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FINAL
~~DRAFT~~ REASSESSMENT REPORT

VIENNA STREET DUMP
FORT VALLEY, PEACH COUNTY, GEORGIA

U.S. EPA ID NO. ~~GAD000048934~~ GA00000 48934

Revision 2

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1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA) tasked the Roy F. Weston Inc. (WESTON®), Superfund Technical Assessment and Response Team - 2 (START-2) to prepare a reassessment (RA) report for Vienna Street Dump (VSD) in Fort Valley, Peach County, Georgia, EPA ID No. GAD000048934. This RA report is prepared under Contract No. 68-W-00-123, Technical Direction Document (TDD) No. 4W-01-11-A-012.

The primary objective of a RA is to determine whether a site has the potential to be placed on the National Priorities List (NPL). The NPL identifies sites at which a release, or threatened release, of hazardous substances poses a serious enough risk to public health or the environment to warrant further investigation and possible remediation under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986.

Information gathered during the RA is used to generate a preliminary Hazard Ranking System (HRS) score. The HRS is the primary criterion EPA uses to determine whether a site should be placed on the NPL. RAs are generally conducted at sites in order to determine if data from previous investigations can adequately be used to fulfill HRS documentation requirements. RAs are also conducted to address site issues not adequately resolved in previous investigations.

Specifically, the objectives of the RA are as follows:

- Obtain and review relevant file material
- Collect samples to attribute hazardous substances to site operations (if necessary)
- Collect samples to establish representative background levels (if necessary)
- Evaluate target populations for the groundwater migration, surface water migration, soil exposure, and air migration pathways
- Collect any other missing HRS data
- Document current site conditions
- Develop a site layout map

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This report documents the sampling results of the reassessment conducted on the VSD during the weeks of March 19 and April 23, 2001. Information reviewed for the RA was gathered from the Georgia Environmental Protection Division (GAEPD) and from the EPA Region 4 CERCLA files.

2.0 SITE BACKGROUND

This section describes the facility, its present and past operations (including waste disposal practices and regulatory history), previous investigations, and potential source areas located at the facility.

2.1 SITE DESCRIPTION AND ENVIRONMENTAL SETTING

Vienna Street Dump site consists of approximately 30.5 acres and is located east of Vienna Street in Fort Valley, Peach County, Georgia (see Figure 1) (Ref. 1). Its geographical coordinates are 32° 33' 32.44" north latitude, and 83° 52' 16.79" west longitude (Refs. 1; 2, pg. 2).

The local climate is characterized as temperate and humid (Ref. 2, p. 2). The average, annual total precipitation for Peach County is 48 inches, and the mean annual lake evaporation is 44 inches, yielding a net annual precipitation of four inches (Ref. 3). The 2-year, 24-hour rainfall event for the area is approximately 3.5 inches (Ref.4).

Vienna Street Dump has been inactive since the late 1960s or early 1970s (Ref. 2, p. 2). A wastewater treatment plant (WWTP) currently operates on the northwestern section of the property. Grassland, brush, and small trees cover the eastern and southern portions of the property. The former dump is bordered to the northwest by the Norfolk Southern Railroad and to the west by Vienna Street. Bay Creek forms the north and northeastern boundary of the dump. The southern boundary is formed by a drainage ditch which flows into Bay Creek at the southeastern portion of the property. The WWTP is enclosed within a fenced area and the site is fenced along its western extent. The southern perimeter is open and adjacent to an apartment complex (Refs. 1; 2, pp. 2, 4; 5).

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2.2 SITE OPERATIONS AND REGULATORY HISTORY

The VSD consists of three lots owned by the City of Fort Valley. The City purchased four acres of land south of the Norfolk Southern Railroad in the early 1900s and a WWTP was constructed on the property in 1935. Nine acres of adjoining land were purchased by the City in 1940. It is believed that the City began using the property as a dump sometime in the early 1940s, although no supporting documentation has been found (Ref 2, p. 5.). The dump was used to dispose of raw, municipal, and industrial wastes from the Fort Valley region and is suspected to have included waste chemicals from two large local industries: Woolfolk Chemical Company and the Blue Bird Body Company (Ref. 2, p. 5). The City purchased another 19.45-acres adjacent to the dump in 1965. Eleven acres of this area lies east of Bay Creek and remain undeveloped while the remaining 8.45 acres located on the western side of Bay Creek were incorporated into the dump area. It is reported by local residents that the dump was closed in the late 1960s or early 1970s. The WWTP, which is currently in operation, was expanded onto three acres of the closed dump in 1978 (Ref. 2, pg. 5; 5).

2.3 PREVIOUS RELEASES AND INVESTIGATIONS

As previously stated, the dump is suspected to contain chemical wastes from Woolfolk Chemical Company and Blue Bird Body Company. These suspicions are based upon interviews with longtime residents of the area (Ref. 2, pg. 5).

Black & Veatch (B&V) completed a preliminary assessment (PA) of the Vienna Street Dump in January 1994. Based on this investigation, B&V recommended a site screening investigation (Ref. 2, p. 5). The PA was followed by a site inspection (SI), that was completed in January 1995. B&V recommended no further action be taken at the site based upon the results of the SI (Ref. 2, p. 31). Constituents detected at elevated concentrations in soil samples included arsenic, barium, chromium, cobalt, copper, cyanide, lead, manganese, mercury, vanadium, zinc, and several pesticides. The pesticides detected were heptachlor, heptachlor epoxide, alpha-BHC, beta-BHC, dieldrin, DDD, DDE, DDT, endrin, chlordene, alpha-chlordene, gamma-chlordene, gamma-chlordane, and alpha-chlordane (Ref. 2, pp. 13-17).

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In 2000, the Woolfolk Alliance Group expressed concern to EPA that the groundwater portion of the B&V SI report provided insufficient data to document the groundwater pathway. Furthermore, the local citizens, represented by the Woolfolk Alliance Group, expressed concern that areas both on-site and off-site were frequented by neighborhood children and adults using paths and cut-throughs and represented a possible human exposure to hazardous constituents from the VSD property. The citizens spoke of 3 areas of concern: 1) a cut-through path leading from the Indian Oaks property north through the VSD site; 2) a westerly foot path leading from the Indian Oaks property to the adjacent city park; and 3) the Indian Oaks Playground, which was suspected to have been filled in with landfill waste or on-site soils during construction of the Indian Oaks complex. In August of 2000, in response to those concerns, the State of Georgia Environmental Protection Division (EPD) on behalf of EPA, collected seven surface and five subsurface soil samples from the VSD property and the off-site areas of concern for analysis. Using Direct Push Technology (DPT), the EPD sampling team was unable to reach groundwater at the expected depth in an attempt to gain the data needed to document the groundwater exposure pathway. Although groundwater samples could not be collected during this effort, EPD did collect several on-site subsurface samples (mentioned above) with the DPT (Ref. 6). Another groundwater sampling attempt was made in December 2000, but the team was still unable to reach groundwater with the DPT, due to drought conditions and lower-than-expected groundwater levels (Ref.7).

EPA made the decision to install temporary monitoring wells using a drill rig, which could access greater depths. In April 2001, EPA and START-2 personnel collected groundwater samples on the VSD property. The EPA collected groundwater samples from two on-site temporary wells, one on-site control well, and one off-site up gradient pre-existing background well (Ref. 8).

2.4 POTENTIAL SOURCE AREAS

The former dump is considered to be the potential source area.

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3.0 RA ACTIVITIES

This section outlines field observations and sampling procedures at the sampling locations. Individual subsections address the sampling investigation and rationale for specific RA activities. The RA was conducted in accordance with the EPA Field Investigation Work Plan dated March 2001 (Ref. 9). Deviations from the sampling plan involved deleting the on-site background temporary well location due to the lack of groundwater recovery.

3.1 SAMPLE COLLECTION METHODOLOGY AND PROCEDURES

EPA personnel from the Science and Ecosystem Support Division (SESD) and START-2 personnel collected four groundwater samples during the week of April 23, 2001. Sampling locations are depicted on Figure 3 (see Appendix A) and summarized in Table 1. No soil samples were collected during the week of April 23, 2001. Soil locations identified on Figure 3 are from EPD's investigation in August 2000.

EPA SESD and START-2 personnel followed sample collection procedures developed in accordance with the EPA Region 4 SESD, *Environmental Investigation Standard Operating Procedures and Quality Assurance Manual* (EISOPQAM), and drill cuttings were containerized on site.

3.2 ANALYTICAL SUPPORT AND METHODOLOGY

According to the EPD sampling plan for the VSD, samples collected during the August 2000 EPD investigation were to be collected in accordance with the EPA Region 4 EISOPQAM. The samples underwent total organics (volatile organic compounds (VOCs), extractable semivolatile organic compounds (SVOC), herbicides, pesticides, and PCBs) and total inductively coupled plasma (ICP) metals (including mercury) analysis. Samples were hand delivered to the EPD lab in Atlanta, Georgia (Ref. 6, Attachment A). Analytical data from EPD's investigation is attached in Reference 6 of this report.

All samples collected by EPA during the April 2001 RA were analyzed by EPA's Science and Ecosystem and Support Division (SESD). SESD laboratories analyzed for EPA Target Compound List (TCL) VOC,

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SVOC, pesticides, and PCBs. The samples were also analyzed for Target Analyte List (TAL) inorganic substances (metals and cyanide). All samples were analyzed for the full TAL scan.

3.3 ANALYTICAL DATA QUALITY AND DATA QUALIFIERS

The analytical data was subject to a quality assurance review as described in the EPA SESD laboratory data evaluation guidelines. The text and analytical data tables presented in this report show some concentrations of organic and inorganic parameters as qualified with a "J," indicating that the qualitative analysis was acceptable; however, the quantitative value has been estimated. Other compounds may have been qualified with an "N," indicating that they were detected based on the presumptive evidence of their presence. This means that the compound was only tentatively identified, and its detection cannot be considered a positive indication of its presence. Some sample results are reported with a "U" qualifier, meaning that the material was analyzed for but not detected. The reported number is the laboratory-derived practical quantitation limit (PQL) for the constituent in that sample. At times, miscellaneous organic compounds that do not appear on the TCL are reported with the data set. These constituents are qualified as "JN," indicating that they are tentatively identified at estimated quantities. Because these constituents are not routinely analyzed for or reported, background levels of SQLs are not generally available for comparison. Some compounds are qualified with an "R" which indicates the QC evaluation has determined the concentration of the compound is unusable. Compounds qualified with a "C" have been confirmed by gas chromatograph or mass spectrometry. The "A" qualifier indicates the sample concentration is based on an average value. The summarized analytical tables are presented in Appendix B; the complete analytical data sheets are presented in Appendix C.

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TABLE 1
SURFACE SOIL SAMPLING LOCATIONS AND RATIONALE
VIENNA STREET DUMP

Sample Number	Location	Rationale
Sample #8	Off- site, approximately 150 feet southwest of Indian Oaks Apartment Complex's parking lot	Background surface soil sample for comparison to other sample results
Sample #1	Northern edge of the Indian Oaks Apartment Complex's playground, approximately 100 feet north of the apartment complex parking lot	To determine presence or absence of hazardous substances
Sample #2	Indian Oaks Apartments along the eastern edge of the children's playground, approximately 30 feet north of the parking lot	To determine presence or absence of hazardous substances
Sample #3	Indian Oaks Apartments along the western edge of the children's playground, approximately 30 feet north of the parking lot	To determine presence or absence of hazardous substances
Sample #5	Along the foot path between the Indian Oaks Apartment and the adjacent city park	To determine presence or absence of hazardous substances
Sample #6	Along the cut-through path between the former dump and Indian Oaks Apartment Complex, approximately 50 feet north of the apartment complex's property line	To determine presence or absence of hazardous substances
Sample #15	Southeastern portion of the former dump	To determine presence or absence of hazardous substances

Notes:

- The samples denoted above were collected from a depth of 0 to 1 foot below ground surface during the August 2000 investigation conducted by the GAEPD.

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TABLE 2
SUBSURFACE SOIL SAMPLING LOCATIONS AND RATIONALE
VIENNA STREET DUMP

Sample Number	Location	Rationale
Sample #4	Northern edge of the Indian Oaks Apartment Complex's playground, approximately 100 feet north of the apartment complex parking lot	To determine presence or absence of hazardous substances
Sample #9	On-site, northern edge of the former dump east of the Norfolk Southern Railroad	To determine presence or absence of hazardous substances
Sample #11	Northeastern edge of the former dump, due south of the Bay Creek	To determine presence or absence of hazardous substances
Sample #13	Middle portion of the former dump, approximately 100 feet south of the wastewater treatment aeration tanks	To determine presence or absence of hazardous substances
Sample #17	Middle portion of the former dump, approximately 100 feet south of the wastewater treatment aeration tanks	To determine presence or absence of hazardous substances

Notes:

-The samples denoted above were collected from a depth of 4 to 8 feet below ground surface during the August 2000 investigation conducted by the GAEPD.

-Sample #17 is a duplicate sample of Sample #13.

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TABLE 3
GROUNDWATER SAMPLING LOCATIONS AND RATIONALE
VIENNA STREET DUMP

Sample Number	Location	Rationale
BKGD	Off- site, north of the WWTP, located on the Blue Bird Body Company's property	Background groundwater sample for comparison to downgradient sample results
CNTL	On-site, located north of the WWTP and upgradient from the dump area	To provide control conditions for groundwater between Blue Bird property and Vienna Street Dump
TW1	On-site, located on the southern edge of the dump near the northeast corner of the Indian Oaks Apartment property	To determine presence or absence of hazardous substances
TW3	On-site, located in the southeast corner of the site near the conflux of the drainage ditch and Bay Creek	To determine presence or absence of hazardous substances

Notes:

The samples denoted above were collected during the April 2001EPA investigation.
BKGD - Off-site permanent monitoring well sample
WWTP - Waste water treatment plant
CNTL - On-site control temporary monitoring well sample
TW - Temporary monitoring well sample

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4.0 SOURCE SAMPLING

This section discusses the source area evaluated at the property and the sampling locations and analytical results of samples collected from soil samples collected on site. The source area at the VSD evaluated during this RA is contaminated soil detected within the former landfill boundaries. Surface soil and subsurface soil sampling locations are depicted on Figure 3 from the EPD investigation in August 2000.

The following discussion of hazardous constituents detected at elevated levels in soil samples collected at the property includes only those hazardous constituents that are associated with site activities and those hazardous constituents that may pose a threat to human health or the environment.

4.1 SOURCE ANALYTICAL RESULTS

Surface and subsurface soil samples were collected from an off-site background location and from potentially contaminated areas within the VSD boundary, a pedestrian path, and the playground of the Indian Oaks apartment complex. Soil data is compared to background samples and is considered elevated if the compound is three times the background concentration. In the case where a constituent is undetected in the background sample, any concentration equal to or greater than the PQL is considered to be elevated. Specific findings regarding EPD's sample results are summarized below.

4.1.1 Surface Soil

- Metal constituents detected at elevated concentrations in surface soil samples included arsenic, barium, lead, nickel, silver, and total mercury. Barium was the only constituent detected at elevated concentrations on the Indian Oaks Apartment complex playground. Barium concentrations ranged from 50 mg/kg to 61 mg/kg in Samples #3 and #1, respectively. Samples #5 and #6 were collected along the pedestrian path. Sample #5 contained an elevated level of nickel (13 mg/kg) and Sample #6 contained elevated levels of arsenic (69 mg/kg) and lead (56 mg/kg). Sample #15 collected from the southeastern portion of the former dump contained elevated levels of arsenic, barium, lead, silver, and total mercury at concentrations ranging from 0.15 mg/kg to 110 mg/kg.

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- The VOCs detected at elevated concentrations in surface soil samples were benzene (9.5 micrograms per kilogram [μg/kg]) and toluene (7.4 μg/kg) in Sample #3 collected from the playground area located at the Indian Oaks Apartment complex. Acetone (130 μg/kg) was detected in Sample #6 collected along the pedestrian path. Acetone is a common laboratory contaminant and is not likely attributable to the operations of the former dump because it has not been detected in elevated levels in samples collected from the former dump either in the B&V SI or the EPD investigation.

- Pesticides were detected at elevated concentrations in Samples #1 and #3 collected from the playground. Concentrations ranged from 7.3μg/kg to 3,500 JD (D = results based on dilution runs) μg/kg. Such compounds include 4,4'-DDE, 4,4'-DDT, and toxaphene. Pesticides detected at elevated concentrations in samples collected along the pedestrian path include 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, and toxaphene at concentrations ranging from 5.9 μg/kg to 32 μg/kg. Pesticides detected in the sample collected from the former dump include alpha-BHC, chlordane, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, toxaphene, and lindane (gamma-BHC).

4.1.2 Subsurface Soil

A background subsurface soil sample was not collected for comparison to subsurface soil samples collected during the EPD investigation. Therefore, the following sample results are indicative of constituents detected in subsurface soil samples collected from the playground (Sample #4) and the former dump (Samples #9, #11, #13).

- Metal constituents detected in subsurface soil samples collected from the playground during the EPD investigation included barium, chromium, copper, lead, and nickel at concentrations ranging from 5.3 mg/kg to 62.0 mg/kg. Subsurface soil samples collected during the same investigation from the former dump revealed arsenic, barium, cadmium, chromium, copper, lead, nickel and total mercury. Metal concentrations of samples collected from the former dump ranged from 0.31 mg/kg to 270 mg/kg.

- The VOCs detected in a subsurface soil sample were carbon disulfide and chlorobenzene. Carbon

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disulfide (5.9 μg/kg) and chlorobenzene (31 μg/kg) were detected in Sample #11.

- Pesticides detected in subsurface soil Samples #9 and #11 included aldrin, alpha-BHC, beta-BHC, lindane, chlordane, 4,4-DDE, 4,4-DDD, 4,4-DDT, and toxaphene. These pesticides ranged in concentration from 10 μg/kg to 1,700 μg/kg.
- SVOCs and PCBs were not detected in subsurface soil samples collected on the playground or former dump.

Unknown and several miscellaneous compounds were detected in the surface and subsurface soil samples as detailed in Appendix C.

4.2 SOURCE CONCLUSIONS

Based on the analytical results for surface and subsurface soil samples (from the B&V SI and the EPD investigation), surficial contamination is present within the former VSD. Inorganic constituents detected at elevated levels in surface and subsurface soil samples when compared to background surface and subsurface samples include arsenic, barium, chromium, cobalt, copper, lead, manganese, mercury, zinc. Several pesticides were also detected, including aldrin, heptachlor, heptachlor epoxide, alpha-BHC, beta-BHC, gamma-BHC, dieldrin, DDD, DDE, DDT, toxaphene, endrin, chlordane, alpha-chlordene, gamma-chlordene, gamma-chlordane, and alpha-chlordane. The VOCs carbon disulfide and chlorobenzene were also detected in subsurface soil samples collected during the EPD investigation.

5.0 PATHWAYS

This section discusses the groundwater migration, surface water migration, soil exposure, and air migration pathways. Additionally, this section discusses the targets associated with each pathway and draws pathway-specific conclusions. Sampling locations and analytical results for samples collected from the specific pathways are also discussed.

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5.1 GROUNDWATER MIGRATION PATHWAY

Four groundwater samples (including one control sample and one background sample) were collected during the RA. Groundwater sampling locations are depicted on Figure 3 and described in Table 1. Field parameters, inorganic and organic analytical results for all groundwater samples are summarized in Tables 2 and 3, respectively, in Appendix B, which follows Section 6.0.

5.1.1 Geologic and Hydrogeologic Setting

The former Vienna Street Dump facility is located in the City of Fort Valley on the Fort Valley Plateau (Ref. 12, Plate 1). The plateau is located along the inner margin of the Coastal Plain physiographic province near the Fall Line, the boundary between the Coastal Plain and Piedmont provinces (Ref. 10, Sheet 1). The relief of the surrounding area is flat to moderate with a gentle southeastward slope. Elevations range from 350 feet to 550 feet above mean sea level (msl), and the facility is located at approximately 525 feet above msl (Ref. 3).

The facility is underlain in descending stratigraphic order by the following units: undifferentiated middle to late Eocene sediments, the Perry Sand Formation, the Providence Sand Formation, the undifferentiated Ripley and Cusseta Formations, the undifferentiated Blufftown and Eutaw Formations, and the Tuscaloosa Formation (Refs. 16, Plate 1; 13, p. 6).

The middle to late Eocene sediments are predominantly reddish-brown clays that are approximately 20 feet thick in the vicinity of the facility, and may reach a thickness of 45 feet within Peach County (Refs. 12, Plate 1; 15, p. 316). Typical exposures of these sediments are massive-bedded, tough, and clayey, and the sediments contain poorly sorted, fine to coarse-grained quartz sand and pebbles of plinthite (Ref. 12, Plate 1). In rare local occurrences, the sediments contain gravel, kaolin clasts, and zones of strongly cross-bedded very coarse-grained sand (Ref. 16, Plate 1).

The Perry Sand Formation underlies the Eocene sediments at approximately 20 feet bgs and is estimated to have a total thickness of 65 feet in Peach County. Relatively thin and discontinuous lenses of kaolin are present in the upper portion of the Perry Sand. The Perry Sand consists of medium- to fine-grained sand that

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is thin-bedded and cross-bedded. The sand is white to very pale yellow to dark reddish-brown, with strongly contrasting dark reddish-brown and white beds most commonly found in the upper third of the formation. A dense sandy kaolin clay, approximately 18 feet thick, is found at the base of the Perry Sands. The kaolin clay is massive-bedded, jointed, and contains subconchoidal fractures. The kaolin sand is poorly sorted, very coarse-grained, and irregularly distributed within the clay. The kaolin is pale-gray to tan with irregularly shaped maroon-stained patches. The kaolin is a remnant of the Clayton Formation that is pinching out beneath the facility (Refs. 10, Sheet 1; 16, Plate 1).

Beneath the white kaolin clay and sand sequence associated with the perched zone is an assemblage of gray and tan sand, silt, and clay layers and lenses, interpreted to be the Providence Sand. Specifically, the Providence Sand consists of white to red, mottled, sandy clay, interbedded with fine to coarse-grained sand, and fine to medium-grained, angular, limonitic, arkosic sand (Ref. 15, p. 317). The Providence Sand is approximately 72 feet thick in the vicinity of the facility (Ref. 15, p. 317).

The undifferentiated Ripley and Cussetta Formations unconformably underlie the Providence Sand and consist of light tan, sandy clay, and fine to coarse-grained, angular, limonitic, arkosic sand with some clay (Ref. 15, p. 317). The Ripley and Cussetta Formations have a thickness of approximately 88 feet in the vicinity of the facility (Ref. 15, p. 317). The undifferentiated Blufftown and Eutaw Formations unconformably underlie the Ripley and Cussetta Formations and consist of dark-gray to black, sandy, micaceous clay, fine to coarse-grained, angular, arkosic sand, and light-gray to red, mottled, sandy clay (Ref. 15, p. 317). The thickness of the formations is approximately 55 feet in the vicinity of the facility (Ref. 15, p. 317).

The Tuscaloosa Formation unconformably underlies the Blufftown and Eutaw Formations and consists of fine to coarse-grained, white to red mottled, arkosic, micaceous, sand with some interbedded clay, and gray to brick-red, micaceous, sandy clay (Ref. 15, p. 317). The thickness of the Tuscaloosa Formation is approximately 266 feet in the vicinity of the facility (Ref. 15, p. 317).

In the Fort Valley area there are three aquifers present: the surficial aquifer, the Providence aquifer, and the Tuscaloosa aquifer.

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The surficial aquifer underlies the facility and consists of the Eocene sediments and the Perry Sands. The surficial aquifer in the vicinity of the facility consists of a perched zone overlying a kaolin layer which is present at the base of the Perry Sands (Ref. 14, p. 9). The perched zone is less than 10 feet thick, approximately 30 feet deep, and consists of the saturated, lower few feet of the Perry Sands. During the RA, groundwater wells were drilled approximately 45 to 75 feet bgs in order to collect groundwater samples. Groundwater was encountered 35 to 55 feet bgs (Ref. 8, Figure 2). The depth to the water table (during the RA) is lower than the published depth of 30 feet due to the drought prevalent in the late 1990s and early 2000s. The upper 25 feet of the Perry Sand consists of red silty to sandy clay which is underlain by an orange sand layer 10 to 15 feet thick. This sand layer overlies a layer of white kaolin clay 15 to 25 feet thick. The water within the saturated sand is perched approximately 70 feet above the Providence aquifer (Ref. 14, p. 10). The potentiometric surface of the perched zone generally mimics the topographic surface of the underlying kaolin unit. The general groundwater flow direction of the perched zone was south-southeast at a relatively constant gradient of 0.01 on April 28, 1998 (Ref. 14, p. 10). The numerous kaolin clay layers form an effective confining layer to the Upper Cretaceous Aquifer System.

The Upper Cretaceous Aquifer System consists of the Providence, Ripley, Cusseta, Blufftown, Eutaw, and Tuscaloosa Formations (Refs. 16, Plate 1; 18, p. 6). The Providence aquifer, the uppermost aquifer within the Upper Cretaceous Aquifer System, underlies the surficial aquifer in the area. The Providence aquifer is composed of approximately 20 to 40 feet of alternating white kaolin clay and white sand that comprises the upper portion of the Providence Sand. The Providence Sand is an important source of groundwater in the area (Refs. 13, p. 8; 16, Sheet 2). The hydraulic conductivity of the aquifer is estimated to be approximately 10^{-4} centimeters per second (cm/sec) based on the lithology of the aquifer. The Providence aquifer is recharged primarily through the infiltration of precipitation, especially where the aquifer is near the land surface and is overlain by permeable sands; in addition, a portion of the recharge is received through upward leakage from underlying units (Ref. 16, Sheets 3 and 5). Recharge water generally enters the aquifer in the north-eastward trending outcrop belt and flows south, bounded by the Ocmulgee River on the east and the Chattahoochee River on the west (Ref. 16, Sheet. 5). Declining water levels in the Providence have increased the naturally occurring hydraulic head differentials and increased the potential for upward leakage from the underlying units (Ref. 16, Sheet 3). The Providence aquifer discharges significant amounts of water

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to surface streams, some of which is rejected aquifer recharge water due to low transmissivity (Ref. 16, Sheet 3). The Providence aquifer is approximately 72 feet thick in the vicinity of the facility (Ref. 15, p. 317). The underlying undifferentiated Ripley, Cusseta, Blufftown, and Eutaw formations contain clay layers ranging from 27 to 106 feet in thickness in the Fort Valley area. The clay generally forms an effective confining unit between the Providence aquifer and the underlying Tuscaloosa aquifer (Ref. 15, pp. 314-317).

The Tuscaloosa aquifer, comprised of the Tuscaloosa Formation, unconformably underlies the undifferentiated Ripley, Cusseta, Blufftown, and Eutaw Formations. The Tuscaloosa aquifer represents the basal unit of the Upper Cretaceous Aquifer System (Refs. 15, p. 317; 18, p. 29). The Tuscaloosa aquifer is an excellent aquifer for the area due to a preponderance of sand, which allows for easy transmission of water within the saturated zone. The aquifer is primarily recharged through the infiltration of precipitation (Ref. 18, pp. 13, 31). The Tuscaloosa aquifer ranges from approximately 200 to 600 feet thick in the Fort Valley area (Refs. 15, pp. 314-317; 19, p.23). The Tuscaloosa aquifer is generally confined from the overlying units due to the positive head differentials between it and the overlying aquifers.

5.1.2 Groundwater Sampling Locations and Analytical Results

SESD and WESTON, START-2 personnel, collected three groundwater samples from temporary monitoring wells located on site and one groundwater sample from a pre-existing permanent monitoring well located north of the former Vienna Street Dump facility on the Blue Bird Body property. The well located on the Blue Bird Body property was presumed to be upgradient from both properties and was used to provide a background sample location. A control temporary monitoring well sample collected for comparison to on-site samples was collected from the upgradient well installed by EPA and is labeled as CNTL on Figure 3. The control well was located in the northwestern portion of the VSD property. Groundwater sample TW1 was collected from a temporary monitoring well located near the Indian Oaks Apartment complex. Groundwater sample TW3 was collected from a temporary monitoring well located on the eastern portion of the property. Appendix B, Tables 2 and 3 lists the field parameters and analytical data for the groundwater samples.

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5.1.2.1 Temporary Monitoring Wells

- All groundwater samples collected from temporary monitoring wells were screened in the surficial aquifer. The wells were installed using a hollow stem auger by SESD. The well screens and casings were stainless steel (Refs. 8; 9).

- Metal compounds detected at elevated concentrations include arsenic, barium, cadmium, cobalt, copper, lead, manganese, selenium, thallium, titanium, yttrium, and zinc. Concentrations of the aforementioned constituents ranged from 2 micrograms per liter (μg/L) to 840 μg/L. Lead (48 μg/L) is the only constituent above the national maximum contamination level (MCL) of 15 μg/L for lead (Ref. 20). In 2006, the EPA plans to implement a new standard (MCL) for arsenic of 10 μg/L (Ref. 20). Based on this new standard, arsenic will be above the MCL in monitoring wells TW1 (19 μg/L) and TW3 (19 μg/L).

- 1,2-Dichloropropane was the only VOC detected at an elevated concentration in TW3 (8.6 A μg/L)

- Caprolactam was the only SVOC detected at an elevated concentration of 600 μg/L in sample TW1. Caprolactam is a constituent used in manufacturing synthetic fibers, plastics, bristles, film, and coatings (Ref. 21)

- No pesticides or PCBs were detected at elevated concentrations.

5.1.3 Groundwater Targets

According to a CENTRACTS report based on U.S. Bureau of Census data, an estimated 1,154 persons obtain potable water from private wells located within 4 miles of the facility and are distributed as follows: 0 to 0.25 mile, 4 persons; 0.25 to 0.50 mile, 9 persons; 0.50 to 1 mile, 59 persons; 1 to 2 miles, 205 persons; 2 to 3 miles, 393 persons; and 3 to 4 miles, 484 persons. The nearest private well is located between 0 to 0.25 mile from the facility (Ref. 22).

The residents of Fort Valley and much of the surrounding area obtain their water from the Fort Valley Utility Commission (FVUC). FVUC serves Peach County and neighboring counties by means of approximately

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4,500 connections (Ref. 23). The U.S. Bureau of the Census indicates the average number of people per household in Peach County is 2.68 (Ref. 24). Therefore, FVUC serves approximately 12,060 people (4,500 connections x 2.68 people per household = 12,060 people).

The FVUC receives all of its water from six groundwater wells (Ref. 25). Five of the six wells are located within a four-mile radius of the VSD. One well lies between a 0.5- to 1-mile radius, two wells are located between a 1- to 2-mile radius, and two wells lie between a 3- to 4-mile radius (Ref. 25). Each of the wells supplies water to approximately 2,010 people (12,060 people ÷ 6 wells). The FVUC system is a blended system that receives no more than 40 percent of its water from one well (Refs. 26).

The total number of people served by municipal wells are radially distributed as follows: 0 to 0.25 mile, 0 persons; 0.25 to 0.5 mile, 0 persons; 0.5 to 1 mile, 2,010 persons; 1 to 2 mile, 4,020 persons; 2 to 3 mile, 0 persons; and 3 to 4 mile, 4,020 persons (Refs. 1; 23; 25). The nearest municipal supply well is located approximately one mile southwest of the former dump (Refs. 1; 25). All wells within the FVUC system draw from the Tuscaloosa aquifer (Ref. 25).

5.1.4 Groundwater Conclusions

Arsenic, barium, cadmium, cobalt, copper, lead, manganese, selenium, thallium, titanium, yttrium, vanadium, zinc, 1,2-dichloropropane, and caprolactam were detected at elevated concentrations in groundwater samples collected from on-site temporary monitoring wells during the EPA investigation. Arsenic, barium, cadmium, cobalt, copper, lead, manganese, vanadium, and zinc were detected in on-site source samples during the B&V SI. Lead is the only constituent detected above MCLs in a sample collected from the surficial aquifer. In 2006, the EPA plans to implement a new standard (MCL) for arsenic of 10 μg/L. Based on this new standard, arsenic will be above the MCL in monitoring wells TW1 (19 μg/L) and TW3 (19 μg/L).

The residents of Fort Valley and much of the surrounding area obtain their water from the FVUC, which obtains its water from wells screened within the Tuscaloosa aquifer. Additionally, private wells are located within the study area; these wells are assumed to be completed in the surficial aquifer. Clay confining layers

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exist between the surficial, Providence, and Tuscaloosa aquifers which would inhibit the vertical migration of constituents between aquifers.

5.2 SURFACE WATER MIGRATION PATHWAY

No surface water or sediment samples were collected during the RA or EPD investigation. However, B&V collected four surface water and four sediment samples (which include background samples) during the SI. Constituents elevated in surface water samples collected during the SI were cyanide and manganese. Elevated constituents in sediment samples included arsenic, barium, vanadium, zinc, 4,4'-DDT, and O,P-DDT. Zinc, 4,4-DDT, and O,P-DDT were also detected in source samples during the SI.

5.2.1 Hydrologic Setting

Site surface water runoff drains into Bay Creek, which is a perennial stream. Bay Creek runs approximately 10 miles in a generally southerly direction prior to flowing into Big Indian Creek (Ref. 1; 2, p. 5). Portions of the Vienna Street Dump site lie within the 100-year flood plain. Bay Creek continues to flow generally southeast from the site until emptying into Big Indian Creek some ten miles downstream. The remainder of the 15-mile surface water pathway is traced through Big Indian Creek as it wends southeastward (Ref. 2, p. 24).

5.2.2 Surface Water Targets

There are no known surface water intakes within Peach County. The majority of the residents within the four-mile radius are served by the the Fort Valley Utility Commission, which derives its water from six deep wells. The remaining residents obtain drinking water from private wells (Refs. 23; 25).

Bay Creek is used for recreational fishing at bridge crossings because access to the creek is restricted due to dense vegetation along the banks (Ref. 2, p. 24). Several federal threatened and endangered species are found in Peach County which include the bald eagle (*Haliaeetus leucocephalus*), wood stork (*Mycteria americana*), and the red-cockaded woodpecker (*Picoides borealis*) (Ref. 27). However, their exact locations have not been identified. There are approximately 7.5 miles of wetland frontage along Bay Creek (Ref. 1).

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5.2.3 Surface Water Conclusions

Arsenic, barium, vanadium, zinc, and 4,4'-DDT were detected in sediment samples collected from Bay Creek. The aforementioned constituents were also detected in source areas. Surface water runoff from the facility drains into Bay Creek. Bay Creek runs approximately 10 miles in a generally southerly direction prior to flowing into Big Indian Creek. Portions of the Vienna Street Dump site lie within the 100-year flood plain.

5.3 SOIL EXPOSURE PATHWAY AND AIR MIGRATION PATHWAY

During the August 2000 EPD investigation, seven surface and five subsurface soil samples were collected from the former dump and surrounding areas. Surface and subsurface soil sample results were discussed in Section 4.0.

5.3.1 Physical Conditions

The former VSD is located in an mixed residential and commercial area. An active wastewater treatment facility is currently in operation on the northwestern section of the property. The eastern and southern portions of the property are covered with brush, grassland, and small trees (Ref. 2, p. 27). Bay Creek forms the northeast perimeter of the site (Ref. 1; 2, p. 4). An apartment complex, Indian Oak Apartments, lies adjacent to the site to the south (Ref. 6, p. 2). The former dump is bound to the west by Vienna Street and to the northwest by the Norfolk Southern Railroad (Ref. 1; 2, p. 4). Although the main entrance to the property is fenced, the property is accessible from the apartment complex located south of the property. Site access from the west is restricted by a fence. Bay Creek forms a natural barrier along the northern and eastern edges of the site. Surface water runoff from the site flows into Bay Creek, which flows approximately ten miles before discharging into Big Indian Creek (Refs. 1; 2, p. 29).

5.3.2 Soil and Air Targets

According to a CENTRACTS report based on U.S. Bureau of Census data , approximately 8,831 people live within 4 radial miles of the VSD. The population distribution is as follows: 0 to 0.25 mile, 15; 0.25 to 0.50 mile, 48; 0.50 to 1 mile, 300; 1 to 2 miles, 1,964; 2 to 3 miles, 3,052; 3 to 4 miles, 3,452 (Ref. 22). The nearest residences are located across Vienna Street and the Indian Oaks Apartment complex located just

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south of the former dump (Refs.1; 2, p. 4). There are 147 units occupied in the Indian Oaks Apartment Complex. Based on the county multiplier of 2.68 people per household, approximately 394 people reside in the apartment complex (Ref. 28). Of the 394 residents, 25% or 98 people are assumed to use the complex's playground. Two schools lie approximately one mile from the dump to the west and southwest (Ref. 1).

Several federal threatened and endangered species are found in Peach County, Georgia. Such species include the wood stork (*Mycteria americana*), the red-cockaded woodpecker (*Piciodes borealis*), and the bald eagle (*Haliaeetus leucocephalus*) (Ref. 27). There are approximately 160 acres of wetlands within a 4-mile radius of the facility. The wetland acreage is distributed as follows: 0 to 0.25 mile, 0 acres; 0.25 to 0.50 mile, 0 acres; 0.50 to 1 mile, 0 acres; 1 to 2 miles, 18 acres; 2 to 3 miles, 2.5 acres; 3 to 4 miles, 140 acres (Ref. 1).

5.3.3 Soil and Air Conclusions

Several inorganic constituents were detected in on-site surface and subsurface soil samples. During the August 2000 EPD investigation, barium and the pesticides 4,4-DDE and 4,4'-DDT were detected at elevated concentrations in two samples collected from the Indian Oaks Apartment complex playground. Barium concentrations ranged from 50 mg/kg to 60 mg/kg. 4,4'-DDE and 4,4'-DDT were detected at concentrations ranging from 7.3 μg/kg to 74.0D μg/kg. The concentrations detected in surface soil samples collected at the playground are below the State of Georgia residential screening values of 1,000 mg/kg for barium and 660 μg/kg for DDE and DDT. Benzene and toluene were also detected at elevated concentrations when compared to background levels. However, such constituents were not elevated in source samples collected from the former dump during the B&V SI and the EPD investigation and are therefore not considered to be site-attributable. Arsenic, lead, and nickel were also detected at elevated concentrations in samples collected along the pathway which leads from the apartment complex to the WWTP. There are no schools or daycare centers within 200 feet of the facility. The former dump is not used for public recreation and is partially inaccessible to outsiders due to fencing and natural boundaries. However, the property is only partially fenced and is accessible from the apartment complex located south of the property.

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6.0 SUMMARY AND CONCLUSIONS

Vienna Street Dump has been inactive since the late 1960s or early 1970s. A WWTP currently operates on the northwestern section of the property. Grassland, brush, and small trees cover the eastern and southern portions of the property. The former dump is bordered to the northwest by the Norfolk Southern Railroad and to the west by Vienna Street. Bay Creek forms the north and northeastern boundary of the dump and the southern boundary is formed by a drainage ditch which flows into Bay Creek at the southeastern extent of the site. The WWTP is enclosed within a fenced area and the site is fenced along its western extent. The southern perimeter is open and adjacent to an apartment complex.

The groundwater migration pathway is a likely migration pathway for on-site contaminants. On-site groundwater samples indicated the presence of arsenic, barium, cadmium, cobalt, copper, lead, manganese, selenium, thallium, titanium, yttrium, vanadium, zinc, 1,2-dichloropropane, and caprolactam. The majority of residents in the vicinity of the former dump are served by municipal water supplies. A total of 10,050 persons are served by the five municipal wells located within 4 miles of the property. The nearest municipal well is located approximately 1 mile southwest of the property; all municipal wells are completed in the Tuscaloosa aquifer.

The surface water pathway is a primary migration route. Surface water runoff from the facility drains into Bay Creek, which runs approximately 10 miles in a generally southerly direction prior to flowing into Big Indian Creek. Portions of the Vienna Street Dump site lie within the 100-year flood plain. Constituents detected at elevated concentrations in sediment samples which were detected in on-site source areas include arsenic, barium, vanadium, zinc, and 4,4'-DDT. However, based on the concentration of constituents detected within the off-site surface water bodies and their potential receptors, the threat to the downstream waters appears to be minimal.

Numerous inorganic and organic constituents were detected at elevated concentrations in on-site soils. Site-attributable constituents such as barium, 4,4-DDE and 4,4'-DDT were detected in surface soil samples collected from the Indian Oaks Apartment complex's playground. Concentrations for the aforementioned

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constituents are below the GA residential screening values for such constituents. Based on the concentrations of the constituents detected and the limited number of targets, these constituents do not appear to be a substantial threat to the local public.

Based on the analytical results for samples collected during the B&V SI and the EPD investigation, and observations made during the reassessment, no further CERCLA action is recommended for the former Vienna Street Dump.

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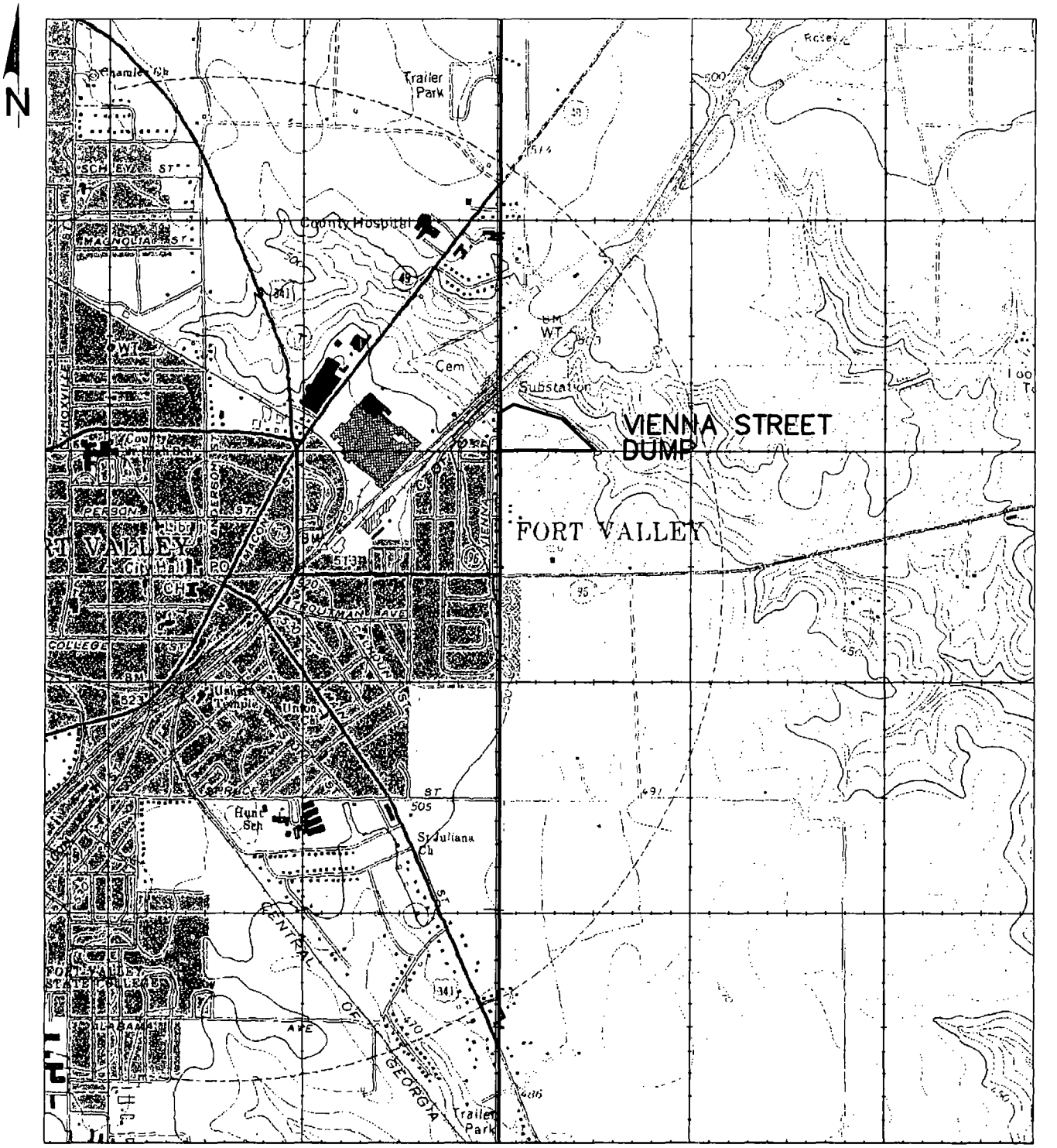
APPENDIX A

FIGURES



MODIFIED U.S.G.S. QUAD FORT VALLEY EAST MAP (7.5 SERIES), DATED 1999, SCALE: 1:2000

VIENNA STREET DUMP
FORT VALLEY, GEORGIA

GENERAL SITE LOCATION MAP

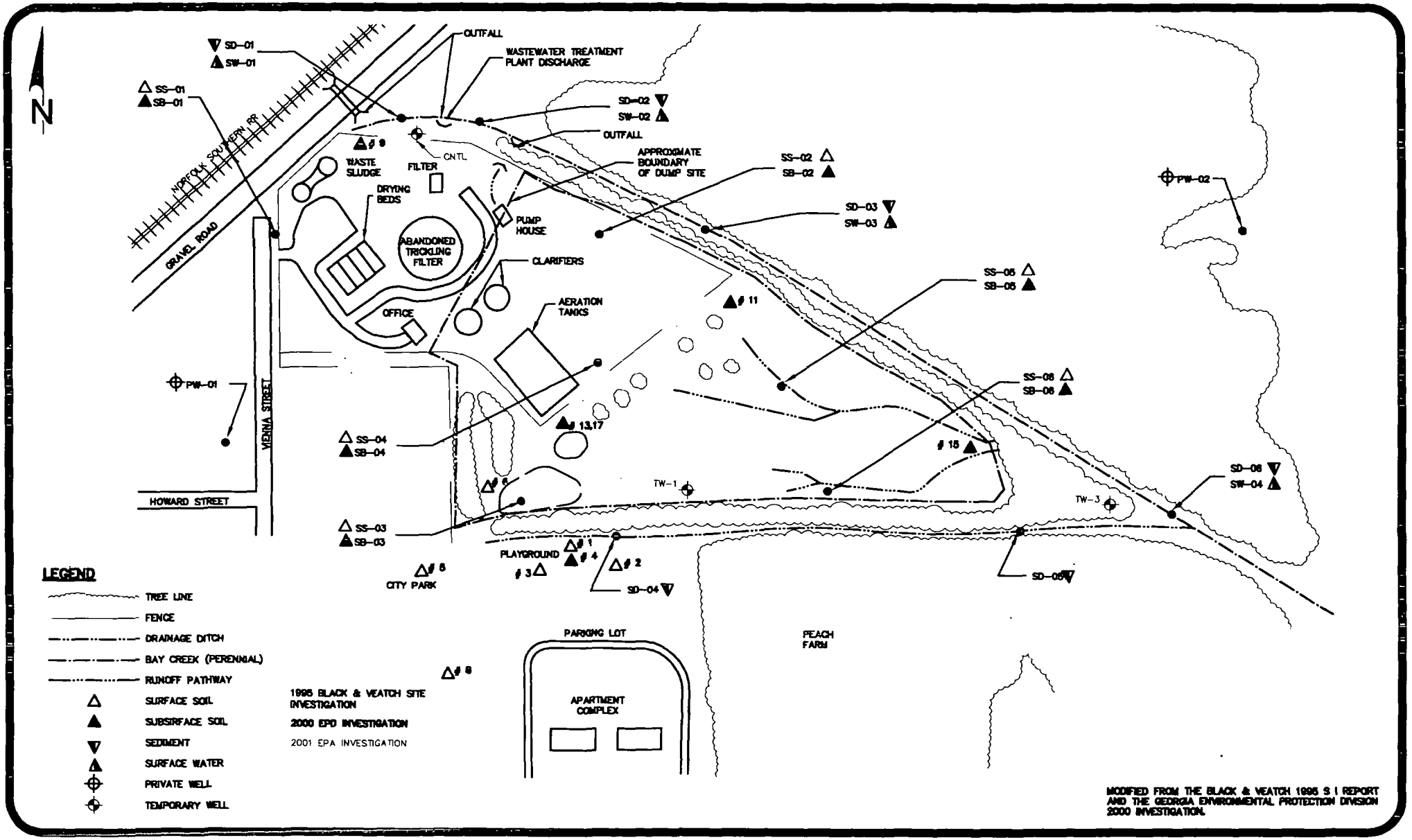
FIGURE 1

ROY F. WESTON, INC.

WESTON

MANAGERS DESIGNERS/CONSULTANTS

DRAWN:	DATE:	W.O. NO.: VIENNA_TOPO.dwg
M. SNEED	8/30/01	12587-001-001-0035
SCALE:	EPA ID NO:	TDD NO:
AS NOTED	GAD000048934	4W-01-11-A-012



ROY F. WESTON, INC.

WESTON

MANAGERS DESIGNERS/CONSULTANTS

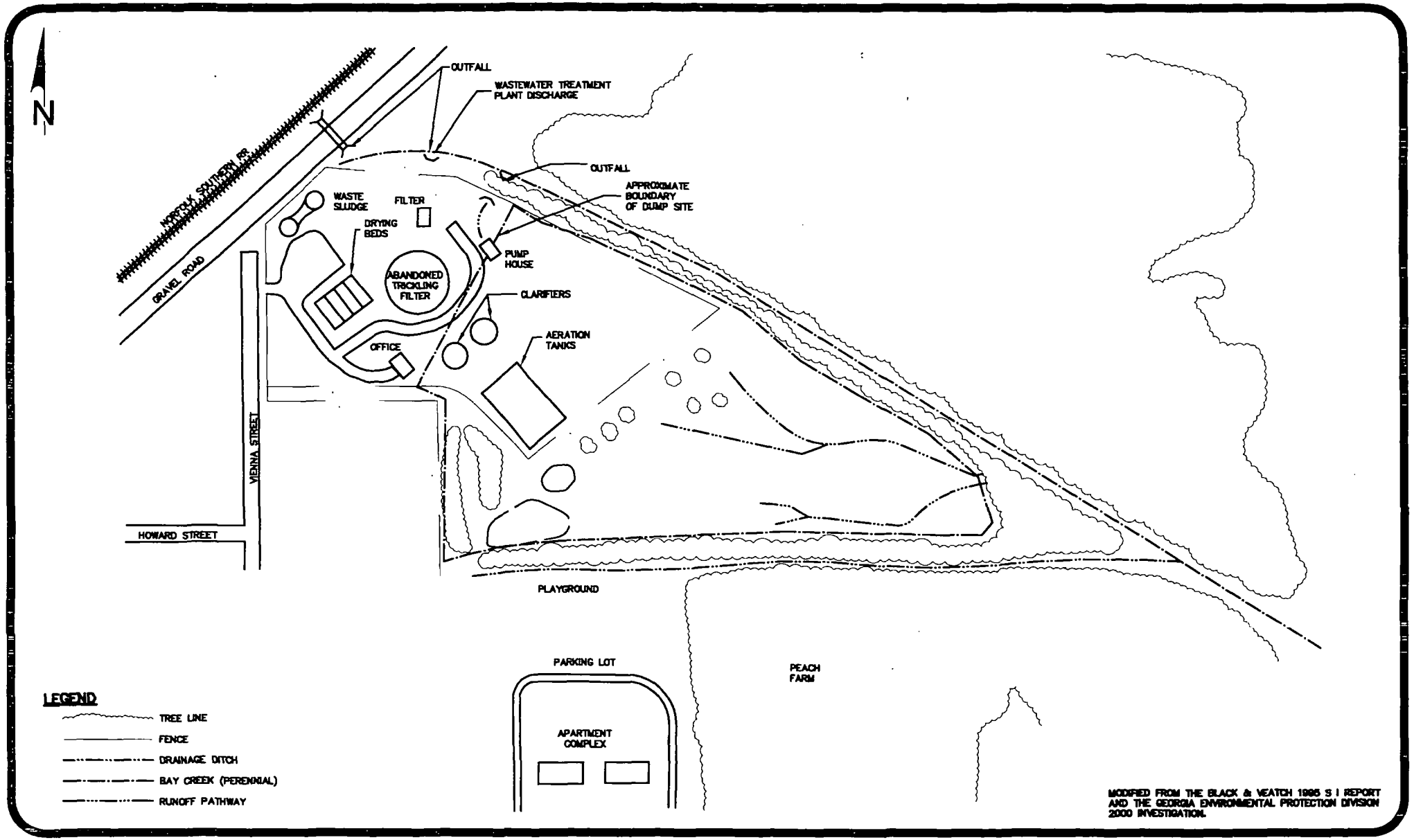
VIENNA STREET DUMP
FORT VALLEY, PEACH COUNTY, GEORGIA

SAMPLING LOCATION MAP

FIGURE 3

DRAWN:	DATE:	W.O. NO.: vienna.dwg
M. SNEED	11/28/01	12587-001-001-0035
SCALE:	EPA ID NO:	TDD NO:
N.T.S.	GAD000048934	4W-01-11-A-012

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



MODIFIED FROM THE BLACK & VEATCH 1995 S I REPORT AND THE GEORGIA ENVIRONMENTAL PROTECTION DIVISION 2000 INVESTIGATION.

ROY F. WESTON, INC. Superfund Technical Assessment and Response Team USEPA REGION 4

VIENNA STREET DUMP
FORT VALLEY, PEACH COUNTY, GEORGIA

SITE LOCATION MAP

FIGURE 2

ROY F. WESTON, INC.
WESTON
MANAGERS DESIGNERS/CONSULTANTS

DRAWN:	DATE:	W.O. NO.: vienna.dwg
M. SNEED	8/1/01	12587-001-001-0035
SCALE:	EPA ID NO:	TDD NO:
N.T.S.	GAD000048934	4W-01-11-A-012

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

APPENDIX B

ANALYTICAL DATA TABLES

TABLE 4
SUMMARY OF INORGANIC ANALYTICAL RESULTS
SITE INSPECTION SURFACE SOIL SAMPLES
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

Compound	Background Sample VS-SS-01	VS-SS-02	VS-SS-03	VS-04-SS	VS-05-SS	VS-06-SS
Inorganics - Total (mg/kg)						
Aluminum	6300	16000	11000	16000	13000	12000
Arsenic	32.00	930.00	7.60	46.00	8.40	30.00
Barium	79.00	230.00	15.00	23.00	31.00	33.00
Chromium	15.00	158.00	23.00	77.00	19.00	31.00
Cobalt	2.40	9.60	1.20 J	3.50	1.70 J	1.10 J
Copper	23.00	930.00	-	15.00	11.00	35.00
Cyanide	0.58 U	0.86	-	-	-	-
Lead	91.00 J	1300.00 J	13.00 J	74.00 J	14.00 J	98.00 J
Magnesium	180.00	1500.00	100.00	350.00	140.00	130.00
Manganese	210.00	870.00	78.00	240.00	32.00	30.00
Total Mercury	0.15	0.84	-	-	-	3.90
Vanadium	25.00	40.00	56.00	85.00	45.00	58.00
Zinc	140.00	1500.00	-	12.00	-	46.00

Notes:

Surface soil samples were collected during the August 1994 Black & Veatch Site Inspection.

VS - Vienna Street Dump
SS - Surface soil sample
mg/kg - Milligrams per kilogram
J - Estimated value
U - Value is below the reporting limit
\- Material analyzed for but not detected
Shading - constituent is elevated above background

TABLE 5
SUMMARY OF ORGANIC ANALYTICAL RESULTS
SITE INSPECTION SURFACE SOIL SAMPLES
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

Compound	Background Sample VS-SS-01	VS-SS-02	VS-SS-03	VS-SS-04	VS-SS-05	VS-SS-06
VOCs (ug/kg)						
None						
SVOCs (ug/kg)						
Benzo (b and/or k) fluoranthene	7000 U	760 J	-	-	-	-
Fluoranthene	7000 U	1300 J	-	-	-	-
Phenanthrene	7000 U	1000 J	-	-	-	-
Pyrene	7000 U	1100 J	-	-	-	-
Pesticides & PCBs (ug/kg)						
Heptachlor	50 U	56	-	-	-	72
Heptachlor Epoxide	50 U	90	-	-	-	-
Alpha-BHC	50.0 U	-	-	-	-	53.0
Beta-BHC	50.0 U	370.0	-	-	-	-
Dieldrin	16.0	920.0 C	-	9.1 J	-	1700.0 C
4,4'-DDD (p,p'-DDD)	50.0 U	200.0 N	-	-	-	2000.0 C
4,4'-DDE (p,p'-DDE)	61.0	2300.0 C	34.0	20.0 J	-	130.0
4,4'-DDT (p,p'-DDT)	50.0	2500.0 C	23.0 J	14.0 J	-	440.0
Lindane (gamma-BHC)	50.0 U	-	-	-	-	26.0
Endrin	50.0 U	99.0	-	-	-	84.0 N
Chlordene/2	7.0 U	5.4 J	-	-	-	290.0
Alpha-chlordene/2	14.0 U	24.0	-	-	-	82.0 N
Beta-chlordene/2	14.0 U	21.0 N	-	-	-	62.0 N
Gamma-chlordene/2	14.0 U	63.0	-	-	-	14.0
Gamma-chlordane/2	8.7 J	910.0 C	-	3.7 J	-	2400.0 C
Trans-nonalchlor	12.0 N	380.0 N	-	-	-	490.0 N
Alpha-chlordane/2	9.2 JN	570.0 C	-	-	-	640.0 C
Cis-nonachlor	14.0 U	-	-	-	-	110.0 N
Oxychlordane/2	14.0 U	29.0 N	-	-	-	-
Endrin Ketone	50.0 U	-	-	-	-	31.0
Miscellaneous Pesticides/PCBs (ug/kg)						
O, P-DDD	-	190.0 N	-	-	-	860.0 N
O, P-DDE	-	280.0 N	-	-	-	64.0 N
O, P-DDT	14.0 J	1400.0 C	-	-	-	44.0 N

TABLE 5
SUMMARY OF ORGANIC ANALYTICAL RESULTS
SITE INSPECTION SURFACE SOIL SAMPLES
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

Compound	Background Sample VS-SS-01	VS-SS-02	VS-SS-03	VS-SS-04	VS-SS-05	VS-SS-06
Miscellaneous Pesticides/PCBs (ug/kg)						
O, P-DDD	-	190.0 N	-	-	-	860.0 N
O, P-DDE	-	280.0 N	-	-	-	64.0 N
O, P-DDT	14.0 J	1400.0 C	-	-	-	44.0 N

Notes:

Surface soil samples were collected during the August 1994 Black & Veatch Site Inspection.

VS - Vienna Street Dump
SS - Surface soil sample
VOCs - Volatile organic compounds
ug/kg - Micrograms per kilogram
SVOCs - Semivolatile organic compounds
U - Value is below the reporting limit (PQL)
J - Estimated value
PCBs - Polychlorinated biphenyls
C - Confirmed by gas chromatograph
N - Presumptive evidence of presence of material
\- Material analyzed for but not detected
Shading - constituent is elevated above background

TABLE 6
SUMMARY OF INORGANIC ANALYTICAL RESULTS
SITE INSPECTION SUBSURFACE SOIL SAMPLES
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

Compound	Background Sample VS-SB-01	VS-SB-02	VS-SB-03	VS-SB-04	VS-SB-05	VS-SB-06
Inorganics - Total (mg/kg)						
Aluminum	14000	2100	15000	150000	15000	15000
Arsenic	12.00	1000.00	5.90	1600.00	12.00	9.60
Barium	29.00	290.00	19.00	310.00	12.00	12.00
Chromium	35.00	57.00	28.00	54.00	34.00	41.00
Cobalt	1.60 J	9.00	1.60 J	8.70	1.70	2.10
Copper	7.30	330.00	-	620.00	8.70	15.00
Lead	20.00 J	1900.00 J	11.00 J	5900.00 J	14.00 J	21.00 J
Magnesium	120.00	1800.00	150.00	1800.00	92.00	260.00
Manganese	92.00	960.00	68.00	430.00	54.00	130.00
Total Mercury	0.12 U	2.50	-	1.10	-	-
Vanadium	75.00	38.00	58.00	36.00	110.00	88.00
Zinc	30.00 U	2500.00	-	6000.00	120.00	53.00

Notes:

Subsurface soil samples were collected during the August 1994 Black & Veatch Site Inspection.

VS - Vienna Street Dump
SB - Subsurface soil sample
mg/kg - Milligrams per kilogram
J - Estimated value
U - Value is below the reporting limit
\- Material analyzed for but not detected
Shading - constituent is elevated above background

TABLE 7
SUMMARY OF ORGANIC ANALYTICAL RESULTS
SITE INSPECTION SUBSURFACE SOIL SAMPLES
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

Compound	Background Sample VS-SB-01	VS-SB-02	VS-SB-03	VS-SB-04	VS-SB-05	VS-SB-06
VOCs (ug/kg)						
Toluene	75 U	10 J	-	11 J	-	-
Chlorobenzene	75 U	-	-	-	-	21 J
(M-and/or P-) xylene	75 U	-	-	-	-	6.2 J
1,4-Dichlorobenzene	75 U	-	-	-	-	16 J
1,2-Dichlorobenzene	75 U	-	-	-	-	6.3 J
SVOCs (ug/kg)						
4-Chloroaniline	7000 U	-	-	-	-	1500 J
Benzo (b and/or k) fluoranthene	7000 U	-	-	-	-	910 J
Bis (2-ethylhexyl)phthalate	7000 U	-	-	-	-	4500 J
Fluoranthene	7000 U	1400 J	-	-	-	950 J
Phenanthrene	7000 U	-	-	-	-	1300 J
Pyrene	7000 U	1200 J	-	-	-	880 J
Pesticides & PCBs (ug/kg)						
Aldrin	50 U	-	-	-	-	180
Heptachlor	50 U	3400	-	-	-	77
Heptachlor Epoxide	50 U	210	-	140	-	-
Alpha-BHC	50.0 U	19.0	-	37.0	-	-
Beta-BHC	50.0 U	1100.0	-	740.0	-	-
Dieldrin	50.0 U	2200.0 C	-	2700.0 C	-	700.0 C
4,4'-DDD (p,p'-DDD)	50.0 U	2600.0 C	-	12000.0 C	-	1300.0 C
4,4'-DDE (p,p'-DDE)	50.0 U	6200.0 C	-	5400.0 C	-	130.0
4,4'-DDT (p,p'-DDT)	50.0 U	9900.0 C	-	10000.0 C	-	42.0 C
Lindane (gamma-BHC)	50.0 U	-	-	31.0	-	-
Chlordene/2	7.0 U	69.0	-	210.0	-	2000.0 C
Alpha-chlordene/2	14.0 U	73.0 N	-	360.0	-	140.0 C
Gamma-chlordene/2	14.0 U	110.0	-	330.0	-	-
Gamma-chlordane/2	14.0 U	2100.0 C	-	3800.0 C	-	3400.0 C
Alpha-chlordane/2	-	850.0 C	-	2100.0 C	-	680.0 C
Miscellaneous Pesticides/PCBs (ug/kg)						
O, P-DDD	-	610.0 N	-	4000.0	-	430.0 C
O, P-DDE	-	550.0 N	-	510.0 N	-	64.0 N
O, P-DDT	-	1800.0 C	-	300.0 C	-	39.0 N

Notes:

Subsurface soil samples were collected during the August 1994 Black & Veatch Site Inspection.

VS - Vienna Street Dump
SB - Subsurface soil sample
VOCs - Volatile organic compounds
ug/kg - Micrograms per kilogram
U - Value is below the reporting limit
J - Estimated value
SVOCs - Semivolatile organic compounds
PCBs - Polychlorinated biphenyls
C - Confirmed by gas chromatograph
N - Presumptive evidence of material
\- Material analyzed for but not detected
Shading - constituent is elevated above background

TABLE 8
SUMMARY OF INORGANIC ANALYTICAL RESULTS
SITE INSPECTION SURFACE WATER SAMPLES
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

Metals (ug/L)	Background VS-SW-01	VS-SW-02	VS-SW-03	VS-SW-04
Aluminum	430	-	510	-
Arsenic	2U	-	6J	-
Barium	26	10	14	12
Cyanide	10U	-	12	12
Magnesium	740	750	680	810
Manganese	17	79	77	67
Zinc	150	-	-	-

Notes:

Samples were collected during the August 1994 Black & Veatch Site Inspection.

VS - Vienna Street Dump
SW - Surface water sample
ug/L - Micrograms per liter
U - Value is below the reporting limit
J - Estimated value
\- Material analyzed for but not detected
Shading - constituent is elevated above background

TABLE 9
SUMMARY OF INORGANIC ANALYTICAL RESULTS
SITE INSPECTION SEDIMENT SAMPLES - DRAINAGE DITCH
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

Compound	Background Sample VS-SS-01	Southern Drainage Ditch VS-SD-04	VS-SD-05
Inorganics - Total (mg/kg)			
Aluminum	6300	15000	9000
Arsenic	32.00	13.00	8.70
Barium	79.00	66.00	8.80
Chromium	15.00	28.00	20.00
Cobalt	2.40	3.00	0.92 J
Copper	23.00	9.80	-
Lead	91.00 J	36.00 J	6.90 J
Magnesium	180.00	340.00	85.00
Manganese	210.00	300.00	35.00
Vanadium	25.00	52.00	50.00
Zinc	140.00	51.00	-

Notes:

Surface soil and sediment samples were collected during the August 1994 Black & Veatch Site Inspection. (The drainage ditch was dry at the time of sampling. Therefore, the samples were compared to the background surface soil sample).

VS - Vienna Street Dump
SS - Surface soil sample
SD - Sediment sample
mg/kg - Milligrams per kilogram
J - Estimated value
\- Material analyzed for but not detected

TABLE 10
SUMMARY OF ORGANIC ANALYTICAL RESULTS
SITE INSPECTION SEDIMENT SAMPLES DRAINAGE DITCH
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

Compound	Background Sample VS-SS-01	Southern Drainage Ditch	
		VS-SD-04	VS-SD-05
Pesticides & PCBs (ug/kg)			
Dieldrin	16.0	-	-
4,4'-DDE (p,p'-DDE)	61.0	39.0	-
4,4'-DDT (p,p'-DDT)	50.0	17.0 J	-
Gamma-chlordane	8.7 J	-	-

Notes:

Surface soil and sediment samples were collected during the August 1994 Black & Veatch Site Inspection. (The drainage ditch was dry at the time of sampling. Therefore, the samples were compared to the background surface soil sample).

VS - Vienna Street Dump
SS - Surface soil sample
SD - Sediment sample
PCBs - Polychlorinated biphenyls
ug/kg - Micrograms per kilogram
J - Estimated value
\- Material analyzed for but not detected

TABLE 11
SUMMARY OF INORGANIC ANALYTICAL RESULTS
SITE INSPECTION SEDIMENT SAMPLES - BAY CREEK
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

Compound	Background Sample VS-SD-01	Bay Creek VS-SD-02	VS-SD-03	VS-SD-06
Inorganics - Total (mg/kg)				
Aluminum	800	4100	2600	1800
Arsenic	1.80 J	4.90	8.10	7.1
Barium	3.00	9.70	18.00	3.7
Chromium	44.00	17.00	8.70	6.6
Cobalt	1.40 J	1.20 J	0.93 J	0.79 J
Copper	3.00 U	-	-	-
Lead	7.30	7.90 J	15.00	21
Magnesium	230.00	190.00	240.00	-
Manganese	24.00	64.00	70.00	26
Vanadium	9.00	30.00	12.00	15
Zinc	30.00 U	-	50.00	-

Notes:

Sediment samples were collected during the August 1994 Black & Veatch Site Inspection.

VS - Vienna Street Dump
SD - Sediment sample
mg/kg - Milligrams per kilogram
J - Value is estimated
U - Value is below the reporting limit
\- Material analyzed for but not detected
Shading - constituent is elevated above background

TABLE 12
SUMMARY OF ORGANIC ANALYTICAL RESULTS
SITE INSPECTION SEDIMENT SAMPLES - BAY CREEK
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

Compound	Background Sample VS-SD-01	Bay Creek VS-SD-02	VS-SD-03	VS-SD-06
Pesticides & PCBs (ug/kg)				
Dieldrin	50.0 U	-	9.5 J	-
4,4'-DDD (p,p'-DDD)	50.0 U	-	16.0 J	-
4,4'-DDE (p,p'-DDE)	50.0 U	-	16.0 J	-
4,4'-DDT (p,p'-DDT)	50.0 U	42.0	330.0	13 J
Eldrin	50.0 U	-	11.0 J	-
Gamma-chlordane	-	-	11.0 J	-
Miscellaneous Pesticides/PCBs				
O,P -DDT	-	18 JN	170	-

Notes:

Sediment samples were collected during the August 1994 Black & Veatch Site Inspection.

VS - Vienna Street Dump
SD - Sediment sample
PCBs - Polychlorinated biphenyls
ug/kg - Micrograms per kilogram
U - Value is below the reporting limit
J - Estimated value
N - Presumptive evidence of the presence of material
\- Material analyzed for but not detected
Shading - constituent is elevated above background

TABLE 13
SUMMARY OF INORGANIC ANALYTICAL RESULTS
SITE INSPECTION POTABLE WELL SAMPLES
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

	Background		
Metals (ug/L)	**VS-PW-01**	**VS-PW-01D**	**VS-PW-02**
Barium	39	41	7
Copper	3U	-	26
Magnesium	980	1000	340
Manganese	17	17	-
Mercury	0.47	0.42	-
Zinc	30U	29	-

Notes:

Potable well samples were collected during the August 1994 Black & Veatch Site Inspection.

VS - Vienna Street Dump
PW - Potable well sample
D - Duplicate sample
ug/L - Micrograms per liter
U - Value is below the reporting limit
\- Material analyzed for but not detected
Shading - constituent is elevated above background

TABLE 14
SUMMARY OF INORGANIC ANALYTICAL RESULTS
EPD INVESTIGATION SURFACE SOIL SAMPLES
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

		Playground			Path		Dump
Compound	Background Sample Sample # 8	Sample # 1	Sample # 2	Sample # 3	Sample # 5	Sample # 6	Sample # 15
Inorganics - Total (mg/kg)							
Arsenic	8.80	8.00 U	8.00 U	8.00 U	8.00 U	69.00	110.00
Barium	15.00	61.00	30.00	50.00	38.00	25.00	177.00
Chromium	41.00	12.00	20.00	25.00	24.00	20.00	23.00
Copper	5.90	3.40	8.20	9.80	15.00	10.00	13.00
Lead	14.00	16.00	16.00	18.00	22.00	56.00	86.00
Nickel	3.90	4.20	3.50	5.00	13.00	3.90	4.30
Silver	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	3.80
Total Mercury	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.15

Notes:

Surface soil samples were collected during the August 2000 GA EPD investigation.

mg/kg - Milligrams per kilogram
U - Value is below the reporting limit (practical quantitation limit = PQL)
Shading - constituent is elevated above background

TABLE 15
SUMMARY OF ORGANIC ANALYTICAL RESULTS
EPD INVESTIGATION SURFACE SOIL SAMPLES
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

		Playground			Path		Dump
Compound	Background Sample Sample # 8	Sample # 1	Sample # 2	Sample # 3	Sample # 5	Sample # 6	Sample # 15
VOCs (ug/kg)							
Acetone	97 U	97 U	110 U	120 U	Trace	130	100 U
Benzene	4.9 U	4.9 U	5.7 U	9.5	4.9 U	4.8 U	5.1 U
Toluene	4.9 U	4.9 U	5.7 U	7.4	4.9 U	4.8 U	5.1 U
Pesticides & PCBs (ug/kg)							
alpha-BHC	2.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	5.2
Chlordane	50.0 U	50.0 U	100.0 U	50.0 U	50.0 U	50.0 U	400.0 JD
4,4'-DDD (p,p'-DDD)	7.5 U	7.5 U	15.0 U	7.5 U	7.5 U	49.5	47.0
4,4'-DDE (p,p'-DDE)	3.0 U	74.0 D	6.0 U	7.3	5.9	32.0	150.0 D
4,4'-DDT (p,p'-DDT)	6.5 U	23.0	13.0 U	6.5 U	6.5 U	20.0	170.0 D
Lindane (gamma-BHC)	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	2.5
Mirex	7.7	13.0	7.0 U	3.5 U	3.5 U	3.5 U	3.5 U
Toxaphene	130.0 U	3500.0 JD	260.0 U	130.0 J	130.0 U	130.0 U	130.0 U

Notes:

Surface soil samples were collected during the August 2000 GA EPD investigation.

There are traces of p,m-Xylene, n-Propylbenzene, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, n-butylbenzene, and Naphthalene in Sample # 3.

D - Denotes results based on dilution run on 9/14/00. 4,4-DDE and 4,4-DDT required 10X dilution for analysis. PQLs for these analytes adjusted accordingly.

J - Estimated value

ug/kg - Micrograms per kilogram

U - Value is below the reporting limit (PQL)

Shading - constituent is elevated above background

TABLE 16
SUMMARY OF INORGANIC ANALYTICAL RESULTS
EPD INVESTIGATION SUBSURFACE SOIL SAMPLES
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

	Playground	Dump		
Compound	Sample # 4	Sample # 9	Sample # 11	Sample # 13
Inorganics - Total (mg/kg)				
Arsenic	8.0 U	8.0 U	270.0	8.0 U
Barium	62.0	24.0	150.0	39.0
Cadmium	1.0 U	1.0 U	2.7	1.0 U
Chromium	43.0	17.0	31.0	24.0
Copper	5.3	4.1	89.0	6.3
Lead	22.0	15.0	260.0	18.0
Nickel	7.0	3.3	25.0	4.9
Total Mercury	0.1 U	0.1 U	0.31	0.1 U

Notes:

Subsurface soil samples were collected during the August 2000 GA EPD investigation.

mg/kg - Milligrams per kilogram
U - Value is below the reporting limit (PQL)

TABLE 17
SUMMARY OF ORGANIC ANALYTICAL RESULTS
EPD INVESTIGATION SUBSURFACE SOIL SAMPLES
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

	Playground	Dump		
Compound	Sample # 4	Sample # 9	Sample # 11	Sample # 13
VOCs (ug/kg)				
Carbon Disulfide	4.9 U	Trace	5.9	Trace
Chlorobenzene	4.9 U	5.6 U	31.0	4.9 U
Pesticides & PCBs (ug/kg)				
Aldrin	3.5 U	7.0 U	19.0	3.5 U
a-BHC	2.0 U	4.0 U	41.0 D	2.0 U
b-BHC	3.0 U	6.0 U	120.0 D	3.0 U
Chlordane	50.0 U	100.0 U	50.0 U	59.0 J
4,4'-DDD	7.5 U	15.0 U	500.0 D	27.0
4,4'-DDE (p,p'-DDE)	3.0 U	25.0	1700.0 D	36.0
4,4'-DDT (p,p'-DDT)	6.5 U	13.0 U	31.0	6.5 U
Lindane (g-BHC)	1.0 U	2.0 U	10.0	1.0 U
Toxaphene	130.0 U	1100.0 J	130.0 U	130.0 U

Notes:

Subsurface soil samples were collected during the August 2000 GA EPD investigation.
Traces of methylene chloride and iodomethane were detected in Sample #4.
Traces of chloromethane, methylene chloride, and carbon disulfide were detected in Sample #9.
Traces of acetone, benzene, tert-gutylbenzene, and 1,2,4-trimethylbenzene were detected in Sample #11.
Traces of acetone, and carbon disulfide were detected in Sample #13.

VOCs - Volatile organic compounds
ug/kg - Micrograms per kilogram
U - Value is below the reporting limit
PCBs - Polychlorinated biphenyls
D - Denotes results based on dilution run on 9/14/00. A-BHC and b-BHC required 10X dilution, 4,4'-DDD required 50X dilution and 4,4'-DDE required 100X dilution for analysis. MDLs for these analytes were adjusted accordingly.
J - Estimated value

TABLE 18
SUMMARY OF FIELD PARAMETERS
EPA INVESTIGATION GROUNDWATER SAMPLES
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

Sample Number	pH	Conductivity (mS/cm)	Turbidity (NTU)	Temperature °C	Comments
BKGD	4.32	0.042	5	NA	None
CNTL	5.7	0.17	233	18.1	High turbidity
TW1	4.54	0.28	NA	18.3	High turbidity
TW3	4.42	0.404	NA	18.2	High turbidity

Notes:

Groundwater samples were collected during the April 2001 EPA Investigation.

BKGD - Background monitoring well
CNTL - On-site control monitoring well
TW1 - On-site monitoring well
TW3 - On-site monitoring well
mS/cm = microsiemens per centimeter
NTU = National turbidity units
°C = degrees Celsius
NA = Not available

TABLE 19
SUMMARY OF ANALYTICAL RESULTS
EPA INVESTIGATION GROUNDWATER SAMPLES
VIENNA STREET DUMP
FORT VALLEY, GEORGIA

	BKGD	CNTL	TW1	TW3
Metals (ug/L)				
Aluminum	120A	2,300	23,000	4,400
Arsenic	2.0U	1.0U	19	19
Barium	26A	67	38	210
Cadmium	0.50U	0.50U	0.62	0.74
Calcium	0.65A	23	9	22
Chromium	5.0U	200	130	40
Cobalt	5.0U	5.0U	5.0U	12
Copper	20U	20U	72	20U
Iron	0.50U	5.2	120	29
Lead	1.0U	4.2	48	12
Magnesium	0.82A	2.8	2.7	9.5
Manganese	10U	100	320	840
Molybdenum	5.0U	5.0U	71	35
Nickel	10U	230	70	22
Potassium	2.0U	4.3	6.3	4.5
Selenium	2.0U	2.0U	11	4.3
Sodium	2.3A	5.4	32	29
Strontium	7.9A	99	46	210
Thallium	0.50U	0.50U	1.2	0.50U
Titanium	10U	53	370	110
Vanadium	5.0U	12	220	61
Yttrium	4.7A	14	48	93
Zinc	16AJ	63	210	57
Volatile Organic Compounds (ug/L)				
Trichlorofluoromethane	0.66J	1.0U	1.0U	1.0U
Cis-1,2-Dichloroethene	1.0U	1.0U	0.60J	1.0U
1,2-Dichloropropane	1.0U	1.0U	0.89J	8.6A
1,4-Dichlorobenzene	1.0U	1.0U	0.71J	1.0U
Extractables (ug/L)				
Caprolactam	85	10U	600	40
Pesticides and Polychlorinated Biphenyls (ug/L)				
Alpha-BHC	0.10U	0.10U	0.043J	0.039J
Dieldrin	0.10U	0.10U	0.10U	0.051J

Notes:

Groundwater samples were collected during the April 2001 EPA Investigation.

A - Average value
BKGD - Background monitoring well
CNTL - On-site control monitoring well
J - Estimated value
ug/L - Micrograms per liter
TW1 - On-site monitoring well
TW3 - On-site monitoring well
U - Value is below the reporting limit
Shading - constituent is elevated above background

APPENDIX C
ANALYTICAL DATA SET

HAZARDOUS WASTE MANAGEMENT BRANCH (HWMB)
REQUEST FOR LABORATORY ANALYSIS

#8 background

Location: Vienna Street Dump / Fort Valley

Background

Collected By/Phone: James Sliwinski / (404) 656-2833

Date: 08/30/00 13:05

Submitted To Lab: 08/30/00

HWMB LOG NUMBER: 8409

(Use a separate Request Sheet for each sample point)

Sample ID AD02870
Location: HWMB
Description: HW8409 VIENNA ST.DUMP/FT VALL
Sample Collecto J.SLIWINSKI
Sample ID: AD02870

Analysis Needed By: Routine ✓ Other (specify) _____

Sample Description (check one)

Waste ____ Soil/Sediment ✓ Sludge ____
Ground Water ____ Surface Water ____ Drinking Water Well ____

Concentration of Organics Requested (estimated): High ____ Low ✓ Other (e.g., rinse blank - specify) _____

Describe Sample Including Source and Known Properties (e.g. pH, concentration):
Municipal and industrial dump site: metals, herbicides, pesticides, PCBs, semi-volatile and volatile organics - Background soil sample, upgradient

Applicable Hazardous Waste Codes (If known) _____

Special Precautions:

ANALYSIS REQUIRED

(Note: Totals will always be run first. A TCLP will subsequently be run only if the total value indicates a positive TCLP could results)

1. TOTAL ORGANICS

		4 OZ JARS	8 OZ JARS	16 OZ JARS	6 OUNCES
Semi-Volatiles (Acid & Base\Neutral)	✓				
Volatiles	✓				
Pesticides	✓				
Herbicides	✓				
Organophosphorous Pesticides					
PCB	✓				
BETX		1	1	1	1
Total Petroleum Hydrocarbon					

2. TOTAL METALS

ICP Metals Scan (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) ✓
Mercury ✓
Metals Special Requests: _____

Organics Special Requests: _____

3. TCLP ORGANICS

Volatiles ____ Pesticides ____
Semi-Volatiles (Acid & Base/Neutral) ____ Herbicides ____
Additional Specific Organics for TCLP: _____

4. TCLP METALS ANALYSIS

TCLP Metals (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) ____ Additional Metals for TCLP: _____
Mercury ____

5. ADDITIONAL ANALYSIS REQUESTED (see list on back): _____

Reviewed By: (HWMB): _____ Date: _____ Reviewed By (EPD Lab): MWalker
Approved By:(HWMB): _____ Date: _____ Date (EPD Lab): 8/30/00

RECPT TEMP 0.0 MNW

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

455 14th Street NW, Atlanta, GA 30318-7900
(404) 206-5269

LABORATORY REPORT

TO: Georgia Env Protection Divison Hazardous Waste Mgmt Branch 205 Butler St SE Suite 1154E Atlanta, GA 30334	Date Collected: 8/30/2000 Time Collected: 13:05 Sample Collector: J.SLIWINSKI Chlorination: Sample Type:
Sample ID: AD02870 Facility Name: HW8409 VIENNA ST.DUMP/FT VALL Site ID: HWMB Location ID: Location Descr: HW8409 BACKGRND.SOIL UPGRADIENT	Received By: MW Date Received: 8/30/2000 Time Received: 5:36 PM Project: HW Reporting Date: 9/28/2000 Received Temperature: 0.0 °C

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
8260 Volatiles in Soil/Sed. QC Batch 36498										
Dibromofluoromethane(Surrogate QC Std.)			EPA 8260	55	ug/kg (dw)		0.00	AGV	9/5/2000	*33 to 75*
Toluene-d8(Surrogate QC Std.)			EPA 8260	51	ug/kg (dw)		0.00	AGV	9/5/2000	*39 to 68*
Bromofluorobenzene(Surrogate QC Std.)			EPA 8260	47	ug/kg (dw)		0.00	AGV	9/5/2000	*25 to 60*
1,2-Dichloroethane-d4(Surrogate QC Std.)			EPA 8260	53	ug/kg (dw)		4.9	AGV	9/5/2000	*35 to 65*
Dichlorodifluoromethane	34334		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Chloromethane	34421		EPA 8260	Not Detected	ug/kg (dw)		9.7	AGV	9/5/2000	
Bromomethane	34416		EPA 8260	Not Detected	ug/kg (dw)		9.7	AGV	9/5/2000	
Vinyl Chloride	34495		EPA 8260	Not Detected	ug/kg (dw)		1.9	AGV	9/5/2000	
Chloroethane	34314		EPA 8260	Not Detected	ug/kg (dw)		9.7	AGV	9/5/2000	
Methylene Chloride	34426		EPA 8260	Trace	ug/kg (dw)	B	4.9	AGV	9/5/2000	
Trichlorofluoromethane	34491		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Acetone	75059		EPA 8260	Not Detected	ug/kg (dw)		97	AGV	9/5/2000	
Dibromomethane	78756		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
trans-1,2-Dichloroethene	34549		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Iodomethane	73121		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Carbon Disulfide	78544		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
1,1-Dichloroethene	34504		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
1,1-Dichloroethane	34499		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
cis-1,2-Dichloroethene	77093		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
2,2-Dichloropropane	77170		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Bromochloromethane	77297		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Chloroform	34318		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
1,1-Dichloropropene	77168		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
1,2-Dichloroethane	34534		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
2-Butanone	75078		EPA 8260	Not Detected	ug/kg (dw)		97	AGV	9/5/2000	
1,1,1-Trichloroethane	34509		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	

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PQL: Practical Quantitation Limit
LSPC: result less than lower specification
USPC: result greater than upper specification
TIE: Tentatively Identified or Estimated
VIOL: Violation (result exceeds MCL)

Laboratory Contacts:

Inorganics:	Pat Sammons	Ext 5239
Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
Carbon Tetrachloride	34299		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Vinyl Acetate	78498		EPA 8260	Not Detected		ug/kg (dw)	48	AGV	9/5/2000	
Bromodichloromethane	34330		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2-Dichloropropane	34544		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Trichloroethene	34487		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Benzene	34237		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
cis-1,3-Dichloropropene	34702		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
trans-1,3-Dichloropropene	34697		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Dibromochloromethane	34309		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,1,2-Trichloroethane	34514		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Bromoform	34290		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2,3-Trichloropropane	78490		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
4-Methyl-2-Pentanone	75169		EPA 8260	Not Detected		ug/kg (dw)	48	AGV	9/5/2000	
2-Hexanone	75166		EPA 8260	Not Detected		ug/kg (dw)	48	AGV	9/5/2000	
Tetrachloroethene	34478		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,3-Dichloropropane	77173		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,1,2,2-Tetrachloroethane	34519		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Toluene	34483		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2-Dibromoethane	79749		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Chlorobenzene	34304		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Ethylbenzene	34374		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,1,1,2-Tetrachloroethane			EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Styrene	75192		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
p,m-Xylene	45510		EPA 8260	Not Detected		ug/kg (dw)	9.7	AGV	9/5/2000	
o-Xylene	78362		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Isopropylbenzene	77223		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Bromobenzene	78491		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
n-Propylbenzene	77224		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
2-Chlorotoluene	77225		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,3,5-Trimethylbenzene	77226		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
4-Chlorotoluene	77277		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
tert-Butylbenzene	77353		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2,4-Trimethylbenzene	34554		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
sec-Butylbenzene	77350		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,3-Dichlorobenzene	34569		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
p-Isopropyltoluene	77356		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,4-Dichlorobenzene	34574		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
n-Butylbenzene	77342		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2-Dichlorobenzene	34539		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2-Dibromo-3-chloropropane	99999		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2,4-Trichlorobenzene	34554		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Hexachlorobutadiene	39705		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Naphthalene	34445		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2,3-Trichlorobenzene	77613		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
8270 Semi-Vol In Soil/Sed QC Batch 36842										
2-Fluorophenol(Surrogate QC Std.)			EPA 8270C	45		ug/kg (dw)	0.00	GJG	9/14/2000	*22 to 63*
Phenol-d5(Surrogate QC Std.)			EPA 8270C	48		ug/kg (dw)	0.00	GJG	9/14/2000	*18 to 73*
Nitrobenzene-d5(Surrogate QC Std.)			EPA 8270C	52		ug/kg (dw)	0.00	GJG	9/14/2000	*25 to 81*
2-Fluorobiphenyl(Surrogate QC Std.)			EPA 8270C	47		ug/kg (dw)	0.00	GJG	9/14/2000	*28 to 81*

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
2,4,6-Tribromophenol(Surrogate QC Std.)			EPA 8270C	45		ug/kg (dw)	0.00	GJG	9/14/2000	*14 to 101*
Terphenyl-d14(Surrogate QC Std.)			EPA 8270C	57		ug/kg (dw)	0.00	GJG	9/14/2000	*44 to 92*
n-Nitrosodimethylamine	34441		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
2-Picoline	73310		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Methylmethanesulfonate	73119		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Ethylmethanesulfonate	73118		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Aniline	73185		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Phenol	34695		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
bis(2-Chloroethyl)ether	34276		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
2-Chlorophenol	34589		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
1,3-Dichlorobenzene	34569		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
1,4-Dichlorobenzene	34574		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Benzyl alcohol	75212		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/14/2000	
1,2-Dichlorobenzene	34539		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
2-Methylphenol			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
bis(2-Chloroisopropyl)ether	34286		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Acetophenone	73272		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
4-Methylphenol			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
n-Nitroso-di-n-propylamine	34428		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Hexachloroethane	34399		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Nitrobenzene	34450		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
n-Nitrosopiperidine	73129		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Isophorone	34411		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
2-Nitrophenol	34594		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
2,4-Dimethylphenol	34609		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
bis(2-Chloroethoxy)methane	34281		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Benzoic acid	75315		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/14/2000	
2,4-Dichlorophenol	34604		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
1,2,4-Trichlorobenzene	34554		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
aa-dimethyl-Phenethylamine	73136		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Naphthalene	34445		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
4-Chloroaniline	78867		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/14/2000	
2,6-Dichlorophenol	73122		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Hexachlorobutadiene	38705		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
n-Nitroso-di-n-butylamine	73159		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
4-Chloro-3-methylphenol	34455		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/14/2000	
2-Methylnaphthalene	78868		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
1,2,4,5-Tetrachlorobenzene	79787		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Hexachlorocyclopentadiene	34389		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
2,4,6-Trichlorophenol	34624		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
2,4,5-Trichlorophenol	78401		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
2-Chloronaphthalene	34584		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
1-Chloronaphthalene			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
2-Nitroaniline	78299		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/14/2000	
Dimethylphthalate	34344		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Acenaphthylene	34203		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
2,6-Dinitrotoluene	34629		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
3-Nitroaniline	78869		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/14/2000	
Acenaphthene	34208		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	

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2,4-Dinitrophenol	34619		EPA 8270C	Not Detected	ug/kg (dw)	5500	GJG	9/14/2000	
4-Nitrophenol	34649		EPA 8270C	Not Detected	ug/kg (dw)	5500	GJG	9/14/2000	
Dibenzofuran	75647		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Pentachlorobenzene	79790		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
2,4-Dinitrotoluene	34614		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
1-Naphthylamine	73143		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
2-Naphthylamine	73124		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
2,3,4,6-Tetrachlorophenol			EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Diethylphthalate	34339		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Fluorene	34384		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
4-Chlorophenyl-phenylether	34644		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
4-Nitroaniline	78870		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Diphenylamine			EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
4,6-Dinitro-2-methylphenol	34660		EPA 8270C	Not Detected	ug/kg (dw)	5500	GJG	9/14/2000	
n-Nitrosodiphenylamine	34436		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
1,2-Diphenylhydrazine	34349		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
4-Bromophenyl-phenylether	34639		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Phenacetin	73117		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Hexachlorobenzene	39701		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
4-Aminobiphenyl	73125		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Pentachlorophenol	39061		EPA 8270C	Not Detected	ug/kg (dw)	5500	GJG	9/14/2000	
Pronamide	73031		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Pentachloronitrobenzene	81808		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Phenanthrene	34464		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Anthracene	34223		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Di-n-butylphthalate	39112		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Fluoranthene	34379		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Benzidine	39121		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Pyrene	34472		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
p-Dimethylaminoazobenzene	73116		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Butylbenzylphthalate	34295		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Benzo[a]anthracene	34529		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
3,3'-Dichlorobenzidine	34634		EPA 8270C	Not Detected	ug/kg (dw)	2200	GJG	9/14/2000	
Chyrsene	34323		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
bis(2-Ethylhexyl)phthalate	39102		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Di-n-octylphthalate	34599		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Benzo[b]fluoranthene	34233		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Benzo[k]fluoranthene	34245		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
7,12-Dimethylbenz(a)anthracene	73115		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Benzo[a]pyrene	34250		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
3-Methylcholanthrene	73156		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Dibenz(a,j)acridine			EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Indeno[1,2,3-cd]pyrene	34406		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Dibenz[a,h]anthracene	34559		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Benzo[g,h,i]perylene	34524		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Pyridine	73312		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Alpha-BHC	39076		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Gamma-BHC	39343		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	
Beta-BHC	34257		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/14/2000	

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Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
Delta-BHC	34262		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Heptachlor	39413		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Aldrin	39333		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Heptachlor Epoxide	39423		EPA 8270C	Not Detected		ug/kg (dw)	2800	GJG	9/14/2000	
Endosulfan 1	34364		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/14/2000	
Dieldrin	39383		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
p,p'-DDE	39321		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Endrin	39393		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/14/2000	
Endosulfan 2	34359		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/14/2000	
p,p'-DDD	39311		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Endrin Aldehyde	34369		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
Endosulfan Sulfate	34354		EPA 8270C	Not Detected		ug/kg (dw)	2800	GJG	9/14/2000	
p,p'-DDT	39301		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/14/2000	
1-Docosene			EPA 8270C	7000 TIE		ug/kg (dw)	0.00	GJG	9/14/2000	
1-Dotriacontanol			EPA 8270C	1700 TIE		ug/kg (dw)	0.00	GJG	9/14/2000	
ICP Metals HW in Solids QC Batch 36308										
Silver	01078		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Arsenic	01003		EPA 6010B	8.8		mg/kg (dw)	8	PT	9/6/2000	
Barium	01008		EPA 6010B	15		mg/kg (dw)	1	PT	9/6/2000	
Cadmium	01028		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Chromium	01029		EPA 6010B	41		mg/kg (dw)	2	PT	9/6/2000	
Lead	01052		EPA 6010B	14		mg/kg (dw)	9	PT	9/6/2000	
Nickel	01068		EPA 6010B	3.9		mg/kg (dw)	2	PT	9/6/2000	
Selenium	01148		EPA 6010B	Not Detected		mg/kg (dw)	19	PT	9/6/2000	
Copper	01042		EPA 6010B	5.9		mg/kg (dw)	2	PT	9/6/2000	
QC Batch 36228										
Mercury			EPA 7471A	Not Detected		mg/kg (dw)	0.1	CN	9/7/2000	
Pesticides in Sediment/Soil QC Batch 36291										
TCMX surr std			EPA 8081A	5.60		ug/KG (dw)		PM	9/8/2000	*4.0 to 12*
DCB surr std			EPA 8081A	13.9		ug/KG (dw)		PM	9/8/2000	*8.0 to 24*
ALDRIN			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/8/2000	
a-BHC			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/8/2000	
b-BHC			EPA 8081A	Not Detected		ug/KG (dw)	3.0	PM	9/8/2000	
d-BHC			EPA 8081A	Not Detected		ug/KG (dw)	4.5	PM	9/8/2000	
LINDANE (g-BHC)			EPA 8081A	Not Detected		ug/KG (dw)	1.0	PM	9/8/2000	
CHLORDANE			EPA 8081A	Not Detected		ug/KG (dw)	50	PM	9/8/2000	
4,4-DDE			EPA 8081A	Not Detected		ug/KG (dw)	3.0	PM	9/8/2000	
4,4-DDD			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/8/2000	
4,4-DDT			EPA 8081A	Not Detected		ug/KG (dw)	6.5	PM	9/8/2000	
DIELDRIN			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/8/2000	
ENDOSULFAN I			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/8/2000	
ENDOSULFAN II			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/8/2000	
ENDOSULFAN SULFATE			EPA 8081A	Not Detected		ug/KG (dw)	8.0	PM	9/8/2000	
ENDRIN			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/8/2000	
ENDRIN ALDEHYDE			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/8/2000	
HEPTACHLOR			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/8/2000	
HEPTACHLOR EPOXIDE			EPA 8081A	Not Detected		ug/KG (dw)	4.0	PM	9/8/2000	
TOXAPHENE			EPA 8081A	Not Detected		ug/KG (dw)	130	PM	9/8/2000	

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
CHLORPYRIFOS (DURSBAN)			EPA 8081A	Not Detected	ug/KG (dw)		5.0	PM	9/8/2000	
HEXACHLOROBENZENE			EPA 8081A	Not Detected	ug/KG (dw)		1.0	PM	9/8/2000	
METHOXYCHLOR			EPA 8081A	Not Detected	ug/KG (dw)		20	PM	9/8/2000	
MIREX			EPA 8081A	7.7	ug/KG (dw)		3.5	PM	9/8/2000	
PCBs in Sediments or Soils QC Batch 36497										
TCMX surr std			EPA 8082	5.60	ug/KG (dw)			PM	9/8/2000	*4.0 to 12.0*
DCBP surr std			EPA 8082	13.9	ug/KG (dw)			PM	9/8/2000	*8.0 to 24.0*
PCB-1016			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
PCB-1221			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
PCB-1232			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
PCB-1242			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
PCB-1248			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
PCB-1254			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
PCB-1260			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
PCB-1262			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
Phenoxy Herbicides in Sediment QC Batch 36515										
DCAA-surr QC std			EPA 8151A	83	ug/KG			BG	9/12/2000	*80 to 280*
2,4-D			EPA 8151A	Not Detected	ug/KG		20	BG	9/12/2000	
SILVEX (2,4,5-TP)			EPA 8151A	Not Detected	ug/KG		4	BG	9/12/2000	

COMMENTS: $8260S -"B"- Blank had trace levels of Methylene Chloride due to lab contamination. 7-090700-239

ug/L: micrograms/liter	<: less than	
mg/L: milligrams/liter	MCL: Maximum Contaminant Level	
mg/kg: milligrams/kilogram	PQL: Practical Quantitation Limit	
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HAZARDOUS WASTE MANAGEMENT BRANCH (HWMB)
REQUEST FOR LABORATORY ANALYSIS

#1
0-1"

ation: Vienna Street Dump / Fort Valley

d By/Phone: James Sliwinski / (404) 656-2833

te: 08/30/00 9:40

itted To Lab: 08/30/00

LOG NUMBER: 8402

(parate Request Sheet for each sample point)

Sample ID AD02866
Location: HWMB
Description: HW8402 VIENNA ST.DUMP/FT
Sample Collecto J.SLIWINSKI
Sample ID: AD02866

lysis Needed By: Routine ✓ Other (specify) _____

ample Description (check one)

Waste ____ Soil/Sediment ✓ Sludge ____
Ground Water ____ Surface Water ____ Drinking Water Well ____

Concentration of Organics Requested (estimated): High ___ Low ✓ Other (e.g., rinse blank - specify) _____

Describe Sample Including Source and Known Properties (e.g. pH, concentration):
Municipal and industrial dump site: metals, herbicides, pesticides, PCBs, semi-volatile and volatile organics. Soil at Indian Oaks playground.

Applicable Hazardous Waste Codes (If known) _____ _____ _____

Special Precautions:

ANALYSIS REQUIRED

(Note: Totals will always be run first. A TCLP will subsequently be run only if the total value indicates a positive TCLP could results)

1. TOTAL ORGANICS

		4 OZ. JARS	8 OZ. JARS	16 OZ. JARS	ENVELOPES
Semi-Volatiles (Acid & Base\Neutral)	✓				
Volatiles	✓				
Pesticides	✓				
Herbicides	✓				
Organophosphorous Pesticides					
PCB	✓				
BETX					
Total Petroleum Hydrocarbon					
		1	2	1	=1

TOTAL METALS
ICP Metals Scan (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) ✓
Mercury ✓
Metals Special Requests: ____

Organics Special Requests: _____

3. TCLP ORGANICS

Volatiles ____ Pesticides ____
Semi-Volatiles (Acid & Base/Neutral) ____ Herbicides ____
Additional Specific Organics for TCLP: _____

4. TCLP METALS ANALYSIS

TCLP Metals (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) ____ Additional Metals for TCLP: ____
Mercury ____

5. ADDITIONAL ANALYSIS REQUESTED (see list on back): _____

Reviewed By: (HWMB): ____ Date: ____ Reviewed By (EPD Lab): M. Wilkins
Approved By:(HWMB): ____ Date: ____ Date (EPD Lab): 8/30/00

RECPT TEMP 0.0°, MNW

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

455 14th Street NW, Atlanta, GA 30318-7900
(404) 206-5269

LABORATORY REPORT

TO: Georgia Env Protection Divison Hazardous Waste Mgmt Branch 205 Butler St SE Suite 1154E Atlanta, GA 30334	Date Collected: 8/30/2000 Time Collected: 9:40 Sample Collector: J.SLIWINSKI Chlorination: Sample Type:
Sample ID: AD02866 Facility Name: HW8402 VIENNA ST.DUMP/FT VALL Site ID: HWMB Location ID: Location Descr: HW8402 SOIL@INDIAN OAKS PLAYGRN	Received By: MW Date Received: 8/30/2000 Time Received: 5:36 PM Project: HW Reporting Date: 10/5/2000 Received Temperature: 0.0 °C

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
8260 Volatiles in Soil/Sed. QC Batch 36498										
Dibromofluoromethane(Surrogate QC Std.)			EPA 8260	53		ug/kg (dw)	0.00	AGV	9/5/2000	*33 to 75*
Toluene-d8(Surrogate QC Std.)			EPA 8260	49		ug/kg (dw)	0.00	AGV	9/5/2000	*39 to 68*
Bromofluorobenzene(Surrogate QC Std.)			EPA 8260	50		ug/kg (dw)	0.00	AGV	9/5/2000	*25 to 60*
1,2-Dichloroethane-d4(Surrogate QC Std.)			EPA 8260	51		ug/kg (dw)	4.9	AGV	9/5/2000	*35 to 65*
Dichlorodifluoromethane	34334		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Chloromethane	34421		EPA 8260	Not Detected		ug/kg (dw)	9.7	AGV	9/5/2000	
Bromomethane	34416		EPA 8260	Not Detected		ug/kg (dw)	9.7	AGV	9/5/2000	
Vinyl Chloride	34495		EPA 8260	Not Detected		ug/kg (dw)	1.9	AGV	9/5/2000	
Chloroethane	34314		EPA 8260	Not Detected		ug/kg (dw)	9.7	AGV	9/5/2000	
Methylene Chloride	34426		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Trichlorofluoromethane	34491		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Acetone	75059		EPA 8260	Not Detected		ug/kg (dw)	97	AGV	9/5/2000	
Dibromomethane	78756		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
trans-1,2-Dichloroethene	34549		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Iodomethane	73121		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Carbon Disulfide	78544		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,1-Dichloroethene	34504		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,1-Dichloroethane	34499		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
cis-1,2-Dichloroethene	77093		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
2,2-Dichloropropane	77170		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Bromochloromethane	77297		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Chloroform	34318		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,1-Dichloropropene	77168		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2-Dichloroethane	34534		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
2-Butanone	75078		EPA 8260	Not Detected		ug/kg (dw)	97	AGV	9/5/2000	
1,1,1-Trichloroethane	34509		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Carbon Tetrachloride	34299		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or OC Range
Vinyl Acetate	78498		EPA 8260	Not Detected		ug/kg (dw)	48	AGV	9/5/2000	
Bromodichloromethane	34330		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2-Dichloropropane	34544		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Trichloroethene	34487		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Benzene	34237		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
cis-1,3-Dichloropropene	34702		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
trans-1,3-Dichloropropene	34697		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Dibromochloromethane	34309		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,1,2-Trichloroethane	34514		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Bromoform	34290		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2,3-Trichloropropane	78490		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
4-Methyl-2-Pentanone	75169		EPA 8260	Not Detected		ug/kg (dw)	48	AGV	9/5/2000	
2-Hexanone	75166		EPA 8260	Not Detected		ug/kg (dw)	48	AGV	9/5/2000	
Tetrachloroethene	34478		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,3-Dichloropropane	77173		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,1,2,2-Tetrachloroethane	34519		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Toluene	34483		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2-Dibromoethane	79749		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Chlorobenzene	34304		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Ethylbenzene	34374		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,1,1,2-Tetrachloroethane			EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Styrene	75192		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
p,m-Xylene	45510		EPA 8260	Not Detected		ug/kg (dw)	9.7	AGV	9/5/2000	
o-Xylene	78362		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Isopropylbenzene	77223		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Bromobenzene	78491		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
n-Propylbenzene	77224		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
2-Chlorotoluene	77225		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,3,5-Trimethylbenzene	77226		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
4-Chlorotoluene	77277		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
tert-Butylbenzene	77353		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2,4-Trimethylbenzene	34554		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
sec-Butylbenzene	77350		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,3-Dichlorobenzene	34569		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
p-Isopropyltoluene	77356		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,4-Dichlorobenzene	34574		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
n-Butylbenzene	77342		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2-Dichlorobenzene	34539		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2-Dibromo-3-chloropropane	99999		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2,4-Trichlorobenzene	34554		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Hexachlorobutadiene	39705		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
Naphthalene	34445		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
1,2,3-Trichlorobenzene	77613		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/5/2000	
8270 Semi-Vol in Soil/Sed QC Batch 36842										
2-Fluorophenol(Surrogate QC Std.)		U	EPA 8270C	65		ug/kg (dw)	0.00	GJG	9/15/2000	*22 to 63*
Phenol-d5(Surrogate QC Std.)		U	EPA 8270C	76		ug/kg (dw)	0.00	GJG	9/15/2000	*18 to 73*
Nitrobenzene-d5(Surrogate QC Std.)			EPA 8270C	77		ug/kg (dw)	0.00	GJG	9/15/2000	*25 to 81*
2-Fluorobiphenyl(Surrogate QC Std.)			EPA 8270C	78		ug/kg (dw)	0.00	GJG	9/15/2000	*28 to 81*
2,4,6-Tribromophenol(Surrogate QC Std.)			EPA 8270C	97		ug/kg (dw)	0.00	GJG	9/15/2000	*14 to 101*
Terphenyl-d14(Surrogate QC Std.)		U	EPA 8270C	98		ug/kg (dw)	0.00	GJG	9/15/2000	*44 to 92*
n-Nitrosodimethylamine	34441		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
2-Picoline	73310		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Methylmethanesulfonate	73119		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Ethylmethanesulfonate	73118		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Aniline	73185		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Phenol	34695		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
bis(2-Chloroethyl)ether	34276		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2-Chlorophenol	34589		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
1,3-Dichlorobenzene	34569		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
1,4-Dichlorobenzene	34574		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Benzyl alcohol	75212		EPA 8270C	Not Detected	ug/kg (dw)		2200	GJG	9/15/2000	
1,2-Dichlorobenzene	34539		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2-Methylphenol			EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
bis(2-Chloroisopropyl)ether	34286		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Acetophenone	73272		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
4-Methylphenol			EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
n-Nitroso-di-n-propylamine	34428		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Hexachloroethane	34399		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Nitrobenzene	34450		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
n-Nitrosopiperidine	73129		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Isophorone	34411		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2-Nitrophenol	34594		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2,4-Dimethylphenol	34609		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
bis(2-Chloroethoxy)methane	34281		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Benzoic acid	75315		EPA 8270C	Not Detected	ug/kg (dw)		5700	GJG	9/15/2000	
2,4-Dichlorophenol	34604		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
1,2,4-Trichlorobenzene	34554		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
aa-dimethyl-Phenethylamine	73136		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Naphthalene	34445		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
4-Chloroaniline	78867		EPA 8270C	Not Detected	ug/kg (dw)		2200	GJG	9/15/2000	
2,6-Dichlorophenol	73122		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Hexachlorobutadiene	38705		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
n-Nitroso-di-n-butylamine	73159		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
4-Chloro-3-methylphenol	34455		EPA 8270C	Not Detected	ug/kg (dw)		2200	GJG	9/15/2000	
2-Methylnaphthalene	78868		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
1,2,4,5-Tetrachlorobenzene	79787		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Hexachlorocyclopentadiene	34389		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2,4,6-Trichlorophenol	34624		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2,4,5-Trichlorophenol	78401		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2-Chloronaphthalene	34584		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
1-Chloronaphthalene			EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2-Nitroaniline	78299		EPA 8270C	Not Detected	ug/kg (dw)		5700	GJG	9/15/2000	
Dimethylphthalate	34344		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Acenaphthylene	34203		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2,6-Dinitrotoluene	34629		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
3-Nitroaniline	78869		EPA 8270C	Not Detected	ug/kg (dw)		5700	GJG	9/15/2000	
Acenaphthene	34208		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2,4-Dinitrophenol	34619		EPA 8270C	Not Detected	ug/kg (dw)		5700	GJG	9/15/2000	
4-Nitrophenol	34649		EPA 8270C	Not Detected	ug/kg (dw)		5700	GJG	9/15/2000	
Dibenzofuran	75647		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Pentachlorobenzene	79790		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2,4-Dinitrotoluene	34614		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	

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1-Naphthylamine	73143		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
2-Naphthylamine	73124		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
2,3,4,6-Tetrachlorophenol			EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Diethylphthalate	34339		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Fluorene	34384		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
4-Chlorophenyl-phenylether	34644		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
4-Nitroaniline	78870		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Diphenylamine			EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
4,6-Dinitro-2-methylphenol	34660		EPA 8270C	Not Detected	ug/kg (dw)	5700	GJG	9/15/2000	
n-Nitrosodiphenylamine	34436		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
1,2-Diphenylhydrazine	34349		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
4-Bromophenyl-phenylether	34639		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Phenacetin	73117		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorobenzene	39701		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
4-Aminobiphenyl	73125		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Pentachlorophenol	39061		EPA 8270C	Not Detected	ug/kg (dw)	5700	GJG	9/15/2000	
Pronamide	73031		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Pentachloronitrobenzene	81808		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Phenanthrene	34464		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Anthracene	34223		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Di-n-butylphthalate	39112		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Fluoranthene	34379		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Benzidine	39121		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Pyrene	34472		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
p-Dimethylaminoazobenzene	73116		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Butylbenzylphthalate	34295		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[a]anthracene	34529		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
3,3'-Dichlorobenzidine	34634		EPA 8270C	Not Detected	ug/kg (dw)	2200	GJG	9/15/2000	
Chyrsene	34323		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Ethylhexyl)phthalate	39102		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Di-n-octylphthalate	34599		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[b]fluoranthene	34233		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[k]fluoranthene	34245		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
7,12-Dimethylbenz(a)anthracene	73115		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[a]pyrene	34250		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
3-Methylcholanthrene	73156		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Dibenz(a,j)acridine			EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Indeno[1,2,3-cd]pyrene	34406		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Dibenz[a,h]anthracene	34559		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[g,h,i]perylene	34524		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Pyridine	73312		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Alpha-BHC	39076		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Gamma-BHC	39343		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Beta-BHC	34257		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Delta-BHC	34262		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Heptachlor	39413		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Aldrin	39333		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Heptachlor Epoxide	39423		EPA 8270C	Not Detected	ug/kg (dw)	2800	GJG	9/15/2000	
Endosulfan 1	34364		EPA 8270C	Not Detected	ug/kg (dw)	5700	GJG	9/15/2000	
Dieldrin	39383		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
p,p'-DDE	39321		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	

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Endrin	39393		EPA 8270C	Not Detected	ug/kg (dw)		2300	GJG	9/15/2000	
Endosulfan 2	34359		EPA 8270C	Not Detected	ug/kg (dw)		5700	GJG	9/15/2000	
p,p'-DDD	39311		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Endrin Aldehyde	34369		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Endosulfan Sulfate	34354		EPA 8270C	Not Detected	ug/kg (dw)		2800	GJG	9/15/2000	
p,p'-DDT	39301		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Hexadecanoic acid			EPA 8270C	1600 TIE	ug/kg (dw)			GJG	9/15/2000	
1-Octadecanol			EPA 8270C	11000 TIE	ug/kg (dw)			GJG	9/15/2000	
ICP Metals HW in Solids QC Batch 36308										
Silver	01078		EPA 6010B	Not Detected	mg/kg (dw)		1	PT	9/6/2000	
Arsenic	01003		EPA 6010B	Not Detected	mg/kg (dw)		8	PT	9/6/2000	
Barium	01008		EPA 6010B	61	mg/kg (dw)		1	PT	9/6/2000	
Cadmium	01028		EPA 6010B	Not Detected	mg/kg (dw)		1	PT	9/6/2000	
Chromium	01029		EPA 6010B	12	mg/kg (dw)		2	PT	9/6/2000	
Lead	01052		EPA 6010B	16	mg/kg (dw)		9	PT	9/6/2000	
Nickel	01068		EPA 6010B	4.2	mg/kg (dw)		2	PT	9/6/2000	
Selenium	01148		EPA 6010B	Not Detected	mg/kg (dw)		19	PT	9/6/2000	
Copper	01042		EPA 6010B	3.4	mg/kg (dw)		2	PT	9/6/2000	
QC Batch 36228										
Mercury			EPA 7471A	Not Detected	mg/kg (dw)		0.1	CN	9/7/2000	
Pesticides in Sediment/Soil QC Batch 36291										
TCMX surr std			EPA 8081A	6.45	ug/KG (dw)			PM	9/13/2000	*4.0 to 12*
DCB surr std			EPA 8081A	12.8	ug/KG (dw)			PM	9/13/2000	*8.0 to 24*
ALDRIN			EPA 8081A	Not Detected	ug/KG (dw)		3.5	PM	9/13/2000	
a-BHC			EPA 8081A	Not Detected	ug/KG (dw)		2.0	PM	9/13/2000	
b-BHC			EPA 8081A	Not Detected	ug/KG (dw)		3.0	PM	9/13/2000	
d-BHC			EPA 8081A	Not Detected	ug/KG (dw)		4.5	PM	9/13/2000	
LINDANE (g-BHC)			EPA 8081A	Not Detected	ug/KG (dw)		1.0	PM	9/13/2000	
CHLORDANE			EPA 8081A	Not Detected	ug/KG (dw)		50	PM	9/13/2000	
4,4-DDE			EPA 8081A	74	ug/KG (dw)	D	30	PM	9/13/2000	
4,4-DDD			EPA 8081A	Not Detected	ug/KG (dw)		7.5	PM	9/13/2000	
4,4-DDT			EPA 8081A	23	ug/KG (dw)		6.5	PM	9/13/2000	
DIELDRIN			EPA 8081A	Not Detected	ug/KG (dw)		2.0	PM	9/13/2000	
ENDOSULFAN I			EPA 8081A	Not Detected	ug/KG (dw)		5.0	PM	9/13/2000	
ENDOSULFAN II			EPA 8081A	Not Detected	ug/KG (dw)		7.5	PM	9/13/2000	
ENDOSULFAN SULFATE			EPA 8081A	Not Detected	ug/KG (dw)		8.0	PM	9/13/2000	
ENDRIN			EPA 8081A	Not Detected	ug/KG (dw)		7.5	PM	9/13/2000	
ENDRIN ALDEHYDE			EPA 8081A	Not Detected	ug/KG (dw)		3.5	PM	9/13/2000	
HEPTACHLOR			EPA 8081A	Not Detected	ug/KG (dw)		5.0	PM	9/13/2000	
HEPTACHLOR EPOXIDE			EPA 8081A	Not Detected	ug/KG (dw)		4.0	PM	9/13/2000	
TOXAPHENE			EPA 8081A	3500	ug/KG (dw)	J,D	1300	PM	9/13/2000	
CHLORPYRIFOS (DURSBAN)			EPA 8081A	Not Detected	ug/KG (dw)		5.0	PM	9/13/2000	
HEXACHLOROBENZENE			EPA 8081A	Not Detected	ug/KG (dw)		1.0	PM	9/13/2000	
METHOXYCHLOR			EPA 8081A	Not Detected	ug/KG (dw)		20	PM	9/13/2000	
MIREX			EPA 8081A	13	ug/KG (dw)		3.5	PM	9/13/2000	
PCBs in Sediments or Soils QC Batch 36497										
TCMX surr std			EPA 8082	6.45	ug/KG (dw)			PM	9/12/2000	*4.0 to 12.0*
DCBP surr std			EPA 8082	12.8	ug/KG (dw)			PM	9/12/2000	*8.0 to 24.0*
PCB-1016			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/12/2000	
PCB-1221			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/12/2000	

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PCB-1232			EPA 8082	Not Detected	ug/KG (dw)	33	PM	9/12/2000	
PCB-1242			EPA 8082	Not Detected	ug/KG (dw)	33	PM	9/12/2000	
PCB-1248			EPA 8082	Not Detected	ug/KG (dw)	33	PM	9/12/2000	
PCB-1254			EPA 8082	Not Detected	ug/KG (dw)	33	PM	9/12/2000	
PCB-1260			EPA 8082	Not Detected	ug/KG (dw)	33	PM	9/12/2000	
PCB-1262			EPA 8082	Not Detected	ug/KG (dw)	33	PM	9/12/2000	
Phenoxy Herbicides in Sediment QC Batch 36515									
DCAA-surr QC std			EPA 8151A	174	ug/KG		BG	9/12/2000	*80 to 280*
2,4-D			EPA 8151A	Not Detected	ug/KG	20	BG	9/12/2000	
SILVEX (2,4,5-TP)			EPA 8151A	Not Detected	ug/KG	4	BG	9/12/2000	

COMMENTS: $8081S - D qualifier denotes results based on dilution run on 9/13/00. 4,4-DDE and Toxaphene required 10X dilution for analysis. PQLs for these analytes adjusted accordingly.
$8081S - J qualifier denotes estimated results. Toxaphene estimated due to weathering effects resulting in peak ratios varied from the standard.

COMMENTS: $8151B - Herbicides in Sediments - The recoveries for both 2,4-D (33.4%) and Silvex (19.6%) in the MS are below the acceptable QC range (Range = 50-140%) and the precision for 2,4-D is out of the acceptable QC limit at 64.1% (Limit = 50%) due to matrix interferences. Recoveries and precision for the LCS/LCSD are all within the acceptable QC ranges (1-091300-485).

COMMENTS: $8270S - Sample had three surrogate compounds, 2-Fluorophenol (65% recovery, limits 22-63%), Phenol-d5 (76% recovery, limits 18-73%), and Terphenyl-d14 (98% recovery, limits 44-92%) with recoveries outside acceptable control limits due to matrix interferences. LCS results were within acceptable control limits 7-091900-255

COMMENTS: $P_8081S : 4,4-DDD recovery for MS 0% (range 50 - 150%) and "Not Detected" in MSD (no precision calculated - limit = 35%) due to matrix interferences. LCS/LCSD were in control. 1-092000-498

ug/L: micrograms/liter	<: less than	**Laboratory Contacts:**
mg/L: milligrams/liter	MCL: Maximum Contaminant Level	
mg/kg: milligrams/kilogram	PQL: Practical Quantitation Limit	Inorganics: Pat Sammons Ext 5239
ug/kg:	LSPC: result less than lower specification	Metals: Mark Tolbert Ext 5240
micrograms/kilogram	USPC: result greater than upper specification	Organics: Danny Reed Ext 5252
ug/g: micrograms/gram	TIE: Tentatively Identified or Estimated	GC Mass Spec: Steve Bryan Ext 5260
ppm: parts per million	VIOL: Violation (result exceeds MCL)	

HAZARDOUS WASTE MANAGEMENT BRANCH (HWMB)

REQUEST FOR LABORATORY ANALYSIS

#2012 GHL

Location: Vienna Street Dump / Fort Valley

Collected By/Phone: James Sliwinski / (404) 656-2833

Date: 12:35 pm 08/29/00

Submitted To Lab: 08/29/00

LOG NUMBER: 8403

(separate Request Sheet for each sample point)

LAB No.

Sample ID AD02389
Location: HWMB
Description: VIENNA STREET DUMP HW8403
Sample Collecto J SLIWINSKI
Entry Point:
Due Date: 12/30/1999

Analysis Needed By: Routine ✓ Other (specify)

Sample Description (check one)

Waste ____ Soil/Sediment ✓ Sludge ✓ Sludge
Ground Water ____ Surface Water ____ Drinking Water Well ____

Concentration of Organics Requested (estimated): High ___ Low ✓ Other (e.g., rinse blank - specify) ____

Describe Sample Including Source and Known Properties (e.g. pH, concentration):
Municipal and industrial dump site: metals, herbicides, pesticides, PCBs, semi-volatile and volatile organics

Applicable Hazardous Waste Codes (If known) ____

Special Precautions:

ANALYSIS REQUIRED

(Note: Totals will always be run first. A TCLP will subsequently be run only if the total value indicates a positive TCLP could results)

1. TOTAL ORGANICS

Semi-Volatiles (Acid & Base\Neutral)	✓	1 4 OZ JARS
Volatiles	✓	2 8 OZ JARS
Pesticides	✓	
Herbicides	✓	1 16 OZ JARS
Organophosphorous Pesticides		
PCB	✓	4 encores
BETX		
Total Petroleum Hydrocarbon		

2. TOTAL METALS

ICP Metals Scan (Ag,As,Ba,Cd,Cr,Ni,Pb,Se)	✓
Mercury	✓
Metals Special Requests:	

Organics Special Requests: ____

3. TCLP ORGANICS

Volatiles ____ Pesticides ____
Semi-Volatiles (Acid & Base/Neutral) ____ Herbicides ____
Additional Specific Organics for TCLP: ____

4. TCLP METALS ANALYSIS

TCLP Metals (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) ____ Additional Metals for TCLP: ____
Mercury ____

5. ADDITIONAL ANALYSIS REQUESTED (see list on back): ____

Reviewed By: (HWMB): ____ Date: ____ Reviewed By (EPD Lab): GHL
Approved By:(HWMB): ____ Date: ____ Date (EPD Lab): 8-29-00

RECPT TEMP 0.0°

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

455 14th Street NW, Atlanta, GA 30318-7900
(404) 206-5269

LABORATORY REPORT

TO: Georgia Env Protection Divison Hazardous Waste Mgmt Branch 205 Butler St SE Suite 1154E Atlanta, GA 30334	Date Collected: 8/29/2000 Time Collected: 12:35 Sample Collector: J SLIWINSKI Chlorination: Sample Type:
Sample ID: AD02389 Facility Name: VIENNA STREET DUMP HW8403 Site ID: HWMB Location ID: Location Descr: HW8403 FORT VALLEY	Received By: GHL Date Received: 8/30/2000 Time Received: 8:52 AM Project: HW Reporting Date: 10/5/2000 Received Temperature: 0.0 °C

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
8260 Volatiles in Soil/Sed. QC Batch 36491										
Dibromofluoromethane(Surrogate QC Std.)			EPA 8260	51	ug/kg (dw)		0.00	AGV	8/31/2000	*33 to 75*
Toluene-d8(Surrogate QC Std.)			EPA 8260	52	ug/kg (dw)		0.00	AGV	8/31/2000	*39 to 68*
Bromofluorobenzene(Surrogate QC Std.)			EPA 8260	47	ug/kg (dw)		0.00	AGV	8/31/2000	*25 to 60*
1,2-Dichloroethane-d4(Surrogate QC Std.)			EPA 8260	42	ug/kg (dw)		5.7	AGV	8/31/2000	*35 to 65*
Dichlorodifluoromethane	34334		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	
Chloromethane	34421		EPA 8260	Trace	ug/kg (dw)		11	AGV	8/31/2000	
Bromomethane	34416		EPA 8260	Not Detected	ug/kg (dw)		11	AGV	8/31/2000	
Vinyl Chloride	34495		EPA 8260	Not Detected	ug/kg (dw)		2.3	AGV	8/31/2000	
Chloroethane	34314		EPA 8260	Not Detected	ug/kg (dw)		11	AGV	8/31/2000	
Methylene Chloride	34426		EPA 8260	Trace	ug/kg (dw)	B	5.7	AGV	8/31/2000	
Trichlorofluoromethane	34491		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	
Acetone	75059		EPA 8260	Not Detected	ug/kg (dw)		110	AGV	8/31/2000	
Dibromomethane	78756		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	
trans-1,2-Dichloroethene	34549		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	
Iodomethane	73121		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	
Carbon Disulfide	78544		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	
1,1-Dichloroethene	34504		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	
1,1-Dichloroethane	34499		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	
cis-1,2-Dichloroethene	77093		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	
2,2-Dichloropropane	77170		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	
Bromochloromethane	77297		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	
Chloroform	34318		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	
1,1-Dichloropropene	77168		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	
1,2-Dichloroethane	34534		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	
2-Butanone	75078		EPA 8260	Not Detected	ug/kg (dw)		110	AGV	8/31/2000	
1,1,1-Trichloroethane	34509		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	
Carbon Tetrachloride	34299		EPA 8260	Not Detected	ug/kg (dw)		5.7	AGV	8/31/2000	

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ug/kg: micrograms/kilogram
ug/g: micrograms/gram
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PQL: Practical Quantitation Limit
LSPC: result less than lower specification
USPC: result greater than upper specification
TIE: Tentatively Identified or Estimated
VIOL: Violation (result exceeds MCL)

Laboratory Contacts:

Inorganics:	Pat Sammons	Ext 5239
Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
Vinyl Acetate	78498		EPA 8260	Not Detected		ug/kg (dw)	57	AGV	8/31/2000	
Bromodichloromethane	34330		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
1,2-Dichloropropane	34544		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
Trichloroethene	34487		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
Benzene	34237		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
cis-1,3-Dichloropropene	34702		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
trans-1,3-Dichloropropene	34697		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
Dibromochloromethane	34309		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
1,1,2-Trichloroethane	34514		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
Bromoform	34290		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
1,2,3-Trichloropropane	78490		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
4-Methyl-2-Pentanone	75169		EPA 8260	Not Detected		ug/kg (dw)	57	AGV	8/31/2000	
2-Hexanone	75166		EPA 8260	Not Detected		ug/kg (dw)	57	AGV	8/31/2000	
Tetrachloroethene	34478		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
1,3-Dichloropropane	77173		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
1,1,2,2-Tetrachloroethane	34519		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
Toluene	34483		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
1,2-Dibromoethane	79749		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
Chlorobenzene	34304		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
Ethylbenzene	34374		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
1,1,1,2-Tetrachloroethane			EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
Styrene	75192		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
p,m-Xylene	45510		EPA 8260	Not Detected		ug/kg (dw)	11	AGV	8/31/2000	
o-Xylene	78362		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
Isopropylbenzene	77223		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
Bromobenzene	78491		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
n-Propylbenzene	77224		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
2-Chlorotoluene	77225		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
1,3,5-Trimethylbenzene	77226		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
4-Chlorotoluene	77277		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
tert-Butylbenzene	77353		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
1,2,4-Trimethylbenzene	34554		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
sec-Butylbenzene	77350		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
1,3-Dichlorobenzene	34569		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
p-Isopropyltoluene	77356		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
1,4-Dichlorobenzene	34574		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
n-Butylbenzene	77342		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
1,2-Dichlorobenzene	34539		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
1,2-Dibromo-3-chloropropane	99999		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
1,2,4-Trichlorobenzene	34554		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
Hexachlorobutadiene	39705		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
Naphthalene	34445		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
1,2,3-Trichlorobenzene	77613		EPA 8260	Not Detected		ug/kg (dw)	5.7	AGV	8/31/2000	
8270 Semi-Vol in Soil/Sed QC Batch 36842										
2-Fluorophenol(Surrogate QC Std.)			EPA 8270C	52		ug/kg (dw)	0.00	GJG	9/14/2020	22 to 63
Phenol-d5(Surrogate QC Std.)			EPA 8270C	57		ug/kg (dw)	0.00	GJG	9/14/2020	18 to 73
Nitrobenzene-d5(Surrogate QC Std.)			EPA 8270C	61		ug/kg (dw)	0.00	GJG	9/14/2020	25 to 81
2-Fluorobiphenyl(Surrogate QC Std.)			EPA 8270C	53		ug/kg (dw)	0.00	GJG	9/14/2020	28 to 81
2,4,6-Tribromophenol(Surrogate QC Std.)			EPA 8270C	56		ug/kg (dw)	0.00	GJG	9/14/2020	14 to 101
Terphenyl-d14(Surrogate QC Std.)			EPA 8270C	62		ug/kg (dw)	0.00	GJG	9/14/2020	44 to 92
n-Nitrosodimethylamine	34441		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	

ug/L: micrograms/liter
mg/L: milligrams/liter
mg/kg: milligrams/kilogram
ug/kg: micrograms/kilogram
ug/g: micrograms/gram
ppm: parts per million

<: less than
MCL: Maximum Contaminant Level
PQL: Practical Quantitation Limit
LSPC: result less than lower specification
USPC: result greater than upper specification
TIE: Tentatively Identified or Estimated
VIOL: Violation (result exceeds MCL)

Laboratory Contacts:

Inorganics:	Pat Sammons	Ext 5239
Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
2-Picoline	73310		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Methylmethanesulfonate	73119		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Ethylmethanesulfonate	73118		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Aniline	73185		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Phenol	34695		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
bis(2-Chloroethyl)ether	34276		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
2-Chlorophenol	34589		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
1,3-Dichlorobenzene	34569		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
1,4-Dichlorobenzene	34574		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Benzyl alcohol	75212		EPA 8270C	Not Detected		ug/kg (dw)	4800	GJG	9/14/2020	
1,2-Dichlorobenzene	34539		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
2-Methylphenol			EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
bis(2-Chloroisopropyl)ether	34286		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Acetophenone	73272		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
4-Methylphenol			EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
n-Nitroso-di-n-propylamine	34428		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Hexachloroethane	34399		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Nitrobenzene	34450		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
n-Nitrosopiperidine	73129		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Isophorone	34411		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
2-Nitrophenol	34594		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
2,4-Dimethylphenol	34609		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
bis(2-Chloroethoxy)methane	34281		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Benzoic acid	75315		EPA 8270C	Not Detected		ug/kg (dw)	12000	GJG	9/14/2020	
2,4-Dichlorophenol	34604		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
1,2,4-Trichlorobenzene	34554		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
aa-dimethyl-Phenethylamine	73136		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Naphthalene	34445		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
4-Chloroaniline	78867		EPA 8270C	Not Detected		ug/kg (dw)	4800	GJG	9/14/2020	
2,6-Dichlorophenol	73122		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Hexachlorobutadiene	38705		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
n-Nitroso-di-n-butylamine	73159		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
4-Chloro-3-methylphenol	34455		EPA 8270C	Not Detected		ug/kg (dw)	4800	GJG	9/14/2020	
2-Methylnaphthalene	78868		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
1,2,4,5-Tetrachlorobenzene	79787		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Hexachlorocyclopentadiene	34389		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
2,4,6-Trichlorophenol	34624		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
2,4,5-Trichlorophenol	78401		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
2-Chloronaphthalene	34584		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
1-Chloronaphthalene			EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
2-Nitroaniline	78299		EPA 8270C	Not Detected		ug/kg (dw)	12000	GJG	9/14/2020	
Dimethylphthalate	34344		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Acenaphthylene	34203		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
2,6-Dinitrotoluene	34629		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
3-Nitroaniline	78869		EPA 8270C	Not Detected		ug/kg (dw)	12000	GJG	9/14/2020	
Acenaphthene	34208		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
2,4-Dinitrophenol	34619		EPA 8270C	Not Detected		ug/kg (dw)	12000	GJG	9/14/2020	
4-Nitrophenol	34649		EPA 8270C	Not Detected		ug/kg (dw)	12000	GJG	9/14/2020	
Dibenzofuran	75647		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Pentachlorobenzene	79790		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
2,4-Dinitrotoluene	34614		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	

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Laboratory Contacts:

Inorganics:	Pat Sammons	Ext 5239
Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
1-Naphthylamine	73143		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
2-Naphthylamine	73124		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
2,3,4,6-Tetrachlorophenol			EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Diethylphthalate	34339		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Fluorene	34384		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
4-Chlorophenyl-phenylether	34644		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
4-Nitroaniline	78870		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Diphenylamine			EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
4,6-Dinitro-2-methylphenol	34660		EPA 8270C	Not Detected	ug/kg (dw)		12000	GJG	9/14/2020	
n-Nitrosodiphenylamine	34436		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
1,2-Diphenylhydrazine	34349		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
4-Bromophenyl-phenylether	34639		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Phenacetin	73117		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Hexachlorobenzene	39701		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
4-Aminobiphenyl	73125		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Pentachlorophenol	39061		EPA 8270C	Not Detected	ug/kg (dw)		12000	GJG	9/14/2020	
Pronamide	73031		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Pentachloronitrobenzene	81808		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Phenanthrene	34464		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Anthracene	34223		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Di-n-butylphthalate	39112		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Fluoranthene	34379		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Benzidine	39121		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Pyrene	34472		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
p-Dimethylaminoazobenzene	73116		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Butylbenzylphthalate	34295		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Benzo[a]anthracene	34529		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
3,3'-Dichlorobenzidine	34634		EPA 8270C	Not Detected	ug/kg (dw)		4800	GJG	9/14/2020	
Chyrsene	34323		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
bis(2-Ethylhexyl)phthalate	39102		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Di-n-octylphthalate	34599		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Benzo[b]fluoranthene	34233		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Benzo[k]fluoranthene	34245		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
7,12-Dimethylbenz(a)anthracene	73115		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Benzo[a]pyrene	34250		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
3-Methylcholanthrene	73156		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Dibenz(a,j)acridine			EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Indeno[1,2,3-cd]pyrene	34406		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Dibenz[a,h]anthracene	34559		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Benzo[g,h,i]perylene	34524		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Pyridine	73312		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Alpha-BHC	39076		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Gamma-BHC	39343		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Beta-BHC	34257		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Delta-BHC	34262		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Heptachlor	39413		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Aldrin	39333		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
Heptachlor Epoxide	39423		EPA 8270C	Not Detected	ug/kg (dw)		6200	GJG	9/14/2020	
Endosulfan 1	34364		EPA 8270C	Not Detected	ug/kg (dw)		12000	GJG	9/14/2020	
Dieldrin	39383		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	
p,p'-DDE	39321		EPA 8270C	Not Detected	ug/kg (dw)		2500	GJG	9/14/2020	

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PQL: Practical Quantitation Limit
LSPC: result less than lower specification
USPC: result greater than upper specification
TIE: Tentatively Identified or Estimated
VIOL: Violation (result exceeds MCL)

Laboratory Contacts:

Inorganics:	Pat Sammons	Ext 5239
Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
Endrin	39393		EPA 8270C	Not Detected		ug/kg (dw)	4900	GJG	9/14/2020	
Endosulfan 2	34359		EPA 8270C	Not Detected		ug/kg (dw)	12000	GJG	9/14/2020	
p,p'-DDD	39311		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Endrin Aldehyde	34369		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Endosulfan Sulfate	34354		EPA 8270C	Not Detected		ug/kg (dw)	6200	GJG	9/14/2020	
p,p'-DDT	39301		EPA 8270C	Not Detected		ug/kg (dw)	2500	GJG	9/14/2020	
Hexadecanoic acid			EPA 8270C	1800 TIE		ug/kg (dw)	0.00	GJG	9/14/2020	
1-Octadecanol			EPA 8270C	24000 TIE		ug/kg (dw)	0.00	GJG	9/14/2020	
1-Dotriacontanol			EPA 8270C	7800 TIE		ug/kg (dw)	0.00	GJG	9/14/2020	
ICP Metals HW in Solids QC Batch 36308										
Silver	01078		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Arsenic	01003		EPA 6010B	Not Detected		mg/kg (dw)	8	PT	9/6/2000	
Barium	01008		EPA 6010B	30		mg/kg (dw)	1	PT	9/6/2000	
Cadmium	01028		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Chromium	01029		EPA 6010B	20		mg/kg (dw)	2	PT	9/6/2000	
Lead	01052		EPA 6010B	16		mg/kg (dw)	9	PT	9/6/2000	
Nickel	01068		EPA 6010B	3.5		mg/kg (dw)	2	PT	9/6/2000	
Selenium	01148		EPA 6010B	Not Detected		mg/kg (dw)	19	PT	9/6/2000	
Copper	01042		EPA 6010B	8.2		mg/kg (dw)	2	PT	9/6/2000	
QC Batch 36228										
Mercury			EPA 7471A	Not Detected		mg/kg (dw)	0.1	CN	9/7/2000	
Pesticides in Sediment/Soil QC Batch 36291										
TCMX surr std			EPA 8081A	6.15		ug/KG (dw)		PM	9/8/2000	*4.0 to 12*
DCB surr std			EPA 8081A	13.5		ug/KG (dw)		PM	9/8/2000	*8.0 to 24*
ALDRIN			EPA 8081A	Not Detected		ug/KG (dw)	7.0	PM	9/8/2000	
a-BHC			EPA 8081A	Not Detected		ug/KG (dw)	4.0	PM	9/8/2000	
b-BHC			EPA 8081A	Not Detected		ug/KG (dw)	6.0	PM	9/8/2000	
d-BHC			EPA 8081A	Not Detected		ug/KG (dw)	9.0	PM	9/8/2000	
LINDANE (g-BHC)			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/8/2000	
CHLORDANE			EPA 8081A	Not Detected		ug/KG (dw)	100	PM	9/8/2000	
4,4-DDE			EPA 8081A	Not Detected		ug/KG (dw)	6.0	PM	9/8/2000	
4,4-DDD			EPA 8081A	Not Detected		ug/KG (dw)	15	PM	9/8/2000	
4,4-DDT			EPA 8081A	Not Detected		ug/KG (dw)	13	PM	9/8/2000	
DIELDRIN			EPA 8081A	Not Detected		ug/KG (dw)	4.0	PM	9/8/2000	
ENDOSULFAN I			EPA 8081A	Not Detected		ug/KG (dw)	10	PM	9/8/2000	
ENDOSULFAN II			EPA 8081A	Not Detected		ug/KG (dw)	15	PM	9/8/2000	
ENDOSULFAN SULFATE			EPA 8081A	Not Detected		ug/KG (dw)	16	PM	9/8/2000	
ENDRIN			EPA 8081A	Not Detected		ug/KG (dw)	15	PM	9/8/2000	
ENDRIN ALDEHYDE			EPA 8081A	Not Detected		ug/KG (dw)	7.0	PM	9/8/2000	
HEPTACHLOR			EPA 8081A	Not Detected		ug/KG (dw)	10	PM	9/8/2000	
HEPTACHLOR EPOXIDE			EPA 8081A	Not Detected		ug/KG (dw)	8.0	PM	9/8/2000	
TOXAPHENE			EPA 8081A	Not Detected		ug/KG (dw)	260	PM	9/8/2000	
CHLORPYRIFOS (DURSBAN)			EPA 8081A	Not Detected		ug/KG (dw)	10	PM	9/8/2000	
HEXACHLOROBENZENE			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/8/2000	
METHOXYCHLOR			EPA 8081A	Not Detected		ug/KG (dw)	40	PM	9/8/2000	
MIREX			EPA 8081A	Not Detected		ug/KG (dw)	7.0	PM	9/8/2000	
PCBs in Sediments or Soils QC Batch 36497										
TCMX surr std			EPA 8082	6.15		ug/KG (dw)		PM	9/8/2000	*4.0 to 12.0*
DCBP surr std			EPA 8082	13.5		ug/KG (dw)		PM	9/8/2000	*8.0 to 24.0*
PCB-1016			EPA 8082	Not Detected		ug/KG (dw)	66	PM	9/8/2000	

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GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
PCB-1221			EPA 8082	Not Detected	ug/KG (dw)	66	PM	9/8/2000	
PCB-1232			EPA 8082	Not Detected	ug/KG (dw)	66	PM	9/8/2000	
PCB-1242			EPA 8082	Not Detected	ug/KG (dw)	66	PM	9/8/2000	
PCB-1248			EPA 8082	Not Detected	ug/KG (dw)	66	PM	9/8/2000	
PCB-1254			EPA 8082	Not Detected	ug/KG (dw)	66	PM	9/8/2000	
PCB-1260			EPA 8082	Not Detected	ug/KG (dw)	66	PM	9/8/2000	
PCB-1262			EPA 8082	Not Detected	ug/KG (dw)	66	PM	9/8/2000	
Phenoxy Herbicides in Sediment QC Batch 36515									
DCAA-surr QC std			EPA 8151A	265	ug/KG		BG	9/12/2000	*80 to 280*
2,4-D			EPA 8151A	Not Detected	ug/KG	20	BG	9/12/2000	
SILVEX (2,4,5-TP)			EPA 8151A	Not Detected	ug/KG	4	BG	9/12/2000	

COMMENTS: $8081S -PQLs adjusted for initial sample weight of 10.0 g (PQLs based on 20.0 g initial weight).

COMMENTS: $8260S "B" FLAG-Trace levels of Methylene Chloride due to laboratory contamination.7-090700-240

ug/L: micrograms/liter	<: less than	**Laboratory Contacts:**		
mg/L: milligrams/liter	MCL: Maximum Contaminant Level			
mg/kg: milligrams/kilogram	PQL: Practical Quantitation Limit	Inorganics:	Pat Sammons	Ext 5239
ug/kg:	LSPC: result less than lower specification	Metals:	Mark Tolbert	Ext 5240
micrograms/kilogram	USPC: result greater than upper specification	Organics:	Danny Reed	Ext 5252
ug/g: micrograms/gram	TIE: Tentatively Identified or Estimated	GC Mass Spec:	Steve Bryan	Ext 5260
ppm: parts per million	VIOL: Violation (result exceeds MCL)			

HAZARDOUS WASTE MANAGEMENT BRANCH (HWMB)
REQUEST FOR LABORATORY ANALYSIS

#3, 9-12

ation: Vienna Street Dump / Fort Valley

d By/Phone: James Sliwinski / (404) 656-2833

GHL

e: 13:05 pm 08/29/00 LAB No.

Sample ID AD02393
Location: HWMB
Description: VIENNA STREET DUMP HW8404
Sample Collecto J SLIWINSKI
Entry Point:
Due Date: 12/30/1999

ted To Lab: 08/29/00

.OG NUMBER: 8404
aste Request Sheet for each sample point)

sis Needed By: Routine ✓ Other (specify)

ple Description (check one)

Waste ____ Soil/Sediment ✓ Sludge ____
Ground Water ____ Surface Water ____ Drinking Water Well ____

Concentration of Organics Requested (estimated): High ____ Low ✓ Other (e.g., rinse blank - specify) ____

Describe Sample Including Source and Known Properties (e.g. pH, concentration):
Municipal and industrial dump site: metals, herbicides, pesticides, PCBs, semi-volatile and volatile organics

Applicable Hazardous Waste Codes (if known):

Special Precautions:

ANALYSIS REQUIRED

(Note: Totals will always be run first. A TCLP will subsequently be run only if the total value indicates a positive TCLP could results)

1. TOTAL ORGANICS

Semi-Volatiles (Acid & Base\Neutral)	✓	1 4 OZ. JARS
Volatiles	✓	2 8 OZ. JARS
Pesticides	✓	
Herbicides	✓	1 16 OZ. JARS
Organophosphorous Pesticides		
PCB	✓	4 encores
BETX		
Total Petroleum Hydrocarbon		

2. TOTAL METALS

ICP Metals Scan (Ag,As,Ba,Cd,Cr,Ni,Pb,Se)	✓
Mercury	✓
Metals Special Requests:	

Organics Special Requests:

3. TCLP ORGANICS

Volatiles ____ Pesticides ____
Semi-Volatiles (Acid & Base/Neutral) ____ Herbicides ____
Additional Specific Organics for TCLP:

4. TCLP METALS ANALYSIS

TCLP Metals (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) ____ Additional Metals for TCLP:
Mercury ____

5. ADDITIONAL ANALYSIS REQUESTED (see list on back):

Reviewed By: (HWMB): ____ Date: ____ Reviewed By (EPD Lab): GHL
Approved By:(HWMB): ____ Date: ____ Date (EPD Lab): 8-29-00

PT TEMP 0.0

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

455 14th Street NW, Atlanta, GA 30318-7900
(404) 206-5269

LABORATORY REPORT

TO: Georgia Env Protection Divison Hazardous Waste Mgmt Branch 205 Butler St SE Suite 1154E Atlanta, GA 30334	Date Collected: 8/29/2000 Time Collected: 13:05 Sample Collector: J SLIWINSKI Chlorination: Sample Type:
Sample ID: AD02393 Facility Name: VIENNA STREET DUMP HW8404 Site ID: HWMB Location ID: Location Descr: HW8404 FORT VALLEY	Received By: GHL Date Received: 8/30/2000 Time Received: 8:52 AM Project: HW Reporting Date: 9/28/2000 Received Temperature: 0.0 °C

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
8260 Volatiles in Soil/Sed. QC Batch 36491										
Dibromofluoromethane(Surrogate QC Std.)			EPA 8260	56	ug/kg (dw)		0.00	AGV	8/31/2000	*33 to 75*
Toluene-d8(Surrogate QC Std.)			EPA 8260	65	ug/kg (dw)		0.00	AGV	8/31/2000	*39 to 68*
Bromofluorobenzene(Surrogate QC Std.)			EPA 8260	39	ug/kg (dw)		0.00	AGV	8/31/2000	*25 to 60*
1,2-Dichloroethane-d4(Surrogate QC Std.)			EPA 8260	55	ug/kg (dw)		5.8	AGV	8/31/2000	*35 to 65*
Dichlorodifluoromethane	34334		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
Chloromethane	34421		EPA 8260	Not Detected	ug/kg (dw)		12	AGV	8/31/2000	
Bromomethane	34416		EPA 8260	Not Detected	ug/kg (dw)		12	AGV	8/31/2000	
Vinyl Chloride	34495		EPA 8260	Not Detected	ug/kg (dw)		2.3	AGV	8/31/2000	
Chloroethane	34314		EPA 8260	Not Detected	ug/kg (dw)		12	AGV	8/31/2000	
Methylene Chloride	34426		EPA 8260	Not Detected	ug/kg (dw)	B	5.8	AGV	8/31/2000	
Trichlorofluoromethane	34491		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
Acetone	75059		EPA 8260	Not Detected	ug/kg (dw)		120	AGV	8/31/2000	
Dibromomethane	78756		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
trans-1,2-Dichloroethene	34549		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
Iodomethane	73121		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
Carbon Disulfide	78544		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
1,1-Dichloroethene	34504		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
1,1-Dichloroethane	34499		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
cis-1,2-Dichloroethene	77093		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
2,2-Dichloropropane	77170		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
Bromochloromethane	77297		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
Chloroform	34318		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
1,1-Dichloropropene	77168		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
1,2-Dichloroethane	34534		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
2-Butanone	75078		EPA 8260	Not Detected	ug/kg (dw)		120	AGV	8/31/2000	
1,1,1-Trichloroethane	34509		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	

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Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER	PQL	ANALYST	ANALYSIS DATE	MCL or OC Range
Carbon Tetrachloride	34299		EPA 8260	Trace	ug/kg (dw)		5.8	AGV	8/31/2000	
Vinyl Acetate	78498		EPA 8260	Not Detected	ug/kg (dw)		58	AGV	8/31/2000	
Bromodichloromethane	34330		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
1,2-Dichloropropane	34544		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
Trichloroethene	34487		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
Benzene	34237		EPA 8260	9.5	ug/kg (dw)		5.8	AGV	8/31/2000	
cis-1,3-Dichloropropene	34702		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
trans-1,3-Dichloropropene	34697		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
Dibromochloromethane	34309		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
1,1,2-Trichloroethane	34514		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
Bromoform	34290		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
1,2,3-Trichloropropane	78490		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
4-Methyl-2-Pentanone	75169		EPA 8260	Not Detected	ug/kg (dw)		58	AGV	8/31/2000	
2-Hexanone	75166		EPA 8260	Not Detected	ug/kg (dw)		58	AGV	8/31/2000	
Tetrachloroethene	34478		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
1,3-Dichloropropane	77173		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
1,1,2,2-Tetrachloroethane	34519		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
Toluene	34483		EPA 8260	7.4	ug/kg (dw)		5.8	AGV	8/31/2000	
1,2-Dibromoethane	79749		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
Chlorobenzene	34304		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
Ethylbenzene	34374		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
1,1,1,2-Tetrachloroethane			EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
Styrene	75192		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
p,m-Xylene	45510		EPA 8260	Trace	ug/kg (dw)		12	AGV	8/31/2000	
o-Xylene	78362		EPA 8260	Not Detected	ug/kg (dw)		5.8	AGV	8/31/2000	
Isopropylbenzene	77223		EPA 8260	Not Detected	ug/kg (dw)	J	5.8	AGV	8/31/2000	
Bromobenzene	78491		EPA 8260	Not Detected	ug/kg (dw)	J	5.8	AGV	8/31/2000	
n-Propylbenzene	77224		EPA 8260	Trace	ug/kg (dw)	J	5.8	AGV	8/31/2000	
2-Chlorotoluene	77225		EPA 8260	Not Detected	ug/kg (dw)	J	5.8	AGV	8/31/2000	
1,3,5-Trimethylbenzene	77226		EPA 8260	Trace	ug/kg (dw)	J	5.8	AGV	8/31/2000	
4-Chlorotoluene	77277		EPA 8260	Not Detected	ug/kg (dw)	J	5.8	AGV	8/31/2000	
tert-Butylbenzene	77353		EPA 8260	Not Detected	ug/kg (dw)	J	5.8	AGV	8/31/2000	
1,2,4-Trimethylbenzene	34554		EPA 8260	Trace	ug/kg (dw)	J	5.8	AGV	8/31/2000	
sec-Butylbenzene	77350		EPA 8260	Not Detected	ug/kg (dw)	J	5.8	AGV	8/31/2000	
1,3-Dichlorobenzene	34569		EPA 8260	Not Detected	ug/kg (dw)	J	5.8	AGV	8/31/2000	
p-Isopropyltoluene	77356		EPA 8260	Not Detected	ug/kg (dw)	J	5.8	AGV	8/31/2000	
1,4-Dichlorobenzene	34574		EPA 8260	Not Detected	ug/kg (dw)	J	5.8	AGV	8/31/2000	
n-Butylbenzene	77342		EPA 8260	Trace	ug/kg (dw)	J	5.8	AGV	8/31/2000	
1,2-Dichlorobenzene	34539		EPA 8260	Not Detected	ug/kg (dw)	J	5.8	AGV	8/31/2000	
1,2-Dibromo-3-chloropropane	99999		EPA 8260	Not Detected	ug/kg (dw)	J	5.8	AGV	8/31/2000	
1,2,4-Trichlorobenzene	34554		EPA 8260	Not Detected	ug/kg (dw)	J	5.8	AGV	8/31/2000	
Hexachlorobutadiene	39705		EPA 8260	Not Detected	ug/kg (dw)	J	5.8	AGV	8/31/2000	
Naphthalene	34445		EPA 8260	Trace	ug/kg (dw)	J	5.8	AGV	8/31/2000	
1,2,3-Trichlorobenzene	77613		EPA 8260	Not Detected	ug/kg (dw)	J	5.8	AGV	8/31/2000	
Decane			EPA 8260	17 TIE	ug/kg (dw)		0.00	AGV	8/31/2000	
Undecane			EPA 8260	18 TIE	ug/kg (dw)		0.00	AGV	8/31/2000	
8270 Semi-Vol in Soil/Sed QC Batch 36842										
2-Fluorophenol(Surrogate QC Std.)		U	EPA 8270C	67	ug/kg (dw)		0.00	GJG	9/15/2000	*22 to 63*
Phenol-d5(Surrogate QC Std.)		U	EPA 8270C	80	ug/kg (dw)		0.00	GJG	9/15/2000	*18 to 73*

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Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

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Nitrobenzene-d5(Surrogate QC Std.)			EPA 8270C	78	ug/kg (dw)		0.00	GJG	9/15/2000	*25 to 81*
2-Fluorobiphenyl(Surrogate QC Std.)			EPA 8270C	81	ug/kg (dw)		0.00	GJG	9/15/2000	*28 to 81*
2,4,6-Tribromophenol(Surrogate QC Std.)			EPA 8270C	99	ug/kg (dw)		0.00	GJG	9/15/2000	*14 to 101*
Terphenyl-d14(Surrogate QC Std.)		U	EPA 8270C	100	ug/kg (dw)		0.00	GJG	9/15/2000	*44 to 92*
n-Nitrosodimethylamine	34441		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
2-Picoline	73310		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
Methylmethanesulfonate	73119		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
Ethylmethanesulfonate	73118		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
Aniline	73185		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
Phenol	34695		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
bis(2-Chloroethyl)ether	34276		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
2-Chlorophenol	34589		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
1,3-Dichlorobenzene	34569		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
1,4-Dichlorobenzene	34574		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
Benzyl alcohol	75212		EPA 8270C	Not Detected	ug/kg (dw)		2300	GJG	9/15/2000	
1,2-Dichlorobenzene	34539		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
2-Methylphenol			EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
bis(2-Chloroisopropyl)ether	34286		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
Acetophenone	73272		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
4-Methylphenol			EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
n-Nitroso-di-n-propylamine	34428		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
Hexachloroethane	34399		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
Nitrobenzene	34450		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
n-Nitrosopiperidine	73129		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
Isophorone	34411		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
2-Nitrophenol	34594		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
2,4-Dimethylphenol	34609		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
bis(2-Chloroethoxy)methane	34281		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
Benzoic acid	75315		EPA 8270C	Not Detected	ug/kg (dw)		5800	GJG	9/15/2000	
2,4-Dichlorophenol	34604		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
1,2,4-Trichlorobenzene	34554		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
aa-dimethyl-Phenethylamine	73136		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
Naphthalene	34445		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
4-Chloroaniline	78867		EPA 8270C	Not Detected	ug/kg (dw)		2300	GJG	9/15/2000	
2,6-Dichlorophenol	73122		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
Hexachlorobutadiene	38705		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
n-Nitroso-di-n-butylamine	73159		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
4-Chloro-3-methylphenol	34455		EPA 8270C	Not Detected	ug/kg (dw)		2300	GJG	9/15/2000	
2-Methylnaphthalene	78868		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
1,2,4,5-Tetrachlorobenzene	79787		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
Hexachlorocyclopentadiene	34389		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
2,4,6-Trichlorophenol	34624		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
2,4,5-Trichlorophenol	78401		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
2-Chloronaphthalene	34584		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
1-Chloronaphthalene			EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
2-Nitroaniline	78299		EPA 8270C	Not Detected	ug/kg (dw)		5800	GJG	9/15/2000	
Dimethylphthalate	34344		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
Acenaphthylene	34203		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	
2,6-Dinitrotoluene	34629		EPA 8270C	Not Detected	ug/kg (dw)		1200	GJG	9/15/2000	

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3-Nitroaniline	78869		EPA 8270C	Not Detected		ug/kg (dw)	5800	GJG	9/15/2000	
Acenaphthene	34208		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
2,4-Dinitrophenol	34619		EPA 8270C	Not Detected		ug/kg (dw)	5800	GJG	9/15/2000	
4-Nitrophenol	34649		EPA 8270C	Not Detected		ug/kg (dw)	5800	GJG	9/15/2000	
Dibenzofuran	75647		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Pentachlorobenzene	79790		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
2,4-Dinitrotoluene	34614		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
1-Naphthylamine	73143		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
2-Naphthylamine	73124		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
2,3,4,6-Tetrachlorophenol			EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Diethylphthalate	34339		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Fluorene	34384		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
4-Chlorophenyl-phenylether	34644		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
4-Nitroaniline	78870		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Diphenylamine			EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
4,6-Dinitro-2-methylphenol	34660		EPA 8270C	Not Detected		ug/kg (dw)	5800	GJG	9/15/2000	
n-Nitrosodiphenylamine	34436		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
1,2-Diphenylhydrazine	34349		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
4-Bromophenyl-phenylether	34639		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Phenacetin	73117		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Hexachlorobenzene	39701		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
4-Aminobiphenyl	73125		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Pentachlorophenol	39061		EPA 8270C	Not Detected		ug/kg (dw)	5800	GJG	9/15/2000	
Pronamide	73031		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Pentachloronitrobenzene	81808		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Phenanthrene	34464		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Anthracene	34223		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Di-n-butylphthalate	39112		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Fluoranthene	34379		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Benzidine	39121		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Pyrene	34472		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
p-Dimethylaminoazobenzene	73116		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Butylbenzylphthalate	34295		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Benzo[a]anthracene	34529		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
3,3'-Dichlorobenzidine	34634		EPA 8270C	Not Detected		ug/kg (dw)	2300	GJG	9/15/2000	
Chyrsene	34323		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
bis(2-Ethylhexyl)phthalate	39102		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Di-n-octylphthalate	34599		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Benzo[b]fluoranthene	34233		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Benzo[k]fluoranthene	34245		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
7,12-Dimethylbenz(a)anthracene	73115		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Benzo[a]pyrene	34250		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
3-Methylcholanthrene	73156		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Dibenz(a,j)acridine			EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Indeno[1,2,3-cd]pyrene	34406		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Dibenz[a,h]anthracene	34559		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Benzo[g,h,i]perylene	34524		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Pyridine	73312		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Alpha-BHC	39076		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	

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Gamma-BHC	39343		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Beta-BHC	34257		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Delta-BHC	34262		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Heptachlor	39413		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Aldrin	39333		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Heptachlor Epoxide	39423		EPA 8270C	Not Detected		ug/kg (dw)	2900	GJG	9/15/2000	
Endosulfan 1	34364		EPA 8270C	Not Detected		ug/kg (dw)	5800	GJG	9/15/2000	
Dieldrin	39383		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
p,p'-DDE	39321		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Endrin	39393		EPA 8270C	Not Detected		ug/kg (dw)	2300	GJG	9/15/2000	
Endosulfan 2	34359		EPA 8270C	Not Detected		ug/kg (dw)	5800	GJG	9/15/2000	
p,p'-DDD	39311		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Endrin Aldehyde	34369		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Endosulfan Sulfate	34354		EPA 8270C	Not Detected		ug/kg (dw)	2900	GJG	9/15/2000	
p,p'-DDT	39301		EPA 8270C	Not Detected		ug/kg (dw)	1200	GJG	9/15/2000	
Octadecanoic acid			EPA 8270C	3200 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
1-Octadecanol			EPA 8270C	13000 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
Hexatriacontane			EPA 8270C	3300 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
ICP Metals HW in Solids QC Batch 36308										
Silver	01078		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Arsenic	01003		EPA 6010B	Not Detected		mg/kg (dw)	8	PT	9/6/2000	
Barium	01008		EPA 6010B	50		mg/kg (dw)	1	PT	9/6/2000	
Cadmium	01028		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Chromium	01029		EPA 6010B	25		mg/kg (dw)	2	PT	9/6/2000	
Lead	01052		EPA 6010B	18		mg/kg (dw)	9	PT	9/6/2000	
Nickel	01068		EPA 6010B	5.0		mg/kg (dw)	2	PT	9/6/2000	
Selenium	01148		EPA 6010B	Not Detected		mg/kg (dw)	19	PT	9/6/2000	
Copper	01042		EPA 6010B	9.8		mg/kg (dw)	2	PT	9/6/2000	
QC Batch 36228										
Mercury			EPA 7471A	Not Detected		mg/kg (dw)	0.1	CN	9/7/2000	
Pesticides in Sediment/Soil QC Batch 36291										
TCMX surr std			EPA 8081A	5.75		ug/KG (dw)		PM	9/8/2000	4.0 to 12
DCB surr std			EPA 8081A	14.4		ug/KG (dw)		PM	9/8/2000	8.0 to 24
ALDRIN			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/8/2000	
a-BHC			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/8/2000	
b-BHC			EPA 8081A	Not Detected		ug/KG (dw)	3.0	PM	9/8/2000	
d-BHC			EPA 8081A	Not Detected		ug/KG (dw)	4.5	PM	9/8/2000	
LINDANE (g-BHC)			EPA 8081A	Not Detected		ug/KG (dw)	1.0	PM	9/8/2000	
CHLORDANE			EPA 8081A	Not Detected		ug/KG (dw)	50	PM	9/8/2000	
4,4-DDE			EPA 8081A	7.3		ug/KG (dw)	3.0	PM	9/8/2000	
4,4-DDD			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/8/2000	
4,4-DDT			EPA 8081A	Not Detected		ug/KG (dw)	6.5	PM	9/8/2000	
DIELDRIN			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/8/2000	
ENDOSULFAN I			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/8/2000	
ENDOSULFAN II			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/8/2000	
ENDOSULFAN SULFATE			EPA 8081A	Not Detected		ug/KG (dw)	8.0	PM	9/8/2000	
ENDRIN			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/8/2000	
ENDRIN ALDEHYDE			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/8/2000	

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Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
HEPTACHLOR			EPA 8081A	Not Detected	ug/KG (dw)		5.0	PM	9/8/2000	
HEPTACHLOR EPOXIDE			EPA 8081A	Not Detected	ug/KG (dw)		4.0	PM	9/8/2000	
TOXAPHENE			EPA 8081A	130	ug/KG (dw)	J	130	PM	9/8/2000	
CHLORPYRIFOS (DURSBAN)			EPA 8081A	Not Detected	ug/KG (dw)		5.0	PM	9/8/2000	
HEXACHLOROBENZENE			EPA 8081A	Not Detected	ug/KG (dw)		1.0	PM	9/8/2000	
METHOXYCHLOR			EPA 8081A	Not Detected	ug/KG (dw)		20	PM	9/8/2000	
MIREX			EPA 8081A	Not Detected	ug/KG (dw)		3.5	PM	9/8/2000	
PCBs in Sediments or Soils QC Batch 36497										
TCMX surr std			EPA 8082	5.75	ug/KG (dw)			PM	9/8/2000	*4.0 to 12.0*
DCBP surr std			EPA 8082	14.4	ug/KG (dw)			PM	9/8/2000	*8.0 to 24.0*
PCB-1016			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
PCB-1221			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
PCB-1232			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
PCB-1242			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
PCB-1248			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
PCB-1254			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
PCB-1260			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
PCB-1262			EPA 8082	Not Detected	ug/KG (dw)		33	PM	9/8/2000	
Phenoxy Herbicides in Sediment QC Batch 36515										
DCAA-surr QC std			EPA 8151A	113	ug/KG			BG	9/12/2000	*80 to 280*
2,4-D			EPA 8151A	Not Detected	ug/KG		20	BG	9/12/2000	
SILVEX (2,4,5-TP)			EPA 8151A	Not Detected	ug/KG		4	BG	9/12/2000	

COMMENTS: $8081S - J qualifier denotes estimated results. Toxaphene estimated due to weathering effects resulting in peak ratios being varied from the standard.

COMMENTS: $8260S - "B" FLAG-Trace levels of Methylene Chloride due to laboratory contamination. 7-090700-240.
$8260S - "J" FLAG- Estimated value. Internal STD 1,4-Dichlorobenzene-d4 failed low (37% response, 50-150% limits). The LCS was acceptiable for these compounds. 7-090700-240.

COMMENTS: $8270S - Sample had three surrogate compounds, 2-Fluorophenol (67% recovery, limits 22-63%), Phenol-d5(80% recovery, limits 18-73%) and Terphenyl-d14 (100% recovery, limits 44-92%) with recoveries outside acceptable control limits due to matrix interferences. LCS results were within acceptable control limits. 7-091900-255

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HAZARDOUS WASTE MANAGEMENT BRANCH (HWMB)
REQUEST FOR LABORATORY ANALYSIS

#5
0-12"

Location: Vienna Street Dump / Fort Valley

ected By/Phone: James Sliwinski / (404) 656-2833

n Date: 08/30/00 12:12

ubmitted To Lab: 08/30/00

MB LOG NUMBER: 8406
(a separate Request Sheet for each sample point)

Sample ID AD02868
Location: HWMB
Description: HW8406 VIENNA ST.DUMP/FT VALI
Sample Collecto J.SLIWINSKI
Sample ID: AD02868

Analysis Needed By: Routine ✓ Other (specify) _____

Sample Description (check one)

Waste ____ Soil/Sediment ✓ Sludge ____
Ground Water ____ Surface Water ____ Drinking Water Well ____

Concentration of Organics Requested (estimated): High ___ Low ✓ Other (e.g., rinse blank - specify) _____

Describe Sample Including Source and Known Properties (e.g. pH, concentration):
Municipal and industrial dump site: metals, herbicides, pesticides, PCBs, semi-volatile and volatile organics. Soil near footpath in the city's park adjacent to apartment

Applicable Hazardous Waste Codes (if known) _____ _____ _____

Special Precautions:

ANALYSIS REQUIRED
(Note: Totals will always be run first. A TCLP will subsequently be run only if the total value indicates a positive TCLP could results)

1. TOTAL ORGANICS

		4 OZ JARS	8 OZ JARS	16 OZ JARS	ENCORES
Semi-Volatiles (Acid & Base/Neutral)	✓				
Volatiles	✓				
Pesticides	✓				
Herbicides	✓				
Organophosphorous Pesticides					
PCB	✓				
BETX		1	2	1	5
Total Petroleum Hydrocarbon					

2. TOTAL METALS
ICP Metals Scan (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) ✓
Mercury ✓
Metals Special Requests: _____

Organics Special Requests: _____

3. TCLP ORGANICS

Volatiles ____ Pesticides ____
Semi-Volatiles (Acid & Base/Neutral) ____ Herbicides ____
Additional Specific Organics for TCLP: _____

4. TCLP METALS ANALYSIS

TCLP Metals (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) ____ Additional Metals for TCLP: _____
Mercury ____

5. ADDITIONAL ANALYSIS REQUESTED (see list on back): _____

Reviewed By: (HWMB): _____ Date: _____ Reviewed By (EPD Lab): m walker
Approved By:(HWMB): _____ Date: _____ Date (EPD Lab): 8/30/00

RECPT TEMP 0.0 MNW

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

455 14th Street NW, Atlanta, GA 30318-7900
(404) 206-5269

LABORATORY REPORT

TO: Georgia Env Protection Divison Hazardous Waste Mgmt Branch 205 Butler St SE Suite 1154E Atlanta, GA 30334	Date Collected: 8/30/2000 Time Collected: 12:12 Sample Collector: J.SLIWINSKI Chlorination: Sample Type:
Sample ID: AD02868 Facility Name: HW8406 VIENNA ST.DUMP/FT VALL Site ID: HWMB Location ID: Location Descr: HW8406 SOIL NR.FOOTPATH IN CITY	Received By: MW Date Received: 8/30/2000 Time Received: 5:36 PM Project: HW Reporting Date: 10/5/2000 Received Temperature: 0.0 °C

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
8260 Volatiles in Soil/Sed. QC Batch 36498										
Dibromofluoromethane(Surrogate QC Std.)			EPA 8260	53	ug/kg (dw)		0.00	AGV	9/6/2000	*33 to 75*
Toluene-d8(Surrogate QC Std.)			EPA 8260	53	ug/kg (dw)		0.00	AGV	9/6/2000	*39 to 68*
Bromofluorobenzene(Surrogate QC Std.)			EPA 8260	44	ug/kg (dw)		0.00	AGV	9/6/2000	*25 to 60*
1,2-Dichloroethane-d4(Surrogate QC Std.)			EPA 8260	49	ug/kg (dw)		4.9	AGV	9/6/2000	*35 to 65*
Dichlorodifluoromethane	34334		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	
Chloromethane	34421		EPA 8260	Not Detected	ug/kg (dw)		9.9	AGV	9/6/2000	
Bromomethane	34416		EPA 8260	Not Detected	ug/kg (dw)		9.9	AGV	9/6/2000	
Vinyl Chloride	34495		EPA 8260	Not Detected	ug/kg (dw)		2.0	AGV	9/6/2000	
Chloroethane	34314		EPA 8260	Not Detected	ug/kg (dw)		9.9	AGV	9/6/2000	
Methylene Chloride	34426		EPA 8260	Trace	ug/kg (dw)	B	4.9	AGV	9/6/2000	
Trichlorofluoromethane	34491		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	
Acetone	75059		EPA 8260	Trace	ug/kg (dw)		99	AGV	9/6/2000	
Dibromomethane	78756		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	
trans-1,2-Dichloroethene	34549		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	
Iodomethane	73121		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	
Carbon Disulfide	78544		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	
1,1-Dichloroethene	34504		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	
1,1-Dichloroethane	34499		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	
cis-1,2-Dichloroethene	77093		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	
2,2-Dichloropropane	77170		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	
Bromochloromethane	77297		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	
Chloroform	34318		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	
1,1-Dichloropropene	77168		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	
1,2-Dichloroethane	34534		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	
2-Butanone	75078		EPA 8260	Not Detected	ug/kg (dw)		99	AGV	9/6/2000	
1,1,1-Trichloroethane	34509		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	
Carbon Tetrachloride	34299		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/6/2000	

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Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
Vinyl Acetate	78498		EPA 8260	Not Detected		ug/kg (dw)	50	AGV	9/6/2000	
Bromodichloromethane	34330		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
1,2-Dichloropropane	34544		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
Trichloroethene	34487		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
Benzene	34237		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
cis-1,3-Dichloropropene	34702		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
trans-1,3-Dichloropropene	34697		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
Dibromochloromethane	34309		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
1,1,2-Trichloroethane	34514		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
Bromoform	34290		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
1,2,3-Trichloropropane	78490		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
4-Methyl-2-Pentanone	75169		EPA 8260	Not Detected		ug/kg (dw)	50	AGV	9/6/2000	
2-Hexanone	75166		EPA 8260	Not Detected		ug/kg (dw)	50	AGV	9/6/2000	
Tetrachloroethene	34478		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
1,3-Dichloropropane	77173		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
1,1,2,2-Tetrachloroethane	34519		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
Toluene	34483		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
1,2-Dibromoethane	79749		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
Chlorobenzene	34304		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
Ethylbenzene	34374		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
1,1,1,2-Tetrachloroethane			EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
Styrene	75192		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
p,m-Xylene	45510		EPA 8260	Not Detected		ug/kg (dw)	9.9	AGV	9/6/2000	
o-Xylene	78362		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
Isopropylbenzene	77223		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
Bromobenzene	78491		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
n-Propylbenzene	77224		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
2-Chlorotoluene	77225		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
1,3,5-Trimethylbenzene	77226		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
4-Chlorotoluene	77277		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
tert-Butylbenzene	77353		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
1,2,4-Trimethylbenzene	34554		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
sec-Butylbenzene	77350		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
1,3-Dichlorobenzene	34569		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
p-Isopropyltoluene	77356		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
1,4-Dichlorobenzene	34574		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
n-Butylbenzene	77342		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
1,2-Dichlorobenzene	34539		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
1,2-Dibromo-3-chloropropane	99999		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
1,2,4-Trichlorobenzene	34554		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
Hexachlorobutadiene	39705		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
Naphthalene	34445		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
1,2,3-Trichlorobenzene	77613		EPA 8260	Not Detected		ug/kg (dw)	4.9	AGV	9/6/2000	
8270 Semi-Vol in Soil/Sed QC Batch 36842										
2-Fluorophenol(Surrogate QC Std.)			EPA 8270C	59		ug/kg (dw)	0.00	GJG	9/15/2000	*22 to 63*
Phenol-d5(Surrogate QC Std.)			EPA 8270C	72		ug/kg (dw)	0.00	GJG	9/15/2000	*18 to 73*
Nitrobenzene-d5(Surrogate QC Std.)			EPA 8270C	64		ug/kg (dw)	0.00	GJG	9/15/2000	*25 to 81*
2-Fluorobiphenyl(Surrogate QC Std.)			EPA 8270C	76		ug/kg (dw)	0.00	GJG	9/15/2000	*28 to 81*
2,4,6-Tribromophenol(Surrogate QC Std.)			EPA 8270C	92		ug/kg (dw)	0.00	GJG	9/15/2000	*14 to 101*
Terphenyl-d14(Surrogate QC Std.)		U	EPA 8270C	99		ug/kg (dw)	0.00	GJG	9/15/2000	*44 to 92*
n-Nitrosodimethylamine	34441		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
2-Picoline	73310		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Methylmethanesulfonate	73119		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Ethylmethanesulfonate	73118		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Aniline	73185		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Phenol	34695		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Chloroethyl)ether	34276		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Chlorophenol	34589		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,3-Dichlorobenzene	34569		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,4-Dichlorobenzene	34574		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzyl alcohol	75212		EPA 8270C	Not Detected		ug/kg (dw)	2100	GJG	9/15/2000	
1,2-Dichlorobenzene	34539		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Methylphenol			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Chloroisopropyl)ether	34286		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Acetophenone	73272		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Methylphenol			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
n-Nitroso-di-n-propylamine	34428		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachloroethane	34399		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Nitrobenzene	34450		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
n-Nitrosopiperidine	73129		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Isophorone	34411		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Nitrophenol	34594		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4-Dimethylphenol	34609		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Chloroethoxy)methane	34281		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzoic acid	75315		EPA 8270C	Not Detected		ug/kg (dw)	5400	GJG	9/15/2000	
2,4-Dichlorophenol	34604		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,2,4-Trichlorobenzene	34554		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
aa-dimethyl-Phenethylamine	73136		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Naphthalene	34445		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Chloroaniline	78867		EPA 8270C	Not Detected		ug/kg (dw)	2100	GJG	9/15/2000	
2,6-Dichlorophenol	73122		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorobutadiene	38705		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
n-Nitroso-di-n-butylamine	73159		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Chloro-3-methylphenol	34455		EPA 8270C	Not Detected		ug/kg (dw)	2100	GJG	9/15/2000	
2-Methylnaphthalene	78868		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,2,4,5-Tetrachlorobenzene	79787		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorocyclopentadiene	34389		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4,6-Trichlorophenol	34624		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4,5-Trichlorophenol	78401		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Chloronaphthalene	34584		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1-Chloronaphthalene			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Nitroaniline	78299		EPA 8270C	Not Detected		ug/kg (dw)	5400	GJG	9/15/2000	
Dimethylphthalate	34344		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Acenaphthylene	34203		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,6-Dinitrotoluene	34629		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
3-Nitroaniline	78869		EPA 8270C	Not Detected		ug/kg (dw)	5400	GJG	9/15/2000	
Acenaphthene	34208		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4-Dinitrophenol	34619		EPA 8270C	Not Detected		ug/kg (dw)	5400	GJG	9/15/2000	
4-Nitrophenol	34649		EPA 8270C	Not Detected		ug/kg (dw)	5400	GJG	9/15/2000	
Dibenzofuran	75647		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachlorobenzene	79790		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4-Dinitrotoluene	34614		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	

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Laboratory Contacts:

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Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
1-Naphthylamine	73143		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
2-Naphthylamine	73124		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
2,3,4,6-Tetrachlorophenol			EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Diethylphthalate	34339		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Fluorene	34384		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
4-Chlorophenyl-phenylether	34644		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
4-Nitroaniline	78870		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Diphenylamine			EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
4,6-Dinitro-2-methylphenol	34660		EPA 8270C	Not Detected	ug/kg (dw)	5400	GJG	9/15/2000	
n-Nitrosodiphenylamine	34436		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
1,2-Diphenylhydrazine	34349		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
4-Bromophenyl-phenylether	34639		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Phenacetin	73117		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorobenzene	39701		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
4-Aminobiphenyl	73125		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Pentachlorophenol	39061		EPA 8270C	Not Detected	ug/kg (dw)	5400	GJG	9/15/2000	
Pronamide	73031		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Pentachloronitrobenzene	81808		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Phenanthrene	34464		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Anthracene	34223		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Di-n-butylphthalate	39112		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Fluoranthene	34379		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Benzidine	39121		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Pyrene	34472		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
p-Dimethylaminoazobenzene	73116		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Butylbenzylphthalate	34295		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[a]anthracene	34529		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
3,3'-Dichlorobenzidine	34634		EPA 8270C	Not Detected	ug/kg (dw)	2100	GJG	9/15/2000	
Chyrsene	34323		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Ethylhexyl)phthalate	39102		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Di-n-octylphthalate	34599		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[b]fluoranthene	34233		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[k]fluoranthene	34245		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
7,12-Dimethylbenz(a)anthracene	73115		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[a]pyrene	34250		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
3-Methylcholanthrene	73156		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Dibenz(a,j)acridine			EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Indeno[1,2,3-cd]pyrene	34406		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Dibenz[a,h]anthracene	34559		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[g,h,i]perylene	34524		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Pyridine	73312		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Alpha-BHC	39076		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Gamma-BHC	39343		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Beta-BHC	34257		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Delta-BHC	34262		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Heptachlor	39413		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Aldrin	39333		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Heptachlor Epoxide	39423		EPA 8270C	Not Detected	ug/kg (dw)	2700	GJG	9/15/2000	
Endosulfan 1	34364		EPA 8270C	Not Detected	ug/kg (dw)	5400	GJG	9/15/2000	
Dieldrin	39383		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
p,p'-DDE	39321		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	

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Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
Endrin	39393		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/15/2000	
Endosulfan 2	34359		EPA 8270C	Not Detected		ug/kg (dw)	5400	GJG	9/15/2000	
p,p'-DDD	39311		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Endrin Aldehyde	34369		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Endosulfan Sulfate	34354		EPA 8270C	Not Detected		ug/kg (dw)	2700	GJG	9/15/2000	
p,p'-DDT	39301		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Cyclododecane			EPA 8270C	3200 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
Hexadecanoic Acid			EPA 8270C	1900 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
1-Octadecanol			EPA 8270C	8200 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
ICP Metals HW in Solids QC Batch 36308										
Silver	01078		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Arsenic	01003		EPA 6010B	Not Detected		mg/kg (dw)	8	PT	9/6/2000	
Barium	01008		EPA 6010B	38		mg/kg (dw)	1	PT	9/6/2000	
Cadmium	01028		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Chromium	01029		EPA 6010B	24		mg/kg (dw)	2	PT	9/6/2000	
Lead	01052		EPA 6010B	22		mg/kg (dw)	9	PT	9/6/2000	
Nickel	01068		EPA 6010B	13		mg/kg (dw)	2	PT	9/6/2000	
Selenium	01148		EPA 6010B	Not Detected		mg/kg (dw)	19	PT	9/6/2000	
Copper	01042		EPA 6010B	15		mg/kg (dw)	2	PT	9/6/2000	
QC Batch 36228										
Mercury			EPA 7471A	Not Detected		mg/kg (dw)	0.1	CN	9/7/2000	
Pesticides in Sediment/Soil QC Batch 36291										
TCMX surr std			EPA 8081A	5.55		ug/KG (dw)		PM	9/8/2000	*4.0 to 12*
DCB surr std			EPA 8081A	13.4		ug/KG (dw)		PM	9/8/2000	*8.0 to 24*
ALDRIN			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/8/2000	
a-BHC			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/8/2000	
b-BHC			EPA 8081A	Not Detected		ug/KG (dw)	3.0	PM	9/8/2000	
d-BHC			EPA 8081A	Not Detected		ug/KG (dw)	4.5	PM	9/8/2000	
LINDANE (g-BHC)			EPA 8081A	Not Detected		ug/KG (dw)	1.0	PM	9/8/2000	
CHLORDANE			EPA 8081A	Not Detected		ug/KG (dw)	50	PM	9/8/2000	
4,4-DDE			EPA 8081A	5.9		ug/KG (dw)	3.0	PM	9/8/2000	
4,4-DDD			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/8/2000	
4,4-DDT			EPA 8081A	Not Detected		ug/KG (dw)	6.5	PM	9/8/2000	
DIELDRIN			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/8/2000	
ENDOSULFAN I			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/8/2000	
ENDOSULFAN II			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/8/2000	
ENDOSULFAN SULFATE			EPA 8081A	Not Detected		ug/KG (dw)	8.0	PM	9/8/2000	
ENDRIN			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/8/2000	
ENDRIN ALDEHYDE			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/8/2000	
HEPTACHLOR			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/8/2000	
HEPTACHLOR EPOXIDE			EPA 8081A	Not Detected		ug/KG (dw)	4.0	PM	9/8/2000	
TOXAPHENE			EPA 8081A	Not Detected		ug/KG (dw)	130	PM	9/8/2000	
CHLORPYRIFOS (DURSBAN)			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/8/2000	
HEXACHLOROBENZENE			EPA 8081A	Not Detected		ug/KG (dw)	1.0	PM	9/8/2000	
METHOXYCHLOR			EPA 8081A	Not Detected		ug/KG (dw)	20	PM	9/8/2000	
MIREX			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/8/2000	
PCBs in Sediments or Soils QC Batch 36497										
TCMX surr std			EPA 8082	5.55		ug/KG (dw)		PM	9/8/2000	*4.0 to 12.0*
DCBP surr std			EPA 8082	13.4		ug/KG (dw)		PM	9/8/2000	*8.0 to 24.0*
PCB-1016			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/8/2000	

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
PCB-1221			EPA 8082	Not Detected	ug/KG (dw)	33	PM	9/8/2000	
PCB-1232			EPA 8082	Not Detected	ug/KG (dw)	33	PM	9/8/2000	
PCB-1242			EPA 8082	Not Detected	ug/KG (dw)	33	PM	9/8/2000	
PCB-1248			EPA 8082	Not Detected	ug/KG (dw)	33	PM	9/8/2000	
PCB-1254			EPA 8082	Not Detected	ug/KG (dw)	33	PM	9/8/2000	
PCB-1260			EPA 8082	Not Detected	ug/KG (dw)	33	PM	9/8/2000	
PCB-1262			EPA 8082	Not Detected	ug/KG (dw)	33	PM	9/8/2000	
Phenoxy Herbicides in Sediment QC Batch 36515									
DCAA-surr QC std			EPA 8151A	187	ug/KG		BG	9/12/2000	*80 to 280*
2,4-D			EPA 8151A	Not Detected	ug/KG	20	BG	9/12/2000	
SILVEX (2,4,5-TP)			EPA 8151A	Not Detected	ug/KG	4	BG	9/12/2000	

COMMENTS: $8260S -"B"- Blank had trace levels of Methylene Chloride due to lab contamination. 7-090700-239

COMMENTS: $8270S - Sample had one surrogate, Terhphenyl-d14 (99% recovery, limits 44-92%) with a recovery outside acceptable limits due to matrix interferences. LCS results were within acceptable control limits. 7-091900-255

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HAZARDOUS WASTE MANAGEMENT BRANCH (HWMB)
REQUEST FOR LABORATORY ANALYSIS

#6

/Location: Vienna Street Dump / Fort Valley

llected By/Phone: James Sliwinski / (404) 656-2833

on Date: 08/29/00 16:50

Submitted To Lab: 08/30/00

WMB LOG NUMBER: 8407

File a separate Request Sheet for each sample point)

Sample ID AD02869
Location: HWMB
Description: HW8407 VIENNA ST.DUMP/FT VALL
Sample Collecto J.SLIWINSKI
Sample ID: AD02869

Analysis Needed By: Routine ✓ Other (specify) _____

Sample Description (check one)

Waste		Soil/Sediment	✓	Sludge	
Ground Water		Surface Water		Drinking Water Well	

Concentration of Organics Requested (estimated): High ___ Low ✓ Other (e.g., rinse blank - specify) _____

Describe Sample Including Source and Known Properties (e.g. pH, concentration):
Municipal and industrial dump site: metals, herbicides, pesticides, PCBs, semi-volatile and volatile organics. Soil at the cut through path

Applicable Hazardous Waste Codes (If known) _____ _____ _____

Special Precautions:

ANALYSIS REQUIRED

(Note: Totals will always be run first. A TCLP will subsequently be run only if the total value indicates a positive TCLP could results)

1. TOTAL ORGANICS

		4 OZ. JARS	8 OZ. JARS	16 OZ. JARS	ENCORES
Semi-Volatiles (Acid & Base\Neutral)	✓				
Volatiles	✓				
Pesticides	✓				
Herbicides	✓				
Organophosphorous Pesticides					
PCB	✓				
BETX					
Total Petroleum Hydrocarbon		1	2	1	1

2. TOTAL METALS

ICP Metals Scan (Ag,As,Ba,Cd,Cr,Ni,Pb,Se)	✓
Mercury	✓
Metals Special Requests:	

Organics Special Requests: _____

3. TCLP ORGANICS

Volatiles		Pesticides	
Semi-Volatiles (Acid & Base/Neutral)		Herbicides	

Additional Specific Organics for TCLP: _____

4. TCLP METALS ANALYSIS

TCLP Metals (Ag,As,Ba,Cd,Cr,Ni,Pb,Se)		Additional Metals for TCLP:	
Mercury			

5. ADDITIONAL ANALYSIS REQUESTED (see list on back): _____

Reviewed By: (HWMB): _____ Date: _____ Reviewed By (EPD Lab): [illegible]
Approved By:(HWMB): _____ Date: _____ Date (EPD Lab): 8/30/00

RECPT TEMP 0.0°

MNW

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

455 14th Street NW, Atlanta, GA 30318-7900
(404) 206-5269

LABORATORY REPORT

TO: Georgia Env Protection Divison Hazardous Waste Mgmt Branch 205 Butler St SE Suite 1154E Atlanta, GA 30334	Date Collected: 8/29/2000 Time Collected: 16:50 Sample Collector: J.SLIWINSKI Chlorination: Sample Type:
Sample ID: AD02869 Facility Name: HW8407 VIENNA ST.DUMP/FT VALL Site ID: HWMB Location ID: Location Descr: HW8407 SOIL@CUT THROUGH PATH	Received By: MW Date Received: 8/30/2000 Time Received: 5:36 PM Project: HW Reporting Date: 10/5/2000 Received Temperature: 0.0 °C

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
8260 Volatiles in Soil/Sed. QC Batch 36498										
Dibromofluoromethane(Surrogate QC Std.)			EPA 8260	53	ug/kg (dw)		0.00	AGV	9/6/2000	*33 to 75*
Toluene-d8(Surrogate QC Std.)			EPA 8260	53	ug/kg (dw)		0.00	AGV	9/6/2000	*39 to 68*
Bromofluorobenzene(Surrogate QC Std.)			EPA 8260	45	ug/kg (dw)		0.00	AGV	9/6/2000	*25 to 60*
1,2-Dichloroethane-d4(Surrogate QC Std.)			EPA 8260	48	ug/kg (dw)		4.8	AGV	9/6/2000	*35 to 65*
Dichlorodifluoromethane	34334		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	
Chloromethane	34421		EPA 8260	Not Detected	ug/kg (dw)		9.5	AGV	9/6/2000	
Bromomethane	34416		EPA 8260	Not Detected	ug/kg (dw)		9.5	AGV	9/6/2000	
Vinyl Chloride	34495		EPA 8260	Not Detected	ug/kg (dw)		1.9	AGV	9/6/2000	
Chloroethane	34314		EPA 8260	Not Detected	ug/kg (dw)		9.5	AGV	9/6/2000	
Methylene Chloride	34426		EPA 8260	Trace	ug/kg (dw)	B	4.8	AGV	9/6/2000	
Trichlorofluoromethane	34491		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	
Acetone	75059		EPA 8260	130	ug/kg (dw)		95	AGV	9/6/2000	
Dibromomethane	78756		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	
trans-1,2-Dichloroethene	34549		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	
Iodomethane	73121		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	
Carbon Disulfide	78544		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	
1,1-Dichloroethene	34504		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	
1,1-Dichloroethane	34499		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	
cis-1,2-Dichloroethene	77093		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	
2,2-Dichloropropane	77170		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	
Bromochloromethane	77297		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	
Chloroform	34318		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	
1,1-Dichloropropene	77168		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	
1,2-Dichloroethane	34534		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	
2-Butanone	75078		EPA 8260	Not Detected	ug/kg (dw)		95	AGV	9/6/2000	
1,1,1-Trichloroethane	34509		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	
Carbon Tetrachloride	34299		EPA 8260	Not Detected	ug/kg (dw)		4.8	AGV	9/6/2000	

ug/L: micrograms/liter	<: less than	**Laboratory Contacts:**
mg/L: milligrams/liter	MCL: Maximum Contaminant Level	
mg/kg: milligrams/kilogram	PQL: Practical Quantitation Limit	Inorganics: Pat Sammons Ext 5239
ug/kg:	LSPC: result less than lower specification	Metals: Mark Tolbert Ext 5240
micrograms/kilogram	USPC: result greater than upper specification	Organics: Danny Reed Ext 5252
ug/g: micrograms/gram	TIE: Tentatively Identified or Estimated	GC Mass Spec: Steve Bryan Ext 5260
ppm: parts per million	VIOL: Violation (result exceeds MCL)	

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
Vinyl Acetate	78498		EPA 8260	Not Detected	ug/kg (dw)	48	AGV	9/6/2000	
Bromodichloromethane	34330		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
1,2-Dichloropropane	34544		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
Trichloroethene	34487		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
Benzene	34237		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
cis-1,3-Dichloropropene	34702		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
trans-1,3-Dichloropropene	34697		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
Dibromochloromethane	34309		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
1,1,2-Trichloroethane	34514		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
Bromoform	34290		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
1,2,3-Trichloropropane	78490		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
4-Methyl-2-Pentanone	75169		EPA 8260	Not Detected	ug/kg (dw)	48	AGV	9/6/2000	
2-Hexanone	75166		EPA 8260	Not Detected	ug/kg (dw)	48	AGV	9/6/2000	
Tetrachloroethene	34478		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
1,3-Dichloropropane	77173		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
1,1,2,2-Tetrachloroethane	34519		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
Toluene	34483		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
1,2-Dibromoethane	79749		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
Chlorobenzene	34304		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
Ethylbenzene	34374		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
1,1,1,2-Tetrachloroethane			EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
Styrene	75192		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
p,m-Xylene	45510		EPA 8260	Not Detected	ug/kg (dw)	9.5	AGV	9/6/2000	
o-Xylene	78362		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
Isopropylbenzene	77223		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
Bromobenzene	78491		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
n-Propylbenzene	77224		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
2-Chlorotoluene	77225		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
1,3,5-Trimethylbenzene	77226		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
4-Chlorotoluene	77277		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
tert-Butylbenzene	77353		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
1,2,4-Trimethylbenzene	34554		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
sec-Butylbenzene	77350		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
1,3-Dichlorobenzene	34569		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
p-Isopropyltoluene	77356		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
1,4-Dichlorobenzene	34574		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
n-Butylbenzene	77342		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
1,2-Dichlorobenzene	34539		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
1,2-Dibromo-3-chloropropane	99999		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
1,2,4-Trichlorobenzene	34554		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
Hexachlorobutadiene	39705		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
Naphthalene	34445		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
1,2,3-Trichlorobenzene	77613		EPA 8260	Not Detected	ug/kg (dw)	4.8	AGV	9/6/2000	
8270 Semi-Vol in Soil/Sed QC Batch 36842									
2-Fluorophenol(Surrogate QC Std.)		U	EPA 8270C	64	ug/kg (dw)	0.00	GJG	9/15/2000	22 to 63
Phenol-d5(Surrogate QC Std.)		U	EPA 8270C	80	ug/kg (dw)	0.00	GJG	9/15/2000	18 to 73
Nitrobenzene-d5(Surrogate QC Std.)			EPA 8270C	78	ug/kg (dw)	0.00	GJG	9/15/2000	25 to 81
2-Fluorobiphenyl(Surrogate QC Std.)		U	EPA 8270C	82	ug/kg (dw)	0.00	GJG	9/15/2000	28 to 81
2,4,6-Tribromophenol(Surrogate QC Std.)			EPA 8270C	81	ug/kg (dw)	0.00	GJG	9/15/2000	14 to 101
Terphenyl-d14(Surrogate QC Std.)		U	EPA 8270C	110	ug/kg (dw)	0.00	GJG	9/15/2000	44 to 92
n-Nitrosodimethylamine	34441		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	

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PQL: Practical Quantitation Limit
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TIE: Tentatively Identified or Estimated
VIOL: Violation (result exceeds MCL)

Laboratory Contacts:

Inorganics:	Pat Sammons	Ext 5239
Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

Sample ID: AD02869

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or *QC Range*
2-Picoline	73310		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Methylmethanesulfonate	73119		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Ethylmethanesulfonate	73118		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Aniline	73185		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Phenol	34695		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Chloroethyl)ether	34276		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Chlorophenol	34589		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,3-Dichlorobenzene	34569		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,4-Dichlorobenzene	34574		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzyl alcohol	75212		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/15/2000	
1,2-Dichlorobenzene	34539		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Methylphenol			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Chloroisopropyl)ether	34286		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Acetophenone	73272		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Methylphenol			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
n-Nitroso-di-n-propylamine	34428		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachloroethane	34399		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Nitrobenzene	34450		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
n-Nitrosopiperidine	73129		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Isophorone	34411		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Nitrophenol	34594		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4-Dimethylphenol	34609		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Chloroethoxy)methane	34281		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzoic acid	75315		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
2,4-Dichlorophenol	34604		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,2,4-Trichlorobenzene	34554		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
aa-dimethyl-Phenethylamine	73136		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Naphthalene	34445		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Chloroaniline	78867		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/15/2000	
2,6-Dichlorophenol	73122		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorobutadiene	38705		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
n-Nitroso-di-n-butylamine	73159		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Chloro-3-methylphenol	34455		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/15/2000	
2-Methylnaphthalene	78868		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,2,4,5-Tetrachlorobenzene	79787		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorocyclopentadiene	34389		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4,6-Trichlorophenol	34624		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4,5-Trichlorophenol	78401		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Chloronaphthalene	34584		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1-Chloronaphthalene			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Nitroaniline	78299		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
Dimethylphthalate	34344		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Acenaphthylene	34203		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,6-Dinitrotoluene	34629		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
3-Nitroaniline	78869		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
Acenaphthene	34208		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4-Dinitrophenol	34619		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
4-Nitrophenol	34649		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
Dibenzofuran	75647		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachlorobenzene	79790		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4-Dinitrotoluene	34614		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	

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Laboratory Contacts:

Inorganics:	Pat Sammons	Ext 5239
Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

Sample ID: AD22262

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
1-Naphthylamine	73143		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Naphthylamine	73124		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,3,4,6-Tetrachlorophenol			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Diethylphthalate	34339		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Fluorene	34384		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Chlorophenyl-phenylether	34644		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Nitroaniline	78870		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Diphenylamine			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4,6-Dinitro-2-methylphenol	34660		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
n-Nitrosodiphenylamine	34436		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,2-Diphenylhydrazine	34349		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Bromophenyl-phenylether	34639		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Phenacetin	73117		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorobenzene	39701		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Aminobiphenyl	73125		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachlorophenol	39061		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
Pronamide	73031		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachloronitrobenzene	81808		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Phenanthrene	34464		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Anthracene	34223		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Di-n-butylphthalate	39112		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Fluoranthene	34379		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzidine	39121		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pyrene	34472		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
p-Dimethylaminoazobenzene	73116		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Butylbenzylphthalate	34295		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[a]anthracene	34529		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
3,3'-Dichlorobenzidine	34634		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/15/2000	
Chyrsene	34323		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Ethylhexyl)phthalate	39102		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Di-n-octylphthalate	34599		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[b]fluoranthene	34233		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[k]fluoranthene	34245		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
7,12-Dimethylbenz(a)anthracene	73115		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[a]pyrene	34250		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
3-Methylcholanthrene	73156		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Dibenz(a,j)acridine			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Indeno[1,2,3-cd]pyrene	34406		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Dibenz[a,h]anthracene	34559		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[g,h,i]perylene	34524		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pyridine	73312		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Alpha-BHC	39076		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Gamma-BHC	39343		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Beta-BHC	34257		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Delta-BHC	34262		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Heptachlor	39413		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Aldrin	39333		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Heptachlor Epoxide	39423		EPA 8270C	Not Detected		ug/kg (dw)	2800	GJG	9/15/2000	
Endosulfan 1	34364		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
Dieldrin	39383		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
p,p'-DDE	39321		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	

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Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
Endrin	39393		EPA 8270C	Not Detected	ug/kg (dw)	2200	GJG	9/15/2000	
Endosulfan 2	34359		EPA 8270C	Not Detected	ug/kg (dw)	5500	GJG	9/15/2000	
p,p'-DDD	39311		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Endrin Aldehyde	34369		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Endosulfan Sulfate	34354		EPA 8270C	Not Detected	ug/kg (dw)	2800	GJG	9/15/2000	
p,p'-DDT	39301		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Hexadecanoic Acid			EPA 8270C	1600 TIE	ug/kg (dw)	0.00	GJG	9/15/2000	
1-Octadecanol			EPA 8270C	15000 TIE	ug/kg (dw)	0.00	GJG	9/15/2000	
17-Pentatriacontene			EPA 8270C	1500 TIE	ug/kg (dw)	0.00	GJG	9/15/2000	
1-Dotriacontanol			EPA 8270C	3200 TIE	ug/kg (dw)	0.00	GJG	9/15/2000	
ICP Metals HW in Solids QC Batch 36308									
Silver	01078		EPA 6010B	Not Detected	mg/kg (dw)	1	PT	9/6/2000	
Arsenic	01003		EPA 6010B	69	mg/kg (dw)	8	PT	9/6/2000	
Barium	01008		EPA 6010B	25	mg/kg (dw)	1	PT	9/6/2000	
Cadmium	01028		EPA 6010B	Not Detected	mg/kg (dw)	1	PT	9/6/2000	
Chromium	01029		EPA 6010B	20	mg/kg (dw)	2	PT	9/6/2000	
Lead	01052		EPA 6010B	56	mg/kg (dw)	9	PT	9/6/2000	
Nickel	01068		EPA 6010B	3.9	mg/kg (dw)	2	PT	9/6/2000	
Selenium	01148		EPA 6010B	Not Detected	mg/kg (dw)	19	PT	9/6/2000	
Copper	01042		EPA 6010B	10	mg/kg (dw)	2	PT	9/6/2000	
QC Batch 36228									
Mercury			EPA 7471A	Not Detected	mg/kg (dw)	0.1	CN	9/7/2000	
Pesticides in Sediment/Soil QC Batch 36291									
TCMX surr std			EPA 8081A	5.85	ug/KG (dw)		PM	9/12/2000	*4.0 to 12*
DCB surr std			EPA 8081A	12.5	ug/KG (dw)		PM	9/12/2000	*8.0 to 24*
ALDRIN			EPA 8081A	Not Detected	ug/KG (dw)	3.5	PM	9/12/2000	
a-BHC			EPA 8081A	Not Detected	ug/KG (dw)	2.0	PM	9/12/2000	
b-BHC			EPA 8081A	Not Detected	ug/KG (dw)	3.0	PM	9/12/2000	
d-BHC			EPA 8081A	Not Detected	ug/KG (dw)	4.5	PM	9/12/2000	
LINDANE (g-BHC)			EPA 8081A	Not Detected	ug/KG (dw)	1.0	PM	9/12/2000	
CHLORDANE			EPA 8081A	Not Detected	ug/KG (dw)	50	PM	9/12/2000	
4,4-DDE			EPA 8081A	32	ug/KG (dw)	3.0	PM	9/12/2000	
4,4-DDD			EPA 8081A	9.5	ug/KG (dw)	7.5	PM	9/12/2000	
4,4-DDT			EPA 8081A	20	ug/KG (dw)	6.5	PM	9/12/2000	
DIELDRIN			EPA 8081A	Not Detected	ug/KG (dw)	2.0	PM	9/12/2000	
ENDOSULFAN I			EPA 8081A	Not Detected	ug/KG (dw)	5.0	PM	9/12/2000	
ENDOSULFAN II			EPA 8081A	Not Detected	ug/KG (dw)	7.5	PM	9/12/2000	
ENDOSULFAN SULFATE			EPA 8081A	Not Detected	ug/KG (dw)	8.0	PM	9/12/2000	
ENDRIN			EPA 8081A	Not Detected	ug/KG (dw)	7.5	PM	9/12/2000	
ENDRIN ALDEHYDE			EPA 8081A	Not Detected	ug/KG (dw)	3.5	PM	9/12/2000	
HEPTACHLOR			EPA 8081A	Not Detected	ug/KG (dw)	5.0	PM	9/12/2000	
HEPTACHLOR EPOXIDE			EPA 8081A	Not Detected	ug/KG (dw)	4.0	PM	9/12/2000	
TOXAPHENE			EPA 8081A	Not Detected	ug/KG (dw)	130	PM	9/12/2000	
CHLORPYRIFOS (DURSBAN)			EPA 8081A	Not Detected	ug/KG (dw)	5.0	PM	9/12/2000	
HEXACHLOROBENZENE			EPA 8081A	Not Detected	ug/KG (dw)	1.0	PM	9/12/2000	
METHOXYCHLOR			EPA 8081A	Not Detected	ug/KG (dw)	20	PM	9/12/2000	
MIREX			EPA 8081A	Not Detected	ug/KG (dw)	3.5	PM	9/12/2000	
PCBs in Sediments or Soils QC Batch 36497									
TCMX surr std			EPA 8082	5.85	ug/KG (dw)		PM	9/12/2000	*4.0 to 12.0*
DCBP surr std			EPA 8082	12.5	ug/KG (dw)		PM	9/12/2000	*8.0 to 24.0*

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PCB-1016			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1221			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1232			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1242			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1248			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1254			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1260			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1262			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
Phenoxy Herbicides in Sediment QC Batch 36515										
DCAA-surr QC std			EPA 8151A	183		ug/KG		BG	9/12/2000	*80 to 280*
2,4-D			EPA 8151A	Not Detected		ug/KG	20	BG	9/12/2000	
SILVEX (2,4,5-TP)			EPA 8151A	Not Detected		ug/KG	4	BG	9/12/2000	

COMMENTS: $8260S -"B"- Blank had trace levels of Methylene Chloride due to lab contamination. 7-090700-239

COMMENTS: $8270S - Sample had 4 surrogates, 2-Fluorophenol (64% recovery, limits 22-63%), Phenol-d5(80% recovery, limits 18-73%), 2-Fluorobyphenyl (82% recovery, limits 28-81%), and Terphenyl-d14 (109% recovery, limits 44-92%) with recoveries outside acceptable control limits due to matrix interferences. LCS limits are within acceptable control limits. 7-091900-255

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HAZARDOUS WASTE MANAGEMENT BRANCH (HWMB)
REQUEST FOR LABORATORY ANALYSIS

(15)

ocation: Vienna Street Dump / Fort Valley

cted By/Phone: James Sliwinski / (404) 656-2833

Date: 08/30/00 10:45

mitted To Lab: 08/30/00

B LOG NUMBER: 8416

(separate Request Sheet for each sample point)

Sample ID AD02873
Location: HWMB
Description: HW8416 VIENNA ST.DUMP/FT VALL
Sample Collecto J.SLIWINSKI
Sample ID: AD02873

alysis Needed By: Routine ✓ Other (specify) _____

Sample Description (check one)

Waste		Soil/Sediment	✓	Sludge	
Ground Water		Surface Water		Drinking Water Well	

Concentration of Organics Requested (estimated): High ___ Low ✓ Other (e.g., rinse blank - specify) _____

Describe Sample Including Source and Known Properties (e.g. pH, concentration):
Municipal and industrial dump site: metals, herbicides, pesticides, PCBs, semi-volatile and volatile organics. Sample at the eastern portion

Applicable Hazardous Waste Codes (If known) _____ _____ _____

Special Precautions:

ANALYSIS REQUIRED

(Note: Totals will always be run first. A TCLP will subsequently be run only if the total value indicates a positive TCLP could results)

1. TOTAL ORGANICS

		4 OZ JARS	8 OZ JARS	16 OZ JARS	ENCORES
Semi-Volatiles (Acid & Base\Neutral)	✓				
Volatiles	✓				
Pesticides	✓				
Herbicides	✓				
Organophosphorous Pesticides					
PCB	✓				
BETX		1	1	1	1
Total Petroleum Hydrocarbon					

2. TOTAL METALS

ICP Metals Scan (Ag,As,Ba,Cd,Cr,Ni,Pb,Se)	✓
Mercury	✓
Metals Special Requests:	

Organics Special Requests: _____

3. TCLP ORGANICS

Volatiles		Pesticides	
Semi-Volatiles (Acid & Base/Neutral)		Herbicides	

Additional Specific Organics for TCLP: _____

4. TCLP METALS ANALYSIS

TCLP Metals (Ag,As,Ba,Cd,Cr,Ni,Pb,Se)		Additional Metals for TCLP:	
Mercury			

5. ADDITIONAL ANALYSIS REQUESTED (see list on back): _____

Reviewed By: (HWMB): _____ Date: _____ Reviewed By (EPD Lab): M. Walker
Approved By:(HWMB): _____ Date: _____ Date (EPD Lab): 8/30/00

MNW

RECPT TEMP 2.0

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

455 14th Street NW, Atlanta, GA 30318-7900
(404) 206-5269

LABORATORY REPORT

TO: Georgia Env Protection Divison Hazardous Waste Mgmt Branch 205 Butler St SE Suite 1154E Atlanta, GA 30334	Date Collected: 8/30/2000 Time Collected: 10:45 Sample Collector: J.SLIWINSKI Chlorination: Sample Type:
Sample ID: AD02873 Facility Name: HW8416 VIENNA ST.DUMP/FT VALL Site ID: HWMB Location ID: Location Descr: HW8416 SOIL@EASTERN PORTION	Received By: MW Date Received: 8/30/2000 Time Received: 5:36 PM Project: HW Reporting Date: 10/5/2000 Received Temperature: 0.0 °C

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
8260 Volatiles in Soil/Sed. QC Batch 36498									
Dibromofluoromethane(Surrogate QC Std.)			EPA 8260	51	ug/kg (dw)	0.00	AGV	9/5/2000	*33 to 75*
Toluene-d8(Surrogate QC Std.)			EPA 8260	52	ug/kg (dw)	0.00	AGV	9/5/2000	*39 to 68*
Bromofluorobenzene(Surrogate QC Std.)			EPA 8260	46	ug/kg (dw)	0.00	AGV	9/5/2000	*25 to 60*
1,2-Dichloroethane-d4(Surrogate QC Std.)			EPA 8260	49	ug/kg (dw)	5.1	AGV	9/5/2000	*35 to 65*
Dichlorodifluoromethane	34334		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
Chloromethane	34421		EPA 8260	Not Detected	ug/kg (dw)	10	AGV	9/5/2000	
Bromomethane	34416		EPA 8260	Not Detected	ug/kg (dw)	10	AGV	9/5/2000	
Vinyl Chloride	34495		EPA 8260	Not Detected	ug/kg (dw)	2.0	AGV	9/5/2000	
Chloroethane	34314		EPA 8260	Not Detected	ug/kg (dw)	10	AGV	9/5/2000	
Methylene Chloride	34426		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
Trichlorofluoromethane	34491		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
Acetone	75059		EPA 8260	Not Detected	ug/kg (dw)	100	AGV	9/5/2000	
Dibromomethane	78756		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
trans-1,2-Dichloroethene	34549		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
Iodomethane	73121		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
Carbon Disulfide	78544		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
1,1-Dichloroethene	34504		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
1,1-Dichloroethane	34499		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
cis-1,2-Dichloroethene	77093		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
2,2-Dichloropropane	77170		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
Bromochloromethane	77297		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
Chloroform	34318		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
1,1-Dichloropropene	77168		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
1,2-Dichloroethane	34534		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
2-Butanone	75078		EPA 8260	Not Detected	ug/kg (dw)	100	AGV	9/5/2000	
1,1,1-Trichloroethane	34509		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	
Carbon Tetrachloride	34299		EPA 8260	Not Detected	ug/kg (dw)	5.1	AGV	9/5/2000	

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
Vinyl Acetate	78498		EPA 8260	Not Detected		ug/kg (dw)	51	AGV	9/5/2000	
Bromodichloromethane	34330		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
1,2-Dichloropropane	34544		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
Trichloroethene	34487		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
Benzene	34237		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
cis-1,3-Dichloropropene	34702		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
trans-1,3-Dichloropropene	34697		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
Dibromochloromethane	34309		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
1,1,2-Trichloroethane	34514		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
Bromoform	34290		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
1,2,3-Trichloropropane	78490		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
4-Methyl-2-Pentanone	75169		EPA 8260	Not Detected		ug/kg (dw)	51	AGV	9/5/2000	
2-Hexanone	75166		EPA 8260	Not Detected		ug/kg (dw)	51	AGV	9/5/2000	
Tetrachloroethene	34478		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
1,3-Dichloropropane	77173		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
1,1,2,2-Tetrachloroethane	34519		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
Toluene	34483		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
1,2-Dibromoethane	79749		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
Chlorobenzene	34304		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
Ethylbenzene	34374		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
1,1,1,2-Tetrachloroethane			EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
Styrene	75192		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
p,m-Xylene	45510		EPA 8260	Not Detected		ug/kg (dw)	10	AGV	9/5/2000	
o-Xylene	78362		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
Isopropylbenzene	77223		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
Bromobenzene	78491		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
n-Propylbenzene	77224		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
2-Chlorotoluene	77225		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
1,3,5-Trimethylbenzene	77226		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
4-Chlorotoluene	77277		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
tert-Butylbenzene	77353		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
1,2,4-Trimethylbenzene	34554		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
sec-Butylbenzene	77350		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
1,3-Dichlorobenzene	34569		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
p-Isopropyltoluene	77356		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
1,4-Dichlorobenzene	34574		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
n-Butylbenzene	77342		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
1,2-Dichlorobenzene	34539		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
1,2-Dibromo-3-chloropropane	99999		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
1,2,4-Trichlorobenzene	34554		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
Hexachlorobutadiene	39705		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
Naphthalene	34445		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
1,2,3-Trichlorobenzene	77613		EPA 8260	Not Detected		ug/kg (dw)	5.1	AGV	9/5/2000	
8270 Semi-Vol in Soil/Sed QC Batch 36842										
2-Fluorophenol(Surrogate QC Std.)		U	EPA 8270C	67		ug/kg (dw)	0.00	GJG	9/15/2000	*22 to 63*
Phenol-d5(Surrogate QC Std.)		U	EPA 8270C	76		ug/kg (dw)	0.00	GJG	9/15/2000	*18 to 73*
Nitrobenzene-d5(Surrogate QC Std.)			EPA 8270C	80		ug/kg (dw)	0.00	GJG	9/15/2000	*25 to 81*
2-Fluorobiphenyl(Surrogate QC Std.)			EPA 8270C	77		ug/kg (dw)	0.00	GJG	9/15/2000	*28 to 81*
2,4,6-Tribromophenol(Surrogate QC Std.)			EPA 8270C	93		ug/kg (dw)	0.00	GJG	9/15/2000	*14 to 101*
Terphenyl-d14(Surrogate QC Std.)		U	EPA 8270C	99		ug/kg (dw)	0.00	GJG	9/15/2000	*44 to 92*
n-Nitrosodimethylamine	34441		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	

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2-Picoline	73310		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Methylmethanesulfonate	73119		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Ethylmethanesulfonate	73118		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Aniline	73185		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Phenol	34695		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Chloroethyl)ether	34276		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Chlorophenol	34589		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,3-Dichlorobenzene	34569		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,4-Dichlorobenzene	34574		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzyl alcohol	75212		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/15/2000	
1,2-Dichlorobenzene	34539		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Methylphenol			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Chloroisopropyl)ether	34286		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Acetophenone	73272		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Methylphenol			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
n-Nitroso-di-n-propylamine	34428		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachloroethane	34399		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Nitrobenzene	34450		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
n-Nitrosopiperidine	73129		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Isophorone	34411		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Nitrophenol	34594		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4-Dimethylphenol	34609		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Chloroethoxy)methane	34281		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzoic acid	75315		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
2,4-Dichlorophenol	34604		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,2,4-Trichlorobenzene	34554		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
aa-dimethyl-Phenethylamine	73136		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Naphthalene	34445		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Chloroaniline	78867		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/15/2000	
2,6-Dichlorophenol	73122		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorobutadiene	38705		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
n-Nitroso-di-n-butylamine	73159		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Chloro-3-methylphenol	34455		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/15/2000	
2-Methylnaphthalene	78868		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,2,4,5-Tetrachlorobenzene	79787		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorocyclopentadiene	34389		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4,6-Trichlorophenol	34624		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4,5-Trichlorophenol	78401		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Chloronaphthalene	34584		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1-Chloronaphthalene			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Nitroaniline	78299		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
Dimethylphthalate	34344		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Acenaphthylene	34203		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,6-Dinitrotoluene	34629		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
3-Nitroaniline	78869		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
Acenaphthene	34208		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4-Dinitrophenol	34619		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
4-Nitrophenol	34649		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
Dibenzofuran	75647		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachlorobenzene	79790		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4-Dinitrotoluene	34614		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	

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1-Naphthylamine	73143		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Naphthylamine	73124		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,3,4,6-Tetrachlorophenol			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Diethylphthalate	34339		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Fluorene	34384		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Chlorophenyl-phenylether	34644		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Nitroaniline	78870		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Diphenylamine			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4,6-Dinitro-2-methylphenol	34660		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
n-Nitrosodiphenylamine	34436		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,2-Diphenylhydrazine	34349		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Bromophenyl-phenylether	34639		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Phenacetin	73117		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorobenzene	39701		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Aminobiphenyl	73125		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachlorophenol	39061		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
Pronamide	73031		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachloronitrobenzene	81808		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Phenanthrene	34464		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Anthracene	34223		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Di-n-butylphthalate	39112		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Fluoranthene	34379		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzidine	39121		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pyrene	34472		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
p-Dimethylaminoazobenzene	73116		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Butylbenzylphthalate	34295		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[a]anthracene	34529		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
3,3'-Dichlorobenzidine	34634		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/15/2000	
Chyrsene	34323		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Ethylhexyl)phthalate	39102		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Di-n-octylphthalate	34599		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[b]fluoranthene	34233		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[k]fluoranthene	34245		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
7,12-Dimethylbenz(a)anthracene	73115		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[a]pyrene	34250		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
3-Methylcholanthrene	73156		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Dibenz(a,j)acridine			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Indeno[1,2,3-cd]pyrene	34406		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Dibenz[a,h]anthracene	34559		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[g,h,i]perylene	34524		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pyridine	73312		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Alpha-BHC	39076		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Gamma-BHC	39343		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Beta-BHC	34257		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Delta-BHC	34262		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Heptachlor	39413		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Aldrin	39333		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Heptachlor Epoxide	39423		EPA 8270C	Not Detected		ug/kg (dw)	2800	GJG	9/15/2000	
Endosulfan 1	34364		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
Dieldrin	39383		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
p,p'-DDE	39321		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
Endrin	39393		EPA 8270C	Not Detected		ug/kg (dw)	2300	GJG	9/15/2000	
Endosulfan 2	34359		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
p,p'-DDD	39311		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Endrin Aldehyde	34369		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Endosulfan Sulfate	34354		EPA 8270C	Not Detected		ug/kg (dw)	2800	GJG	9/15/2000	
p,p'-DDT	39301		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexadecanoic acid			EPA 8270C	2100 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
1-Octadecanol			EPA 8270C	9700 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
Tetratetracontane			EPA 8270C	3300 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
ICP Metals HW in Solids QC Batch 36308										
Silver	01078		EPA 6010B	3.8		mg/kg (dw)	1	PT	9/6/2000	
Arsenic	01003		EPA 6010B	110		mg/kg (dw)	8	PT	9/6/2000	
Barium	01008		EPA 6010B	77		mg/kg (dw)	1	PT	9/6/2000	
Cadmium	01028		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Chromium	01029		EPA 6010B	23		mg/kg (dw)	2	PT	9/6/2000	
Lead	01052		EPA 6010B	86		mg/kg (dw)	9	PT	9/6/2000	
Nickel	01068		EPA 6010B	4.3		mg/kg (dw)	2	PT	9/6/2000	
Selenium	01148		EPA 6010B	Not Detected		mg/kg (dw)	19	PT	9/6/2000	
Copper	01042		EPA 6010B	13		mg/kg (dw)	2	PT	9/6/2000	
ICP Metals HW in TCLP Extracts QC Batch 36581										
Silver	01077		EPA 6010B	Not Detected		mg/L	0.01	PT	9/14/2000	5
Arsenic	01002		EPA 6010B	0.19		mg/L	0.08	PT	9/14/2000	5
Barium	01007		EPA 6010B	0.47		mg/L	0.01	PT	9/14/2000	100
Cadmium	01027		EPA 6010B	Not Detected		mg/L	0.01	PT	9/14/2000	1
Chromium	01034		EPA 6010B	Not Detected		mg/L	0.02	PT	9/14/2000	5
Lead	01051		EPA 6010B	Not Detected		mg/L	0.09	PT	9/14/2000	5
Selenium	01147		EPA 6010B	Not Detected		mg/L	0.19	PT	9/14/2000	1
QC Batch 36228										
Mercury			EPA 7471A	0.15		mg/kg (dw)	0.1	CN	9/7/2000	
Pesticides in Sediment/Soil QC Batch 36291										
TCMX surr std			EPA 8081A	4.97		ug/KG (dw)		PM	9/14/2000	*4.0 to 12*
DCB surr std			EPA 8081A	12.2		ug/KG (dw)		PM	9/14/2000	*8.0 to 24*
ALDRIN			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/14/2000	
a-BHC			EPA 8081A	5.2		ug/KG (dw)	2.0	PM	9/14/2000	
b-BHC			EPA 8081A	Not Detected		ug/KG (dw)	3.0	PM	9/14/2000	
d-BHC			EPA 8081A	Not Detected		ug/KG (dw)	4.5	PM	9/14/2000	
LINDANE (g-BHC)			EPA 8081A	2.5		ug/KG (dw)	1.0	PM	9/14/2000	
CHLORDANE			EPA 8081A	400	J	ug/KG (dw)	50	PM	9/14/2000	
4,4-DDE			EPA 8081A	150	D	ug/KG (dw)	30	PM	9/14/2000	
4,4-DDD			EPA 8081A	47		ug/KG (dw)	7.5	PM	9/14/2000	
4,4-DDT			EPA 8081A	170	D	ug/KG (dw)	65	PM	9/14/2000	
DIELDRIN			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/14/2000	
ENDOSULFAN I			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/14/2000	
ENDOSULFAN II			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/14/2000	
ENDOSULFAN SULFATE			EPA 8081A	Not Detected		ug/KG (dw)	8.0	PM	9/14/2000	
ENDRIN			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/14/2000	
ENDRIN ALDEHYDE			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/14/2000	
HEPTACHLOR			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/14/2000	
HEPTACHLOR EPOXIDE			EPA 8081A	Not Detected		ug/KG (dw)	4.0	PM	9/14/2000	
TOXAPHENE			EPA 8081A	Not Detected		ug/KG (dw)	130	PM	9/14/2000	

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CHLORPYRIFOS (DURSBAN)			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/14/2000	
HEXACHLOROBENZENE			EPA 8081A	Not Detected		ug/KG (dw)	1.0	PM	9/14/2000	
METHOXYCHLOR			EPA 8081A	Not Detected		ug/KG (dw)	20	PM	9/14/2000	
MIREX			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/14/2000	
PCBs in Sediments or Soils QC Batch 36497										
TCMX surr std			EPA 8082	4.97		ug/KG (dw)		PM	9/12/2000	*4.0 to 12.0*
DCBP surr std			EPA 8082	12.2		ug/KG (dw)		PM	9/12/2000	*8.0 to 24.0*
PCB-1016			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1221			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1232			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1242			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1248			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1254			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1260			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1262			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
Phenoxy Herbicides in Sediment QC Batch 36515										
DCAA-surr QC std			EPA 8151A	108		ug/KG		BG	9/12/2000	*80 to 280*
2,4-D			EPA 8151A	Not Detected		ug/KG	20	BG	9/12/2000	
SILVEX (2,4,5-TP)			EPA 8151A	Not Detected		ug/KG	4	BG	9/12/2000	

COMMENTS: $8081S - D qualifier denotes results based on dilution run on 9/14/00. 4,4-DDE and 4,4-DDT required 10X dilution for analysis. PQLs for these analytes adjusted accordingly.
$8081S - J qualifier denotes estimated results. Chlordane estimated due to weathering effects resulting in peak ratios varied from the standard.

COMMENTS: $8270S - Sample had 3 surrogates, 2-Fluorophenol (67% recovery, limits 22-63%), Phenol-d5 (76% recovery, limits 18-73%), and Terphenyl-d14 (99% recovery, limits 44-92%) with recoveries outside acceptable control limits due to matrix interferences. LCS results are within acceptable control limits. 7-091900-255

COMMENTS: $R_8270S - Matrix Spike had five spike compounds, N-Nitroso-di-n-propylamine (68% recovery, limits 20-64%), 1,2,4-Trichlorobenzene (62% recovery, limits 27-57%), 4-Nitrophenol (78% recovery, limits 7-77%), 2,4-Dinitrotoluene (79% recovery, limits 12-78%), and Pentachlorophenol (73% recovery, limits 7-70%) with recoveries outside acceptable control limits due to matrix interferences. LCS results were within acceptable control limits. 7-091900-255

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GC Mass Spec:	Steve Bryan	Ext 5260

HAZARDOUS WASTE MANAGEMENT BRANCH (HWMB)
REQUEST FOR LABORATORY ANALYSIS

#4
4-8' deep

Location: Vienna Street Dump / Fort Valley

Collected By/Phone: James Sliwinski / (404) 656-2833

Date: 08/30/00 10:10 LAB No.

Submitted To Lab: 08/30/00

HWMB LOG NUMBER: 8405
(File a separate Request Sheet for each sample point)

Sample ID AD02867
Location: HWMB
Description: HW8405 VIENNA ST.DUMP/FT VALL
Sample Collecto J.SLIWINSKI
Sample ID: AD02867

Analysis Needed By: Routine ✓ Other (specify) _____

Sample Description (check one)

Waste _____ Soil/Sediment ✓ Sludge _____
Ground Water _____ Surface Water _____ Drinking Water Well _____

Concentration of Organics Requested (estimated): High ___ Low ✓ Other (e.g., rinse blank - specify) _____

Describe Sample Including Source and Known Properties (e.g. pH, concentration);
Municipal and industrial dump site: metals, herbicides, pesticides, PCBs, semi-volatile and volatile organics. Subsurface soil at Indian Oaks playground, 4~6' deep

Applicable Hazardous Waste Codes (If known) _____ _____ _____

Special Precautions:

ANALYSIS REQUIRED

(Note: Totals will always be run first. A TCLP will subsequently be run only if the total value indicates a positive TCLP could results)

1. TOTAL ORGANICS

		4 OZ JARS	8 OZ JARS	16 OZ JARS	ENCORES
Semi-Volatiles (Acid & Base\Neutral)	✓				
Volatiles	✓				
Pesticides	✓				
Herbicides	✓				
Organophosphorous Pesticides					
PCB	✓				
BETX					
Total Petroleum Hydrocarbon					
		1	2	1	1

2. TOTAL METALS

ICP Metals Scan (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) ✓
Mercury ✓
Metals Special Requests: _____

Organics Special Requests: _____

3. TCLP ORGANICS

Volatiles _____ Pesticides _____
Semi-Volatiles (Acid & Base/Neutral) _____ Herbicides _____
Additional Specific Organics for TCLP: _____

4. TCLP METALS ANALYSIS

TCLP Metals (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) _____ Additional Metals for TCLP: _____
Mercury _____

5. ADDITIONAL ANALYSIS REQUESTED (see list on back): _____

Reviewed By: (HWMB): _____ Date: _____ Reviewed By (EPD Lab): M. Walker
Approved By:(HWMB): _____ Date: _____ Date (EPD Lab): 8/30/00

RECPT TEMP 20°

MNW

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

455 14th Street NW, Atlanta, GA 30318-7900
(404) 206-5269

LABORATORY REPORT

TO: Georgia Env Protection Divison Hazardous Waste Mgmt Branch 205 Butler St SE Suite 1154E Atlanta, GA 30334	Date Collected: 8/30/2000 Time Collected: 10:10 Sample Collector: J.SLIWINSKI Chlorination: Sample Type:
Sample ID: AD02867 Facility Name: HW8405 VIENNA ST.DUMP/FT VALL Site ID: HWMB Location ID: Location Descr: HW8405 SOIL@INDIAN OAKS PLAYGRN	Received By: MW Date Received: 8/30/2000 Time Received: 5:36 PM Project: HW Reporting Date: 9/28/2000 Received Temperature: 0.0 °C

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
8260 Volatiles in Soil/Sed. QC Batch 36498										
Dibromofluoromethane(Surrogate QC Std.)			EPA 8260	53	ug/kg (dw)		0.00	AGV	9/5/2000	*33 to 75*
Toluene-d8(Surrogate QC Std.)			EPA 8260	49	ug/kg (dw)		0.00	AGV	9/5/2000	*39 to 68*
Bromofluorobenzene(Surrogate QC Std.)			EPA 8260	50	ug/kg (dw)		0.00	AGV	9/5/2000	*25 to 60*
1,2-Dichloroethane-d4(Surrogate QC Std.)			EPA 8260	51	ug/kg (dw)		4.9	AGV	9/5/2000	*35 to 65*
Dichlorodifluoromethane	34334		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Chloromethane	34421		EPA 8260	Not Detected	ug/kg (dw)		9.7	AGV	9/5/2000	
Bromomethane	34416		EPA 8260	Not Detected	ug/kg (dw)		9.7	AGV	9/5/2000	
Vinyl Chloride	34495		EPA 8260	Not Detected	ug/kg (dw)		1.9	AGV	9/5/2000	
Chloroethane	34314		EPA 8260	Not Detected	ug/kg (dw)		9.7	AGV	9/5/2000	
Methylene Chloride	34426		EPA 8260	Trace	ug/kg (dw)	B	4.9	AGV	9/5/2000	
Trichlorofluoromethane	34491		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Acetone	75059		EPA 8260	Not Detected	ug/kg (dw)		97	AGV	9/5/2000	
Dibromomethane	78756		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
trans-1,2-Dichloroethene	34549		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Iodomethane	73121		EPA 8260	Trace	ug/kg (dw)		4.9	AGV	9/5/2000	
Carbon Disulfide	78544		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
1,1-Dichloroethene	34504		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
1,1-Dichloroethane	34499		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
cis-1,2-Dichloroethene	77093		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
2,2-Dichloropropane	77170		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Bromochloromethane	77297		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Chloroform	34318		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
1,1-Dichloropropene	77168		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
1,2-Dichloroethane	34534		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
2-Butanone	75078		EPA 8260	Not Detected	ug/kg (dw)		97	AGV	9/5/2000	
1,1,1-Trichloroethane	34509		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	

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ug/g: micrograms/gram
ppm: parts per million

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PQL: Practical Quantitation Limit
LSPC: result less than lower specification
USPC: result greater than upper specification
TIE: Tentatively Identified or Estimated
VIOL: Violation (result exceeds MCL)

Laboratory Contacts:

Inorganics:	Pat Sammons	Ext 5239
Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
Carbon Tetrachloride	34299		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Vinyl Acetate	78498		EPA 8260	Not Detected	ug/kg (dw)	48	AGV	9/5/2000	
Bromodichloromethane	34330		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,2-Dichloropropane	34544		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Trichloroethene	34487		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Benzene	34237		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
cis-1,3-Dichloropropene	34702		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
trans-1,3-Dichloropropene	34697		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Dibromochloromethane	34309		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,1,2-Trichloroethane	34514		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Bromoform	34290		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,2,3-Trichloropropane	78490		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
4-Methyl-2-Pentanone	75169		EPA 8260	Not Detected	ug/kg (dw)	48	AGV	9/5/2000	
2-Hexanone	75166		EPA 8260	Not Detected	ug/kg (dw)	48	AGV	9/5/2000	
Tetrachloroethene	34478		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,3-Dichloropropane	77173		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,1,2,2-Tetrachloroethane	34519		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Toluene	34483		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,2-Dibromoethane	79749		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Chlorobenzene	34304		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Ethylbenzene	34374		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,1,1,2-Tetrachloroethane			EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Styrene	75192		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
p,m-Xylene	45510		EPA 8260	Not Detected	ug/kg (dw)	9.7	AGV	9/5/2000	
o-Xylene	78362		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Isopropylbenzene	77223		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Bromobenzene	78491		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
n-Propylbenzene	77224		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
2-Chlorotoluene	77225		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,3,5-Trimethylbenzene	77226		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
4-Chlorotoluene	77277		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
tert-Butylbenzene	77353		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,2,4-Trimethylbenzene	34554		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
sec-Butylbenzene	77350		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,3-Dichlorobenzene	34569		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
p-Isopropyltoluene	77356		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,4-Dichlorobenzene	34574		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
n-Butylbenzene	77342		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,2-Dichlorobenzene	34539		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,2-Dibromo-3-chloropropane	99999		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,2,4-Trichlorobenzene	34554		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Hexachlorobutadiene	39705		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Naphthalene	34445		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,2,3-Trichlorobenzene	77613		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
8270 Semi-Vol in Soil/Sed QC Batch 36842									
2-Fluorophenol(Surrogate QC Std.)		U	EPA 8270C	66	ug/kg (dw)	0.00	GJG	9/15/2000	*22 to 63*
Phenol-d5(Surrogate QC Std.)		U	EPA 8270C	79	ug/kg (dw)	0.00	GJG	9/15/2000	*18 to 73*
Nitrobenzene-d5(Surrogate QC Std.)			EPA 8270C	78	ug/kg (dw)	0.00	GJG	9/15/2000	*25 to 81*
2-Fluorobiphenyl(Surrogate QC Std.)			EPA 8270C	80	ug/kg (dw)	0.00	GJG	9/15/2000	*28 to 81*

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2,4,6-Tribromophenol(Surrogate QC Std.)			EPA 8270C	92	ug/kg (dw)		0.00	GJG	9/15/2000	*14 to 101*
Terphenyl-d14(Surrogate QC Std.)		U	EPA 8270C	120	ug/kg (dw)		0.00	GJG	9/15/2000	*44 to 92*
n-Nitrosodimethylamine	34441		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2-Picoline	73310		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Methylmethanesulfonate	73119		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Ethylmethanesulfonate	73118		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Aniline	73185		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Phenol	34695		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
bis(2-Chloroethyl)ether	34276		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2-Chlorophenol	34589		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
1,3-Dichlorobenzene	34569		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
1,4-Dichlorobenzene	34574		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Benzyl alcohol	75212		EPA 8270C	Not Detected	ug/kg (dw)		2300	GJG	9/15/2000	
1,2-Dichlorobenzene	34539		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2-Methylphenol			EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
bis(2-Chloroisopropyl)ether	34286		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Acetophenone	73272		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
4-Methylphenol			EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
n-Nitroso-di-n-propylamine	34428		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Hexachloroethane	34399		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Nitrobenzene	34450		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
n-Nitrosopiperidine	73129		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Isophorone	34411		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2-Nitrophenol	34594		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2,4-Dimethylphenol	34609		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
bis(2-Chloroethoxy)methane	34281		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Benzoic acid	75315		EPA 8270C	Not Detected	ug/kg (dw)		5700	GJG	9/15/2000	
2,4-Dichlorophenol	34604		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
1,2,4-Trichlorobenzene	34554		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
aa-dimethyl-Phenethylamine	73136		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Naphthalene	34445		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
4-Chloroaniline	78867		EPA 8270C	Not Detected	ug/kg (dw)		2300	GJG	9/15/2000	
2,6-Dichlorophenol	73122		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Hexachlorobutadiene	38705		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
n-Nitroso-di-n-butylamine	73159		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
4-Chloro-3-methylphenol	34455		EPA 8270C	Not Detected	ug/kg (dw)		2300	GJG	9/15/2000	
2-Methylnaphthalene	78868		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
1,2,4,5-Tetrachlorobenzene	79787		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Hexachlorocyclopentadiene	34389		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2,4,6-Trichlorophenol	34624		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2,4,5-Trichlorophenol	78401		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2-Chloronaphthalene	34584		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
1-Chloronaphthalene			EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2-Nitroaniline	78299		EPA 8270C	Not Detected	ug/kg (dw)		5700	GJG	9/15/2000	
Dimethylphthalate	34344		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
Acenaphthylene	34203		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
2,6-Dinitrotoluene	34629		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	
3-Nitroaniline	78869		EPA 8270C	Not Detected	ug/kg (dw)		5700	GJG	9/15/2000	
Acenaphthene	34208		EPA 8270C	Not Detected	ug/kg (dw)		1100	GJG	9/15/2000	

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2,4-Dinitrophenol	34619		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
4-Nitrophenol	34649		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
Dibenzofuran	75647		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachlorobenzene	79790		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4-Dinitrotoluene	34614		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1-Naphthylamine	73143		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Naphthylamine	73124		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,3,4,6-Tetrachlorophenol			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Diethylphthalate	34339		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Fluorene	34384		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Chlorophenyl-phenylether	34644		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Nitroaniline	78870		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Diphenylamine			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4,6-Dinitro-2-methylphenol	34660		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
n-Nitrosodiphenylamine	34436		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,2-Diphenylhydrazine	34349		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Bromophenyl-phenylether	34639		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Phenacetin	73117		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorobenzene	39701		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Aminobiphenyl	73125		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachlorophenol	39061		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
Pronamide	73031		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachloronitrobenzene	81808		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Phenanthrene	34464		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Anthracene	34223		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Di-n-butylphthalate	39112		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Fluoranthene	34379		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzidine	39121		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pyrene	34472		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
p-Dimethylaminoazobenzene	73116		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Butylbenzylphthalate	34295		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[a]anthracene	34529		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
3,3'-Dichlorobenzidine	34634		EPA 8270C	Not Detected		ug/kg (dw)	2300	GJG	9/15/2000	
Chyrsene	34323		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Ethylhexyl)phthalate	39102		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Di-n-octylphthalate	34599		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[b]fluoranthene	34233		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[k]fluoranthene	34245		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
7,12-Dimethylbenz(a)anthracene	73115		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[a]pyrene	34250		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
3-Methylcholanthrene	73156		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Dibenz(a,j)acridine			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Indeno[1,2,3-cd]pyrene	34406		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Dibenz[a,h]anthracene	34559		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[g,h,i]perylene	34524		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pyridine	73312		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Alpha-BHC	39076		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Gamma-BHC	39343		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Beta-BHC	34257		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	

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Laboratory Contacts:

Inorganics:	Pat Sammons	Ext 5239
Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
Delta-BHC	34262		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Heptachlor	39413		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Aldrin	39333		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Heptachlor Epoxide	39423		EPA 8270C	Not Detected		ug/kg (dw)	2900	GJG	9/15/2000	
Endosulfan 1	34364		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
Dieldrin	39383		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
p,p'-DDE	39321		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Endrin	39393		EPA 8270C	Not Detected		ug/kg (dw)	2300	GJG	9/15/2000	
Endosulfan 2	34359		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
p,p'-DDD	39311		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Endrin Aldehyde	34369		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Endosulfan Sulfate	34354		EPA 8270C	Not Detected		ug/kg (dw)	2900	GJG	9/15/2000	
p,p'-DDT	39301		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexadecanoic acid			EPA 8270C	1700 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
Octacecanoic acid			EPA 8270C	2400 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
Hexadecanol			EPA 8270C	2100 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
1-Octadecanol			EPA 8270C	13000 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
ICP Metals HW in Solids QC Batch 36308										
Silver	01078		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Arsenic	01003		EPA 6010B	Not Detected		mg/kg (dw)	8	PT	9/6/2000	
Barium	01008		EPA 6010B	62		mg/kg (dw)	1	PT	9/6/2000	
Cadmium	01028		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Chromium	01029		EPA 6010B	43		mg/kg (dw)	2	PT	9/6/2000	
Lead	01052		EPA 6010B	22		mg/kg (dw)	9	PT	9/6/2000	
Nickel	01068		EPA 6010B	7.0		mg/kg (dw)	2	PT	9/6/2000	
Selenium	01148		EPA 6010B	Not Detected		mg/kg (dw)	19	PT	9/6/2000	
Copper	01042		EPA 6010B	5.3		mg/kg (dw)	2	PT	9/6/2000	
QC Batch 36228										
Mercury			EPA 7471A	Not Detected		mg/kg (dw)	0.1	CN	9/7/2000	
Pesticides in Sediment/Soil QC Batch 36291										
TCMX surr std			EPA 8081A	6.95		ug/KG (dw)		PM	9/13/2000	*4.0 to 12*
DCB surr std			EPA 8081A	15.0		ug/KG (dw)		PM	9/13/2000	*8.0 to 24*
ALDRIN			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/13/2000	
a-BHC			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/13/2000	
b-BHC			EPA 8081A	Not Detected		ug/KG (dw)	3.0	PM	9/13/2000	
d-BHC			EPA 8081A	Not Detected		ug/KG (dw)	4.5	PM	9/13/2000	
LINDANE (g-BHC)			EPA 8081A	Not Detected		ug/KG (dw)	1.0	PM	9/13/2000	
CHLORDANE			EPA 8081A	Not Detected		ug/KG (dw)	50	PM	9/13/2000	
4,4-DDE			EPA 8081A	Not Detected		ug/KG (dw)	3.0	PM	9/13/2000	
4,4-DDD			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/13/2000	
4,4-DDT			EPA 8081A	Not Detected		ug/KG (dw)	6.5	PM	9/13/2000	
DIELDRIN			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/13/2000	
ENDOSULFAN I			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/13/2000	
ENDOSULFAN II			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/13/2000	
ENDOSULFAN SULFATE			EPA 8081A	Not Detected		ug/KG (dw)	8.0	PM	9/13/2000	
ENDRIN			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/13/2000	
ENDRIN ALDEHYDE			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/13/2000	
HEPTACHLOR			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/13/2000	

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or *QC Range*
HEPTACHLOR EPOXIDE			EPA 8081A	Not Detected		ug/KG (dw)	4.0	PM	9/13/2000	
TOXAPHENE			EPA 8081A	Not Detected		ug/KG (dw)	130	PM	9/13/2000	
CHLORPYRIFOS (DURSBAN)			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/13/2000	
HEXACHLOROBENZENE			EPA 8081A	Not Detected		ug/KG (dw)	1.0	PM	9/13/2000	
METHOXYCHLOR			EPA 8081A	Not Detected		ug/KG (dw)	20	PM	9/13/2000	
MIREX			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/13/2000	
PCBs in Sediments or Soils QC Batch 36497										
TCMX surr std			EPA 8082	6.95		ug/KG (dw)		PM	9/13/2000	*4.0 to 12.0*
DCBP surr std			EPA 8082	15.0		ug/KG (dw)		PM	9/13/2000	*8.0 to 24.0*
PCB-1016			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/13/2000	
PCB-1221			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/13/2000	
PCB-1232			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/13/2000	
PCB-1242			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/13/2000	
PCB-1248			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/13/2000	
PCB-1254			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/13/2000	
PCB-1260			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/13/2000	
PCB-1262			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/13/2000	
Phenoxy Herbicides in Sediment QC Batch 36515										
DCAA-surr QC std			EPA 8151A	144		ug/KG		BG	9/12/2000	*80 to 280*
2,4-D			EPA 8151A	Not Detected		ug/KG	20	BG	9/12/2000	
SILVEX (2,4,5-TP)			EPA 8151A	Not Detected		ug/KG	4	BG	9/12/2000	

COMMENTS: $8260S -"B"- Blank had trace levels of Methylene Chloride due to lab contamination. 7-090700-239

COMMENTS: $8270S - Sample had three surrogate compounds, 2-Fluorophenol (66% recovery, limits 22-63%), Phenol-d5 (79% recovery, limits 18-73%), and Terphenyl-d14 (120% recovery, limits 44-92%) with recoveries outside acceptable control limits due to matrix interferences. LCS results were within acceptable control limits 7-091900-255

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HAZARDOUS WASTE MANAGEMENT BRANCH (HWMB)
REQUEST FOR LABORATORY ANALYSIS

#9 GHL

ocation: Vienna Street Dump / Fort Valley

cted By/Phone: James Sliwinski / (404) 656-2833

Date: 10:45 a.m. 08/29/00

mitted To Lab: 08/29/00

LOG NUMBER: 8410

(separate Request Sheet for each sample point)

LAB No.

Sample ID AD02394
Location: HWMB
Description: VIENNA STREET DUMP HW8410
Sample Collecto J SLIWINSKI
Entry Point:
Due Date: 12/30/1999

Analysis Needed By: Routine ✓ Other (specify)

Sample Description (check one)

Waste ____ Soil/Sediment ✓ Sludge ____
Ground Water ____ Surface Water ____ Drinking Water Well ____

Concentration of Organics Requested (estimated): High ___ Low ✓ Other (e.g., rinse blank - specify) ____

Describe Sample Including Source and Known Properties (e.g. pH, concentration):
Municipal and industrial dump site: metals, herbicides, pesticides, PCBs, semi-volatile and volatile organics

Applicable Hazardous Waste Codes (if known) ____

Special Precautions:

ANALYSIS REQUIRED

(Note: Totals will always be run first. A TCLP will subsequently be run only if the total value indicates a positive TCLP could results)

1. TOTAL ORGANICS

Semi-Volatiles (Acid & Base\Neutral)	✓		
Volatiles	✓	1	4 OZ. JARS
Pesticides	✓	2	8 OZ. JARS
Herbicides	✓	1	16 OZ. JARS
Organophosphorous Pesticides		4	encores
PCB	✓		
BETX			
Total Petroleum Hydrocarbon			

Organics Special Requests: ____

2. TOTAL METALS

ICP Metals Scan (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) ✓
Mercury ✓
Metals Special Requests: ____

3. TCLP ORGANICS

Volatiles ____ Pesticides ____
Semi-Volatiles (Acid & Base/Neutral) ____ Herbicides ____
Additional Specific Organics for TCLP: ____

4. TCLP METALS ANALYSIS

TCLP Metals (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) ____ Additional Metals for TCLP: ____
Mercury ____

5. ADDITIONAL ANALYSIS REQUESTED (see list on back): ____

Reviewed By: (HWMB): ____ Date: ____ Reviewed By (EPD Lab): GHL
Approved By:(HWMB): ____ Date: ____ Date (EPD Lab): 8-29-00

T TEMP 0.0

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

455 14th Street NW, Atlanta, GA 30318-7900
(404) 206-5269

LABORATORY REPORT

TO: Georgia Env Protection Divison Hazardous Waste Mgmt Branch 205 Butler St SE Suite 1154E Atlanta, GA 30334	Date Collected: 8/29/2000 Time Collected: 10:45 Sample Collector: J SLIWINSKI Chlorination: Sample Type:
Sample ID: AD02394 Facility Name: VIENNA STREET DUMP HW8410 Site ID: HWMB Location ID: Location Descr: HW8410 FORT VALLEY	Received By: GHL Date Received: 8/30/2000 Time Received: 8:52 AM Project: HW Reporting Date: 10/5/2000 Received Temperature: 0.0 °C

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
8260 Volatiles in Soil/Sed. QC Batch 36491										
Dibromofluoromethane(Surrogate QC Std.)			EPA 8260	52	ug/kg (dw)		0.00	AGV	8/31/2000	*33 to 75*
Toluene-d8(Surrogate QC Std.)			EPA 8260	52	ug/kg (dw)		0.00	AGV	8/31/2000	*39 to 68*
Bromofluorobenzene(Surrogate QC Std.)			EPA 8260	48	ug/kg (dw)		0.00	AGV	8/31/2000	*25 to 60*
1,2-Dichloroethane-d4(Surrogate QC Std.)			EPA 8260	51	ug/kg (dw)		5.6	AGV	8/31/2000	*35 to 65*
Dichlorodifluoromethane	34334		EPA 8260	Not Detected	ug/kg (dw)		5.6	AGV	8/31/2000	
Chloromethane	34421		EPA 8260	Trace	ug/kg (dw)		11	AGV	8/31/2000	
Bromomethane	34416		EPA 8260	Not Detected	ug/kg (dw)		11	AGV	8/31/2000	
Vinyl Chloride	34495		EPA 8260	Not Detected	ug/kg (dw)		2.2	AGV	8/31/2000	
Chloroethane	34314		EPA 8260	Not Detected	ug/kg (dw)		11	AGV	8/31/2000	
Methylene Chloride	34426		EPA 8260	Trace	ug/kg (dw)	B	5.6	AGV	8/31/2000	
Trichlorofluoromethane	34491		EPA 8260	Not Detected	ug/kg (dw)		5.6	AGV	8/31/2000	
Acetone	75059		EPA 8260	Not Detected	ug/kg (dw)		110	AGV	8/31/2000	
Dibromomethane	78756		EPA 8260	Not Detected	ug/kg (dw)		5.6	AGV	8/31/2000	
trans-1,2-Dichloroethene	34549		EPA 8260	Not Detected	ug/kg (dw)		5.6	AGV	8/31/2000	
Iodomethane	73121		EPA 8260	Not Detected	ug/kg (dw)		5.6	AGV	8/31/2000	
Carbon Disulfide	78544		EPA 8260	Trace	ug/kg (dw)		5.6	AGV	8/31/2000	
1,1-Dichloroethene	34504		EPA 8260	Not Detected	ug/kg (dw)		5.6	AGV	8/31/2000	
1,1-Dichloroethane	34499		EPA 8260	Not Detected	ug/kg (dw)		5.6	AGV	8/31/2000	
cis-1,2-Dichloroethene	77093		EPA 8260	Not Detected	ug/kg (dw)		5.6	AGV	8/31/2000	
2,2-Dichloropropane	77170		EPA 8260	Not Detected	ug/kg (dw)		5.6	AGV	8/31/2000	
Bromochloromethane	77297		EPA 8260	Not Detected	ug/kg (dw)		5.6	AGV	8/31/2000	
Chloroform	34318		EPA 8260	Not Detected	ug/kg (dw)		5.6	AGV	8/31/2000	
1,1-Dichloropropene	77168		EPA 8260	Not Detected	ug/kg (dw)		5.6	AGV	8/31/2000	
1,2-Dichloroethane	34534		EPA 8260	Not Detected	ug/kg (dw)		5.6	AGV	8/31/2000	
2-Butanone	75078		EPA 8260	Not Detected	ug/kg (dw)		110	AGV	8/31/2000	
1,1,1-Trichloroethane	34509		EPA 8260	Not Detected	ug/kg (dw)		5.6	AGV	8/31/2000	
Carbon Tetrachloride	34299		EPA 8260	Not Detected	ug/kg (dw)		5.6	AGV	8/31/2000	

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Vinyl Acetate	78498		EPA 8260	Not Detected		ug/kg (dw)	56	AGV	8/31/2000	
Bromodichloromethane	34330		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
1,2-Dichloropropane	34544		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
Trichloroethene	34487		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
Benzene	34237		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
cis-1,3-Dichloropropene	34702		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
trans-1,3-Dichloropropene	34697		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
Dibromochloromethane	34309		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
1,1,2-Trichloroethane	34514		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
Bromoform	34290		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
1,2,3-Trichloropropane	78490		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
4-Methyl-2-Pentanone	75169		EPA 8260	Not Detected		ug/kg (dw)	56	AGV	8/31/2000	
2-Hexanone	75166		EPA 8260	Not Detected		ug/kg (dw)	56	AGV	8/31/2000	
Tetrachloroethene	34478		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
1,3-Dichloropropane	77173		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
1,1,2,2-Tetrachloroethane	34519		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
Toluene	34483		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
1,2-Dibromoethane	79749		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
Chlorobenzene	34304		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
Ethylbenzene	34374		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
1,1,1,2-Tetrachloroethane			EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
Styrene	75192		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
p,m-Xylene	45510		EPA 8260	Not Detected		ug/kg (dw)	11	AGV	8/31/2000	
o-Xylene	78362		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
Isopropylbenzene	77223		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
Bromobenzene	78491		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
n-Propylbenzene	77224		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
2-Chlorotoluene	77225		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
1,3,5-Trimethylbenzene	77226		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
4-Chlorotoluene	77277		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
tert-Butylbenzene	77353		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
1,2,4-Trimethylbenzene	34554		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
sec-Butylbenzene	77350		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
1,3-Dichlorobenzene	34569		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
p-Isopropyltoluene	77356		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
1,4-Dichlorobenzene	34574		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
n-Butylbenzene	77342		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
1,2-Dichlorobenzene	34539		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
1,2-Dibromo-3-chloropropane	99999		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
1,2,4-Trichlorobenzene	34554		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
Hexachlorobutadiene	39705		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
Naphthalene	34445		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
1,2,3-Trichlorobenzene	77613		EPA 8260	Not Detected		ug/kg (dw)	5.6	AGV	8/31/2000	
Hexanal			EPA 8260	8.9 TIE		ug/kg (dw)	0.00	AGV	8/31/2000	
8270 Semi-Vol in Soil/Sed QC Batch 36842										
2-Fluorophenol(Surrogate QC Std.)		U	EPA 8270C	64		ug/kg (dw)	0.00	GJG	9/15/2000	*22 to 63*
Phenol-d5(Surrogate QC Std.)		U	EPA 8270C	74		ug/kg (dw)	0.00	GJG	9/15/2000	*18 to 73*
Nitrobenzene-d5(Surrogate QC Std.)			EPA 8270C	77		ug/kg (dw)	0.00	GJG	9/15/2000	*25 to 81*
2-Fluorobiphenyl(Surrogate QC Std.)			EPA 8270C	77		ug/kg (dw)	0.00	GJG	9/15/2000	*28 to 81*
2,4,6-Tribromophenol(Surrogate QC Std.)			EPA 8270C	82		ug/kg (dw)	0.00	GJG	9/15/2000	*14 to 101*
Terphenyl-d14(Surrogate QC Std.)			EPA 8270C	90		ug/kg (dw)	0.00	GJG	9/15/2000	*44 to 92*

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
n-Nitrosodimethylamine	34441		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
2-Picoline	73310		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Methylmethanesulfonate	73119		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Ethylmethanesulfonate	73118		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Aniline	73185		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Phenol	34695		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
bis(2-Chloroethyl)ether	34276		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
2-Chlorophenol	34589		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
1,3-Dichlorobenzene	34569		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
1,4-Dichlorobenzene	34574		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Benzyl alcohol	75212		EPA 8270C	Not Detected		ug/kg (dw)	2800	GJG	9/15/2000	
1,2-Dichlorobenzene	34539		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
2-Methylphenol			EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
bis(2-Chloroisopropyl)ether	34286		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Acetophenone	73272		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
4-Methylphenol			EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
n-Nitroso-di-n-propylamine	34428		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Hexachloroethane	34399		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Nitrobenzene	34450		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
n-Nitrosopiperidine	73129		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Isophorone	34411		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
2-Nitrophenol	34594		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
2,4-Dimethylphenol	34609		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
bis(2-Chloroethoxy)methane	34281		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Benzoic acid	75315		EPA 8270C	Not Detected		ug/kg (dw)	7100	GJG	9/15/2000	
2,4-Dichlorophenol	34604		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
1,2,4-Trichlorobenzene	34554		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
aa-dimethyl-Phenethylamine	73136		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Naphthalene	34445		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
4-Chloroaniline	78867		EPA 8270C	Not Detected		ug/kg (dw)	2800	GJG	9/15/2000	
2,6-Dichlorophenol	73122		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Hexachlorobutadiene	38705		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
n-Nitroso-di-n-butylamine	73159		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
4-Chloro-3-methylphenol	34455		EPA 8270C	Not Detected		ug/kg (dw)	2800	GJG	9/15/2000	
2-Methylnaphthalene	78868		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
1,2,4,5-Tetrachlorobenzene	79787		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Hexachlorocyclopentadiene	34389		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
2,4,6-Trichlorophenol	34624		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
2,4,5-Trichlorophenol	78401		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
2-Chloronaphthalene	34584		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
1-Chloronaphthalene			EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
2-Nitroaniline	78299		EPA 8270C	Not Detected		ug/kg (dw)	7100	GJG	9/15/2000	
Dimethylphthalate	34344		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Acenaphthylene	34203		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
2,6-Dinitrotoluene	34629		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
3-Nitroaniline	78869		EPA 8270C	Not Detected		ug/kg (dw)	7100	GJG	9/15/2000	
Acenaphthene	34208		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
2,4-Dinitrophenol	34619		EPA 8270C	Not Detected		ug/kg (dw)	7100	GJG	9/15/2000	
4-Nitrophenol	34649		EPA 8270C	Not Detected		ug/kg (dw)	7100	GJG	9/15/2000	
Dibenzofuran	75647		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Pentachlorobenzene	79790		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
2,4-Dinitrotoluene	34614		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
1-Naphthylamine	73143		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
2-Naphthylamine	73124		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
2,3,4,6-Tetrachlorophenol			EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Diethylphthalate	34339		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Fluorene	34384		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
4-Chlorophenyl-phenylether	34644		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
4-Nitroaniline	78870		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Diphenylamine			EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
4,6-Dinitro-2-methylphenol	34660		EPA 8270C	Not Detected	ug/kg (dw)		7100	GJG	9/15/2000	
n-Nitrosodiphenylamine	34436		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
1,2-Diphenylhydrazine	34349		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
4-Bromophenyl-phenylether	34639		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Phenacetin	73117		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Hexachlorobenzene	39701		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
4-Aminobiphenyl	73125		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Pentachlorophenol	39061		EPA 8270C	Not Detected	ug/kg (dw)		7100	GJG	9/15/2000	
Pronamide	73031		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Pentachloronitrobenzene	81808		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Phenanthrene	34464		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Anthracene	34223		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Di-n-butylphthalate	39112		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Fluoranthene	34379		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Benzidine	39121		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Pyrene	34472		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
p-Dimethylaminoazobenzene	73116		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Butylbenzylphthalate	34295		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Benzo[a]anthracene	34529		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
3,3'-Dichlorobenzidine	34634		EPA 8270C	Not Detected	ug/kg (dw)		2800	GJG	9/15/2000	
Chyrsene	34323		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
bis(2-Ethylhexyl)phthalate	39102		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Di-n-octylphthalate	34599		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Benzo[b]fluoranthene	34233		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Benzo[k]fluoranthene	34245		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
7,12-Dimethylbenz(a)anthracene	73115		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Benzo[a]pyrene	34250		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
3-Methylcholanthrene	73156		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Dibenz(a,j)acridine			EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Indeno[1,2,3-cd]pyrene	34406		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Dibenz[a,h]anthracene	34559		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Benzo[g,h,i]perylene	34524		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Pyridine	73312		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Alpha-BHC	39076		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Gamma-BHC	39343		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Beta-BHC	34257		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Delta-BHC	34262		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Heptachlor	39413		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Aldrin	39333		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	
Heptachlor Epoxide	39423		EPA 8270C	Not Detected	ug/kg (dw)		3500	GJG	9/15/2000	
Endosulfan 1	34364		EPA 8270C	Not Detected	ug/kg (dw)		7100	GJG	9/15/2000	
Dieldrin	39383		EPA 8270C	Not Detected	ug/kg (dw)		1400	GJG	9/15/2000	

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p,p'-DDE	39321		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Endrin	39393		EPA 8270C	Not Detected		ug/kg (dw)	2800	GJG	9/15/2000	
Endosulfan 2	34359		EPA 8270C	Not Detected		ug/kg (dw)	7100	GJG	9/15/2000	
p,p'-DDD	39311		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Endrin Aldehyde	34369		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Endosulfan Sulfate	34354		EPA 8270C	Not Detected		ug/kg (dw)	3500	GJG	9/15/2000	
p,p'-DDT	39301		EPA 8270C	Not Detected		ug/kg (dw)	1400	GJG	9/15/2000	
Cyclododecane			EPA 8270C	2800 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
Hexadecane			EPA 8270C	2300 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
5-Eicosene			EPA 8270C	13000 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
ICP Metals HW in Solids QC Batch 36308										
Silver	01078		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Arsenic	01003		EPA 6010B	Not Detected		mg/kg (dw)	8	PT	9/6/2000	
Barium	01008		EPA 6010B	24		mg/kg (dw)	1	PT	9/6/2000	
Cadmium	01028		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Chromium	01029		EPA 6010B	17		mg/kg (dw)	2	PT	9/6/2000	
Lead	01052		EPA 6010B	15		mg/kg (dw)	9	PT	9/6/2000	
Nickel	01068		EPA 6010B	3.3		mg/kg (dw)	2	PT	9/6/2000	
Selenium	01148		EPA 6010B	Not Detected		mg/kg (dw)	19	PT	9/6/2000	
Copper	01042		EPA 6010B	4.1		mg/kg (dw)	2	PT	9/6/2000	
QC Batch 36228										
Mercury			EPA 7471A	Not Detected		mg/kg (dw)	0.1	CN	9/7/2000	
Pesticides in Sediment/Soil QC Batch 36291										
TCMX surr std			EPA 8081A	5.10		ug/KG (dw)		PM	9/8/2000	*4.0 to 12*
DCB surr std			EPA 8081A	11.4		ug/KG (dw)		PM	9/8/2000	*8.0 to 24*
ALDRIN			EPA 8081A	Not Detected		ug/KG (dw)	7.0	PM	9/8/2000	
a-BHC			EPA 8081A	Not Detected		ug/KG (dw)	4.0	PM	9/8/2000	
b-BHC			EPA 8081A	Not Detected		ug/KG (dw)	6.0	PM	9/8/2000	
d-BHC			EPA 8081A	Not Detected		ug/KG (dw)	9.0	PM	9/8/2000	
LINDANE (g-BHC)			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/8/2000	
CHLORDANE			EPA 8081A	Not Detected		ug/KG (dw)	100	PM	9/8/2000	
4,4-DDE			EPA 8081A	25		ug/KG (dw)	6.0	PM	9/8/2000	
4,4-DDD			EPA 8081A	Not Detected		ug/KG (dw)	15	PM	9/8/2000	
4,4-DDT			EPA 8081A	Not Detected		ug/KG (dw)	13	PM	9/8/2000	
DIELDRIN			EPA 8081A	Not Detected		ug/KG (dw)	4.0	PM	9/8/2000	
ENDOSULFAN I			EPA 8081A	Not Detected		ug/KG (dw)	10	PM	9/8/2000	
ENDOSULFAN II			EPA 8081A	Not Detected		ug/KG (dw)	15	PM	9/8/2000	
ENDOSULFAN SULFATE			EPA 8081A	Not Detected		ug/KG (dw)	16	PM	9/8/2000	
ENDRIN			EPA 8081A	Not Detected		ug/KG (dw)	15	PM	9/8/2000	
ENDRIN ALDEHYDE			EPA 8081A	Not Detected		ug/KG (dw)	7.0	PM	9/8/2000	
HEPTACHLOR			EPA 8081A	Not Detected		ug/KG (dw)	10	PM	9/8/2000	
HEPTACHLOR EPOXIDE			EPA 8081A	Not Detected		ug/KG (dw)	8.0	PM	9/8/2000	
TOXAPHENE			EPA 8081A	1100	J	ug/KG (dw)	260	PM	9/8/2000	
CHLORPYRIFOS (DURSBAN)			EPA 8081A	Not Detected		ug/KG (dw)	10	PM	9/8/2000	
HEXACHLOROBENZENE			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/8/2000	
METHOXYCHLOR			EPA 8081A	Not Detected		ug/KG (dw)	40	PM	9/8/2000	
MIREX			EPA 8081A	Not Detected		ug/KG (dw)	7.0	PM	9/8/2000	
PCBs in Sediments or Soils QC Batch 36497										
TCMX surr std			EPA 8082	5.10		ug/KG (dw)		PM	9/8/2000	*4.0 to 12.0*
DCBP surr std			EPA 8082	11.4		ug/KG (dw)		PM	9/8/2000	*8.0 to 24.0*

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ug/g: micrograms/gram
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MCL: Maximum Contaminant Level
PQL: Practical Quantitation Limit
LSPC: result less than lower specification
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TIE: Tentatively Identified or Estimated
VIOL: Violation (result exceeds MCL)

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Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
PCB-1016			EPA 8082	Not Detected		ug/KG (dw)	66	PM	9/8/2000	
PCB-1221			EPA 8082	Not Detected		ug/KG (dw)	66	PM	9/8/2000	
PCB-1232			EPA 8082	Not Detected		ug/KG (dw)	66	PM	9/8/2000	
PCB-1242			EPA 8082	Not Detected		ug/KG (dw)	66	PM	9/8/2000	
PCB-1248			EPA 8082	Not Detected		ug/KG (dw)	66	PM	9/8/2000	
PCB-1254			EPA 8082	Not Detected		ug/KG (dw)	66	PM	9/8/2000	
PCB-1260			EPA 8082	Not Detected		ug/KG (dw)	66	PM	9/8/2000	
PCB-1262			EPA 8082	Not Detected		ug/KG (dw)	66	PM	9/8/2000	
Phenoxy Herbicides in Sediment QC Batch 36515										
DCAA-surr QC std			EPA 8151A	162		ug/KG		BG	9/12/2000	*80 to 280*
2,4-D			EPA 8151A	Not Detected		ug/KG	20	BG	9/12/2000	
SILVEX (2,4,5-TP)			EPA 8151A	Not Detected		ug/KG	4	BG	9/12/2000	

COMMENTS: $8081S - J qualifier denotes estimated results. Toxaphene estimated due to weathering effects resulting in peak ratios being varied from the standard.
$8081S - PQLs adjusted for initial sample weight of 10.0 g (PQLs based on 20.0 g initial weight).

COMMENTS: $8082S - PQLs adjusted for initial sample weight of 10.0 g (PQLs based on 20.0 g initial weight).

COMMENTS: $8260S "B" FLAG-Trace levels of Methylene Chloride due to laboratory contamination. 7-090700-240

COMMENTS: $8270S - Sample had two surrogate compounds, 2-Fluorophenol (64% recovery, limits 22-63%), and Phenol-d5(74% recovery, limits 18-73%) with recoveries outside acceptable control limits due to matrix interferences. LCS results were within acceptable control limits. 7-091900-255

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HAZARDOUS WASTE MANAGEMENT BRANCH (HWMB)
REQUEST FOR LABORATORY ANALYSIS

11
4-8'

...cation: Vienna Street Dump / Fort Valley

...ted By/Phone: James Sliwinski / (404) 656-2833

...Date: 08\29\00 15:30

...mitted To Lab: 08\30\00

...B LOG NUMBER: 8412

...separate Request Sheet for each sample point)

Sample ID AD02871
Location: HWMB
Description: HW8412 VIENNA ST.DUMP/FT VALL
Sample Collecto J.SLIWINSKI
Sample ID: AD02871

...nalysis Needed By: Routine ✓ Other (specify) _____

Sample Description (check one)

Waste _____ Soil/Sediment ✓ Sludge _____
Ground Water _____ Surface Water _____ Drinking Water Well _____

Concentration of Organics Requested (estimated): High ___ Low ✓ Other (e.g., rinse blank - specify) _____

Describe Sample Including Source and Known Properties (e.g. pH, concentration);
Municipal and industrial dump site: metals, herbicides, pesticides, PCBs, semi-volatile and volatile organics. Subsurface soil at northeast edge

Applicable Hazardous Waste Codes (if known) _____ _____ _____

Special Precautions:

ANALYSIS REQUIRED

(Note: Totals will always be run first. A TCLP will subsequently be run only if the total value indicates a positive TCLP could results)

1. TOTAL ORGANICS

		4 OZ JARS	8 OZ JARS	16 OZ JARS	ENCORES
Semi-Volatiles (Acid & Base\Neutral)	✓				
Volatiles	✓				
Pesticides	✓				
Herbicides	✓				
Organophosphorous Pesticides					
PCB	✓				
BETX					
Total Petroleum Hydrocarbon		1	2	1	4

2. TOTAL METALS

ICP Metals Scan (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) ✓
Mercury ✓
Metals Special Requests: _____

Organics Special Requests: _____

3. TCLP ORGANICS

Volatiles _____ Pesticides _____
Semi-Volatiles (Acid & Base/Neutral) _____ Herbicides _____
Additional Specific Organics for TCLP: _____

4. TCLP METALS ANALYSIS

TCLP Metals (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) _____ Additional Metals for TCLP: _____
Mercury _____

5. ADDITIONAL ANALYSIS REQUESTED (see list on back): _____

Reviewed By: (HWMB): _____ Date: _____ Reviewed By (EPD Lab): M.Walker
Approved By:(HWMB): _____ Date: _____ Date (EPD Lab): 8/30/00

MNW

RECFT TEMP 0.0

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

455 14th Street NW, Atlanta, GA 30318-7900
(404) 206-5269

LABORATORY REPORT

TO: Georgia Env Protection Divison Hazardous Waste Mgmt Branch 205 Butler St SE Suite 1154E Atlanta, GA 30334	Date Collected: 8/29/2000 Time Collected: 15:30 Sample Collector: J.SLIWINSKI Chlorination: Sample Type:
Sample ID: AD02871 Facility Name: HW8412 VIENNA ST.DUMP/FT VALL Site ID: HWMB Location ID: Location Descr: HW8412 SURFACE SOIL@NE EDGE	Received By: MW Date Received: 8/30/2000 Time Received: 5:36 PM Project: HW Reporting Date: 9/28/2000 Received Temperature: 0.0 °C

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
8260 Volatiles in Soil/Sed. QC Batch 36498										
Dibromofluoromethane(Surrogate QC Std.)			EPA 8260	54	ug/kg (dw)		0.00	AGV	9/6/2000	*33 to 75*
Toluene-d8(Surrogate QC Std.)			EPA 8260	48	ug/kg (dw)		0.00	AGV	9/6/2000	*39 to 68*
Bromofluorobenzene(Surrogate QC Std.)			EPA 8260	49	ug/kg (dw)		0.00	AGV	9/6/2000	*25 to 60*
1,2-Dichloroethane-d4(Surrogate QC Std.)			EPA 8260	52	ug/kg (dw)		5.4	AGV	9/6/2000	*35 to 65*
Dichlorodifluoromethane	34334		EPA 8260	Not Detected	ug/kg (dw)		5.4	AGV	9/6/2000	
Chloromethane	34421		EPA 8260	Not Detected	ug/kg (dw)		11	AGV	9/6/2000	
Bromomethane	34416		EPA 8260	Not Detected	ug/kg (dw)		11	AGV	9/6/2000	
Vinyl Chloride	34495		EPA 8260	Not Detected	ug/kg (dw)		2.1	AGV	9/6/2000	
Chloroethane	34314		EPA 8260	Not Detected	ug/kg (dw)		11	AGV	9/6/2000	
Methylene Chloride	34426		EPA 8260	Not Detected	ug/kg (dw)		5.4	AGV	9/6/2000	
Trichlorofluoromethane	34491		EPA 8260	Not Detected	ug/kg (dw)		5.4	AGV	9/6/2000	
Acetone	75059		EPA 8260	Trace	ug/kg (dw)		110	AGV	9/6/2000	
Dibromomethane	78756		EPA 8260	Not Detected	ug/kg (dw)		5.4	AGV	9/6/2000	
trans-1,2-Dichloroethene	34549		EPA 8260	Not Detected	ug/kg (dw)		5.4	AGV	9/6/2000	
Iodomethane	73121		EPA 8260	Not Detected	ug/kg (dw)		5.4	AGV	9/6/2000	
Carbon Disulfide	78544		EPA 8260	5.9	ug/kg (dw)		5.4	AGV	9/6/2000	
1,1-Dichloroethene	34504		EPA 8260	Not Detected	ug/kg (dw)		5.4	AGV	9/6/2000	
1,1-Dichloroethane	34499		EPA 8260	Not Detected	ug/kg (dw)		5.4	AGV	9/6/2000	
cis-1,2-Dichloroethene	77093		EPA 8260	Not Detected	ug/kg (dw)		5.4	AGV	9/6/2000	
2,2-Dichloropropane	77170		EPA 8260	Not Detected	ug/kg (dw)		5.4	AGV	9/6/2000	
Bromochloromethane	77297		EPA 8260	Not Detected	ug/kg (dw)		5.4	AGV	9/6/2000	
Chloroform	34318		EPA 8260	Not Detected	ug/kg (dw)		5.4	AGV	9/6/2000	
1,1-Dichloropropene	77168		EPA 8260	Not Detected	ug/kg (dw)		5.4	AGV	9/6/2000	
1,2-Dichloroethane	34534		EPA 8260	Not Detected	ug/kg (dw)		5.4	AGV	9/6/2000	
2-Butanone	75078		EPA 8260	Not Detected	ug/kg (dw)		110	AGV	9/6/2000	
1,1,1-Trichloroethane	34509		EPA 8260	Not Detected	ug/kg (dw)		5.4	AGV	9/6/2000	

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
Carbon Tetrachloride	34299		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
Vinyl Acetate	78498		EPA 8260	Not Detected		ug/kg (dw)	54	AGV	9/6/2000	
Bromodichloromethane	34330		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
1,2-Dichloropropane	34544		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
Trichloroethene	34487		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
Benzene	34237		EPA 8260	Trace		ug/kg (dw)	5.4	AGV	9/6/2000	
cis-1,3-Dichloropropene	34702		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
trans-1,3-Dichloropropene	34697		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
Dibromochloromethane	34309		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
1,1,2-Trichloroethane	34514		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
Bromoform	34290		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
1,2,3-Trichloropropane	78490		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
4-Methyl-2-Pentanone	75169		EPA 8260	Not Detected		ug/kg (dw)	54	AGV	9/6/2000	
2-Hexanone	75166		EPA 8260	Not Detected		ug/kg (dw)	54	AGV	9/6/2000	
Tetrachloroethene	34478		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
1,3-Dichloropropane	77173		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
1,1,2,2-Tetrachloroethane	34519		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
Toluene	34483		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
1,2-Dibromoethane	79749		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
Chlorobenzene	34304		EPA 8260	31		ug/kg (dw)	5.4	AGV	9/6/2000	
Ethylbenzene	34374		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
1,1,1,2-Tetrachloroethane			EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
Styrene	75192		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
p,m-Xylene	45510		EPA 8260	Not Detected		ug/kg (dw)	11	AGV	9/6/2000	
o-Xylene	78362		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
Isopropylbenzene	77223		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
Bromobenzene	78491		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
n-Propylbenzene	77224		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
2-Chlorotoluene	77225		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
1,3,5-Trimethylbenzene	77226		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
4-Chlorotoluene	77277		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
tert-Butylbenzene	77353		EPA 8260	Trace		ug/kg (dw)	5.4	AGV	9/6/2000	
1,2,4-Trimethylbenzene	34554		EPA 8260	Trace		ug/kg (dw)	5.4	AGV	9/6/2000	
sec-Butylbenzene	77350		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
1,3-Dichlorobenzene	34569		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
p-Isopropyltoluene	77356		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
1,4-Dichlorobenzene	34574		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
n-Butylbenzene	77342		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
1,2-Dichlorobenzene	34539		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
1,2-Dibromo-3-chloropropane	99999		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
1,2,4-Trichlorobenzene	34554		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
Hexachlorobutadiene	39705		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
Naphthalene	34445		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
1,2,3-Trichlorobenzene	77613		EPA 8260	Not Detected		ug/kg (dw)	5.4	AGV	9/6/2000	
8270 Semi-Vol in Soil/Sed QC Batch 36842										
2-Fluorophenol(Surrogate QC Std.)		U	EPA 8270C	65		ug/kg (dw)	0.00	GJG	9/15/2000	*22 to 63*
Phenol-d5(Surrogate QC Std.)		U	EPA 8270C	77		ug/kg (dw)	0.00	GJG	9/15/2000	*18 to 73*
Nitrobenzene-d5(Surrogate QC Std.)			EPA 8270C	77		ug/kg (dw)	0.00	GJG	9/15/2000	*25 to 81*
2-Fluorobiphenyl(Surrogate QC Std.)			EPA 8270C	80		ug/kg (dw)	0.00	GJG	9/15/2000	*28 to 81*

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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
2,4,6-Tribromophenol(Surrogate QC Std.)			EPA 8270C	81	ug/kg (dw)	0.00	GJG	9/15/2000	*14 to 101*
Terphenyl-d14(Surrogate QC Std.)		U	EPA 8270C	94	ug/kg (dw)	0.00	GJG	9/15/2000	*44 to 92*
n-Nitrosodimethylamine	34441		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
2-Picoline	73310		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Methylmethanesulfonate	73119		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Ethylmethanesulfonate	73118		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Aniline	73185		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Phenol	34695		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Chloroethyl)ether	34276		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
2-Chlorophenol	34589		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
1,3-Dichlorobenzene	34569		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
1,4-Dichlorobenzene	34574		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Benzyl alcohol	75212		EPA 8270C	Not Detected	ug/kg (dw)	2200	GJG	9/15/2000	
1,2-Dichlorobenzene	34539		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
2-Methylphenol			EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Chloroisopropyl)ether	34286		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Acetophenone	73272		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
4-Methylphenol			EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
n-Nitroso-di-n-propylamine	34428		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Hexachloroethane	34399		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Nitrobenzene	34450		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
n-Nitrosopiperidine	73129		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Isophorone	34411		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
2-Nitrophenol	34594		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
2,4-Dimethylphenol	34609		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Chloroethoxy)methane	34281		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Benzoic acid	75315		EPA 8270C	Not Detected	ug/kg (dw)	5700	GJG	9/15/2000	
2,4-Dichlorophenol	34604		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
1,2,4-Trichlorobenzene	34554		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
aa-dimethyl-Phenethylamine	73136		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Naphthalene	34445		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
4-Chloroaniline	78867		EPA 8270C	Not Detected	ug/kg (dw)	2200	GJG	9/15/2000	
2,6-Dichlorophenol	73122		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorobutadiene	38705		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
n-Nitroso-di-n-butylamine	73159		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
4-Chloro-3-methylphenol	34455		EPA 8270C	Not Detected	ug/kg (dw)	2200	GJG	9/15/2000	
2-Methylnaphthalene	78868		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
1,2,4,5-Tetrachlorobenzene	79787		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorocyclopentadiene	34389		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
2,4,6-Trichlorophenol	34624		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
2,4,5-Trichlorophenol	78401		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
2-Chloronaphthalene	34584		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
1-Chloronaphthalene			EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
2-Nitroaniline	78299		EPA 8270C	Not Detected	ug/kg (dw)	5700	GJG	9/15/2000	
Dimethylphthalate	34344		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
Acenaphthylene	34203		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
2,6-Dinitrotoluene	34629		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	
3-Nitroaniline	78869		EPA 8270C	Not Detected	ug/kg (dw)	5700	GJG	9/15/2000	
Acenaphthene	34208		EPA 8270C	Not Detected	ug/kg (dw)	1100	GJG	9/15/2000	

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Laboratory Contacts:

Inorganics:	Pat Sammons	Ext 5239
Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
2,4-Dinitrophenol	34619		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
4-Nitrophenol	34649		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
Dibenzofuran	75647		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachlorobenzene	79790		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4-Dinitrotoluene	34614		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1-Naphthylamine	73143		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Naphthylamine	73124		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,3,4,6-Tetrachlorophenol			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Diethylphthalate	34339		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Fluorene	34384		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Chlorophenyl-phenylether	34644		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Nitroaniline	78870		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Diphenylamine			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4,6-Dinitro-2-methylphenol	34660		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
n-Nitrosodiphenylamine	34436		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,2-Diphenylhydrazine	34349		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Bromophenyl-phenylether	34639		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Phenacetin	73117		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorobenzene	39701		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Aminobiphenyl	73125		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachlorophenol	39061		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
Pronamide	73031		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachloronitrobenzene	81808		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Phenanthrene	34464		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Anthracene	34223		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Di-n-butylphthalate	39112		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Fluoranthene	34379		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzidine	39121		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pyrene	34472		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
p-Dimethylaminoazobenzene	73116		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Butylbenzylphthalate	34295		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[a]anthracene	34529		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
3,3'-Dichlorobenzidine	34634		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/15/2000	
Chyrsene	34323		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Ethylhexyl)phthalate	39102		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Di-n-octylphthalate	34599		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[b]fluoranthene	34233		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[k]fluoranthene	34245		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
7,12-Dimethylbenz(a)anthracene	73115		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[a]pyrene	34250		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
3-Methylcholanthrene	73156		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Dibenz(a,j)acridine			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Indeno[1,2,3-cd]pyrene	34406		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Dibenz[a,h]anthracene	34559		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[g,h,i]perylene	34524		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pyridine	73312		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Alpha-BHC	39076		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Gamma-BHC	39343		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Beta-BHC	34257		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	

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Laboratory Contacts:

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Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
Delta-BHC	34262		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Heptachlor	39413		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Aldrin	39333		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Heptachlor Epoxide	39423		EPA 8270C	Not Detected		ug/kg (dw)	2800	GJG	9/15/2000	
Endosulfan 1	34364		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
Dieldrin	39383		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
p,p'-DDE	39321		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Endrin	39393		EPA 8270C	Not Detected		ug/kg (dw)	2300	GJG	9/15/2000	
Endosulfan 2	34359		EPA 8270C	Not Detected		ug/kg (dw)	5700	GJG	9/15/2000	
p,p'-DDD	39311		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Endrin Aldehyde	34369		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Endosulfan Sulfate	34354		EPA 8270C	Not Detected		ug/kg (dw)	2800	GJG	9/15/2000	
p,p'-DDT	39301		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Cyclododecane			EPA 8270C	1700 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
Hexadecanoic Acid			EPA 8270C	1300 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
Tetracosane			EPA 8270C	3200 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
1-Octadecanol			EPA 8270C	15000 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
ICP Metals HW in TCLP Extracts QC Batch 36581										
Silver	01077		EPA 6010B	Not Detected		mg/L	0.01	PT	9/14/2000	5
Arsenic	01002		EPA 6010B	Not Detected		mg/L	0.08	PT	9/14/2000	5
Barium	01007		EPA 6010B	0.65		mg/L	0.01	PT	9/14/2000	100
Cadmium	01027		EPA 6010B	0.02		mg/L	0.01	PT	9/14/2000	1
Chromium	01034		EPA 6010B	Not Detected		mg/L	0.02	PT	9/14/2000	5
Lead	01051		EPA 6010B	0.59		mg/L	0.09	PT	9/14/2000	5
Selenium	01147		EPA 6010B	Not Detected		mg/L	0.19	PT	9/14/2000	1
ICP Metals HW in Solids QC Batch 36308										
Silver	01078		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Arsenic	01003		EPA 6010B	270		mg/kg (dw)	8	PT	9/6/2000	
Barium	01008		EPA 6010B	150		mg/kg (dw)	1	PT	9/6/2000	
Cadmium	01028		EPA 6010B	2.7		mg/kg (dw)	1	PT	9/6/2000	
Chromium	01029		EPA 6010B	31		mg/kg (dw)	2	PT	9/6/2000	
Lead	01052		EPA 6010B	260		mg/kg (dw)	9	PT	9/6/2000	
Nickel	01068		EPA 6010B	25		mg/kg (dw)	2	PT	9/6/2000	
Selenium	01148		EPA 6010B	Not Detected		mg/kg (dw)	19	PT	9/6/2000	
Copper	01042		EPA 6010B	89		mg/kg (dw)	2	PT	9/6/2000	
QC Batch 36228										
Mercury			EPA 7471A	0.31		mg/kg (dw)	0.1	CN	9/7/2000	
Pesticides in Sediment/Soil QC Batch 36291										
TCMX surr std			EPA 8081A	5.30		ug/KG (dw)		PM	9/14/2000	*4.0 to 12*
DCB surr std			EPA 8081A	13.1		ug/KG (dw)		PM	9/14/2000	*8.0 to 24*
ALDRIN			EPA 8081A	19		ug/KG (dw)	3.5	PM	9/14/2000	
a-BHC			EPA 8081A	41	D	ug/KG (dw)	20	PM	9/14/2000	
b-BHC			EPA 8081A	120	D	ug/KG (dw)	30	PM	9/14/2000	
d-BHC			EPA 8081A	Not Detected		ug/KG (dw)	4.5	PM	9/14/2000	
LINDANE (g-BHC)			EPA 8081A	10		ug/KG (dw)	1.0	PM	9/14/2000	
CHLORDANE			EPA 8081A	Not Detected		ug/KG (dw)	50	PM	9/14/2000	
4,4-DDE			EPA 8081A	1700	D	ug/KG (dw)	300	PM	9/14/2000	
4,4-DDD			EPA 8081A	500	D	ug/KG (dw)	380	PM	9/14/2000	

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Laboratory Contacts:

Inorganics:	Pat Sammons	Ext 5239
Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
4,4-DDT			EPA 8081A	31		ug/KG (dw)	6.5	PM	9/14/2000	
DIELDRIN			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/14/2000	
ENDOSULFAN I			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/14/2000	
ENDOSULFAN II			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/14/2000	
ENDOSULFAN SULFATE			EPA 8081A	Not Detected		ug/KG (dw)	8.0	PM	9/14/2000	
ENDRIN			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/14/2000	
ENDRIN ALDEHYDE			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/14/2000	
HEPTACHLOR			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/14/2000	
HEPTACHLOR EPOXIDE			EPA 8081A	Not Detected		ug/KG (dw)	4.0	PM	9/14/2000	
TOXAPHENE			EPA 8081A	Not Detected		ug/KG (dw)	130	PM	9/14/2000	
CHLORPYRIFOS (DURSBAN)			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/14/2000	
HEXACHLOROBENZENE			EPA 8081A	Not Detected		ug/KG (dw)	1.0	PM	9/14/2000	
METHOXYCHLOR			EPA 8081A	Not Detected		ug/KG (dw)	20	PM	9/14/2000	
MIREX			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/14/2000	
PCBs in Sediments or Soils QC Batch 36497										
TCMX surr std			EPA 8082	5.30		ug/KG (dw)		PM	9/12/2000	*4.0 to 12.0*
DCBP surr std			EPA 8082	13.1		ug/KG (dw)		PM	9/12/2000	*8.0 to 24.0*
PCB-1016			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1221			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1232			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1242			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1248			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1254			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1260			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1262			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
Phenoxy Herbicides in Sediment QC Batch 36515										
DCAA-surr QC std			EPA 8151A	280		ug/KG		BG	9/12/2000	*80 to 280*
2,4-D			EPA 8151A	Not Detected		ug/KG	20	BG	9/12/2000	
SILVEX (2,4,5-TP)			EPA 8151A	Not Detected		ug/KG	4	BG	9/12/2000	

COMMENTS: $8081S - D qualifier denotes results based on dilution run on 9/14/00. a-BHC and b-BHC required 10X dilution, 4,4-DDD required 50X dilution and 4,4-DDE required 100X dilution for analysis. MDLs for these analytes adjusted accordingly.

COMMENTS: $8270S - Sample had 3 surrogates, 2-Fluorophenol (65% recovery, limits 22-63%), Phenol-d5 (77% recovery, limits 18-73%), and Terphenyl-d14 (94% recovery, limits 44-92%) with recoveries outside acceptable control limits due to matrix interferences. LCS limits are within acceptable control limits. 7-091900-255

ug/L: micrograms/liter	<: less than	**Laboratory Contacts:**
mg/L: milligrams/liter	MCL: Maximum Contaminant Level	
mg/kg: milligrams/kilogram	PQL: Practical Quantitation Limit	Inorganics: Pat Sammons Ext 5239
ug/kg:	LSPC: result less than lower specification	Metals: Mark Tolbert Ext 5240
micrograms/kilogram	USPC: result greater than upper specification	Organics: Danny Reed Ext 5252
ug/g: micrograms/gram	TIE: Tentatively Identified or Estimated	GC Mass Spec: Steve Bryan Ext 5260
ppm: parts per million	VIOL: Violation (result exceeds MCL)	

HAZARDOUS WASTE MANAGEMENT BRANCH (HWMB)
REQUEST FOR LABORATORY ANALYSIS

13
4-8

cation: Vienna Street Dump / Fort Valley

ed By/Phone: James Sliwinski / (404) 656-2833

ate: 08/30/00 8:15

itted To Lab: 08/30/00

LOG NUMBER: 8414
(paste Request Sheet for each sample point)

Sample ID AD02872
Location: HWMB
Description: HW8414 VIENNA ST.DUMP/FT VAL
Sample Collecto J.SLIWINSKI
Sample ID: AD02872

ysis Needed By: Routine ✓ Other (specify) _____

mple Description (check one)

Waste ____ Soil/Sediment ✓ Sludge ____
Ground Water ____ Surface Water ____ Drinking Water Well ____

Concentration of Organics Requested (estimated): High ___ Low ✓ Other (e.g., rinse blank - specify) _____

Describe Sample Including Source and Known Properties (e.g. pH, concentration):
Municipal and industrial dump site: metals, herbicides, pesticides, PCBs, semi-volatile and volatile organics. Subsurface soil at the middle portion

Applicable Hazardous Waste Codes (If known) _____ _____ _____

Special Precautions:

ANALYSIS REQUIRED

(Note: Totals will always be run first. A TCLP will subsequently be run only if the total value indicates a positive TCLP could results)

1. TOTAL ORGANICS		4 OZ. JARS	8 OZ. JARS	16 OZ. JARS	ENCORES
Semi-Volatiles (Acid & Base\Neutral)	✓				
Volatiles	✓				
Pesticides	✓				
Herbicides	✓				
Organophosphorous Pesticides					
PCB	✓				
BETX		1	2	1	4
Total Petroleum Hydrocarbon					

2. TOTAL METALS
ICP Metals Scan (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) ✓
Mercury ✓
Metals Special Requests: ____

Organics Special Requests: _____

3. TCLP ORGANICS

Volatiles ____ Pesticides ____
Semi-Volatiles (Acid & Base/Neutral) ____ Herbicides ____
Additional Specific Organics for TCLP: _____

4. TCLP METALS ANALYSIS

TCLP Metals (Ag,As,Ba,Cd,Cr,Ni,Pb,Se) ____ Additional Metals for TCLP: ____
Mercury ____

5. ADDITIONAL ANALYSIS REQUESTED (see list on back): _____

Reviewed By: (HWMB): ____ Date: ____ Reviewed By (EPD Lab): M. Walker
Approved By:(HWMB): ____ Date: ____ Date (EPD Lab): 8/30/00

MNW

RECFT TEMP 0.0°

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

455 14th Street NW, Atlanta, GA 30318-7900
(404) 206-5269

LABORATORY REPORT

TO: Georgia Env Protection Divison Hazardous Waste Mgmt Branch 205 Butler St SE Suite 1154E Atlanta, GA 30334	Date Collected: 8/30/2000 Time Collected: 8:15 Sample Collector: J.SLIWINSKI Chlorination: Sample Type:
Sample ID: AD02872 Facility Name: HW8414 VIENNA ST.DUMP/FT VALL Site ID: HWMB Location ID: Location Descr: HW8414 SURFACE SOIL@MID POINT	Received By: MW Date Received: 8/30/2000 Time Received: 5:36 PM Project: HW Reporting Date: 9/28/2000 Received Temperature: 0.0 °C

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
8260 Volatiles in Soil/Sed. QC Batch 36498									
Dibromofluoromethane(Surrogate QC Std.)			EPA 8260	55	ug/kg (dw)	0.00	AGV	9/5/2000	*33 to 75*
Toluene-d8(Surrogate QC Std.)			EPA 8260	57	ug/kg (dw)	0.00	AGV	9/5/2000	*39 to 68*
Bromofluorobenzene(Surrogate QC Std.)			EPA 8260	41	ug/kg (dw)	0.00	AGV	9/5/2000	*25 to 60*
1,2-Dichloroethane-d4(Surrogate QC Std.)			EPA 8260	52	ug/kg (dw)	4.9	AGV	9/5/2000	*35 to 65*
Dichlorodifluoromethane	34334		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Chloromethane	34421		EPA 8260	Not Detected	ug/kg (dw)	9.8	AGV	9/5/2000	
Bromomethane	34416		EPA 8260	Not Detected	ug/kg (dw)	9.8	AGV	9/5/2000	
Vinyl Chloride	34495		EPA 8260	Not Detected	ug/kg (dw)	2.0	AGV	9/5/2000	
Chloroethane	34314		EPA 8260	Not Detected	ug/kg (dw)	9.8	AGV	9/5/2000	
Methylene Chloride	34426		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Trichlorofluoromethane	34491		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Acetone	75059		EPA 8260	Trace	ug/kg (dw)	98	AGV	9/5/2000	
Dibromomethane	78756		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
trans-1,2-Dichloroethene	34549		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Iodomethane	73121		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Carbon Disulfide	78544		EPA 8260	Trace	ug/kg (dw)	4.9	AGV	9/5/2000	
1,1-Dichloroethene	34504		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,1-Dichloroethane	34499		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
cis-1,2-Dichloroethene	77093		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
2,2-Dichloropropane	77170		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Bromochloromethane	77297		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
Chloroform	34318		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,1-Dichloropropene	77168		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
1,2-Dichloroethane	34534		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	
2-Butanone	75078		EPA 8260	Not Detected	ug/kg (dw)	98	AGV	9/5/2000	
1,1,1-Trichloroethane	34509		EPA 8260	Not Detected	ug/kg (dw)	4.9	AGV	9/5/2000	

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Organics:	Danny Reed	Ext 5252
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ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	UNITS	QUALIFIER	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
Carbon Tetrachloride	34299		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Vinyl Acetate	78498		EPA 8260	Not Detected	ug/kg (dw)		49	AGV	9/5/2000	
Bromodichloromethane	34330		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
1,2-Dichloropropane	34544		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Trichloroethene	34487		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Benzene	34237		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
cis-1,3-Dichloropropene	34702		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
trans-1,3-Dichloropropene	34697		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Dibromochloromethane	34309		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
1,1,2-Trichloroethane	34514		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Bromoform	34290		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
1,2,3-Trichloropropane	78490		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
4-Methyl-2-Pentanone	75169		EPA 8260	Not Detected	ug/kg (dw)		49	AGV	9/5/2000	
2-Hexanone	75166		EPA 8260	Not Detected	ug/kg (dw)		49	AGV	9/5/2000	
Tetrachloroethene	34478		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
1,3-Dichloropropane	77173		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
1,1,2,2-Tetrachloroethane	34519		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Toluene	34483		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
1,2-Dibromoethane	79749		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Chlorobenzene	34304		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Ethylbenzene	34374		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
1,1,1,2-Tetrachloroethane			EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Styrene	75192		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
p,m-Xylene	45510		EPA 8260	Not Detected	ug/kg (dw)		9.8	AGV	9/5/2000	
o-Xylene	78362		EPA 8260	Not Detected	ug/kg (dw)		4.9	AGV	9/5/2000	
Isopropylbenzene	77223		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
Bromobenzene	78491		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
n-Propylbenzene	77224		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
2-Chlorotoluene	77225		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
1,3,5-Trimethylbenzene	77226		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
4-Chlorotoluene	77277		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
tert-Butylbenzene	77353		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
1,2,4-Trimethylbenzene	34554		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
sec-Butylbenzene	77350		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
1,3-Dichlorobenzene	34569		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
p-Isopropyltoluene	77356		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
1,4-Dichlorobenzene	34574		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
n-Butylbenzene	77342		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
1,2-Dichlorobenzene	34539		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
1,2-Dibromo-3-chloropropane	99999		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
1,2,4-Trichlorobenzene	34554		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
Hexachlorobutadiene	39705		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
Naphthalene	34445		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
1,2,3-Trichlorobenzene	77613		EPA 8260	Not Detected	ug/kg (dw)	J	4.9	AGV	9/5/2000	
8270 Semi-Vol in Soil/Sed QC Batch 36842										
2-Fluorophenol(Surrogate QC Std.)			EPA 8270C	50	ug/kg (dw)		0.00	GJG	9/15/2000	*22 to 63*
Phenol-d5(Surrogate QC Std.)			EPA 8270C	55	ug/kg (dw)		0.00	GJG	9/15/2000	*18 to 73*
Nitrobenzene-d5(Surrogate QC Std.)			EPA 8270C	61	ug/kg (dw)		0.00	GJG	9/15/2000	*25 to 81*
2-Fluorobiphenyl(Surrogate QC Std.)			EPA 8270C	58	ug/kg (dw)		0.00	GJG	9/15/2000	*28 to 81*

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2,4,6-Tribromophenol(Surrogate QC Std.)			EPA 8270C	60		ug/kg (dw)	0.00	GJG	9/15/2000	*14 to 101*
Terphenyl-d14(Surrogate QC Std.)			EPA 8270C	74		ug/kg (dw)	0.00	GJG	9/15/2000	*44 to 92*
n-Nitrosodimethylamine	34441		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Picoline	73310		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Methylmethanesulfonate	73119		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Ethylmethanesulfonate	73118		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Aniline	73185		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Phenol	34695		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Chloroethyl)ether	34276		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Chlorophenol	34589		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,3-Dichlorobenzene	34569		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,4-Dichlorobenzene	34574		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzyl alcohol	75212		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/15/2000	
1,2-Dichlorobenzene	34539		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Methylphenol			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Chloroisopropyl)ether	34286		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Acetophenone	73272		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Methylphenol			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
n-Nitroso-di-n-propylamine	34428		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachloroethane	34399		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Nitrobenzene	34450		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
n-Nitrosopiperidine	73129		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Isophorone	34411		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Nitrophenol	34594		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4-Dimethylphenol	34609		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Chloroethoxy)methane	34281		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzoic acid	75315		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
2,4-Dichlorophenol	34604		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,2,4-Trichlorobenzene	34554		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
aa-dimethyl-Phenethylamine	73136		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Naphthalene	34445		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Chloroaniline	78867		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/15/2000	
2,6-Dichlorophenol	73122		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorobutadiene	38705		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
n-Nitroso-di-n-butylamine	73159		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Chloro-3-methylphenol	34455		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/15/2000	
2-Methylnaphthalene	78868		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,2,4,5-Tetrachlorobenzene	79787		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorocyclopentadiene	34389		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4,6-Trichlorophenol	34624		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4,5-Trichlorophenol	78401		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Chloronaphthalene	34584		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1-Chloronaphthalene			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Nitroaniline	78299		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
Dimethylphthalate	34344		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Acenaphthylene	34203		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,6-Dinitrotoluene	34629		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
3-Nitroaniline	78869		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
Acenaphthene	34208		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	

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2,4-Dinitrophenol	34619		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
4-Nitrophenol	34649		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
Dibenzofuran	75647		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachlorobenzene	79790		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,4-Dinitrotoluene	34614		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1-Naphthylamine	73143		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2-Naphthylamine	73124		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
2,3,4,6-Tetrachlorophenol			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Diethylphthalate	34339		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Fluorene	34384		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Chlorophenyl-phenylether	34644		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Nitroaniline	78870		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Diphenylamine			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4,6-Dinitro-2-methylphenol	34660		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
n-Nitrosodiphenylamine	34436		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1,2-Diphenylhydrazine	34349		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Bromophenyl-phenylether	34639		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Phenacetin	73117		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Hexachlorobenzene	39701		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
4-Aminobiphenyl	73125		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachlorophenol	39061		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
Pronamide	73031		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pentachloronitrobenzene	81808		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Phenanthrene	34464		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Anthracene	34223		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Di-n-butylphthalate	39112		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Fluoranthene	34379		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzidine	39121		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pyrene	34472		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
p-Dimethylaminoazobenzene	73116		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Butylbenzylphthalate	34295		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[a]anthracene	34529		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
3,3'-Dichlorobenzidine	34634		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/15/2000	
Chyrsene	34323		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
bis(2-Ethylhexyl)phthalate	39102		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Di-n-octylphthalate	34599		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[b]fluoranthene	34233		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[k]fluoranthene	34245		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
7,12-Dimethylbenz(a)anthracene	73115		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[a]pyrene	34250		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
3-Methylcholanthrene	73156		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Dibenz(a,j)acridine			EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Indeno[1,2,3-cd]pyrene	34406		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Dibenz[a,h]anthracene	34559		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Benzo[g,h,i]perylene	34524		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Pyridine	73312		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Alpha-BHC	39076		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Gamma-BHC	39343		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Beta-BHC	34257		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	

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Delta-BHC	34262		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Heptachlor	39413		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Aldrin	39333		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Heptachlor Epoxide	39423		EPA 8270C	Not Detected		ug/kg (dw)	2800	GJG	9/15/2000	
Endosulfan 1	34364		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
Dieldrin	39383		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
p,p'-DDE	39321		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Endrin	39393		EPA 8270C	Not Detected		ug/kg (dw)	2200	GJG	9/15/2000	
Endosulfan 2	34359		EPA 8270C	Not Detected		ug/kg (dw)	5500	GJG	9/15/2000	
p,p'-DDD	39311		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Endrin Aldehyde	34369		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
Endosulfan Sulfate	34354		EPA 8270C	Not Detected		ug/kg (dw)	2800	GJG	9/15/2000	
p,p'-DDT	39301		EPA 8270C	Not Detected		ug/kg (dw)	1100	GJG	9/15/2000	
1-Octadecanol			EPA 8270C	7200 TIE		ug/kg (dw)	0.00	GJG	9/15/2000	
ICP Metals HW in Solids QC Batch 36308										
Silver	01078		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Arsenic	01003		EPA 6010B	Not Detected		mg/kg (dw)	8	PT	9/6/2000	
Barium	01008		EPA 6010B	39		mg/kg (dw)	1	PT	9/6/2000	
Cadmium	01028		EPA 6010B	Not Detected		mg/kg (dw)	1	PT	9/6/2000	
Chromium	01029		EPA 6010B	24		mg/kg (dw)	2	PT	9/6/2000	
Lead	01052		EPA 6010B	18		mg/kg (dw)	9	PT	9/6/2000	
Nickel	01068		EPA 6010B	4.9		mg/kg (dw)	2	PT	9/6/2000	
Selenium	01148		EPA 6010B	Not Detected		mg/kg (dw)	19	PT	9/6/2000	
Copper	01042		EPA 6010B	6.3		mg/kg (dw)	2	PT	9/6/2000	
QC Batch 36228										
Mercury			EPA 7471A	Not Detected		mg/kg (dw)	0.1	CN	9/7/2000	
Pesticides in Sediment/Soil QC Batch 36291										
TCMX surr std			EPA 8081A	5.75		ug/KG (dw)		PM	9/12/2000	*4.0 to 12*
DCB surr std			EPA 8081A	13.1		ug/KG (dw)		PM	9/12/2000	*8.0 to 24*
ALDRIN			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/12/2000	
a-BHC			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/12/2000	
b-BHC			EPA 8081A	Not Detected		ug/KG (dw)	3.0	PM	9/12/2000	
d-BHC			EPA 8081A	Not Detected		ug/KG (dw)	4.5	PM	9/12/2000	
LINDANE (g-BHC)			EPA 8081A	Not Detected		ug/KG (dw)	1.0	PM	9/12/2000	
CHLORDANE			EPA 8081A	59	J	ug/KG (dw)	50	PM	9/12/2000	
4,4-DDE			EPA 8081A	36		ug/KG (dw)	3.0	PM	9/12/2000	
4,4-DDD			EPA 8081A	27		ug/KG (dw)	7.5	PM	9/12/2000	
4,4-DDT			EPA 8081A	Not Detected		ug/KG (dw)	6.5	PM	9/12/2000	
DIELDRIN			EPA 8081A	Not Detected		ug/KG (dw)	2.0	PM	9/12/2000	
ENDOSULFAN I			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/12/2000	
ENDOSULFAN II			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/12/2000	
ENDOSULFAN SULFATE			EPA 8081A	Not Detected		ug/KG (dw)	8.0	PM	9/12/2000	
ENDRIN			EPA 8081A	Not Detected		ug/KG (dw)	7.5	PM	9/12/2000	
ENDRIN ALDEHYDE			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/12/2000	
HEPTACHLOR			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/12/2000	
HEPTACHLOR EPOXIDE			EPA 8081A	Not Detected		ug/KG (dw)	4.0	PM	9/12/2000	
TOXAPHENE			EPA 8081A	Not Detected		ug/KG (dw)	130	PM	9/12/2000	
CHLORPYRIFOS (DURSBAN)			EPA 8081A	Not Detected		ug/KG (dw)	5.0	PM	9/12/2000	

ug/L: micrograms/liter
mg/L: milligrams/liter
mg/kg: milligrams/kilogram
ug/kg: micrograms/kilogram
ug/g: micrograms/gram
ppm: parts per million

<: less than
MCL: Maximum Contaminant Level
PQL: Practical Quantitation Limit
LSPC: result less than lower specification
USPC: result greater than upper specification
TIE: Tentatively Identified or Estimated
VIOL: Violation (result exceeds MCL)

Laboratory Contacts:

Inorganics:	Pat Sammons	Ext 5239
Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

ANALYTE	PARAMETER CODE	NOTE	EPA METHOD	RESULT	QUALIFIER	UNITS	PQL	ANALYST	ANALYSIS DATE	MCL or QC Range
HEXACHLOROBENZENE			EPA 8081A	Not Detected		ug/KG (dw)	1.0	PM	9/12/2000	
METHOXYCHLOR			EPA 8081A	Not Detected		ug/KG (dw)	20	PM	9/12/2000	
MIREX			EPA 8081A	Not Detected		ug/KG (dw)	3.5	PM	9/12/2000	
PCBs in Sediments or Soils QC Batch 36497										
TCMX surr std			EPA 8082	5.75		ug/KG (dw)		PM	9/12/2000	*4.0 to 12.0*
DCBP surr std			EPA 8082	13.1		ug/KG (dw)		PM	9/12/2000	*8.0 to 24.0*
PCB-1016			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1221			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1232			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1242			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1248			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1254			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1260			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
PCB-1262			EPA 8082	Not Detected		ug/KG (dw)	33	PM	9/12/2000	
Phenoxy Herbicides in Sediment QC Batch 36515										
DCAA-surr QC std			EPA 8151A	148		ug/KG		BG	9/12/2000	*80 to 280*
2,4-D			EPA 8151A	Not Detected		ug/KG	20	BG	9/12/2000	
SILVEX (2,4,5-TP)			EPA 8151A	Not Detected		ug/KG	4	BG	9/12/2000	

COMMENTS: $8081S - J qualifier denotes estimated results. Chlordane estimated due to weathering effects resulting in peak ratios being varied from the standard.

COMMENTS: $8260S - "J" - Sample had one internal standard, 1,4-Dichlorobenzene-d4 (42% response, limits 50-200%) fall outside acceptable response limits due to matrix interferences. LCS results were within acceptable control limits. 7-090700-239

ug/L: micrograms/liter
mg/L: milligrams/liter
mg/kg: milligrams/kilogram
ug/kg: micrograms/kilogram
ug/g: micrograms/gram
ppm: parts per million

<: less than
MCL: Maximum Contaminant Level
PQL: Practical Quantitation Limit
LSPC: result less than lower specification
USPC: result greater than upper specification
TIE: Tentatively Identified or Estimated
VIOL: Violation (result exceeds MCL)

Laboratory Contacts:

Inorganics:	Pat Sammons	Ext 5239
Metals:	Mark Tolbert	Ext 5240
Organics:	Danny Reed	Ext 5252
GC Mass Spec:	Steve Bryan	Ext 5260

May 24, 2001

MEMORANDUM

SUBJECT: Vienna Street Dump

TO: Carolyn Thompson

Carolyn,

Attached is the data from the drill cutting samples from drilling at the Vienna Street Dump. There are 3-8 drums of cuttings associated with each of these samples staged at the southeast end of the wastewater treatment plant. The drums are grouped together by sample and each is labeled.

WMD/SSMB
RECEIVED

MAY 29 2001

EPA-REGION 4
ATLANTA, GA

METALS SAMPLE ANALYSIS **EPA - REGION IV SESD, ATHENS, GA** **Production Date: 05/23/2001 13:11**

Sample **5385** FY **2001** Project: **01-0444**

METALS SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW1CUT /
Media: SUBSURFACE SOIL (> 12")

Produced by: Wasko, Mike
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:50
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
0.50U	MG/KG	SILVER
1.2	MG/KG	ARSENIC
NA	MG/KG	BORON
4.8	MG/KG	BARIUM
0.30U	MG/KG	BERYLLIUM
0.10U	MG/KG	CADMIUM
0.64	MG/KG	COBALT
10	MG/KG	CHROMIUM
5.8	MG/KG	COPPER
0.50U	MG/KG	MOLYBDENUM
1.6	MG/KG	NICKEL
5.2	MG/KG	LEAD
0.10U	MG/KG	ANTIMONY
0.40U	MG/KG	SELENIUM
2.5U	MG/KG	TIN
0.69	MG/KG	STRONTIUM
NA	MG/KG	TELLURIUM
26	MG/KG	TITANIUM
0.10U	MG/KG	THALLIUM
18	MG/KG	VANADIUM
9.6	MG/KG	YTTRIUM
23	MG/KG	ZINC
NA	MG/KG	ZIRCONIUM
0.050U	MG/KG	TOTAL MERCURY
2200	MG/KG	ALUMINUM
28	MG/KG	MANGANESE
90	MG/KG	CALCIUM
50U	MG/KG	MAGNESIUM
6500	MG/KG	IRON
200U	MG/KG	SODIUM
200U	MG/KG	POTASSIUM
22A	%	% MOISTURE

average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
ual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
tes that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

METALS SAMPLE ANALYSIS **EPA - REGION IV SESD, ATHENS, GA** **Production Date: 05/23/2001 13:11**

Sample **5384** FY **2001** Project: **01-0444**

METALS SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW3CUT /
Media: SUBSURFACE SOIL (> 12")

Produced by: Wasko, Mike
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:30
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
0.50U	MG/KG	SILVER
1.0	MG/KG	ARSENIC
NA	MG/KG	BORON
4.5	MG/KG	BARIUM
0.30U	MG/KG	BERYLLIUM
0.10U	MG/KG	CADMIUM
0.50U	MG/KG	COBALT
8.6	MG/KG	CHROMIUM
5.6	MG/KG	COPPER
0.50U	MG/KG	MOLYBDENUM
1.8	MG/KG	NICKEL
5.5	MG/KG	LEAD
0.10U	MG/KG	ANTIMONY
0.40U	MG/KG	SELENIUM
2.5U	MG/KG	TIN
0.73	MG/KG	STRONTIUM
NA	MG/KG	TELLURIUM
24	MG/KG	TITANIUM
0.10U	MG/KG	THALLIUM
17	MG/KG	VANADIUM
2.4	MG/KG	YTTRIUM
22	MG/KG	ZINC
NA	MG/KG	ZIRCONIUM
0.049U	MG/KG	TOTAL MERCURY
1700	MG/KG	ALUMINUM
24	MG/KG	MANGANESE
140	MG/KG	CALCIUM
50U	MG/KG	MAGNESIUM
5300	MG/KG	IRON
200U	MG/KG	SODIUM
200U	MG/KG	POTASSIUM
11	%	% MOISTURE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
ates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

METALS SAMPLE ANALYSIS **EPA - REGION IV SESD, ATHENS, GA** **Production Date: 05/23/2001 13:11**

Sample **5383** FY **2001** Project: **01-0444**

METALS SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: CNTLCUT /
Media: SUBSURFACE SOIL (> 12")

Produced by: Wasko, Mike
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:15
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
0.50U	MG/KG	SILVER
1.0A	MG/KG	ARSENIC
NA	MG/KG	BORON
5.6A	MG/KG	BARIUM
0.30U	MG/KG	BERYLLIUM
0.099U	MG/KG	CADMIUM
0.62A	MG/KG	COBALT
5.0A	MG/KG	CHROMIUM
2.9A	MG/KG	COPPER
0.50U	MG/KG	MOLYBDENUM
2.1A	MG/KG	NICKEL
5.2A	MG/KG	LEAD
0.099UJ	MG/KG	ANTIMONY
0.40U	MG/KG	SELENIUM
2.5U	MG/KG	TIN
0.62A	MG/KG	STRONTIUM
NA	MG/KG	TELLURIUM
22A	MG/KG	TITANIUM
0.099U	MG/KG	THALLIUM
13A	MG/KG	VANADIUM
4.5A	MG/KG	YTTRIUM
22A	MG/KG	ZINC
NA	MG/KG	ZIRCONIUM
0.048U	MG/KG	TOTAL MERCURY
1100A	MG/KG	ALUMINUM
36A	MG/KG	MANGANESE
95A	MG/KG	CALCIUM
50U	MG/KG	MAGNESIUM
4600A	MG/KG	IRON
200U	MG/KG	SODIUM
200U	MG/KG	POTASSIUM
17	%	% MOISTURE

MATRIX SPIKE RECOVERY OUT OF CONTROL LIMITS FOR SB

e. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
nown to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
ata unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample **5385** FY **2001** Project: **01-0444**

PESTICIDES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW1CUT /
Media: SUBSURFACE SOIL (> 12")

Produced by: Revells, Lavon
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:50
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
23U	UG/KG	ALDRIN
23U	UG/KG	HEPTACHLOR
23U	UG/KG	HEPTACHLOR EPOXIDE
23U	UG/KG	ALPHA-BHC
23U	UG/KG	BETA-BHC
23U	UG/KG	GAMMA-BHC (LINDANE)
23U	UG/KG	DELTA-BHC
23U	UG/KG	ENDOSULFAN I (ALPHA)
23U	UG/KG	DIELDRIN
23U	UG/KG	4,4'-DDT (P,P'-DDT)
23U	UG/KG	4,4'-DDE (P,P'-DDE)
23U	UG/KG	4,4'-DDD (P,P'-DDD)
23U	UG/KG	ENDRIN
23U	UG/KG	ENDOSULFAN II (BETA)
23U	UG/KG	ENDOSULFAN SULFATE
120U	UG/KG	PCB-1242 (AROCLOR 1242)
120U	UG/KG	PCB-1254 (AROCLOR 1254)
120U	UG/KG	PCB-1221 (AROCLOR 1221)
120U	UG/KG	PCB-1232 (AROCLOR 1232)
120U	UG/KG	PCB-1248 (AROCLOR 1248)
120U	UG/KG	PCB-1260 (AROCLOR 1260)
120U	UG/KG	PCB-1016 (AROCLOR 1016)
940U	UG/KG	TOXAPHENE
23U	UG/KG	CHLORDENE /2
23U	UG/KG	ALPHA-CHLORDENE /2
23U	UG/KG	BETA-CHLORDENE /2
23U	UG/KG	GAMMA-CHLORDENE /2
23U	UG/KG	GAMMA-CHLORDANE /2
23U	UG/KG	TRANS-NONACHLOR /2
23U	UG/KG	ALPHA-CHLORDANE /2
23U	UG/KG	CIS-NONACHLOR /2
23U	UG/KG	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
47U	UG/KG	METHOXYCHLOR
26U	UG/KG	ENDRIN KETONE
21	%	% MOISTURE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.
C-confirmed by gcms: 1.when no value is reported, see chlordane constituents 2.constituents or metabolites of technical chlordane

Sample **5384** FY **2001** Project: **01-0444**

PESTICIDES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW3CUT /
Media: SUBSURFACE SOIL (> 12")

Produced by: Revells, Lavon
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:30
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
21U	UG/KG	ALDRIN
21U	UG/KG	HEPTACHLOR
21U	UG/KG	HEPTACHLOR EPOXIDE
21U	UG/KG	ALPHA-BHC
21U	UG/KG	BETA-BHC
21U	UG/KG	GAMMA-BHC (LINDANE)
21U	UG/KG	DELTA-BHC
21U	UG/KG	ENDOSULFAN I (ALPHA)
21U	UG/KG	DIELDRIN
38U	UG/KG	4,4'-DDT (P,P'-DDT)
21U	UG/KG	4,4'-DDE (P,P'-DDE)
21U	UG/KG	4,4'-DDD (P,P'-DDD)
21U	UG/KG	ENDRIN
21U	UG/KG	ENDOSULFAN II (BETA)
21U	UG/KG	ENDOSULFAN SULFATE
100U	UG/KG	PCB-1242 (AROCLOR 1242)
100U	UG/KG	PCB-1254 (AROCLOR 1254)
100U	UG/KG	PCB-1221 (AROCLOR 1221)
100U	UG/KG	PCB-1232 (AROCLOR 1232)
100U	UG/KG	PCB-1248 (AROCLOR 1248)
100U	UG/KG	PCB-1260 (AROCLOR 1260)
100U	UG/KG	PCB-1016 (AROCLOR 1016)
830U	UG/KG	TOXAPHENE
21U	UG/KG	CHLORDENE /2
21U	UG/KG	ALPHA-CHLORDENE /2
21U	UG/KG	BETA-CHLORDENE /2
21U	UG/KG	GAMMA-CHLORDENE /2
21U	UG/KG	GAMMA-CHLORDANE /2
21U	UG/KG	TRANS-NONACHLOR /2
21U	UG/KG	ALPHA-CHLORDANE /2
21U	UG/KG	CIS-NONACHLOR /2
21U	UG/KG	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
42U	UG/KG	METHOXYCHLOR
23U	UG/KG	ENDRIN KETONE
12	%	% MOISTURE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.
C-confirmed by gcms: 1.when no value is reported, see chlordane constituents 2.constituents or metabolites of technical chlordane

Sample **5383** FY **2001** Project: **01-0444**

PESTICIDES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: CNTLCUT /
Media: SUBSURFACE SOIL (> 12")

Produced by: Revells, Lavon
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:15
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
21U	UG/KG	ALDRIN
21U	UG/KG	HEPTACHLOR
21U	UG/KG	HEPTACHLOR EPOXIDE
21U	UG/KG	ALPHA-BHC
21U	UG/KG	BETA-BHC
21U	UG/KG	GAMMA-BHC (LINDANE)
21U	UG/KG	DELTA-BHC
21U	UG/KG	ENDOSULFAN I (ALPHA)
21U	UG/KG	DIELDRIN
31U	UG/KG	4,4'-DDT (P,P'-DDT)
21U	UG/KG	4,4'-DDE (P,P'-DDE)
26U	UG/KG	4,4'-DDD (P,P'-DDD)
21U	UG/KG	ENDRIN
21U	UG/KG	ENDOSULFAN II (BETA)
21U	UG/KG	ENDOSULFAN SULFATE
110U	UG/KG	PCB-1242 (AROCLOR 1242)
110U	UG/KG	PCB-1254 (AROCLOR 1254)
110U	UG/KG	PCB-1221 (AROCLOR 1221)
110U	UG/KG	PCB-1232 (AROCLOR 1232)
110U	UG/KG	PCB-1248 (AROCLOR 1248)
110U	UG/KG	PCB-1260 (AROCLOR 1260)
110U	UG/KG	PCB-1016 (AROCLOR 1016)
850U	UG/KG	TOXAPHENE
21U	UG/KG	CHLORDENE /2
21U	UG/KG	ALPHA-CHLORDENE /2
21U	UG/KG	BETA-CHLORDENE /2
21U	UG/KG	GAMMA-CHLORDENE /2
21U	UG/KG	GAMMA-CHLORDANE /2
21U	UG/KG	TRANS-NONACHLOR /2
21U	UG/KG	ALPHA-CHLORDANE /2
21U	UG/KG	CIS-NONACHLOR /2
21U	UG/KG	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
16JN	UG/KG	METHOXYCHLOR
21U	UG/KG	ENDRIN KETONE
15	%	% MOISTURE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.
C-confirmed by gcms: 1.when no value is reported, see chlordane constituents 2.constituents or metabolites of technical chlordane

VOLATILES SAMPLE ANALYSIS

EPA - REGION IV SESD, ATHENS, GA

Production Date: 05/16/2001 11:36

Sample **5383** FY **2001** Project: **01-0444**

VOLATILES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: CNTLCUT /
Media: SUBSURFACE SOIL (> 12")

Produced by: Allen, Frank
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:15
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
1.0U	UG/KG	DICHLORODIFLUOROMETHANE
1.0U	UG/KG	CHLOROMETHANE
1.0U	UG/KG	BROMOMETHANE
1.0U	UG/KG	VINYL CHLORIDE
1.0U	UG/KG	CHLOROETHANE
1.0U	UG/KG	TRICHLOROFLUOROMETHANE
1.0U	UG/KG	1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)
1.0U	UG/KG	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)
1.0U	UG/KG	METHYLENE CHLORIDE
1.0U	UG/KG	METHYL T-BUTYL ETHER (MTBE)
13U	UG/KG	ACETONE
1.0U	UG/KG	CARBON DISULFIDE
1.0U	UG/KG	METHYL ACETATE
1.0U	UG/KG	1,1-DICHLOROETHANE
1.0U	UG/KG	CIS-1,2-DICHLOROETHENE
1.0UJ	UG/KG	2,2-DICHLOROPROPANE
2.6U	UG/KG	METHYL ETHYL KETONE
1.0U	UG/KG	BROMOCHLOROMETHANE
1.0U	UG/KG	TRANS-1,2-DICHLOROETHENE
5.2U	UG/KG	CHLOROFORM
1.0U	UG/KG	1,2-DICHLOROETHANE
1.0U	UG/KG	1,1,1-TRICHLOROETHANE
1.0U	UG/KG	CYCLOHEXANE
1.0U	UG/KG	1,1-DICHLOROPROPENE
1.0U	UG/KG	CARBON TETRACHLORIDE
5.2U	UG/KG	BROMODICHLOROMETHANE
2.6U	UG/KG	METHYL ISOBUTYL KETONE
1.0U	UG/KG	1,2-DICHLOROPROPANE
1.0U	UG/KG	METHYLCYCLOHEXANE
1.0U	UG/KG	DIBROMOMETHANE
1.0U	UG/KG	TRANS-1,3-DICHLOROPROPENE
1.0U	UG/KG	TRICHLOROETHENE (TRICHLOROETHYLENE)
1.0U	UG/KG	BENZENE
1.0U	UG/KG	DIBROMOCHLOROMETHANE
1.0U	UG/KG	1,1,2-TRICHLOROETHANE
1.0U	UG/KG	CIS-1,3-DICHLOROPROPENE
1.0U	UG/KG	BROMOFORM
1.0U	UG/KG	BROMOBENZENE
1.0UJ	UG/KG	1,1,2,2-TETRACHLOROETHANE
1.0U	UG/KG	TETRACHLOROETHENE (TETRACHLOROETHYLENE)
1.0U	UG/KG	1,3-DICHLOROPROPANE
2.6U	UG/KG	METHYL BUTYL KETONE
1.0U	UG/KG	TOLUENE
1.0U	UG/KG	CHLOROBENZENE
1.0U	UG/KG	1,1,1,2-TETRACHLOROETHANE
1.0U	UG/KG	ETHYL BENZENE
2.1U	UG/KG	(M- AND/OR P-)XYLENE
1.0U	UG/KG	O-XYLENE
1.0U	UG/KG	STYRENE
1.0U	UG/KG	1,2,3-TRICHLOROPROPANE
1.0U	UG/KG	O-CHLOROTOLUENE
1.0U	UG/KG	P-CHLOROTOLUENE
1.0U	UG/KG	1,3-DICHLOROBENZENE
1.0U	UG/KG	1,4-DICHLOROBENZENE
1.0U	UG/KG	1,2-DICHLOROBENZENE
1.0U	UG/KG	1,2-DIBROMOETHANE (EDB)
1.0U	UG/KG	ISOPROPYLBENZENE
1.0U	UG/KG	N-PROPYLBENZENE
1.0U	UG/KG	1,3,5-TRIMETHYLBENZENE
1.0U	UG/KG	TERT-BUTYLBENZENE
1.0U	UG/KG	1,2,4-TRIMETHYLBENZENE
1.0U	UG/KG	SEC-BUTYLBENZENE
1.0U	UG/KG	P-ISOPROPYLTOLUENE
1.0U	UG/KG	N-BUTYLBENZENE
1.0U	UG/KG	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)
1.0U	UG/KG	1,2,4-TRICHLOROBENZENE
1.0U	UG/KG	HEXACHLORO-1,3-BUTADIENE
5.2U	UG/KG	1,2,3-TRICHLOROBENZENE
15	%	% MOISTURE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

VOLATILES SAMPLE ANALYSIS

EPA - REGION IV SESD, ATHENS, GA

Production Date: 05/16/2001 11:36

Sample **5384** FY **2001** Project: **01-0444**

VOLATILES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW3CUT /
Media: SUBSURFACE SOIL (> 12")

Produced by: Allen, Frank
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:30
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
1.0U	UG/KG	DICHLORODIFLUOROMETHANE
1.0U	UG/KG	CHLOROMETHANE
1.0U	UG/KG	BROMOMETHANE
1.0U	UG/KG	VINYL CHLORIDE
1.0U	UG/KG	CHLOROETHANE
1.0U	UG/KG	TRICHLOROFLUOROMETHANE
1.0U	UG/KG	1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)
1.0U	UG/KG	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)
1.0U	UG/KG	METHYLENE CHLORIDE
1.0U	UG/KG	METHYL T-BUTYL ETHER (MTBE)
13U	UG/KG	ACETONE
1.0U	UG/KG	CARBON DISULFIDE
1.0U	UG/KG	METHYL ACETATE
1.0U	UG/KG	1,1-DICHLOROETHANE
1.0U	UG/KG	CIS-1,2-DICHLOROETHENE
1.0UJ	UG/KG	2,2-DICHLOROPROPANE
2.6U	UG/KG	METHYL ETHYL KETONE
1.0U	UG/KG	BROMOCHLOROMETHANE
1.0U	UG/KG	TRANS-1,2-DICHLOROETHENE
5.2U	UG/KG	CHLOROFORM
1.0U	UG/KG	1,2-DICHLOROETHANE
1.0U	UG/KG	1,1,1-TRICHLOROETHANE
1.0U	UG/KG	CYCLOHEXANE
1.0U	UG/KG	1,1-DICHLOROPROPENE
1.0U	UG/KG	CARBON TETRACHLORIDE
5.2U	UG/KG	BROMODICHLOROMETHANE
2.6U	UG/KG	METHYL ISOBUTYL KETONE
1.0U	UG/KG	1,2-DICHLOROPROPANE
1.0U	UG/KG	METHYLCYCLOHEXANE
1.0U	UG/KG	DIBROMOMETHANE
1.0U	UG/KG	TRANS-1,3-DICHLOROPROPENE
1.0U	UG/KG	TRICHLOROETHENE (TRICHLOROETHYLENE)
1.0U	UG/KG	BENZENE
1.0U	UG/KG	DIBROMOCHLOROMETHANE
1.0U	UG/KG	1,1,2-TRICHLOROETHANE
1.0U	UG/KG	CIS-1,3-DICHLOROPROPENE
1.0U	UG/KG	BROMOFORM
1.0U	UG/KG	BROMOBENZENE
1.0UJ	UG/KG	1,1,2,2-TETRACHLOROETHANE
1.0U	UG/KG	TETRACHLOROETHENE (TETRACHLOROETHYLENE)
1.0U	UG/KG	1,3-DICHLOROPROPANE
2.6U	UG/KG	METHYL BUTYL KETONE
4.1	UG/KG	TOLUENE
1.0U	UG/KG	CHLOROBENZENE
1.0U	UG/KG	1,1,1,2-TETRACHLOROETHANE
1.0U	UG/KG	ETHYL BENZENE
2.1U	UG/KG	(M- AND/OR P-)XYLENE
1.0U	UG/KG	O-XYLENE
1.0U	UG/KG	STYRENE
1.0U	UG/KG	1,2,3-TRICHLOROPROPANE
1.0U	UG/KG	O-CHLOROTOLUENE
1.0U	UG/KG	P-CHLOROTOLUENE
1.0U	UG/KG	1,3-DICHLOROBENZENE
1.0U	UG/KG	1,4-DICHLOROBENZENE
1.0U	UG/KG	1,2-DICHLOROBENZENE
1.0U	UG/KG	1,2-DIBROMOETHANE (EDB)
1.0U	UG/KG	ISOPROPYLBENZENE
1.0U	UG/KG	N-PROPYLBENZENE
1.0U	UG/KG	1,3,5-TRIMETHYLBENZENE
1.0U	UG/KG	TERT-BUTYLBENZENE
1.0U	UG/KG	1,2,4-TRIMETHYLBENZENE
1.0U	UG/KG	SEC-BUTYLBENZENE
1.0U	UG/KG	P-ISOPROPYLTOLUENE
1.0U	UG/KG	N-BUTYLBENZENE
1.0U	UG/KG	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)
1.0U	UG/KG	1,2,4-TRICHLOROBENZENE
1.0U	UG/KG	HEXACHLORO-1,3-BUTADIENE
5.2U	UG/KG	1,2,3-TRICHLOROBENZENE
12	%	% MOISTURE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

VOLATILES SAMPLE ANALYSIS

EPA - REGION IV SESD, ATHENS, GA

Production Date: 05/16/2001 11:36

Sample **5385** FY **2001** Project: **01-0444**

VOLATILES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: TW1CUT /

Media: SUBSURFACE SOIL (> 12")

Produced by: Allen, Frank

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/26/2001 15:50

Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
1.4U	UG/KG	DICHLORODIFLUOROMETHANE
1.4U	UG/KG	CHLOROMETHANE
1.4U	UG/KG	BROMOMETHANE
1.4U	UG/KG	VINYL CHLORIDE
1.4U	UG/KG	CHLOROETHANE
1.4U	UG/KG	TRICHLOROFLUOROMETHANE
1.4U	UG/KG	1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)
1.4U	UG/KG	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)
1.4U	UG/KG	METHYLENE CHLORIDE
1.4U	UG/KG	METHYL T-BUTYL ETHER (MTBE)
17U	UG/KG	ACETONE
1.4U	UG/KG	CARBON DISULFIDE
1.4U	UG/KG	METHYL ACETATE
1.4U	UG/KG	1,1-DICHLOROETHANE
1.4U	UG/KG	CIS-1,2-DICHLOROETHENE
1.4UJ	UG/KG	2,2-DICHLOROPROPANE
3.4U	UG/KG	METHYL ETHYL KETONE
1.4U	UG/KG	BROMOCHLOROMETHANE
1.4U	UG/KG	TRANS-1,2-DICHLOROETHENE
6.8U	UG/KG	CHLOROFORM
1.4U	UG/KG	1,2-DICHLOROETHANE
1.4U	UG/KG	1,1,1-TRICHLOROETHANE
1.4U	UG/KG	CYCLOHEXANE
1.4U	UG/KG	1,1-DICHLOROPROPENE
1.4U	UG/KG	CARBON TETRACHLORIDE
6.8U	UG/KG	BROMODICHLOROMETHANE
3.4U	UG/KG	METHYL ISOBUTYL KETONE
1.4U	UG/KG	1,2-DICHLOROPROPANE
1.4U	UG/KG	METHYLCYCLOHEXANE
1.4U	UG/KG	DIBROMOMETHANE
1.4U	UG/KG	TRANS-1,3-DICHLOROPROPENE
1.4U	UG/KG	TRICHLOROETHENE (TRICHLOROETHYLENE)
1.4U	UG/KG	BENZENE
1.4U	UG/KG	DIBROMOCHLOROMETHANE
1.4U	UG/KG	1,1,2-TRICHLOROETHANE

RESULTS	UNITS	ANALYTE
1.4U	UG/KG	CIS-1,3-DICHLOROPROPENE
1.4U	UG/KG	BROMOFORM
1.4U	UG/KG	BROMOBENZENE
1.4UJ	UG/KG	1,1,2,2-TETRACHLOROETHANE
1.4U	UG/KG	TETRACHLOROETHENE (TETRACHLOROETHYLENE)
1.4U	UG/KG	1,3-DICHLOROPROPANE
3.4U	UG/KG	METHYL BUTYL KETONE
1.3J	UG/KG	TOLUENE
1.4U	UG/KG	CHLOROBENZENE
1.4U	UG/KG	1,1,1,2-TETRACHLOROETHANE
1.4U	UG/KG	ETHYL BENZENE
2.7U	UG/KG	(M- AND/OR P-)XYLENE
1.4U	UG/KG	O-XYLENE
1.4U	UG/KG	STYRENE
1.4U	UG/KG	1,2,3-TRICHLOROPROPANE
1.4U	UG/KG	O-CHLOROTOLUENE
1.4U	UG/KG	P-CHLOROTOLUENE
1.4U	UG/KG	1,3-DICHLOROBENZENE
1.4U	UG/KG	1,4-DICHLOROBENZENE
1.4U	UG/KG	1,2-DICHLOROBENZENE
1.4U	UG/KG	1,2-DIBROMOETHANE (EDB)
1.4U	UG/KG	ISOPROPYLBENZENE
1.4U	UG/KG	N-PROPYLBENZENE
1.4U	UG/KG	1,3,5-TRIMETHYLBENZENE
1.4U	UG/KG	TERT-BUTYLBENZENE
1.4U	UG/KG	1,2,4-TRIMETHYLBENZENE
1.4U	UG/KG	SEC-BUTYLBENZENE
1.4U	UG/KG	P-ISOPROPYLTOLUENE
1.4U	UG/KG	N-BUTYLBENZENE
1.4U	UG/KG	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)
1.4U	UG/KG	1,2,4-TRICHLOROBENZENE
1.4U	UG/KG	HEXACHLORO-1,3-BUTADIENE
6.8U	UG/KG	1,2,3-TRICHLOROBENZENE
21	%	% MOISTURE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

June 1, 2001

MEMORANDUM

FROM: Brian Striggow

SUBJECT: Vienna Street Dump

TO: Carolyn Thompson

Carolyn,

Attached is the data from the groundwater samples at the Vienna Street Dump. Also attached is the Extractable Organic data, which I just received. My apologies that this was not included with the earlier packet of data on the drill cuttings. Note that there are no detects of extractables for the drill cuttings.

WMD/SRMB
RECEIVED

JUN 04 2001

EPA-REGION 4
ATLANTA, GA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4

Science and Ecosystem Support Division
980 College Station Road
Athens, Georgia 30605-2720

MEMORANDUM

Date: 05/25/2001

Subject: Results of EXTRACTABLES Sample Analysis
01-0444 Vienna Street Dump
Fort Valley, GA

From: Revell, Dennis

To: Striggow.Brian

Thru: Cosgrove, Bill
Chief,Organic Chemistry Section
Analytical Support Branch

Attached are the results of analysis of samples collected as part of the subject project. If you have any questions, please contact me.

ATTACHMENT

Sample **5379** FY **2001** Project: **01-0444**

MISCELLANEOUS COMPOUNDS

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW1 /
Media: GROUNDWATER

Produced by:
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/25/2001 15:30
Ending:

RESULTS	UNITS	ANALYTE
100JN	UG/L	DIMETHYLPHENYLBENZENEACETAMIDE
300JN	UG/L	DIAZADIKETOCYCLOTETRADECANE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample **5380** FY **2001** Project: **01-0444**

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW3 /
Media: GROUNDWATER

Produced by:
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/25/2001 17:45
Ending:

RESULTS	UNITS	ANALYTE
10U	UG/L	BIS(2-CHLOROETHYL) ETHER
10U	UG/L	BENZALDEHYDE
10U	UG/L	HEXACHLOROETHANE
10U	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
10U	UG/L	N-NITROSODI-N-PROPYLAMINE
10U	UG/L	ACETOPHENONE
10U	UG/L	NITROBENZENE
10U	UG/L	HEXACHLOROBUTADIENE
40	UG/L	CAPROLACTAM
10U	UG/L	2-METHYLNAPHTHALENE
10U	UG/L	1,2,4-TRICHLOROBENZENE
10U	UG/L	NAPHTHALENE
10U	UG/L	4-CHLOROANILINE
10U	UG/L	BIS(2-CHLOROETHOXY)METHANE
10U	UG/L	ISOPHORONE
10U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
10U	UG/L	1,1-BIPHENYL
10U	UG/L	2-CHLORONAPHTHALENE
10U	UG/L	2-NITROANILINE
10U	UG/L	ACENAPHTHYLENE
10U	UG/L	ACENAPHTHENE
10U	UG/L	DIMETHYL PHTHALATE
10U	UG/L	DIBENZOFURAN
10U	UG/L	2,4-DINITROTOLUENE
10U	UG/L	2,6-DINITROTOLUENE
10U	UG/L	3-NITROANILINE
10U	UG/L	4-CHLOROPHENYL PHENYL ETHER
10U	UG/L	4-NITROANILINE
10U	UG/L	FLUORENE
10U	UG/L	DIETHYL PHTHALATE
10U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	UG/L	HEXACHLOROBENZENE (HCB)
10U	UG/L	ATRAZINE
10U	UG/L	4-BROMOPHENYL PHENYL ETHER
10U	UG/L	PHENANTHRENE

RESULTS	UNITS	ANALYTE
10U	UG/L	ANTHRACENE
10U	UG/L	CARBAZOLE
10U	UG/L	DI-N-BUTYLPHTHALATE
10U	UG/L	FLUORANTHENE
10U	UG/L	PYRENE
10U	UG/L	BENZYL BUTYL PHTHALATE
10U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
10U	UG/L	BENZO(A)ANTHRACENE
10U	UG/L	CHRYSENE
10U	UG/L	3,3'-DICHLOROBENZIDINE
10U	UG/L	DI-N-OCTYLPHTHALATE
10U	UG/L	BENZO(B)FLUORANTHENE
10U	UG/L	BENZO(K)FLUORANTHENE
10U	UG/L	BENZO-A-PYRENE
10U	UG/L	INDENO (1,2,3-CD) PYRENE
10U	UG/L	DIBENZO(A,H)ANTHRACENE
10U	UG/L	BENZO(GHI)PERYLENE
10U	UG/L	2-CHLOROPHENOL
10U	UG/L	2-METHYLPHENOL
10U	UG/L	(3-AND/OR 4-)METHYLPHENOL
10U	UG/L	2-NITROPHENOL
10U	UG/L	PHENOL
10U	UG/L	2,4-DIMETHYLPHENOL
10U	UG/L	2,4-DICHLOROPHENOL
10U	UG/L	2,4,6-TRICHLOROPHENOL
10U	UG/L	2,4,5-TRICHLOROPHENOL
10U	UG/L	4-CHLORO-3-METHYLPHENOL
20U	UG/L	2,4-DINITROPHENOL
20U	UG/L	2-METHYL-4,6-DINITROPHENOL
20U	UG/L	PENTACHLOROPHENOL
20U	UG/L	4-NITROPHENOL
10U	UG/L	2,3,4,6-TETRACHLOROPHENOL

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample **5383** FY **2001** Project: **01-0444**

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: CNTLCUT /
Media: SUBSURFACE SOIL (> 12")

Produced by:
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:15
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
3900U	UG/KG	BIS(2-CHLOROETHYL) ETHER
3900U	UG/KG	BENZALDEHYDE
3900U	UG/KG	HEXACHLOROETHANE
3900U	UG/KG	BIS(2-CHLOROISOPROPYL) ETHER
3900U	UG/KG	N-NITROSODI-N-PROPYLAMINE
3900U	UG/KG	ACETOPHENONE
3900U	UG/KG	NITROBENZENE
3900U	UG/KG	HEXACHLOROBUTADIENE
3900U	UG/KG	CAPROLACTAM
3900U	UG/KG	2-METHYLNAPHTHALENE
3900U	UG/KG	1,2,4-TRICHLOROBENZENE
3900U	UG/KG	NAPHTHALENE
3900U	UG/KG	4-CHLOROANILINE
3900U	UG/KG	BIS(2-CHLOROETHOXY)METHANE
3900U	UG/KG	ISOPHORONE
3900U	UG/KG	HEXACHLOROCYCLOPENTADIENE (HCCP)
3900U	UG/KG	1,1-BIPHENYL
3900U	UG/KG	2-CHLORONAPHTHALENE
3900U	UG/KG	2-NITROANILINE
3900U	UG/KG	ACENAPHTHYLENE
3900U	UG/KG	ACENAPHTHENE
3900U	UG/KG	DIMETHYL PHTHALATE
3900U	UG/KG	DIBENZOFURAN
3900U	UG/KG	2,4-DINITROTOLUENE
3900U	UG/KG	2,6-DINITROTOLUENE
3900U	UG/KG	3-NITROANILINE
3900U	UG/KG	4-CHLOROPHENYL PHENYL ETHER
3900U	UG/KG	4-NITROANILINE
3900U	UG/KG	FLUORENE
3900U	UG/KG	DIETHYL PHTHALATE
3900U	UG/KG	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
3900U	UG/KG	HEXACHLOROBENZENE (HCB)
3900U	UG/KG	ATRAZINE
3900U	UG/KG	4-BROMOPHENYL PHENYL ETHER
3900U	UG/KG	PHENANTHRENE

RESULTS	UNITS	ANALYTE
3900U	UG/KG	ANTHRACENE
3900U	UG/KG	CARBAZOLE
3900U	UG/KG	DI-N-BUTYLPHTHALATE
3900U	UG/KG	FLUORANTHENE
3900U	UG/KG	PYRENE
3900U	UG/KG	BENZYL BUTYL PHTHALATE
3900U	UG/KG	BIS(2-ETHYLHEXYL) PHTHALATE
3900U	UG/KG	BENZO(A)ANTHRACENE
3900U	UG/KG	CHRYSENE
3900U	UG/KG	3,3'-DICHLOROBENZIDINE
3900U	UG/KG	DI-N-OCTYLPHTHALATE
3900U	UG/KG	BENZO(B)FLUORANTHENE
3900U	UG/KG	BENZO(K)FLUORANTHENE
3900U	UG/KG	BENZO-A-PYRENE
3900U	UG/KG	INDENO (1,2,3-CD) PYRENE
3900U	UG/KG	DIBENZO(A,H)ANTHRACENE
3900U	UG/KG	BENZO(GHI)PERYLENE
3900U	UG/KG	2-CHLOROPHENOL
3900U	UG/KG	2-METHYLPHENOL
3900U	UG/KG	(3-AND/OR 4-)METHYLPHENOL
3900U	UG/KG	2-NITROPHENOL
3900U	UG/KG	PHENOL
3900U	UG/KG	2,4-DIMETHYLPHENOL
3900U	UG/KG	2,4-DICHLOROPHENOL
3900U	UG/KG	2,4,6-TRICHLOROPHENOL
3900U	UG/KG	2,4,5-TRICHLOROPHENOL
3900U	UG/KG	4-CHLORO-3-METHYLPHENOL
7800U	UG/KG	2,4-DINITROPHENOL
7800U	UG/KG	2-METHYL-4,6-DINITROPHENOL
7800U	UG/KG	PENTACHLOROPHENOL
7800U	UG/KG	4-NITROPHENOL
3900U	UG/KG	2,3,4,6-TETRACHLOROPHENOL
14.9	%	% MOISTURE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample **5384** FY **2001** Project: **01-0444**

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW3CUT /
Media: SUBSURFACE SOIL (> 12")

Produced by:
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:30
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
3500U	UG/KG	BIS(2-CHLOROETHYL) ETHER
3500U	UG/KG	BENZALDEHYDE
3500U	UG/KG	HEXACHLOROETHANE
3500U	UG/KG	BIS(2-CHLOROISOPROPYL) ETHER
3500U	UG/KG	N-NITROSODI-N-PROPYLAMINE
3500U	UG/KG	ACETOPHENONE
3500U	UG/KG	NITROBENZENE
3500U	UG/KG	HEXACHLOROBUTADIENE
3500U	UG/KG	CAPROLACTAM
3500U	UG/KG	2-METHYLNAPHTHALENE
3500U	UG/KG	1,2,4-TRICHLOROBENZENE
3500U	UG/KG	NAPHTHALENE
3500U	UG/KG	4-CHLOROANILINE
3500U	UG/KG	BIS(2-CHLOROETHOXY)METHANE
3500U	UG/KG	ISOPHORONE
3500U	UG/KG	HEXACHLOROCYCLOPENTADIENE (HCCP)
3500U	UG/KG	1,1-BIPHENYL
3500U	UG/KG	2-CHLORONAPHTHALENE
3500U	UG/KG	2-NITROANILINE
3500U	UG/KG	ACENAPHTHYLENE
3500U	UG/KG	ACENAPHTHENE
3500U	UG/KG	DIMETHYL PHTHALATE
3500U	UG/KG	DIBENZOFURAN
3500U	UG/KG	2,4-DINITROTOLUENE
3500U	UG/KG	2,6-DINITROTOLUENE
3500U	UG/KG	3-NITROANILINE
3500U	UG/KG	4-CHLOROPHENYL PHENYL ETHER
3500U	UG/KG	4-NITROANILINE
3500U	UG/KG	FLUORENE
3500U	UG/KG	DIETHYL PHTHALATE
3500U	UG/KG	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
3500U	UG/KG	HEXACHLOROBENZENE (HCB)
3500U	UG/KG	ATRAZINE
3500U	UG/KG	4-BROMOPHENYL PHENYL ETHER
3500U	UG/KG	PHENANTHRENE
3500U	UG/KG	ANTHRACENE
3500U	UG/KG	CARBAZOLE
3500U	UG/KG	DI-N-BUTYLPHTHALATE
3500U	UG/KG	FLUORANTHENE
3500U	UG/KG	PYRENE
3500U	UG/KG	BENZYL BUTYL PHTHALATE
3500U	UG/KG	BIS(2-ETHYLHEXYL) PHTHALATE
3500U	UG/KG	BENZO(A)ANTHRACENE
3500U	UG/KG	CHRYSENE
3500U	UG/KG	3,3'-DICHLOROBENZIDINE
3500U	UG/KG	DI-N-OCTYLPHTHALATE
3500U	UG/KG	BENZO(B)FLUORANTHENE
3500U	UG/KG	BENZO(K)FLUORANTHENE
3500U	UG/KG	BENZO-A-PYRENE
3500U	UG/KG	INDENO (1,2,3-CD) PYRENE
3500U	UG/KG	DIBENZO(A,H)ANTHRACENE
3500U	UG/KG	BENZO(GHI)PERYLENE
3500U	UG/KG	2-CHLOROPHENOL
3500U	UG/KG	2-METHYLPHENOL
3500U	UG/KG	(3-AND/OR 4-)METHYLPHENOL
3500U	UG/KG	2-NITROPHENOL
3500U	UG/KG	PHENOL
3500U	UG/KG	2,4-DIMETHYLPHENOL
3500U	UG/KG	2,4-DICHLOROPHENOL
3500U	UG/KG	2,4,6-TRICHLOROPHENOL
3500U	UG/KG	2,4,5-TRICHLOROPHENOL
3500U	UG/KG	4-CHLORO-3-METHYLPHENOL
6900U	UG/KG	2,4-DINITROPHENOL
6900U	UG/KG	2-METHYL-4,6-DINITROPHENOL
6900U	UG/KG	PENTACHLOROPHENOL
6900U	UG/KG	4-NITROPHENOL
3500U	UG/KG	2,3,4,6-TETRACHLOROPHENOL
12.5	%	% MOISTURE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample **5385** FY **2001** Project: **01-0444**

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW1CUT /
Media: SUBSURFACE SOIL (> 12")

Produced by:
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:50
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
3800U	UG/KG	BIS(2-CHLOROETHYL) ETHER
3800U	UG/KG	BENZALDEHYDE
3800U	UG/KG	HEXACHLOROETHANE
3800U	UG/KG	BIS(2-CHLOROISOPROPYL) ETHER
3800U	UG/KG	N-NITROSODI-N-PROPYLAMINE
3800U	UG/KG	ACETOPHENONE
3800U	UG/KG	NITROBENZENE
3800U	UG/KG	HEXACHLOROBUTADIENE
3800U	UG/KG	CAPROLACTAM
3800U	UG/KG	2-METHYLNAPHTHALENE
3800U	UG/KG	1,2,4-TRICHLOROBENZENE
3800U	UG/KG	NAPHTHALENE
3800U	UG/KG	4-CHLOROANILINE
3800U	UG/KG	BIS(2-CHLOROETHOXY)METHANE
3800U	UG/KG	ISOPHORONE
3800U	UG/KG	HEXACHLOROCYCLOPENTADIENE (HCCP)
3800U	UG/KG	1,1-BIPHENYL
3800U	UG/KG	2-CHLORONAPHTHALENE
3800U	UG/KG	2-NITROANILINE
3800U	UG/KG	ACENAPHTHYLENE
3800U	UG/KG	ACENAPHTHENE
3800U	UG/KG	DIMETHYL PHTHALATE
3800U	UG/KG	DIBENZOFURAN
3800U	UG/KG	2,4-DINITROTOLUENE
3800U	UG/KG	2,6-DINITROTOLUENE
3800U	UG/KG	3-NITROANILINE
3800U	UG/KG	4-CHLOROPHENYL PHENYL ETHER
3800U	UG/KG	4-NITROANILINE
3800U	UG/KG	FLUORENE
3800U	UG/KG	DIETHYL PHTHALATE
3800U	UG/KG	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
3800U	UG/KG	HEXACHLOROBENZENE (HCB)
3800U	UG/KG	ATRAZINE
3800U	UG/KG	4-BROMOPHENYL PHENYL ETHER
3800U	UG/KG	PHENANTHRENE
3800U	UG/KG	ANTHRACENE
3800U	UG/KG	CARBAZOLE
3800U	UG/KG	DI-N-BUTYLPHTHALATE
3800U	UG/KG	FLUORANTHENE
3800U	UG/KG	PYRENE
3800U	UG/KG	BENZYL BUTYL PHTHALATE
3800U	UG/KG	BIS(2-ETHYLHEXYL) PHTHALATE
3800U	UG/KG	BENZO(A)ANTHRACENE
3800U	UG/KG	CHRYSENE
3800U	UG/KG	3,3'-DICHLOROBENZIDINE
3800U	UG/KG	DI-N-OCTYLPHTHALATE
3800U	UG/KG	BENZO(B)FLUORANTHENE
3800U	UG/KG	BENZO(K)FLUORANTHENE
3800U	UG/KG	BENZO-A-PYRENE
3800U	UG/KG	INDENO (1,2,3-CD) PYRENE
3800U	UG/KG	DIBENZO(A,H)ANTHRACENE
3800U	UG/KG	BENZO(GHI)PERYLENE
3800U	UG/KG	2-CHLOROPHENOL
3800U	UG/KG	2-METHYLPHENOL
3800U	UG/KG	(3-AND/OR 4-)METHYLPHENOL
3800U	UG/KG	2-NITROPHENOL
3800U	UG/KG	PHENOL
3800U	UG/KG	2,4-DIMETHYLPHENOL
3800U	UG/KG	2,4-DICHLOROPHENOL
3800U	UG/KG	2,4,6-TRICHLOROPHENOL
3800U	UG/KG	2,4,5-TRICHLOROPHENOL
3800U	UG/KG	4-CHLORO-3-METHYLPHENOL
7600U	UG/KG	2,4-DINITROPHENOL
7600U	UG/KG	2-METHYL-4,6-DINITROPHENOL
7600U	UG/KG	PENTACHLOROPHENOL
7600U	UG/KG	4-NITROPHENOL
3800U	UG/KG	2,3,4,6-TETRACHLOROPHENOL
21.0	%	% MOISTURE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample **5377** FY **2001** Project: **01-0444**

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: BKGD /
Media: GROUNDWATER

Produced by:
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/25/2001 10:38
Ending:

RESULTS	UNITS	ANALYTE
10U	UG/L	BIS(2-CHLOROETHYL) ETHER
10U	UG/L	BENZALDEHYDE
10U	UG/L	HEXACHLOROETHANE
10U	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
10U	UG/L	N-NITROSODI-N-PROPYLAMINE
10U	UG/L	ACETOPHENONE
10U	UG/L	NITROBENZENE
10U	UG/L	HEXACHLOROBUTADIENE
85	UG/L	CAPROLACTAM
10U	UG/L	2-METHYLNAPHTHALENE
10U	UG/L	1,2,4-TRICHLOROBENZENE
10U	UG/L	NAPHTHALENE
10U	UG/L	4-CHLOROANILINE
10U	UG/L	BIS(2-CHLOROETHOXY)METHANE
10U	UG/L	ISOPHORONE
10U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
10U	UG/L	1,1-BIPHENYL
10U	UG/L	2-CHLORONAPHTHALENE
10U	UG/L	2-NITROANILINE
10U	UG/L	ACENAPHTHYLENE
10U	UG/L	ACENAPHTHENE
10U	UG/L	DIMETHYL PHTHALATE
10U	UG/L	DIBENZOFURAN
10U	UG/L	2,4-DINITROTOLUENE
10U	UG/L	2,6-DINITROTOLUENE
10U	UG/L	3-NITROANILINE
10U	UG/L	4-CHLOROPHENYL PHENYL ETHER
10U	UG/L	4-NITROANILINE
10U	UG/L	FLUORENE
10U	UG/L	DIETHYL PHTHALATE
10U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	UG/L	HEXACHLOROBENZENE (HCB)
10U	UG/L	ATRAZINE
10U	UG/L	4-BROMOPHENYL PHENYL ETHER
10U	UG/L	PHENANTHRENE

RESULTS	UNITS	ANALYTE
10U	UG/L	ANTHRACENE
10U	UG/L	CARBAZOLE
10U	UG/L	DI-N-BUTYLPHTHALATE
10U	UG/L	FLUORANTHENE
10U	UG/L	PYRENE
10U	UG/L	BENZYL BUTYL PHTHALATE
10U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
10U	UG/L	BENZO(A)ANTHRACENE
10U	UG/L	CHRYSENE
10U	UG/L	3,3'-DICHLOROBENZIDINE
10U	UG/L	DI-N-OCTYLPHTHALATE
10U	UG/L	BENZO(B)FLUORANTHENE
10U	UG/L	BENZO(K)FLUORANTHENE
10U	UG/L	BENZO-A-PYRENE
10U	UG/L	INDENO (1,2,3-CD) PYRENE
10U	UG/L	DIBENZO(A,H)ANTHRACENE
10U	UG/L	BENZO(GHI)PERYLENE
10U	UG/L	2-CHLOROPHENOL
10U	UG/L	2-METHYLPHENOL
10U	UG/L	(3-AND/OR 4-)METHYLPHENOL
10U	UG/L	2-NITROPHENOL
10U	UG/L	PHENOL
10U	UG/L	2,4-DIMETHYLPHENOL
10U	UG/L	2,4-DICHLOROPHENOL
10U	UG/L	2,4,6-TRICHLOROPHENOL
10U	UG/L	2,4,5-TRICHLOROPHENOL
10U	UG/L	4-CHLORO-3-METHYLPHENOL
20U	UG/L	2,4-DINITROPHENOL
20U	UG/L	2-METHYL-4,6-DINITROPHENOL
20U	UG/L	PENTACHLOROPHENOL
20U	UG/L	4-NITROPHENOL
10U	UG/L	2,3,4,6-TETRACHLOROPHENOL

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample **5377** FY **2001** Project: **01-0444**

MISCELLANEOUS COMPOUNDS

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: BKGD /
Media: GROUNDWATER

Produced by:
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/25/2001 10:38
Ending:

RESULTS	UNITS	ANALYTE
10JN	UG/L	OCTAADECANOIC ACID, METHYL ESTER
100JN	UG/L	DECANOIC ACID, METHYL ESTER
30JN	UG/L	TETRADECANOIC ACID, METHYL ESTER
30JN	UG/L	HEXADECANOIC ACID, METHYL ESTER
10JN	UG/L	OCTADECADIENOIC ACID, METHYL ESTER
100JN	UG/L	OCTADECENOIC ACID, METHYL ESTER
20JN	UG/L	OCTADECANOIC ACID, METHYL ESTER
20JN	UG/L	OLEIC ACID

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5378 FY 2001 Project: 01-0444

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: CNTL /
Media: GROUNDWATER

Produced by:
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/25/2001 13:10
Ending:

RESULTS	UNITS	ANALYTE
10U	UG/L	BIS(2-CHLOROETHYL) ETHER
10U	UG/L	BENZALDEHYDE
10U	UG/L	HEXACHLOROETHANE
10U	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
10U	UG/L	N-NITROSODI-N-PROPYLAMINE
10U	UG/L	ACETOPHENONE
10U	UG/L	NITROBENZENE
10U	UG/L	HEXACHLOROBUTADIENE
10U	UG/L	CAPROLACTAM
10U	UG/L	2-METHYLNAPHTHALENE
10U	UG/L	1,2,4-TRICHLOROBENZENE
10U	UG/L	NAPHTHALENE
10U	UG/L	4-CHLOROANILINE
10U	UG/L	BIS(2-CHLOROETHOXY)METHANE
10U	UG/L	ISOPHORONE
10U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
10U	UG/L	1,1-BIPHENYL
10U	UG/L	2-CHLORONAPHTHALENE
10U	UG/L	2-NITROANILINE
10U	UG/L	ACENAPHTHYLENE
10U	UG/L	ACENAPHTHENE
10U	UG/L	DIMETHYL PHTHALATE
10U	UG/L	DIBENZOFURAN
10U	UG/L	2,4-DINITROTOLUENE
10U	UG/L	2,6-DINITROTOLUENE
10U	UG/L	3-NITROANILINE
10U	UG/L	4-CHLOROPHENYL PHENYL ETHER
10U	UG/L	4-NITROANILINE
10U	UG/L	FLUORENE
10U	UG/L	DIETHYL PHTHALATE
10U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	UG/L	HEXACHLOROBENZENE (HCB)
10U	UG/L	ATRAZINE
10U	UG/L	4-BROMOPHENYL PHENYL ETHER
10U	UG/L	PHENANTHRENE
10U	UG/L	ANTHRACENE
10U	UG/L	CARBAZOLE
10U	UG/L	DI-N-BUTYLPHTHALATE
10U	UG/L	FLUORANTHENE
10U	UG/L	PYRENE
10U	UG/L	BENZYL BUTYL PHTHALATE
10U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
10U	UG/L	BENZO(A)ANTHRACENE
10U	UG/L	CHRYSENE
10U	UG/L	3,3'-DICHLOROBENZIDINE
10U	UG/L	DI-N-OCTYLPHTHALATE
10U	UG/L	BENZO(B)FLUORANTHENE
10U	UG/L	BENZO(K)FLUORANTHENE
10U	UG/L	BENZO-A-PYRENE
10U	UG/L	INDENO (1,2,3-CD) PYRENE
10U	UG/L	DIBENZO(A,H)ANTHRACENE
10U	UG/L	BENZO(GHI)PERYLENE
10U	UG/L	2-CHLOROPHENOL
10U	UG/L	2-METHYLPHENOL
10U	UG/L	(3-AND/OR 4-)METHYLPHENOL
10U	UG/L	2-NITROPHENOL
10U	UG/L	PHENOL
10U	UG/L	2,4-DIMETHYLPHENOL
10U	UG/L	2,4-DICHLOROPHENOL
10U	UG/L	2,4,6-TRICHLOROPHENOL
10U	UG/L	2,4,5-TRICHLOROPHENOL
10U	UG/L	4-CHLORO-3-METHYLPHENOL
20U	UG/L	2,4-DINITROPHENOL
20U	UG/L	2-METHYL-4,6-DINITROPHENOL
20U	UG/L	PENTACHLOROPHENOL
20U	UG/L	4-NITROPHENOL
10U	UG/L	2,3,4,6-TETRACHLOROPHENOL

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample **5379** FY **2001** Project: **01-0444**

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW1 /
Media: GROUNDWATER

Produced by:
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/25/2001 15:30
Ending:

RESULTS	UNITS	ANALYTE
10U	UG/L	BIS(2-CHLOROETHYL) ETHER
10U	UG/L	BENZALDEHYDE
10U	UG/L	HEXACHLOROETHANE
10U	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
10U	UG/L	N-NITROSODI-N-PROPYLAMINE
10U	UG/L	ACETOPHENONE
10U	UG/L	NITROBENZENE
10U	UG/L	HEXACHLOROBUTADIENE
600	UG/L	CAPROLACTAM
10U	UG/L	2-METHYLNAPHTHALENE
10U	UG/L	1,2,4-TRICHLOROBENZENE
10U	UG/L	NAPHTHALENE
10U	UG/L	4-CHLOROANILINE
10U	UG/L	BIS(2-CHLOROETHOXY)METHANE
10U	UG/L	ISOPHORONE
10U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
10U	UG/L	1,1-BIPHENYL
10U	UG/L	2-CHLORONAPHTHALENE
10U	UG/L	2-NITROANILINE
10U	UG/L	ACENAPHTHYLENE
10U	UG/L	ACENAPHTHENE
10U	UG/L	DIMETHYL PHTHALATE
10U	UG/L	DIBENZOFURAN
10U	UG/L	2,4-DINITROTOLUENE
10U	UG/L	2,6-DINITROTOLUENE
10U	UG/L	3-NITROANILINE
10U	UG/L	4-CHLOROPHENYL PHENYL ETHER
10U	UG/L	4-NITROANILINE
10U	UG/L	FLUORENE
10U	UG/L	DIETHYL PHTHALATE
10U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	UG/L	HEXACHLOROBENZENE (HCB)
10U	UG/L	ATRAZINE
10U	UG/L	4-BROMOPHENYL PHENYL ETHER
10U	UG/L	PHENANTHRENE
10U	UG/L	ANTHRACENE
10U	UG/L	CARBAZOLE
10U	UG/L	DI-N-BUTYLPHTHALATE
10U	UG/L	FLUORANTHENE
10U	UG/L	PYRENE
10U	UG/L	BENZYL BUTYL PHTHALATE
10U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
10U	UG/L	BENZO(A)ANTHRACENE
10U	UG/L	CHRYSENE
10U	UG/L	3,3'-DICHLOROBENZIDINE
10U	UG/L	DI-N-OCTYLPHTHALATE
10U	UG/L	BENZO(B)FLUORANTHENE
10U	UG/L	BENZO(K)FLUORANTHENE
10U	UG/L	BENZO-A-PYRENE
10U	UG/L	INDENO (1,2,3-CD) PYRENE
10U	UG/L	DIBENZO(A,H)ANTHRACENE
10U	UG/L	BENZO(GHI)PERYLENE
10U	UG/L	2-CHLOROPHENOL
10U	UG/L	2-METHYLPHENOL
10U	UG/L	(3-AND/OR 4-)METHYLPHENOL
10U	UG/L	2-NITROPHENOL
10U	UG/L	PHENOL
10U	UG/L	2,4-DIMETHYLPHENOL
10U	UG/L	2,4-DICHLOROPHENOL
10U	UG/L	2,4,6-TRICHLOROPHENOL
10U	UG/L	2,4,5-TRICHLOROPHENOL
10U	UG/L	4-CHLORO-3-METHYLPHENOL
20U	UG/L	2,4-DINITROPHENOL
20U	UG/L	2-METHYL-4,6-DINITROPHENOL
20U	UG/L	PENTACHLOROPHENOL
20U	UG/L	4-NITROPHENOL
10U	UG/L	2,3,4,6-TETRACHLOROPHENOL

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5385 FY 2001 Project: 01-0444

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW1CUT /
Media: SUBSURFACE SOIL (> 12")

Produced by: Revell, Dennis
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:50
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
3800U	UG/KG	BIS(2-CHLOROETHYL) ETHER
3800U	UG/KG	BENZALDEHYDE
3800U	UG/KG	HEXACHLOROETHANE
3800U	UG/KG	BIS(2-CHLOROISOPROPYL) ETHER
3800U	UG/KG	N-NITROSODI-N-PROPYLAMINE
3800U	UG/KG	ACETOPHENONE
3800U	UG/KG	NITROBENZENE
3800U	UG/KG	HEXACHLOROBUTADIENE
3800U	UG/KG	CAPROLACTAM
3800U	UG/KG	2-METHYLNAPHTHALENE
3800U	UG/KG	1,2,4-TRICHLOROBENZENE
3800U	UG/KG	NAPHTHALENE
3800U	UG/KG	4-CHLOROANILINE
3800U	UG/KG	BIS(2-CHLOROETHOXY)METHANE
3800U	UG/KG	ISOPHORONE
3800U	UG/KG	HEXACHLOROCYCLOPENTADIENE (HCCP)
3800U	UG/KG	1,1-BIPHENYL
3800U	UG/KG	2-CHLORONAPHTHALENE
3800U	UG/KG	2-NITROANILINE
3800U	UG/KG	ACENAPHTHYLENE
3800U	UG/KG	ACENAPHTHENE
3800U	UG/KG	DIMETHYL PHTHALATE
3800U	UG/KG	DIBENZOFURAN
3800U	UG/KG	2,4-DINITROTOLUENE
3800U	UG/KG	2,6-DINITROTOLUENE
3800U	UG/KG	3-NITROANILINE
3800U	UG/KG	4-CHLOROPHENYL PHENYL ETHER
3800U	UG/KG	4-NITROANILINE
3800U	UG/KG	FLUORENE
3800U	UG/KG	DIETHYL PHTHALATE
3800U	UG/KG	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
3800U	UG/KG	HEXACHLOROBENZENE (HCB)
3800U	UG/KG	ATRAZINE
3800U	UG/KG	4-BROMOPHENYL PHENYL ETHER
3800U	UG/KG	PHENANTHRENE
3800U	UG/KG	ANTHRACENE
3800U	UG/KG	CARBAZOLE
3800U	UG/KG	DI-N-BUTYLPHTHALATE
3800U	UG/KG	FLUORANTHENE
3800U	UG/KG	PYRENE
3800U	UG/KG	BENZYL BUTYL PHTHALATE
3800U	UG/KG	BIS(2-ETHYLHEXYL) PHTHALATE
3800U	UG/KG	BENZO(A)ANTHRACENE
3800U	UG/KG	CHRYSENE
3800U	UG/KG	3,3'-DICHLOROBENZIDINE
3800U	UG/KG	DI-N-OCTYLPHTHALATE
3800U	UG/KG	BENZO(B)FLUORANTHENE
3800U	UG/KG	BENZO(K)FLUORANTHENE
3800U	UG/KG	BENZO-A-PYRENE
3800U	UG/KG	INDENO (1,2,3-CD) PYRENE
3800U	UG/KG	DIBENZO(A,H)ANTHRACENE
3800U	UG/KG	BENZO(GHI)PERYLENE
3800U	UG/KG	2-CHLOROPHENOL
3800U	UG/KG	2-METHYLPHENOL
3800U	UG/KG	(3-AND/OR 4-)METHYLPHENOL
3800U	UG/KG	2-NITROPHENOL
3800U	UG/KG	PHENOL
3800U	UG/KG	2,4-DIMETHYLPHENOL
3800U	UG/KG	2,4-DICHLOROPHENOL
3800U	UG/KG	2,4,6-TRICHLOROPHENOL
3800U	UG/KG	2,4,5-TRICHLOROPHENOL
3800U	UG/KG	4-CHLORO-3-METHYLPHENOL
7600U	UG/KG	2,4-DINITROPHENOL
7600U	UG/KG	2-METHYL-4,6-DINITROPHENOL
7600U	UG/KG	PENTACHLOROPHENOL
7600U	UG/KG	4-NITROPHENOL
3800U	UG/KG	2,3,4,6-TETRACHLOROPHENOL
21.0	%	% MOISTURE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample **5384** FY **2001** Project: **01-0444**

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW3CUT /
Media: SUBSURFACE SOIL (> 12")

Produced by: Revell, Dennis
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:30
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
3500U	UG/KG	BIS(2-CHLOROETHYL) ETHER
3500U	UG/KG	BENZALDEHYDE
3500U	UG/KG	HEXACHLOROETHANE
3500U	UG/KG	BIS(2-CHLOROISOPROPYL) ETHER
3500U	UG/KG	N-NITROSODI-N-PROPYLAMINE
3500U	UG/KG	ACETOPHENONE
3500U	UG/KG	NITROBENZENE
3500U	UG/KG	HEXACHLOROBUTADIENE
3500U	UG/KG	CAPROLACTAM
3500U	UG/KG	2-METHYLNAPHTHALENE
3500U	UG/KG	1,2,4-TRICHLOROBENZENE
3500U	UG/KG	NAPHTHALENE
3500U	UG/KG	4-CHLOROANILINE
3500U	UG/KG	BIS(2-CHLOROETHOXY)METHANE
3500U	UG/KG	ISOPHORONE
3500U	UG/KG	HEXACHLOROCYCLOPENTADIENE (HCCP)
3500U	UG/KG	1,1-BIPHENYL
3500U	UG/KG	2-CHLORONAPHTHALENE
3500U	UG/KG	2-NITROANILINE
3500U	UG/KG	ACENAPHTHYLENE
3500U	UG/KG	ACENAPHTHENE
3500U	UG/KG	DIMETHYL PHTHALATE
3500U	UG/KG	DIBENZOFURAN
3500U	UG/KG	2,4-DINITROTOLUENE
3500U	UG/KG	2,6-DINITROTOLUENE
3500U	UG/KG	3-NITROANILINE
3500U	UG/KG	4-CHLOROPHENYL PHENYL ETHER
3500U	UG/KG	4-NITROANILINE
3500U	UG/KG	FLUORENE
3500U	UG/KG	DIETHYL PHTHALATE
3500U	UG/KG	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
3500U	UG/KG	HEXACHLOROBENZENE (HCB)
3500U	UG/KG	ATRAZINE
3500U	UG/KG	4-BROMOPHENYL PHENYL ETHER
3500U	UG/KG	PHENANTHRENE
3500U	UG/KG	ANTHRACENE
3500U	UG/KG	CARBAZOLE
3500U	UG/KG	DI-N-BUTYLPHTHALATE
3500U	UG/KG	FLUORANTHENE
3500U	UG/KG	PYRENE
3500U	UG/KG	BENZYL BUTYL PHTHALATE
3500U	UG/KG	BIS(2-ETHYLHEXYL) PHTHALATE
3500U	UG/KG	BENZO(A)ANTHRACENE
3500U	UG/KG	CHRYSENE
3500U	UG/KG	3,3'-DICHLOROBENZIDINE
3500U	UG/KG	DI-N-OCTYLPHTHALATE
3500U	UG/KG	BENZO(B)FLUORANTHENE
3500U	UG/KG	BENZO(K)FLUORANTHENE
3500U	UG/KG	BENZO-A-PYRENE
3500U	UG/KG	INDENO (1,2,3-CD) PYRENE
3500U	UG/KG	DIBENZO(A,H)ANTHRACENE
3500U	UG/KG	BENZO(GHI)PERYLENE
3500U	UG/KG	2-CHLOROPHENOL
3500U	UG/KG	2-METHYLPHENOL
3500U	UG/KG	(3-AND/OR 4-)METHYLPHENOL
3500U	UG/KG	2-NITROPHENOL
3500U	UG/KG	PHENOL
3500U	UG/KG	2,4-DIMETHYLPHENOL
3500U	UG/KG	2,4-DICHLOROPHENOL
3500U	UG/KG	2,4,6-TRICHLOROPHENOL
3500U	UG/KG	2,4,5-TRICHLOROPHENOL
3500U	UG/KG	4-CHLORO-3-METHYLPHENOL
6900U	UG/KG	2,4-DINITROPHENOL
6900U	UG/KG	2-METHYL-4,6-DINITROPHENOL
6900U	UG/KG	PENTACHLOROPHENOL
6900U	UG/KG	4-NITROPHENOL
3500U	UG/KG	2,3,4,6-TETRACHLOROPHENOL
12.5	%	% MOISTURE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample **5383** FY **2001** Project: **01-0444**

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: CNTLCUT /
Media: SUBSURFACE SOIL (> 12")

Produced by: Revell, Dennis
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:15
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
3900U	UG/KG	BIS(2-CHLOROETHYL) ETHER
3900U	UG/KG	BENZALDEHYDE
3900U	UG/KG	HEXACHLOROETHANE
3900U	UG/KG	BIS(2-CHLOROISOPROPYL) ETHER
3900U	UG/KG	N-NITROSODI-N-PROPYLAMINE
3900U	UG/KG	ACETOPHENONE
3900U	UG/KG	NITROBENZENE
3900U	UG/KG	HEXACHLOROBUTADIENE
3900U	UG/KG	CAPROLACTAM
3900U	UG/KG	2-METHYLNAPHTHALENE
3900U	UG/KG	1,2,4-TRICHLOROBENZENE
3900U	UG/KG	NAPHTHALENE
3900U	UG/KG	4-CHLOROANILINE
3900U	UG/KG	BIS(2-CHLOROETHOXY)METHANE
3900U	UG/KG	ISOPHORONE
3900U	UG/KG	HEXACHLOROCYCLOPENTADIENE (HCCP)
3900U	UG/KG	1,1-BIPHENYL
3900U	UG/KG	2-CHLORONAPHTHALENE
3900U	UG/KG	2-NITROANILINE
3900U	UG/KG	ACENAPHTHYLENE
3900U	UG/KG	ACENAPHTHENE
3900U	UG/KG	DIMETHYL PHTHALATE
3900U	UG/KG	DIBENZOFURAN
3900U	UG/KG	2,4-DINITROTOLUENE
3900U	UG/KG	2,6-DINITROTOLUENE
3900U	UG/KG	3-NITROANILINE
3900U	UG/KG	4-CHLOROPHENYL PHENYL ETHER
3900U	UG/KG	4-NITROANILINE
3900U	UG/KG	FLUORENE
3900U	UG/KG	DIETHYL PHTHALATE
3900U	UG/KG	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
3900U	UG/KG	HEXACHLOROBENZENE (HCB)
3900U	UG/KG	ATRAZINE
3900U	UG/KG	4-BROMOPHENYL PHENYL ETHER
3900U	UG/KG	PHENANTHRENE
3900U	UG/KG	ANTHRACENE
3900U	UG/KG	CARBAZOLE
3900U	UG/KG	DI-N-BUTYLPHTHALATE
3900U	UG/KG	FLUORANTHENE
3900U	UG/KG	PYRENE
3900U	UG/KG	BENZYL BUTYL PHTHALATE
3900U	UG/KG	BIS(2-ETHYLHEXYL) PHTHALATE
3900U	UG/KG	BENZO(A)ANTHRACENE
3900U	UG/KG	CHRYSENE
3900U	UG/KG	3,3'-DICHLOROBENZIDINE
3900U	UG/KG	DI-N-OCTYLPHTHALATE
3900U	UG/KG	BENZO(B)FLUORANTHENE
3900U	UG/KG	BENZO(K)FLUORANTHENE
3900U	UG/KG	BENZO-A-PYRENE
3900U	UG/KG	INDENO (1,2,3-CD) PYRENE
3900U	UG/KG	DIBENZO(A,H)ANTHRACENE
3900U	UG/KG	BENZO(GHI)PERYLENE
3900U	UG/KG	2-CHLOROPHENOL
3900U	UG/KG	2-METHYLPHENOL
3900U	UG/KG	(3-AND/OR 4-)METHYLPHENOL
3900U	UG/KG	2-NITROPHENOL
3900U	UG/KG	PHENOL
3900U	UG/KG	2,4-DIMETHYLPHENOL
3900U	UG/KG	2,4-DICHLOROPHENOL
3900U	UG/KG	2,4,6-TRICHLOROPHENOL
3900U	UG/KG	2,4,5-TRICHLOROPHENOL
3900U	UG/KG	4-CHLORO-3-METHYLPHENOL
7800U	UG/KG	2,4-DINITROPHENOL
7800U	UG/KG	2-METHYL-4,6-DINITROPHENOL
7800U	UG/KG	PENTACHLOROPHENOL
7800U	UG/KG	4-NITROPHENOL
3900U	UG/KG	2,3,4,6-TETRACHLOROPHENOL
14.9	%	% MOISTURE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

U.S. EPA REGION IV

SDMS

Unscannable Material Target Sheet

DocID: 10583612 Site ID: GA0000048934

Site Name: Vienna Street Dump

Nature of Material:

Map:	✓	Computer Disks:	
Photos:		CD-ROM:	
Blueprints:		Oversized Report:	
Slides:		Log Book:	

Other (describe): Backing Map

Amount of material:

Please contact the appropriate Records Center to view the material.

ATTACHMENT E

Reference No.: 2

BLACK & VEATCH Waste Science, Inc.

400 Northridge Road, Suite 350, Atlanta, Georgia 30350, (404) 594-2500, Fax: (404) 587-2930

US EPA -- Region IV
Site Inspections
Work Assignment No. 11

BVWS Project 52011.128
January 9, 1994

Narindar Kumar
Chief Site Assessment Section
U.S. Environmental Protection Agency
345 Courtland Street, NE
Atlanta, Georgia 30365

Subject: ~~Draft~~ Site Inspection
Vienna Street Dump
Fort Valley, Peach County, GA
EPA ID No. GAD000048934

Dear Mr. Kumar:

Enclosed please find a copy of the ~~Draft~~ Site Inspection for Vienna Street Dump in Fort Valley, Peach County, Georgia. If you have any questions, please contact me at 404/643-2321.

Very truly yours,

BLACK & VEATCH Waste Science, Inc.

Paul Moisan
Project Manager

fw
Enclosure

cc: Doug Thompson, EPA PO, w/o enclosures
Deborah Davidson, EPA CO, w/o enclosures
Earl Bozeman, EPA WAM, w/o enclosures
Bill Bokey, EPA ESD, w/ enclosures

REC'D
JAN 0 9 1995

~~DRAFT~~

Site Inspection Report

For

Vienna Street Dump
Fort Valley, Peach County, Georgia

EPA ID GA0000048934
WasteLAN 06155

1/24/95
NFRAP - Further Inv.

Prepared under
EPA Contract Nº 68-W9-0055

Prepared for

WASTE MANAGEMENT DIVISION
U.S. Environmental Protection Agency

Prepared by

BLACK & VEATCH Waste Science, Inc.
Atlanta, Georgia

BVWS Project 52011.128

REC'D.
JAN 0 9 1995

January 6, 1995

Prepared by:	Reviewed by:	Approved by:
Joseph Slykerman Site Manager	Lesley Keck Technical Reviewer	Paul Moisan Project Manager

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EXECUTIVE SUMMARY

BLACK & VEATCH Waste Science, Inc. (Black & Veatch) was tasked by the U.S. Environmental Protection Agency (EPA), Waste Management Division, Region IV to conduct a Site Inspection (SI) at the Vienna Street Dump, Fort Valley, Peach County, Georgia. The objectives of this SI were to determine the nature of contaminants present at the site and to determine if a release of these substances has occurred or may occur.

Located on the east side of Vienna Street in Fort Valley, Georgia, the Vienna Street Dump site consists of portions of two lots encompassing an area of approximately 30.5 acres. In 1935, the City of Fort Valley installed two anaerobic digesters, a trickling filter system, and sludge drying beds on a 4-acre portion of the site for wastewater treatment (Ref. 1, p. 3). In 1940, the City purchased nine acres of adjoining land (Ref. 1, p. 3). Although supporting documentation could not be found, interviews with long time residents suggest that the City opened the dump sometime in the early 1940s (Refs. 1, p. 5). The dump was used to dispose of raw, municipal, and industrial wastes from Fort Valley and local industries. Residents in the area suspect that waste chemicals from Woolfolk Chemical Company and the Blue Bird Body Company, two large industries in the area, may have been dumped at the site (Ref. 1, p. 5). In 1965, the City purchased another 19 acres contiguous to the southern border of the parcel. Approximately 11 acres lie on the east side of Bay Creek and remain undeveloped. The remaining 8 acres lie on the west side of Bay Creek and were utilized as part of the dump (Ref. 1, p. 5). Residents in the area report that the dump was closed sometime in the late 1960s to early 1970s (Ref. 1, p. 5).

In 1978 the wastewater treatment facility was expanded with the installation of an aeration basin, a grit chamber, and two clarifiers. The facility was expanded to the east on three acres of the closed city dump (Ref. 1, p. 5). The site currently accommodates the wastewater treatment facility and the city animal shelter (Refs. 1, p. 5; 6, p. 2).

A Preliminary Assessment (PA) of the Vienna Street Dump was completed by Black & Veatch in January 1994. Based on this PA, Black & Veatch recommended scheduling of a Site Screening Investigation (Ref. 1, p. 11).

Contaminated soil was the only identified source at the Vienna Street Dump. The areas found to contain contaminants with elevated concentrations were dispersed throughout the site. Numerous pesticides, including DDT, dieldrin, and chlordanes were found at the dump site.

The groundwater pathway is of minor concern at the Vienna Street Dump site. Groundwater sampling did not reveal any contaminants at elevated levels. Although a large percentage of the surrounding population uses private wells for their potable water source, due to the hydrogeology of the area, the possibility of groundwater contamination is minimal.

Surface water runoff flows in an easterly direction into Bay Creek, a perennial stream (Refs. 1, p. 9; 6, p. 9). Bay Creek flows approximately 10 miles in a southeasterly direction where it enters Big Indian Creek. Big Indian Creek flows in a southwesterly direction for the remainder of the 15-mile surface water pathway (Ref. 2). There are no surface water intakes along the 15-mile surface water pathway. Although Bay Creek is large enough in some areas to support fishing, the area bordering the creek is so densely vegetated that it prohibits fishing with the exception of the few bridge crossings. Big Indian Creek is used for recreational fishing (Ref. 1, p. 9). There are no known habitats of aquatic federally endangered or threatened species along the pathway. Contaminants from the site, including zinc, 4,4'-DDT, and O,P-DDT, have been found in sediment collected from Bay Creek. The surface water pathway is a concern at the Vienna Street Dump site.

The soil exposure is a minor concern at the Vienna Street Dump site. Analysis shows that several organic contaminants are present at elevated levels in soils and sediments. The majority of the site is accessible to the public with the exception of the wastewater treatment facility which is surrounded by chain link fencing. The nearest residence is a multifamily home 200 feet from the southern boundary of the site. The population density within the 4-mile radius of the site is low.

The air pathway is of minor concern at the site. The contaminants are not volatile, and the potential for contaminants to become airborne is limited.

Based on the results of this investigation, it is recommended that no further action be taken at the Vienna Street Dump site.

1.0 Introduction

BLACK & VEATCH Waste Science, Inc. (Black & Veatch) was tasked by the U.S. Environmental Protection Agency (EPA), Waste Management Division, Region IV to conduct a Site Inspection (SI) at the Vienna Street Dump site, Fort Valley, Peach County, Georgia. The investigation was performed under the authority of the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). The task was performed to satisfy the requirements stated in Work Assignment Nº 11 under EPA Contract Nº 68-W9-0055.

1.1 Objectives

The objectives of this inspection were to determine the nature of contaminants present at the site, to determine if a release of hazardous materials to the environment has occurred or may occur, and if a release has occurred, to determine attribution of those contaminants to the site. Further, this inspection sought to define the possible pathways by which contamination could migrate from the site and the populations and environments it would potentially affect. Through these objectives, a recommendation is made regarding future activities at the site.

1.2 Scope of Work

The objectives were achieved through the completion of a number of specific tasks. The following is a list of those tasks:

- Obtain information to prepare a site-specific preliminary Hazard Ranking System (HRS) score.
- Obtain and review relevant background materials.
- Obtain information on local water systems.
- Determine location and distance to nearest well.
- Evaluate potentially affected populations and environments associated with the groundwater, surface water, soil exposure, and air pathways.
- Develop a site sketch.

- Collect environmental samples.

2.0 Site Description, Operational History, and Waste Characteristics

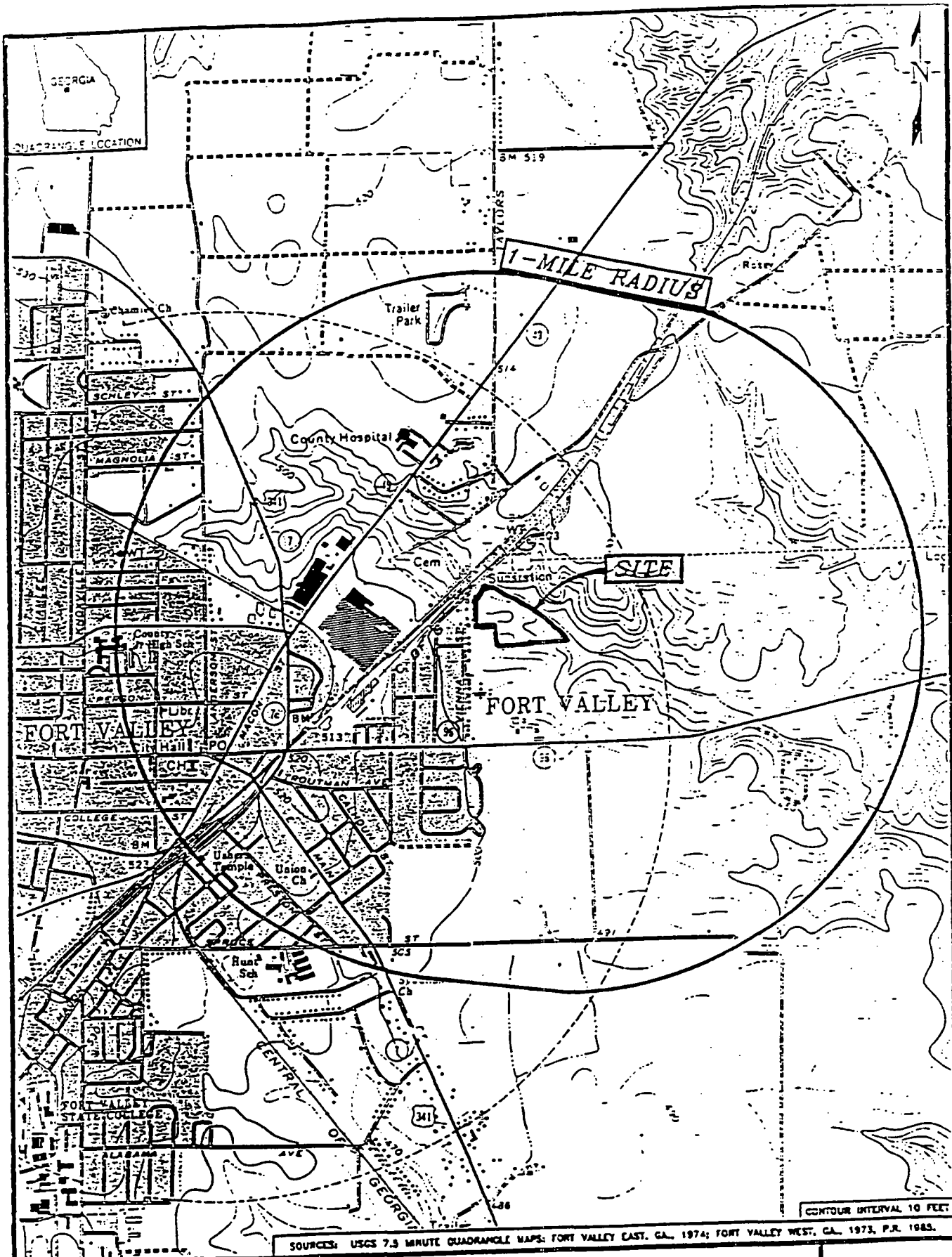
2.1 Location

Located on the east side of Vienna Street in Fort Valley, Georgia, the Vienna Street Dump site consists of two land lots encompassing an area of approximately 30.5 acres (Refs. 1, p. 3; 2). More specifically, the site is located at 32° 33' 32.44" North latitude and 83° 52' 16.79" West longitude (Refs. 2; 3). A site location map of the Vienna Street Dump site is presented as Figure 1.

The climate of Peach County is characterized as humid and temperate. Average annual precipitation for the area is 48 inches, and the mean lake pan evaporation is 44 inches per year. Therefore, net annual precipitation in the area is four inches (Ref. 4, pp. 43, 63). The 2-year, 24-hour rainfall for Peach County is approximately 4 inches (Ref. 5, p. 95).

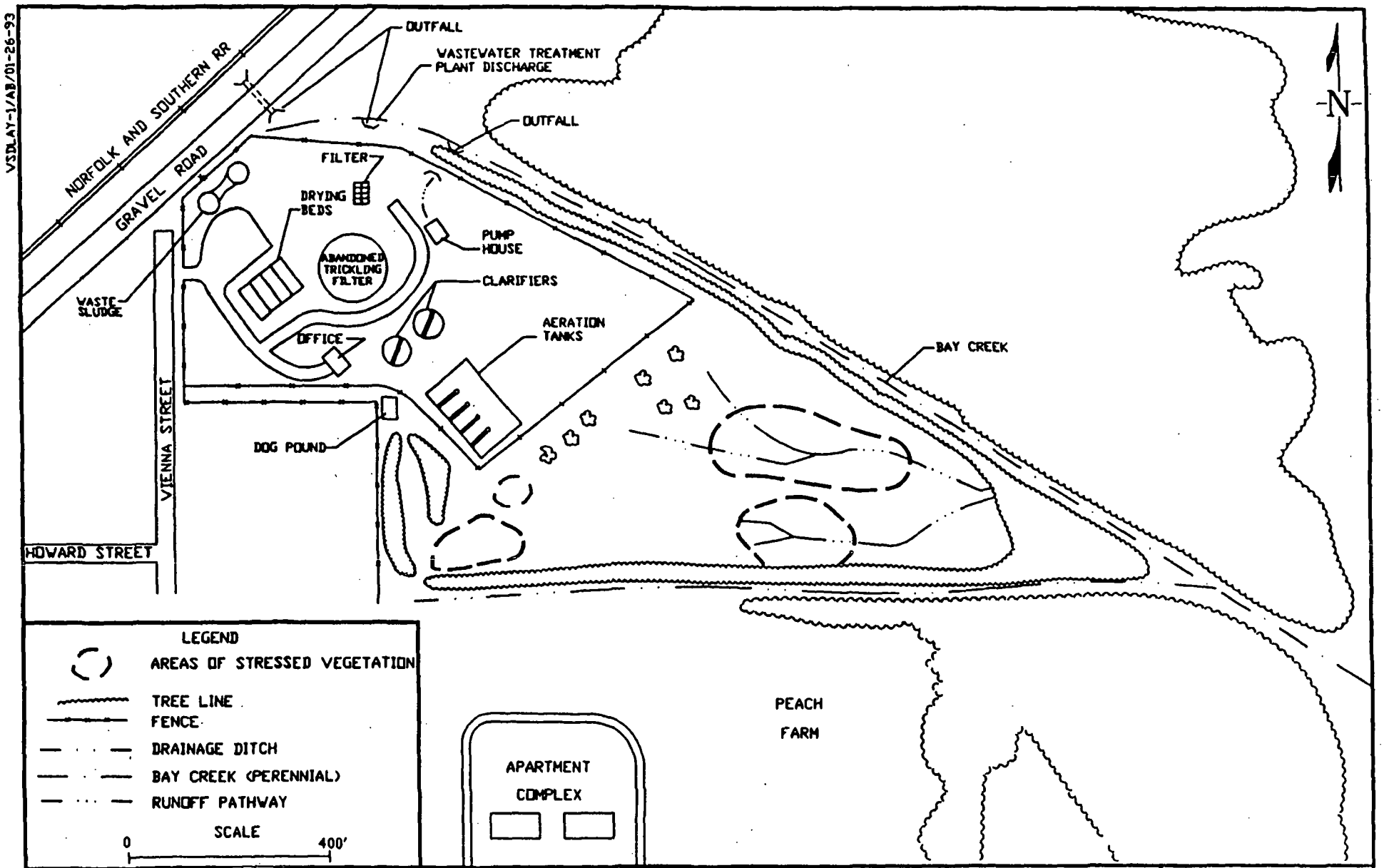
2.2 Site Description

The Vienna Street Dump site has been inactive since the late 1960s or early 1970s (Ref. 1, p. 5). An active wastewater treatment plant (WWTP) and the city animal shelter are presently located in the northwestern section of the site (Refs. 1, p. 5; 6, p. 2). The eastern and southern portions of the site consist of brush, grassland, and small trees (Ref. 2). The site is bounded partially to the north by Bay Creek which wraps around the site the northeastern portion of the site. Farmland and residences border the site on the south and west. The site is bounded on the north by the Norfolk and Southern Railroad and Vienna Street (Ref. 2). Much of the site is well vegetated but stressed vegetation is apparent in several locations and landfill debris is visible near Bay Creek due to erosion. The site is accessible to the public on the southern edge where it is bordered by an apartment complex. A fence along the western border separates residences from the site, and Bay Creek provides a natural barrier to the site to the north and northeast (Refs. 1, p. 3; 2). A site layout is presented as Figure 2.



SITE LOCATION MAP
VIENNA STREET DUMP
FORT VALLEY, PEACH COUNTY, GEORGIA

FIGURE 1



SITE LAYOUT MAP
VIENNA STREET DUMP
FORT VALLEY, PEACH COUNTY, GEORGIA

FIGURE 2

Surface water runoff flows offsite into Bay Creek (Ref. 1, p. 9). Bay Creek meanders approximately 10 miles in a southerly direction before emptying into the Big Indian Creek (Refs. 1, p. 9; 2).

2.3 Operational History

The Vienna Street Dump site is composed of three lots purchased by the City of Fort Valley. In the early 1900s, the City purchased four acres of land south of the Norfolk and Southern Railroad tracks. In 1935, the City installed two anaerobic digesters, a trickling filter system, and sludge drying beds on this land for wastewater treatment (Ref. 1, p. 3). In 1940, the city purchased nine acres of adjoining land (Ref. 1, p. 3). Interviews with long time residents suggest that the City opened the dump sometime in the early 1940s; however supporting documentation could not be found (Ref. 1, p. 5). The dump was used to dispose of raw, municipal, and industrial wastes from Fort Valley and local industries. Residents in the area suspect that waste chemicals from Woolfolk Chemical Company and the Blue Bird Body Company, two large industries in the area, may have been dumped at the site (Ref. 1, p. 5).

In 1965, the City purchased another 19.45 acres contiguous to the southern border of the parcel. Roughly 11 acres lie on the east side of Bay Creek and remain undeveloped. The remaining 8.45 acres lie on the west side of Bay Creek and were utilized as part of the dump (Ref. 1, p. 5). Residents in the area report that the dump was closed sometime in the late 1960s to early 1970s (Ref. 1, p. 5).

In 1978, the WWTP was expanded to include an aeration basin, a grit chamber, and two clarifiers. The facility was expanded to the east on three acres of the closed city dump (Ref. 1, p. 5). The site currently accommodates the WWTP and the city animal shelter (Ref. 1, p. 5; 6).

A Preliminary Assessment (PA) of the Vienna Street Dump was completed by Black & Veatch in January 1994. Based on this PA, Black & Veatch recommended scheduling of a Site Screening Investigation (Ref. 1, p. 11).

The Vienna Street Dump is not regulated under the Resource Conservation and Recovery Act (RCRA) (Ref. 8).

2.4 Waste Characteristics

Vienna Street Dump is an inactive landfill which was utilized for the disposal of raw, municipal, and industrial wastes. Although there is no documentation, Woolfolk Chemical and Blue Bird Body Company may have disposed of waste at the landfill (Ref. 1, p. 5). The waste quantity is estimated to be 10 acres east-southeast of the WWTP.

3.0 Field Investigation

3.1 Sample Collection

During the field investigation conducted the week of August 15, 1994, Black & Veatch attempted to identify and characterize contaminants which may be present in the environment as a result of the wastes disposed of in the landfill. To accomplish this, Black & Veatch collected surface soil, subsurface soil, sediment, and surface water samples from strategic locations. Selection of these locations was based on the historical information, hydrogeological data for the region, and site layout and field observations.

3.1.1 Sample Collection Methodology

All sample collection, sample preservation, and chain-of-custody procedures used during this investigation was in accordance with Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual, EPA Region IV, Environmental Services Division, February 1, 1991 (SOP), and the Field Study Plan (FSP) prepared by Black & Veatch on April 7, 1994. No deviations from this FSP occurred.

3.1.2 Duplicate Samples

Duplicate samples were offered to Mr. Jimmy Williams, Mayor of Fort Valley; Mr. Glen Taylor, Director of Fort Valley Utilities Commission; Mr. Tresco, private resident; and Mrs. Mary Williams, private resident, and all were declined. Receipt for sample forms are on file at the Black & Veatch office in Atlanta, Georgia.

3.1.3 Description of Sample Locations

During the sampling investigation, a total of 24 environmental samples were collected. Sample locations are shown in Figure 3. Samples were collected from onsite surface soil, subsurface soil, sediment, and surface water locations; from the wastewater treatment facility, and from two private residences. Sample codes, descriptions, locations, and rationale are contained in Table 1.

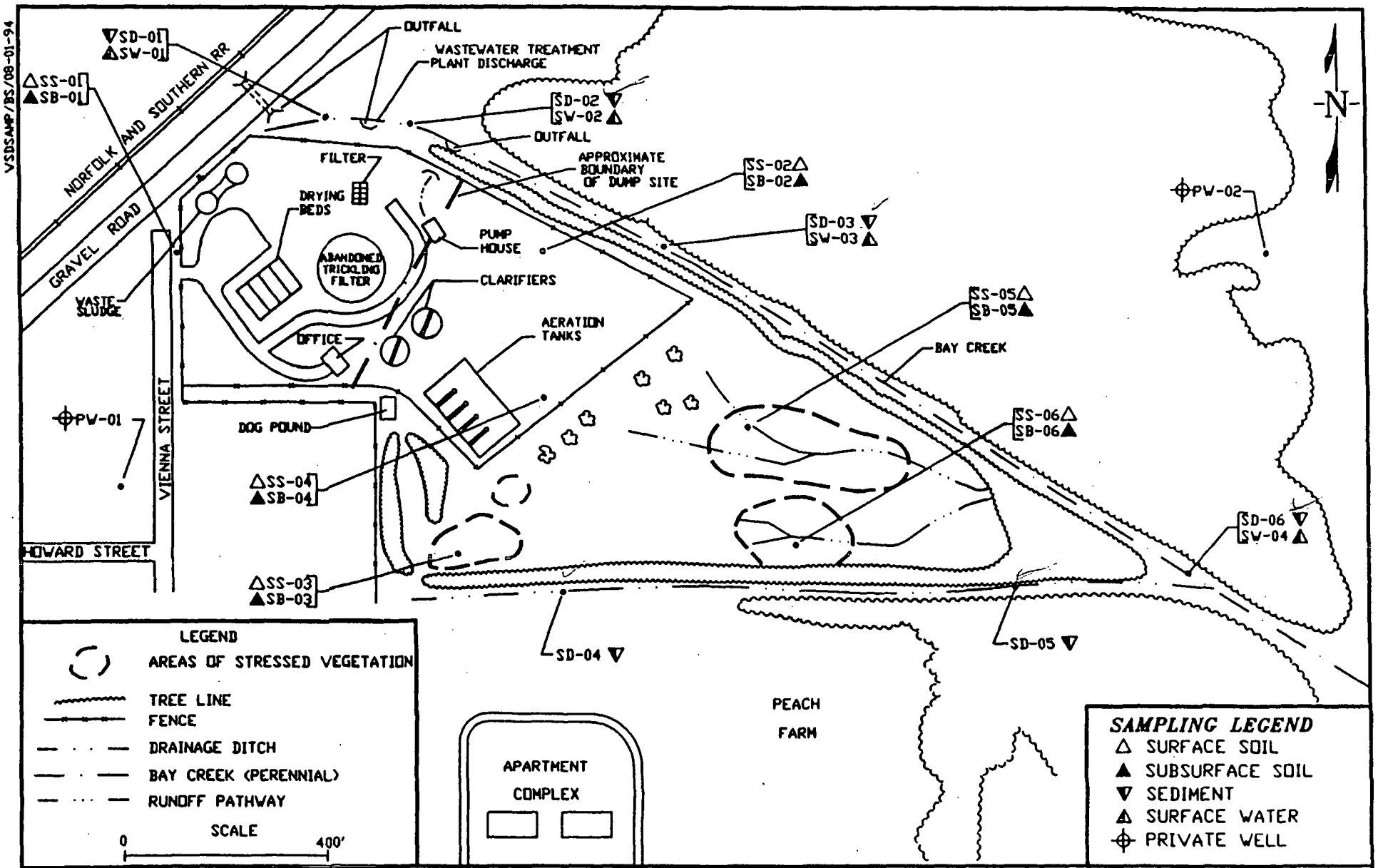
3.1.4 Analytical Support and Methodology

All samples collected were analyzed under the Contract Laboratory Program (CLP) and analyzed for all parameters listed in the Target Compound List (TCL) and the Target Analyte List (TAL). Organic analyses of all samples were performed by the EPA Environmental Services Division, in Athens, Georgia. Inorganic analyses of all samples were performed by Southwest Labs of Oklahoma in Broken Arrow, Oklahoma.

All laboratory analyses and laboratory quality assurance procedures used during the investigation were in accordance with standard procedures and protocols as specified in the Analytical Support Branch Laboratory Operations and Quality Control Manual, EPA Region IV, October 1990; or as specified by the existing EPA standard procedures and protocols for the CLP Statement of Work (SOW), as applicable.

3.1.5 Analytical Data Quality and Data Qualifiers

All analytical data were subject to a quality assurance review as described in the EPA Environmental Services Division laboratory data evaluation guidelines. In the tables, some of the concentrations of the organic and inorganic parameters have been qualified with a "J". This indicates that the qualitative analysis was acceptable, but the quantitative value has been estimated. Other compounds may have been qualified with an "N", indicating that they were detected based on the presumptive evidence of their presence. This means that the compound was only tentatively identified, and its detection cannot be as a positive indication of its presence. Other compounds may have been qualified with a "C". This indicates that the analysis was confirmed using a gas chromatograph or mass spectrophotometer. Results for some samples are reported with a "U" qualifier. This means that the material was analyzed



SAMPLE LOCATION MAP
VIENNA STREET DUMP
FORT VALLEY, PEACH COUNTY, GEORGIA

FIGURE 3

TABLE 1
SAMPLE LOCATIONS AND RATIONALE
Vienna Street Dump Site
Fort Valley, Peach County, Georgia

Sample Code	Sample Type	Location	Rationale
VS-SS-01	Surface Soil	North of WWTP entrance, east of Vienna Street.	To determine background conditions
VS-SB-01	Subsurface Soil	North of WWTP entrance, east of Vienna Street.	To determine background conditions
VS-SS-02	Surface Soil	Due east of the pump house of WWTP.	To determine the presence or absence of contaminants
VS-SB-02	Subsurface Soil	Due east of the pump house of WWTP.	To determine the presence or absence of contaminants
VS-SS-03	Surface Soil	Stressed vegetation due south of aeration tanks on southern border of site.	To determine the presence or absence of contaminants
VS-SB-03	Subsurface Soil	Stressed vegetation due south of aeration tanks on southern border of site.	To determine the presence or absence of contaminants
VS-SS-04	Surface Soil	75 feet due east of aeration tanks along fence line of WWTP.	To determine the presence or absence of contaminants
VS-SB-04	Subsurface Soil	75 feet due east of aeration tanks along fence line of WWTP.	To determine the presence or absence of contaminants
VS-SS-05	Surface Soil	Stressed vegetation area in eastern section of site, midway between Bay Creek and southern fence line.	To determine the presence or absence of contaminants
VS-SB-05	Subsurface Soil	Stressed vegetation area in eastern section of site, midway between Bay Creek and southern fence line.	To determine the presence or absence of contaminants.
VS-SS-06	Surface Soil	Stressed vegetation area in southeastern section of site, along fence line.	To determine the presence or absence of contaminants
VS-SB-06	Subsurface Soil	Stressed vegetation area southeastern section of dump site, along fence line.	To determine the presence or absence of contaminants
VS-SD-01	Sediment	100 feet west of WWTP discharge along Bay Creek.	To determine background conditions.

VS - Vienna Street Dump
SS - Surface Soil
SB - Subsurface Soil
WWTP - Wastewater Treatment Plant
SD - Sediment
SW - Surface Water
PW - Private Well

TABLE 1 (continued)
SAMPLE LOCATIONS AND RATIONALE
Vienna Street Dump Site
Fort Valley, Peach County, Georgia

Sample Code	Sample Type	Location	Rationale
VS-SD-02	Sediment	100 feet downstream of WWTP discharge in Bay Creek.	A control to disseminate the WWTP discharge from the site.
VS-SD-03	Sediment	700 feet downstream of WWTP discharge in Bay Creek	To determine the presence or absence of contaminants.
VS-SD-04	Sediment	400 feet east of fence line in southern drainage ditch.	To determine the presence or absence of contaminants
VS-SD-05	Sediment	Southern drainage ditch 200 feet west of the confluence of Bay Creek and the southern drainage ditch.	To determine the presence or absence of contaminants
VS-SD-06	Sediment	Confluences of Bay Creek and the southern drainage ditch.	To determine the presence or absence of contaminants
VS-SW-01	Surface Water	100 feet upstream of WWTP discharge in Bay Creek.	To determine background conditions.
VS-SW-02	Surface Water	100 feet downstream of WWTP discharge in Bay Creek.	A control to disseminate the WWTP discharge from the site.
VS-SW-03	Surface Water	700 feet downstream of WWTP discharge in Bay Creek.	To determine the presence or absence of contaminants.
VS-SW-04	Surface Water	Confluence of Bay Creek and the southern drainage ditch.	To determine the presence or absence of contaminants
VS-PW-01	Groundwater	Upgradiant from the site, at a private residence.	To determine background conditions.
VS-PW-02	Groundwater	Downgradiant from the site, at a private residence.	To determine the presence or absence of contaminants

VS - Vienna Street Dump
SS - Surface Soil
SB - Subsurface Soil
WWTP - Wastewater Treatment Facility
SD - Sediment
SW - Surface Water
PW - Private Well

but not detected. The reported number is the laboratory-derived sample quantitation limit (SQL) for the compound or element in that sample. At times miscellaneous organic compounds that do not appear on the target compound list are reported with the data set. These compounds are qualified as "JN", indicating that they are tentatively identified at estimated quantities. Because these compounds are not routinely analyzed for or reported, background levels of SQL levels are not generally available for comparison. The complete analytical data sheets are presented in Appendix A.

Samples containing concentrations of contaminants greater than three times those of the background sample are considered to be elevated. In the cases where there was no detection of a contaminant at the background location, any sample with a concentration equal to or greater than the sample quantitation limit is considered to be elevated. These elevated samples are noted in the text and the tables.

4.0 Waste Sources

4.1 Source Descriptions

Contaminated soil was the only identified source at the Vienna Street Dump. The areas found to contain contaminants with elevated concentrations were dispersed throughout the dump site. Samples collected from within the fence line of the WWTP to the drainage ditch that borders the southern edge of the site to the stressed vegetation areas in the middle of the site all contained elevated concentrations of pesticides, including DDT, dieldrin, and the chlordanes.

4.2 Source Sample Locations and Analytical Results

A total of 12 samples were collected in order to define the source: 6 surface soil samples, 6 subsurface soil samples, and 2 sediment samples. Sample locations are shown in Figure 3. Subsurface soil samples were collected at a depth of three to five feet below land surface (bls), and were collected to determine the migration potential of contaminants.

Two surface and two subsurface soil samples were collected from the eastern portion

of the WWTP where the landfill is suspected to begin. Three surface and three subsurface soil samples were collected from stressed vegetation areas in the eastern portion of the site outside the eastern fence line of the WWTP. Background surface and subsurface soil samples, VS-SS-01 and VS-SB-01, were collected from the east side of Vienna Street north of the entrance to the WWTP. Two sediment samples were collected along the drainage ditch that borders the southern portion of the site.

4.2.1 Surface and Subsurface Soil Analytical Results

A complete account of contaminants detected in the surface and subsurface soil samples is presented in Tables 2 and 3. The analytical data from this investigation is presented in Appendix A. The analytical results of the surface and subsurface soil samples collected at Vienna Street Dump indicate the presence of numerous inorganic constituents at concentrations which exceed three times the background sample concentration. Samples VS-SS-02, VS-SB-02, and VS-SB-04 have eleven or more constituents at elevated concentrations. Although the concentrations are elevated, potassium and sodium were detected within the naturally occurring concentration range for this area (Ref. 9).

Analysis of surface and subsurface soil samples also revealed the presence of 17 pesticides at elevated levels. In sample VS-SS-02, 12 pesticides were detected at elevated concentrations, including dieldrin, 4,4'-DDT, 4,4'-DDE, and Alpha-chlordane. In sample VS-SB-02, 12 pesticides were detected at elevated levels, sample VS-SB-04 contained 13 pesticides at elevated levels, sample VS-SS-06 and VS-SB-06 both contained 9 pesticides at elevated levels.

4.2.2 Sediment Analytical Results

A summary of contaminants detected in onsite sediment samples VS-SD-04 and VS-SD-05 is presented in Table 4. The analytical data is presented in Appendix A. The analytical results of sediment samples revealed no compounds at elevated levels.

Table 2
Surface/Subsurface Soil Inorganic Analytical Results
Vienna Street Dump
Fort Valley, Peach County, Georgia

Parameters (mg/kg)	Background												
	VS-SS-01	VS-SB-01	VS-SS-02	VS-SB-02	VS-SS-03	VS-SB-03	VS-SS-04	VS-SB-04	VS-SS-05	VS-SB-05	VS-SS-06	VS-SB-06	Naturally Occurring Levels* ppm
Aluminum	6300	14,000	16,000	2100	11,000	15,000	16,000	150,000	13,000	15,000	12,000	15,000	700-20,000
Antimony	6 UJ	20 UJ	67JN	66 JN	-	-	-	51 JN	-	14 JN	-	16 JN	< 10,000
Arsenic	32	12	930	1000	7.6	5.9	46	1600	8.4	12	30	9.6	< 2.6
Barium	79	29	230	290	15	19	23	310	31	12	33	12	0-200
Beryllium	0.23 U	0.24 U	0.29 JN	0.49 JN	-	-	-	0.29 JN	-	-	-	-	< 1
Cadmium	1 U	0.48 U	10 JN	10 JN	-	-	-	16 JN	-	0.52 JN	-	-	N/A
Calcium	1100	830	10,000	18,000	230	390	1500	20,000	72	720	5800	1700	< 3500
Chromium	15	35	58	57	23	28	77	54	19	34	31	41	0-30
Cobalt	2.4	1.6 J	9.6	9	1.2 J	1.6 J	3.5	8.7	1.7 J	1.7	1.1 J	2.1	< 3
Copper	23	7.3	930	330	-	-	15	620	11	8.7	35	15	0-15
Iron	11,000	27,000	120,000	100,000	16,000	22,000	30,000	61,000	15,000	30,000	20,000	28,000	0-15,000
Lead	91 J	20 J	1300 J	1900 J	13 J	11 J	74 J	5900 J	14 J	14 J	98 J	21 J	< 10
Magnesium	180	120	1500	1800	100	150	350	1800	140	92	130	260	0-1,500
Manganese	210	92	870	960	78	68	240	430	32	54	30	130	0-150
Mercury	0.15	0.12 U	0.84	2.5	-	-	-	1.1	-	-	3.9	-	< .032

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Table 2
Surface/Subsurface Soil Inorganic Analytical Results
Vienna Street Dump
Fort Valley, Peach County, Georgia

Parameters (mg/kg)	Background												
	VS-SS-01	VS-SB-01	VS-SS-02	VS-SB-02	VS-SS-03	VS-SB-03	VS-SS-04	VS-SB-04	VS-SS-05	VS-SB-05	VS-SS-06	VS-SB-06	Naturally Occurring Levels* ppm
Nickel	6 U	3 U	-	-	-	-	-	-	-	-	-	-	7-10
Potassium	190	150 J	960	1000	-	190 J	340	730	310 J	230	820 J	270 J	0-11,000
Selenium	2 U	1.5 JN	5.5 JN	4.7 JN	-	-	-	3.2 JN	-	-	-	-	.5-.7
Silver	1 U	1 U	4.2 JN	4 JN	-	-	-	3 JN	-	-	-	-	N/A
Sodium	33	40 U	130	280	-	-	40	170	-	-	74	56	0-2,000
Thallium	1.2 U	1.2 U	3.1 JN	2.7 JN	-	-	-	-	-	-	-	-	N/A
Vanadium	25	75	40	38	56	58	85	36	45	110	58	88	0-20
Zinc	140	30 U	1500	2500	-	-	12	6000	-	120	46	53	<5-17
Cyanide	0.58 U	0.60 U	0.86	-	-	-	-	-	-	-	-	-	N/A

* Hanford T. Shacklette and Joesephine G. Boemgen, U.S. Geological Survey, Elemental Concentrations in Soils and Other Surficial Materials of the Conterminous United States. U.S. Geological Survey Paper 1270, Washington D.C.: GPO, 1984.

J Indicates an estimated value

N Presumptive evidence of presence of material

\- Material analyzed for but not detected.

U Material analyzed for but not detected, number is the SQL.

Shaded numbers indicate results are three times or greater than background or above the Sample Quantitation Limit (SQL).

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TABLE 3
Surface/Subsurface Soil Organic Analytical Results
Vienna Street Dump
Fort Valley, Peach County, Georgia

Parameters (ug/kg)	Background		Source Sample									
	VS-SS-01	VS-SB-01	VS-SS-02	VS-SB-02	VS-SS-03	VS-SB-03	VS-SS-04	VS-SB-04	VS-SS-05	VS-SB-05	VS-SS-06	VS-SB-06
Extractable Organic Compounds												
4 - Chloroaniline	7000 U	7000 U	--	--	--	--	--	--	--	--	--	1500 J
Benzo (B and/or K) Fluoranthene	7000 U	7000 U	760 J	--	--	--	--	--	--	--	--	910 J
Bis(2-ethylhexyl) phthalate	7000 U	7000 U	--	--	--	--	--	--	--	--	--	4500 J
Fluoranthene	7000 U	7000 U	1300 J	1400 J	--	--	--	--	--	--	--	950 J
Phenanthrene	7000 U	7000 U	1000 J	--	--	--	--	--	--	--	--	1300 J
Pyrene	7000 U	7000 U	1100 J	1200 J	--	--	--	--	--	--	--	880 J
Miscellaneous Extractable Organic Compounds												
Chlorpropham	--	--	--	--	--	--	--	--	--	--	--	80,000 JN
Purgeable Organic Compounds												
Toluene	59 UJ	75 U	--	10 J	--	--	--	11 J	--	--	--	--
Chlorobenzene	59 UJ	75 U	--	--	--	--	--	--	--	--	--	21 J
(M-and/or P-) Xylene	59 UJ	75 U	--	--	--	--	--	--	--	--	--	6.2 J
1,4-Dichlorobenzene	59 UJ	75 U	--	--	--	--	--	--	--	--	--	16 J
1,2-Dichlorobenzene	59 UJ	75 U	--	--	--	--	--	--	--	--	--	6.3 J

J Indicates an estimated value.
N Presumptive evidence of presence of material.
- Material analyzed for but not detected.
U Material analyzed for but not detected, number is the SQL.
Shaded numbers indicate results are three times or greater than background or above the sample quantitation limit (SQL).

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TABLE 3
Surface/Subsurface Soil Organic Analytical Results
Vienna Street Dump
Fort Valley, Peach County, Georgia

Parameters (ug/kg)	Background		Source Sample									
	VS-SS-01	VS-SB-01	VS-SS-02	VS-SB-02	VS-SS-03	VS-SB-03	VS-SS-04	VS-SB-04	VS-SS-05	VS-SB-05	VS-SS-06	VS-SB-06
Pesticides/PCB Compounds												
Aldrin	50 U	50 U	--	--	--	--	--	--	--	--	--	180
Heptachlor	50 U	50 U	56	3400	--	--	--	--	--	--	72	77
Heptachlor Epoxide	50 U	50 U	90	210	--	--	--	140	--	--	--	--
Alpha-BHC	50 U	50 U	--	19	--	--	--	37	--	--	53	--
Beta-BHC	50 U	50 U	370	1100	--	--	--	740	--	--	--	--
Gamma-BHC (Lindane)	50 U	50 U	--	--	--	--	--	31	--	--	26	--
Dieldrin	16	50 U	920 C	2200 C	--	--	9.1 J	2700 C	--	--	1700 C	700 C
4,4'-DDT (P,P'-DDT)	50	50 U	2500 C	9900 C	23 J	--	14 J	10000 C	--	--	440	42 C
4,4'-DDE (P,P'-DDE)	61	50 U	2300 C	6200 C	34	--	20 J	5400 C	--		130	130
4,4'-DDD (P,P'-DDD)	50 U	50 U	200 N	2600 C	--	--	--	12000 C	--	--	2000 C	1300 C
Endrin	50 U	50 U	99	--	--	--	--	--	--	--	84 N	
Chlordene /2	7.0 U	--	5.4 J	69	--	--	--	210	--	--	290	2000 C
Alpha-Chlordene /2	14 U	--	24	73 N	--	--	--	360	--	--	82 N	140 C
Beta-Chlordene /2	14 U	--	21 N	68 JN	--	--	--	250 N	--	--	62 N	--

J	Indicates an estimated value.
-	Material analyzed for but not detected.
U	Material analyzed for but not detected, number is the SQL.
N	Presumptive evidence of presence of material.
C	Confirmed by GC / MS

Shaded numbers indicate results are three times or greater than background or above the sample quantitation limit (SQL).

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TABLE 3
Surface/Subsurface Soil Organic Analytical Results
Vienna Street Dump
Fort Valley, Peach County, Georgia

Parameters (ug/kg)	Background		Source Sample									
	VS-SS-01	VS-SB-01	VS-SS-02	VS-SB-02	VS-SS-03	VS-SB-03	VS-SS-04	VS-SB-04	VS-SS-05	VS-SB-05	VS-SS-06	VS-SB-06
Gamma-Chlordene /2	14 U	--	63	110	--	--	--	330	--	--	14	
Gamma-Chlordane /2	8.7 J	--	910 C	2100 C	--	--	3.7 J	3800 C	--	--	2400 C	3400 C
Trans-Nonalchlor	12 N	--	380 N	560 N	--	--	--	900 N	--	--	490 N	830 N
Alpha-Chlordane /2	9.2 JN	--	570 C	850 C	--	--	--	2100 C	--	--	640 C	680 C
Cis-Nonachlor	14 U	--	--	--	--	--	--	--	--	--	110 N	180 N
Oxychlordane /2	14 U	--	29 N	--	--	--	--	--	--	--	--	--
Endrin Ketone	50 U	50 U	--	--	--	--	--	--	--	--	31	--
Miscellaneous Pesticides / PCB Compounds												
O, P-DDT	14 J	--	1400 C	1800 C	--	--	--	300 C	--	--	44 N	39 N
O, P-DDD	--	--	190 N	610 N	--	--	--	4000	--	--	860 N	430 C
O,P-DDE	--	--	280 N	550 N	--	--	--	510 N	--	--	--	64 N

J Indicates an estimated value.
\- Material analyzed for but not detected.
U Material analyzed for but not detected, number is the SQL.
N Presumptive evidence of presence of material.
C Confirmed by GC / MS
Shaded numbers indicate results are three times or greater than background or above the sample quantitation limit (SQL).

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Table 4
Sediment Inorganic/Organic Analytical Results
Vienna Street Dump
Fort Valley, Peach County, Georgia

Parameters	Background	Source Sample		
Inorganics (mg/kg)	VS-SS-01	VS-SD-04	VS-SD-05	Naturally Occurring Levels *ppm
Aluminum	6300	15,000	9000	700-20,000
Arsenic	32	13	8.7	4.1
Barium	79	66	8.8	0-200
Calcium	1100	1800	300	130-2300
Chromium	15	28	20	0.30
Cobalt	2.4	3	0.92 J	< 3
Copper	23	9.8	-	0-15
Iron	11,000	17,000	15,000	0-15,000
Lead	91 J	36 J	6.9 J	10-20
Magnesium	180	340	85	0-1500
Manganese	210	300	35	500-1000
Potassium	190	490	170	0-11,000
Sodium	33	-	-	0-2000
Vanadium	25	52	50	0-30
Zinc	140	51	-	0-28
Pesticides / PCB Compounds (mg/kg)				
Dieldrin	16	--	--	N/A
4,4'DDT(P,P'DDT)	50	17 J	--	N/A
4,4' -DDE (P,P'-DDE)	61	39	--	N/A
Gamma-Chlordane	8.7 J	--	--	N/A

* Hanford T. Shacklette and Joesephine G. Boerngen, U.S. Geological Survey, Elemental Concentrations in Soils and Other Surficial Materials of the Conterminous United States. U.S. Geological Survey Professional Paper 1270, Washington D.C.: GPO, 1984.

J Indicates an estimated value

\- Material analyzed for but not detected.

U Material analyzed for but not detected, number is the SQL.

Shaded numbers indicate results are three times or greater than background or above the Sample Quantitation Limit (SQL).

N/A Not Applicable

4.3 Source Conclusions

At the Vienna Street Dump site, contaminated soil is the only identified source. Samples located throughout the site indicate that elevated levels of pesticides are present.

5.0 Groundwater Pathway

5.1 Hydrogeologic Setting

The Vienna Street Dump is located in west central Peach County, Georgia, within the East Gulf Coastal Plain physiographic province (Ref. 10, p. 5). Generally, this region ranges from extensively flat, coastal swamps and marshes to rolling uplands towards the northern or "inner margin" of the Gulf Coastal Plain province (Ref. 11, p. 271). The East Gulf Coastal Plain is underlain by unconsolidated sediments, which principally consist of sand, silt, and clay transported by streams from the adjoining uplands. Regionally the sediments range in age from Jurassic to present and were deposited on floodplains and as deltas where streams reached the coast. These sediments were "reworked" by waves and ocean currents and are therefore complexly interbedded, but generally dip towards the southeast (Ref. 11, p. 271). Clay and silt layers become thicker and more numerous downdip (toward the southeast); also, gravel, limestone, and mollusk shells tend to occur closer to the coast within the region (Ref. 11, pp. 271-272).

The site is located in the Coastal Plain physiographic province, but more specifically, in the northwestern portion of the Fort Valley Plateau physiographic district, an area bordered by the Ocmulgee River Valley to the east and the Flint River Valley to the west (Ref. 12). This plateau is characterized by flat-topped interfluves with narrow, 50 to 150 feet deep, steep-walled valleys. Elevations within a 4-mile radius of the site range from 350 feet to 550 feet above mean sea level (amsl) (Ref. 2). The Vienna Street Dump ranges in elevation from 440 to 470 feet amsl (Ref. 2).

The site, located along the eastern city limits of Fort Valley, is located approximately 15 miles south of the Fall Line, which forms the boundary between the older, highly metamorphosed crystalline rocks of the Piedmont physiographic province and the younger, unconsolidated sediments of the Coastal Plain physiographic province (Ref. 13). The majority of the site is located in the outcrop area of the Eocene

Undifferentiated formations, which include highly weathered sands and sandy clays of lower Tertiary age (Ref. 12). More specifically, the site lies above the Ocmulgee Formation considered to be one of the prominant Upper Ecocene deposits (Ref. 14, Figure 6). The Ocmulgee Formation consists of "a basal sandy, glauconitic, indurated limestone overlain by tough, massive, glauconitic, granular, rather even textured slightly argillaceous limestone" (Ref. 14, p. 54). The Ocmulgee Formation occurs as an approximate 10 mile band south but parallel to the fall line (Ref 14, p. 54). The Ocmulgee thickness ranges from 35 to 90 feet (Ref. 14, p. 54). The eastern portion of the Vienna Street Dump borders Bay Creek. Bay Creek lies within the Providence Sand outcropping of Upper Cretaceous age (Ref. 13).

The site is underlain by three different soil types: along Bay Creek is "local alluvial land"; within the central area of the site, soils maps indicate Orangeburg sandy loam; and the western portion of site property consists of Greenville clay loams (Ref. 15, Sheet 20 pp. 3, 5, 7).

Local alluvial land is loamy, deep, well-drained, and typically formed in drainageways. This land type slopes 0 to 3 percent and exhibits moderate permeability and available water capacity (Ref. 15, p. 5). Orangeburg Sandy Loam is severely eroded, deep, well-drained soil which occurs on broad ridges and hillside uplands (Ref. 11, p. 7). Greenville clay loam is also severely eroded, deep, well-drained soil which occurs on broad ridges and upland hillsides; however, this soil type has a clayey subsoil, whereas the Orangeburg has a loamy subsoil (Ref. 15, p. 3).

Strata which underlie the site are (in descending order): Eocene undifferentiated, Providence sand, Ripley formation, Cussetta sand, and the Tuscaloosa formations (Ref. 13). All strata, with the exception of the Eocene undifferentiated, are of Cretaceous age and contain the aquifer of concern for the Fort Valley area, called the Cretaceous Aquifer System (Ref. 10, p. 31). This aquifer system consists mainly of gravel and sand beds with clay and silt lenses, which can locally act as a confining bed which separates the aquifer system into two or more aquifers (Ref. 16, Sheets 1,3,4). The estimated groundwater flow direction in the surficial aquifer is northeast towards Bay Creek (Ref. 2). Estimated depth to the water table is 10 to 30 feet bls (Ref. 2).

In 1976, Peach County relied on the Cretaceous Aquifer System for approximately two million gallons per day (Ref. 16, Sheet 2). The Cretaceous Aquifer is composed of six aquifer units: A_1, A_2, A_3, A_4, A_5, and A_6. In the vicinity of the site, only A_4, A_5, and A_6 are present (Ref. 16, Sheets 3, 4, 5). Table 5 describes the hydrogeologic units beneath the site (Ref. 16, Sheets 1, 2, 3, 4, 5):

Table 5
Hydrogeologic Units
Vienna Street Dump Site
Fort Valley, Peach County, Georgia

Aquifer Name	Altitude Of Top Of Aquifer (above mean sea level) Site Lies At 470 Feet amsl	Thickness Of Aquifer (Feet)	% Sand	Potentiometric Surface of Aquifer (Feet)
A_3	N/A	70	63-82	460
A_4	+400	100	72-82	380
A_5	+300	180	75-87	360
A_6	-100	300	79	300

Ref. 16: Lin D. Pollard and Robert C Vorhis, The Geohydrology of the Cretaceous Rock Aquifer System in Georgia, 1980.

In Peach County, Aquifer A_4 is combined with A_5 and A_6 to produce water. Observed transmissivity in aquifer unit A_4 is 3,900 square feet per day (ft^2/day), and yields greater than 1,000 gallons per minute have been reported (Ref. 16, Sheet 4).

5.2 Groundwater Pathway Targets

Drinking water is obtained from the Fort Valley Water Department by a majority of the people living within four miles of the site. The City of Fort Valley utilizes five public wells. These wells are between 495 and 610 feet deep and serve 3,837 connections. Based on the average number of persons per household of 2.79, approximately 10,705 people are supplied with potable water from the Fort Valley Water Department (Refs. 17; 18). Residences where municipal water is not available utilize private wells.

The nearest private well is located approximately 0.75 mile southeast from the site

(Ref. 2). The population relying on groundwater from private wells is estimated to be 737 households or 2,056 people (Refs. 2; 18). The total population using groundwater for potable water within 4 miles of the facility is 12,761 people. A summary of groundwater usage in the 4-mile site radius is presented in Table 6.

Table 6
Summary of Groundwater Usage within 4-Mile Radius
Vienna Street Dump
Fort Valley, Georgia

RADIUS (miles)	Population using Private Wells	Population using Municipal Wells
0.00-0.25	0	0
0.25-0.50	0	0
0.50-1.00	33	0
1.00-2.00	220	4,282
2.00-3.00	815	6,423
3.00-4.00	988	0
TOTALS	**2,056**	**10,705**

Private well populations of the site based on 2.79 persons per household derived from 1990 census data (Ref. 18). House count derived from USGS topographic quadrangle maps (Ref. 2).

5.3 Groundwater Sample Locations and Analytical Results

Two potable well samples were collected during this investigation. One groundwater sample, VS-PW-02, was collected approximately 1.5 miles north-northeast of the site at an upgradient location to serve as a background sample. The second groundwater sample, VS-PW-01 was collected approximately 0.75 mile east-southeast of the site to determine if contaminants were present in the aquifer, if potential contamination was related to the site, and if there was any immediate threat to the public health. Sample codes, descriptions, and rationale are presented in Table 1.

Groundwater sampling at the Vienna Street Dump did not reveal any inorganic or organic analytes at elevated levels. A complete listing of the analytes detected in groundwater is presented in Table 7. The analytical data is presented in Appendix A.

Table 7
Groundwater Inorganic Analytical Results
Vienna Street Dump
Fort Valley, Peach County, Georgia

Parameters (µg/L)	Background		Sample
	VS-PW-01	VS-PW-01D	VS-PW-02
Barium	39	41	7
Calcium	1600	1700	620
Copper	3 U	--	26
Iron	600	610	--
Magnesium	980	1000	340
Manganese	17	17	--
Mercury	0.47	0.42	--
Sodium	13,000	14,000	1700
Zinc	30 U	29	--

J Indicates an estimated value
- Material analyzed for but not detected.
U Material analyzed for but not detected, number is the SQL.

5.4 Groundwater Pathway Conclusions

Groundwater sampling was conducted during this SI because of the surrounding population that use private wells for potable water. Although the two private well sample results indicate no groundwater contamination, the groundwater pathway is of concern at the Vienna Street Dump site due to the percentage of the population using private wells for their potable water source and the nature of the contaminats found at the site.

6.0 Surface Water Pathway

6.1 Hydrologic Setting

Portions of the Vienna Street Dump are located within the 100-year floodplain, specifically the areas close to Bay Creek (Ref. 19). All surface water runoff in the area flows east into Bay Creek, a perennial stream (Refs. 1, p. 9; 6, p. 9). Bay Creek flows approximately 10 miles to the southeast where it enters Big Indian Creek. Big Indian Creek flows to the southwest for the remainder of the 15-mile surface water pathway (Ref. 2).

6.2 Surface Water Pathway Targets

Bay Creek is used for recreational fishing only at bridge crossings because the banks are too densely vegetated to allow access (Ref. 17). No surface water intakes are present along the 15-mile surface water pathway of the Vienna Street Dump site (Refs. 2; 17). There are no aquatic federally endangered or threatened species along the 15-mile surface water pathway (Ref. 21). There is approximately 1 mile of palustrine wetlands along the pathway (Ref. 2).

6.3 Sediment Analytical Results

A summary of contaminants detected in sediment samples is presented in Tables 8 and 9. The analytical data is presented in Appendix A. The analytical results of sediment samples revealed the presence of five inorganic compounds at elevated levels but only one, zinc, was above the naturally occuring level for this area (Ref. 9).

Sampling also revealed two organic compounds at elevated levels. Sample VS-SD-03 contained 4,4'-DDT at 330 micrograms per kilogram (ug/kg) and the pesticide O,P-DDT at 170 ug/kg.

Table 8
Sediment Inorganic Analytical Results
Vienna Street Dump
Fort Valley, Peach County, Georgia

Parameters (mg/kg)	Background	Surface Water Sample			
	VS-SD-01	VS-SD-02	VS-SD-03	VS-SD-06	Naturally Occurring Levels *ppm
Aluminum	800	4100	2600	1800	700-20,000
Arsenic	1.8 J	4.9	8.1	7.1	4.1
Barium	3	9.7	18	3.7	0-200
Calcium	350	560	630	160	130-2300
Chromium	44	17	8.7	6.6	0.30
Cobalt	1.4 J	1.2 J	0.93 J	0.79 J	< 3
Copper	3 U	-	-	-	0-15
Iron	3800	11,000	4900	5100	0-15,000
Lead	7.3	7.9 J	15	21	10-20
Magnesium	230	190	240	-	0-1500
Manganese	24	64	70	26	500-1000
Potassium	130 U	-	-	-	0-11,000
Sodium	40 U	37	-	42	0-2000
Vanadium	9	30	12	15	0-30
Zinc	30 U	-	50	-	0-28

* Hanford T. Shacklette and Joesephine G. Boerngen, U.S. Geological Survey, Elemental Concentrations in Soils and Other Surficial Materials of the Conterminous United States. U.S. Geological Survey Professional Paper 1270, Washington D.C.: GPO, 1984.

J Indicates an estimated value

\- Material analyzed for but not detected.

U Material analyzed for but not detected, number is the SQL.

Shaded numbers indicate results are three times or greater than background or above the Sample Quantitation Limit (SQL).

Table 9
Sediment Organic Analytical Results
Vienna Street Dump
Fort Valley, Peach County, Georgia

Parameters (ug/kg)	Background	Source Sample		
	VS-SD-01	VS-SD-02	VS-SD-03	VS-SD-06
Pesticides / PCB Compounds				
Dieldrin	50 U	--	9.5 J	--
4,4' -DDT (P,P'-DDT)	50 U	42	330	13 J
4,4' -DDE (P,P'-DDE)	50 U	--	16 J	--
4,4' -DDD (P,P'-DDD)	50 U	--	16 J	--
Eldrin	50 U	--	11 J	--
Gamma-Chlordane	--	--	11 J	--
Trans-Nonalchlor	--	--	5.7 JN	--
Alpha-Chlordane	--	--	5.9 JN	--
Miscellaneous Pesticides / PCB Compounds				
O, P -DDT	--	18 JN	170	

J Indicates an estimated value
N Presumptive evidence of presence of material.
\- Material analyzed for but not detected.
U Material analyzed for but not detected, number is SQL.
Shaded numbers indicate results are three times or greater than background or above the Sample Quantitation Limit (SQL).

6.4 Surface Water Analytical Results

A summary of contaminants detected in the surface water samples is presented in Table 10. The analytical data is presented in Appendix A. The analytical results of surface water samples revealed the presence of three inorganic contaminants at levels above three times the background sample. Sample VS-SW-02 contained manganese at 79 micrograms per liter (ug/L) and sodium at 30,000 ug/L. Sample VS-SW-03 contained manganese at 77 ug/L, sodium at 1,100,000 ug/L, and cyanide at 12 ug/L. Sample VS-SW-04 contained manganese at 67 ug/L, sodium at 30,000 ug/L, and cyanide at 12 ug/L. Sampling also revealed several organic constituents at elevated levels. Sample VS-SW-03 contained 4,4'-DDT ug/L. Six other miscellaneous extractable compounds were also found to be present in surface water, but these compounds cannot be attributed to the site because they were not found at the source.

6.5 Surface Water Pathway Conclusions

The surface water pathway is of concern at the site. Surface water runoff from the Vienna Street Dump site flows either directly into Bay Creek on the northeastern section of the site or into a drainage ditch on the southern border which travels approximately 800 feet before emptying into Bay Creek. Contaminants from the site, including zinc, 4,4'-DDT, and O,P-DDT, have been found in the sediment of Bay Creek.

7.0 Soil Exposure And Air Pathways

7.1 Physical Conditions

The Vienna Street Dump site has been inactive as a landfill since the late 1960s or early 1970s (Ref. 1, p. 5). An active wastewater treatment facility and the city animal shelter are presently located in the northwestern section of the site (Refs. 1, p. 5; 6, p. 2). The eastern and southern portions of the site consist of brush, grassland, and small trees (Ref. 2). The site is bounded partially to the north by Bay Creek, which wraps around the northeastern portion of the site. Farmland and residences border the site on the south and west. The site is bounded on the north by the Norfolk and Southern railroad and Vienna Street (Ref. 2). Much of the site is well vegetated but

Table 10
Surface Water Inorganic Analytical Results
Vienna Street Dump
Fort Valley, Peach County, Georgia

Parameters (u g/L)	Background	Source Sample		
	VS-SW-01	VS-SW-02	VS-SW-03	VS-SW-04
Aluminum	430	--	510	--
Arsenic	2 U	--	6 J	--
Barium	26	10	14	12
Calcium	6200	4800	5000	5000
Iron	390	300	540	240
Magnesium	740	750	680	810
Manganese	17	79	77	67
Sodium	2000	30,000	1,100,000	30,000
Zinc	150	--	--	--
Cyanide	10 U	--	12	12

J Indicates an estimated value

\- Material analyzed for but not detected.

U Material analyzed for but not detected, number is the SQL.

Shaded numbers indicate results are three times or greater than background or above the Sample Quantitation Limit (SQL).

stressed vegetation is apparent and landfill debris is visible near Bay Creek due to erosion. The site is accessible to the public on the southern edge where it is bordered by an apartment complex. A fence along the western border separates residences from the site and Bay Creek provides a natural barrier to the site from the north and northeast (Refs. 1, p. 3; 2). Surface water runoff flows offsite into Bay Creek (Ref. 1, p. 9). Bay Creek meanders approximately 10 miles to the south before emptying into Big Indian Creek (Ref. 1, p. 9; 2).

7.2 Soil Exposure and Air Pathway Targets

Approximately 10,095 people reside within a 4-mile radius of the Vienna Street Dump site (Refs. 2; 18). A summary of the resident population within the 4-mile site radius is presented in Table 11. The closest residence is a multi-family apartment complex located approximately 200 feet south of the site, and the nearest school is located 5,280 feet southwest of the site (Ref. 2). The area surrounding the site is a mixture of commercial properties and private residences (Ref. 2). There are three workers at the WWTP, but none actively working at the dump. (Refs. 1; 6, p. 9).

TABLE 11
4-MILE RADIUS POPULATION
Vienna Street Dump
Fort Valley, Georgia

RADIUS (miles)	POPULATION
0.00-0.25	382
0.25-0.50	1,868
0.50-1.00	2,250
1.00-2.00	4,500
2.00-3.00	163
3.00-4.00	932
TOTAL	**10,095**

The federally endangered or threatened species that are found within the 4-mile radius of the site are the Florida Panther (*Felis Concolor Coryi)*, bald eagle *(Haliaeetus leucocephalus)*, Bachman's Warbler *(Vermivora bachmanii)*, red-cockaded woodpecker *(Picoides [=Dendrocopos] borealis)* (Ref. 21).

7.3 Soil Exposure and Air Sample Locations

The soil samples collected during this investigation have already been discussed and their locations identified in Section 4.2 of this report. No additional soil or sediment samples were collected from any adjacent or nearby properties during the field investigation. The sample location map is presented as Figure 3.

No formal air sampling was conducted during this investigation; however, air monitoring as required for health and safety purposes was conducted. No readings were noted above background levels.

7.4 Soil Exposure and Air Analytical Results

The analytical results of the surface soil samples collected during this investigation have been discussed in Section 4.3 of this report. Onsite soils were found to be contaminated with numerous inorganics and pesticide compounds.

7.5 Soil Exposure and Air Pathway Conclusions

Site-attributable contaminants were detected in surface and subsurface soils. A multifamily residence is located on the southern border of the site where access is unrestricted. The soil exposure pathway is of concern due to the large area of contamination and the accessibility to the dump site. The air pathway is of minor concern due to the limited potential for the contaminants to become airborne.

8.0 Summary and Conclusions

Black & Veatch was tasked by the EPA to conduct an SI at the Vienna Street Dump site, Fort Valley, Peach County, Georgia. The objectives of this SI were to determine the nature of potential contaminants present at the site, and to determine if a release of these substances has occurred or may occur.

Contaminated soil was the only identified source at the Vienna Street Dump. The areas found to contain contaminants with elevated concentrations were dispersed throughout the dump site. Samples collected from within the fence line of the WWTP to the stressed vegetation areas in the middle of the site all contained elevated concentrations of pesticides, including DDT, dieldrin, and chlordanes.

The groundwater pathway is of minor concern at the Vienna Street Dump site. Although there is a large percentage of the surrounding population using private wells for their potable water source, groundwater sampling did not reveal any contaminants at elevated levels.

Surface water runoff flows east into Bay Creek, a perennial stream (Ref. 1, p. 9). Bay Creek flows approximately 10 miles to the southeast where it enters Big Indian Creek. Big Indian Creek flows to the southwest for the remainder of the 15-mile surface water pathway (Ref. 2). There are no surface water intakes along the 15-mile surface water pathway. Bay Creek is used for recreational fishing only at bridge crossings because the banks are too densely vegetated to allow access. Big Indian Creek is also used for recreational fishing (Ref. 16). There are no known aquatic habitats of federally endangered or threatened species along the pathway. Zinc, 4,4'-DDT, and O,P-DDT, have been found in the sediment collected from Bay Creek. The surface water pathway is a concern because of the presence of pesticides in the sediments.

Soil exposure is a minor concern at the Vienna Street Dump site. Analysis shows that several organic contaminants are present at elevated levels in soils and sediments. The majority of the site is accessible to public with the exception of the wastewater treatment facility which is surrounded by chain link fencing. The nearest residence is a multifamily home whose property borders the site to the south. The population density within the 4-mile radius of the site is low.

The air pathway is of minor concern at the site. The contaminants are not volatile, and the potential for contaminants to become airborne is limited.

Based on the results of this investigation, it is recommended that no further action be taken at the Vienna Street Dump site.

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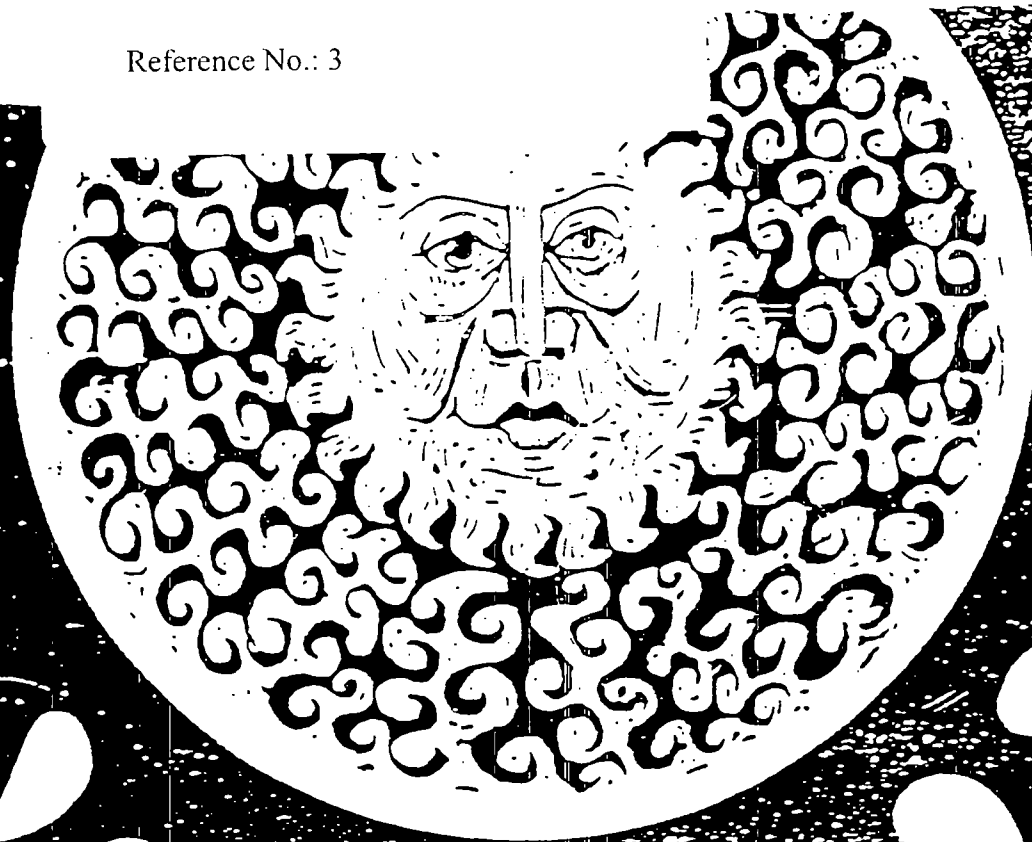
Reference No.: 3



CLIMATIC ATLAS OF THE UNITED STATES

onmental Science Services Administration . Environment

U.S. DEPARTMENT OF COMMERCE
C. R. Smith, Secretary

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
Robert M. White, Administrator

ENVIRONMENTAL DATA SERVICE
Woodrow C. Jacobs, Director

JUNE 1968

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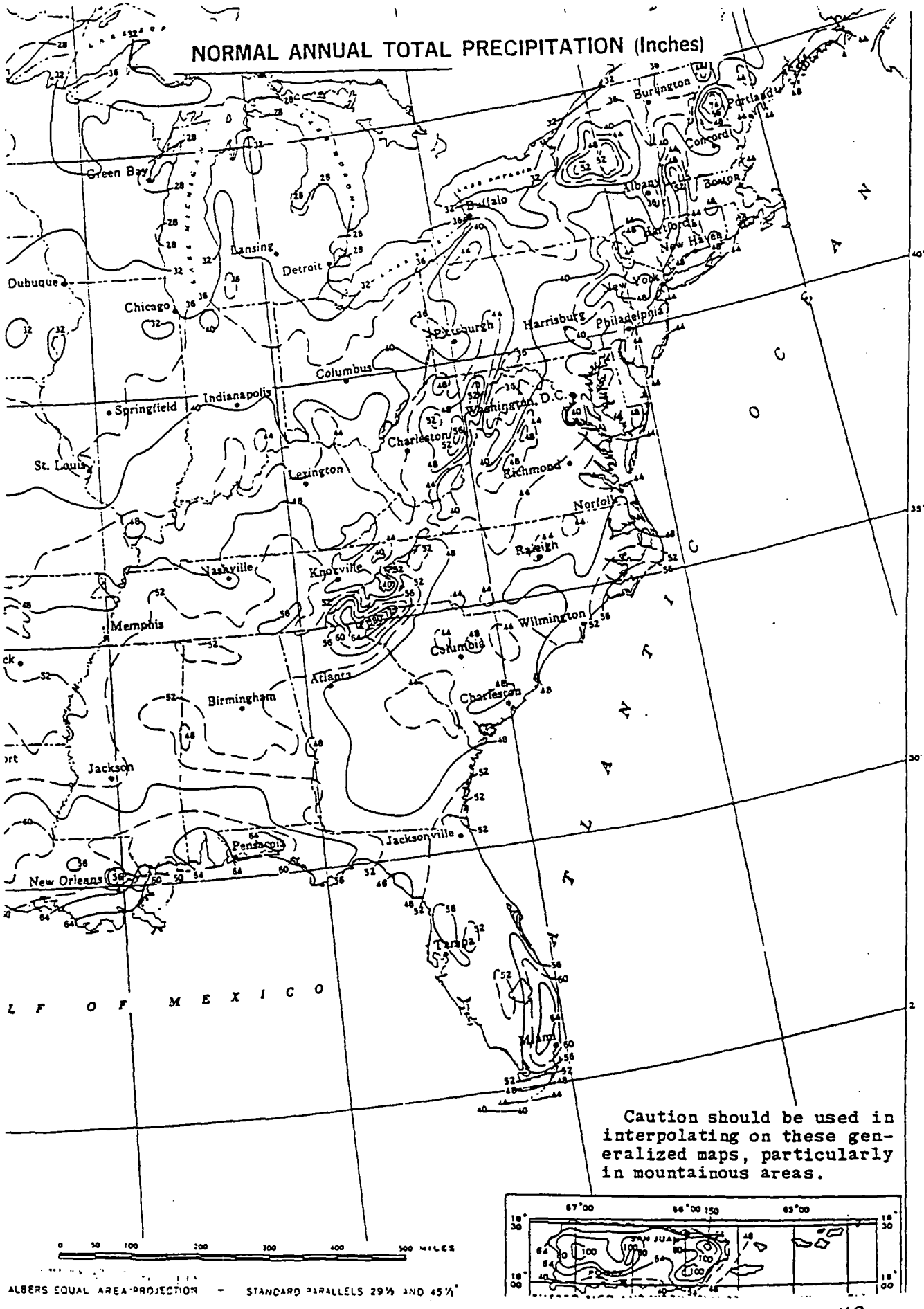
1983

NORMAL ANNUAL TOTAL PRECIPITATION (Inches)



Caution should be used in interpolating on these generalized maps, particularly in mountainous areas.

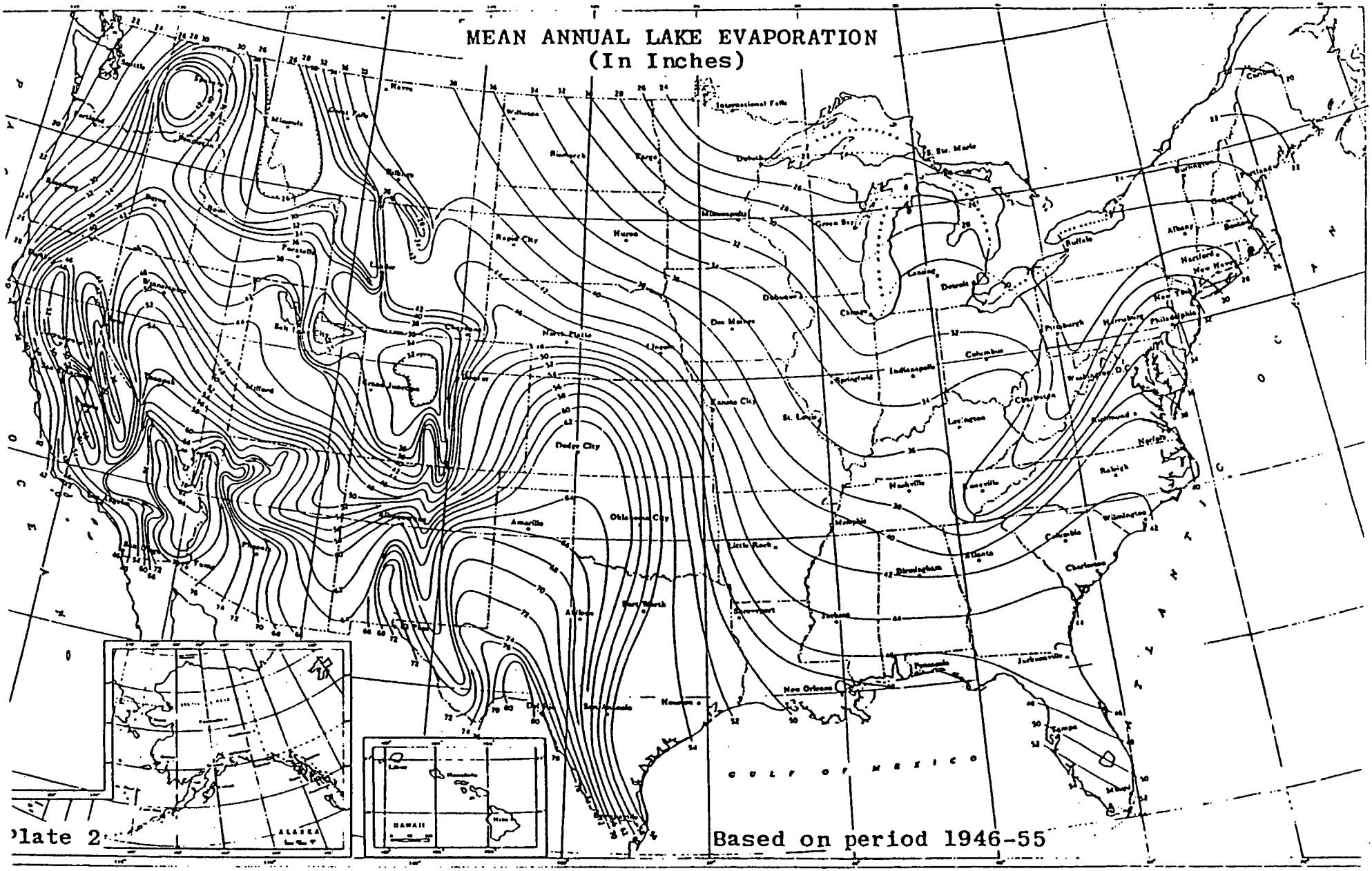

MEAN ANNUAL LAKE EVAPORATION
(In Inches)
Based on period 1946-55
GULF OF MEXICO
ALASKA
HAWAII

Plate 2

U.S. DEPARTMENT OF COMMERCE
LUTHER H. HODGES, Secretary

Reference No.: 4

WEATHER BUREAU
F. W. REICHELDERFER, Chief

TECHNICAL PAPER NO. 40

RAINFALL FREQUENCY ATLAS OF THE UNITED STATES

for Durations from 30 Minutes to 24 Hours and Return Periods from 1 to 100 Years

Prepared by
DAVID M. HERSHFIELD
Cooperative Studies Section, Hydrologic Services Division
for
Engineering Division, Soil Conservation Service
U.S. Department of Agriculture

WASHINGTON, D.C.
May 1961

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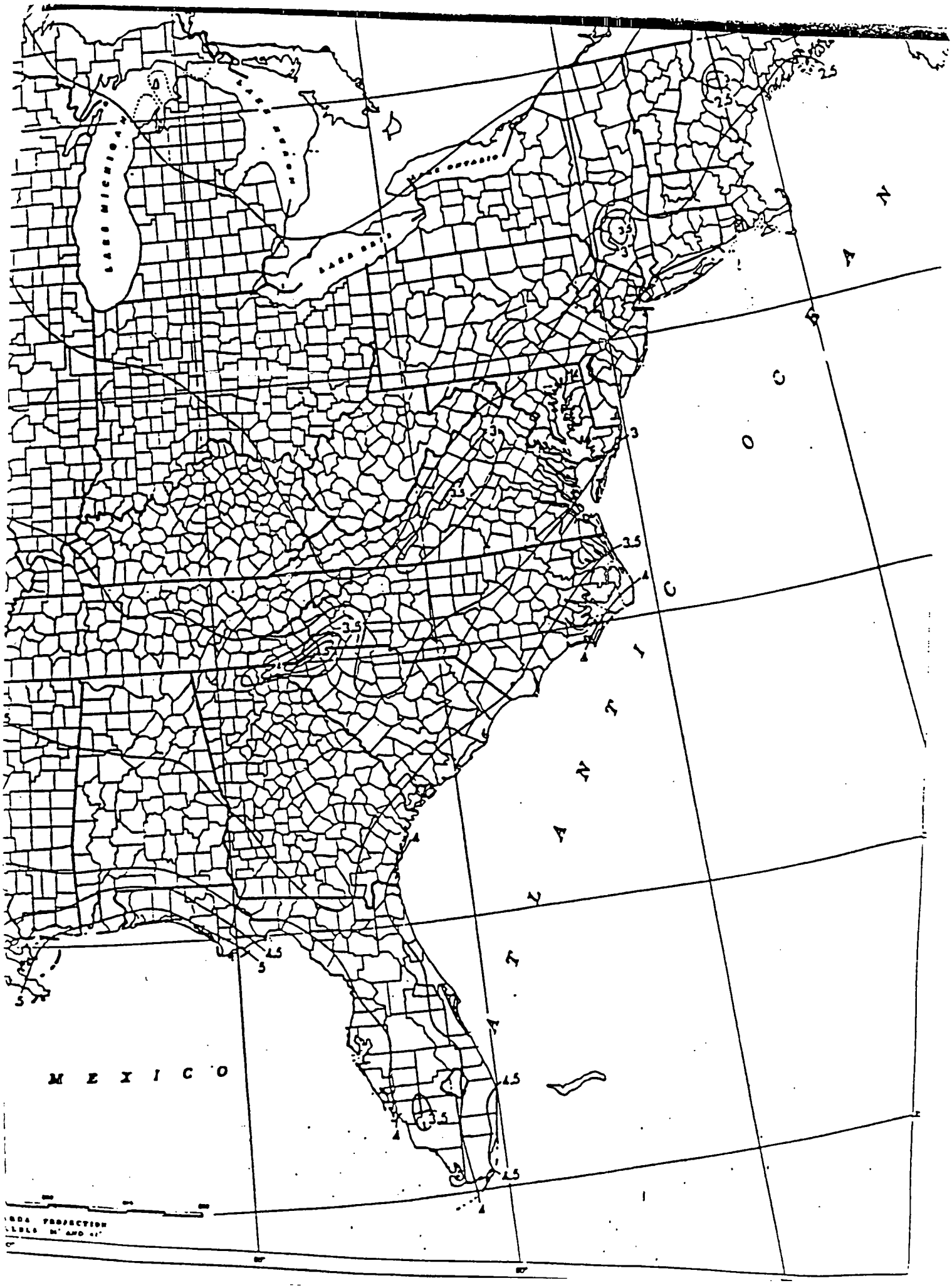
LAKE MICHIGAN
LAKE ERIE
ATLANTIC OCEAN
MEXICO

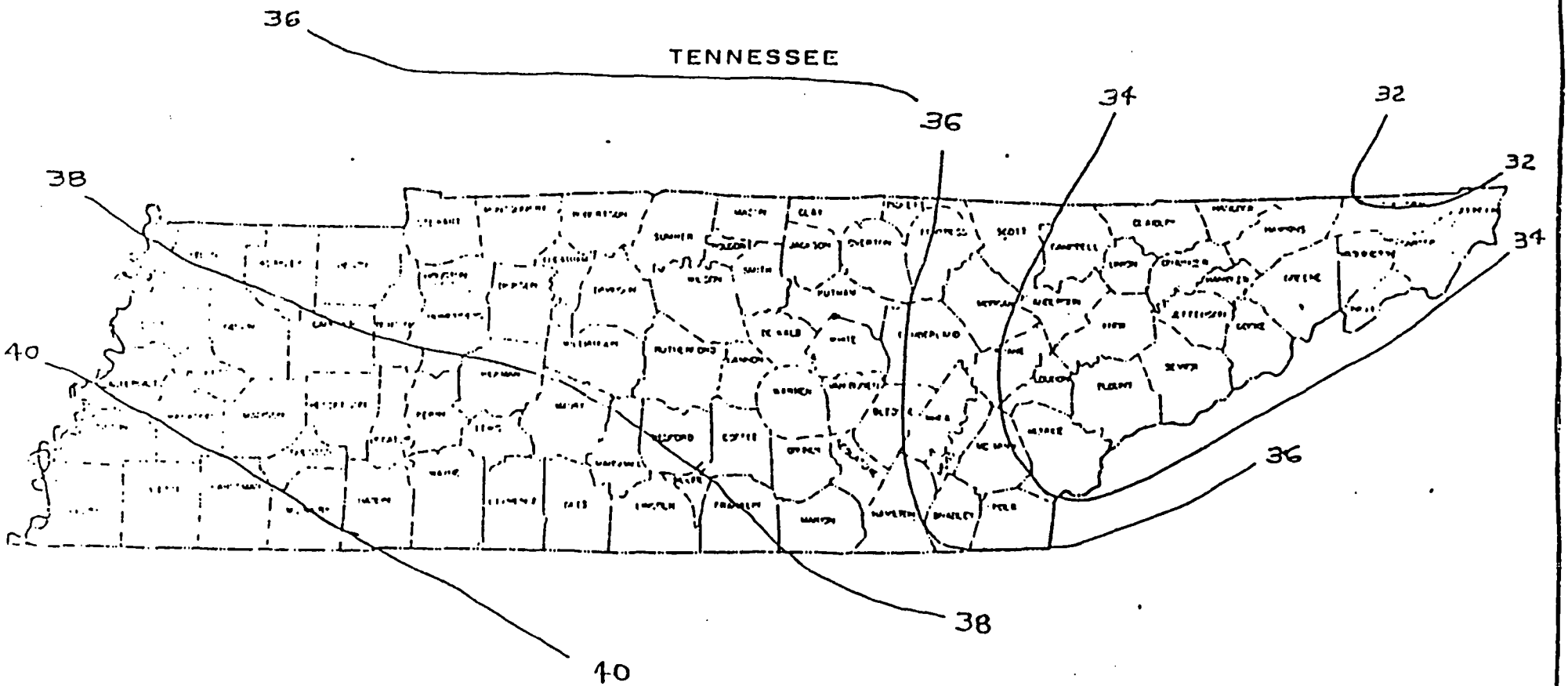

FIGURE 4
MEAN ANNUAL LAKE EVAPORATION
(IN INCHES)

TENNESSEE

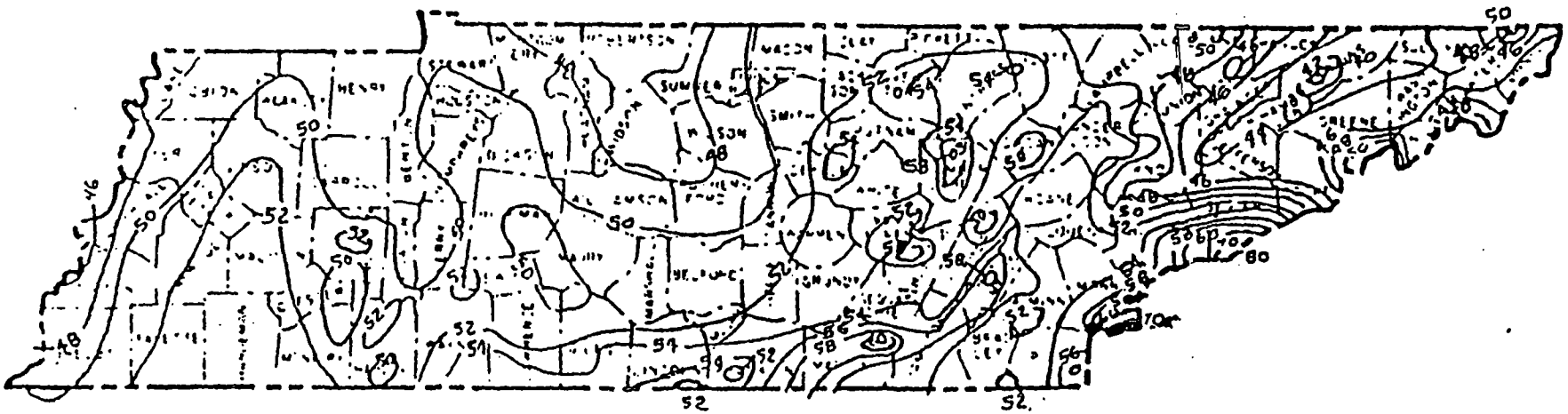

FIGURE 5
AVERAGE ANNUAL PRECIPITATION, IN INCHES

DCN# RFW-VSD-0007
TDD No. 4W-01-11-A-012
WESTON W.O. No. 12587-001-001-0035

Reference No.: 5

SITE:
VIENNA ST. DUMP SITE
East side of VIENNA ST.
PEACH COUNTY, FORT VALLEY, GA

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VIENNA STREET DUMP, FORT VALLEY, GEORGIA
TUESDAY, DECEMBER 12 2000.

1030 START-2 MEMBER, MARSH DUNCAN ARRIVES @ THE VIENNA STREET DUMP SITE AFTER DEPARTING FROM ATLANTA THIS MORNING. THE SITE IS LOCATED @ 504 VIENNA ST.
WEATHER: PARTLY CLOUDY TO CLEAR AND COLD TEMP WINDY.

M DUNCAN MEETS GA EPD PERSONNEL

GA EPD ATTEMPTING TO COLLECT GROUNDWATER SAMPLE @ SAMPLING LOCATION NINE (9). A TRUCK-MOUNTED GEOPROBE (DIRECT PUSH) IS BEING USED TO REACH THE GROUNDWATER. THIS LOCATION IS AT THE LOWEST ELEVATION OF THE SITE. BAY CREEK, WHICH HAS RUNNING WATER IS APPROXIMATELY 50' NORTH OF SAMPLING LOCATION.

1130 LOWELL SMITH OF WWTP Operations Manager serves 8500 people (population of town)

1200 MARVIN CRAFTER, A LOCAL CITIZEN ON SITE FOR APPROXIMATELY 5 MINUTES. MR. CRAFTER STATES THAT A DRILL RIG SHOULD BE USED AND EPA SHOULD DO IT.

1215 GA EPD SAMPLING CREW THEES LUNCH BREAK. AT THIS POINT THE GEOPROBE HAS PENETRATED APPROXIMATELY 35' DEEP AND HAVE NOT REACHED ANY WATER.

[signature] 12/12/00

12-12-00 CONTINUED

PHOTO LOG.

PHOTO #	SUBJECT	O	P	W
1	PLAYGROUND @ APARTMENT COMPLEX - INDIAN OAKS APTS.	SE	MD	
2	POSSIBLE PATHWAY TO WWTP FROM INDIAN OAKS APT PLAYGROUND. PICTURE TAKEN FROM PLAYGROUND, WWTP IN BACKGROUND	N	MD	
3	INDIAN OAKS APT SIGN - HWY 96 J. RUSSELL MANG'T	E	MD	
4	WASTEWATER T.P. VIEW FROM R/R TRACKS	SE	MD	
5	" " "	SE	MD	
6	" " "	SE	MD	
7	" " "	SE	MD	
8.	BAY CREEK (CLOSE-UP)	W	MD	
9	OUTFALL INTO BAY CREEK (NEAR #9)	E	MD	
10.	PHOTO OF 9 - GEOPROBE CORES COLLECTED - ALL CONTAIN CLAY AND SAND. NO WATER DISCOVERED	NE	MD	JS
11.	GA EPD SAMPLING @ LOC. #9.	NE	MD	JS
12.	GA EPD SAMPLING @ #9. TESTING DEPTH	SW	MD	JS
13	GA EPD SAMPLING (CORING) @ #9.	NE	MD	
14	SOUTH PORTION OF SITE CUT THROUGH TO INDIAN OAK APTS IN BACK GROUND			

12/12/00 CONTINUED

1230 M. DUNCAN CONTINUES SITE RECON AND TAKES PHOTOS. ~~MA~~ SITE MAP PROVIDED ~~M~~ BY GA EPD APPEARS ACCURATE & CONCISE.

1315 GA EPD RETURNS TO SITE FROM LUNCH BREAK. ATTEMPTING TO REACH GROUNDWATER. AT THIS DEPTH (GREATER THAN 35') THE PERISTALTIC WILL NOT BE ABLE TO RETRIEVE A SAMPLE IF WATER IS FOUND. AN ATTEMPT IS BEING MADE TO LOCATE WATER, EVEN IF IT CANNOT BE COLLECTED TODAY. THEREFORE, WATER DEPTH WILL BE KNOWN FOR FUTURE ACTIVITIES.

1325 WWTP SUPERVISOR WALTER LANTER RETURNS WITH LOWELL SMITH. JIMSLEWINSKI DISCUSSES PREVIOUS SAMPLING RESULTS W/ WALTER.

1350 SAMPLING DEPTH @ LOCATION #9 IS ESTIMATED @ 37 FEET ~~[illegible]~~ ~~[illegible]~~ MD 1402

NOTED WALTER S LANTER, UTILITY COMMISSION
PH # 478-825-7701 ext 16
FAX # 917-825-7704
500 ANTHONE ST
FT. VALLEY, GA 31030

1400 GAEPD PERSONNEL ESTIMATE THAT WATER MAY BE @ 40FT - 37FT. PROBE IS UNABLE TO PENETRATE TO FURTHER DEPTH DO TO CAVE IN. SAMPLING CORE IS FILLING UP AND PREVENTING FURTHER SAMPLING.
- IT IS DETERMINED THAT A ~~LAT~~ DRILL RIG WILL BE REQUIRED TO REACH NECESSARY DEPTHS TO COLLECT SAMPLE.

[signature]

12/12/00

1400 (CONTINUED) A ~~SP~~ SMALL AMOUNT OF MOISTURE WAS DETECTED @ THE END OF THE PROBE WHEN AT THE 37-40' DEPTH. ALTHOUGH, THE CORE WAS STILL DRY, THIS WAS A SIGN THAT THE WATER TABLE ~~WAS~~ IS NEAR THAT DEPTH. ALTHOUGH DUE TO CAVE ~~[illegible]~~ IN, THE GEOPROBE COULD NOT EFFECTIVELY PENETRATE BEYOND THAT DEPTH.

1410 GAEPD CREW SURVEY SOUTH END OF SITE FOR POSSIBLE SAMPLING LOCATION. NOTE: SAMPLING #9 IS THE LOWEST ELEVATION ON THE SITE, SO THEREFORE, IT IS ASSUMED THAT THIS WOULD MOST EASILY YIELD A GROUNDWATER SAMPLE. ~~AT THIS~~ @ THE MOST SHALLOW DEPTHS IT HAS NOT.

1430-7 1430 A SECOND AREA IS LOCATED TO ATTEMPT TO COLLECT A GROUNDWATER SAMPLE. APPROXIMATELY 50' NE OF THE PUMPHOUSE, THERE IS A LOW-LYING AREA THAT LEADS TO AN OUTFALL INTO BAY CREEK. MR. LOWELL OF THE WWTP DIGS A PRELIMINARY HOLE OF APPROXIMATELY 2½ → 3 FT w/ A SHOVEL TO CHECK FOR A POSSIBLE BURIED UTILITY LINE. NO LINE IS DISCOVERED. MR LOWELL IS CONFIDENT THE LINE WAS NOT BURIED DEEPER THAN THAT. GA EPD DECIDES TO ~~SAMPLE~~ PROBE @ THIS LOCATION.

IT IS APPROXIMATE 15' WEST OF THE FENCE LINE THAT SEPERATES BAY CREEK @ THE WASTE WATER TREATMENT PLANT (WWTP)

[signature] 12/12/00

12/12/00

1510 M. DUNCAN RECONS SOUTHERN PORTION OF SITE (IN BETWEEN WWTP FENCELINE & APT COMPLEX) SOME ~~OF~~ TREES HAVE BEEN CUT DOWN AND GROUNDWORK PERFORMED AS CLEARING ACTIVITIES FOR OVERHEAD POWERLINES. - ALTHOUGH IT IS DECEMBER AND MOST PLANT LIFE IS DORMANT THERE DOES NOT APPEAR TO BE ANY WIDESPREAD STRESSED VEGATATION. ONE PATC OF BARE GROUND WAS NOTED, IT WAS LOCATED UNDER THE POWER LINES AND IS APPROXIMATELY 30 x 50' AREA. THE AREA IS ERODED, w/ SOME DEBRIS, AND WHITE-ASH LIKE MATERIAL. IT IS POSSIBLE THAT THIS AREA HAS BEEN USED TO OPEN-BURN ~~DEBR~~ DEBRIS.

1520 GAEPD REACHES 25' DEEP @ LATEST SAMPLING LOCATION. THE MATERIAL IS DRY AND CAVE-IN IS PREVENTING ANY MORE EFFICIENT PROBING. GAEPD DECIDES THAT NO SAMPLE CAN BE COLLECTED @ THIS LOCATION WITH THEIR EQUIPMENT. LIKE THE FIRST LOCATION, A DRILL RIG w/ DEEPER CAPABILITY WILL BE REQUIRED.

1530 GAEPD CREW AND START-2 MEMBER M. DUNCAN DEPART SITE. M. DUNCAN ENROUTE TO ATLANTA, GA (ROY F WESTON NORCROSS, GA OFFICE)

1730 M. DUNCAN ARRIVES @ OFFICE.

[signature] 12/12/00

February 22, 2001 Thursday

1030 Arrived at the site
WESTON - Joe Baer + Jo Ellen Johnson
Weather - overcast - wet 50's
Objective: to site locations for groundwater sample collection for the SI.
Brian Stringgow from EPA onsite
Met w/ L. Smith with Ft Valley Utilities
Chief Operator 478-825-1661
11:15 Begin walking the site with START Members Johnson and Baer and Mr. Stringgow of EPA. Reviewing the site layout for well locations.
11:35 BlueBird Bus is completely occupying the area to the West of the site on the other side of the railroad tracks.
1330 OFFSITE FOR LUNCH
1430 DRIVING AROUND SITE VINCITY TO LOCATE OFF SITE WELL LOCATIONS. UPGRADIENT WELL LOCATION WILL BE SOUTH OF ENTRANCE TO WWTP INSIDE FENCE OR JUST OUTSIDE FENCE WEST OF THE FORMER DOG POUND. HOWEVER, DOWNGRADIENT WELLS MAY HAVE TO BE LOCATED OFF SITE, ESPECIALLY NORTH OF BAY CREEK. FILL WAS OBSERVED ON THE SOUTHERN BANKS OF THE CREEK THE EASTERN PORTION OF THE SITE IS WOODED AND IT CANNOT BE DETERMINED WHERE THE FILL ENDS. MAY NEED A DOZER TO SAMPLE AT THE EASTERN PORTION OF THE SITE IF WE ARE NOT TO DRILL IN FILL.

2/22/01

THERE HAS BEEN A PATH CUT THROUGH THE TREE LINE NORTH OF THE APARTMENT COMPLEX and PLAYGROUND THAT CONNECTS POWER TO THE APARTMENTS. BRAIN STOPPED IN THERE TO FIND OUT WHO TO CONTACT FOR SITE ACCESS. DOWNGRADIENT WELL TO BE LOCATED NE OF APT. COMPLEX ~~NE~~ SOUTH OF TREELINE BUT WEST OF PINE GROVE. ANOTHER DOWN GRADIENT WELL MAY BE LOCATED ~~NORTH~~ JC ON THE NORTHERN BANK OF BAY CREEK IN A CLEAR AREA ADJACENT TO THE CREEK AND SOUTH OF EVANS PECAN GROVE OFF OF 96 BRIAN TALKED TO THE SECRETARY TO GET NAME OF CONTACT (CHOP EVANS) FOR SITE ACCESS.
1455 WENT BACK TO WWTP TO LET Mr. Smith KNOW THAT WE NEEDED TO BE ONSITE AFTER 1500. HE TOLD US TO LOCK THE GATE WHEN WE LEAVE. WE DROVE OVER THE AREA NORTH OF BAY CREEK TO SEE IF WE COULD FIND ACCESS TO THE NORTHEN BANK TO DRILL NORTH OF THE LANDFILL AREA. ~~HAH~~ ~~Ex~~ JC AREA ON NORTHERN BANK OF BAY CREEK HEAVILY WOODED.
1630 JOE + BRAIN SHOOTING IN POTENTIAL AREAS FOR GROUNDWATER SAMPLES WITH GPS.
WESTON TO LOCATE UTILITY COMPANY
H.S. RUSSELL & Co. 404-330-1000 FOR INDIAN OAKS APT. - TOM CROWDLEY
- EVANS PECAN, LLC 912-~~812~~-825-2095
CHOP EVANS - SUPERVISOR ST. FLOURNEY
SAND PIT mobile 957-1871
~~JC MAYOR - DR. WAI~~

2/22/01

WALTER LANTER - W&S CHIEF
478-825-1661
Mayor Dr. John Stumboldt 825-8567
in charge of dumpsite
POSSIBLE ROAD CUT
Brian Stringfellow - 706-340-6352 cell #
1720 OFFSITE BRIAN IS LOCKING GATE

Contacts for March 19, 2001
Field Effort
Meet time 12:30
EPA SESD Representative -
Brian Stringfellow - cell # 706-340-6352

McConnel Drum Service
770-451-1100
To deliver 30 55-gallon open-top drums before 3pm 3/19

Georgia Utilities Protection Ctr, Inc.
1-800-282-7411

Work approved for 3/15 - noon + April 2nd Notify if need more time

WWTP - Entire site to be located # 9655937

Indian Oaks Apts. - Back portion (northern most) portion of site # 9655965

Northernmost portion of pecan orchard off # 9655995

Fort Valley Utilities provides gas, water and electricity
Bell South - checked on 3/13
Quest for Fiber Optics

Larry Dailey of Fort Valley Utility
wants us to call when we get there
to locate gas water & electricity
478-825-7701 ext 14

WWTP contact 478-825-1661
Lowell Smith

Trip Tracks Service (MJ&H Corp)
478-474-0376
Trip's beeper 478-765-7680
(Dozer + Operator)
Will drop off dozer around 2pm on
Monday. Sign daley ticket

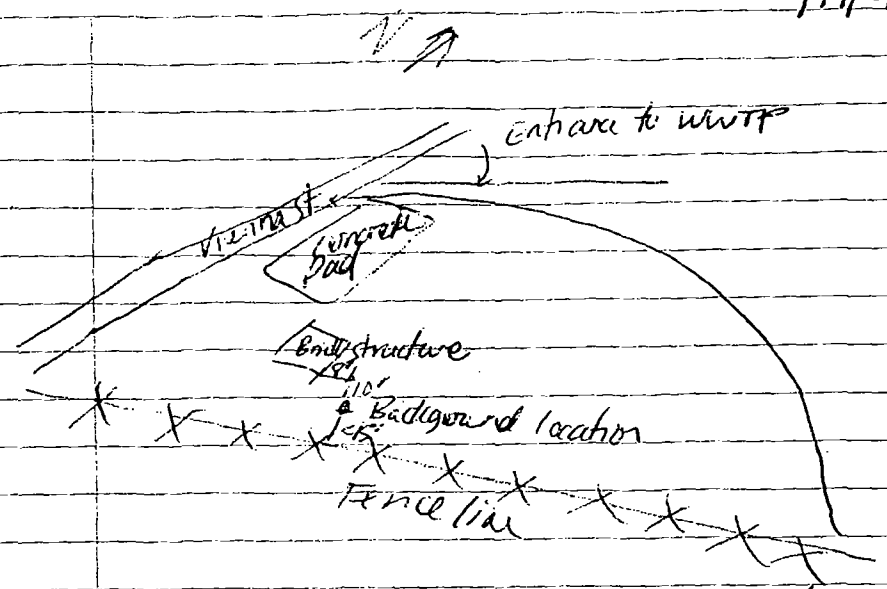
Ellis Env. - Jeff Finn
ph 352-332-5888
fax 352-332-3222

3/19/01

1210 START personnel Shaneka Pennamon
on-site @ WWTP. Let WWTP contact
Lowell Smith know I'm here.
The drums (30) have been delivered.
1215 EPA personnel - Brian Striggow,
Art & their contractor arrives
1220 Jeff Finn, START on-site
1230 START & EPA break for lunch.
1310 EPA & START back-onsite.
Set up decon pad, EPA calibrate
instruments
1530 EPA's Striggow hand augering @
location for background temporary
monitoring well.
1550 Begin drilling using hollow-
stem augur.
1635 Photo #1 - Soil cuttings @ background
well location
Direction facing - east
Photographer - S. Pennamon
Witness - J. Finn
Background location is in
southwestern corner of WWTP
Near fencing.
1657 Photo #2 - Background well location;
drill rig & hollow stem augur.
Direction Facing: east
Photographer - S. Pennamon
Witness - Jeff Finn

Background area is covered in grass.

3/19/01



1835 Photo # 3 - Soil on auger - 1st 5' bgs - dry
Photographer - S. Pennamon
Witness: S. Finn
Direction Facing: East

1940 START: EPA off site. START locks facility gate.

S. Pennamon

3/20/01

0800 START Pennamon: ~~Finn~~ Finn on-site. Dozer operator Tripp is already on-site.

Note: Background well sample will not be collected at direction of Struggnow. Auger was advanced to 75 feet below land surface: no water was detected.

0805 EPA: ILS contractors on-site.

Temperature = 50°F. Cloudy. It's forecasted to rain all day. Windy (Winds = 15-20 mph according to forecasters).

0830 ILS began deconning augers & other equipment associated w/ drilling.

1030 EPA began drilling @ control sample in Northwestern edge of property.

1120 EPA, START, ILS, & Tripp off site for lunch

1230 EPA, START, ILS, & Tripp back on-site

1245 START Pennamon off-site for Kerosene & gas for generator.

1315 START Pennamon on-site w/ gas & Kerosene.
EPA, START Finn, & ILS are installing temporary monitoring well @ the site

3/20/07

control location.
- Sandpacking was installed ~~at~~ in borehole surrounding temporary monitoring well.

1524 Striggnow states its o.k. to develop the control well & sample if parameters are stable. He wants to take another water level reading in the morning & then abandon the well.

1601 Water level reading for control sample.
Depth to water level - 38.70
Depth to bottom of well - 47.50'
Length of casing "stick-up" - 3.04'
Length of water column = 47.50 - 38.70
= 8.8'

Purge vol. (1 well) 8.8 x .163 = 1.43 gallons
3 well volumes = 4.30 gallons

B. Striggnow labeled soil cuttings from the control sample C1, C2, & C3.

1633 Initial water reading

Time	pH	Turb (NTU)	Temp (°C)	Cond (µS/cm)
	6.21	315	16.9°C	189
1644	6.22	NR	17.1	181.4
1657	6.26	315	16.0	184.0

3/20/07

3/20/07

1705 Stopped purging due to lost bailer. EPA Striggnow decided to sample well tomorrow after sediment has settled & retrieve bailer tomorrow also.
Turbidity readings are high.
Briggnow wants to obtain a water level reading from control well tomorrow morning also (to perhaps gage depth of other temporary wells.

Note: START's purged ≈ 8.5 gallons from the control ~~at~~ temporary well.

1730 EPA, START, & ILS off-site for the day.

3/20/07

3/21/01

0800 STARTs Finn & Pennamon on-site.
Bulldozer Tripp already on-site

Temperature = 50°F; windy; cloudy; ~~sl~~ sup misty. 100% cloud cover.

0810 STARTs setting up to sample well (CNTL)

0835 Water level reading
38.70' - depth to water.

0853 Water Parameters

pH	Cond	Temp	Turb
6.50 ~~6.77~~ sup	202	15.2°C	NR

0947 Photo #4 - Control sample
Dir. Facing: North
Photographer: S. Pennamon
Witness: Jeff Finn

0948 Photo #5 - Control Sample
Near chemical storage bldg.
Dir. Facing - Southeast
Photographer: S. Pennamon
Witness: Jeff Finn

1025 Conference call w/ Joe Baer & Jo Ellen Johnson ~~(STA~~ sup, Shanieka Pennamon (START). Brian Striggnow (EPA). Due to HRS concerns

3/21/01

START advises Striggnow that well of concern is TW-3 near edge of creek & northeastern edge of property. START would like Striggnow to leave in CNTL well (control) & come back later under better operating (weather, site conditions) conditions to install temporary monitoring wells TW-1 & TW-3. Striggnow agreed to grout well & "secure" by placing drum cuttings from that well around it (w/ the approval of Lowell Smith, WWTP).

Jo Ellen Johnson stated we do have access to Blue Bird ~~well~~ sup to sample their monitoring well.

1230 STARTs & Tripp off-site for lunch
1330 STARTs & Tripp back on-site.

1348 Photo #6 - Trash/Debris from landfill in cleared grub.
Direction facing - North
Photographer: S. Pennamon
Witness: J. Finn

1349 Photo #7 - Debris in cleared grub
Direction facing - Northeast
Photographer - S. Pennamon
Witness: J. Finn

1349 Photo #8 - Debris in cleared grub
Photographer - S. Pennamon

3/21/01

Witness: J. Finn
Direction facing: NE

1352 Photo #9 - Debris in cleared grub
Direction facing: Northwest
Photographer: S. Pennamon
Witness: J. Finn

1354 Photo #10: Drainage conduit @ end of cleared path; conduit may lead to Bay Creek.
Direction facing: East
Photographer: S. Pennamon
Witness: J. Finn

1354 Photo 11: Same as Photo #10
Direction facing - East
Photographer: S. Pennamon
Witness: J. Finn

1355 Photo #12 - Storage tank in the landfill.
Direction facing: Southeast
Photographer: S. Pennamon
Witness: J. Finn

1400 Photo #13, Tree containing debris in roots.
Direction facing Northwest
Photographer: S. Pennamon
Witness: J. Finn

1406 Photo #14 - Landfill in front of apartment complex.
Direction facing: South
Photographer: S. Pennamon
Witness: J. Finn

1406 Photo #15 - Proposed location of TW-1.

3/21/01

Direction facing: Southeast
Photographer: S. Pennamon
Witness: J. Finn

1516 Photo #15 - Control sample on Northwestern portion of property, grouted & barracaded by drums of soil cuttings.
Direction facing: Northwest
Photographer: S. Pennamon
Witness: Jeff Finn

Note: The drums staged at the control sample location (for groundwater) are labeled C1, C2, & C3. The drums contain the soil cuttings for depths 10' or greater. The remaining 1st 10' of soil is on the ground & will be used to fill in the borehole.

1530 START's off-site.

Note: Personnel on-site during the week of Mar 19, 2001 include:

Brian Striggow, EPA SESD
Art Masters, EPA SESD
Marty Allen, ESAT
Claire Barton, ESAT
Shanieka Pennamon, START
Jeffery Finn, START

Tripp Rivers, Tripp's Tractor Service

S. [illegible]
3/24/07

UTILITY COMMISSION
OF FORT VALLEY

KEITH SPILLERS
WATER FOREMAN

P.O. BOX 1529 • FORT VALLEY, GEORGIA 31030
912/825-7701 • FAX 912/825-3177
EXT. 17

UTILITY COMMISSION
OF FORT VALLEY

WALTER S. LANTER
WATER/WASTE WATER SUPERINTENDENT

P.O. BOX 1529 • FORT VALLEY, GEORGIA 31030
912/825-7701 • FAX 912/825-3177
EXT. 16

Georgia Department of Natural Resources
205 Butler Street, S.E., Suite 1154, Atlanta, Georgia 30334
Lonice C. Barrett, Commissioner
Environmental Protection Division
Harold F. Reheis, Director
404/656-7802

Reference No.: 6

October 31, 2000

TRIP REPORT

SITE NAME AND LOCATION: Vienna Street Dump
Fort Valley Georgia
EPA I.D. No. GAD0000048934

TRIP BY: James Sliwinski, Environmental Engineer
Ken Grall, Environmental Engineer
Bob Pierce, Sr. Geologist

DATE OF TRIP: August 29 and 30, 2000

OFFICIALS CONTACTED: Walter Lanter, Fort Valley's Superintendent of Wastewater and Water

REFERENCES: Black & Veatch Waste Science, Inc.
January 6, 1995 Site Inspection
Georgia Environmental Protection Division
August 4, 2000 Supplemental Sampling and Analysis Plan

BACKGROUND:

The purpose of evaluating this site is to determine what, if any, releases have occurred from the former dump site used to dispose of raw, municipal and industrial waste from Fort Valley and local industries. The scope of this investigation included the sampling of various environmental media to investigate the possible migration of hazardous substances from the site.

It is suspected that waste chemicals from Woolfolk Chemical Company and the Blue Bird Body Company, two large industries in the area, may have been dumped at the site. A Site Inspection (SI) was done on the site by Black & Veatch Waste Science, Inc. (Black & Veatch) on January 6, 1995. The Black & Veatch report indicated that the surface and subsurface soil contained numerous inorganic and pesticide substances at concentrations which exceeded three times the background levels. These substances included; arsenic, lead, copper, mercury, zinc, heptachlor, Beta-BHC, Dieldrin, 4,4,'-DDD, 4,4,'-DDE, 4,4,'-DDT, chlordene, chlordane and O, P-DDT. The sediment also contained inorganic and pesticide constituents at concentrations that exceeded three times the background levels. These constituents included; aluminum, arsenic, zinc, 4,4,'-DDT and O, P-DDT. Although the SI report submitted to U.S. Environmental Protection Agency (EPA), Waste Management Division, Region IV was scored according to the Hazard Ranking System, it was discovered that the groundwater ~~and the surface soil sample~~ locations did not completely characterize the site. Additional groundwater ~~and surface soil sampling was~~ required to evaluate the groundwater ~~and soil~~ pathway. The scope of this investigation included the

At the request of the community, add'l soil samples were taken at the playground of the adjacent apartment complex and along 2 well-travelled cut-through paths (one off-site path + one path

sampling of the soil and efforts to collect groundwater. Duplicate samples are included in the investigation.

Site Description

The Vienna Street Dump site has been inactive since the late 1960s or early 1970s. An active wastewater treatment plant (WWTP) and the city animal shelter are presently located in the northwestern section of the site. The eastern and southern portions of the site consist of brush, grassland and small trees. The site is bounded partially to the north by Bay Creek, which wraps around the northeastern portion of the site. Farmland and residences border the site on the south and west. The site is bounded on the north by the Norfolk and Southern Railroad and Vienna Street. Much of the site is well vegetated but stressed vegetation is apparent in several locations and landfill debris is visible near Bay Creek due to erosion. The site is accessible to the public on the southern edge where it is bordered by Indian Oaks Apartments. A fence along the western border separates residences from the site, and Bay Creek provides a natural barrier to the north and northeast. Surface water runoff flows offsite into Bay Creek. Bay Creek flow approximately 10 miles in a southerly direction before emptying into Big Indian Creek.

Operational History and Waste Characteristics

The Vienna Street Dump site is composed of three lots purchased by the City of Fort Valley. In the early 1900s, the city purchased four acres of land south of the Norfolk and Southern Railroad tracks. In 1935, the city installed two anaerobic digesters, a trickling filter system, and sludge drying beds on this land for wastewater treatment. In 1940, the city purchased nine acres of adjoining land. The city opened the dump sometime in the early 1940s. The dump site was used to dispose of raw, municipal and industrial waste from Fort Valley and local industries. It is suspected that waste chemicals from Woolfolk Chemical Company and the Blue Bird Body Company, two large industries in the area, may have been dumped at the site. In 1965, the city purchased another 19.45 acres contiguous to the southern border of the parcel. Approximately 11 acres of undeveloped land lie on the east side of Bay Creek. The remaining 8.45 acres lie on the west side of Bay Creek and were utilized as part of the dump. The dump was closed sometime in the late 1960s to early 1970s. In 1978, the WWTP was expanded to include an aeration basin, a grit chamber and two clarifiers. The facility was expanded to the east on three acres of the closed city dump. The site currently accommodates the WWTP and the city animal shelter. A Preliminary Assessment (PA) of the dump site was completed by Black & Veatch in January 1994. Based on this PA, Black and Veatch recommended scheduling of a Site Screening Investigation. A SI was done by Black & Veatch on January 6, 1995. Based on an aerial photograph from February 1980, land grading was taking place at the apartments under construction (now the Indian Oaks apartment complex located on 1103 East Church Street, Fort Valley), as well as at the city dump. The ravine in the photograph, which appears to be receiving fill material, is now occupied by the apartment complex playground. While it is most likely that the ravine fill material came from the apartment construction site, samples were collected to ensure that the fill material did not come from the dump. The dump site is not regulated under the Resource Conservation and Recovery Act (RCRA). The waste quantity is estimated to be 10 acres east-southeast of the WWTP.

SAMPLING:

Sampling locations were selected based upon the areas of the site that metals, herbicides, pesticides, PCBs, semi-volatile and volatile organic compounds may have been released from the Vienna Street Dump's area. Field conditions altered the number and locations of samples taken in respect to the proposed Supplemental Sampling and Analysis Plan. Seven (7) surface soil samples

were collected at the 0 to 1' depth, included one background sample (Sample #8). Surface soil samples were collected from the Indian Oaks Apartments' playground due to concerns that the ravine, identified on an aerial photograph, may have been filled in with waste from the dump site. In addition, samples were collected from cut-through paths from the nearby park and dump site. Five (5) deep subsurface soil samples, including one duplicate, were collected using the direct push equipment (Geoprobe) at a depth of 4 to 8 feet below ground surface. The Geoprobe equipment was unable to reach the 4 to 8 feet sampling depth for Sample #15 due to debris in the soil; therefore, a surface soil sample was collected at this location. According to the sampling plan, five groundwater samples, including one duplicate, were proposed to be collected from these four direct push locations. Based on the SI report and the work done at the Woolfolk Chemical site, approximately 1 mile from the dump site, EPD assumed that the shallow groundwater would be 10 to 30 feet below ground surface. EPD tried to collect groundwater at the lowest elevation on the Vienna Street Dump site, which was located at the northwest corner. The nearby surface water, Bay Creek, was approximately 15 feet below ground surface. At 25 feet deep, there was no indication of groundwater (Sample #9). Another location was selected to collect groundwater that was at the northern edge of the site (Sample #11). At 20 feet below ground surface, there was no indication of water present. Bob Pierce, the geologist who was in charge of the Geoprobe equipment and is knowledgeable with the hydrogeology in the area made the decision not to proceed with the groundwater sampling.

INSPECTION:

The objectives of the supplemental sampling event was to collect additional analytical data in order to identify hazardous substances at the site and off-site, to investigate whether hazardous substances have been released to the environment, to ascertain if any releases have impacted human health and the environment. The proposed sampling plan called for soil and groundwater sampling at sample locations identified in Figure 3. However, due to the drought conditions, the available time for sampling and limitations of the direct push equipment, groundwater samples were not collected and only deep subsurface soil samples were collected at these locations during this investigation. EPD will try to collect groundwater samples, later in the year, after the shallow groundwater aquifer has been recharged by precipitation.

CONCLUSIONS:

According to the samples collected from the Vienna Street Dump, the analytical results do indicate a release of hazardous substances to the environment. These substances included; arsenic, lead, 4,4,'-DDD, 4,4,'-DDE, 4,4,'-DDT, chlordane and toxaphene. The analytical data has been submitted to U.S. EPA Region IV for evaluation.

PHOTOGRAPHS: Twenty-Three (23) Pictures

REVIEWED BY:

ATTACHMENTS:
A - EPD Supplemental Sampling and Analysis Plan
B - Site Diagram: Sample Location Map
C - Lab Analyses Summary
D - Lab Analyses Reports
E - Black & Veatch Site Inspection

File: Vienna Street Dump, Fort Valley (R)
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Georgia Department of Natural Resources
205 Butler Street, S.E., Suite 1154, Atlanta, Georgia 30334
Lonice C. Barrett, Commissioner
Environmental Protection Division
Harold F. Reheis, Director
404/656-7802

Reference No.: 7

January 9, 2001

TRIP REPORT

SITE NAME AND LOCATION: Vienna Street Dump
Fort Valley Georgia
EPA I.D. No. GAD0000048934

TRIP BY: James Sliwinski, Environmental Engineer
Jim Ussery, Program Manager
Steve White, Unit Coordinator
Bob Pierce, Sr. Geologist

DATE OF TRIP: December 12, 2000

OFFICIALS CONTACTED: Walter Lanter, Fort Valley's Superintendent of Wastewater and Water

REFERENCES:
Black & Veatch Waste Science, Inc.
January 6, 1995 Site Inspection
Georgia Environmental Protection Division
August 4, 2000 Supplemental Sampling and Analysis Plan
Georgia Environmental Protection Division
October 31, 2000 Trip Report

BACKGROUND:

The purpose of evaluating this site is to determine what, if any, releases have occurred from the former dump site used to dispose of raw, municipal and industrial waste from Fort Valley and local industries. The objectives of the supplemental sampling event (collecting groundwater) was to gather additional analytical data in order to identify hazardous substances at the site and off-site, to investigate whether hazardous substances have been released to the environment, to ascertain if any releases have impacted human health and the environment.

It is suspected that waste chemicals from Woolfolk Chemical Company and the Blue Bird Body Company, two large industries in the area, may have been dumped at the site. A Site Inspection (SI) was done on the site by Black & Veatch Waste Science, Inc. (Black & Veatch) on January 6, 1995. The Black & Veatch report indicated that the surface and subsurface soil contained numerous inorganic and pesticide substances at concentrations which exceeded three times the background levels. These substances included; arsenic, lead, copper, mercury, zinc, heptachlor, Beta-BHC, Dieldrin, 4,4,'-DDD, 4,4,'-DDE, 4,4,'-DDT, chlordene, chlordane and O, P-DDT. The sediment also contained inorganic and pesticide constituents at concentrations that exceeded three times the background levels. These constituents included; aluminum, arsenic, zinc, 4,4,'-DDT and O, P-DDT. Although the SI report submitted to U.S.

Environmental Protection Agency (EPA), Waste Management Division, Region IV was scored according to the Hazard Ranking System, it was discovered that the groundwater and the surface soil sample locations did not completely characterize the site. Additional surface soil samples were collected on August 29 and 30, 2000 and sent to the laboratory for analysis; however, groundwater samples were not collected at the time due to the drought conditions. EPD returned to the site later in the year, after the shallow groundwater aquifer was recharged by precipitation, in order to collect the groundwater samples.

SAMPLING:

Groundwater sampling locations were selected based upon the areas of the site that contamination may have been released from the Vienna Street Dump and that the direct push equipment (Geoprobe) could reach the shallow aquifer. Based on the SI report, the groundwater investigation work done at the Woolfolk Chemical site and EPD's previous attempt to collect groundwater at the site, EPD assumed that the shallow groundwater would be 25 to 35 feet below ground surface. EPD tried to collect groundwater at the lowest elevation on the Vienna Street Dump site (Sample Location #1), which was located at the northwest corner near Bay Creek. EPD went down 38 feet and did not hit groundwater. There appeared to be some evidence of water present at 38 feet, but EPD could not go any deeper. As the core barrels tubes were pushed down into the hole, the sides of the hole would collapsed back into the hole causing the core barrel tube to fill up before reach the bottom of the hole. EPD could not remove any additional soil from the hole. The clayey sand was dry, until there was some moisture at approximately 37 feet. EPD attempted to collect groundwater at another location, approximately 80 feet east of Sample #1, without using the core barrels tubes. EPD used push rods with a plug at the end. EPD could only go to 25 feet at this location. The Geoprobe unit was unable to push additional rods into the ground and it was nearly impossible to extract the rods. There was no indication of moisture at this depth. A decision was made not to proceed any further to prevent injury to personnel and damaging the Geoprobe unit.

CONCLUSIONS:

EPD informed Carolyn Thomson of U.S. EPA that our direct push equipment (Geoprobe) was not capable of collecting the groundwater samples at this site, due the limitations of the equipment. If groundwater samples are necessary to evaluate this pathway, alternative methods of groundwater collection will be required, such as installing groundwater-monitoring wells using hollow-stem auger drilling equipment.

PHOTOGRAPHS: Six (6) Pictures

REVIEWED BY: G. Yardman

ATTACHMENT: A - Site Diagram: Sample Location Map

File: Vienna Street Dump, Fort Valley (R)
R:\JIMS\SIFOLDER\VS11201.TRP.DOC

COUNTY: Peach

NO. 1 OF 6

SITE NAME:

Vienna Street Dump

DATE: 12\12\00

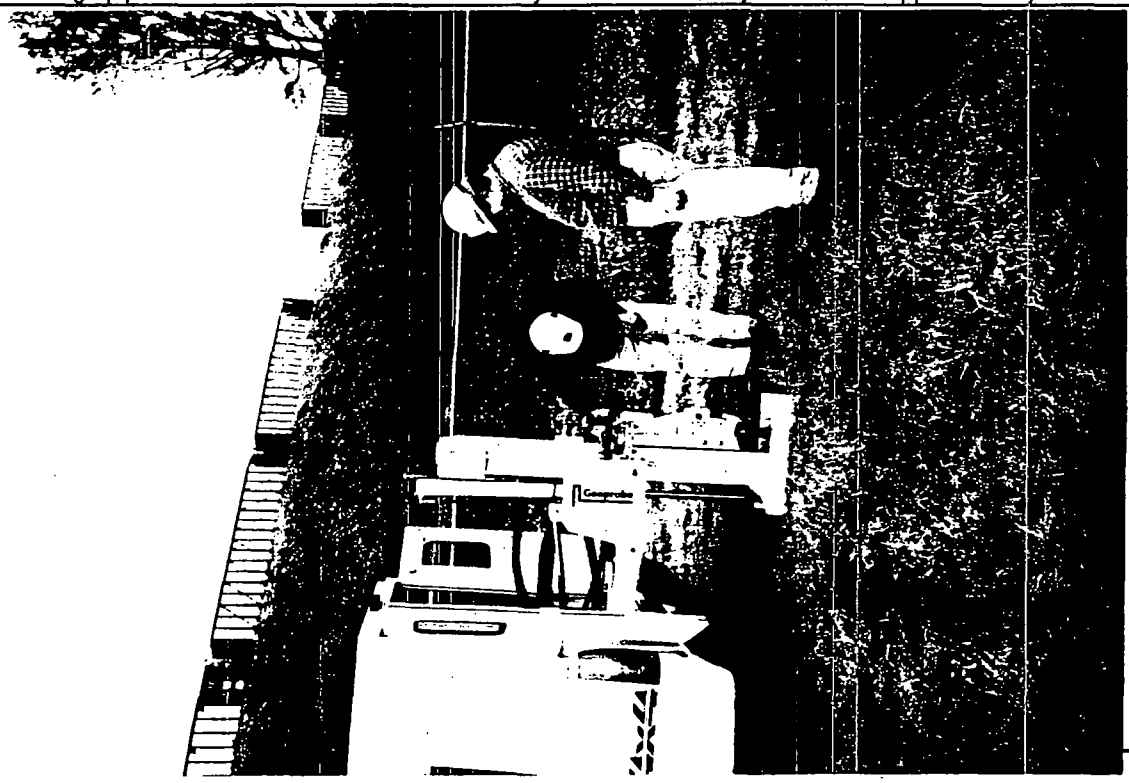
TIME: 10:23 a.m.

DIR. FACING: N

PHOTO BY:

James Sliwinski

EXPLANATION: Sample location for groundwater Sample #1 on the northern edge of the site just east of the Norfolk and Southern Railroad. This location was the lowest elevation at the site and approximately 40' west of the wastewater treatment plant discharge pipe and 12' from the fence. The nearby surface water, Bay Creek, was approximately 15' below ground surface.



COUNTY: Peach

NO. 2 OF 6

SITE NAME:

Vienna Street Dump

DATE: 12\12\00

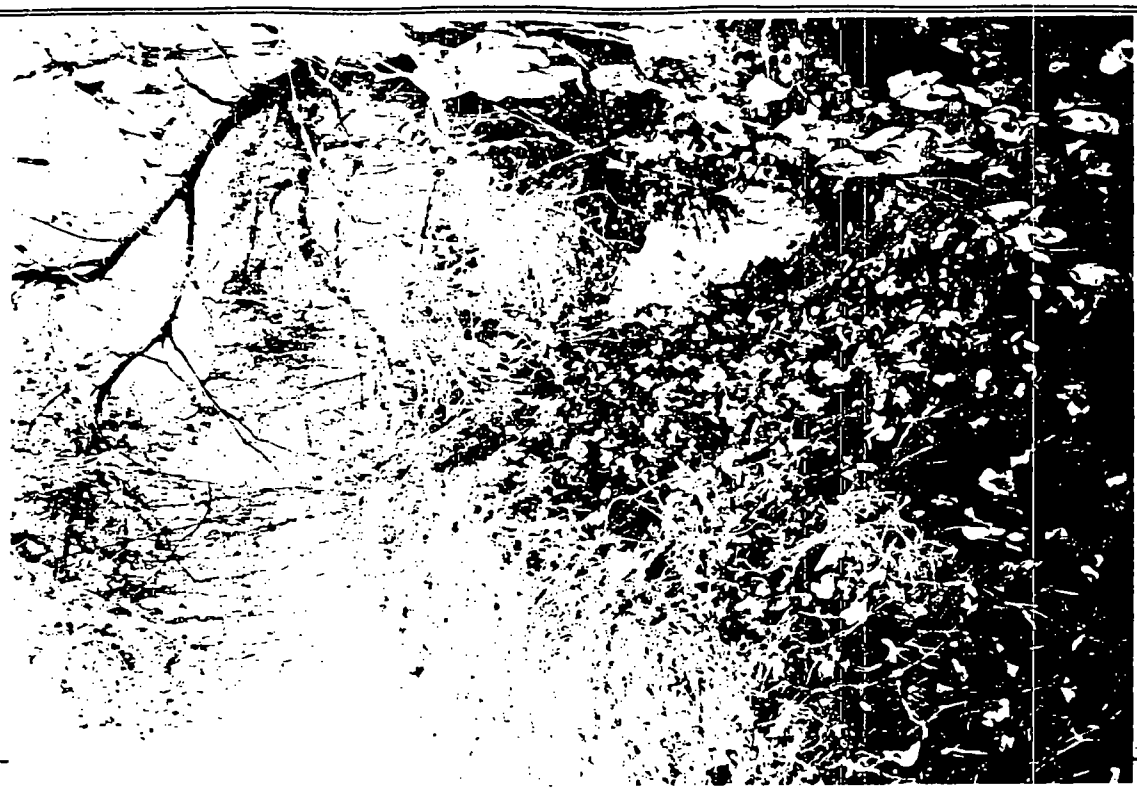
TIME: 10:20 a.m.

DIR. FACING: N

PHOTO BY:

James Sliwinski

EXPLANATION: Sample location for groundwater Sample #1 on the northern edge of the site just east of the Norfolk and Southern Railroad. This location was the lowest elevation at the site and approximately 40' west of the wastewater treatment plant discharge pipe and 12' from the fence. The nearby surface water, Bay Creek, was approximately 15' below ground surface.



COUNTY: Peach

NO. 3 OF 6

SITE NAME:

Vienna Street Dump

DATE: 12\12\00

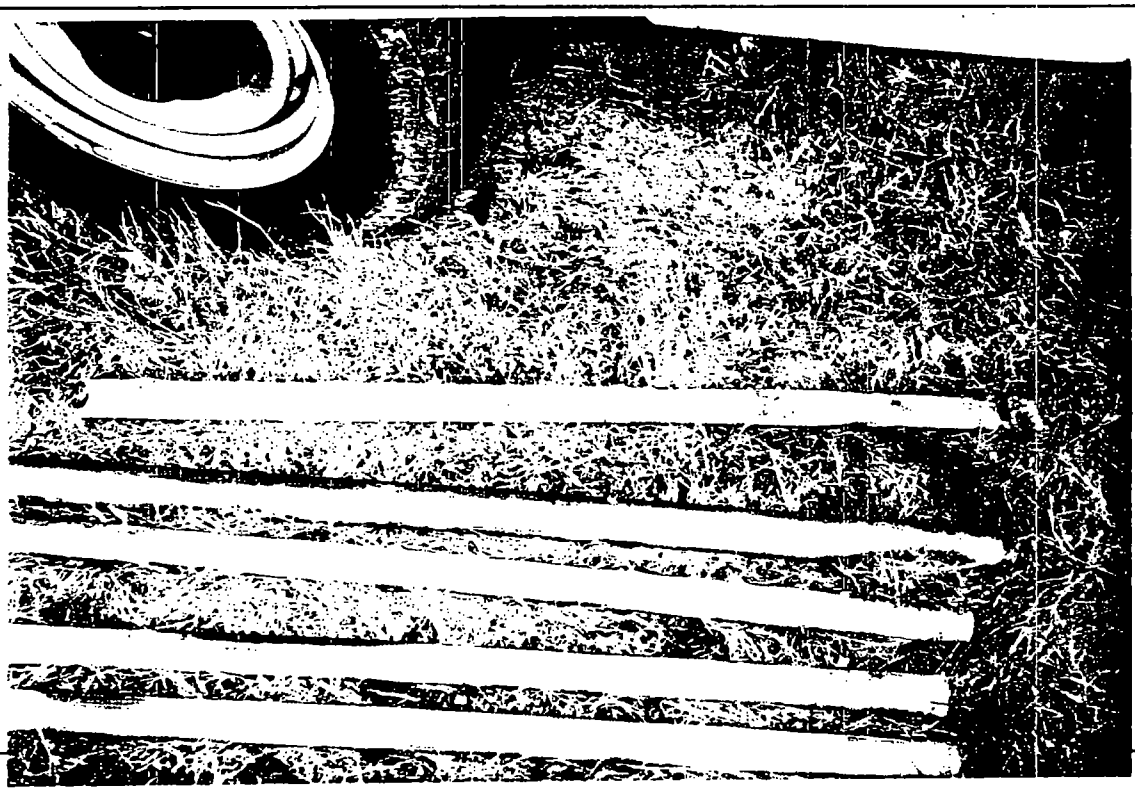
TIME: 10:31 a.m.

DIR. FACING: NW

PHOTO BY:

James Sliwinski

EXPLANATION: The nearby surface water, Bay Creek, from the wastewater treatment plant's discharge pipe. The creek is approximately 15' below ground surface.



COUNTY: Peach

NO. 4 OF 6

SITE NAME:

Vienna Street Dump

DATE: 12\12\00

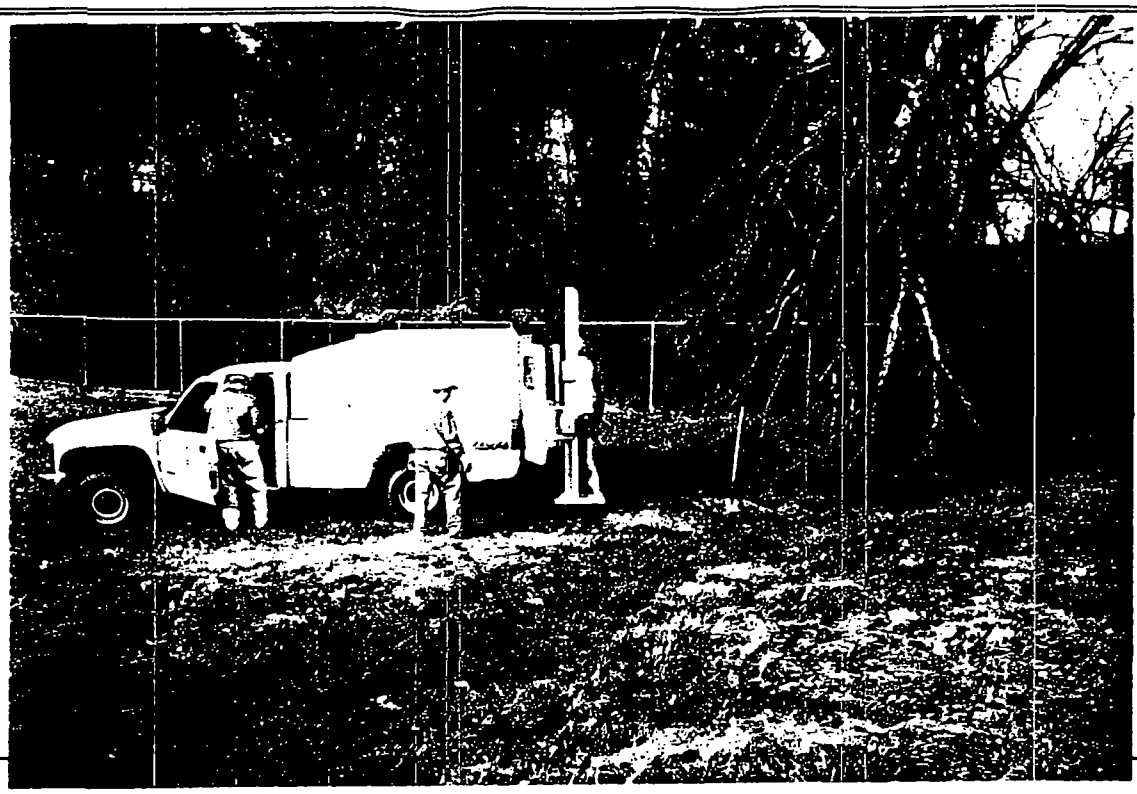
TIME: 11:50 a.m.

DIR. FACING:

PHOTO BY:

James Sliwinski

EXPLANATION: Subsurface soil at Sample #1. Soil matrix from left to right. 0 – 4' depth: topsoil, 4-6' depth: top soil, 6-8' depth: reddish brown sandy clay, 8-12' depth: reddish brown sandy clay, 12-16' depth: reddish brown sandy clay, 16-18' depth: reddish brown sandy clay, 18-20' depth: tan sand, 20-35' depth: tan clayey sand, 35-37' depth: tan clayey sand with some moisture.



COUNTY: Peach

NO. 5 OF 6

SITE NAME:

Vienna Street Dump

DATE: 12\12\00

TIME: 3:05 p.m.

DIR. FACING: N

PHOTO BY:

James Sliwinski

EXPLANATION: Sample location for groundwater Sample #2 on the northern edge of the site. This location was approximately 80' east of the Sample #1 and 20' from the chain-linked fence.

COUNTY: Peach

NO. 6 OF 6

SITE NAME:

Vienna Street Dump

DATE: 12\12\00

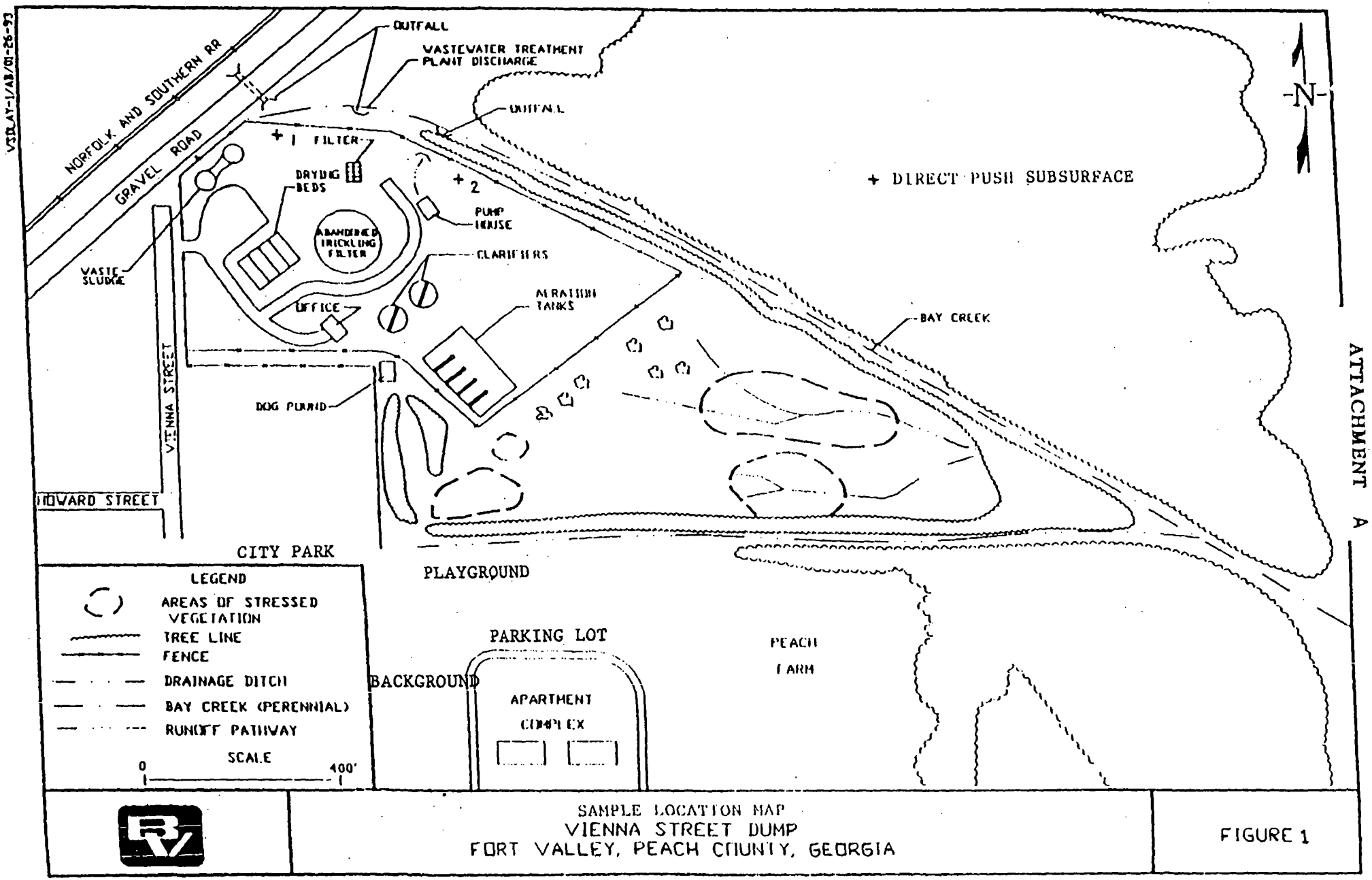
TIME: 3:00 p.m.

DIR. FACING: NW

PHOTO BY:

James Sliwinski

EXPLANATION: Sample location for groundwater Sample #2 on the northern edge of the site. This location was approximately 80' east of the Sample #1 and 20' from the chain-linked fence.



SAMPLE LOCATION MAP
VIENNA STREET DUMP
FORT VALLEY, PEACH COUNTY, GEORGIA

FIGURE 1

ATTACHMENT A

V3DLAT-1/AB/01-26-93

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 4, SCIENCE and ECOSYSTEM SUPPORT DIVISION
ATHENS, GA 30605-2720

4-SESD-EIB

JUN 15 2001

Reference No.: 8

MEMORANDUM

SUBJECT: Report for Vienna Street Dump
Fort Valley, GA
SESD Project No. 01-0444

FROM: Brian Striggow, Environmental Protection Specialist
Superfund and Air Section

THRU: Archie Lee, Chief
Superfund and Air Section

TO: Carolyn Thompson
South Site Management Branch
Waste Management Division

The attached document is the report for the temporary well installation and sampling at the Vienna Street Dump. In the interest of expediting the HRS work dependent on this report, a copy is being sent to:

RF Weston, Inc.
Attn: Jo Ellen Johnson
Suite 200
5405 Metric Pl.
Norcross, GA 30092

If you have any questions about this report, please contact me at (706) 355-8619 or at email *striggow.brian@epamail.epa.gov*

Vienna Street Dump
Fort Valley, Georgia

Field Investigation
Final Report
June 2001

United States Environmental Protection Agency
Region 4
Science and Ecosystem Support Division
Enforcement and Investigations Branch
Superfund and Air Section

Introduction

During the weeks of March 19, 2001, and April 23, 2001 personnel from the US-EPA Region 4 Science and Ecosystem Support Division (SESD), Superfund and Air Section conducted a field investigation at, and in the area surrounding, the Vienna Street Dump in Fort Valley, Georgia. The efforts of SESD personnel were augmented by support from ESAT and START contract personnel.

This investigation was requested by the US-EPA Region 4 Waste Management Division, South Site Management Branch. The goal of the investigation was to collect and analyze groundwater samples from the Vienna Street Dump area to support the Hazard Ranking System (HRS) decision making process.

Background

The Vienna Street Dump is located on property owned by the city of Fort Valley east of the downtown area, to the East of the Norfolk and Southern RR and South of Bay Creek. A wastewater treatment plant was established on the western end of the property in 1935. The eastern portion of the property was used from approximately 1940 to 1970 to dispose of municipal and industrial waste. Local residents have suspected that chemical wastes from various local industries, including Blue Bird Body and Woolfolk Chemical, may have been buried at the site.

In 1994-1995, Black and Veatch conducted a Site Investigation (SI) for the purpose of determining the nature and extent of contamination at the site. The groundwater evaluation at that time consisted of sampling and analysis of a presumed upgradient and downgradient potable well located 1.5 mile NNE of the site and 0.75 mile ESE of the site respectively. While these analyses indicated no elevated levels of contaminants, a recent review of the SI report revealed that the two potable wells sampled comprised an inadequate evaluation of potential groundwater pathways.

The State of Georgia Department of Natural Resources, Environmental Protection Division conducted an investigation in October 2000 to gather further data and better characterize any groundwater contamination. At this time an attempt was made using Direct Push Technology (DPT) equipment to establish temporary wells adjacent to the landfill. This equipment was able to reach depths of 25' Below Land Surface (BLS), but could not obtain groundwater at this depth. The DPT work was subsequently abandoned.

The Blue Bird Body Company facilities are to the north and northwest of the site, immediately across the Norfolk Southern RR. The current Blue Bird parking area Northwest of the site has been investigated as a RCRA landfill. There is an existing monitoring well field at this site which has shown trichlorofluoromethane(TCFM) and tetrachloroethene in the groundwater. Based on piezometric data, groundwater flow was determined to be flowing generally east from this site.

Sampling and Methodology

The presumed area of buried material is roughly indicated on Figure 1, Vienna Street Dump Temp.

Well Locations. The delineation of this area is based on:

a. The discovery of buried municipal waste at the TW1 well site during drilling.
b. The discovery of buried metal and debris immediately to the west of the TW3 well site during road clearing.
c. Stressed vegetation between the TW1 site and Bay Creek.
d. Exposed debris along the banks of Bay Creek.

The area was not defined by geophysical studies and only to a limited extent by history. The western boundary of the buried material is not well delineated.

A planned background well on the south end of the wastewater treatment plant property which did not yield water at the design depth (75') was abandoned and an existing well on the nearby Blue Bird landfill property was substituted as a background well. The background well is in the presumed upgradient direction of the Blue Bird and Vienna Street Dump sites. A control well was installed between the Blue Bird landfill and the Vienna Street Dump to isolate the effects of that site. Two temporary wells (TW1 and TW3) were installed south and east of the dump area to obtain groundwater potentially influenced by contamination from the unlined dump. An additional well site (TW2) Southeast of the dump had been identified as a backup location in the event of access problems with the other wells, but was not drilled or installed. The location of the wells is indicated on Figure 1, Vienna Street Dump Temp. well locations. Physical data on the wells for this project appears in Table 1, Well and Water Level Data. Auger cuttings returned to the surface were logged during drilling operations. A crossection summary of this information appears in Figure 2, Well Cross Sections. Copies of the drilling and sampling logbook are attached to this report.

The control well was installed on March 20, 2001. Adverse weather prevented additional work at that time. The casing was grouted in place and the surface finished with a soil berm. The TW1 and TW3 wells were installed on April 23 and 24, 2001, respectively. All wells were sampled on April 25, 2001. Drummed drill cuttings on site were also sampled on this date. All samples were analyzed for volatile organics, extractable organics, pesticides, and metals.

All samples were collected and handled in accordance with the US-EPA, Region 4, SESD, Environmental Investigation Standard Operating Procedures and Quality Assurance Manual, May 1, 1996. All samples were analyzed in accordance with the Analytical Support Branch Operations and Quality Control Manual, December, 1997.

Analytical data on the ground water samples appears in Table 2, Ground water organic compound analyses results, and Table 3, Ground water metals analyses results. Analytical data on the drill cuttings appears in Table 4, Drill cuttings organic compound analyses results, and Table 3, Drill cuttings metals analyses results. Compounds analyzed for, but not detected in any sample are not included in these tables. The original lab data with all analytes listed is attached to this report.

Summary

A number of organic compounds were detected in the background well, including TCFM, which has been associated with the Bluebird landfill. Other than Caprolactam, none of these

Figure 1. Vienna Street Dump Temp. Well Locations

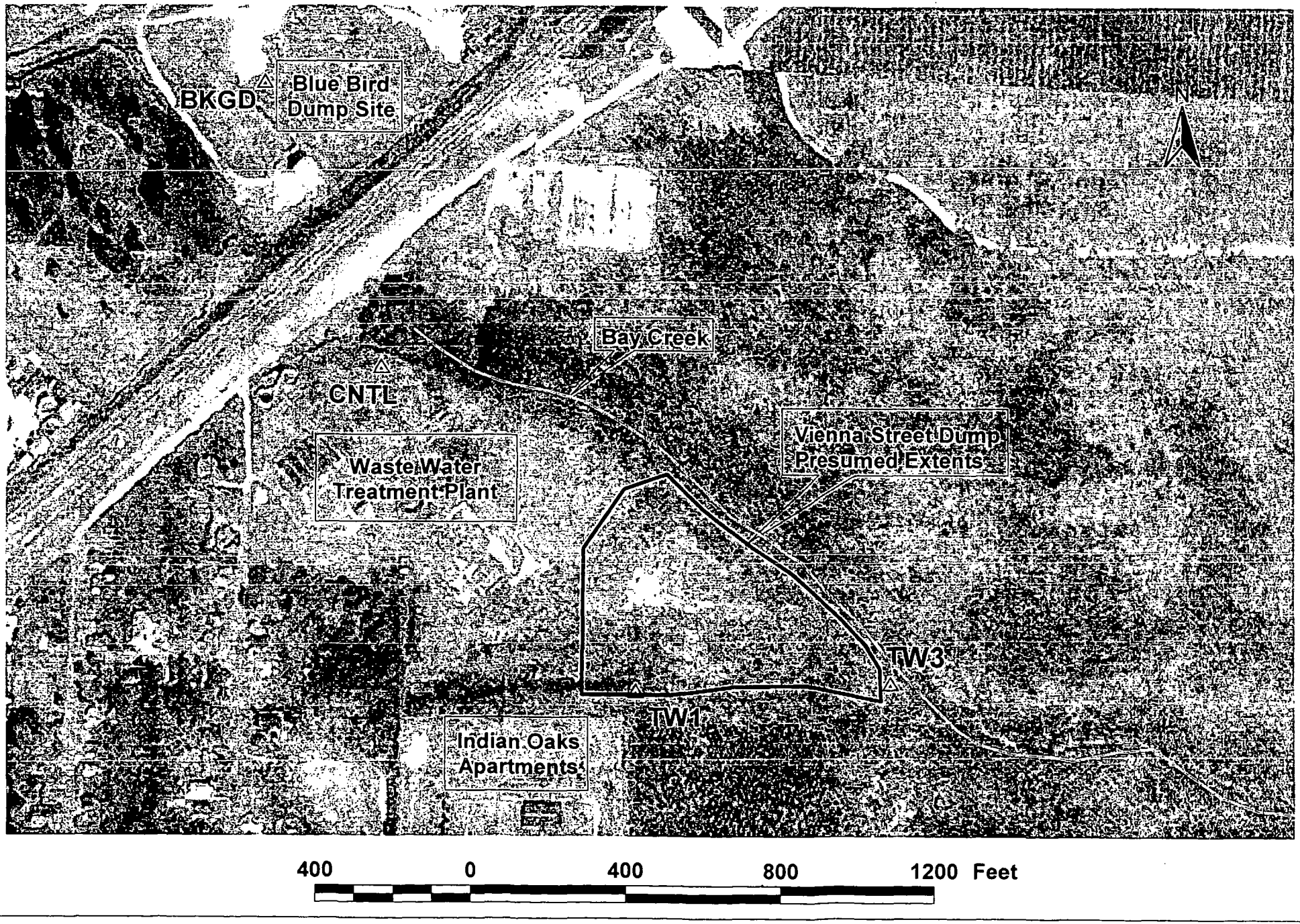
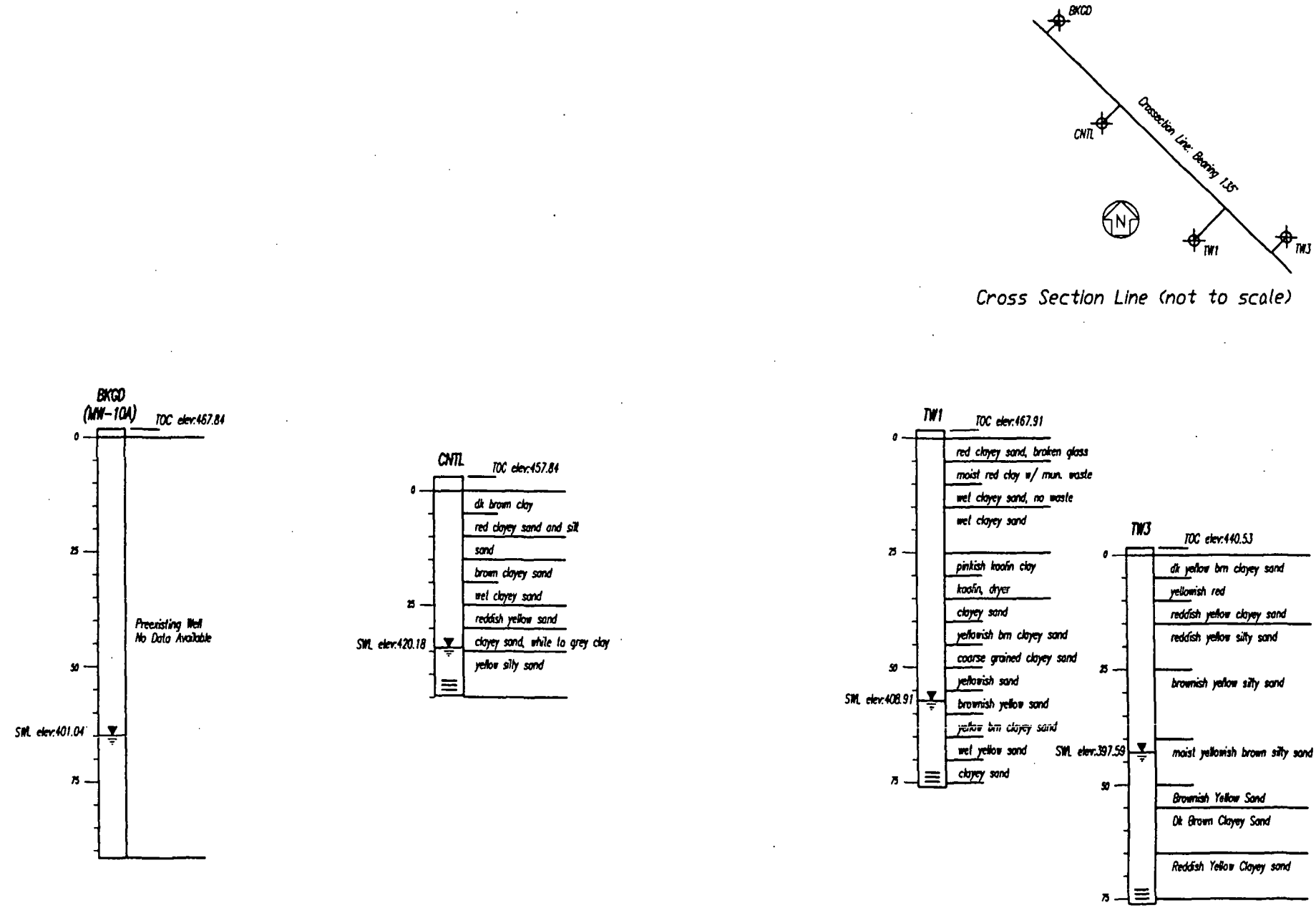


Figure 2. Well Cross Sections



Scale:
Vertical: 1" = 30'
Horizontal 1" = 300'

Vienna Street Dump Figure 2 Well X-sections	REV. DATE REV. DATE	DESIGNED	SCALE noted
		DRAWN	Reference
		CHECKED	PROJECT No.
		APPROVED	DATE
EPA Science and Ecosystem Support Division	980 College Station Road Athens, Georgia	DWG NO. vsdxsect.dwg	REV. 0

compounds are found in the other wells. The pesticide Alpha-BHC is found in wells TW1 and TW3 at concentrations of 0.043 and 0.039 ppb respectively. Dieldrin was found in TW3 at a concentration of 0.051 ppb. Several miscellaneous extractable compounds and volatile organic compounds were also found in the TW1 and TW3 wells that were not seen in the background or control wells. Chromium was found in the CNTL and TW1 wells (200 and 130 ppb respectively) at concentrations in excess of the drinking water MCL of 100 ppb. Lead was also found in TW2 at a concentration of 48 ppb which is in excess of the drinking water MCL of 15ppb. Note that the very high turbidities of the temporary well samples (reported in Table 1, Well and water level data) may have contributed to elevated metals results.

As the analytical data is being forwarded for further review, the results will not be commented on at further length here. The well cross section information does deserve some comment as it relates to assumptions regarding ground water flow. An earlier study at the Blue Bird site indicated a generally eastward groundwater flow. The surficial aquifer at the Vienna Street Dump would be expected to be following local terrain (sloping Northeast) or following the general terrain in flowing in the direction of Bay Creek(Eastsoutheast). Either of these conclusions might be supported by the static water level information reported in Table 1, Well and water level data, and Figure 2, Well cross sections, if the apparently anomalously high water level of the control well (CNTL) is ignored. It is plausible that the CNTL well screen was placed in a small aquifer perched on a discontinuous clay layer. Comparison of the analytical results from the background well and the dump temporary wells seems to indicate little linking of contamination between the sites. Should this become an issue in the future, though, a control well should probably be drilled to a greater depth at near the same location to ensure that the relevant ground water conduit is sampled.

References

1. United States Environmental Protection Agency, Region 4, Science and Ecosystem Support Division, Environmental Investigation Standard Operating Procedures and Quality Assurance Manual, May 1, 1996.

2. United States Environmental Protection Agency, Region 4, Science and Ecosystem Support Division, Analytical Support Branch Operations and Quality Control Manual, December, 1997.

3. United States Environmental Protection Agency, USEPA Current Drinking Water Standards, http://www.epa.gov/safewater/mcl.html

4. Black and Veatch, Site Inspection Report for Vienna Street Dump, January 1995

5. Georgia Department of Natural Resources, Environmental Protection Division. Trip Report, Vienna Street Dump, January 9, 2001

Table 1. Well and water level data.

Well Designation:	BKGD	CNTL	TW1	TW3
Description:	Background Well	Temp Control Well	Temp Well 1	Temp Well 3
	Blue Bird MW-10A	NW end of WWTP	South end of dump	East end of dump
			nr Indian Oaks apts	nr Bay Creek
Construction:	Permanent, 2"nom PVC	Temporary, 2"nom SS	Temporary, 2"nom SS	Temporary, 2"nom SS
Sample Turbidity (NTU)	5	233	112	>>500
Total Depth:	93.5	47.7	77.7	77.7
Water Level:	66.8	37.3	59.0	44.5
Elevation, TOC:	467.84	457.48	467.91	442.09
Elevation, SWL:	401.04	420.18	408.91	397.59
Elevation, Ground Surface:	466*	454.4	466.15	440.53
Lattitude:	32°33'43.280"	32°33'36.092"	32°33'28.014"	32°33'28.408"
Longitude:	83°52'31.537"	83°52'27.811"	83°52'19.890"	83°52'12.170"
UTM17 X coordinate:	230016	230108	230308	230509
UTM17 Y coordinate:	3606193	3605969	3605714	3605721

* estimated
Elevation Datum: NAVD88
Horizontal Datum: NAD27

Table 2. Ground water organic compound analyses results.

	Designation:	BKGD		CNTL		TW1		TW3		
PESTICIDES SCAN	Units									CAS #
ALPHA-BHC	UG/L		U		U	0.043	J	0.039	J	319-84-6
DIELDRIN	UG/L		U		U		U	0.051	J	60-57-1
EXTRACTABLES SCAN										
CAPROLACTAM	UG/L	85			U	600		40		
MISCELLANEOUS EXTRACTABLES										
DECANOIC ACID, METHYL ESTER	UG/L	100	JN		NR		NR		NR	
DIAZADIKETOCYCLOTETRADECANE	UG/L		NR		NR	300	JN		NR	
DIMETHYLPHENYLBENZENEACETAMIDE	UG/L		NR		NR	100	JN		NR	
HEXADECANOIC ACID, METHYL ESTER	UG/L	30	JN		NR		NR		NR	
OCTAADECANOIC ACID, METHYL ESTER	UG/L	10	JN		NR		NR		NR	
OCTADECADIENOIC ACID, METHYL ESTER	UG/L	10	JN		NR		NR		NR	
OCTADECANOIC ACID, METHYL ESTER	UG/L	20	JN		NR		NR		NR	
OCTADECENOIC ACID, METHYL ESTER	UG/L	100	JN		NR		NR		NR	
OLEIC ACID	UG/L	20	JN		NR		NR		NR	
TETRADECANOIC ACID, METHYL ESTER	UG/L	30	JN		NR		NR		NR	
VOLATILES SCAN										
1,2-DICHLOROPROPANE	UG/L		U		U	0.89	J	8.6	A	78-87-5
1,4-DICHLOROBENZENE	UG/L		U		U	0.71	J		U	106-46-7
CIS-1,2-DICHLOROETHENE	UG/L		U		U	0.6	J		U	156-59-4
TRICHLOROFLUOROMETHANE	UG/L	0.66	J		U		U		U	75-69-4

Data Qualifiers

A-Average value. NA-Not analyzed. NAI-Interferences. J-Estimated value.
N-Presumptive evidence of presence of material.
NR-Not Reported
K-Actual value is known to be less than value given.
L-Actual value is known to be greater than value given.
U-Material was analyzed for but not detected.
R-QC indicates that data unusable. Compound may or may not be present. Resampling and reanalysis is necessary for verification.
C-Confirmed by GCMS.
1.When no value is reported, see chlordane constituents.
2.Constituents or metabolites of technical chlordane.

Table 3. Ground water metals analyses results.

	Designation:	BKGD		CNTL		TW1		TW3		
										CAS #
	Units									
ALUMINUM	UG/L	120	A	2300		23000		4400		7429-90-5
ARSENIC	UG/L		U		U	19		19		7440-38-2
BARIUM	UG/L	26	A	67		38		210		7440-39-3
CADMIUM	UG/L		U		U	0.62		0.74		7440-43-9
CALCIUM	MG/L	0.65	A	23		9		22		7440-70-2
CHROMIUM	UG/L		U	200		130		40		7440-47-3
COBALT	UG/L		U		U		U	12		7440-48-4
COPPER	UG/L		U		U	72			U	7440-50-8
IRON	MG/L		U	5.2		120		29		7439-89-6
LEAD	UG/L		U	4.2		48		12		7439-92-1
MAGNESIUM	MG/L	0.82	A	2.8		2.7		9.5		7439-95-4
MANGANESE	UG/L		U	100		320		840		7439-96-5
MOLYBDENUM	UG/L		U		U	7.1		35		7439-98-7
NICKEL	UG/L		U	230		70		22		7440-02-0
POTASSIUM	MG/L		U	4.3		6.3		4.5		7440-09-7
SELENIUM	UG/L		U		U	11		4.3		7782-49-2
SODIUM	MG/L	2.3	A	5.4		32		29		7440-23-5
STRONTIUM	UG/L	7.9	A	99		46		210		7440-24-6
THALLIUM	UG/L		U		U	1.2			U	7440-28-0
TITANIUM	UG/L		U	53		370		110		7440-32-6
VANADIUM	UG/L		U	12		220		61		7440-62-2
YTTRIUM	UG/L	4.7	A	14		48		93		7440-65-5
ZINC	UG/L	16	AJ	63		210		57		7440-66-6

Data Qualifiers

A-Average value. NA-Not analyzed. NAI-Interferences. J-Estimated value.
N-Presumptive evidence of presence of material.
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L-Actual value is known to be greater than value given.
U-Material was analyzed for but not detected.
R-QC indicates that data unusable. Compound may or may not be present. Resampling and reanalysis is necessary for verif
C-Confirmed by GCMS.
1.When no value is reported, see chlordane constituents.
2.Constituents or metabolites of technical chlordane.

Table 4. Drill cuttings organic compound analyses results.

	Designation:	CNTLCUT		TW1CUT		TW3CUT		
	Units							CAS #
PESTICIDES SCAN								
METHOXYCHLOR	UG/KG	16	JN		U		U	
VOLATILES SCAN								
TOLUENE	UG/KG		U	1.3	J	4.1		108-88-3

Data Qualifiers

A-Average value. NA-Not analyzed. NAI-Interferences. J-Estimated value.
N-Presumptive evidence of presence of material.
NR-Not Reported
K-Actual value is known to be less than value given.
L-Actual value is known to be greater than value given.
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R-QC indicates that data unusable. Compound may or may not be present. Resampling and reanalysis is necessary for verificatio
C-Confirmed by GCMS.
1.When no value is reported, see chlordane constituents.
2.Constituents or metabolites of technical chlordane.

Table 5. Drill cuttings metals analyses results.

	Designation:	CNTLCUT		TW1CUT		TW3CUT		
	Units							
METALS SCAN								CAS #
ALUMINUM	MG/KG	1100	A	2200		1700		7429-90-5
ARSENIC	MG/KG	1	A	1.2		1		7440-38-2
BARIUM	MG/KG	5.6	A	4.8		4.5		7440-39-3
CALCIUM	MG/KG	95	A	90		140		7440-70-2
CHROMIUM	MG/KG	5	A	10		8.6		7440-47-3
COBALT	MG/KG	0.62	A	0.64			U	7440-48-4
COPPER	MG/KG	2.9	A	5.8		5.6		7440-50-8
IRON	MG/KG	4600	A	6500		5300		7439-89-6
LEAD	MG/KG	5.2	A	5.2		5.5		7439-92-1
MANGANESE	MG/KG	36	A	28		24		7439-96-5
NICKEL	MG/KG	2.1	A	1.6		1.8		7440-02-0
STRONTIUM	MG/KG	0.62	A	0.69		0.73		7440-24-6
TITANIUM	MG/KG	22	A	26		24		7440-32-6
VANADIUM	MG/KG	13	A	18		17		7440-62-2
YTTRIUM	MG/KG	4.5	A	9.6		2.4		7440-65-5
ZINC	MG/KG	22	A	23		22		7440-66-6

Data Qualifiers

A-Average value. NA-Not analyzed. NAI-Interferences. J-Estimated value.
N-Presumptive evidence of presence of material.
NR-Not Reported
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C-Confirmed by GCMS.
1.When no value is reported, see chlordane constituents.
2.Constituents or metabolites of technical chlordane.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4

Science and Ecosystem Support Division
980 College Station Road
Athens, Georgia 30605-2720

MEMORANDUM

Date: 05/16/2001

Subject: Results of VOLATILES Sample Analysis
01-0444 Vienna Street Dump
Fort Valley, GA

From: Allen, Frank

To: Striggow.Brian

Thru: Cosgrove, Bill
Chief,Organic Chemistry Section
Analytical Support Branch

Attached are the results of analysis of samples collected as part of the subject project. If you have any questions, please contact me.

ATTACHMENT

Sample 5377 FY 2001 Project: 01-0444

VOLATILES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: BKGD /

Media: GROUNDWATER

Produced by: Allen, Frank

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/25/2001 10:38

Ending:

RESULTS	UNITS	ANALYTE
1.0U	UG/L	DICHLORODIFLUOROMETHANE
1.0U	UG/L	CHLOROMETHANE
1.0U	UG/L	BROMOMETHANE
1.0U	UG/L	VINYL CHLORIDE
1.0U	UG/L	CHLOROETHANE
0.66J	UG/L	TRICHLOROFLUOROMETHANE
1.0U	UG/L	1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)
1.0U	UG/L	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)
5.0U	UG/L	METHYLENE CHLORIDE
1.0U	UG/L	METHYL T-BUTYL ETHER (MTBE)
25.U	UG/L	ACETONE
2.5U	UG/L	CARBON DISULFIDE
1.0U	UG/L	METHYL ACETATE
1.0U	UG/L	1,1-DICHLOROETHANE
1.0U	UG/L	CIS-1,2-DICHLOROETHENE
1.0U	UG/L	2,2-DICHLOROPROPANE
25.U	UG/L	METHYL ETHYL KETONE
1.0U	UG/L	BROMOCHLOROMETHANE
1.0U	UG/L	TRANS-1,2-DICHLOROETHENE
1.0U	UG/L	CHLOROFORM
1.0U	UG/L	1,2-DICHLOROETHANE
1.0U	UG/L	1,1,1-TRICHLOROETHANE
1.0U	UG/L	CYCLOHEXANE
1.0U	UG/L	1,1-DICHLOROPROPENE
1.0U	UG/L	CARBON TETRACHLORIDE
1.0U	UG/L	BROMODICHLOROMETHANE
2.5U	UG/L	METHYL ISOBUTYL KETONE
1.0U	UG/L	1,2-DICHLOROPROPANE
1.0U	UG/L	METHYLCYCLOHEXANE
1.0U	UG/L	DIBROMOMETHANE
1.0U	UG/L	TRANS-1,3-DICHLOROPROPENE
1.0U	UG/L	TRICHLOROETHENE (TRICHLOROETHYLENE)
1.0U	UG/L	BENZENE
1.0U	UG/L	DIBROMOCHLOROMETHANE
1.0U	UG/L	1,1,2-TRICHLOROETHANE
1.0U	UG/L	CIS-1,3-DICHLOROPROPENE
1.0U	UG/L	BROMOFORM
1.0U	UG/L	BROMOBENZENE
1.0U	UG/L	1,1,2,2-TETRACHLOROETHANE
1.0U	UG/L	TETRACHLOROETHENE (TETRACHLOROETHYLENE)
1.0U	UG/L	1,3-DICHLOROPROPANE
2.5U	UG/L	METHYL BUTYL KETONE
1.0U	UG/L	TOLUENE
1.0U	UG/L	CHLOROBENZENE
1.0U	UG/L	1,1,1,2-TETRACHLOROETHANE
1.0U	UG/L	ETHYL BENZENE
1.0U	UG/L	(M- AND/OR P-)XYLENE
1.0U	UG/L	O-XYLENE
1.0U	UG/L	STYRENE
1.0U	UG/L	1,2,3-TRICHLOROPROPANE
1.0U	UG/L	O-CHLOROTOLUENE
1.0U	UG/L	P-CHLOROTOLUENE
1.0U	UG/L	1,3-DICHLOROBENZENE
1.0U	UG/L	1,4-DICHLOROBENZENE
1.0U	UG/L	1,2-DICHLOROBENZENE
1.0U	UG/L	1,2-DIBROMOETHANE (EDB)
1.0U	UG/L	ISOPROPYLBENZENE
1.0U	UG/L	N-PROPYLBENZENE
1.0U	UG/L	1,3,5-TRIMETHYLBENZENE
1.0U	UG/L	TERT-BUTYLBENZENE
1.0U	UG/L	1,2,4-TRIMETHYLBENZENE
1.0U	UG/L	SEC-BUTYLBENZENE
1.0U	UG/L	P-ISOPROPYLTOLUENE
1.0U	UG/L	N-BUTYLBENZENE
5.0U	UG/L	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)
1.0U	UG/L	1,2,4-TRICHLOROBENZENE
1.0U	UG/L	HEXACHLORO-1,3-BUTADIENE
1.0U	UG/L	1,2,3-TRICHLOROBENZENE

-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5378 FY 2001 Project: 01-0444

VOLATILES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: CNTL /

Media: GROUNDWATER

Produced by: Allen, Frank

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/25/2001 13:10

Ending:

RESULTS	UNITS	ANALYTE
1.0U	UG/L	DICHLORODIFLUOROMETHANE
1.0U	UG/L	CHLOROMETHANE
1.0U	UG/L	BROMOMETHANE
1.0U	UG/L	VINYL CHLORIDE
1.0U	UG/L	CHLOROETHANE
1.0U	UG/L	TRICHLOROFLUOROMETHANE
1.0U	UG/L	1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)
1.0U	UG/L	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)
5.0U	UG/L	METHYLENE CHLORIDE
1.0U	UG/L	METHYL T-BUTYL ETHER (MTBE)
25.U	UG/L	ACETONE
2.5U	UG/L	CARBON DISULFIDE
1.0U	UG/L	METHYL ACETATE
1.0U	UG/L	1,1-DICHLOROETHANE
1.0U	UG/L	CIS-1,2-DICHLOROETHENE
1.0U	UG/L	2,2-DICHLOROPROPANE
25.U	UG/L	METHYL ETHYL KETONE
1.0U	UG/L	BROMOCHLOROMETHANE
1.0U	UG/L	TRANS-1,2-DICHLOROETHENE
1.0U	UG/L	CHLOROFORM
1.0U	UG/L	1,2-DICHLOROETHANE
1.0U	UG/L	1,1,1-TRICHLOROETHANE
1.0U	UG/L	CYCLOHEXANE
1.0U	UG/L	1,1-DICHLOROPROPENE
1.0U	UG/L	CARBON TETRACHLORIDE
1.0U	UG/L	BROMODICHLOROMETHANE
2.5U	UG/L	METHYL ISOBUTYL KETONE
1.0U	UG/L	1,2-DICHLOROPROPANE
1.0U	UG/L	METHYLCYCLOHEXANE
1.0U	UG/L	DIBROMOMETHANE
1.0U	UG/L	TRANS-1,3-DICHLOROPROPENE
1.0U	UG/L	TRICHLOROETHENE (TRICHLOROETHYLENE)
1.0U	UG/L	BENZENE
1.0U	UG/L	DIBROMOCHLOROMETHANE
1.0U	UG/L	1,1,2-TRICHLOROETHANE
1.0U	UG/L	CIS-1,3-DICHLOROPROPENE
1.0U	UG/L	BROMOFORM
1.0U	UG/L	BROMOBENZENE
1.0U	UG/L	1,1,2,2-TETRACHLOROETHANE
1.0U	UG/L	TETRACHLOROETHENE (TETRACHLOROETHYLENE)
1.0U	UG/L	1,3-DICHLOROPROPANE
2.5U	UG/L	METHYL BUTYL KETONE
1.0U	UG/L	TOLUENE
1.0U	UG/L	CHLOROBENZENE
1.0U	UG/L	1,1,1,2-TETRACHLOROETHANE
1.0U	UG/L	ETHYL BENZENE
1.0U	UG/L	(M- AND/OR P-)XYLENE
1.0U	UG/L	O-XYLENE
1.0U	UG/L	STYRENE
1.0U	UG/L	1,2,3-TRICHLOROPROPANE
1.0U	UG/L	O-CHLOROTOLUENE
1.0U	UG/L	P-CHLOROTOLUENE
1.0U	UG/L	1,3-DICHLOROBENZENE
1.0U	UG/L	1,4-DICHLOROBENZENE
1.0U	UG/L	1,2-DICHLOROBENZENE
1.0U	UG/L	1,2-DIBROMOETHANE (EDB)
1.0U	UG/L	ISOPROPYLBENZENE
1.0U	UG/L	N-PROPYLBENZENE
1.0U	UG/L	1,3,5-TRIMETHYLBENZENE
1.0U	UG/L	TERT-BUTYLBENZENE
1.0U	UG/L	1,2,4-TRIMETHYLBENZENE
1.0U	UG/L	SEC-BUTYLBENZENE
1.0U	UG/L	P-ISOPROPYLTOLUENE
1.0U	UG/L	N-BUTYLBENZENE
5.0U	UG/L	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)
1.0U	UG/L	1,2,4-TRICHLOROBENZENE
1.0U	UG/L	HEXACHLORO-1,3-BUTADIENE
1.0U	UG/L	1,2,3-TRICHLOROBENZENE

ı-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
:-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
t-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5379 FY 2001 Project: 01-0444

VOLATILES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: TW1 /

Media: GROUNDWATER

Produced by: Allen, Frank

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/25/2001 15:30

Ending:

RESULTS	UNITS	ANALYTE	RESULTS	UNITS	ANALYTE
1.0U	UG/L	DICHLORODIFLUOROMETHANE	1.0U	UG/L	CIS-1,3-DICHLOROPROPENE
1.0U	UG/L	CHLOROMETHANE	1.0U	UG/L	BROMOFORM
1.0U	UG/L	BROMOMETHANE	1.0U	UG/L	BROMOBENZENE
1.0U	UG/L	VINYL CHLORIDE	1.0U	UG/L	1,1,2,2-TETRACHLOROETHANE
1.0U	UG/L	CHLOROETHANE	1.0U	UG/L	TETRACHLOROETHENE (TETRACHLOROETHYLENE)
1.0U	UG/L	TRICHLOROFLUOROMETHANE	1.0U	UG/L	1,3-DICHLOROPROPANE
1.0U	UG/L	1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)	2.5U	UG/L	METHYL BUTYL KETONE
1.0U	UG/L	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)	1.0U	UG/L	TOLUENE
5.0U	UG/L	METHYLENE CHLORIDE	1.0U	UG/L	CHLOROBENZENE
1.0U	UG/L	METHYL T-BUTYL ETHER (MTBE)	1.0U	UG/L	1,1,1,2-TETRACHLOROETHANE
25.U	UG/L	ACETONE	1.0U	UG/L	ETHYL BENZENE
2.5U	UG/L	CARBON DISULFIDE	1.0U	UG/L	(M- AND/OR P-)XYLENE
1.0U	UG/L	METHYL ACETATE	1.0U	UG/L	O-XYLENE
1.0U	UG/L	1,1-DICHLOROETHANE	1.0U	UG/L	STYRENE
0.60J	UG/L	CIS-1,2-DICHLOROETHENE	1.0U	UG/L	1,2,3-TRICHLOROPROPANE
1.0U	UG/L	2,2-DICHLOROPROPANE	1.0U	UG/L	O-CHLOROTOLUENE
25.U	UG/L	METHYL ETHYL KETONE	1.0U	UG/L	P-CHLOROTOLUENE
1.0U	UG/L	BROMOCHLOROMETHANE	1.0U	UG/L	1,3-DICHLOROBENZENE
1.0U	UG/L	TRANS-1,2-DICHLOROETHENE	0.71J	UG/L	1,4-DICHLOROBENZENE
1.0U	UG/L	CHLOROFORM	1.0U	UG/L	1,2-DICHLOROBENZENE
1.0U	UG/L	1,2-DICHLOROETHANE	1.0U	UG/L	1,2-DIBROMOETHANE (EDB)
1.0U	UG/L	1,1,1-TRICHLOROETHANE	1.0U	UG/L	ISOPROPYLBENZENE
1.0U	UG/L	CYCLOHEXANE	1.0U	UG/L	N-PROPYLBENZENE
1.0U	UG/L	1,1-DICHLOROPROPENE	1.0U	UG/L	1,3,5-TRIMETHYLBENZENE
1.0U	UG/L	CARBON TETRACHLORIDE	1.0U	UG/L	TERT-BUTYLBENZENE
1.0U	UG/L	BROMODICHLOROMETHANE	1.0U	UG/L	1,2,4-TRIMETHYLBENZENE
2.5U	UG/L	METHYL ISOBUTYL KETONE	1.0U	UG/L	SEC-BUTYLBENZENE
0.89J	UG/L	1,2-DICHLOROPROPANE	1.0U	UG/L	P-ISOPROPYLTOLUENE
1.0U	UG/L	METHYLCYCLOHEXANE	1.0U	UG/L	N-BUTYLBENZENE
1.0U	UG/L	DIBROMOMETHANE	5.0U	UG/L	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)
1.0U	UG/L	TRANS-1,3-DICHLOROPROPENE	1.0U	UG/L	1,2,4-TRICHLOROBENZENE
1.0U	UG/L	TRICHLOROETHENE (TRICHLOROETHYLENE)	1.0U	UG/L	HEXACHLORO-1,3-BUTADIENE
1.0U	UG/L	BENZENE	1.0U	UG/L	1,2,3-TRICHLOROBENZENE
1.0U	UG/L	DIBROMOCHLOROMETHANE			
1.0U	UG/L	1,1,2-TRICHLOROETHANE			

average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5380 FY 2001 Project: 01-0444

VOLATILES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: TW3 /

Media: GROUNDWATER

Produced by: Allen, Frank

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/25/2001 17:45

Ending:

RESULTS	UNITS	ANALYTE	RESULTS	UNITS	ANALYTE
1.0U	UG/L	DICHLORODIFLUOROMETHANE	1.0U	UG/L	CIS-1,3-DICHLOROPROPENE
1.0U	UG/L	CHLOROMETHANE	1.0U	UG/L	BROMOFORM
1.0U	UG/L	BROMOMETHANE	1.0U	UG/L	BROMOBENZENE
1.0U	UG/L	VINYL CHLORIDE	1.0U	UG/L	1,1,2,2-TETRACHLOROETHANE
1.0U	UG/L	CHLOROETHANE	1.0U	UG/L	TETRACHLOROETHENE (TETRACHLOROETHYLENE)
1.0U	UG/L	TRICHLOROFLUOROMETHANE	1.0U	UG/L	1,3-DICHLOROPROPANE
1.0U	UG/L	1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)	2.5U	UG/L	METHYL BUTYL KETONE
1.0U	UG/L	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)	1.0U	UG/L	TOLUENE
5.0U	UG/L	METHYLENE CHLORIDE	1.0U	UG/L	CHLOROBENZENE
1.0U	UG/L	METHYL T-BUTYL ETHER (MTBE)	1.0U	UG/L	1,1,1,2-TETRACHLOROETHANE
25.U	UG/L	ACETONE	1.0U	UG/L	ETHYL BENZENE
2.5U	UG/L	CARBON DISULFIDE	1.0U	UG/L	(M- AND/OR P-)XYLENE
1.0U	UG/L	METHYL ACETATE	1.0U	UG/L	O-XYLENE
1.0U	UG/L	1,1-DICHLOROETHANE	1.0U	UG/L	STYRENE
1.0U	UG/L	CIS-1,2-DICHLOROETHENE	1.0U	UG/L	1,2,3-TRICHLOROPROPANE
1.0U	UG/L	2,2-DICHLOROPROPANE	1.0U	UG/L	O-CHLOROTOLUENE
25.U	UG/L	METHYL ETHYL KETONE	1.0U	UG/L	P-CHLOROTOLUENE
1.0U	UG/L	BROMOCHLOROMETHANE	1.0U	UG/L	1,3-DICHLOROBENZENE
1.0U	UG/L	TRANS-1,2-DICHLOROETHENE	1.0U	UG/L	1,4-DICHLOROBENZENE
1.0U	UG/L	CHLOROFORM	1.0U	UG/L	1,2-DICHLOROBENZENE
1.0U	UG/L	1,2-DICHLOROETHANE	1.0U	UG/L	1,2-DIBROMOETHANE (EDB)
1.0U	UG/L	1,1,1-TRICHLOROETHANE	1.0U	UG/L	ISOPROPYLBENZENE
1.0U	UG/L	CYCLOHEXANE	1.0U	UG/L	N-PROPYLBENZENE
1.0U	UG/L	1,1-DICHLOROPROPENE	1.0U	UG/L	1,3,5-TRIMETHYLBENZENE
1.0U	UG/L	CARBON TETRACHLORIDE	1.0U	UG/L	TERT-BUTYLBENZENE
1.0U	UG/L	BROMODICHLOROMETHANE	1.0U	UG/L	1,2,4-TRIMETHYLBENZENE
2.5U	UG/L	METHYL ISOBUTYL KETONE	1.0U	UG/L	SEC-BUTYLBENZENE
8.6A	UG/L	1,2-DICHLOROPROPANE	1.0U	UG/L	P-ISOPROPYLTOLUENE
1.0U	UG/L	METHYLCYCLOHEXANE	1.0U	UG/L	N-BUTYLBENZENE
1.0U	UG/L	DIBROMOMETHANE	5.0U	UG/L	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)
1.0U	UG/L	TRANS-1,3-DICHLOROPROPENE	1.0U	UG/L	1,2,4-TRICHLOROBENZENE
1.0U	UG/L	TRICHLOROETHENE (TRICHLOROETHYLENE)	1.0U	UG/L	HEXACHLORO-1,3-BUTADIENE
1.0U	UG/L	BENZENE	1.0U	UG/L	1,2,3-TRICHLOROBENZENE
1.0U	UG/L	DIBROMOCHLOROMETHANE			
1.0U	UG/L	1,1,2-TRICHLOROETHANE			

-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5383 FY 2001 Project: 01-0444

VOLATILES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: CNTLCUT /

Media: SUBSURFACE SOIL (> 12")

Produced by: Allen, Frank

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/26/2001 15:15

Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
1.0U	UG/KG	DICHLORODIFLUOROMETHANE
1.0U	UG/KG	CHLOROMETHANE
1.0U	UG/KG	BROMOMETHANE
1.0U	UG/KG	VINYL CHLORIDE
1.0U	UG/KG	CHLOROETHANE
1.0U	UG/KG	TRICHLOROFLUOROMETHANE
1.0U	UG/KG	1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)
1.0U	UG/KG	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)
1.0U	UG/KG	METHYLENE CHLORIDE
1.0U	UG/KG	METHYL T-BUTYL ETHER (MTBE)
13U	UG/KG	ACETONE
1.0U	UG/KG	CARBON DISULFIDE
1.0U	UG/KG	METHYL ACETATE
1.0U	UG/KG	1,1-DICHLOROETHANE
1.0U	UG/KG	CIS-1,2-DICHLOROETHENE
1.0UJ	UG/KG	2,2-DICHLOROPROPANE
2.6U	UG/KG	METHYL ETHYL KETONE
1.0U	UG/KG	BROMOCHLOROMETHANE
1.0U	UG/KG	TRANS-1,2-DICHLOROETHENE
5.2U	UG/KG	CHLOROFORM
1.0U	UG/KG	1,2-DICHLOROETHANE
1.0U	UG/KG	1,1,1-TRICHLOROETHANE
1.0U	UG/KG	CYCLOHEXANE
1.0U	UG/KG	1,1-DICHLOROPROPENE
1.0U	UG/KG	CARBON TETRACHLORIDE
5.2U	UG/KG	BROMODICHLOROMETHANE
2.6U	UG/KG	METHYL ISOBUTYL KETONE
1.0U	UG/KG	1,2-DICHLOROPROPANE
1.0U	UG/KG	METHYLCYCLOHEXANE
1.0U	UG/KG	DIBROMOMETHANE
1.0U	UG/KG	TRANS-1,3-DICHLOROPROPENE
1.0U	UG/KG	TRICHLOROETHENE (TRICHLOROETHYLENE)
1.0U	UG/KG	BENZENE
1.0U	UG/KG	DIBROMOCHLOROMETHANE
1.0U	UG/KG	1,1,2-TRICHLOROETHANE
1.0U	UG/KG	CIS-1,3-DICHLOROPROPENE
1.0U	UG/KG	BROMOFORM
1.0U	UG/KG	BROMOBENZENE
1.0UJ	UG/KG	1,1,2,2-TETRACHLOROETHANE
1.0U	UG/KG	TETRACHLOROETHENE (TETRACHLOROETHYLENE)
1.0U	UG/KG	1,3-DICHLOROPROPANE
2.6U	UG/KG	METHYL BUTYL KETONE
1.0U	UG/KG	TOLUENE
1.0U	UG/KG	CHLOROBENZENE
1.0U	UG/KG	1,1,1,2-TETRACHLOROETHANE
1.0U	UG/KG	ETHYL BENZENE
2.1U	UG/KG	(M- AND/OR P-)XYLENE
1.0U	UG/KG	O-XYLENE
1.0U	UG/KG	STYRENE
1.0U	UG/KG	1,2,3-TRICHLOROPROPANE
1.0U	UG/KG	O-CHLOROTOLUENE
1.0U	UG/KG	P-CHLOROTOLUENE
1.0U	UG/KG	1,3-DICHLOROBENZENE
1.0U	UG/KG	1,4-DICHLOROBENZENE
1.0U	UG/KG	1,2-DICHLOROBENZENE
1.0U	UG/KG	1,2-DIBROMOETHANE (EDB)
1.0U	UG/KG	ISOPROPYLBENZENE
1.0U	UG/KG	N-PROPYLBENZENE
1.0U	UG/KG	1,3,5-TRIMETHYLBENZENE
1.0U	UG/KG	TERT-BUTYLBENZENE
1.0U	UG/KG	1,2,4-TRIMETHYLBENZENE
1.0U	UG/KG	SEC-BUTYLBENZENE
1.0U	UG/KG	P-ISOPROPYLTOLUENE
1.0U	UG/KG	N-BUTYLBENZENE
1.0U	UG/KG	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)
1.0U	UG/KG	1,2,4-TRICHLOROBENZENE
1.0U	UG/KG	HEXACHLORO-1,3-BUTADIENE
5.2U	UG/KG	1,2,3-TRICHLOROBENZENE
15	%	% MOISTURE

;-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
;-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
?-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5385 FY 2001 Project: 01-0444

VOLATILES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: TW1CUT /

Media: SUBSURFACE SOIL (> 12")

Produced by: Allen, Frank

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/26/2001 15:50

Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
1.4U	UG/KG	DICHLORODIFLUOROMETHANE
1.4U	UG/KG	CHLOROMETHANE
1.4U	UG/KG	BROMOMETHANE
1.4U	UG/KG	VINYL CHLORIDE
1.4U	UG/KG	CHLOROETHANE
1.4U	UG/KG	TRICHLOROFLUOROMETHANE
1.4U	UG/KG	1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)
1.4U	UG/KG	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)
1.4U	UG/KG	METHYLENE CHLORIDE
1.4U	UG/KG	METHYL T-BUTYL ETHER (MTBE)
17U	UG/KG	ACETONE
1.4U	UG/KG	CARBON DISULFIDE
1.4U	UG/KG	METHYL ACETATE
1.4U	UG/KG	1,1-DICHLOROETHANE
1.4U	UG/KG	CIS-1,2-DICHLOROETHENE
1.4UJ	UG/KG	2,2-DICHLOROPROPANE
3.4U	UG/KG	METHYL ETHYL KETONE
1.4U	UG/KG	BROMOCHLOROMETHANE
1.4U	UG/KG	TRANS-1,2-DICHLOROETHENE
6.8U	UG/KG	CHLOROFORM
1.4U	UG/KG	1,2-DICHLOROETHANE
1.4U	UG/KG	1,1,1-TRICHLOROETHANE
1.4U	UG/KG	CYCLOHEXANE
1.4U	UG/KG	1,1-DICHLOROPROPENE
1.4U	UG/KG	CARBON TETRACHLORIDE
6.8U	UG/KG	BROMODICHLOROMETHANE
3.4U	UG/KG	METHYL ISOBUTYL KETONE
1.4U	UG/KG	1,2-DICHLOROPROPANE
1.4U	UG/KG	METHYLCYCLOHEXANE
1.4U	UG/KG	DIBROMOMETHANE
1.4U	UG/KG	TRANS-1,3-DICHLOROPROPENE
1.4U	UG/KG	TRICHLOROETHENE (TRICHLOROETHYLENE)
1.4U	UG/KG	BENZENE
1.4U	UG/KG	DIBROMOCHLOROMETHANE
1.4U	UG/KG	1,1,2-TRICHLOROETHANE

RESULTS	UNITS	ANALYTE
1.4U	UG/KG	CIS-1,3-DICHLOROPROPENE
1.4U	UG/KG	BROMOFORM
1.4U	UG/KG	BROMOBENZENE
1.4UJ	UG/KG	1,1,2,2-TETRACHLOROETHANE
1.4U	UG/KG	TETRACHLOROETHENE (TETRACHLOROETHYLENE)
1.4U	UG/KG	1,3-DICHLOROPROPANE
3.4U	UG/KG	METHYL BUTYL KETONE
1.3J	UG/KG	TOLUENE
1.4U	UG/KG	CHLOROBENZENE
1.4U	UG/KG	1,1,1,2-TETRACHLOROETHANE
1.4U	UG/KG	ETHYL BENZENE
2.7U	UG/KG	(M- AND/OR P-)XYLENE
1.4U	UG/KG	O-XYLENE
1.4U	UG/KG	STYRENE
1.4U	UG/KG	1,2,3-TRICHLOROPROPANE
1.4U	UG/KG	O-CHLOROTOLUENE
1.4U	UG/KG	P-CHLOROTOLUENE
1.4U	UG/KG	1,3-DICHLOROBENZENE
1.4U	UG/KG	1,4-DICHLOROBENZENE
1.4U	UG/KG	1,2-DICHLOROBENZENE
1.4U	UG/KG	1,2-DIBROMOETHANE (EDB)
1.4U	UG/KG	ISOPROPYLBENZENE
1.4U	UG/KG	N-PROPYLBENZENE
1.4U	UG/KG	1,3,5-TRIMETHYLBENZENE
1.4U	UG/KG	TERT-BUTYLBENZENE
1.4U	UG/KG	1,2,4-TRIMETHYLBENZENE
1.4U	UG/KG	SEC-BUTYLBENZENE
1.4U	UG/KG	P-ISOPROPYLTOLUENE
1.4U	UG/KG	N-BUTYLBENZENE
1.4U	UG/KG	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)
1.4U	UG/KG	1,2,4-TRICHLOROBENZENE
1.4U	UG/KG	HEXACHLORO-1,3-BUTADIENE
6.8U	UG/KG	1,2,3-TRICHLOROBENZENE
21	%	% MOISTURE

average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5384 FY 2001 Project: 01-0444

VOLATILES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: TW3CUT /

Media: SUBSURFACE SOIL (> 12")

Produced by: Allen, Frank

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/26/2001 15:30

Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
1.0U	UG/KG	DICHLORODIFLUOROMETHANE
1.0U	UG/KG	CHLOROMETHANE
1.0U	UG/KG	BROMOMETHANE
1.0U	UG/KG	VINYL CHLORIDE
1.0U	UG/KG	CHLOROETHANE
1.0U	UG/KG	TRICHLOROFLUOROMETHANE
1.0U	UG/KG	1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)
1.0U	UG/KG	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)
1.0U	UG/KG	METHYLENE CHLORIDE
1.0U	UG/KG	METHYL T-BUTYL ETHER (MTBE)
13U	UG/KG	ACETONE
1.0U	UG/KG	CARBON DISULFIDE
1.0U	UG/KG	METHYL ACETATE
1.0U	UG/KG	1,1-DICHLOROETHANE
1.0U	UG/KG	CIS-1,2-DICHLOROETHENE
1.0UJ	UG/KG	2,2-DICHLOROPROPANE
2.6U	UG/KG	METHYL ETHYL KETONE
1.0U	UG/KG	BROMOCHLOROMETHANE
1.0U	UG/KG	TRANS-1,2-DICHLOROETHENE
5.2U	UG/KG	CHLOROFORM
1.0U	UG/KG	1,2-DICHLOROETHANE
1.0U	UG/KG	1,1,1-TRICHLOROETHANE
1.0U	UG/KG	CYCLOHEXANE
1.0U	UG/KG	1,1-DICHLOROPROPENE
1.0U	UG/KG	CARBON TETRACHLORIDE
5.2U	UG/KG	BROMODICHLOROMETHANE
2.6U	UG/KG	METHYL ISOBUTYL KETONE
1.0U	UG/KG	1,2-DICHLOROPROPANE
1.0U	UG/KG	METHYLCYCLOHEXANE
1.0U	UG/KG	DIBROMOMETHANE
1.0U	UG/KG	TRANS-1,3-DICHLOROPROPENE
1.0U	UG/KG	TRICHLOROETHENE (TRICHLOROETHYLENE)
1.0U	UG/KG	BENZENE
1.0U	UG/KG	DIBROMOCHLOROMETHANE
1.0U	UG/KG	1,1,2-TRICHLOROETHANE
1.0U	UG/KG	CIS-1,3-DICHLOROPROPENE
1.0U	UG/KG	BROMOFORM
1.0U	UG/KG	BROMOBENZENE
1.0UJ	UG/KG	1,1,2,2-TETRACHLOROETHANE
1.0U	UG/KG	TETRACHLOROETHENE (TETRACHLOROETHYLENE)
1.0U	UG/KG	1,3-DICHLOROPROPANE
2.6U	UG/KG	METHYL BUTYL KETONE
4.1	UG/KG	TOLUENE
1.0U	UG/KG	CHLOROBENZENE
1.0U	UG/KG	1,1,1,2-TETRACHLOROETHANE
1.0U	UG/KG	ETHYL BENZENE
2.1U	UG/KG	(M- AND/OR P-)XYLENE
1.0U	UG/KG	O-XYLENE
1.0U	UG/KG	STYRENE
1.0U	UG/KG	1,2,3-TRICHLOROPROPANE
1.0U	UG/KG	O-CHLOROTOLUENE
1.0U	UG/KG	P-CHLOROTOLUENE
1.0U	UG/KG	1,3-DICHLOROBENZENE
1.0U	UG/KG	1,4-DICHLOROBENZENE
1.0U	UG/KG	1,2-DICHLOROBENZENE
1.0U	UG/KG	1,2-DIBROMOETHANE (EDB)
1.0U	UG/KG	ISOPROPYLBENZENE
1.0U	UG/KG	N-PROPYLBENZENE
1.0U	UG/KG	1,3,5-TRIMETHYLBENZENE
1.0U	UG/KG	TERT-BUTYLBENZENE
1.0U	UG/KG	1,2,4-TRIMETHYLBENZENE
1.0U	UG/KG	SEC-BUTYLBENZENE
1.0U	UG/KG	P-ISOPROPYLTOLUENE
1.0U	UG/KG	N-BUTYLBENZENE
1.0U	UG/KG	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)
1.0U	UG/KG	1,2,4-TRICHLOROBENZENE
1.0U	UG/KG	HEXACHLORO-1,3-BUTADIENE
5.2U	UG/KG	1,2,3-TRICHLOROBENZENE
12	%	% MOISTURE

-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5382 FY 2001 Project: 01-0444

VOLATILES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: QATB1 /

Media: TRIP BLANK - WATER

Produced by: Allen, Frank

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/25/2001 18:05

Ending:

RESULTS	UNITS	ANALYTE	RESULTS	UNITS	ANALYTE
1.0U	UG/L	DICHLORODIFLUOROMETHANE	1.0U	UG/L	CIS-1,3-DICHLOROPROPENE
1.0U	UG/L	CHLOROMETHANE	1.0U	UG/L	BROMOFORM
1.0U	UG/L	BROMOMETHANE	1.0U	UG/L	BROMOBENZENE
1.0U	UG/L	VINYL CHLORIDE	1.0U	UG/L	1,1,2,2-TETRACHLOROETHANE
1.0U	UG/L	CHLOROETHANE	1.0U	UG/L	TETRACHLOROETHENE (TETRACHLOROETHYLENE)
1.0U	UG/L	TRICHLOROFLUOROMETHANE	1.0U	UG/L	1,3-DICHLOROPROPANE
1.0U	UG/L	1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)	2.5U	UG/L	METHYL BUTYL KETONE
1.0U	UG/L	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)	1.0U	UG/L	TOLUENE
5.0U	UG/L	METHYLENE CHLORIDE	1.0U	UG/L	CHLOROBENZENE
1.0U	UG/L	METHYL T-BUTYL ETHER (MTBE)	1.0U	UG/L	1,1,1,2-TETRACHLOROETHANE
25.U	UG/L	ACETONE	1.0U	UG/L	ETHYL BENZENE
2.5U	UG/L	CARBON DISULFIDE	1.0U	UG/L	(M- AND/OR P-)XYLENE
1.0U	UG/L	METHYL ACETATE	1.0U	UG/L	O-XYLENE
1.0U	UG/L	1,1-DICHLOROETHANE	1.0U	UG/L	STYRENE
1.0U	UG/L	CIS-1,2-DICHLOROETHENE	1.0U	UG/L	1,2,3-TRICHLOROPROPANE
1.0U	UG/L	2,2-DICHLOROPROPANE	1.0U	UG/L	O-CHLOROTOLUENE
25.U	UG/L	METHYL ETHYL KETONE	1.0U	UG/L	P-CHLOROTOLUENE
1.0U	UG/L	BROMOCHLOROMETHANE	1.0U	UG/L	1,3-DICHLOROBENZENE
1.0U	UG/L	TRANS-1,2-DICHLOROETHENE	1.0U	UG/L	1,4-DICHLOROBENZENE
1.0U	UG/L	CHLOROFORM	1.0U	UG/L	1,2-DICHLOROBENZENE
1.0U	UG/L	1,2-DICHLOROETHANE	1.0U	UG/L	1,2-DIBROMOETHANE (EDB)
1.0U	UG/L	1,1,1-TRICHLOROETHANE	1.0U	UG/L	ISOPROPYLBENZENE
1.0U	UG/L	CYCLOHEXANE	1.0U	UG/L	N-PROPYLBENZENE
1.0U	UG/L	1,1-DICHLOROPROPENE	1.0U	UG/L	1,3,5-TRIMETHYLBENZENE
1.0U	UG/L	CARBON TETRACHLORIDE	1.0U	UG/L	TERT-BUTYLBENZENE
1.0U	UG/L	BROMODICHLOROMETHANE	1.0U	UG/L	1,2,4-TRIMETHYLBENZENE
2.5U	UG/L	METHYL ISOBUTYL KETONE	1.0U	UG/L	SEC-BUTYLBENZENE
1.0U	UG/L	1,2-DICHLOROPROPANE	1.0U	UG/L	P-ISOPROPYLTOLUENE
1.0U	UG/L	METHYLCYCLOHEXANE	1.0U	UG/L	N-BUTYLBENZENE
1.0U	UG/L	DIBROMOMETHANE	5.0U	UG/L	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)
1.0U	UG/L	TRANS-1,3-DICHLOROPROPENE	1.0U	UG/L	1,2,4-TRICHLOROBENZENE
1.0U	UG/L	TRICHLOROETHENE (TRICHLOROETHYLENE)	1.0U	UG/L	HEXACHLORO-1,3-BUTADIENE
1.0U	UG/L	BENZENE	1.0U	UG/L	1,2,3-TRICHLOROBENZENE
1.0U	UG/L	DIBROMOCHLOROMETHANE			
1.0U	UG/L	1,1,2-TRICHLOROETHANE			

-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5386 FY 2001 Project: 01-0444

VOLATILES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: QATB2 /

Media: TRIP BLANK - SOIL

Produced by: Allen, Frank

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/26/2001 16:00

Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
1.5UJ	UG/KG	DICHLORODIFLUOROMETHANE
1.5UJ	UG/KG	CHLOROMETHANE
1.5UJ	UG/KG	BROMOMETHANE
1.5UJ	UG/KG	VINYL CHLORIDE
1.5UJ	UG/KG	CHLOROETHANE
1.5UJ	UG/KG	TRICHLOROFLUOROMETHANE
1.5UJ	UG/KG	1,1-DICHLOROETHENE (1,1-DICHLOROETHYLENE)
1.5UJ	UG/KG	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113)
1.5UJ	UG/KG	METHYLENE CHLORIDE
1.5UJ	UG/KG	METHYL T-BUTYL ETHER (MTBE)
19UJ	UG/KG	ACETONE
1.5UJ	UG/KG	CARBON DISULFIDE
1.5UJ	UG/KG	METHYL ACETATE
1.5UJ	UG/KG	1,1-DICHLOROETHANE
1.5UJ	UG/KG	CIS-1,2-DICHLOROETHENE
1.5UJ	UG/KG	2,2-DICHLOROPROPANE
3.9UJ	UG/KG	METHYL ETHYL KETONE
1.5UJ	UG/KG	BROMOCHLOROMETHANE
1.5UJ	UG/KG	TRANS-1,2-DICHLOROETHENE
7.7UJ	UG/KG	CHLOROFORM
1.5UJ	UG/KG	1,2-DICHLOROETHANE
1.5UJ	UG/KG	1,1,1-TRICHLOROETHANE
1.5UJ	UG/KG	CYCLOHEXANE
1.5UJ	UG/KG	1,1-DICHLOROPROPENE
1.5UJ	UG/KG	CARBON TETRACHLORIDE
7.7UJ	UG/KG	BROMODICHLOROMETHANE
3.9UJ	UG/KG	METHYL ISOBUTYL KETONE
1.5UJ	UG/KG	1,2-DICHLOROPROPANE
1.5UJ	UG/KG	METHYLCYCLOHEXANE
1.5UJ	UG/KG	DIBROMOMETHANE
1.5UJ	UG/KG	TRANS-1,3-DICHLOROPROPENE
1.5UJ	UG/KG	TRICHLOROETHENE (TRICHLOROETHYLENE)
1.5UJ	UG/KG	BENZENE
1.5UJ	UG/KG	DIBROMOCHLOROMETHANE
1.5UJ	UG/KG	1,1,2-TRICHLOROETHANE

RESULTS	UNITS	ANALYTE
1.5UJ	UG/KG	CIS-1,3-DICHLOROPROPENE
1.5UJ	UG/KG	BROMOFORM
1.5UJ	UG/KG	BROMOBENZENE
1.5UJ	UG/KG	1,1,2,2-TETRACHLOROETHANE
1.5UJ	UG/KG	TETRACHLOROETHENE (TETRACHLOROETHYLENE)
1.5UJ	UG/KG	1,3-DICHLOROPROPANE
3.9UJ	UG/KG	METHYL BUTYL KETONE
1.5UJ	UG/KG	TOLUENE
1.5UJ	UG/KG	CHLOROBENZENE
1.5UJ	UG/KG	1,1,1,2-TETRACHLOROETHANE
1.5UJ	UG/KG	ETHYL BENZENE
3.1UJ	UG/KG	(M- AND/OR P-)XYLENE
1.5UJ	UG/KG	O-XYLENE
1.5UJ	UG/KG	STYRENE
1.5UJ	UG/KG	1,2,3-TRICHLOROPROPANE
1.5UJ	UG/KG	O-CHLOROTOLUENE
1.5UJ	UG/KG	P-CHLOROTOLUENE
1.5UJ	UG/KG	1,3-DICHLOROBENZENE
1.5UJ	UG/KG	1,4-DICHLOROBENZENE
1.5UJ	UG/KG	1,2-DICHLOROBENZENE
1.5UJ	UG/KG	1,2-DIBROMOETHANE (EDB)
1.5UJ	UG/KG	ISOPROPYLBENZENE
1.5UJ	UG/KG	N-PROPYLBENZENE
1.5UJ	UG/KG	1,3,5-TRIMETHYLBENZENE
1.5UJ	UG/KG	TERT-BUTYLBENZENE
1.5UJ	UG/KG	1,2,4-TRIMETHYLBENZENE
1.5UJ	UG/KG	SEC-BUTYLBENZENE
1.5UJ	UG/KG	P-ISOPROPYLTOLUENE
1.5UJ	UG/KG	N-BUTYLBENZENE
1.5UJ	UG/KG	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)
1.5UJ	UG/KG	1,2,4-TRICHLOROBENZENE
1.5UJ	UG/KG	HEXACHLORO-1,3-BUTADIENE
7.7UJ	UG/KG	1,2,3-TRICHLOROBENZENE
10	%	% MOISTURE

ECOMMENDED HOLDING TIME EXCEEDED-PURGEABLE ORGANICS

average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4

Science and Ecosystem Support Division
980 College Station Road
Athens, Georgia 30605-2720

MEMORANDUM

Date: 05/25/2001

Subject: Results of EXTRACTABLES Sample Analysis
01-0444 Vienna Street Dump
Fort Valley, GA

From: Revell, Dennis

To: Striggow.Brian

Thru: Cosgrove, Bill
Chief,Organic Chemistry Section
Analytical Support Branch

Attached are the results of analysis of samples collected as part of the subject project. If you have any questions, please contact me.

ATTACHMENT

Sample 5377 FY 2001 Project: 01-0444

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: BKGD /

Media: GROUNDWATER

Produced by: Revell, Dennis

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/25/2001 10:38

Ending:

RESULTS	UNITS	ANALYTE
10U	UG/L	BIS(2-CHLOROETHYL) ETHER
10U	UG/L	BENZALDEHYDE
10U	UG/L	HEXACHLOROETHANE
10U	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
10U	UG/L	N-NITROSODI-N-PROPYLAMINE
10U	UG/L	ACETOPHENONE
10U	UG/L	NITROBENZENE
10U	UG/L	HEXACHLOROBUTADIENE
85	UG/L	CAPROLACTAM
10U	UG/L	2-METHYLNAPHTHALENE
10U	UG/L	1,2,4-TRICHLOROBENZENE
10U	UG/L	NAPHTHALENE
10U	UG/L	4-CHLOROANILINE
10U	UG/L	BIS(2-CHLOROETHOXY)METHANE
10U	UG/L	ISOPHORONE
10U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
10U	UG/L	1,1-BIPHENYL
10U	UG/L	2-CHLORONAPHTHALENE
10U	UG/L	2-NITROANILINE
10U	UG/L	ACENAPHTHYLENE
10U	UG/L	ACENAPHTHENE
10U	UG/L	DIMETHYL PHTHALATE
10U	UG/L	DIBENZOFURAN
10U	UG/L	2,4-DINITROTOLUENE
10U	UG/L	2,6-DINITROTOLUENE
10U	UG/L	3-NITROANILINE
10U	UG/L	4-CHLOROPHENYL PHENYL ETHER
10U	UG/L	4-NITROANILINE
10U	UG/L	FLUORENE
10U	UG/L	DIETHYL PHTHALATE
10U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	UG/L	HEXACHLOROBENZENE (HCB)
10U	UG/L	ATRAZINE
10U	UG/L	4-BROMOPHENYL PHENYL ETHER
10U	UG/L	PHENANTHRENE
10U	UG/L	ANTHRACENE
10U	UG/L	CARBAZOLE
10U	UG/L	DI-N-BUTYLPHTHALATE
10U	UG/L	FLUORANTHENE
10U	UG/L	PYRENE
10U	UG/L	BENZYL BUTYL PHTHALATE
10U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
10U	UG/L	BENZO(A)ANTHRACENE
10U	UG/L	CHRYSENE
10U	UG/L	3,3'-DICHLOROBENZIDINE
10U	UG/L	DI-N-OCTYLPHTHALATE
10U	UG/L	BENZO(B)FLUORANTHENE
10U	UG/L	BENZO(K)FLUORANTHENE
10U	UG/L	BENZO-A-PYRENE
10U	UG/L	INDENO (1,2,3-CD) PYRENE
10U	UG/L	DIBENZO(A,H)ANTHRACENE
10U	UG/L	BENZO(GHI)PERYLENE
10U	UG/L	2-CHLOROPHENOL
10U	UG/L	2-METHYLPHENOL
10U	UG/L	(3-AND/OR 4-)METHYLPHENOL
10U	UG/L	2-NITROPHENOL
10U	UG/L	PHENOL
10U	UG/L	2,4-DIMETHYLPHENOL
10U	UG/L	2,4-DICHLOROPHENOL
10U	UG/L	2,4,6-TRICHLOROPHENOL
10U	UG/L	2,4,5-TRICHLOROPHENOL
10U	UG/L	4-CHLORO-3-METHYLPHENOL
20U	UG/L	2,4-DINITROPHENOL
20U	UG/L	2-METHYL-4,6-DINITROPHENOL
20U	UG/L	PENTACHLOROPHENOL
20U	UG/L	4-NITROPHENOL
10U	UG/L	2,3,4,6-TETRACHLOROPHENOL

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5377 FY 2001 Project: 01-0444

MISCELLANEOUS COMPOUNDS

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: BKGD /
Media: GROUNDWATER

Produced by: Revell, Dennis
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/25/2001 10:38
Ending:

RESULTS	UNITS	ANALYTE
10JN	UG/L	OCTAADECANOIC ACID, METHYL ESTER
100JN	UG/L	DECANOIC ACID, METHYL ESTER
30JN	UG/L	TETRADECANOIC ACID, METHYL ESTER
30JN	UG/L	HEXADECANOIC ACID, METHYL ESTER
10JN	UG/L	OCTADECADIENOIC ACID, METHYL ESTER
100JN	UG/L	OCTADECENOIC ACID, METHYL ESTER
20JN	UG/L	OCTADECANOIC ACID, METHYL ESTER
20JN	UG/L	OLEIC ACID

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
<-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5378 FY 2001 Project: 01-0444

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: CNTL /

Media: GROUNDWATER

Produced by: Revell, Dennis

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/25/2001 13:10

Ending:

RESULTS	UNITS	ANALYTE
10U	UG/L	BIS(2-CHLOROETHYL) ETHER
10U	UG/L	BENZALDEHYDE
10U	UG/L	HEXACHLOROETHANE
10U	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
10U	UG/L	N-NITROSODI-N-PROPYLAMINE
10U	UG/L	ACETOPHENONE
10U	UG/L	NITROBENZENE
10U	UG/L	HEXACHLOROBUTADIENE
10U	UG/L	CAPROLACTAM
10U	UG/L	2-METHYLNAPHTHALENE
10U	UG/L	1,2,4-TRICHLOROBENZENE
10U	UG/L	NAPHTHALENE
10U	UG/L	4-CHLOROANILINE
10U	UG/L	BIS(2-CHLOROETHOXY)METHANE
10U	UG/L	ISOPHORONE
10U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
10U	UG/L	1,1-BIPHENYL
10U	UG/L	2-CHLORONAPHTHALENE
10U	UG/L	2-NITROANILINE
10U	UG/L	ACENAPHTHYLENE
10U	UG/L	ACENAPHTHENE
10U	UG/L	DIMETHYL PHTHALATE
10U	UG/L	DIBENZOFURAN
10U	UG/L	2,4-DINITROTOLUENE
10U	UG/L	2,6-DINITROTOLUENE
10U	UG/L	3-NITROANILINE
10U	UG/L	4-CHLOROPHENYL PHENYL ETHER
10U	UG/L	4-NITROANILINE
10U	UG/L	FLUORENE
10U	UG/L	DIETHYL PHTHALATE
10U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	UG/L	HEXACHLOROBENZENE (HCB)
10U	UG/L	ATRAZINE
10U	UG/L	4-BROMOPHENYL PHENYL ETHER
10U	UG/L	PHENANTHRENE
10U	UG/L	ANTHRACENE
10U	UG/L	CARBAZOLE
10U	UG/L	DI-N-BUTYLPHTHALATE
10U	UG/L	FLUORANTHENE
10U	UG/L	PYRENE
10U	UG/L	BENZYL BUTYL PHTHALATE
10U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
10U	UG/L	BENZO(A)ANTHRACENE
10U	UG/L	CHRYSENE
10U	UG/L	3,3'-DICHLOROBENZIDINE
10U	UG/L	DI-N-OCTYLPHTHALATE
10U	UG/L	BENZO(B)FLUORANTHENE
10U	UG/L	BENZO(K)FLUORANTHENE
10U	UG/L	BENZO-A-PYRENE
10U	UG/L	INDENO (1,2,3-CD) PYRENE
10U	UG/L	DIBENZO(A,H)ANTHRACENE
10U	UG/L	BENZO(GHI)PERYLENE
10U	UG/L	2-CHLOROPHENOL
10U	UG/L	2-METHYLPHENOL
10U	UG/L	(3-AND/OR 4-)METHYLPHENOL
10U	UG/L	2-NITROPHENOL
10U	UG/L	PHENOL
10U	UG/L	2,4-DIMETHYLPHENOL
10U	UG/L	2,4-DICHLOROPHENOL
10U	UG/L	2,4,6-TRICHLOROPHENOL
10U	UG/L	2,4,5-TRICHLOROPHENOL
10U	UG/L	4-CHLORO-3-METHYLPHENOL
20U	UG/L	2,4-DINITROPHENOL
20U	UG/L	2-METHYL-4,6-DINITROPHENOL
20U	UG/L	PENTACHLOROPHENOL
20U	UG/L	4-NITROPHENOL
10U	UG/L	2,3,4,6-TETRACHLOROPHENOL

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5379 FY 2001 Project: 01-0444

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW1 /
Media: GROUNDWATER

Produced by: Revell, Dennis
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/25/2001 15:30
Ending:

RESULTS	UNITS	ANALYTE
10U	UG/L	BIS(2-CHLOROETHYL) ETHER
10U	UG/L	BENZALDEHYDE
10U	UG/L	HEXACHLOROETHANE
10U	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
10U	UG/L	N-NITROSODI-N-PROPYLAMINE
10U	UG/L	ACETOPHENONE
10U	UG/L	NITROBENZENE
10U	UG/L	HEXACHLOROBUTADIENE
600	UG/L	CAPROLACTAM
10U	UG/L	2-METHYLNAPHTHALENE
10U	UG/L	1,2,4-TRICHLOROBENZENE
10U	UG/L	NAPHTHALENE
10U	UG/L	4-CHLOROANILINE
10U	UG/L	BIS(2-CHLOROETHOXY)METHANE
10U	UG/L	ISOPHORONE
10U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
10U	UG/L	1,1-BIPHENYL
10U	UG/L	2-CHLORONAPHTHALENE
10U	UG/L	2-NITROANILINE
10U	UG/L	ACENAPHTHYLENE
10U	UG/L	ACENAPHTHENE
10U	UG/L	DIMETHYL PHTHALATE
10U	UG/L	DIBENZOFURAN
10U	UG/L	2,4-DINITROTOLUENE
10U	UG/L	2,6-DINITROTOLUENE
10U	UG/L	3-NITROANILINE
10U	UG/L	4-CHLOROPHENYL PHENYL ETHER
10U	UG/L	4-NITROANILINE
10U	UG/L	FLUORENE
10U	UG/L	DIETHYL PHTHALATE
10U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	UG/L	HEXACHLOROBENZENE (HCB)
10U	UG/L	ATRAZINE
10U	UG/L	4-BROMOPHENYL PHENYL ETHER
10U	UG/L	PHENANTHRENE

RESULTS	UNITS	ANALYTE
10U	UG/L	ANTHRACENE
10U	UG/L	CARBAZOLE
10U	UG/L	DI-N-BUTYLPHTHALATE
10U	UG/L	FLUORANTHENE
10U	UG/L	PYRENE
10U	UG/L	BENZYL BUTYL PHTHALATE
10U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
10U	UG/L	BENZO(A)ANTHRACENE
10U	UG/L	CHRYSENE
10U	UG/L	3,3'-DICHLOROBENZIDINE
10U	UG/L	DI-N-OCTYLPHTHALATE
10U	UG/L	BENZO(B)FLUORANTHENE
10U	UG/L	BENZO(K)FLUORANTHENE
10U	UG/L	BENZO-A-PYRENE
10U	UG/L	INDENO (1,2,3-CD) PYRENE
10U	UG/L	DIBENZO(A,H)ANTHRACENE
10U	UG/L	BENZO(GHI)PERYLENE
10U	UG/L	2-CHLOROPHENOL
10U	UG/L	2-METHYLPHENOL
10U	UG/L	(3-AND/OR 4-)METHYLPHENOL
10U	UG/L	2-NITROPHENOL
10U	UG/L	PHENOL
10U	UG/L	2,4-DIMETHYLPHENOL
10U	UG/L	2,4-DICHLOROPHENOL
10U	UG/L	2,4,6-TRICHLOROPHENOL
10U	UG/L	2,4,5-TRICHLOROPHENOL
10U	UG/L	4-CHLORO-3-METHYLPHENOL
20U	UG/L	2,4-DINITROPHENOL
20U	UG/L	2-METHYL-4,6-DINITROPHENOL
20U	UG/L	PENTACHLOROPHENOL
20U	UG/L	4-NITROPHENOL
10U	UG/L	2,3,4,6-TETRACHLOROPHENOL

\-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
:-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
t-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5379 FY 2001 Project: 01-0444

MISCELLANEOUS COMPOUNDS

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW1 /
Media: GROUNDWATER

Produced by: Revell, Dennis
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/25/2001 15:30
Ending:

RESULTS	UNITS	ANALYTE
100JN	UG/L	DIMETHYLPHENYLBENZENEACETAMIDE
300JN	UG/L	DIAZADIKETOCYCLOTETRADECANE

-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5380 FY 2001 Project: 01-0444

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: TW3 /

Media: GROUNDWATER

Produced by: Revell, Dennis

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/25/2001 17:45

Ending:

RESULTS	UNITS	ANALYTE
10U	UG/L	BIS(2-CHLOROETHYL) ETHER
10U	UG/L	BENZALDEHYDE
10U	UG/L	HEXACHLOROETHANE
10U	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
10U	UG/L	N-NITROSODI-N-PROPYLAMINE
10U	UG/L	ACETOPHENONE
10U	UG/L	NITROBENZENE
10U	UG/L	HEXACHLOROBUTADIENE
40	UG/L	CAPROLACTAM
10U	UG/L	2-METHYLNAPHTHALENE
10U	UG/L	1,2,4-TRICHLOROBENZENE
10U	UG/L	NAPHTHALENE
10U	UG/L	4-CHLOROANILINE
10U	UG/L	BIS(2-CHLOROETHOXY)METHANE
10U	UG/L	ISOPHORONE
10U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
10U	UG/L	1,1-BIPHENYL
10U	UG/L	2-CHLORONAPHTHALENE
10U	UG/L	2-NITROANILINE
10U	UG/L	ACENAPHTHYLENE
10U	UG/L	ACENAPHTHENE
10U	UG/L	DIMETHYL PHTHALATE
10U	UG/L	DIBENZOFURAN
10U	UG/L	2,4-DINITROTOLUENE
10U	UG/L	2,6-DINITROTOLUENE
10U	UG/L	3-NITROANILINE
10U	UG/L	4-CHLOROPHENYL PHENYL ETHER
10U	UG/L	4-NITROANILINE
10U	UG/L	FLUORENE
10U	UG/L	DIETHYL PHTHALATE
10U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	UG/L	HEXACHLOROBENZENE (HCB)
10U	UG/L	ATRAZINE
10U	UG/L	4-BROMOPHENYL PHENYL ETHER
10U	UG/L	PHENANTHRENE

RESULTS	UNITS	ANALYTE
10U	UG/L	ANTHRACENE
10U	UG/L	CARBAZOLE
10U	UG/L	DI-N-BUTYLPHTHALATE
10U	UG/L	FLUORANTHENE
10U	UG/L	PYRENE
10U	UG/L	BENZYL BUTYL PHTHALATE
10U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
10U	UG/L	BENZO(A)ANTHRACENE
10U	UG/L	CHRYSENE
10U	UG/L	3,3'-DICHLOROBENZIDINE
10U	UG/L	DI-N-OCTYLPHTHALATE
10U	UG/L	BENZO(B)FLUORANTHENE
10U	UG/L	BENZO(K)FLUORANTHENE
10U	UG/L	BENZO-A-PYRENE
10U	UG/L	INDENO (1,2,3-CD) PYRENE
10U	UG/L	DIBENZO(A,H)ANTHRACENE
10U	UG/L	BENZO(GHI)PERYLENE
10U	UG/L	2-CHLOROPHENOL
10U	UG/L	2-METHYLPHENOL
10U	UG/L	(3-AND/OR 4-)METHYLPHENOL
10U	UG/L	2-NITROPHENOL
10U	UG/L	PHENOL
10U	UG/L	2,4-DIMETHYLPHENOL
10U	UG/L	2,4-DICHLOROPHENOL
10U	UG/L	2,4,6-TRICHLOROPHENOL
10U	UG/L	2,4,5-TRICHLOROPHENOL
10U	UG/L	4-CHLORO-3-METHYLPHENOL
20U	UG/L	2,4-DINITROPHENOL
20U	UG/L	2-METHYL-4,6-DINITROPHENOL
20U	UG/L	PENTACHLOROPHENOL
20U	UG/L	4-NITROPHENOL
10U	UG/L	2,3,4,6-TETRACHLOROPHENOL

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
K-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5383 FY 2001 Project: 01-0444

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: CNTLCUT /
Media: SUBSURFACE SOIL (> 12")

Produced by: Revell, Dennis
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:15
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
3900U	UG/KG	BIS(2-CHLOROETHYL) ETHER
3900U	UG/KG	BENZALDEHYDE
3900U	UG/KG	HEXACHLOROETHANE
3900U	UG/KG	BIS(2-CHLOROISOPROPYL) ETHER
3900U	UG/KG	N-NITROSODI-N-PROPYLAMINE
3900U	UG/KG	ACETOPHENONE
3900U	UG/KG	NITROBENZENE
3900U	UG/KG	HEXACHLOROBUTADIENE
3900U	UG/KG	CAPROLACTAM
3900U	UG/KG	2-METHYLNAPHTHALENE
3900U	UG/KG	1,2,4-TRICHLOROBENZENE
3900U	UG/KG	NAPHTHALENE
3900U	UG/KG	4-CHLOROANILINE
3900U	UG/KG	BIS(2-CHLOROETHOXY)METHANE
3900U	UG/KG	ISOPHORONE
3900U	UG/KG	HEXACHLOROCYCLOPENTADIENE (HCCP)
3900U	UG/KG	1,1-BIPHENYL
3900U	UG/KG	2-CHLORONAPHTHALENE
3900U	UG/KG	2-NITROANILINE
3900U	UG/KG	ACENAPHTHYLENE
3900U	UG/KG	ACENAPHTHENE
3900U	UG/KG	DIMETHYL PHTHALATE
3900U	UG/KG	DIBENZOFURAN
3900U	UG/KG	2,4-DINITROTOLUENE
3900U	UG/KG	2,6-DINITROTOLUENE
3900U	UG/KG	3-NITROANILINE
3900U	UG/KG	4-CHLOROPHENYL PHENYL ETHER
3900U	UG/KG	4-NITROANILINE
3900U	UG/KG	FLUORENE
3900U	UG/KG	DIETHYL PHTHALATE
3900U	UG/KG	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
3900U	UG/KG	HEXACHLOROBENZENE (HCB)
3900U	UG/KG	ATRAZINE
3900U	UG/KG	4-BROMOPHENYL PHENYL ETHER
3900U	UG/KG	PHENANTHRENE
3900U	UG/KG	ANTHRACENE
3900U	UG/KG	CARBAZOLE
3900U	UG/KG	DI-N-BUTYLPHTHALATE
3900U	UG/KG	FLUORANTHENE
3900U	UG/KG	PYRENE
3900U	UG/KG	BENZYL BUTYL PHTHALATE
3900U	UG/KG	BIS(2-ETHYLHEXYL) PHTHALATE
3900U	UG/KG	BENZO(A)ANTHRACENE
3900U	UG/KG	CHRYSENE
3900U	UG/KG	3,3'-DICHLOROBENZIDINE
3900U	UG/KG	DI-N-OCTYLPHTHALATE
3900U	UG/KG	BENZO(B)FLUORANTHENE
3900U	UG/KG	BENZO(K)FLUORANTHENE
3900U	UG/KG	BENZO-A-PYRENE
3900U	UG/KG	INDENO (1,2,3-CD) PYRENE
3900U	UG/KG	DIBENZO(A,H)ANTHRACENE
3900U	UG/KG	BENZO(GHI)PERYLENE
3900U	UG/KG	2-CHLOROPHENOL
3900U	UG/KG	2-METHYLPHENOL
3900U	UG/KG	(3-AND/OR 4-)METHYLPHENOL
3900U	UG/KG	2-NITROPHENOL
3900U	UG/KG	PHENOL
3900U	UG/KG	2,4-DIMETHYLPHENOL
3900U	UG/KG	2,4-DICHLOROPHENOL
3900U	UG/KG	2,4,6-TRICHLOROPHENOL
3900U	UG/KG	2,4,5-TRICHLOROPHENOL
3900U	UG/KG	4-CHLORO-3-METHYLPHENOL
7800U	UG/KG	2,4-DINITROPHENOL
7800U	UG/KG	2-METHYL-4,6-DINITROPHENOL
7800U	UG/KG	PENTACHLOROPHENOL
7800U	UG/KG	4-NITROPHENOL
3900U	UG/KG	2,3,4,6-TETRACHLOROPHENOL
14.9	%	% MOISTURE

-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5384 FY 2001 Project: 01-0444

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: TW3CUT /

Media: SUBSURFACE SOIL (> 12")

Produced by: Revell, Dennis

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/26/2001 15:30

Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
3500U	UG/KG	BIS(2-CHLOROETHYL) ETHER
3500U	UG/KG	BENZALDEHYDE
3500U	UG/KG	HEXACHLOROETHANE
3500U	UG/KG	BIS(2-CHLOROISOPROPYL) ETHER
3500U	UG/KG	N-NITROSODI-N-PROPYLAMINE
3500U	UG/KG	ACETOPHENONE
3500U	UG/KG	NITROBENZENE
3500U	UG/KG	HEXACHLOROBUTADIENE
3500U	UG/KG	CAPROLACTAM
3500U	UG/KG	2-METHYLNAPHTHALENE
3500U	UG/KG	1,2,4-TRICHLOROBENZENE
3500U	UG/KG	NAPHTHALENE
3500U	UG/KG	4-CHLOROANILINE
3500U	UG/KG	BIS(2-CHLOROETHOXY)METHANE
3500U	UG/KG	ISOPHORONE
3500U	UG/KG	HEXACHLOROCYCLOPENTADIENE (HCCP)
3500U	UG/KG	1,1-BIPHENYL
3500U	UG/KG	2-CHLORONAPHTHALENE
3500U	UG/KG	2-NITROANILINE
3500U	UG/KG	ACENAPHTHYLENE
3500U	UG/KG	ACENAPHTHENE
3500U	UG/KG	DIMETHYL PHTHALATE
3500U	UG/KG	DIBENZOFURAN
3500U	UG/KG	2,4-DINITROTOLUENE
3500U	UG/KG	2,6-DINITROTOLUENE
3500U	UG/KG	3-NITROANILINE
3500U	UG/KG	4-CHLOROPHENYL PHENYL ETHER
3500U	UG/KG	4-NITROANILINE
3500U	UG/KG	FLUORENE
3500U	UG/KG	DIETHYL PHTHALATE
3500U	UG/KG	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
3500U	UG/KG	HEXACHLOROBENZENE (HCB)
3500U	UG/KG	ATRAZINE
3500U	UG/KG	4-BROMOPHENYL PHENYL ETHER
3500U	UG/KG	PHENANTHRENE
3500U	UG/KG	ANTHRACENE
3500U	UG/KG	CARBAZOLE
3500U	UG/KG	DI-N-BUTYLPHTHALATE
3500U	UG/KG	FLUORANTHENE
3500U	UG/KG	PYRENE
3500U	UG/KG	BENZYL BUTYL PHTHALATE
3500U	UG/KG	BIS(2-ETHYLHEXYL) PHTHALATE
3500U	UG/KG	BENZO(A)ANTHRACENE
3500U	UG/KG	CHRYSENE
3500U	UG/KG	3,3'-DICHLOROBENZIDINE
3500U	UG/KG	DI-N-OCTYLPHTHALATE
3500U	UG/KG	BENZO(B)FLUORANTHENE
3500U	UG/KG	BENZO(K)FLUORANTHENE
3500U	UG/KG	BENZO-A-PYRENE
3500U	UG/KG	INDENO (1,2,3-CD) PYRENE
3500U	UG/KG	DIBENZO(A,H)ANTHRACENE
3500U	UG/KG	BENZO(GHI)PERYLENE
3500U	UG/KG	2-CHLOROPHENOL
3500U	UG/KG	2-METHYLPHENOL
3500U	UG/KG	(3-AND/OR 4-)METHYLPHENOL
3500U	UG/KG	2-NITROPHENOL
3500U	UG/KG	PHENOL
3500U	UG/KG	2,4-DIMETHYLPHENOL
3500U	UG/KG	2,4-DICHLOROPHENOL
3500U	UG/KG	2,4,6-TRICHLOROPHENOL
3500U	UG/KG	2,4,5-TRICHLOROPHENOL
3500U	UG/KG	4-CHLORO-3-METHYLPHENOL
6900U	UG/KG	2,4-DINITROPHENOL
6900U	UG/KG	2-METHYL-4,6-DINITROPHENOL
6900U	UG/KG	PENTACHLOROPHENOL
6900U	UG/KG	4-NITROPHENOL
3500U	UG/KG	2,3,4,6-TETRACHLOROPHENOL
12.5	%	% MOISTURE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
<-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected, the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5385 FY 2001 Project: 01-0444

EXTRACTABLES SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW1CUT /
Media: SUBSURFACE SOIL (> 12")

Produced by: Revell, Dennis
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:50
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
3800U	UG/KG	BIS(2-CHLOROETHYL) ETHER
3800U	UG/KG	BENZALDEHYDE
3800U	UG/KG	HEXACHLOROETHANE
3800U	UG/KG	BIS(2-CHLOROISOPROPYL) ETHER
3800U	UG/KG	N-NITROSODI-N-PROPYLAMINE
3800U	UG/KG	ACETOPHENONE
3800U	UG/KG	NITROBENZENE
3800U	UG/KG	HEXACHLOROBUTADIENE
3800U	UG/KG	CAPROLACTAM
3800U	UG/KG	2-METHYLNAPHTHALENE
3800U	UG/KG	1,2,4-TRICHLOROBENZENE
3800U	UG/KG	NAPHTHALENE
3800U	UG/KG	4-CHLOROANILINE
3800U	UG/KG	BIS(2-CHLOROETHOXY)METHANE
3800U	UG/KG	ISOPHORONE
3800U	UG/KG	HEXACHLOROCYCLOPENTADIENE (HCCP)
3800U	UG/KG	1,1-BIPHENYL
3800U	UG/KG	2-CHLORONAPHTHALENE
3800U	UG/KG	2-NITROANILINE
3800U	UG/KG	ACENAPHTHYLENE
3800U	UG/KG	ACENAPHTHENE
3800U	UG/KG	DIMETHYL PHTHALATE
3800U	UG/KG	DIBENZOFURAN
3800U	UG/KG	2,4-DINITROTOLUENE
3800U	UG/KG	2,6-DINITROTOLUENE
3800U	UG/KG	3-NITROANILINE
3800U	UG/KG	4-CHLOROPHENYL PHENYL ETHER
3800U	UG/KG	4-NITROANILINE
3800U	UG/KG	FLUORENE
3800U	UG/KG	DIETHYL PHTHALATE
3800U	UG/KG	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
3800U	UG/KG	HEXACHLOROBENZENE (HCB)
3800U	UG/KG	ATRAZINE
3800U	UG/KG	4-BROMOPHENYL PHENYL ETHER
3800U	UG/KG	PHENANTHRENE
3800U	UG/KG	ANTHRACENE
3800U	UG/KG	CARBAZOLE
3800U	UG/KG	DI-N-BUTYLPHTHALATE
3800U	UG/KG	FLUORANTHENE
3800U	UG/KG	PYRENE
3800U	UG/KG	BENZYL BUTYL PHTHALATE
3800U	UG/KG	BIS(2-ETHYLHEXYL) PHTHALATE
3800U	UG/KG	BENZO(A)ANTHRACENE
3800U	UG/KG	CHRYSENE
3800U	UG/KG	3,3'-DICHLOROBENZIDINE
3800U	UG/KG	DI-N-OCTYLPHTHALATE
3800U	UG/KG	BENZO(B)FLUORANTHENE
3800U	UG/KG	BENZO(K)FLUORANTHENE
3800U	UG/KG	BENZO-A-PYRENE
3800U	UG/KG	INDENO (1,2,3-CD) PYRENE
3800U	UG/KG	DIBENZO(A,H)ANTHRACENE
3800U	UG/KG	BENZO(GHI)PERYLENE
3800U	UG/KG	2-CHLOROPHENOL
3800U	UG/KG	2-METHYLPHENOL
3800U	UG/KG	(3-AND/OR 4-)METHYLPHENOL
3800U	UG/KG	2-NITROPHENOL
3800U	UG/KG	PHENOL
3800U	UG/KG	2,4-DIMETHYLPHENOL
3800U	UG/KG	2,4-DICHLOROPHENOL
3800U	UG/KG	2,4,6-TRICHLOROPHENOL
3800U	UG/KG	2,4,5-TRICHLOROPHENOL
3800U	UG/KG	4-CHLORO-3-METHYLPHENOL
7600U	UG/KG	2,4-DINITROPHENOL
7600U	UG/KG	2-METHYL-4,6-DINITROPHENOL
7600U	UG/KG	PENTACHLOROPHENOL
7600U	UG/KG	4-NITROPHENOL
3800U	UG/KG	2,3,4,6-TETRACHLOROPHENOL
21.0	%	% MOISTURE

A-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
<-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
R-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4

Science and Ecosystem Support Division
980 College Station Road
Athens, Georgia 30605-2720

MEMORANDUM

Date: 05/21/2001

Subject: Results of PESTICIDES/PCB Sample Analysis
01-0444 Vienna Street Dump
Fort Valley, GA

From: Revells, Lavon

To: Striggow.Brian

Thru: Cosgrove, Bill
Chief,Organic Chemistry Section
Analytical Support Branch

Attached are the results of analysis of samples collected as part of the subject project. If you have any questions, please contact me.

ATTACHMENT

Sample 5377 FY 2001 Project: 01-0444

PESTICIDES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: BKGD /

Media: GROUNDWATER

Produced by: Revells, Lavon

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/25/2001 10:38

Ending:

RESULTS	UNITS	ANALYTE
0.10U	UG/L	ALDRIN
0.10U	UG/L	HEPTACHLOR
0.10U	UG/L	HEPTACHLOR EPOXIDE
0.10U	UG/L	ALPHA-BHC
0.10U	UG/L	BETA-BHC
0.10U	UG/L	GAMMA-BHC (LINDANE)
0.10U	UG/L	DELTA-BHC
0.10U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.25U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.25U	UG/L	4,4'-DDD (P,P'-DDD)
0.25U	UG/L	ENDRIN
0.25U	UG/L	ENDOSULFAN II (BETA)
0.25U	UG/L	ENDOSULFAN SULFATE
1.2U	UG/L	PCB-1242 (AROCLOR 1242)
1.2U	UG/L	PCB-1254 (AROCLOR 1254)
1.2U	UG/L	PCB-1221 (AROCLOR 1221)
1.2U	UG/L	PCB-1232 (AROCLOR 1232)
1.2U	UG/L	PCB-1248 (AROCLOR 1248)
1.2U	UG/L	PCB-1260 (AROCLOR 1260)
1.2U	UG/L	PCB-1016 (AROCLOR 1016)
10U	UG/L	TOXAPHENE
0.10U	UG/L	CHLORDENE /2
0.10U	UG/L	ALPHA-CHLORDENE /2
NA	UG/L	BETA-CHLORDENE /2
NA	UG/L	GAMMA-CHLORDENE /2
0.10U	UG/L	GAMMA-CHLORDANE /2
0.10U	UG/L	TRANS-NONACHLOR /2
0.10U	UG/L	ALPHA-CHLORDANE /2
0.10U	UG/L	CIS-NONACHLOR /2
0.10U	UG/L	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
0.50U	UG/L	METHOXYCHLOR
0.25U	UG/L	ENDRIN KETONE

average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.
confirmed by gcms: 1.when no value is reported, see chlordane constituents 2.constituents or metabolites of technical chlordane

Sample 5378 FY 2001 Project: 01-0444

PESTICIDES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: CNTL /

Media: GROUNDWATER

Produced by: Revells, Lavon

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/25/2001 13:10

Ending:

RESULTS	UNITS	ANALYTE
0.10U	UG/L	ALDRIN
0.10U	UG/L	HEPTACHLOR
0.10U	UG/L	HEPTACHLOR EPOXIDE
0.10U	UG/L	ALPHA-BHC
0.10U	UG/L	BETA-BHC
0.10U	UG/L	GAMMA-BHC (LINDANE)
0.10U	UG/L	DELTA-BHC
0.10U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.25U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.25U	UG/L	4,4'-DDD (P,P'-DDD)
0.25U	UG/L	ENDRIN
0.25U	UG/L	ENDOSULFAN II (BETA)
0.25U	UG/L	ENDOSULFAN SULFATE
1.2U	UG/L	PCB-1242 (AROCLOR 1242)
1.2U	UG/L	PCB-1254 (AROCLOR 1254)
1.2U	UG/L	PCB-1221 (AROCLOR 1221)
1.2U	UG/L	PCB-1232 (AROCLOR 1232)
1.2U	UG/L	PCB-1248 (AROCLOR 1248)
1.2U	UG/L	PCB-1260 (AROCLOR 1260)
1.2U	UG/L	PCB-1016 (AROCLOR 1016)
10U	UG/L	TOXAPHENE
0.10U	UG/L	CHLORDENE /2
0.10U	UG/L	ALPHA-CHLORDENE /2
NA	UG/L	BETA-CHLORDENE /2
NA	UG/L	GAMMA-CHLORDENE /2
0.10U	UG/L	GAMMA-CHLORDANE /2
0.10U	UG/L	TRANS-NONACHLOR /2
0.10U	UG/L	ALPHA-CHLORDANE /2
0.10U	UG/L	CIS-NONACHLOR /2
0.10U	UG/L	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
0.50U	UG/L	METHOXYCHLOR
0.25U	UG/L	ENDRIN KETONE

ıverage value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
ıctual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
ıc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.
confirmed by gcms: 1.when no value is reported, see chlordane constituents 2.constituents or metabolites of technical chlordane

Sample 5379 FY 2001 Project: 01-0444

PESTICIDES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: TW1 /

Media: GROUNDWATER

Produced by: Revells, Lavon

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/25/2001 15:30

Ending:

RESULTS	UNITS	ANALYTE
0.10U	UG/L	ALDRIN
0.10U	UG/L	HEPTACHLOR
0.10U	UG/L	HEPTACHLOR EPOXIDE
0.043J	UG/L	ALPHA-BHC
0.13U	UG/L	BETA-BHC
0.10U	UG/L	GAMMA-BHC (LINDANE)
0.10U	UG/L	DELTA-BHC
0.10U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.25U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.25U	UG/L	4,4'-DDD (P,P'-DDD)
0.25U	UG/L	ENDRIN
0.25U	UG/L	ENDOSULFAN II (BETA)
0.25U	UG/L	ENDOSULFAN SULFATE
1.2U	UG/L	PCB-1242 (AROCLOR 1242)
1.2U	UG/L	PCB-1254 (AROCLOR 1254)
1.2U	UG/L	PCB-1221 (AROCLOR 1221)
1.2U	UG/L	PCB-1232 (AROCLOR 1232)
1.2U	UG/L	PCB-1248 (AROCLOR 1248)
1.2U	UG/L	PCB-1260 (AROCLOR 1260)
1.2U	UG/L	PCB-1016 (AROCLOR 1016)
10U	UG/L	TOXAPHENE
0.10U	UG/L	CHLORDENE /2
0.10U	UG/L	ALPHA-CHLORDENE /2
NA	UG/L	BETA-CHLORDENE /2
NA	UG/L	GAMMA-CHLORDENE /2
0.10U	UG/L	GAMMA-CHLORDANE /2
0.10U	UG/L	TRANS-NONACHLOR /2
0.10U	UG/L	ALPHA-CHLORDANE /2
0.10U	UG/L	CIS-NONACHLOR /2
0.10U	UG/L	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
0.50U	UG/L	METHOXYCHLOR
0.25U	UG/L	ENDRIN KETONE

-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.
-confirmed by gcms: 1.when no value is reported, see chlordane constituents 2.constituents or metabolites of technical chlordane

Sample 5380 FY 2001 Project: 01-0444

PESTICIDES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: TW3 /

Media: GROUNDWATER

Produced by: Revells, Lavon

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/25/2001 17:45

Ending:

RESULTS	UNITS	ANALYTE
0.10U	UG/L	ALDRIN
0.10U	UG/L	HEPTACHLOR
0.10U	UG/L	HEPTACHLOR EPOXIDE
0.039J	UG/L	ALPHA-BHC
0.20U	UG/L	BETA-BHC
0.10U	UG/L	GAMMA-BHC (LINDANE)
0.17U	UG/L	DELTA-BHC
0.10U	UG/L	ENDOSULFAN I (ALPHA)
0.051J	UG/L	DIELDRIN
0.25U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.25U	UG/L	4,4'-DDD (P,P'-DDD)
0.25U	UG/L	ENDRIN
0.25U	UG/L	ENDOSULFAN II (BETA)
0.25U	UG/L	ENDOSULFAN SULFATE
1.2U	UG/L	PCB-1242 (AROCLOR 1242)
1.2U	UG/L	PCB-1254 (AROCLOR 1254)
1.2U	UG/L	PCB-1221 (AROCLOR 1221)
1.2U	UG/L	PCB-1232 (AROCLOR 1232)
1.2U	UG/L	PCB-1248 (AROCLOR 1248)
1.2U	UG/L	PCB-1260 (AROCLOR 1260)
1.2U	UG/L	PCB-1016 (AROCLOR 1016)
10U	UG/L	TOXAPHENE
0.10U	UG/L	CHLORDENE /2
0.10U	UG/L	ALPHA-CHLORDENE /2
NA	UG/L	BETA-CHLORDENE /2
NA	UG/L	GAMMA-CHLORDENE /2
0.10U	UG/L	GAMMA-CHLORDANE /2
0.10U	UG/L	TRANS-NONACHLOR /2
0.10U	UG/L	ALPHA-CHLORDANE /2
0.10U	UG/L	CIS-NONACHLOR /2
0.16U	UG/L	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
0.50U	UG/L	METHOXYCHLOR
0.25U	UG/L	ENDRIN KETONE

-average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
-actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
-qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.
-confirmed by gcms: 1.when no value is reported, see chlordane constituents 2.constituents or metabolites of technical chlordane

Sample 5383 FY 2001 Project: 01-0444

PESTICIDES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: CNTLCUT /

Media: SUBSURFACE SOIL (> 12")

Produced by: Revells, Lavon

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/26/2001 15:15

Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
21U	UG/KG	ALDRIN
21U	UG/KG	HEPTACHLOR
21U	UG/KG	HEPTACHLOR EPOXIDE
21U	UG/KG	ALPHA-BHC
21U	UG/KG	BETA-BHC
21U	UG/KG	GAMMA-BHC (LINDANE)
21U	UG/KG	DELTA-BHC
21U	UG/KG	ENDOSULFAN I (ALPHA)
21U	UG/KG	DIELDRIN
31U	UG/KG	4,4'-DDT (P,P'-DDT)
21U	UG/KG	4,4'-DDE (P,P'-DDE)
26U	UG/KG	4,4'-DDD (P,P'-DDD)
21U	UG/KG	ENDRIN
21U	UG/KG	ENDOSULFAN II (BETA)
21U	UG/KG	ENDOSULFAN SULFATE
110U	UG/KG	PCB-1242 (AROCLOR 1242)
110U	UG/KG	PCB-1254 (AROCLOR 1254)
110U	UG/KG	PCB-1221 (AROCLOR 1221)
110U	UG/KG	PCB-1232 (AROCLOR 1232)
110U	UG/KG	PCB-1248 (AROCLOR 1248)
110U	UG/KG	PCB-1260 (AROCLOR 1260)
110U	UG/KG	PCB-1016 (AROCLOR 1016)
850U	UG/KG	TOXAPHENE
21U	UG/KG	CHLORDENE /2
21U	UG/KG	ALPHA-CHLORDENE /2
21U	UG/KG	BETA-CHLORDENE /2
21U	UG/KG	GAMMA-CHLORDENE /2
21U	UG/KG	GAMMA-CHLORDANE /2
21U	UG/KG	TRANS-NONACHLOR /2
21U	UG/KG	ALPHA-CHLORDANE /2
21U	UG/KG	CIS-NONACHLOR /2
21U	UG/KG	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
16JN	UG/KG	METHOXYCHLOR
21U	UG/KG	ENDRIN KETONE
15	%	% MOISTURE

average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.
confirmed by gcms: 1.when no value is reported, see chlordane constituents 2.constituents or metabolites of technical chlordane

Sample 5384 FY 2001 Project: 01-0444

PESTICIDES SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: TW3CUT /

Media: SUBSURFACE SOIL (> 12")

Produced by: Revells, Lavon

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/26/2001 15:30

Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
21U	UG/KG	ALDRIN
21U	UG/KG	HEPTACHLOR
21U	UG/KG	HEPTACHLOR EPOXIDE
21U	UG/KG	ALPHA-BHC
21U	UG/KG	BETA-BHC
21U	UG/KG	GAMMA-BHC (LINDANE)
21U	UG/KG	DELTA-BHC
21U	UG/KG	ENDOSULFAN I (ALPHA)
21U	UG/KG	DIELDRIN
38U	UG/KG	4,4'-DDT (P,P'-DDT)
21U	UG/KG	4,4'-DDE (P,P'-DDE)
21U	UG/KG	4,4'-DDD (P,P'-DDD)
21U	UG/KG	ENDRIN
21U	UG/KG	ENDOSULFAN II (BETA)
21U	UG/KG	ENDOSULFAN SULFATE
100U	UG/KG	PCB-1242 (AROCLOR 1242)
100U	UG/KG	PCB-1254 (AROCLOR 1254)
100U	UG/KG	PCB-1221 (AROCLOR 1221)
100U	UG/KG	PCB-1232 (AROCLOR 1232)
100U	UG/KG	PCB-1248 (AROCLOR 1248)
100U	UG/KG	PCB-1260 (AROCLOR 1260)
100U	UG/KG	PCB-1016 (AROCLOR 1016)
830U	UG/KG	TOXAPHENE
21U	UG/KG	CHLORDENE /2
21U	UG/KG	ALPHA-CHLORDENE /2
21U	UG/KG	BETA-CHLORDENE /2
21U	UG/KG	GAMMA-CHLORDENE /2
21U	UG/KG	GAMMA-CHLORDANE /2
21U	UG/KG	TRANS-NONACHLOR /2
21U	UG/KG	ALPHA-CHLORDANE /2
21U	UG/KG	CIS-NONACHLOR /2
21U	UG/KG	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
42U	UG/KG	METHOXYCHLOR
23U	UG/KG	ENDRIN KETONE
12	%	% MOISTURE

ıverage value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
ıctual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
ıc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.
confirmed by gcms: 1.when no value is reported, see chlordane constituents 2.constituents or metabolites of technical chlordane

Sample 5385 FY 2001 Project: 01-0444
PESTICIDES SCAN
Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW1CUT /
Media: SUBSURFACE SOIL (> 12")

Produced by: Revells, Lavon
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:50
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
23U	UG/KG	ALDRIN
23U	UG/KG	HEPTACHLOR
23U	UG/KG	HEPTACHLOR EPOXIDE
23U	UG/KG	ALPHA-BHC
23U	UG/KG	BETA-BHC
23U	UG/KG	GAMMA-BHC (LINDANE)
23U	UG/KG	DELTA-BHC
23U	UG/KG	ENDOSULFAN I (ALPHA)
23U	UG/KG	DIELDRIN
23U	UG/KG	4,4'-DDT (P,P'-DDT)
23U	UG/KG	4,4'-DDE (P,P'-DDE)
23U	UG/KG	4,4'-DDD (P,P'-DDD)
23U	UG/KG	ENDRIN
23U	UG/KG	ENDOSULFAN II (BETA)
23U	UG/KG	ENDOSULFAN SULFATE
120U	UG/KG	PCB-1242 (AROCLOR 1242)
120U	UG/KG	PCB-1254 (AROCLOR 1254)
120U	UG/KG	PCB-1221 (AROCLOR 1221)
120U	UG/KG	PCB-1232 (AROCLOR 1232)
120U	UG/KG	PCB-1248 (AROCLOR 1248)
120U	UG/KG	PCB-1260 (AROCLOR 1260)
120U	UG/KG	PCB-1016 (AROCLOR 1016)
940U	UG/KG	TOXAPHENE
23U	UG/KG	CHLORDENE /2
23U	UG/KG	ALPHA-CHLORDENE /2
23U	UG/KG	BETA-CHLORDENE /2
23U	UG/KG	GAMMA-CHLORDENE /2
23U	UG/KG	GAMMA-CHLORDANE /2
23U	UG/KG	TRANS-NONACHLOR /2
23U	UG/KG	ALPHA-CHLORDANE /2
23U	UG/KG	CIS-NONACHLOR /2
23U	UG/KG	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
47U	UG/KG	METHOXYCHLOR
26U	UG/KG	ENDRIN KETONE
21	%	% MOISTURE

average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.
confirmed by gcms: 1.when no value is reported, see chlordane constituents 2.constituents or metabolites of technical chlordane

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4

Science and Ecosystem Support Division
980 College Station Road
Athens, Georgia 30605-2720

MEMORANDUM

Date: 05/23/2001

Subject: Results of METALS Sample Analysis
01-0444 Vienna Street Dump
Fort Valley, GA

From: Wasko, Mike

To: Striggow.Brian

Thru: Scifres, Jenny
Chief, Inorganic Chemistry Section
Analytical Support Branch

Attached are the results of analysis of samples collected as part of the subject project. If you have any questions, please contact me.

ATTACHMENT

Sample 5377 FY 2001 Project: 01-0444

METALS SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: BKGD /
Media: GROUNDWATER

Produced by: Wasko, Mike
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/25/2001 10:38
Ending:

RESULTS	UNITS	ANALYTE
5.0U	UG/L	SILVER
2.0U	UG/L	ARSENIC
NA	UG/L	BORON
26A	UG/L	BARIUM
3.0U	UG/L	BERYLLIUM
0.50U	UG/L	CADMIUM
5.0U	UG/L	COBALT
5.0U	UG/L	CHROMIUM
20U	UG/L	COPPER
5.0U	UG/L	MOLYBDENUM
10U	UG/L	NICKEL
1.0U	UG/L	LEAD
1.0U	UG/L	ANTIMONY
2.0U	UG/L	SELENIUM
25U	UG/L	TIN
7.9A	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
10U	UG/L	TITANIUM
0.50U	UG/L	THALLIUM
5.0U	UG/L	VANADIUM
4.7A	UG/L	YTTRIUM
16AJ	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.20U	UG/L	TOTAL MERCURY
120A	UG/L	ALUMINUM
10U	UG/L	MANGANESE
0.65A	MG/L	CALCIUM
0.82A	MG/L	MAGNESIUM
0.50U	MG/L	IRON
2.3A	MG/L	SODIUM
2.0U	MG/L	POTASSIUM

ATRIX PRECISION OUTSIDE METHOD CONTROL LIMITS FOR ZN.

average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5378 FY 2001 Project: 01-0444

METALS SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: CNTL /
Media: GROUNDWATER

Produced by: Wasko, Mike
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/25/2001 13:10
Ending:

RESULTS	UNITS	ANALYTE
5.0U	UG/L	SILVER
1.0U	UG/L	ARSENIC
NA	UG/L	BORON
67	UG/L	BARIUM
3.0U	UG/L	BERYLLIUM
0.50U	UG/L	CADMIUM
5.0U	UG/L	COBALT
200	UG/L	CHROMIUM
20U	UG/L	COPPER
5.0U	UG/L	MOLYBDENUM
230	UG/L	NICKEL
4.2	UG/L	LEAD
1.0U	UG/L	ANTIMONY
2.0U	UG/L	SELENIUM
25U	UG/L	TIN
99	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
53	UG/L	TITANIUM
0.50U	UG/L	THALLIUM
12	UG/L	VANADIUM
14	UG/L	YTTRIUM
63	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.20U	UG/L	TOTAL MERCURY
2300	UG/L	ALUMINUM
100	UG/L	MANGANESE
23	MG/L	CALCIUM
2.8	MG/L	MAGNESIUM
5.2	MG/L	IRON
5.4	MG/L	SODIUM
4.3	MG/L	POTASSIUM

verage value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
ctual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
c indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5379 FY 2001 Project: 01-0444

METALS SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW1 /
Media: GROUNDWATER

Produced by: Wasko, Mike
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/25/2001 15:30
Ending:

RESULTS	UNITS	ANALYTE
5.0U	UG/L	SILVER
19	UG/L	ARSENIC
NA	UG/L	BORON
38	UG/L	BARIUM
3.0U	UG/L	BERYLLIUM
0.62	UG/L	CADMIUM
5.0U	UG/L	COBALT
130	UG/L	CHROMIUM
72	UG/L	COPPER
7.1	UG/L	MOLYBDENUM
70	UG/L	NICKEL
48	UG/L	LEAD
1.0U	UG/L	ANTIMONY
11	UG/L	SELENIUM
25U	UG/L	TIN
46	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
370	UG/L	TITANIUM
1.2	UG/L	THALLIUM
220	UG/L	VANADIUM
48	UG/L	YTTRIUM
210	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.20U	UG/L	TOTAL MERCURY
23000	UG/L	ALUMINUM
320	UG/L	MANGANESE
9.0	MG/L	CALCIUM
2.7	MG/L	MAGNESIUM
120	MG/L	IRON
32	MG/L	SODIUM
6.3	MG/L	POTASSIUM

ESENCE OF THALLIUM VERIFIED BY DIRECT ANALYSIS OF UNDIGESTED SAMPLE

/erage value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
:tual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
: indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5380 FY 2001 Project: 01-0444

METALS SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: TW3 /

Media: GROUNDWATER

Produced by: Wasko, Mike

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/25/2001 17:45

Ending:

RESULTS	UNITS	ANALYTE
5.0U	UG/L	SILVER
19	UG/L	ARSENIC
NA	UG/L	BORON
210	UG/L	BARIUM
3.0U	UG/L	BERYLLIUM
0.74	UG/L	CADMIUM
12	UG/L	COBALT
40	UG/L	CHROMIUM
20U	UG/L	COPPER
35	UG/L	MOLYBDENUM
22	UG/L	NICKEL
12	UG/L	LEAD
1.0U	UG/L	ANTIMONY
4.3	UG/L	SELENIUM
25U	UG/L	TIN
210	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
110	UG/L	TITANIUM
0.50U	UG/L	THALLIUM
61	UG/L	VANADIUM
93	UG/L	YTTRIUM
57	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.20U	UG/L	TOTAL MERCURY
4400	UG/L	ALUMINUM
840	UG/L	MANGANESE
22	MG/L	CALCIUM
9.5	MG/L	MAGNESIUM
29	MG/L	IRON
29	MG/L	SODIUM
4.5	MG/L	POTASSIUM

average value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
actual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
qc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5383 FY 2001 Project: 01-0444

METALS SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: CNTLCUT /

Media: SUBSURFACE SOIL (> 12")

Produced by: Wasko, Mike

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/26/2001 15:15

Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
0.50U	MG/KG	SILVER
1.0A	MG/KG	ARSENIC
NA	MG/KG	BORON
5.6A	MG/KG	BARIUM
0.30U	MG/KG	BERYLLIUM
0.099U	MG/KG	CADMIUM
0.62A	MG/KG	COBALT
5.0A	MG/KG	CHROMIUM
2.9A	MG/KG	COPPER
0.50U	MG/KG	MOLYBDENUM
2.1A	MG/KG	NICKEL
5.2A	MG/KG	LEAD
0.099UJ	MG/KG	ANTIMONY
0.40U	MG/KG	SELENIUM
2.5U	MG/KG	TIN
0.62A	MG/KG	STRONTIUM
NA	MG/KG	TELLURIUM
22A	MG/KG	TITANIUM
0.099U	MG/KG	THALLIUM
13A	MG/KG	VANADIUM
4.5A	MG/KG	YTTRIUM
22A	MG/KG	ZINC
NA	MG/KG	ZIRCONIUM
0.048U	MG/KG	TOTAL MERCURY
1100A	MG/KG	ALUMINUM
36A	MG/KG	MANGANESE
95A	MG/KG	CALCIUM
50U	MG/KG	MAGNESIUM
4600A	MG/KG	IRON
200U	MG/KG	SODIUM
200U	MG/KG	POTASSIUM
17	%	% MOISTURE

TRIX SPIKE RECOVERY OUT OF CONTROL LIMITS FOR SB

erage value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
tual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
: indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5385 FY 2001 Project: 01-0444

METALS SCAN

Facility: Vienna Street Dump Fort Valley, GA
Program: SF
Id/Station: TW1CUT /
Media: SUBSURFACE SOIL (> 12")

Produced by: Wasko, Mike
Requestor:
Project Leader: BSTRIGGO
Beginning: 04/26/2001 15:50
Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
0.50U	MG/KG	SILVER
1.2	MG/KG	ARSENIC
NA	MG/KG	BORON
4.8	MG/KG	BARIUM
0.30U	MG/KG	BERYLLIUM
0.10U	MG/KG	CADMIUM
0.64	MG/KG	COBALT
10	MG/KG	CHROMIUM
5.8	MG/KG	COPPER
0.50U	MG/KG	MOLYBDENUM
1.6	MG/KG	NICKEL
5.2	MG/KG	LEAD
0.10U	MG/KG	ANTIMONY
0.40U	MG/KG	SELENIUM
2.5U	MG/KG	TIN
0.69	MG/KG	STRONTIUM
NA	MG/KG	TELLURIUM
26	MG/KG	TITANIUM
0.10U	MG/KG	THALLIUM
18	MG/KG	VANADIUM
9.6	MG/KG	YTTRIUM
23	MG/KG	ZINC
NA	MG/KG	ZIRCONIUM
0.050U	MG/KG	TOTAL MERCURY
2200	MG/KG	ALUMINUM
28	MG/KG	MANGANESE
90	MG/KG	CALCIUM
50U	MG/KG	MAGNESIUM
6500	MG/KG	IRON
200U	MG/KG	SODIUM
200U	MG/KG	POTASSIUM
22A	%	% MOISTURE

verage value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
ctual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
c indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5384 FY 2001 Project: 01-0444

METALS SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: TW3CUT /

Media: SUBSURFACE SOIL (> 12")

Produced by: Wasko, Mike

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/26/2001 15:30

Ending:

DATA REPORTED ON DRY WEIGHT BASIS

RESULTS	UNITS	ANALYTE
0.50U	MG/KG	SILVER
1.0	MG/KG	ARSENIC
NA	MG/KG	BORON
4.5	MG/KG	BARIUM
0.30U	MG/KG	BERYLLIUM
0.10U	MG/KG	CADMIUM
0.50U	MG/KG	COBALT
8.6	MG/KG	CHROMIUM
5.6	MG/KG	COPPER
0.50U	MG/KG	MOLYBDENUM
1.8	MG/KG	NICKEL
5.5	MG/KG	LEAD
0.10U	MG/KG	ANTIMONY
0.40U	MG/KG	SELENIUM
2.5U	MG/KG	TIN
0.73	MG/KG	STRONTIUM
NA	MG/KG	TELLURIUM
24	MG/KG	TITANIUM
0.10U	MG/KG	THALLIUM
17	MG/KG	VANADIUM
2.4	MG/KG	YTTRIUM
22	MG/KG	ZINC
NA	MG/KG	ZIRCONIUM
0.049U	MG/KG	TOTAL MERCURY
1700	MG/KG	ALUMINUM
24	MG/KG	MANGANESE
140	MG/KG	CALCIUM
50U	MG/KG	MAGNESIUM
5300	MG/KG	IRON
200U	MG/KG	SODIUM
200U	MG/KG	POTASSIUM
11	%	% MOISTURE

ıverage value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
ıctual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
ıc indicates that data unusable. compound may or may not be present. resampling and reanalysis is necessary for verification.

Sample 5381 FY 2001 Project: 01-0444

METALS SCAN

Facility: Vienna Street Dump Fort Valley, GA

Program: SF

Id/Station: QA-PB1 /

Media: PRESERVATIVE BLANK

Produced by: Wasko, Mike

Requestor:

Project Leader: BSTRIGGO

Beginning: 04/25/2001 18:00

Ending:

RESULTS	UNITS	ANALYTE
5.0U	UG/L	SILVER
2.0U	UG/L	ARSENIC
NA	UG/L	BORON
5.0U	UG/L	BARIUM
3.0U	UG/L	BERYLLIUM
0.50U	UG/L	CADMIUM
5.0U	UG/L	COBALT
5.0U	UG/L	CHROMIUM
20U	UG/L	COPPER
5.0U	UG/L	MOLYBDENUM
10U	UG/L	NICKEL
0.50U	UG/L	LEAD
1.0U	UG/L	ANTIMONY
2.0U	UG/L	SELENIUM
25U	UG/L	TIN
5.0U	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
10U	UG/L	TITANIUM
0.50U	UG/L	THALLIUM
5.0U	UG/L	VANADIUM
3.0U	UG/L	YTTRIUM
10U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.20U	UG/L	TOTAL MERCURY
100U	UG/L	ALUMINUM
10U	UG/L	MANGANESE
0.50U	MG/L	CALCIUM
0.50U	MG/L	MAGNESIUM
0.50U	MG/L	IRON
2.0U	MG/L	SODIUM
2.0U	MG/L	POTASSIUM

ıverage value. NA-not analyzed. NAI-interferences. J-estimated value. N-presumptive evidence of presence of material.
ıctual value is known to be less than value given. L-actual value is known to be greater than value given. U-material was analyzed for but not detected. the number is the minimum quantitation limit.
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Vienna Street Dump
Field Investigation
3-19-01

(1)

09:01 Depart SESD lab
Personnel: Brian Striggow: Project leader / driller
Art Masters: Safety Officer
Marty Allen: ESAT support
Claire Burton: ESAT support
11:45 Arrive Fort Valley - check-in @ Days Inn
12:10 On Site @ WWTP, drop trailers,
pick decon site, meet Shanika Peeman, Jeff Finn
12:30 To lunch
13:15 Back on-site. Clear utilities
for all well locations on Fort Valley
property w/ Water, Sewer, Electric, Gas.
14:30 Meet w/ Tripp Rivers, Tripp's tractor
Service, regarding road to TW3
14:30 Safety lecture
14:40 Begin staging eqpt to BKGD
15:30 Augered - ~~Hamp~~ 0.0 to 3ft J. Finn
Munsell color 2.5 YR 4/6
1st well Red ~~silty clayey~~ clayey sand or clayey sand + silt
on Hill Consistency 1 soft < .5 - size of grains
weather plasticity - medium
windy Density loose
50°F moist
overcast ~~Dry St~~ Dilitancy - None
Toughness - low
10 to 15% Fines ~~SM~~ SF - No gravel
Dry strength - low -

Background well

(2) 1550 - Start drilling - Hollow stem Auger
- no Air monitoring
Machine is unoperable - due to battery charge

1620 - Drilled to 15 ft
Red Clayey - sand continued

1625 Drilled to 20 FT
- changed ~~from~~ to a less clayey sand, same color - Red
very soft
low plasticity

1630 - Drilled to 25 FT
changed to a coarser grained yellowish red sand with specs of lighter colored sand
~~7.5 yr~~ 5 yR 5/8
less silt < 5%
moist larger grain > approx. .7mm

1640 Drilled to 26 FT
Reddish yellow sand / very little clay
7.5 yR - 6/8 < 5% fines >
Dilitancy - slow → None
- larger

1645 Drilled to 28 ft - Kaolinite clay (3)
white to pink
Color 5 YR 7/1 to 8/1
low plasticity
moist, crumbles easily
med strength
slow to no dilitancy

1650 Drilled to 35 FT
still light grey becoming more pink - 5 yR 7/6
clayey sand

1700 drilled to 40 FT
same pink sand / grey clay -
possibly grey clay loses in pink sand

1710 Drilled to 45 FT ~~incontered~~
clayey sand 10 yR 7/8
yellow
low plasticity crumbles easily
10% silts or fines
low dilitancy
moist, 50 FT

1735 Drilled to 50 ft - Pulled Stated Auger
sample - yellow 10 yR 7/6
~~clayey~~ Sand - very low clay
10% silt or fines low plasticity
moist, ~~soft~~ crumbles easily

(4)

low dilitancy
(sand) soil became more coarse

1735 50Ft Hollow Sam Auger
yellow sand - coarser grain
~~moist~~ - increasing moisture
very ~~low~~ non plasticity - crumbles does
not stick together 7.5YR 7/8
Reddish yellow -

1745
55Ft - increasing moisture (slightly)
same texture soil as above - darker due
to moisture content 7.5YR 6/8
Reddish yellow - sand .5mm
Non plastic grain size

1800 - 60Ft
silty sand - approx 10% silt
moist 7.5YR 7/8
~~low~~ non plasticity Reddish yellow
Slow dilitancy, ~~very~~ JF 50Ft

1810 65Ft
clayey sand 10YR 7/8
~~more~~ moist ~~[illegible]~~ JF yellow
low plasticity 10% silt
Slow - NO Dilitancy

1825 70Ft last Auger
10YR 6/8 brownish yellow approx
clayey sand low plasticity 10% silt
more [illegible] crumbles easily

(5)

1830 Start Removing H.S. Auger
no well installed - no perched -
- water zone found - well will
be abandoned, some moist soil
was found but recovery would
almost be zero.

1830 - 1930 - clean up + transport equiptment
to Decon Pad.

1935 Locked gate at exit

(6) Workday #2 3-20-01

Wind ESE 18mph - ~~Gust up to 35 mph~~ JF

0800 40's °F, light rain, clearing

0800 -

0950 - Decon Augers + equipment, Drill Rig,

1000 set up Drill Rig

- current weather overcast light wind

1020 - Calibrated PID/FID zero gas + methane

1030 - Start Drilling from cuttings

1035 - drilled to 5ft dk. brown clay - low plasticity

Poor sorted moist -

10YR 3/3 10ft low dilitancy

FID normal 16.53 from cutting

FID normal -3.53 10ft - Red ~~silty~~ clayey sand and silt

very moist 2.5YR 4/6 low Plasticity

1050 15ft Angular - subangular - sand 15% silt

non cemented low plastic

grain type - Quartz

soft

bedding thickness?

1100 20ft brown clayey sand

25ft 7.5YR 4/4

1130 - lunch med plasticity

1230 - Resume low dilitancy

(7)

30ft

5YR 6/6 reddish yellow sand

Air-nodule granular, noncemented

16.50 moist low-nonplastic

3.49 soft 65% silt

35ft same granular clayey sand with white to gray clay - Highly plastic

moist to wet

40ft yellow sand - wet

10YR 7/8 silty sand

granular

nonplastic

A RAPID Dilitancy

1305 -

FID 16.9 / Using split auger to check

FID -3.49 / moisture and bottom layers

sand - yellow wet 10YR 7/8

granular 10% silt

RAPID Ditancy nonplastic

- Decided to Fail 5 more ft.

1320 - 45ft

FID 19.65

FID -3.35

Depth to water 39.50ft

1350 from top of auger

1405 - start - setting casing - stainless steel

water at 38.95

(8)

1420 Added one bag of filter sand

calibration turbidity meter #9
std 57 reads 57.1
std 521 reads 526
std 4.7 reads 4.78

pH meter #2
slope 100.3

Conductivity meter #2
std 445 = 445
467 = 47

Centered well
1580 - Depth to water ~~[illegible]~~ 38.70 ft
well depth - ~~[illegible]~~ ft 47.50 ft
length of casing above ground 3.04 ft

8.80 x .163 = 1.43 - 1 well casing
Remove 4.30 gal

Initial water removing - 1st bailer
~~time 1633~~

time	ph	turb NTU	Temp °C	Cond µs/cm
1633	6.21	315	16.9	189
1644	6.22	[illegible]	17.1	181.4
1657	6.26	315	16.0	184.0

(9)

Removed 8.50 Gals - turbidity was gradually going down.

bailer was lost in well -
will retrieve using fishing line in A.m.
sampling postponed until 3.21-01

1730 - left site - locked gate

(10) Day 3 22 March 2001

Orion ph meter #2 model 230A
ph 7.00 + 4.00 sol'n slope 100.8
Conductivity meter - orion model 140
STD. 446 46.7
Read 447 Read 47.
HACH turbidity #9 model 2100P
STD 57 Gel

Depth to water 38.70 ft
for potentiometric information
turbidity meter - malfunctioned - not operating

	ph	cond	temp	turb
0853	6.50	202	15.2°C	— NA
0901	6.37	196	16.3°C	— NA
0906	6.36	191	16.2°C	— NA
0911	6.32	187	16.0°C	96 NTUs JF
0929				- 252

Turbidity calibration - Humidity probably caused the turbidity meter to malfunction
(Actual 4.7 READ 4.69, 57 READ - 56.4)
521 READ 518

Turb - Placed turb. meter in
0931 197 front of heater - finally started
~~0935~~ 0929 252 working, calibrated
Sample time 0935 - pest/pcb, WCS, metals

1015 - Retrieved bailer from well - SP

(11)

1030 - Call Joellen - Instructions for further work - well placement
- grout well - (control)
- dispose of samples
- clean up.
- put in TW-1, TW-3 will be installed at a later date when the area has dried up.

1100 - Start to fill well with filke sand up to 42 ft bgs. - (grouting well)

1200 finished grouting well

Restaged drums at new location
- 4 drums left at control well to serve as protection for well.

1230 - Lunch break - 1330
1330 continued clean up
tried to call Joellen.
JF and SP - checked out TW-3 site, took pictures.
very muddy and wet.
SP - took picture of control well after completion
1515 - left site

1600 Log book returned to B. Stringyon

[signature]

DAY 4 24 MARCH 2001 0311

0815 recalibrate pH meter to 7.00, 4.00
slope 100.2

0830 measured pH after bailing
pH 6.34

April 23, 2001 partly cloudy - 80's
no wind

1300 - meeting at site
1 lunch
1330 set up Decon PAD
1 Set up Drill Rig at Apt complex well
1430

Foxboro TVF-1000

hydrogen 1600 PSI

Span Concentration 1 = both
2 =

1445 PID: 97.0 PPM
FID: 75.1 PPM

Ambient Air Reading
1455 PID Read -2.12 PPM
FID Read -3.68 PPM

1500 to
1510 Safety Meeting
Heat Hazard, slip trip, fall
1515 Started Drilling
PID 4.97
FID 5.43

1 - 5 FT Red clayey sand, moist
PID 4.93 some broken glass particles
5.14 10% silt 4/4 5 YR

4-23-01 JFIN

2/ 5-10ft -9ft moisten red clay with more garbage

PID 5.69

FID 4.97 - clay soil - 30 ppm - FID

3/ 10-15ft wet clay sand 5/6 5YR

PID 5.81 no dump material

FID 4.97 low plasticity

4/ 15-20ft 5/6 5YR

PID 6.43 wet clayey sand

FID 4.41 low plasticity

- some Debris

5/ 20-25ft

24ft PID 6.67 5/4 5YR

FID 4.93 clayey sand low plasticity

wet more plastic -

6/ 25-30ft

- 25ft Kaolin clay - finkish 7/4 5YR

PID 6.84 moist to wet

FID 4.06

7/ 30-35 34ft - Kaolin clay Dryed out

PID 6.83 moist but not wet

FID 3.26

1650 - Breaks

1610 - Resumed Drilling

4-23-01

1610 - Resumed

8/ 35-40ft - start Kaolin clay - moist -

Increased wetness to 40 Kaolin - wet clayey sand

PID 6.86 8/4 ~~5YR~~ pinkish

FID 2.63 7.5YR

42ft changes to 10YR

9/ 40-45F ~~5~~YR

PID 7.34 6/6 clayey sand

FID 2.56 low plastic

low moisture

yellowish brown

10/ 45-50ft

PID 7.47 45ft } wet clay -

FID 2.01 46ft }

50 coarser grained clayey sand

low - No plasticity

6/6 10YR

11/ 50-55F

PID 7.47

FID 1.74 53ft changed to wet sand

1635

7/6 10YR

yellowish sand

no plasticity

wet, 10-15% silt

4-23-01 J. Finn

12/ 55Ft yellow sand - wet

PID 7.58
FID 1.41 | 57Ft - water -

6/6 10YR
brown yellow SAND
wet

60FT cuttings are almost nil (Return)

Fine
1645 SAND -
low to no plasticity

picture 12 JF

1650 Well at southwest corner of Property

water measure / Depth to water 58.20 Ft - bottom of well

1700 - no water yielded -
need to ~~proceed~~ Resume drilling

checked calibration at 1715
Read 96 ppm

1715
Resumed drilling

13/ 60Ft
yellow brown clayey sand
moist
7/8 10YR
low to no plasticity
65Ft

4-23-01 J Finn

14/ 65Ft → 70Ft
PID .21
FID .53

65Ft wet sand - yellow
no plasticity

15/ 70-75FT
PID .15
FID .53

7/6 10 YR
clayey sand
- water -
no Return on Auger

Depth to water Reading 75 Ft

1830 installed stainless steel casing into well.

start
Removed Hollow Stem Augers
Cleanup at well
1930 picture of completed well

#12

Unloaded Augers For Decon

leave site at 2000

4-24-01 J. Finn

0730 start
- Decon equipment

1045 Finished Decon

1200 Calibrate fox boro TVR 1000
PID ~~23252~~ TOL 97 Hydrogen 1100 psi
FID ~~7040~~ methane 765

1230 - Started Drilling
picture #2 Stage on roll
of Drill Rig at bottom of ~~Landfill~~ Dump
- south end next to creek

Auger
1/ 0-5FT dark yellowish brown
PID -14 3/4 10YR Clayey Sand
FID -1.54 low moisture
~~sst~~ change to I low plast
2/ 5-10 5/6 5YR
PID -19 yellowish Red
FID -1.63 low moisture
3/ 10-15 low Plastic
PID -20 12Ft change to Reddish yellow
FID -1.66 clayey sand low to med plasticity
moist
6/8 7.5YR

J. Finn

1150 4-24-01 J. Finn
4/ 15Ft -20F gradual change to Reddish yellow
PID -22 Sand 6/6 7.5YR
FID 1.79 moist low to no plasticity
16Ft change to A 7/6 7.5YR 10%
no plasticity
moist <10% silt
5/ 20-25ft
PID -23 changed to 6/8 7.5YR
FID 1.80 SAND no plasticity
increased moisture 10-15% silt
6/ 25-30Ft changed to brownish yellow
PID 6/6 10YR
FID Sand 10-15% silts
moist
1215 break for lunch
1315 Returned from lunch
- Resumed drilling checked calibration
background
7/ 30-35Ft 30 no change
PID -1.75 6/6 10YR
FID .22 35 moist
no High soil PID or FID reading
8/ 35-40Ft
PID -1.76 no change in soil
PID .73 exc small bits of
dark brown clay

J. Finn

4-24-01 J. Finn

9/ 40 Ft — same sand but more moisture
6/6 10YR
yellowish brown

45 Ft
PID -1.95
FID .81

10/ 45 Ft to 50

47 Ft change to darker brown
5/4 10YR
moist yellowish brown
sand silty 10-15%

50 Ft
PID -2.48
FID -.95

11/ 50 Ft to 55 — changed back to
6/6 10YR
brownish yellow sand
* Increased moisture
had dilitancy

PID -3.11
FID -1.00

12/ 55 Ft to 60 Ft
3/4 10YR
dark brown clayey sand
interbedded fine sand & brown
low moist — No dilitancy

J. Finn

4-24-01 J. Finn

13/ 60 Ft — same yellowish sand
more moisture

65 Ft
PID -3.48
FID -1.58

changed to Reddish yellow clayey sand

14/ 65 - 70 Ft
67 Ft - 6/6 5YR Reddish yellow clayey sand
wet 10-15% silt

PID -2.93
1315 FID - 1.82
- set well casing

PID in well - 3.29 background -3.59
FID in well -1.99 background -1.87

70-75 Ft - No water level - continue drilling

PID - -3.95
FID - 2.08

no change - same pail clayey sand but with Reddish yellow mixed
very moist to wet

photograph of well completed

- Removed Auger from hole
- Loaded Augers to truck
- unloaded Augers for Decon
- checked monitoring well at north end for water level

1830 - finished at site

J. Finn

4-25-01 Steve Pilcher Art Masters

on well 10A Start 0800

Total Depth 92.8

Depth to H_2O — 66.8'

26.0

purged with bailer

calibrating turbidity meter #9 std 521 = 523

std 4.76 = 5

std 57 = 57

ph meter 9-2 7 = 7

4 = 4 slope 99

conductivity meter 2 std 446 = 443

std 46.7 = 47

1 vol	938	turbidity	10 ntu
		ph	4.59
		cond	41 µscm
2 vol	1008	turb	12 ntu
		ph	3.96
		cond	41 µsc
		temp	18.4
3 vol	1028	turb	8
		ph	4.32
		cond	42
		temp	[illegible]

Station BKGD 4-25-01

sampled with bailer

sample time 1038

sampled 3 vos 1 liter 1 gal amber

sample tags 4A-103112-16

Control well

Total Depth 47.1

Depth to H_2O 37.3'

	time	ph	turb	temp	cond
initial	1222	4.11	16	18.0	225
1.5 gal		5.49	574	18.0	234
3 gal		5.30	402	18.2	196
5 gal		5.74	297	18.2	174
6 gal		5.40	227	18.0	171
7.5 gal		5.70	233	18.1	170

sampled @ 1310 by bailer

sampled 3 vol, 1 Litre, 1 gal amber

sample tags 4A 103117-21

AM 4/25/01

TW-1

4-25-01

Depth to H_2O 59.0'
Total Depth very soft bottom 77.1'

	ph	cond	turb	temp
initial	4.60	279	112	18.4
3gal	4.54	280	0f1	18.3

at 5 gal well purged dry allowed to recover sampled @ 1530 with bailer
sample tags 103122 - 103126

TW3

Total depth 75.6
Depth to H_2O 44.5
31.1

	ph	cond	temp	turbidity
Initial	4.96	440	19.2	200
6 gal	4.47	431	18.9	offscale
10 gal	4.50	414	18.2	offscale
15 gal	4.42	404	18.2	offscale

Post cal
cond 46.7 = 47
446 = 442

Ph 6.87 = 7
3.90 = 4
Turb [illegible]

[illegible]

4-26-01
start 0800
- grout well
decon equipment

Sampled drums for cuttings from borehole control well
3 drums Voa taken from the deepest interval metals, pesticide/ext taken from 3 drums equally, composted & mixed

TW3 voa taken from deepest marked interval 40-55' other deep drums were not marked & could not determine which were borehole cuttings and which were auger cuttings. 5 drums composited for other analyses.

TW1 voa taken from deepest interval, six drums composited, mixed & sampled for ext, pest, metals

Reference No.: 9

Vienna Street Dump
Fort Valley, Georgia

Field Investigation Work Plan
March 2001

United States Environmental Protection Agency
Region 4
Science and Ecosystem Support Division
Enforcement and Investigations Branch
Superfund and Air Section

Introduction

During the week of March 19, 2001, personnel from the US-EPA Region 4 Science and Ecosystem Support Division (SESD), Superfund and Air Section will conduct a field investigation at, and in the area surrounding, the Vienna Street Dump in Fort Valley, Georgia. The efforts of SESD personnel will be augmented by support from ESAT and START contract personnel. The overall field investigation activities will be directed by Brian Striggow of the SESD.

This investigation was requested by the US-EPA Region 4 Waste Management Division, South Site Management Branch. The goal of this investigation is to analyze groundwater samples from the Vienna Street Dump area to support the Hazard Ranking System (HRS) decision making process.

Background

The Vienna Street Dump is located on property owned by the city of Fort Valley east of the downtown area, to the East of the Norfolk and Southern RR and South of Bay Creek. A wastewater treatment plant was established on the western end of the property in 1935. The eastern portion of the property was used from approximately 1940 to 1970 to dispose of municipal and industrial waste. Local residents have suspected that chemical wastes from various local industries, including Blue Bird Body and Woolfolk Chemical, may have been buried at the site.

In 1994-1995, Black and Veatch conducted a Site Investigation (SI) for the purpose of determining the nature and extent of contamination at the site. The groundwater evaluation at that time consisted of sampling and analysis of a presumed upgradient and downgradient potable well located 1.5 mile NNE of the site and 0.75 mile ESE of the site respectively. While these analyses indicated no elevated levels of contaminants, a recent review of the SI report revealed that the two potable wells sampled comprised an inadequate evaluation of potential groundwater pathways.

The State of Georgia Department of Natural Resources, Environmental Protection Division conducted an investigation in October 2000 to gather further data and better characterize any groundwater contamination. At this time an attempt was made using Geoprobe equipment to establish temporary wells adjacent to the landfill. This equipment was unable to reach groundwater at approximately 25' Below Land Surface (BLS) and the work was abandoned.

Scope

The scope of this study is the collection and analysis of surficial aquifer groundwater samples in the area of and surrounding the Vienna Street Dump site. The SESD drilling rig will be used to establish temporary wells in material above the clay confining layer believed to underlay the site at a depth greater than that achieved in the previous Geoprobe work.

A background temporary well (BKGD) will be established at the Southwest end of the site, near the Vienna Street entrance of the wastewater treatment plant. This location was chosen for its relatively high elevation which will presumably establish it as an upgradient point, and its lack of proximity to local industry.

A control temporary well (CNTL) will be established at the northwest end of the overall site adjacent to Bay Creek and near the Norfolk Southern Railway. This location lies between the Vienna Street Dump and a dump area owned by Blue Bird Body believed to be a source of potential contamination. The Blue Bird dump is across the railway and upstream on Bay Creek from the Vienna Street Dump. The purpose of this well is to isolate any contamination found in this investigation from the effects of upgradient contamination.

Three potential drilling locations were found for temporary wells along the eastern and southern boundaries of the dump site. These wells are presumed to be downgradient or crossgradient from the dump site proper. There were no practical locations to establish temporary wells along the northern border of the dump due to landfill debris pushed up to the edge of Bay Creek and the lack of access to the opposite bank.

A temporary well (TW1) will be located in the playground of the Indian Oaks Apartments on the Southern border of the site. An additional well (TW3) will be located at the eastern end of the site at a point outside of the buried debris. A backup location (TW2) on the Evans Orchard property southeast of the site will be used as a backup location in the event of problems encountered in establishing either of the other 'TW' locations.

Logistics

Travel to the site will occur on the morning of March 19, 2001. Drilling should commence on the afternoon of March 19. Work should be completed and all personnel released for return by March 23, 2001.

Contractors or other individuals associated with this work should plan on meeting SESD personnel at the Vienna Street wastewater treatment plant at 12:30 pm on March 19.

The START contractor will arrange for equipment to clear access to the TW3 wellsite during midweek.

Samples for Volatile Organic compound Analysis (VOA) will either be shipped Thursday evening to the SESD laboratory for arrival Friday March 23, or brought to the lab by SESD or ESAT personnel Friday morning March 23. If drilling progresses ahead of schedule, the VOA samples may be brought or shipped to the lab early after notifying the laboratory of the change in schedule. All other samples will be brought to the lab and stored in the custody cooler after conclusion of drilling operations.

<u>Personnel:</u>

Brian Striggow	Project leader, driller
Art Masters	Safety Officer and drilling support
Marty Allen	ESAT drilling support
Claire Barton	ESAT decon support
Joe Baer	START geologist, air monitoring, logging

Additional START contractor for IDW handling, sampling

Sampling and Methodology

Samples will be collected and handled in accordance with the US-EPA, Region 4, SESD, Environmental Investigation Standard Operating Procedures and Quality Assurance Manual, May 1, 1996. Samples will be analyzed in accordance with the Laboratory Operations and Quality Control Manual, Sept 1990, and/or the Contract Laboratory Program (CLP) Statement of Work.

Temporary Well Installation

Drilling will be initially performed with 6.25" hollow stem augers. Material at the bottom of the boring will be periodically retrieved via slat auger for identification and evaluation for moisture. If conditions dictate, later drilling may be performed with 4" solid stem augers.

At such point as on-scene evaluation determines that adequate depth has been obtained, a 2" stainless steel temporary well casing will be placed with a 2.5' or 5' 0.010" slot screened section. Depending on the evaluation of material from the bottom of the borehole, the screened section may be filter packed with fine filter sand.

The wells will be developed briefly by bailer to attempt to reduce turbidity. If well recovery is very slow, development will be discontinued. All water samples will be collected by bailer. Field analytical measurements of pH, turbidity, temperature, and conductivity will be recorded at the time of sampling.

If the project schedule permits, the water levels will be recorded after overnight recovery and casing elevations tied to a local temporary benchmark in order to later develop basic potentiometric information.

The background well will be backfilled with the drill cuttings after sampling and abandonment. The control and other temporary well boreholes will be grouted to approximately 5-10' BLS and backfilled with surface drill cuttings to land surface.

Each temporary well sample will be analyzed for:
Metals, Extractable organics/pesticides, and Volatile organics (Table 1).
The results of these analyses will be forwarded to the Waste Management Division.

Investigation Derived Waste (IDW)

Drill cuttings from the control and other temporary well boreholes will be managed as follows:
The drill cuttings from the approximate top 5'-10' of boring will be segregated at the drill site. The rest of the cuttings will be drummed. A composite sample will be taken of the drummed cuttings from each borehole for analysis for the same potential contaminants as the temporary well water samples (Table 1). The VOA cuttings sample will be a grab sample, taken from cuttings removed from near the bottom of the borehole. After sampling and casing removal, the holes will be grouted with bentonite grout to approximately 5'-10' Below Land Surface (BLS). The segregated surface cuttings will be returned to the upper borehole.

Since no contamination is expected at the background well site, cuttings will be returned to the borehole after well abandonment, with any excess cuttings to be spread on the dump site.

The drums of cuttings will be staged on the dump site, within the fenced wastewater treatment plant property if possible. The analysis results of the drummed cuttings will be forwarded to the Waste Management Division for decision making on their ultimate disposition. Further handling of the drummed cuttings will be managed by the Waste Management Division and their START contractor.

Water waste from the cleaning and field decontamination of drilling equipment will be pumped into the influent process stream of the wastewater treatment plant. Any solvent recovered from field decontamination of well casing will be returned to the SESD lab for recycling. Solid material removed from augers during the decon operation will be placed with other drill cuttings from the same borehole.

Safety

The field investigation will be conducted in accordance with the Region 4, SESD, Safety Health and Environmental Management Program, Procedures and Policies Manual, September 1999. Air monitoring by PID and FID will be conducted during all drilling operations. Personal Protective Equipment will be Level D, with additional head, hand, and ear protection for personnel working in proximity to drilling operations.

All personnel will be familiar with the safety plan, a copy of which will be in all field vehicles.

Prior to drilling, all potential drilling locations will be cleared by the utility companies as clear of any buried utilities. Each drill site will be inspected with a pipe locator, a ferromagnetic detector, and hand dug for three feet prior to drilling.

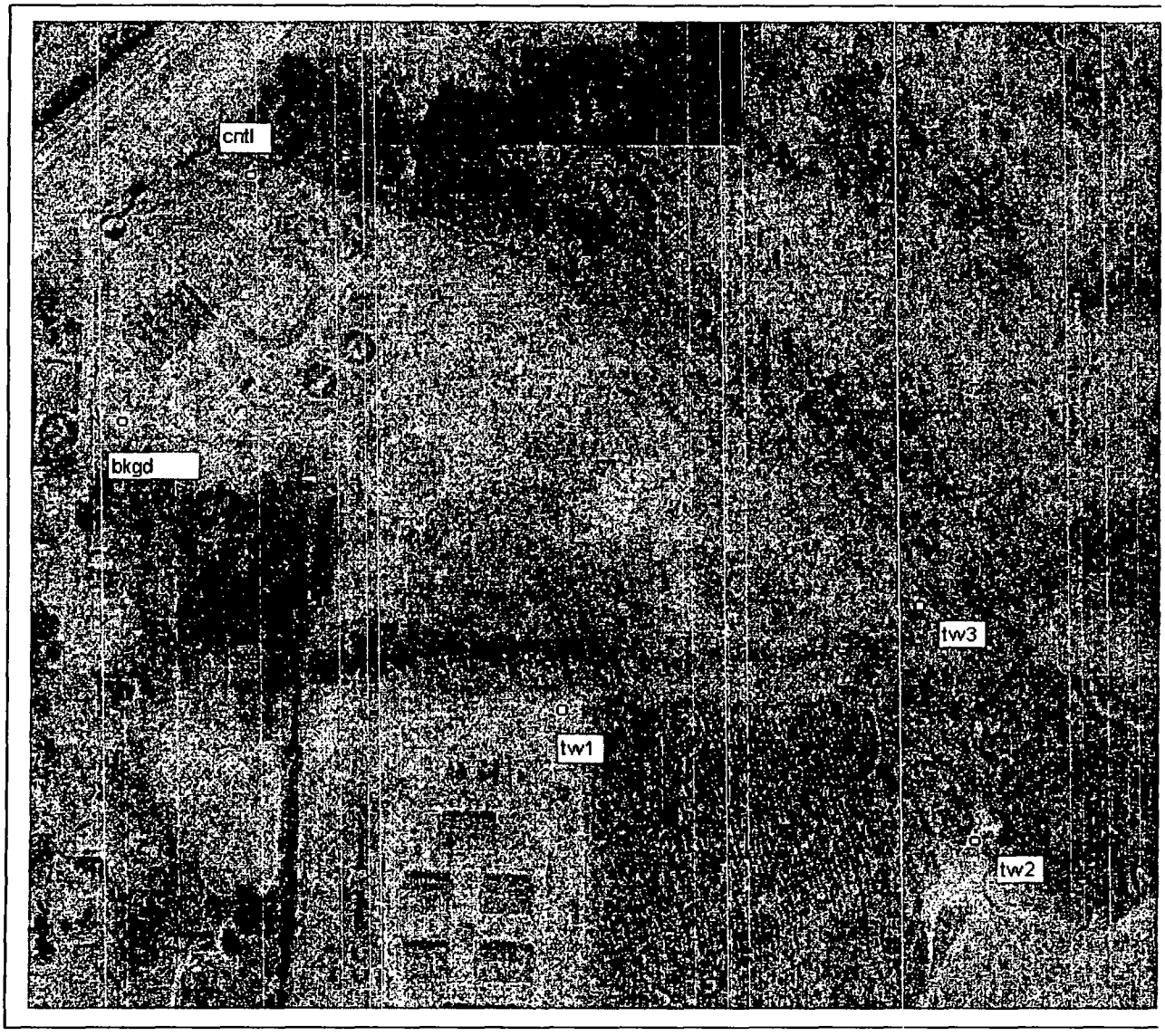


Figure 1. Aerial Photo of Vienna Street Dump with proposed temporary well locations.

Table 1. Vienna Street Dump Samples and Analyses, March 2001

Samples	Description	Matrix	Analyses			
			Volatiles	Extractables	Pesticides	Metals
BKGD	Groundwater from background well at southwestern end of Vienna Street Dump property	Water	x	x	x	x
CNTL	Groundwater from control well at Northwestern end of Vienna Street Dump property	Water	x	x	x	x
TW1*	Groundwater from temporary well at Indian Oaks Apartments	Water	x	x	x	x
TW2*	Groundwater from temporary well at Evans Orchard	Water	x	x	x	x
TW3*	Groundwater from temporary well at East end of Vienna Street Dump	Water	x	x	x	x
PB1	Preservative blank	Water				x
TB1	Water VOA trip blank	Water	x			
TB2	Soil VOA trip blank	Soil	x			
DCC	Drill cuttings from control well	Soil	x	x	x	x
DC1*	Drill cuttings from 'TW1' borehole	Soil	x	x	x	x
DC2*	Drill cuttings from 'TW2' borehole	Soil	x	x	x	x
DC3*	Drill cuttings from 'TW3' borehole	Soil	x	x	x	x
* Two of these three sites will be selected for drilling during field operations. One sample will likely not be collected.						

Reference No.: 10 ners
; 522

HYDROGEOLOGY OF THE CLAYTON AQUIFER OF SOUTHWEST GEORGIA

John S. Clarke, Robert E. Faye and Rebekah Brooks

Prepared as part of the

Accelerated Ground-Water Program

in cooperation with the

Department of the Interior

U.S. Geological Survey

Atlanta

1984

Department of Natural Resources
J. Leonard Ledbetter, Commissioner

Environmental Protection Division
Harold F. Reheis, Assistant Director

Georgia Geologic Survey
William H. McLemore, State Geologist

HYDROLOGIC ATLAS 13

U.S. EPA REGION IV

SDMS

Unscannable Material Target Sheet

DocID: 10583617 Site ID: GAD000048934

Site Name: Vienna Street Dump

Nature of Material:

Map:	/	Computer Disks:	
Photos:		CD-ROM:	
Blueprints:		Oversized Report:	
Slides:		Log Book:	

Other (describe): Site Map

Amount of material:

Please contact the appropriate Records Center to view the material.

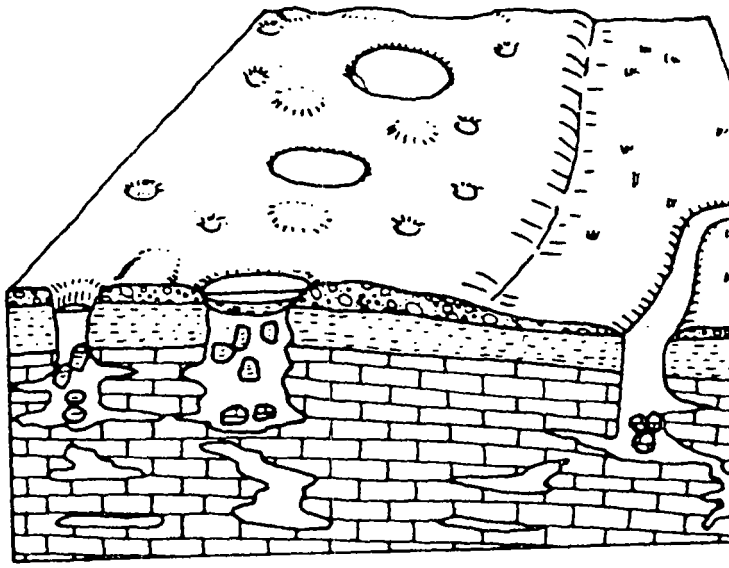
GROUND-WATER POLLUTION SUSCEPTIBILITY MAP OF GEORGIA

by

Victoria P. Trent

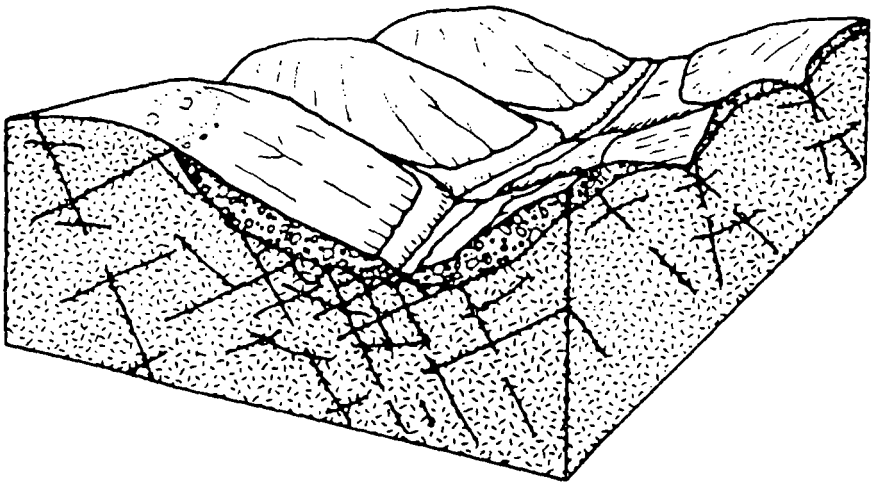
Reference No.: 11

The preparation of this atlas was financed in part through a grant from the U.S. Environmental Protection Agency under the provisions of Section 106 of the Federal Water Pollution Control Act of 1972, as amended.



HYDROGEOLOGY OF THE SOUTHEASTERN COASTAL PLAIN

HYDROGEOLOGY OF THE PIEDMONT AND BLUE RIDGE



Department of Natural Resources
Joe D. Tanner, Commissioner

Environmental Protection Division
Harold F. Reheis, Director

Georgia Geologic Survey
William H. McLemore, State Geologist

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U.S. EPA REGION IV

SDMS

Unscannable Material Target Sheet

DocID: 1058367 Site ID: GA0000048934

Site Name: Vienna Street Dump

Nature of Material:

Map:	✓	Computer Disks:	
Photos:		CD-ROM:	
Blueprints:		Oversized Report:	
Slides:		Log Book:	

Other (describe): Ground-Water Pollution Susceptibility Map of Georgia

Amount of material:

Please contact the appropriate Records Center to view the material.

GEOLOGIC ATLAS OF THE FORT VALLEY AREA

by

John H. Hetrick

Reference No.: 12

Department of Natural Resources
Lonice C. Barrett, Commissioner

Environmental Protection Division
Harold F. Reheis, Assistant Director

Georgia Geologic Survey
William H. McLemore, State Geologist

Atlanta
1990

GEOLOGIC ATLAS 7

U.S. EPA REGION IV

SDMS

Unscannable Material Target Sheet

DocID: 10583617 Site ID: GA0000048534

Site Name: Vienna Street Dump

Nature of Material:

Map:		Computer Disks:	
Photos:		CD-ROM:	
Blueprints:		Oversized Report:	
Slides:		Log Book:	

Other (describe): Geologic Atlas of the Fort Valley Area

Amount of material:

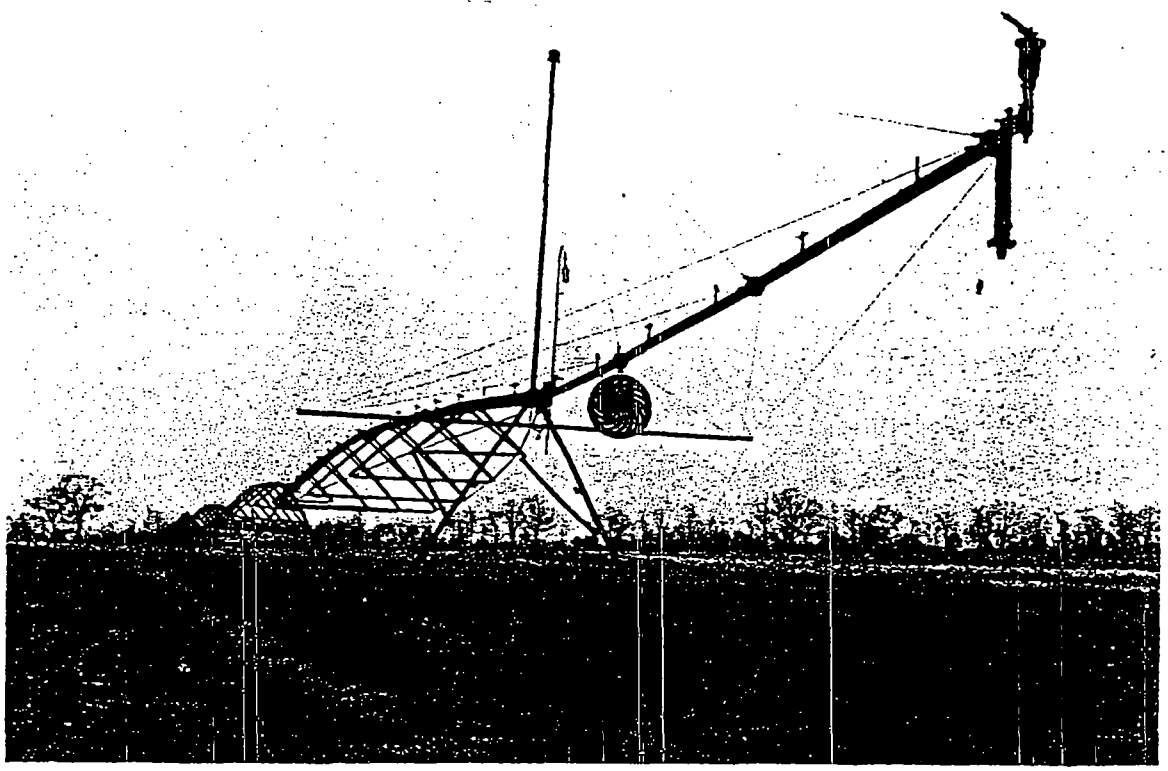
Please contact the appropriate Records Center to view the material.

Reference No.: 13

HYDROGEOLOGY OF THE CLAYTON AND CLAIBORNE AQUIFERS IN SOUTHWESTERN GEORGIA

by

Stephen S. McFadden and P. Dennis Perriello



Department of Natural Resources
Environmental Protection Division
Georgia Geologic Survey

4

INFORMATION CIRCULAR 55

HYDROGEOLOGY OF THE CLAYTON AND CLAIBORNE AQUIFERS IN SOUTHWESTERN GEORGIA

by

Stephen S. McFadden
and
P. Dennis Perriello

Information Circular 55

Prepared as part of the Accelerated Ground-Water Program

GEORGIA DEPARTMENT OF NATURAL RESOURCES
Joe D. Tanner, Commissioner

ENVIRONMENTAL PROTECTION DIVISION
J. Leonard Ledbetter, Director

GEORGIA GEOLOGIC SURVEY
William H. McLemore, State Geologist

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Table 1. Stratigraphic Column of the Study Area.

SYSTEM	EPOCH /SERIES	RADIOMETRIC AGE(M.Y.)/STAGE	GROUP and FORMATION	
TERTIARY		25.0		
	Oligocene	Chickasawhayan 33.0	Unnamed Oligocene Limestone	
		Vicksburgian 38.0		
	Eocene	Jacksonian 41.0	Ocala Limestone	
			Clinchfield Sand	
		Claibornian 50.0	Claiborne Group	Lisbon Formation
				Tallahatta Formation
		55.0 Sabinian	Wilcox Group	Hatchetigbee Formation
	Paleocene	58.0		Tuscahoma Sand
				Nanafalia Formation
		Midwayan 67.0	Clayton Formation	
UPPER CRETACEOUS	Gulfian	Navarroan 72.0	Providence Sand	
			Ripley Formation	
		Tayloran ±79.0	Cusseta Sand	
			Blufftown Formation	
		Austinian ±90.0	Eutaw Formation	
		Eagle Fordian ±94.0	Tuscaloosa Formation	Atkinson Formation
		Woodbinian ±95.0		

(Modified from Huddlestun,1981)

AQUIFERS IN THE STUDY AREA

An aquifer is a body of rock which stores a significant amount of water and is able to transmit that water in usable quantities to municipal, industrial, agricultural, or domestic wells. An artesian aquifer is confined between relatively impermeable layers; consequently, the water level in a well penetrating the upper confining unit will rise above the top of the aquifer due to hydraulic head. Several artesian aquifers are present in the study area including the Providence, Clayton, Claiborne, and Principal Artesian Aquifers.

CRETACEOUS AQUIFERS

Underlying the Clayton Formation in the study area are saturated, permeable sands of the upper Cretaceous Providence Sand. Other Cretaceous aquifers exist in deeper formations, but the greater expense of constructing wells in these aquifers and problems of water quality restrict their use. These deeper aquifers may offer a viable future source of ground water, but their evaluation is beyond the scope of this project. The Providence Sand aquifer, however, is an important source of ground water. It is utilized in multiaquifer wells in Albany and in the updip part of the study area where the Clayton and Claiborne aquifers are not productive.

CLAYTON AQUIFER

The Clayton aquifer consists mostly of saturated, permeable limestone within the middle limestone unit of the Clayton Formation. In some areas, saturated, permeable sands in the upper and lower Clayton Formation are in hydraulic continuity with the limestone and are considered part of the aquifer. The Clayton aquifer is confined above by relatively impermeable clay-rich layers in the upper Clayton Formation and Nanafalia Formation and below by silt and clay layers in the lower Clayton Formation and upper Providence Sand. In the updip part of the study area, the Clayton limestone is reduced in thickness or missing entirely as a result of solution and erosion. Here the Clayton Formation crops out as a sandy clay residuum along streams and on hillsides. In the extreme updip portions of the study area, the confining units are more sandy and permeable; as a result, the Clayton aquifer may be unconfined and include parts of adjacent formations.

Figures 5 through 7 are maps illustrating the geometry of the Clayton aquifer in the study area. Figure 5 is a structure contour map showing the elevation of the top of the Clayton aquifer in feet above or below mean sea level. This contact is the top of the permeable Clayton limestone or contiguous permeable sand as determined by well cuttings, cores, and geophysical logs. The top of the aquifer dips to the southeast at a rate of approximately 20 ft/mi, with a more southerly dip along the Chattahoochee River in the extreme western part of the study area. This map can be used to estimate the depth to the top of the Clayton aquifer by subtracting the elevation indicated by the map from the land surface elevation at a given location.

Figure 6 is an isopach map of the Clayton aquifer in the study area and shows the thickness of the aquifer in feet. The thickness of the aquifer generally increases from the outcrop area to the south, although due to the erosional nature of the Clayton Formation, thicknesses may vary considerably over relatively short distances in the study area.

Figure 7 is a structure contour map showing the elevation of the base of the Clayton aquifer in feet above or below mean sea level. This contact is the bottom of the permeable Clayton limestone or contiguous permeable sand as determined by well cuttings, cores, and geophysical logs. The base of the Clayton aquifer also dips to the southeast, but at a slightly greater rate than the top of the aquifer. Figure 7 can be used to determine the maximum depth at which the Clayton aquifer will be encountered by subtracting the elevation indicated by the map from the land surface elevation at a given location.

The relationship of the Clayton aquifer to the Clayton Formation and other stratigraphic units in the study area is illustrated by the three geologic sections in Plate 1. The southeasterly dip and the general southwesterly thickening are apparent in these sections. Facies changes through the study area are illustrated by changing lithologies recorded in the well logs.

CLAIBORNE AQUIFER

The Claiborne aquifer generally consists of saturated, permeable sands in the Tallahatta Formation, but in some areas may include saturated permeable sands of the lower Lisbon Formation and Hatchetigbee Formation which are in hydraulic continuity. These sands may be separated by less permeable sequences of fine sand, silt and clay. The aquifer is confined above by

Reference No.: 14

Georgia Department of Natural Resources

205 Butler Street, S.E., East Floyd Tower, Atlanta, Georgia 30334
Lonice C. Barrett, Commissioner
Harold F. Reheis, Director
Environmental Protection Division
(404) 656-4713

Reply To:
Georgia Geologic Survey
Room 400
19 Martin Luther King Jr. Drive, S.W.
(404) 656-3214

Reference No.: 14

October 20, 1998

Carol Teras
USEPA - Region IV
Water Programs Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, Georgia 30303

Subject: EPD Report, "Report of Phase I Subsurface Investigation of Contaminated Ground Water, Fort Valley, Georgia"

Dear Ms. Teras:

Enclosed is a copy of the three-volume report summarizing EPD's phase I investigation of the PCE contamination in downtown Fort Valley. I understand that you will make the report available to others in EPA at their request.

If you have any questions or require additional information please contact Jim Guentert or me at (404) 656-3214.

Sincerely,

Roger Carter
Assistant Branch Chief

BRC:jsg

cc: File
w/o attachments:
Dick Green, USEPA
Jeff Pallas, USEPA
Mario Villamarzo, USEPA
Paul Schwartz, USEPA
Natalie Ellington, USEPA
Jennifer Kaduck, Georgia EPD

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Reply To:
Georgia Geologic Survey
Room 400
19 Martin Luther King, Jr.. Dr.. S.W.
Atlanta, Georgia 30334
(404) 656-3214

MEMORANDUM

Date: October 2, 1998

To: Jennifer Kaduck

From: Roger Carter RLC

Subject: Report of Phase I Hydrogeologic Investigation
Fort Valley, Georgia

My memorandum dated July 25, 1998 accompanied the draft report of the hydrogeologic investigation conducted by the Geologic Survey Branch at Fort Valley, Georgia. Since then, the report has been reviewed internally, and editorial changes have been made to the text. There have been no changes to the figures and tables, or to the data in the appendices. There are no material changes in our conclusions. We are forwarding this report for the use by the Hazardous Waste Management Branch because it relates to releases of PCE to the soil and ground water, in violation of rules administered by your branch.

The investigation was funded primarily through Georgia's Drinking Water State Revolving Fund. The primary goal of the investigation was to determine the site or sites that are the probable source or sources of PCE contamination detected in municipal wells CW-1 and CW-2, which are operated by the Fort Valley Utility Commission. The secondary goal was to determine whether either of these two wells could be salvaged for future use in supplying water to the City of Fort Valley. The Survey has prepared the attached report which describes the nature of the investigation, presents the data, describes the hydrogeologic conditions, discusses the chemical contamination, and presents our conclusions regarding PCE sources and useability of the wells.

In brief, the Survey concludes that the Fabra Care Cleaners site is a probable source of the PCE contamination encountered in the soil, in the ground water, and in City wells CW-1 and CW-2; that Anthoines' Machine Shop and the Woolfolk Chemical NPL Site are probably not sources of the PCE contamination; and that five additional sites remain candidate PCE-release sites because additional data are needed to draw a conclusion. There may well be other PCE contributors but we do not believe it is necessary that additional release-sites are required to explain the PCE detections in the soil, ground water and City wells.

The Survey further concludes that the PCE-contaminated ground water can not be prevented from entering wells CW-1 and CW-2 under pumping conditions, and that CW-5 is at risk. PCE has been detected deep within the aquifer and continuous detections in water pumped from CW-5 are expected. As lead time for replacing CW-5 is considerable, we believe that an emergency exists that requires immediate action to protect the public health.

This investigation has been a major part of a multi-branch, multi-agency team effort. I would like to thank those in your branch, and other branches and agencies, for their interest and assistance.

cc: Bill McLemore

REPORT OF PHASE I SUBSURFACE INVESTIGATION

OF CONTAMINATED GROUND WATER

FORT VALLEY, GEORGIA

VOLUME I

Georgia Environmental Protection Division

October 5, 1998

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Text, Tables and Figures

VOLUME II

Appendix A
Appendix B
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Part of Appendix C
Appendix D

INTRODUCTION

The Georgia Environmental Protection Division (EPD) conducted field work for a Phase I Subsurface Investigation at Fort Valley, Georgia from September 1997 to May 1998. The investigation was initiated in response to the detection of tetrachloroethylene, also known as perchloroethylene (PCE), in raw water samples from city wells CW-1 and CW-2. PCE is classified as a probable carcinogen and has a Federal Drinking Water Maximum Contaminant Level (MCL) of 5 micrograms per liter (ug/l) in water. The highest PCE concentrations measured in CW-1 and CW-2 are three ug/l and 16 ug/l, respectively. PCE was not detected in the treated water.

The primary goal of this study was to identify, to the extent feasible, the probable sources (sites) of releases of PCE, that ultimately contaminated the water withdrawn by CW-1 and CW-2. The main objectives were to estimate the ground water flow directions and the vertical and horizontal extent of PCE contamination beneath the central part of Fort Valley, for both the Perched Zone and Water Table Aquifer. A secondary objective was to evaluate whether soils in this general area were contaminated with PCE at the various monitoring well locations. A secondary goal of the investigation was to assess whether the two city wells could be used again, in the near future, without being further contaminated with PCE. This could be reasonably achieved only if PCE were to be found entering the wells from the lowermost well screens, the only location where partial grouting (sealing) of the wells may be feasible. The main objective of the secondary goal was to establish the depth interval, where the PCE enters the well.

This study is regarded as the first phase of what is likely to be additional hydrogeological investigations to answer the additional questions or issues raised by this study.

BACKGROUND

PCE

PCE is a synthetic chlorinated hydrocarbon solvent, commonly used in the dry-cleaning industry and in metal degreasing operations. PCE has been manufactured in the United States since 1925, but trichloroethylene, another organic solvent, was more commonly used until the 1940's. PCE is part of a group of potential environmental pollutants commonly referred to as DNAPLs (dense, nonaqueous phase-liquids), which, as the name implies, are heavier than water in free-phase (undissolved) form and can be persistent, long-term sources of ground water contamination. PCE is more than 60 percent denser than water (relative density of 1.625) and has a relatively low solubility of 150 mg/l in water. PCE can naturally degrade in the subsurface to a series of other chlorinated organic compounds.

Ft. Valley Municipal Water System

The municipal water system is operated by the Fort Valley Utility Commission and consists of five water wells, as shown in Figure 1. Wells CW-1, CW-2 and CW-5 are approximately equidistant from each other and are located near the center of the downtown area, as shown in Figure 2. Wells CW-3 and CW-4 are located in the southwest portion of town, near Fort Valley State College (about one mile from CW-1, CW-2 and CW-5). While PCE has not been detected in system entry point samples, taken where treated water enters the water distribution pipelines, CW-1 and CW-2 were shut down by the Commission in August 1996 as a precautionary measure.

The well screens for CW-1, CW-2 and CW-5 are located at depths where the sands of the Tuscaloosa Formation occur. The main difference in well construction, however, is that CW-1 and CW-2 are hydraulically interconnected with the shallower water-bearing sands above the Tuscaloosa Formation. The gravel-pack placed outside the well casings and screens in wells CW-1 and CW-2 extends to a much shallow depth than in well CW-5. The gravel-pack in CW-5 is restricted to the Tuscaloosa Formation. Well construction details for CW-1, CW-2 and CW-5 are shown in Figure 3.

Wells CW-1 and CW-2 were installed in 1962 and 1977 and are 478 feet and 488 feet deep, respectively. CW-1 and CW-2 are constructed with steel outer casing that are grouted for their entire lengths of 140 feet and 180 feet, respectively. CW-1 has five screened intervals located at depths between 255 feet and 478 feet. CW-2 has three screened intervals located at depths between 350 feet and 486 feet. The gravel-pack in both CW-1 and CW-2 is continuous from the bottom of the well up to the outer casing at 140 feet and 180 feet and, in the case of CW-2, the gravel-pack extends between the inner and outer casing to the land surface. CW-5 was installed in 1990 and is 605 feet deep. CW-5 has a steel outer casing which extends to a depth of 320 feet and has five screened intervals between 330 feet and 590 feet. The gravel pack in CW-5 is continuous from the bottom of the well and into the outer casing to a depth of approximately 270 feet.

In addition to the wells mentioned above, other municipal wells reportedly have once operated in this general area. The locations of three documented historic wells, referred to as the "Kell Well," the "Nick Well," and the "Old City Well" are shown on Figure 2. According to records obtained from the Fort Valley Utility Commission, the Nick Well was 542 feet deep and completed in July 1943 and the Kell Well was 500 feet deep and completed in September 1936. Construction logs for these two wells, however, do not clearly describe the construction, particularly with respect to grouting. No construction details could be confirmed for the "Old City Well," but the well is shown on a 1930 Sanborn Fire Insurance map to have been in the alley about 100 feet north of CW-1. The Fort Valley Utility Commission has only indicated that all three of these older wells were plugged and abandoned but the actual plugging/abandonment methods used are not documented.

PCE Detections in Municipal Water Wells

The EPD has analyzed both treated samples from the water system and untreated samples from the municipal wells for volatiles, including PCE, on a periodic basis since 1988, as part of the public water system permit requirements. Environmental contractors representing the nearby Woolfolk Chemical NPL Site have sampled CW-1 and CW-2 for a group of target compounds, including PCE, on a quarterly basis since October 1993. PCE was first identified in Fort Valley's municipal water supply wells CW-1 and CW-2 in samples collected by ERM, a Woolfolk Chemical NPL Site Contractor, on July 18, 1996. The PCE detections in CW-1 and CW-2 occurred approximately four months after ERM first detected PCE in a monitoring well (MW-4T), completed in the Tuscaloosa Formation at the Woolfolk NPL Site. Since the initial detection, samples have been collected at time intervals ranging from weekly to quarterly from CW-1 and CW-2, variously by the EPD, ERM and the Fort Valley Utility Commission. The Fort Valley Utility Commission has also sampled CW-5 on a weekly to biweekly basis since September 1996. PCE concentrations in CW-1 have generally ranged from approximately 1 ug/l to 3 ug/l with an average of 1.7 ug/l. PCE has been identified at consistently higher concentrations in Well 2, ranging from 1 ug/l to 16 ug/l with an average of 7.6 ug/l. PCE was detected once in CW-5, at a concentration of 5.3 ug/l, on January 15, 1998. Historic PCE concentrations in raw water samples from CW-1 and CW-2, since the initial PCE detections, are listed in Table 1.

PRELIMINARY EVALUATION

The Geologic Survey Branch (GSB) of EPD conducted a preliminary evaluation of potential PCE sources that consisted primarily of the preparation of (1) a Wellhead Protection Plan (WHPP) and (2) a review of historic records regarding past site use. The WHPP is a document routinely prepared by EPD for public water supply wells that are owned by cities, counties and authorities and is based in part on readily observable, potential sources of groundwater pollution. Concurrently, GSB conducted a search for historic information about previous property usage. A December 11, 1996 memorandum from GSB to the EPD Hazardous Waste Management Branch evaluates the data in the WHPP and historic review, relative to potential sources of PCE. The preliminary evaluation of potential sources was, in summary, based on the following elements of the WHPP and historic review:

(a) an area reconnaissance survey and interviews of personnel at selected facilities;
(b) discussions with utility commission employees and other Fort Valley residents;
(c) a review of reports and other information contained in the EPD Hazardous Waste Management Branch Files, EPD Geologic Survey Branch Files and USEPA Files;
(d) a review of Sanborn Fire Insurance maps from 1885, 1920 and 1930; and
(e) a review of material provided by Claude Terry, a consultant advising certain citizens of Fort Valley.

Fifteen potential sources (sites) of PCE were identified during this preliminary assessment. The sites were divided into two groups, Group A and Group B, based on location relative to CW-1

and CW-2, likely usage of PCE, and historic detections of PCE in monitoring wells. The sites in Group A were deemed to be the more likely sources of PCE to contaminate CW-1 and CW-2. The sites in Group A are listed below and shown on Figure 2.

(a) Anthoine Machine Works;
(b) a former dry cleaner (alley southwest of East Main St.):
(c) a former dry cleaner (west side of South Camelia);
(d) a former dry cleaner (intersection of West Church St. and West Main St.);
(e) Fabra Care Cleaners; and
(f) the former Woolfolk Chemical NPL Site

Additionally, a Sanborn Fire Insurance map, which had been updated since the 1930 version, was made available in May 1998 by Mr. Tom Futral, a Georgia Registered Land Surveyor. This updated map indicated that a dry cleaner existed on the property on which the Splish-Splash Car Wash is now located. The outline of the former building is shown on Figure 2. The Splish-Splash Car Wash property is now considered to be a part of the "Group A" sites. According to Mr. Futral, there was not dry cleaning facility at the Splish-Splash Car Wash property when he arrived in Fort Valley in 1964. Therefore, the dry cleaner apparently was in operation sometime between 1930 and 1964. According to the manager interviewed in 1996, the Fabra Care Cleaners has been operating since 1967. Based on the Sanborn Fire Insurance maps the former dry cleaner in the alley southwest of East Main Street was in operation in 1920. The other two former dry cleaners began operation sometime after 1930. The length of time the three former dry cleaners were open is not known.

METHODS OF INVESTIGATION

Soil Drilling and Sampling

EPD drilled a borehole at the location of each monitoring well, using a Mobile B-59 drill rig and hollow stem augers. EPD also collected continuous soil samples in each boring with a 4-inch diameter, 5-foot long core-sampling apparatus attached to the augers. Cores typically were not taken below the water table due to low recovery from caving sands and to seizing of the latching mechanism of the coring apparatus in wet sands. An EPD geologist then described the cores in the field, along with soil cuttings brought to the surface, if coring was not feasible. Core segments were taken for field screening with a photo-ionization detector (PID). Samples having PID readings above background were submitted for laboratory analysis of volatile organic compounds (VOCs). For borings having no PID readings above background levels, samples were collected for VOC analysis just above the water table. In some instances, soil samples for laboratory analysis were collected at or near lithologic boundaries, within damp or wet zones above the water table, or where elevated PID readings were obtained at the top of the hollow-stem augers while the sample interval was being drilled. Detailed descriptions of drilling, soil sampling procedures, and equipment decontamination procedures are included in Appendix A. Boring logs, describing the soil strata encountered, appear in Appendix B. Laboratory analytical data for soil samples are

summarized in Table 2 and are presented in detail in Appendix C.

Monitoring Well Construction

EPD installed five pairs of monitoring wells during the Phase I subsurface investigation, at locations shown in Figure 2. Each pair consisted of a shallow and a deep monitoring well. All ten monitoring wells were constructed in the boreholes drilled with hollow-stem auger equipment, as described previously. A representative diagram of each EPD well-pair is shown in Figure 4.

EPD initially constructed five of the wells in a perched water zone at a depth of approximately 30 feet below ground level, referred to herein as the "Perched Zone." EPD next installed a group of five wells at the permanent water table, which was encountered at a depth of approximately 100 feet.

For each Water Table Aquifer monitoring well, the EPD crew initially installed PVC outer casing, 10 3/4 -inches in diameter, into the kaolin clay layer encountered at approximately 30 feet deep. The purpose of the outer casing was to seal the Perched Zone before drilling deeper, to prevent downward flow through the well bore or sand-pack from the Perched Zone to the Water Table Aquifer. EPD constructed these monitoring wells using 2-inch diameter well screens, which were either 15 or 20 feet long, that were attached to 2-inch diameter PVC inner casing. The PVC inner casing was lowered into 8-inch diameter boreholes that had been drilled within the outer casings. Monitoring well depths were selected to intercept the water table within the screened interval. Detailed monitoring well construction procedures and well-construction diagrams are presented in Appendices A and B, respectively.

Note that specific EPD monitoring wells are referred to herein using "a" and "b" suffixes, indicating screen placement in the Perched Zone or at the water table, respectively. General locations are referenced with the well pair number, without a suffix.

Ground water Sampling

Monitoring Wells

Each EPD monitoring well, with the exception of EPD-4a and EPD-4b, was sampled immediately after their construction and development were completed, and again during an overall sampling event, on April 29 - May 1, 1998, that included all monitoring wells. EPD-4a was not sampled because it contained no water at either time (the sand was not saturated). EPD-4b was sampled once, during the overall sampling event, because it was constructed just before the sampling event began.

Twenty-four monitoring wells were sampled during a sampling event conducted jointly with ERM, Inc, the Woolfolk NPL Site Contractor, from April 29, 1998 through May 1, 1998. Wells sampled included the EPD monitoring wells and selected Woolfolk Chemical NPL Site monitoring

wells. EPD selected the specific Woolfolk monitoring wells to be sampled on the basis of their proximity to the EPD's monitoring wells as well as their being screened either in the Perched Zone or in the upper portion of the Water Table Aquifer. ERM Inc. collected ground water samples, from April 29, 1998 through May 1, 1998, from 15 monitoring wells selected by EPD. EPD personnel observed the sampling event and collected duplicate samples for analysis. The Woolfolk-site monitoring wells that were sampled are listed as follows:

Perched Zone	Water Table Aquifer
MW-2	MW-2P
MW- 2C	MW-10
MW-4B	MW-17
MW-4C	MW-18
MW-11	MW-19
	MW-20
	MW-21
	MW-27
	MW-28
	MW-36

Depth-to-water measurements were made in each Woolfolk and EPD monitoring well on April 28, 1998, prior to initiating the sampling event.

All ground water samples collected from the EPD and Woolfolk monitoring wells were analyzed for VOCs using USEPA Method 8260 or both 8260 and USEPA Method 502.2. Although 8260 has a higher quantitation limit (5 ug/l) than 502.2 (0.5 ug/l), all samples were initially analyzed using 8260 because the laboratory equipment used for this analytical method is less susceptible to damage from higher concentrations of contaminants. If contaminants were identified below the method 8260 quantitiation limit, the sample was re-analyzed using method 502.2 to better quantify the concentration. Monitoring well sampling procedures are described in Appendix A. Laboratory analytical results of water samples collected during the course of the investigation are summarized in Table 3 and presented in Appendix C. Laboratory analytical results from the combined sampling event are summarized in Table 4 and Table 5 and are presented in Appendix C.

City Wells

EPD personnel used low-flow sampling techniques to collect a series of ground water samples from the various screened intervals in CW-1 and CW-2, to develop a water quality profile at each of the well locations. Samples were obtained by lowering a bladder pump to the appropriate depth and purging at a low rate (<500 ml/min) until pH, temperature, conductivity, dissolved oxygen, and redox potential stabilized. The intent of the sampling was to withdraw water from discrete segments of the undisturbed aquifer, as directly as possible, for laboratory analysis. It was anticipated that by withdrawing water slowly at screened depths, aquifer waters opposite the screened intervals would be sampled.

The screened intervals in each well were indicated on well logs provided by the Fort Valley Utility Commission. The "reported" screened intervals were confirmed by two methods. Video tapes previously taken with a downhole camera for the Fort Valley Utility Commission showed the well screens and depths. The geophysical indications of screens (from spontaneous potential logs) collected by the EPD compared favorably with the reported depths. The depths of the well screens and EPD's sampling points are as follows:

CW-1 Screened Interval (feet below well pad)	CW-1 Sample Depth (feet below well pad)	CW-2 Screened Interval (feet below well pad)	CW-2 Sample Depth (feet below well pad)
255 - 265	262	349 - 359	354
331- 341	336	405 - 455	414
401 - 411	408		426
431 - 441	437		438
469 - 479	475		450
		466 - 486	473
			482

As previously mentioned, ground-water samples were analyzed for VOCs using method 8260 and 502.2. Pesticides were analyzed using method 8081B. For semivolatile organic compounds (SVOCs) and metals, method 8270 and 200.7 were used, respectively. Details of the city well sampling procedures are presented in Appendix A. Laboratory analytical results are summarized in Table 6 and are presented in Appendix C.

Geophysical Logging

The EPD collected geophysical data with a logging tool that detects the very small values of naturally-occurring radioactivity (gamma rays), which is present in virtually all soils. Higher values are common for clays, which allows for distinguishing clay from sand in a borehole or well. The purpose of the logging was to obtain additional information on the occurrence of sand and clay strata. The logging tool was lowered to the bottom of the monitoring wells, and gamma-ray detections were measured by a detector in the tool, as it was being raised to the surface by a cable. The detected values were electrically transmitted to the surface by the cable and were recorded on electronic equipment. The logging was done in the five EPD monitoring wells, which extended to the water table, and in City Wells 1 and 2, during May 1998. A description of geophysical logging equipment and procedures are presented in Appendix A. Gamma-ray logs are provided in Appendix D.

Surveying

EPD monitoring well locations and top-of-casing elevations were measured by Mr. Thomas Futral, a Land Surveyor registered to practice in Georgia. The top-of-casing elevations are referenced to the same bench mark as the Woolfolk Chemical NPL Site monitoring wells, which is the National Geodetic Survey (NGS) Bench Mark 030. This bench mark has an elevation of 525.90 feet and is located on the wall of the old Central of Georgia Railway station building located near the intersection of the railway and U.S. Highway 341. Top-of-casing (TOC) elevations are indicated as follows:

Monitoring Well	TOC Elevation
EPD-1a	520.11
EPD-1b	520.04
EPD-2a	519.10
EPD-2b	519.08
EPD-3a	519.23
EPD-3b	519.28
EPD-4a	518.60
EPD-4b	518.43
EPD-5a	518.01
EPD-5b	518.07

HYDROGEOLOGIC CONDITIONS

General

Fort Valley lies in the northern portion of the Coastal Plain Province, in the recharge area of the Cretaceous Aquifer System and in a area of higher pollution susceptibility area according to the Georgia Geologic Survey Hydrologic Atlas 18 and 20. This recharge area is located immediately south of the Fall Line, or boundary between the Piedmont Province and the Coastal Plain Province. The Cretaceous Aquifer System consists of the Providence, Ripley, Cusseta, Blufftown, Eutaw and Tuscaloosa Formations.

A number of subsurface studies have been conducted in the Fort Valley area as part of the Remedial Investigations (RIs) at the nearby Woolfolk Chemical NPL Site. The main water bearing lithostratigraphic units and the equivalent informal, site-specific aquifer designations used for these RI reports are as follows:

Lithostratigraphic Unit	Informal Aquifer Designation in Woolfolk Site Investigation Reports
Perry Sand	Surficial Aquifer
Providence Sand and Ripley Formation	Upper Cretaceous Water Table Aquifer
Cusseta and Blufftown Formation	Upper Cretaceous Confined Aquifer
Tuscaloosa Formation	Tuscaloosa Aquifer

The EPD Phase I hydrogeologic investigation focused on evaluating ground-water quality and flow characteristics in (1) the Perched Zone and (2) the water table, which constitutes the upper limit of the Water Table Aquifer. Corresponding lithostratigraphic units and Woolfolk Site aquifer designations are shown in the above tabulation. The Perched Zone is approximately 30 feet deep and consists of saturated, lower few feet of the Perry Sand. The water table is approximately 100 feet deep, and is within the Providence Sand.

At the Woolfolk site, potentiometric levels for clustered wells, including wells screened in the Tuscaloosa Formation, show the vertical hydraulic gradients to be downward. A clay layer at the top of the Tuscaloosa Formation appears to be continuous enough to lengthen contaminant travel time and inhibit transmission of contamination at or near the ground surface to the Tuscaloosa Formation. The thinness of this clay, however, suggests little likelihood of the clay serving as a dependable aquiclude.

A schematic diagram of the geology and ground water flow in the upper 500 feet of downtown

Fort Valley is shown in Figure 5. The diagram shows that rainfall in the downtown area infiltrates the surface and recharges the Perched Zone. Ground water within the Perched Zone then travels both horizontally and also downward through higher permeability areas within the underlying kaolin layer. The ground water, which migrates downward through the kaolin layer, likely follows circuitous pathways around or through the various layers of clay until it reaches the Water Table Aquifer some 70 feet below.

The general stratigraphy established during the EPD investigation, along the cross-section line depicted on Figure 6, is illustrated in Figure 7. The stratigraphic sequence in the upper 100 feet of the subsurface consists of layers and lenses of sand, clayey sand and sand-clay mixtures. Although there is significant vertical and lateral variation, overall characteristics can be reasonably mapped on the basis of the gamma-ray logs and the soil cores.

Perched Zone

The upper 25 feet, more or less, of the subsurface in the study area consists of red silty to sandy clay. Underlying this clay unit is an orange sand layer that is 10 to 15 feet thick. This sand layer overlies a layer of white kaolin clay that is 15 to 25 feet thick, which in turn overlies 20 to 40 feet of alternating white kaolin clay and white sand. The lower two to four feet of the orange sand unit is saturated with ground water which is temporarily held from further downward movement by the underlying kaolin clay layer. The water within this thin saturated sand, the Perched Zone, is approximately 70 feet above the Water Table Aquifer. The elevation of the top of the kaolin clay layer is highest at EPD-2, and gently slopes to the southeast, southwest and northwest from this general location, as shown in Figure 8.

The potentiometric surface of the Perched Zone, developed from static water level measurements made on April 28, 1998, is shown in Figure 9. The potentiometric surface of the Perched Zone generally mimics the "topographic" surface of the kaolin unit. The general ground-water flow direction in the Perched Zone was to the south-southeast at a relatively constant gradient of 0.01 on April 28, 1998. There was also a component of flow to the west-northwest toward EPD-3 and CW-5, beginning at the ground-water elevation high area in the vicinity of EPD-2. Even though the kaolin layer was present, water was not present in the overlying orange sand at EPD-4 and at monitoring well MW-5 located at the Woolfolk site. Both wells are located in the western portion of the study area. The absence of perched water at these locations may be due to several reasons, including distance from the local recharge area, leakage of water through the perching layer or complete absence of the perching layer in the vicinity of these wells (such as might result from a buried stream channel deposit). The actual cause of the absence of ground water at these two locations, however, is not known.

Water Table Aquifer

Beneath the white kaolin clay and sand sequence that is associated with the Perched Zone is an assemblage of gray and tan sand, silt and clay layers and lenses, interpreted to be the Providence

Sand. The water table, or upper limit of the saturated soils of the Water Table Aquifer, was encountered within the Providence, at depths of approximately 90 to 120 feet below the land surface.

The potentiometric surface of the Water Table Aquifer, developed from static water level measurements made on April 28, 1998, is shown in Figure 10. The contour lines in Figure 10 represent the potentiometric surface that corresponds to the water table. The overall ground-water flow direction indicated by Figure 10 is to the southeast. The hydraulic gradient is variable across the study area but averages approximately 0.015. A small northwest-southeast trending low area, or trough-like feature, extends from EPD-5 through MW-10, as shown in Figure 10. This area may reflect a greater vertical conductivity (vertical drainage) in the area of the trough, less recharge in the area of the trough, or both.

CHEMICAL CONTAMINATION

Soil Contamination

As shown in Table 2, PCE was detected in four soil samples. The highest concentrations of PCE were obtained in shallow samples collected below the sidewalk in front of Fabra Care Cleaners, at EPD-5. PCE was detected at a concentration of 430 ug/mg and 34.5 ug/mg in samples collected at depths of one foot and four feet, respectively.

PCE was also detected at a concentration of 5.86 ug/mg and 7.62 ug/mg in samples collected at EPD-2b (75 feet) and EPD-4b (57 feet), respectively. These samples were taken between the Perched Zone and the Water Table Aquifer.

PCE was also identified in the field in vapor samples collected at EPD-5a, located in front of the Fabra Care facility. Vapor samples were collected from soil cores taken above the Perched Zone, at EPD-5a, using *Sensidyne*™ sampling tubes; the values were as follows:

Depth (feet)	PCE concentration (ppm)
12.5	6
15.5	9
17.5	6
20.5	12
23.0	19
24.7	9

PCE vapors are heavier than air, and were brought to the surface in soil cuttings while augering

the borehole at EPD-5a. Except for similar detections at EPD-5b, which is adjacent to EPD-5a, no other PCE vapors were detected.

Methylene chloride and acetone were detected in some soil samples. These chemicals are used in chemical laboratories to clean glassware and other items. It is likely that the methylene chloride and acetone detections are artifacts of laboratory use of these chemicals.

Groundwater Contamination in the Perched Zone

VOC detections in ground-water samples collected from EPD monitoring wells during the course of the investigation are presented in Table 3. VOC detections in ground-water samples collected during the April 29, 1998 - May 1, 1998 combined sampling event, which included EPD and selected Woolfolk-site monitoring wells, are presented in Table 4 and Table 5, respectively.

PCE analytical results from the nine Perched Zone monitoring wells are shown in Figure 11. PCE was detected only at EPD-5a, located at the Fabra Care Cleaners, at a concentration of 2,100 ug/l on April 29, 1998. PCE was detected at EPD-2a, at a concentration (0.55 ug/l) slightly above the detection limit (0.5 ug/l) on October 16, 1997, shortly after the well was completed, but was not detected in the sample collected on April 29, 1998. Cis 1,2 dichloroethene (cis 1,2-DCE)and trichloroethene (TCE) were also identified in the sample collected from EPD-5a on April 29, 1998; the concentration of both of these chemicals was 119 ug/l. A higher concentration of PCE (5,598 ug/l) but roughly similar concentrations of cis 1,2 - DCE (169 ug/l) and TCE (130.2 ug/l) were detected at EPD-5a on January 16, 1998. TCE and cis 1,2-DCE are typical products of biodegradation of PCE in the subsurface.

The EPD collected a ground-water sample on April 30, 1998 from a monitoring well located approximately 10 feet east of CW-1. The monitoring well casing is 2-inch diameter PVC, which extends approximately 2 feet above ground level and is protected with a four-inch diameter, steel well guard. The EPD and the Fort Valley Utility Commission have no boring log or record of the installation procedures, construction details or ownership of this well. The 33.5 foot depth of the well and the water level elevation suggest that this well is installed in the Perched Zone. The groundwater sample collected from this well contained no VOCs above detection levels.

Ground Water Contamination in the Water Table Aquifer

PCE concentrations in the Water Table Aquifer during the combined sampling event are contoured in map view in Figure 12 and shown in cross-section along A-A' in Figure 13. PCE was detected in all five EPD water-table monitoring wells, but in only two of the Woolfolk NPL Site monitoring wells. PCE detections in the EPD monitoring wells for the sampling event ranged from 51 ug/l at EPD-3b, located immediately south of CW-5, to 771 ug/l at EPD-2b, located in front of the McLean Water Plant. Water samples from EPD-1b and EPD-2b, contained low levels of TCE (28.1 ug/l and 57.0 ug/l, respectively) and cis 1,2- DCE (9.88 ug/l and 20.2 ug/l, respectively). In each of these two monitoring wells, the concentration of PCE is greater than the concentrations

of TCE and DCE. The ratios of TCE and DCE, to PCE, are similar for the two monitoring wells. This suggests that TCE and DCE are not primary contaminants, but instead are probably products of biodegradation of PCE in the subsurface. Similar concentrations of PCE, TCE and cis 1,2 DCE were determined in samples collected from EPD-1b, 2b, 3b and 5b on March 6, 1998, March 27, 1998, April 15, 1998 and March 12, 1998, respectively.

PCE was detected at a concentration of 1.20 ug/l and 0.66 ug/l in samples collected in MW-2P and MW-10, located on the Woolfolk Chemical NPL Site. PCE was not detected in any of the remaining 13 water table monitoring wells sampled at this site. Ground-water samples from MW-17 and MW-29 contained 1,2 - dichloroethane. This chemical compound is not a known degradation product of PCE.

Chloroform was detected in EPD-1a, MW-2P, MW-10, MW-18, MW-29 and MW-36 and may be related to leakage of chlorinated water from the city's water system. For example, water was observed by EPD to flow onto the ground from the water storage tank at the McLean Plant on several occasions.

A dissolved plume of PCE is definable for the Water Table Aquifer in the central portion of downtown Fort Valley, as shown in Figure 12. CW-1 and CW-2 are just outside the area where the plume is defined, but the pattern of PCE occurrence suggests that dissolved PCE is also at the water table at CW-1 and CW-2. The plume is elongate in a cross-gradient direction. Typically, such plumes are elongate in a down-gradient direction. City wells CW-1 and CW-2 are located across the gradient from the central part of the plume. It is expected that past pumpage from the wells could cause what would be a more typically-shaped plume located between them to be drawn toward each of the wells, thus resulting in the observed elongation. Alternatively, the pattern could reflect one or more areas of infiltration of PCE-contaminated ground water through the kaolin clay layer in the Perched Zone. Also, PCE contamination from candidate sources D,E, and F cannot be eliminated as contributing to the shape of the plume, by information obtained in the Phase I investigation.

Contamination in City Wells 1 and 2

The constituents detected in water samples collected from the various screened intervals of CW-1 and CW-2 are listed in Table 6. No semivolatile compounds or pesticides were detected in any sample. PCE was the only VOC detected. PCE concentrations at the well screen intervals are shown in Figure 14. All inorganic constituents detected were present at concentrations less than the state and federal Primary Maximum Contaminant Levels for Drinking Water (MCLs).

PCE detections in water samples collected from the CW-1 screened intervals were relatively consistent, ranging from 1.52 ug/l to 2.11 ug/l, and similar to the historic PCE detections in samples collected at the well head. PCE concentrations in the screened interval samples from CW-2 had somewhat greater variability, ranging from 6.76 ug/l to 12.1 ug/l, and also were similar to PCE concentrations in water samples previously collected at the CW-2 well head. The similar

concentrations at the various screened interval depths from each well could be an indication of one or more of the following scenarios:

(a) Due to the large diameter of the well and borehole, and in spite of pumping each interval until standard sampling indicators had stabilized, the groundwater samples may have been from the casing and/or the well borehole, instead of the surrounding formation. The similar PCE concentrations determined in each screened interval may be due to chemical diffusion of PCE in the well and surrounding borehole, following shut down of the wells.

(b) The historic pumping of CW-1 and CW-2 may have induced flow of contaminated ground water from the plume known to be present at the water table, down into the gravel pack, possibly creating a zone of groundwater around the well borehole of rather consistent PCE concentration. The profile samples may have been taken from this contaminant halo and may not be representative of water quality in the deeper ground water at some distance from the borehole.

(c) The PCE profile data may be an accurate representation of the water quality in the deeper groundwater in this area of Fort Valley. The naturally occurring, downward hydraulic gradient may have moved PCE contamination from the plume at the water table to greater depths over a broad area. The detection of PCE in MW-4T, completed to a depth of 280 feet on the Woolfolk Chemical NPL Site, is supporting evidence that this has occurred. The one-time detection of PCE in city well CW-5 could represent the leading edge of a deep plume that recently reached the CW-5 location at concentrations near the laboratory detection limit.

The PCE data offer no indication of a discrete, high-concentration interval and no practical method of keeping PCE from entering the well screens can be identified.

PROBABLE SOURCES OF PCE CONTAMINATION

Fabra Care Cleaners

Fabra Care Cleaners in Fort Valley presently uses PCE in its dry-cleaning operations. Fabra Care Cleaners should be considered a probable source of a significant release or releases of PCE into the soil and ground water, based on several indications obtained in EPD's hydrogeologic investigation in Fort Valley. Soil and ground-water data at monitoring wells EPD-5a and EPD-5b, both of which were constructed through the sidewalk, about 20 feet in front of the Fabra Care building, provide multiple indications, as follows:

(a) The shallowest soil sample taken at EPD-5a was from one foot below the top of the sidewalk. The laboratory analysis showed PCE to be present in this sample, at 439 ug/kg. PCE at such a shallow depth indicates a release of PCE to be very close to the EPD-5a

location.

(b) PCE vapors, which are heavier (denser) than air, were detected just above ground level during the course of drilling EPD-5a and EPD-5b, when the augers had penetrated to depths just above the Perched Zone. It is interpreted that the vapors were present in the soil pores, or air-filled spaces between the soil grains, and were prevented from settling deeper by the water-filled soil pore-spaces of the Perched Zone. The vapors were brought to the surface when the augers brought the soil that contained the vapors to the surface. PCE vapors were not detected during the course of drilling the other eight monitoring wells constructed by EPD. It is interpreted that the vapors from the EPD-5a and EPD-5b locations indicate the PCE release/source to be quite close to these monitoring well locations.

(c) Water samples were taken from the Perched Zone in EPD-5a at a depth of approximately 30 feet deep, on January 16, 1998 and April 29, 1998. The PCE concentration was 5598 ug/l for the earlier sample and 2110 ug/l for the later sample. With the exception of 0.55 ug/l detected at EPD-2a on October 6, 1997, PCE was not detected in samples taken from any of the other EPD monitoring wells constructed in the Perched Zone, or from any of the five Perched Zone monitoring-well samples from the Woolfolk Chemical NPL site that were analyzed by EPD. It is interpreted that the location of the release/source site is near the location of EPD-5a.

Additionally, Fabra Care Cleaners is located immediately over the PCE plume and just upgradient of the most concentrated portion of the plume, as shown in Figure 10. The Fabra Care Cleaners, therefore, is a prime location for PCE, either dissolved or free product, to migrate down to Perched Zone and then to move laterally downgradient and/or down the slope of the kaolin clay layer (toward the east) before encountering a conductive pathway through the kaolin layer and then migrate downward to the water table.

Other Possible Source-Sites

Other facilities may also contribute to the PCE contamination at the water table. The two facilities on either side of Fabra Care Cleaners are candidate sites that still must be considered as possible contributors. This is due primarily to their locations being just upgradient of the most concentrated portion of the PCE plume at the water table. Also, the three candidate sites north of the Fabra Care Cleaners location, all indicated to have been dry cleaning establishments at one time, cannot be eliminated as potential sources of PCE. This is primarily because one segment of the plume defined in this investigation is trending toward the general vicinity of these three locations. This cross-gradient trend of the plume may be due to past pumping of city well CW-1, but contributions from these three candidate sites cannot be ruled out at this time without additional data. The addresses of these locations are tentatively identified as 112/113 S. Camellia Avenue, 113 W. Main Street and 126 W. Main Street (pending confirmation).

Probably Not Source-Sites

Anthoine's Machine Shop and the Woolfolk Chemical NPL site are probably not sources of the PCE contamination. These sites are downgradient of the central portion of the PCE plume. Rather, the plume is shown by this investigation to be migrating from the northwest side of the railroad tracks that pass through downtown Fort Valley, to the southeastern side of the railroad tracks, toward these two facilities.

DOWNTOWN CITY WELLS

Figure 14 illustrates the depths and designs of City wells CW-1, CW-2 and CW-5. The gravel placed around the well screens and casing at CW-1 and CW-2 is inter-connected to the Water Table Aquifer, from the depths of the well screens up to within approximately 40 and 80 feet of the water table surface, respectively. This aspect of well design maximizes the hydraulic connections between the more conductive water-bearing portions of the aquifer and the well screens. However, the gravel could also serve as pathways for contamination entering the aquifer at the water table to move more quickly to the well screens and into the water pumped to the water treatment plant. On the other hand, the gravel placed around well CW-5 does not extend far above the well screens. This design minimizes the risk of having a pathway open to the flow of potentially-contaminated water to the screens, along the outside of the well casing. Additionally, CW-5 is deeper, and the grout seal extends down to a clay layer located a short distance above the gravel pack in CW-5.

The available hydraulic data from clustered monitoring wells at the Woolfolk site show the vertical component of gradient to be downward, even for clusters having a well screened in the Tuscaloosa Formation. This is consistent with characteristics of being in the recharge area of an unconfined aquifer.

Figure 15 shows structural contours drawn on the top of a relatively thin clay layer, based on information obtained from logs of the City wells and the logs of the deeper monitoring wells constructed at the Woolfolk Chemical NPL site. The clay appears to be broad enough to provide a measure of protection from downward movement of contaminated water into the gravel pack and well screens at CW-5. However, the clay layer is a relatively thin, 10 to 20 feet in vertical dimension at the various well locations, making it more likely to be discontinuous between some of the well locations. Consequently, the clay can not be regarded as a true aquiclude, but locally may serve as an aquitard, increasing the length of the pathway and the travel time for shallow contamination to reach CW-5.

There are multiple indications that PCE has reached the Tuscaloosa Formation, which is within the deeper portion of the Water Table Aquifer, and is threatening the water supply from city well CW-5 which is completed in the Tuscaloosa Formation. These indications are (1) the PCE detections from screens within the Tuscaloosa Formation in city wells CW-1 and CW-2, indicative of downward movement of PCE into the Tuscaloosa Formation; (2) multiple historic PCE

detections in monitoring well MW-4T, located at the Woolfolk Chemical NPL Site and completed in the Tuscaloosa Formation, indicative of PCE movement within the Tuscaloosa Formation; and (3) the detection of PCE for one sampling event, on January 15, 1998, in CW-5, indicative of the leading edge of the plume reaching CW-5 at concentrations near the laboratory detection limits. Past experience indicates that once a plume reaches a pumping well, the contaminant concentration can escalate suddenly. This potential for sudden increases in PCE in CW-5, which is the only remaining well supplying the treatment plant in downtown Fort Valley, and the long lead time it takes to replace a well such as CW-5 (several months to a year or more), leads the GSB to conclude that an emergency condition likely exists.

TABLES

Table 1 Ft. Valley Investigation CW-1 and CW-2 PCE Detections (concentrations in micrograms/liter)			
Date	Note	CW-1	CW-2
06/28/96	1	<1	<1
07/01/96	1	<1	<1
07/03/96	2	<1	<1
07/11/96	2	<1	<1
07/18/96	2	1.8	1.1
07/25/96	2	1.4	<1
08/01/96	2	<1	<1
08/08/96	2	1.1	<1
08/13/96	2	2.4	8.6
08/20/96	2	1.4	9.6
08/29/96	2	1.8	<1
09/09/96	3	1.74	4.8
09/17/96	2	<1	2.5
09/24/96	1	1.2	4.5
10/01/96	2	<1	6.3
10/8/96	3	1.11	5.4
10/08/96	2	2.9	7.2
10/15/96	2	1.2	12.0
10/24/96	2	1.3	10.0
11/05/96	2	<1	5
11/12/96	2	<1	5
11/19/96	2	1.3	8.4
11/26/96	2	1.7	9.5
12/10/96	2	2.2	10
12/11/96	1	1.4	6.5
12/17/96	2	3.0	9.9
12/23/96	2	2.1	12
01/02/97	3	2.7	16
03/05/97	1	<1	6.3
06/03/97	1	<1	5.5
09/16/97	1	1.2	7.5
10/17/97	3	1.23	7.52
12/22/97	1	<1	7.7
02/09/98	3	1.68	8.56
03/17/98	1	<1	9.1

Note:

(1) Quarterly sample collected by ERM personnel and analyzed at Savannah Laboratories

(2) Sample collected by Fort Valley Utility Commission Personnel and analyzed at private laboratory

(3) Sample collected by either Fort Valley Utility Commission or EPD personnel and analyzed at EPD Laboratory

(4) "<1" indicates below detection limits of 1 ug/l

Table 2
Ft. Valley Investigation
VOC Detections in Soil

Borehole ID	Depth (feet)	Date of Sampling	Test Method	toluene	ethylbenzene	xylenes	acetone	carbon disulfide	PCE	methylene chloride	trichloroethene
Detection Limit:				*5*	*5*	*5*	*100*	*5*	*5*	*5*	*5*
EPD-2a	15.5	10-7-97	8260	trace	ND	ND	199	ND	ND	ND	ND
EPD-2a	23.8	10-7-97	8260	trace	ND	ND	153	ND	ND	ND	ND
EPD-2b	63	3-18-98	8260	trace	ND	ND	ND	ND	ND	ND	ND
EPD-2b	65.5	3-18-98	8260	trace	ND	ND	ND	ND	ND	ND	ND
EPD-2b	68	3-18-98	8260	trace	ND	ND	ND	ND	ND	ND	ND
EPD-2b	70	3-18-98	8260	trace	ND	ND	ND	ND	ND	ND	ND
EPD-2b	75	3-23-98	8260	ND	ND	ND	ND	ND	5.86	ND	ND
EPD-3a	10.9	10-8-97	8260	trace	ND	ND	ND	ND	ND	ND	ND
EPD-3a	28.2	10-14-97	8260	trace	ND	ND	ND	ND	ND	ND	ND
EPD-3a	30.7	10-15-97	8260	trace	ND	ND	ND	ND	ND	ND	ND
EPD-3b	91	3-31-98	8260	trace	ND	ND	ND	ND	ND	ND	ND
EPD-4b	57	4-15-98	8260	ND	ND	ND	ND	ND	7.62	27.6	ND
EPD-4b	65	4-15-98	8260	ND	ND	ND	ND	ND	ND	60.8	10.5
EPD-5a	1	1-5-98	8260	8.89	trace	trace	109	ND	439	ND	ND
EPD-5a	4	1-5-98	8260	ND	ND	ND	ND	ND	34.5	ND	ND
EPD-5a	7.5	1-6-98	8260	trace	ND	trace	126	ND	ND	ND	ND
EPD-5a	10.5	1-6-98	8260	ND	ND	ND	106	ND	ND	ND	ND
EPD-5a	12.5	1-6-98	8260	trace	ND	trace	trace	ND	trace	ND	ND
EPD-5a	15.5	1-6-98	8260	ND	ND	ND	112	ND	ND	ND	ND
EPD-5a	17.5	1-6-98	8260	ND	ND	ND	101	ND	ND	ND	ND
EPD-5a	20.5	1-6-98	8260	ND	ND	ND	138	ND	ND	ND	ND
EPD-5a	24.6	1-6-98	8260	trace	ND	trace	119	ND	ND	ND	ND
EPD-5b	61.5	2-25-98	8260	ND	ND	ND	ND	trace	ND	ND	ND
EPD-5b	63	2-25-98	8260	trace	ND	ND	ND	ND	ND	ND	ND

Notes:
ND=not detected
trace=detected below quantitation limits
All values expressed in micrograms per kilogram

Table 3
Fort Valley Investigation
Initial VOC Detections in EPD Monitoring Wells

Monitoring Well Number	Date of Sampling	Test Method	Detection Limit	acetone	carbon disulfide	chloroform	PCE	trichloroethene	cis-1,2-dichloroethylene
EPD-1a	10-1-97	8260	5	72.7	ND	ND	ND	ND	ND
EPD-1a	10-1-97	502.2	0.5	ND	ND	2.09	ND	ND	ND
EPD-1a	10-28-97	524.2	0.5	ND	ND	2.8	ND	ND	ND
EPD-1a	10-28-97	502.2	0.5	ND	ND	2.35	ND	ND	ND
EPD-1b	3-06-98	524.2	0.5	ND	ND	2.1	559	21	8.0
EPD-2a	10-16-97	524.2	0.5	ND	ND	ND	0.53	ND	ND
EPD-2a	10-16-97	502.2	0.5	ND	ND	ND	0.55	ND	ND
EPD-2b	3-27-98	8260	5	ND	ND	trace	501	17.9	7.12
EPD-3b	4-15-98	8260	5	ND	ND	ND	74.3	ND	ND
EPD-5a	1-16-98	8260	5	ND	trace	trace	5598	130.2	169
EPD-5b	3-12-98	524.2	5	ND	ND	ND	177	ND	ND

Notes:
ND=not detected
trace=detected below quantitation limits
All values expressed in micrograms per liter
EPD-4b and 4a not sampled

Table 4
Ft. Valley Investigation
VOC Detections in Perched Water Zone
April 29, 1998 - May 1, 1998
Sampling Event

Monitoring Well ID	EPD-1a	EPD-2a	EPD-5a	Woolfolk MW-2C
Test Method:	*502.2*	*8260*	*8260*	*502.2*
Detection Limit:	*0.50*	*5*	*5*	*0.50*
chloroform	4.02	ND	ND	ND
carbon disulfide	ND	12.8	ND	ND
cis-1,2-dichloroethene	ND	ND	119	ND
trans-1,2-dichloroethene	ND	ND	trace	ND
PCE	ND	ND	2110	ND
trichloroethene	ND	ND	119	0.76
1,2-dichloroethane	ND	ND	ND	2.59

Notes:
ND = not detected
trace=detected below quantitation limits
All values expressed in micrograms per liter

Table 6
Ft. Valley Investigation
VOC Detections at Water Table
April 29, 1998 - May 1, 1998
Sampling Event

Monitoring Well ID	EPD-1b	EPD-2b	EPD-3b	EPD-4b	EPD-5b	Woolfolk MW-2P	Woolfolk MW-10	Woolfolk MW-17	Woolfolk MW-17	Woolfolk MW-18	Woolfolk MW-20	Woolfolk MW-21	Woolfolk MW-29	Woolfolk MW-29	Woolfolk MW-36	Woolfolk MW-36
Test Method:	*8260*	*8260*	*8260*	*8260*	*8260*	*502.2*	*502.2*	*502.2*	*8260*	*502.2*	*8260*	*8260*	*502.2*	*8260*	*502.2*	*8260*
Detection Limit:	*5*	*5*	*5*	*5*	*5*	*0.50*	*0.50*	*0.50*	*5*	*0.50*	*5*	*5*	*0.50*	*5*	*0.50*	*5*
cis-1,2-dichloroethene	9.88	20.2	ND	trace	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,1-dichloroethene	ND	trace	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCE	454	771	51.0	418	248	ND	ND	ND	ND	0.66	ND	6.58	ND	ND	ND	ND
trichloroethene	28.1	57.0	ND	trace	trace	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
chloroform	trace	trace	ND	ND	trace	0.66	1.30	ND	ND	1.31	ND	trace	1.95	ND	0.80	ND
1,2-dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	2.36	7.58	ND	ND	ND	ND	ND	ND	ND
1,2-dichloroethane	ND	ND	ND	ND	ND	ND	ND	1.02	ND	ND	ND	ND	3.97	5.5	ND	ND
carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	trace	ND	ND	ND	ND	5.14

Notes:
ND=not detected
trace=detected below quantitation limits
all values expressed in ug/l

Table 6
Ft. Valley Investigation
CW-1 and CW-2 Profile Sample Results

Sample	Depth	Ba	Al	Ca	Fe	Mg	Mn	Na	PCE
CW-1a	262 feet	10	100	2300	55	<1000	<10	6400	1.52
CW-1b	336 feet	14	<50	3100	64	1100	<10	11000	2.1
CW-1c	408 feet	14	70	3000	110	1100	<10	10000	1.94
CW-1d	437 feet	13	<50	2800	670	<1000	<10	9500	2.11
CW-1e	475 feet	14	<50	2900	2600	<1000	<10	9200	1.84
CW-2a	354 feet	19	<50	1800	1600	<1000	10	5000	11.5
CW-2b	414 feet	16	<50	1400	1300	<1000	<10	4000	8.79
CW-2c	426 feet	13	<50	1400	1500	<1000	<10	3900	8.67
CW-2d	438 feet	19	<50	1700	2000	<1000	14	4700	9.83
CW-2e	450 feet	15	<50	1500	2700	<1000	11	4200	8.88
CW-2f	473 feet	16	<50	1700	3000	<1000	12	4700	12.1
CW-2g	482 feet	18	94	1700	2800	<1000	15	4500	6.76

Note:

1) concentrations expressed in micrograms per liter

2) "<" denotes less than quantitation limit

3) all concentrations below Primary Maximum Contaminant Levels for Drinking Water

Table 7
Ft. Valley Investigation
Groundwater Elevations on April 28, 1998

Monitoring Well ID	Elevation Top of Casing (feet)	Depth to Water (feet)	Groundwater Elevation (feet)
EPD Monitoring Wells			
EPD-1a	520.11	27.35	492.76
EPD-1b	520.04	99.20	420.84
EPD-2a	519.10	23.98	495.12
EPD-2b	519.08	97.70	421.38
EPD-3a	519.23	25.95	493.28
EPD-3b	519.28	94.53	424.75
EPD-4a	518.60	DRY	DRY
EPD-4b	518.43	94.30	424.13
EPD-5a	518.01	24.05	493.96
EPD-5b	518.07	102.12	415.95
Woolfolk NPL Site Monitoring Wells			
MW-2	516.49	28.69	487.80
MW-2C	516.05	28.86	487.19
MW-2P	515.98	105.00	410.98
MW-4B	517.04	28.22	488.82
MW-4C	518.64	30.79	487.85
MW-5	515.77	DRY	DRY
MW-5P	516.74	102.51	414.23
MW-6P	514.08	98.10	415.98
MW-7	515.84	99.40	416.44
MW-8	512.13	96.83	415.30
MW-9	517.51	102.60	414.91
MW-10	516.52	113.01	403.51
MW-11	515.59	31.44	484.15
MW-12	514.41	33.08	481.33
MW-13	514.88	34.27	480.61
MW-14	517.13	38.51	478.62
MW-15	513.27	34.22	479.05
MW-16	514.58	36.06	478.52
MW-17	516.91	99.65	417.26
MW-18	517.29	99.30	417.99
MW-19	515.25	110.94	404.31
MW-20	515.92	100.70	415.22
MW-21	518.22	106.53	411.69
MW-27	515.46	92.36	423.10
MW-28	515.03	104.04	410.99
MW-29	513.46	110.10	403.36
MW-36	517.66	114.50	403.16
MW-37	518.66	103.64	415.02
MW-38	515.58	107.80	407.78

FIGURES

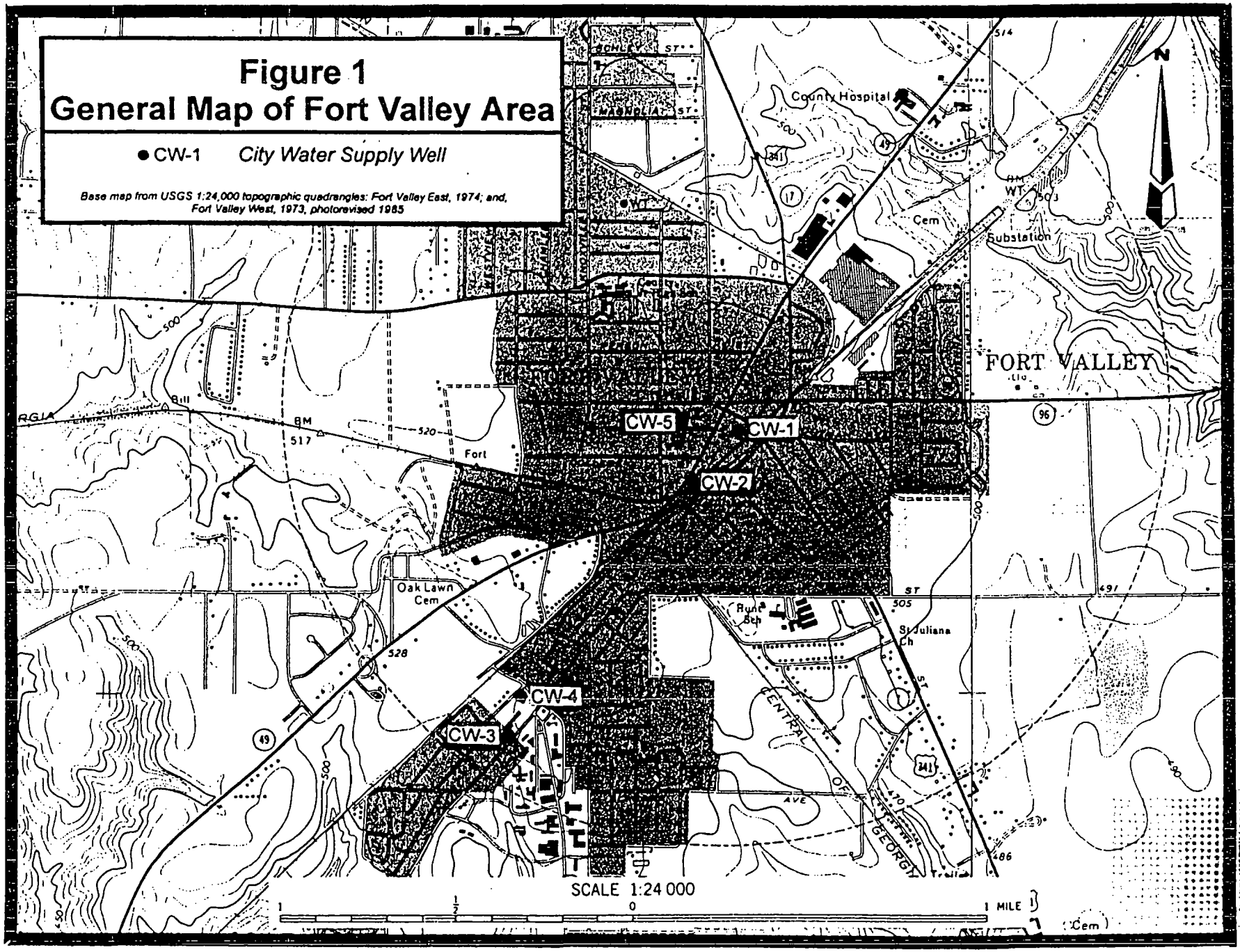
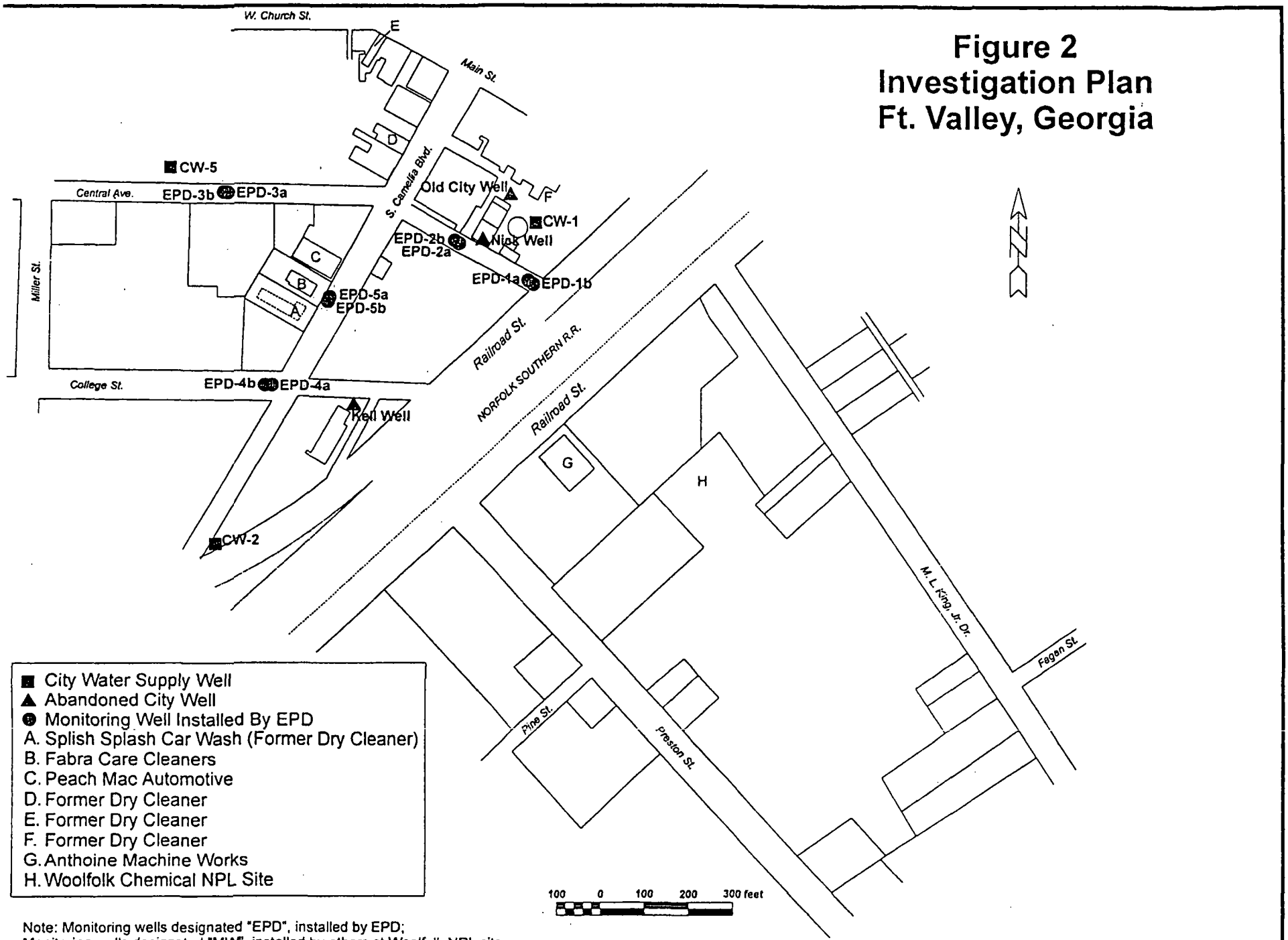


Figure 1
General Map of Fort Valley Area

● CW-1 *City Water Supply Well*

Base map from USGS 1:24,000 topographic quadrangles: Fort Valley East, 1974; and, Fort Valley West, 1973, photorevised 1985

Figure 2
Investigation Plan
Ft. Valley, Georgia



Note: Monitoring wells designated "EPD", installed by EPD;
Monitoring wells designated "MW", installed by others at Woolfolk NPL site

Figure 3 - City Water Supply Well Construction, Ft. Valley, Georgia

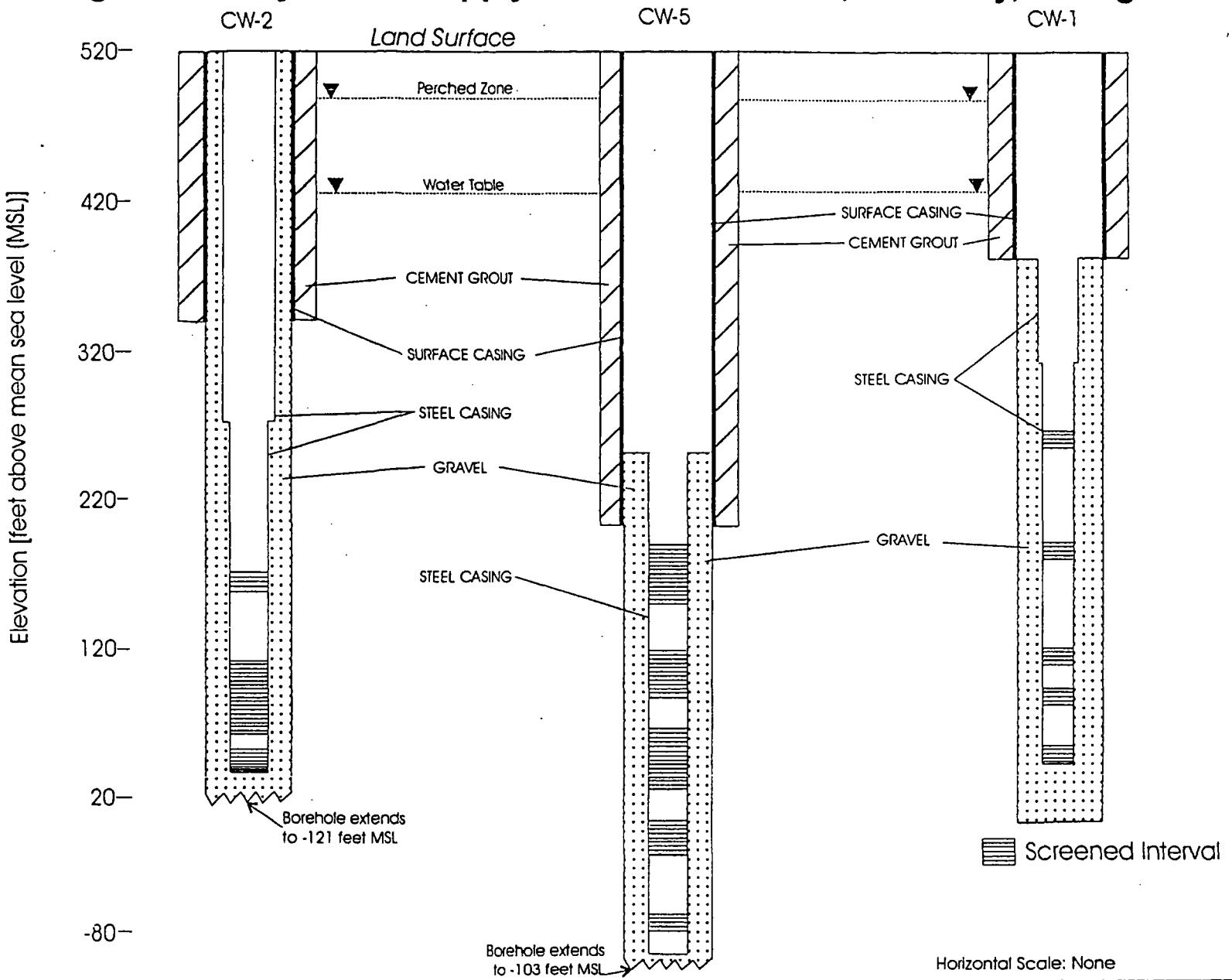
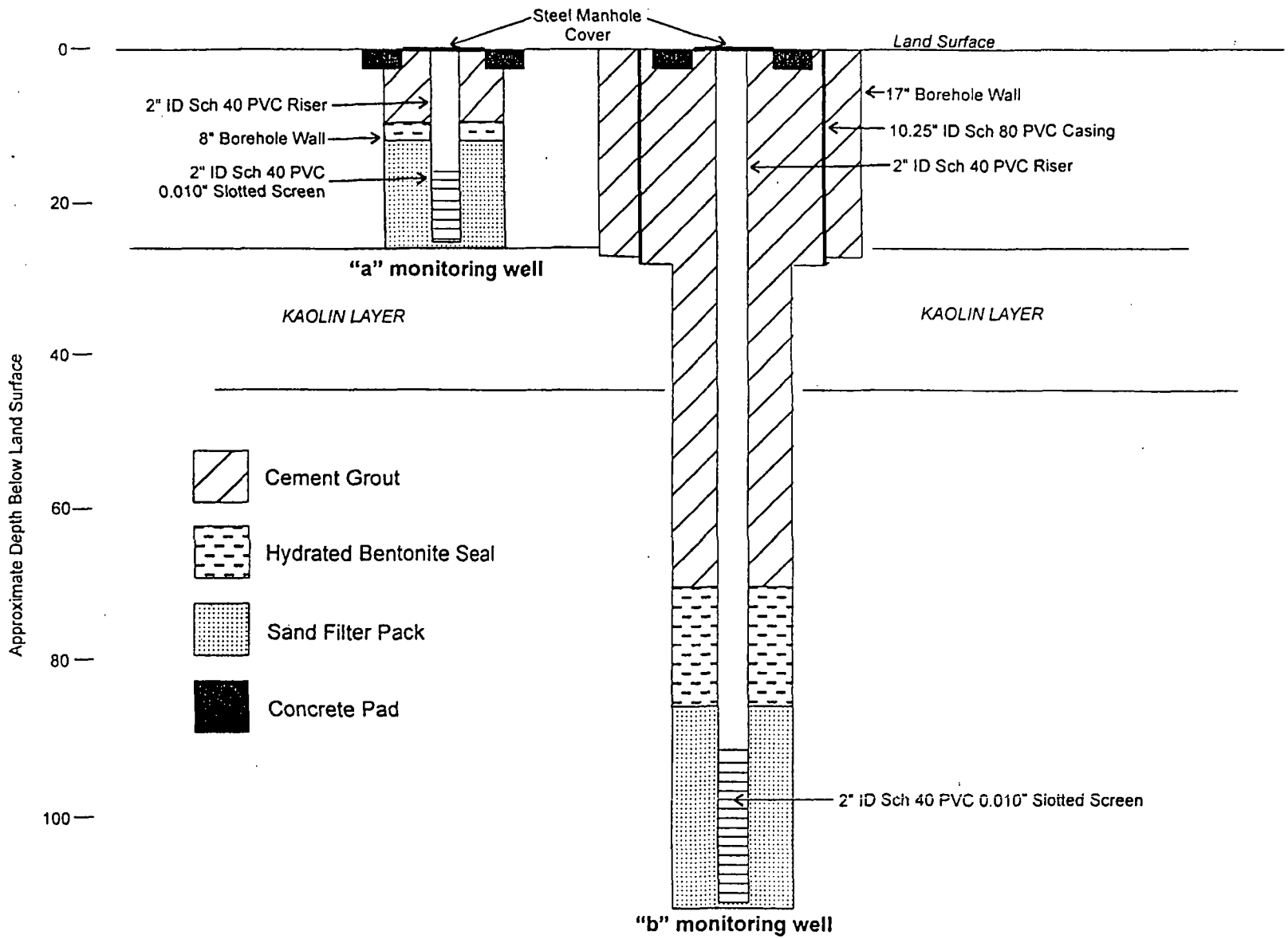


Figure 4 - EPD Monitoring Well Construction Diagram



Notes:
1) Horizontal Scale: None.
2) See Individual Well Construction Diagrams in Appendix A.

Figure 5
Groundwater Diagram
Ft. Valley Area

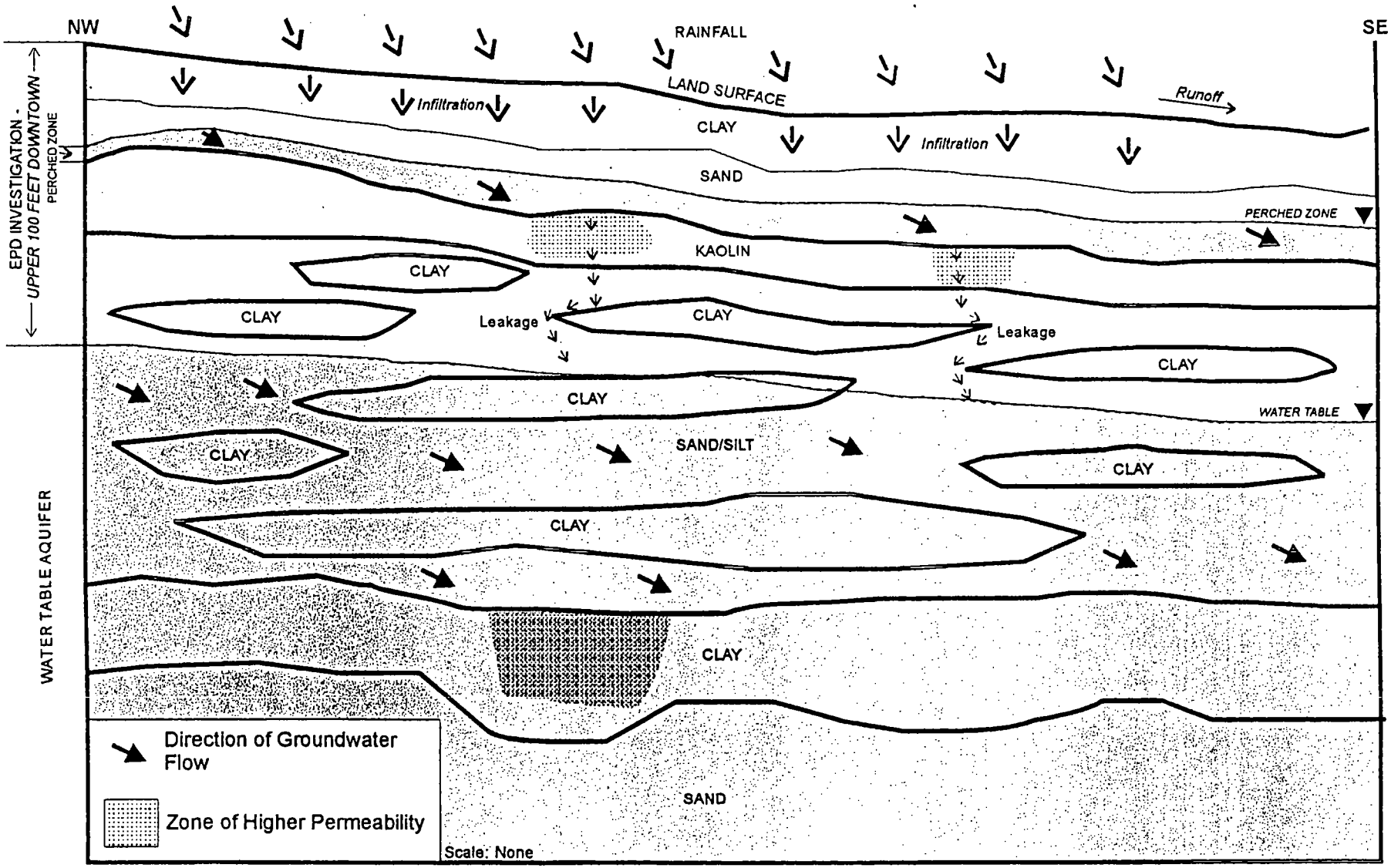
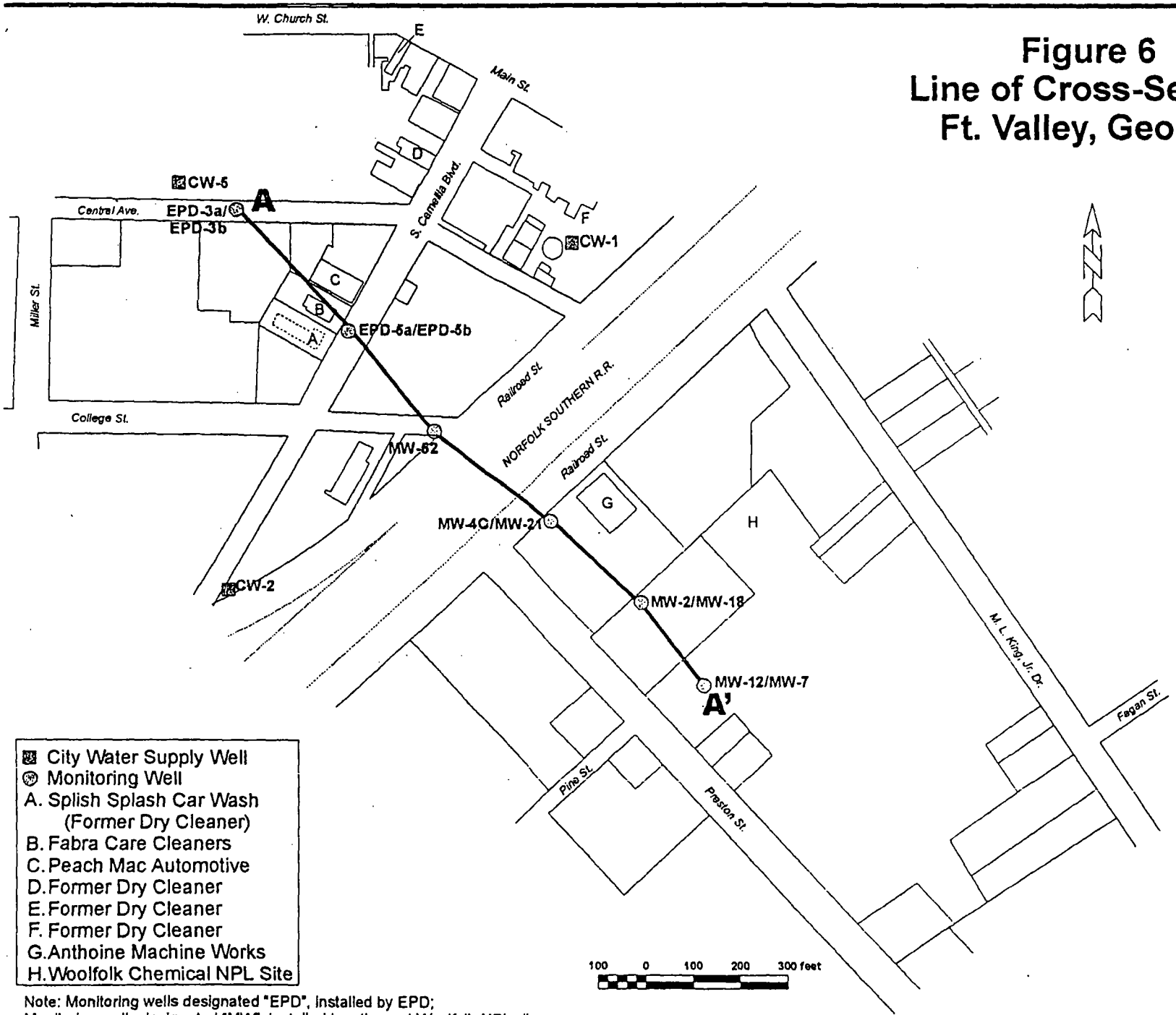


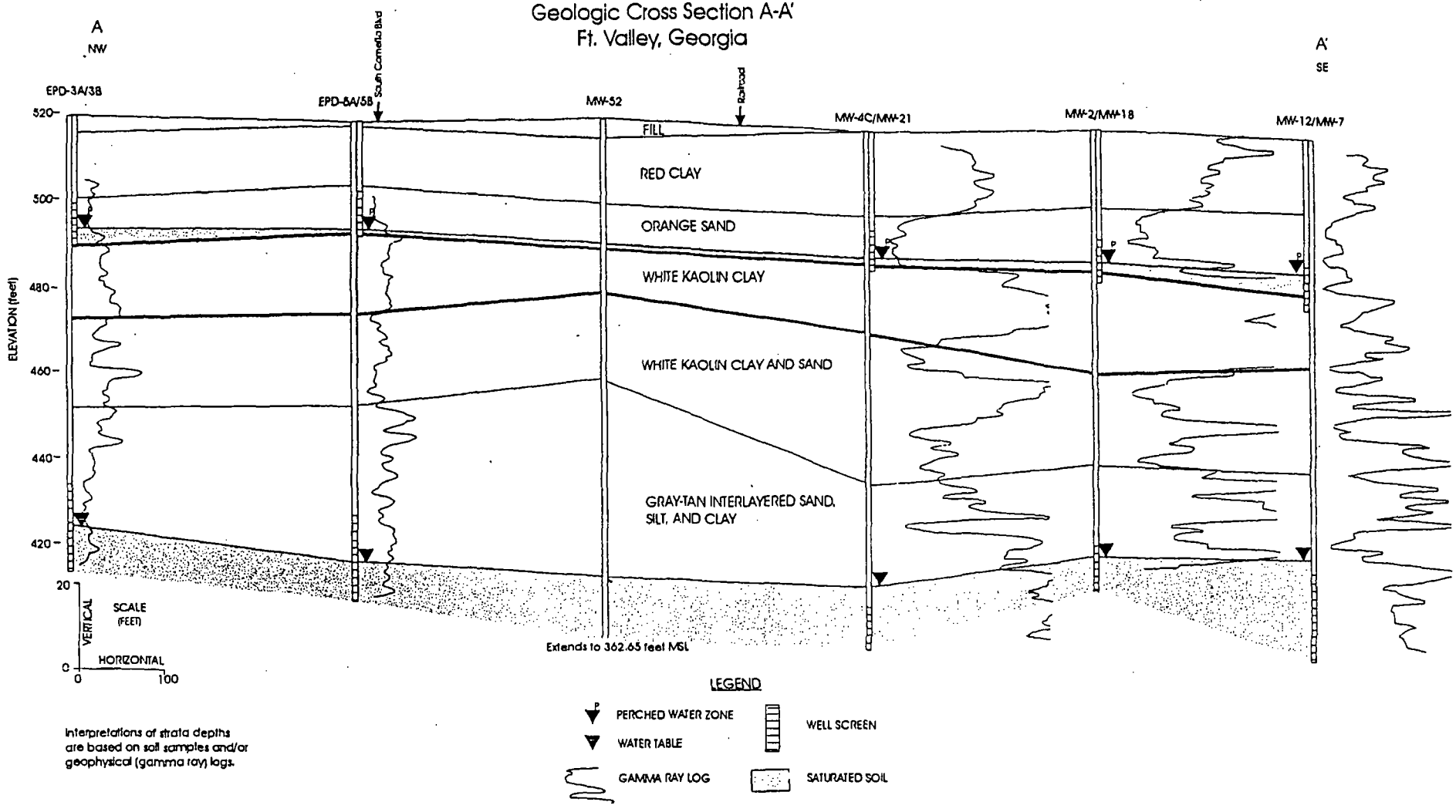
Figure 6
Line of Cross-Section
Ft. Valley, Georgia



- City Water Supply Well
- Monitoring Well
- A. Splish Splash Car Wash (Former Dry Cleaner)
- B. Fabra Care Cleaners
- C. Peach Mac Automotive
- D. Former Dry Cleaner
- E. Former Dry Cleaner
- F. Former Dry Cleaner
- G. Anthoine Machine Works
- H. Woolfolk Chemical NPL Site

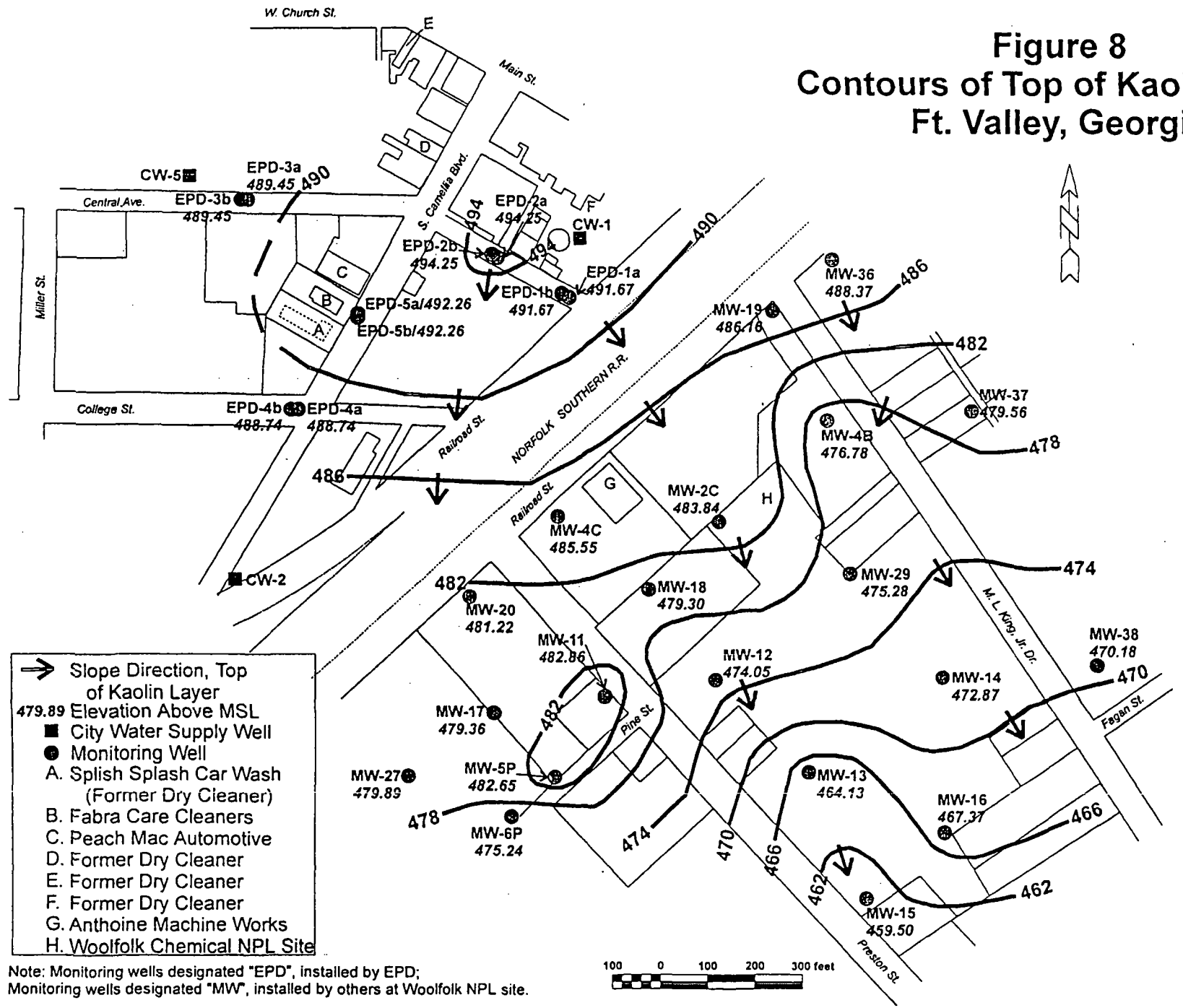
Note: Monitoring wells designated "EPD", installed by EPD;
Monitoring wells designated "MW", installed by others at Woolfolk NPL site

FIGURE 7
Geologic Cross Section A-A'
Ft. Valley, Georgia



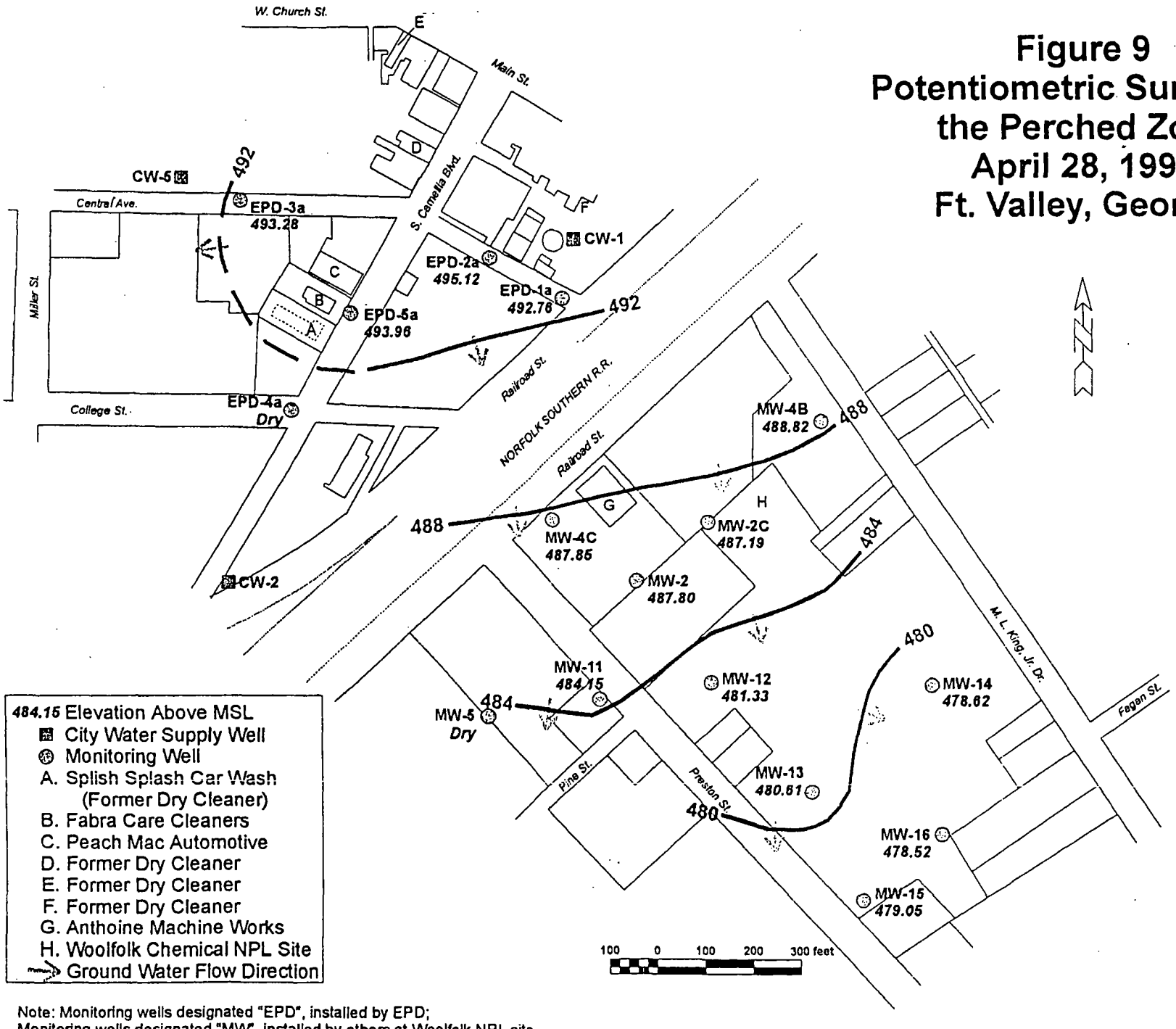
Interpretations of strata depths are based on soil samples and/or geophysical (gamma ray) logs.

Figure 8
Contours of Top of Kaolin Layer
Ft. Valley, Georgia



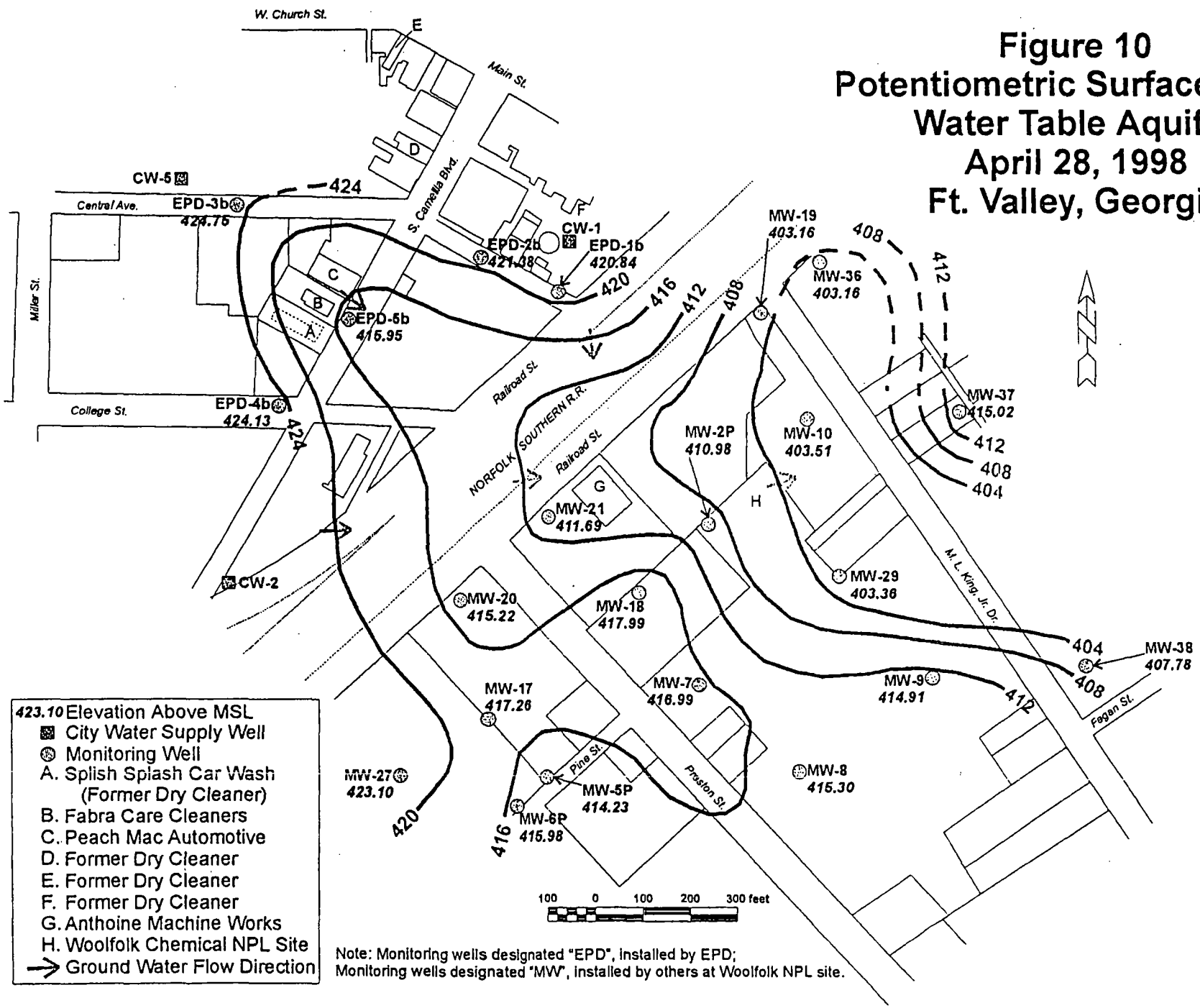
Note: Monitoring wells designated "EPD", installed by EPD;
Monitoring wells designated "MW", installed by others at Woolfolk NPL site.

Figure 9
Potentiometric Surface of the Perched Zone
April 28, 1998
Ft. Valley, Georgia



Note: Monitoring wells designated "EPD", installed by EPD;
Monitoring wells designated "MW", installed by others at Woolfolk NPL site

Figure 10
Potentiometric Surface of the Water Table Aquifer
April 28, 1998
Ft. Valley, Georgia



Note: Monitoring wells designated "EPD", installed by EPD;
Monitoring wells designated "MW", installed by others at Woolfolk NPL site.

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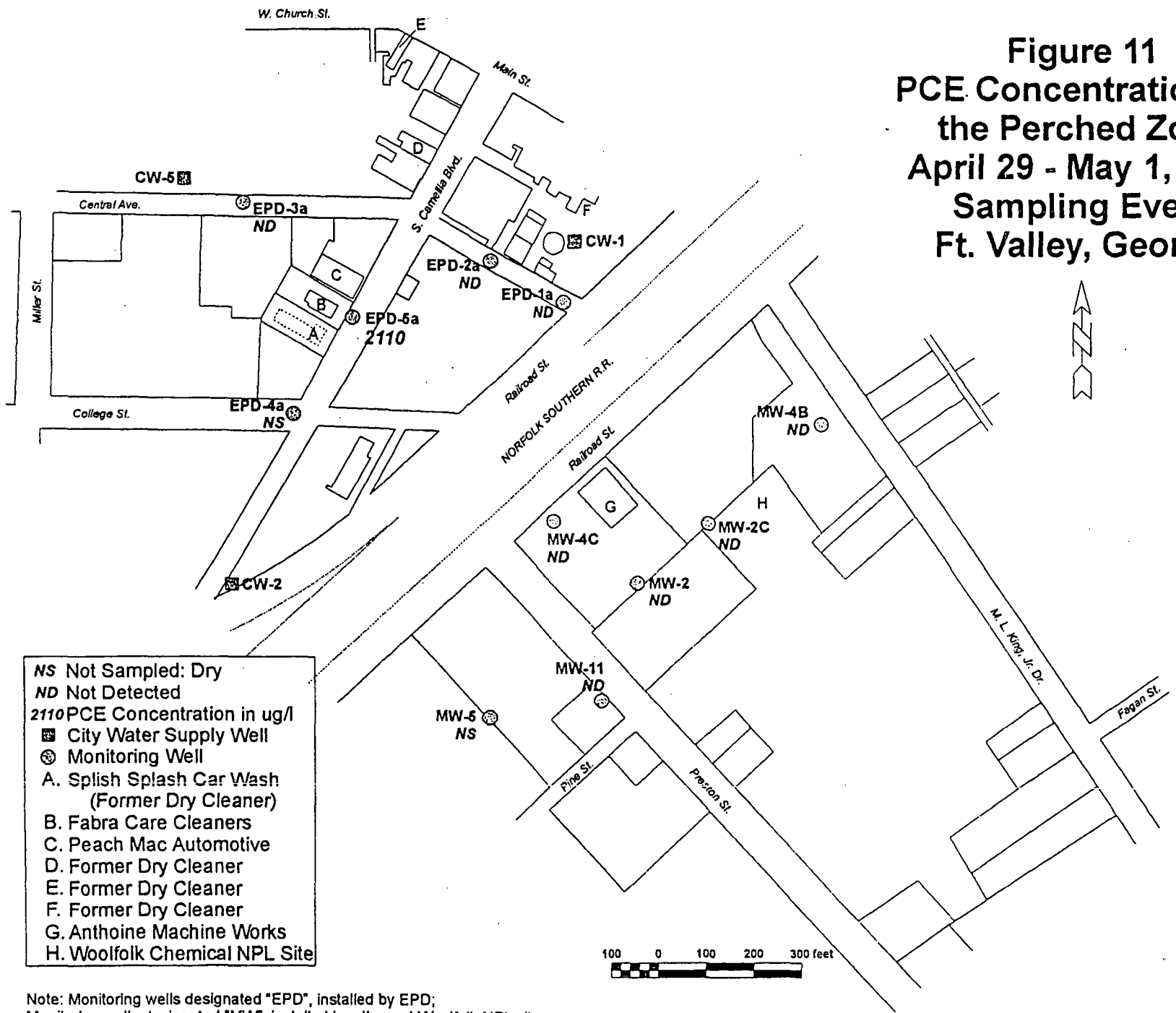
Figure 11
PCE Concentrations in the Perched Zone April 29 - May 1, 1998 Sampling Event Ft. Valley, Georgia

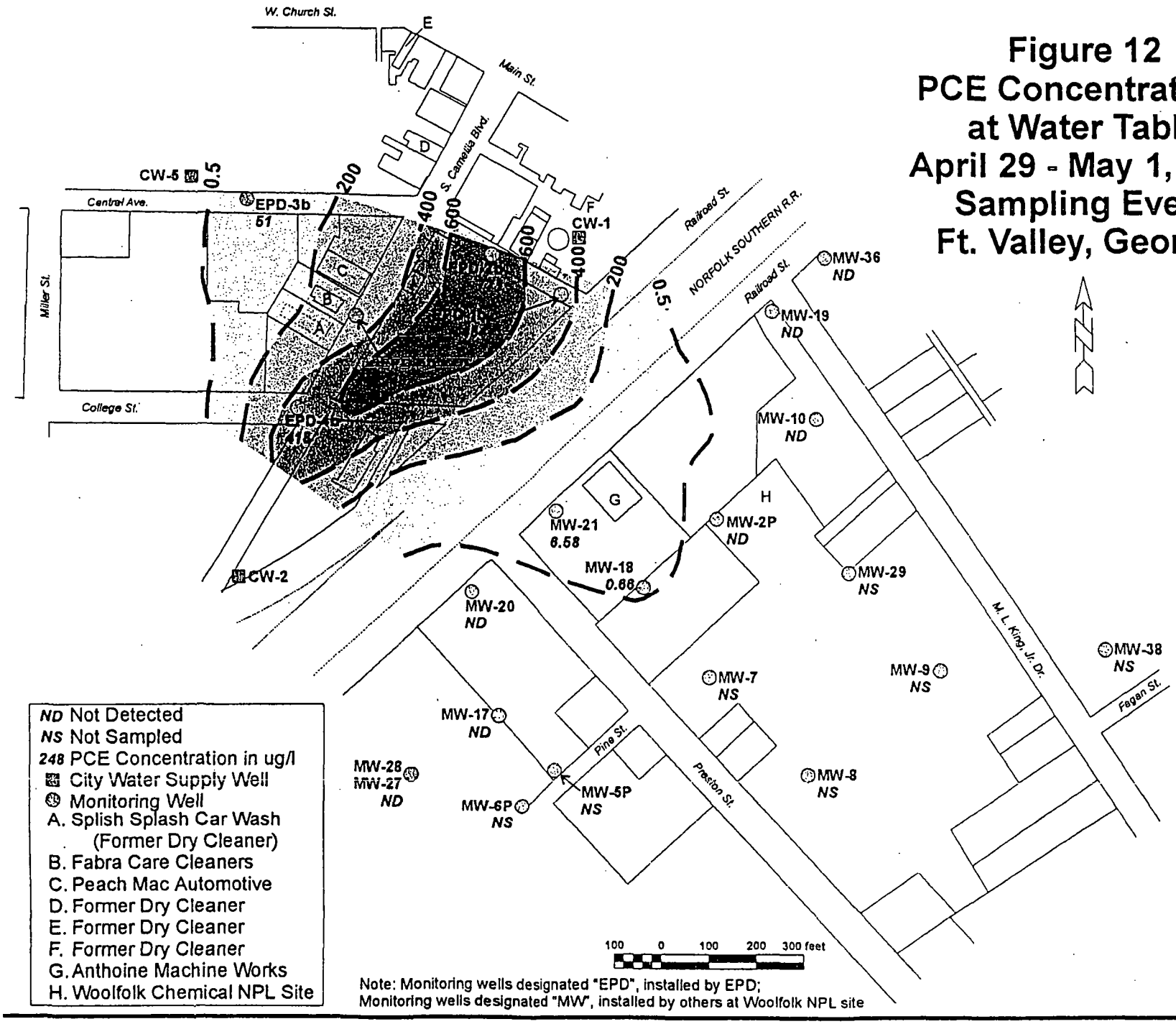


NS Not Sampled: Dry
ND Not Detected
2110 PCE Concentration in ug/l
City Water Supply Well
Monitoring Well
A. Splish Splash Car Wash (Former Dry Cleaner)
B. Fabra Care Cleaners
C. Peach Mac Automotive
D. Former Dry Cleaner
E. Former Dry Cleaner
F. Former Dry Cleaner
G. Anthoine Machine Works
H. Woolfolk Chemical NPL Site

Note: Monitoring wells designated "EPD", installed by EPD;
Monitoring wells designated "MW", installed by others at Woolfolk NPL site

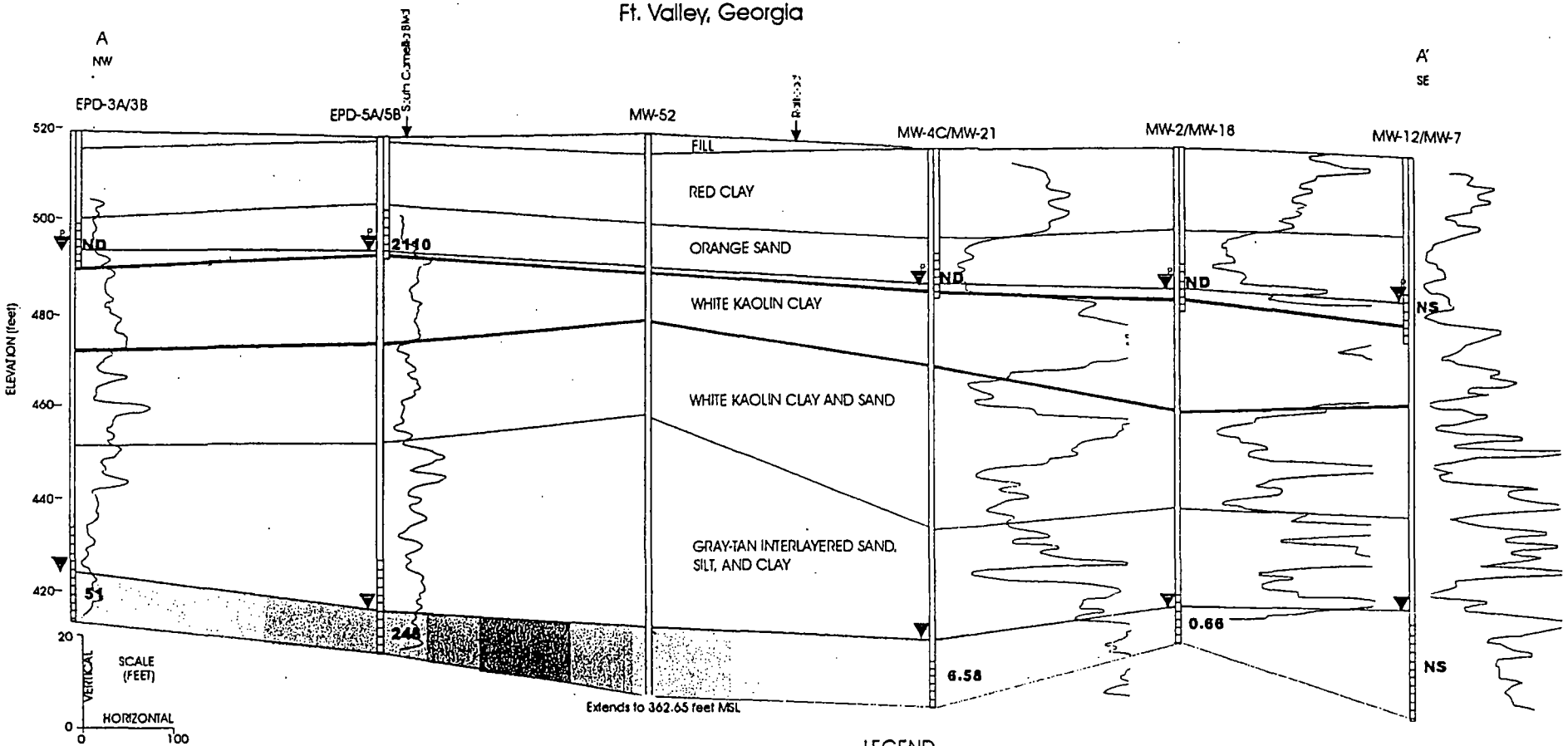
Illustration produced by Geologic Survey Branch of EPD, July 20, 1998.

Figure 12
PCE Concentrations at Water Table
April 29 - May 1, 1998 Sampling Event
Ft. Valley, Georgia



Note: Monitoring wells designated "EPD", installed by EPD;
Monitoring wells designated "MW", installed by others at Woolfolk NPL site

FIGURE 13
PCE Concentrations in Groundwater along Cross Section A-A'
Ft. Valley, Georgia



Notes:
1) Interpretations of strata depths are based on soil samples and/or geophysical (gamma ray) logs.
2) PCE concentrations are for samples taken during April 29 - May 1, 1998 sampling event.

LEGEND

- PERCHED WATER ZONE
- WATER TABLE
- GAMMA RAY LOG
- ND NOT DETECTED
- NS NOT SAMPLED
- 248 PCE CONCENTRATION IN MICROGRAMS/LITER
- WELL SCREEN
- >600 MICROGRAMS/LITER PCE
- 400-600 MICROGRAMS/LITER PCE
- 200-400 MICROGRAMS/LITER PCE
- 0.5-200 MICROGRAMS/LITER PCE
- <0.5 MICROGRAMS/LITER PCE

Also see Figure 12 for map of PCE plume

Figure 14 - CW-1 and CW-2 PCE Profile Data

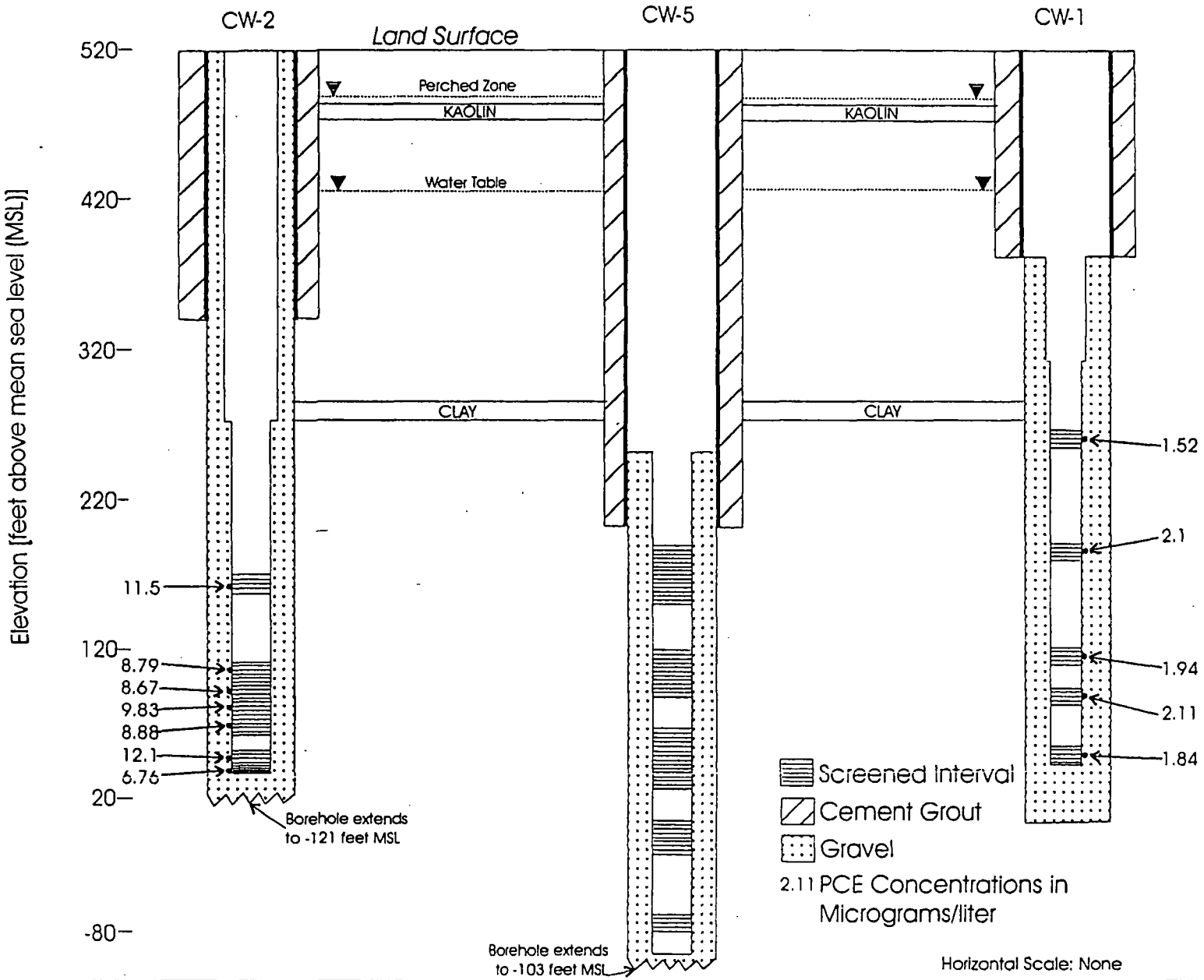


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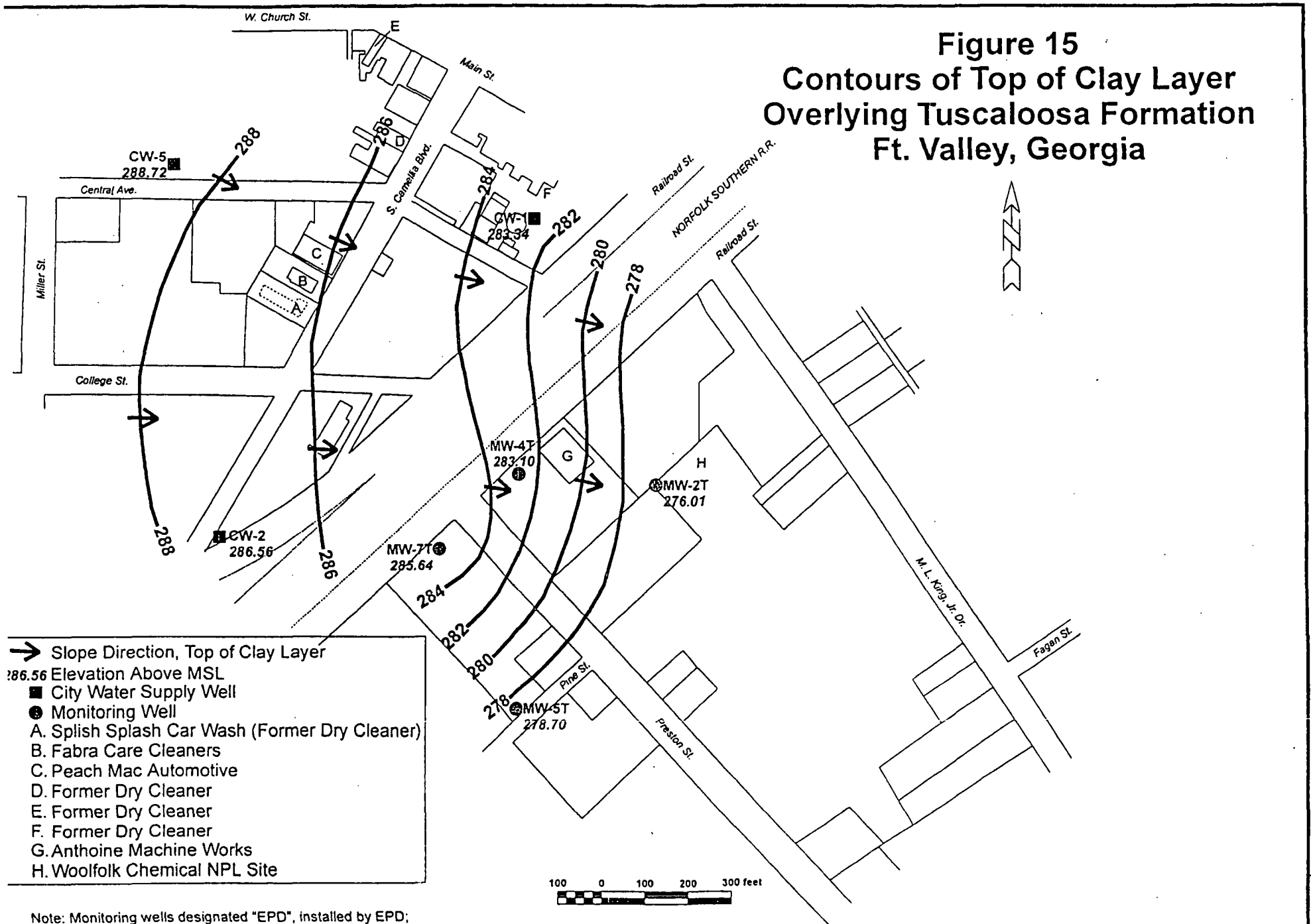
Figure 15
Contours of Top of Clay Layer Overlying Tuscaloosa Formation Ft. Valley, Georgia



Note: Monitoring wells designated "EPD", installed by EPD;
Monitoring wells designated "MW", installed by others at Woolfolk NPL site

Reference No.: 15

GEORGIA
STATE DIVISION OF CONSERVATION
DEPARTMENT OF MINES, MINING AND GEOLOGY
GARLAND PEYTON, Director

THE GEOLOGICAL SURVEY
Bulletin Number 70

WELL LOGS OF THE COASTAL PLAIN OF GEORGIA

by

Stephen M. Herrick, Geologist
United States Geological Survey

Prepared cooperatively by the U. S. Geological Survey

ATLANTA
1961

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Figure 1. Well location map, Coastal Plain of Georgia ..... In Pocket

PEACH COUNTY

Location: Few miles southwest of Fort Valley, at Fort Valley State College
Owner: No. 1 Fort Valley State College
Driller: Layne-Atlantic Company
Drilled: March 1953

Well No.: GGS 348
Elev.: 517

	Thickness (feet)	Depth (feet)
Paleocene: Midway Group: Clayton Formation:		
Clay: gray to red (mottled), sandy	38	38
Upper Cretaceous: Providence Sand:		
Sand: coarse-grained, limonitic; clay (or kaolin), dark-brown to yellow to purple (mottled), sandy, micaceous	7	45
Kaolin: cream, micaceous, sandy	20	65
Sand: coarse-grained, angular; some kaolin, light-gray, micaceous	20	85
Kaolin: light-gray, micaceous	20	105
Sand: fine to coarse-grained; some kaolin, white to red (mottled), micaceous	20	125
Sand: coarse-grained, angular, limonitic	23	148
Ripley and Cusseta (Undifferentiated):		
Clay: light-gray to yellow, micaceous, sandy	6	154
Sand: fine to medium-grained; some clay, as above	16	170
Sand: fine to medium-grained; interbedded kaolin, white to gray to red (mottled), micaceous, sandy	45	215
Blufftown and Eutaw (Undifferentiated):		
Sand: fine to coarse-grained, angular, limonitic; interbedded clay (or kaolin), gray to black, micaceous, lignitic	110	325
Black, lignitic clay prominent at 225-245.		
Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular, limonitic, rather massive; interbedded clay (or kaolin), gray to red (mottled), micaceous, sandy	170	495

PEACH COUNTY

t Val- Well No.: GGS 348
Elev.: 517

	Thickness (feet)	Depth (feet)
.....	38	38
dark-brown	7	45
.....	20	65
gray, mica-	20	85
.....	20	105
ite to red	20	125
.....	23	148
.....	6	154
.....	16	170
ı, white to	45	215
nterbedded ic.....	110	325
ather mas- (mottled), ...	170	495

Summary:	Thickness (feet)	Depth (feet)
Paleocene (Clayton formation)	38	38
Upper Cretaceous (Providence sand)	110	148
Upper Cretaceous (Ripley and Cusseta, undifferentiated)	67	215
Upper Cretaceous (Blufftown and Eutaw, undifferentiated)	110	325
Upper Cretaceous (Tuscaloosa formation)	170	495
Potential Water-Bearing Zones:		
Sand: fine to coarse-grained	35	140
Sand: fine to medium-grained	30	205
Sand: fine to coarse-grained	75	300
Sand: fine to coarse-grained	55	415
Sand: fine to coarse-grained	30	455
Sand: fine to coarse-grained	15	487

PEACH COUNTY

Location: In Fort Valley
Owner: No. 4 City of Fort Valley
Driller: Layne-Atlantic Company
Drilled: January 1954

Well No.: GGS 369
Elev.: 525[1]

	Thickness (feet)	Depth (feet)
Paleocene: Midway Group: Clayton Formation:		
Clay: brick-red, very sandy, limonitic, and scattered fragments of residual limestone	24	24
Sand: fine to coarse-grained, angular	8	32
No samples	3	35
In Upper Cretaceous: Providence Sand:		
Kaolin: white, micaceous, sandy	13	48
Sand: fine to coarse-grained	72	120
In Ripley and Cusseta (Undifferentiated):		
Clay: gray to red (mottled), micaceous, sandy	90	210
In Blufftown and Eutaw (Undifferentiated):		
Sand: fine to coarse-grained; clay, gray, very micaceous	24	234
Clay: gray, silty, very micaceous	16	250
Sand: fine to coarse-grained; some clay, as above	30	280

[1]Average elevation based on Georgia State Highway Maps.

	Thickness (feet)	Depth (feet)
Tuscaloosa Formation:		
Sand: fine to coarse-grained, arkosic; some clay (or kaolin), gray to pink (mottled), micaceous, sandy	35	315
No samples	11	326
Sand: coarse-grained, arkosic	34	360
No samples	36	396
Sand: fine to coarse-grained	109	505
Clay: gray to brick-red, very micaceous, sandy	12	517

Summary:

Paleocene (Clayton formation)	32	32
No samples	3	35
In Upper Cretaceous (Providence sand)	85	120
In Upper Cretaceous (Ripley and Cusseta, undifferentiated)	90	210
In Upper Cretaceous (Blufftown and Eutaw, undifferentiated)	70	280
Upper Cretaceous (Tuscaloosa formation)	237	517

Potential Water-Bearing Zones:

Sand: fine to coarse-grained	25	145
Sand: fine to coarse-grained	30	190
Sand: fine to coarse-grained	20	230
Sand: fine to coarse-grained	40	320
Sand: fine to coarse-grained	40	410
Sand: fine to coarse-grained	25	480

Remarks:

Overall quality of samples poor. Potential water-bearing zones selected from electric log of well.

PEACH COUNTY

Location: 1.0 mi. northeast of Central of Georgia R.R. Station, in Fort Valley
Owner: No. 1 Atlantic Ice Company
Driller: Layne-Atlantic Company
Drilled: April 1955

Well No.: GGS 426
Elev.: 525[1]

	Thickness (feet)	Depth (feet)
Paleocene: Midway Group: Clayton Formation:		
Clay: brick-red, sandy, limonitic	20	20

[1]Average elevation based on Georgia State Highway Maps.

	Thickness (feet)	Depth (feet)
ay (or kaolin),		
	35	315
	11	326
	34	360
	36	396
	109	505
y	12	517
	32	32
	3	35
	85	120
ferentiated)	90	210
ıdifferentiated)	70	280
	237	517
; Zones:		
	25	145
	30	190
	20	230
	40	320
	40	410
	25	480

bearing zones selected from elec-

PEACH COUNTY

:gia R.R. Well No.: GGS 426
Elev.: 525[1]

	Thickness (feet)	Depth (feet)
	20	20

	Thickness (feet)	Depth (feet)
Upper Cretaceous: Providence Sand:		
Kaolin: white to red (mottled), sandy	10	30
Sand: fine to coarse-grained; some clay, as above	25	55
Kaolin: white to red (mottled), very sandy	7	62
Sand: fine to medium-grained, angular, limonitic, arkosic	13	75
Clay: mottled, very sandy	17	92
Ripley and Cusseta (Undifferentiated):		
Clay: light tan, sandy	16	108
Sand: fine to coarse-grained, angular; some clay, as above	39	147
Sand: fine to coarse-grained, angular, limonitic, arkosic	33	180
Blufftown and Eutaw (Undifferentiated):		
Clay: dark-gray to black, sandy, very micaceous	5	185
Sand: fine to coarse-grained, angular, arkosic	25	210
Clay: light-gray to red (mottled), very sandy	7	217
Sand: fine to coarse-grained, angular, arkosic	18	235
In Tuscaloosa Formation:		
Sand: fine to coarse-grained, angular, arkosic; some clay, red, micaceous	68	303
Sand: fine to coarse-grained, angular, arkosic; interbedded clay (or kaolin), white to red (mottled), micaceous, sandy	102	405
Clay: gray to brick-red, micaceous, sandy	25	430
Sand: fine to coarse-grained, angular, arkosic; interbedded thin stringers of clay (or kaolin), gray to red (mottled), micaceous, sandy	71	501

Summary:

Paleocene (Clayton formation)	20	20
Upper Cretaceous (Providence sand)	72	92
Upper Cretaceous (Ripley and Cusseta, undifferentiated)	88	180
Upper Cretaceous (Blufftown and Eutaw, undifferentiated)	55	235
In Upper Cretaceous (Tuscaloosa formation)	266	501

Potential Water-Bearing Zones:

Sand: fine to coarse-grained	67	175
Sand: fine to coarse-grained	25	210

	Thickness (feet)	Depth (feet)
Sand: fine to coarse-grained	13	230
Sand: fine to coarse-grained	92	337
Sand: fine to coarse-grained	47	405
Sand: fine to coarse-grained	37	467
Sand: fine to coarse-grained	25	495

PIERCE COUNTY

Location: 1.5 mi. east of Offerman, Land Lot 329. 4th Land District
Owner: No. 1 Adams-McCaskill
Driller: W. B. Hinton
Drilled: May 1938

Well No.: GGS 119
Elev.: 75

	Thickness (feet)	Depth (feet)
No samples	120	120
In Miocene (Undifferentiated):		
Sand: fine to coarse-grained; limestone, white, rather dense (much calcitized), sandy, phosphatic	360	480
Sand and limestone: as above; dolomitic limestone, light-brown, saccharoidal	105	585
Oligocene (Undifferentiated):		
Sand and limestone: as above with more limestone at depth, light-gray to white at depth, much calcitized, nodular, saccharoidal, fossiliferous (macroshells and Foraminifera)	15	600
Quinqueloculina sp. at 585-600.		
Upper Eocene: Jackson Group: Ocala Limestone:		
Limestone: white to cream, sandier more calcitized and dolomitized at depth, fossiliferous (bryozoan and echinoid remains, some macroshells, and Foraminifera)	265	865
Bryozoan remains prominent at 600-630.		
Camerina sp. at 675-690.		
Operculinoides floridensis, Lepidocyclina sp. at 690-705.		
Asterocyclina nassauensis at 705-720.		
Gypsina globula, Pseudophragmina flintensis at 720-735.		
Camerina striatoreticulata common at 735-750.		
Operculina mariannensis at 765-780.		
Limestone as above but much sandier at 780-810.		
Limestone as above but more dolomitized with depth at 810-865.		

HYDROLOGIC ATLAS 11

HYDROGEOLOGY OF THE PROVIDENCE AQUIFER OF SOUTHWEST GEORGIA

John S. Clarke, Robert E. Faye and Rebekah Brooks

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Atlanta

1983

Department of Natural Resources
Joe D. Tanner, Commissioner

Environmental Protection Division
J. Leonard Ledbetter, Director

Georgia Geologic Survey
William H. McLemore, State Geologist

HYDROLOGIC ATLAS 11

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U.S. EPA REGION IV

SDMS

Unscannable Material Target Sheet

DocID: 10583017 Site ID: GA0000048934

Site Name: Vienna Street Dump

Nature of Material:

Map:		Computer Disks:	
Photos:		CD-ROM:	
Blueprints:		Oversized Report:	
Slides:		Log Book:	

Other (describe): Hydrogeology of the Providence Aquifer of Southwest Georgia

Amount of material:

Please contact the appropriate Records Center to view the material.

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C.W. FETTER

APPLIED HYDROGEOLOGY

Third Edition

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TABLE 4.6 Ranges of intrinsic permeabilities and hydraulic conductivities for unconsolidated sediments

Material	Intrinsic Permeability (darcys)	Hydraulic Conductivity (cm/s)
Clay	10^{-6}–10^{-3}	10^{-9}–10^{-6}
Silt, sandy silts, clayey sands, till	10^{-3}–10^{-1}	10^{-6}–10^{-4}
Silty sands, fine sands	10^{-2}–1	10^{-5}–10^{-3}
Well-sorted sands, glacial outwash	1–10^{2}	10^{-3}–10^{-1}
Well-sorted gravel	10–10^{3}	10^{-2}–1

4.4.3 Permeability of Sediments

Unconsolidated coarse-grained sediments represent some of the most prolific producers of ground water. Likewise, clays are often used for engineering purposes, such as lining solid-waste disposal sites, because of their extremely low intrinsic permeability. There is obviously a wide-ranging continuum of permeability values for unconsolidated sediments (Table 4.6).

The intrinsic permeability is a function of the size of the pore opening. The smaller the size of the sediment grains, the larger the surface area the water contacts (Figure 4.13). This increases the frictional resistance to flow, which reduces the intrinsic permeability. For well-sorted sediments, the intrinsic permeability is proportional to the grain size of the sediment (Norris & Fidler 1965).

For sand-sized alluvial deposits, several factors relating intrinsic permeability to grain size have been noted (Masch & Denny 1966). These observations would hold true for all sedimentary deposits, regardless of origin of deposition.

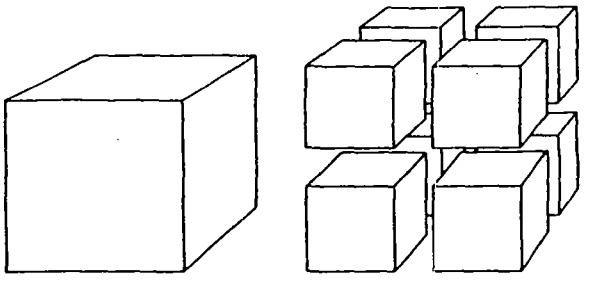

FIGURE 4.13 Relationship of sediment grain size to surface area of pore space. **A.** A cu of sediment with a surface area of 6 square units. **B.** The cube has been broken into 8 piec each with a diameter of one-half of the cube in part A. The surface area has increased to square units—an increase of 100%.

Reference No.: 18

GEORGIA
STATE DIVISION OF CONSERVATION
DEPARTMENT OF MINES, MINING AND GEOLOGY
GARLAND PEYTON, Director

THE GEOLOGICAL SURVEY
Bulletin No. 64

GEOLOGY AND GROUND-WATER RESOURCES OF CENTRAL-EAST GEORGIA

By
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With a Chapter on the Surface-Water Resources

By
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Prepared in cooperation with the
Geological Survey, United States Department of the Interior,
Washington, D. C.
ATLANTA
1956

Summary of the Coastal Plain Sediments in Central-East Georgia

System	Series	Formation	Thickness within the area (feet)	General character	Water-bearing properties
Tertiary	Miocene	Hawthorn formation	0-125±	Commonly massive, mottled orange and gray coarse sandy clay.	Thin, relatively impervious unit. Yields moderate supplies to dug wells only.
	Oligocene	Suwannee limestone	0-50	Cherty limestone and some mottled red clay.	Too thin to be of major importance. Solution cavities in limestone yield some water.
	Eocene	Barnwell formation	0-220	Composed chiefly of brilliant red sand grading downward into interbedded yellow sand and gummy clay lamina. Thick beds of fuller's earth typical of basal member, called Twiggs clay member. Thin fossiliferous limestone beds are present throughout formation, though sporadically leached away.	Very permeable. Coarse, loose sands, characterizing much of formation, yield bountiful supplies of potable ground water. Extensive outcrop area favors high recharge. Artesian water is obtained from this area southeastward from area of outcrop. Impermeable basal clay member acts as confining stratum between sands of the Barnwell and water-bearing strata below.
		McBean formation	0-150	Consists of gray and yellow calcareous sand and fossiliferous limestone beds. Is overlapped by Barnwell formation, the only exposures being along three dissected streams in Burke and Richmond Counties.	Composed of permeable sand and marl beds, but relatively unimportant as an aquifer because of its thinness and limited outcrop area.
Cretaceous	Upper Cretaceous	Tuscaloosa formation	0-850	Generally composed of pink and white kaolinic, micaceous sands. Cross-bedded sands are common but thin clay beds are rare. Upper part of formation generally contains considerable white kaolin.	Excellent aquifer. Preponderance of sand allows easy transmission of water in zone of saturation. Deep permeable beds hold artesian water and are practicable source of water in much of area. Natural recharge of the aquifer is abundant.

GEOLOGIC FORMATIONS OF THE COASTAL PLAIN AND THEIR WATER-BEARING PROPERTIES

Cretaceous System

TUSCALOOSA FORMATION

Geology.—The Tuscaloosa formation was named by Smith and Johnson (1887, p. 95-116) after the city of that name in Alabama. It has long been known that Cretaceous deposits extend across Georgia, and in 1936 C. W. Cooke (p. 17) extended the name Tuscaloosa to represent the basal Upper Cretaceous strata in South Carolina and Georgia. No identifiable fossil remains have been found in this formation in eastern Georgia, and therefore its correlation with the Tuscaloosa elsewhere is based on lithology and stratigraphic position.

While mapping the outcrop area of the Cretaceous formations in Georgia in 1949 for the Federal Survey, Hoye Eargle (personal communication) found evidence to suggest that deposits now called Tuscaloosa in eastern Georgia may be of younger Cretaceous age than the Tuscaloosa. However, until further work is done in the Cretaceous deposits in adjacent parts of South Carolina, where similar deposits also are called Tuscaloosa, it seems desirable to retain the name in eastern Georgia.

In eastern Georgia the Tuscaloosa is exposed in a belt as much as 18 miles wide bordering the Piedmont area and trending slightly north of east. The extreme irregularity of the belt is due to erosion by southeast-flowing streams, which have cut valleys through the formation in the outcrop area where it is relatively thin. Farther south it has V-shaped exposures pointing southward in the valleys. Progressive overlap of younger beds of Eocene age is a factor in limiting the width of the Tuscaloosa belt, and in Warren and Glascock Counties the younger sediments overlap the Tuscaloosa to break the continuity of the belt. Numerous outliers of the formation lie on the Piedmont in the other counties north of the main belt.

In its outcrop area the Tuscaloosa nowhere greatly exceeds 150 feet in thickness and it generally is much thinner, especially toward the north. Under cover, down the dip, it is 355 feet thick at Wrens in Jefferson County, and at Louisville an

inferred thickness of 800 feet is indicated by a driller's log (McCallie, 1908, p. 125-126). Although no record is known of any well penetrating the complete formation in southern Burke and Jefferson Counties, it probably reaches a thickness of 850 feet there.

The Tuscaloosa formation consists of arkosic sand composed largely of angular to subangular quartz grains. Disseminated kaolin and mica are present throughout much of the sand, the latter ranging in color from white to gray, yellow, and pink. Lenses of white and gray clay are present throughout the formation (fig. 2). Balls and boulders of pure white kaolin are common. The Tuscaloosa formation is generally massive, both the sand and the clay showing very little bedding or lamination. A typical section of the Tuscaloosa formation follows:

Section in road cut on U. S. Highway 1, 5 miles south of Butler Creek, Richmond County

		Thickness (feet)
Barnwell formation (Eocene):		
13	Sand, coarse, red	15
Tuscaloosa formation (Upper Cretaceous):		
12	Sand, compact, pink, and thin kaolin lenses	20
11	Sand, white, micaceous	70
10	Sand, clayey, compact, pink, and gravel	18
9	Sand, kaolinic, white, micaceous, crudely stratified	20
8	Sand, medium-grained, white, and disseminated kaolin	25
7	Sand, coarse-grained, and gravel with white kaolin balls	2
6	Sand, white, medium- and fine-grained, poorly stratified, and disseminated kaolin and mica	18
5	Clay, sandy, mottled red and gray, somewhat plastic	18
4	Sand, clayey, compact, pink	11
3	Sand, medium-grained, white, containing disseminated mica and kaolin	12
2	Sand, white, coarse-grained, water-bearing, and sparsely scattered white kaolin particles	14
Metavolcanic series (pre-Cretaceous):		
1	Clay, soft, white and yellow, sericitic, to level of bridge	20

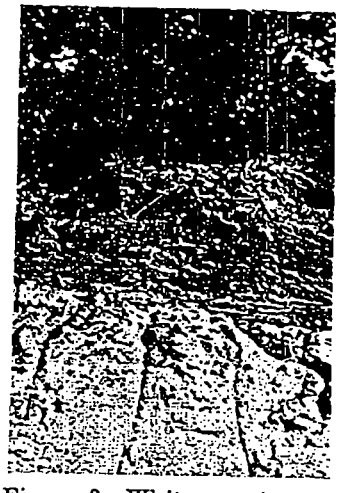

Figure 2. White massive sa
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Ground water.—The
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Figure 2. White massive sandy kaolin of the Tuscaloosa formation overlain by red clayey sand of the Barnwell formation, Camp Gordon Military Reservation, 1 mile north of U. S. Route 1, Richmond County.

Ground water.—The coarse, permeable sands of the Tuscaloosa formation are an excellent source of water. Water from these sands, where they are exposed or are buried beneath younger sediments at depths accessible to wells, is extensively used for domestic and municipal supplies.

In the outcrop area of the formation shallow dug wells locate water readily at depths usually less than 40 feet. At the surface the clay normally present in the formation has been washed away, leaving coarse, loose sand to receive water from precipitation. Therefore, despite the hilly topography, water seeps into the formation to recharge that part of the aquifer that is covered beneath younger sediments down the dip. Water in the outcrop area is generally under water-table conditions. Relatively high yields may be obtained if the underlying basement rock is not encountered at a shallow depth, that is, if the zone of saturation is at least a few tens of feet thick.

South of, and parallel to, the outcrop belt lies another belt as much as 25 miles wide, from which large water supplies can be derived from the sands of the Tuscaloosa. Yields of 500 gallons a minute or more may be obtained from individual wells in the water-bearing beds. The deposits become deeper to the south and east because of the inclination of the strata, but even there the aquifer is accessible to deep wells.

Reference No.: 19

GEORGIA
STATE DIVISION OF CONSERVATION

DEPARTMENT OF MINES, MINING AND GEOLOGY
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THE GEOLOGICAL SURVEY
Bulletin No. 72

GEOLOGY AND GROUND-WATER RESOURCES OF THE MACON AREA, GEORGIA

by

H. E. LeGrand

JO ELLEN CROWHOVER-JOHNSON

Prepared by the
United States Geological Survey
in cooperation with
Georgia Department of Mines, Mining, and Geology
ATLANTA
1962

3	*Houston*	5-18-53	do.	WR	7.0	.05	1.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	do.	10-25-48	do.	*Turner*	16	.9	6.0	7.0		21	2.0			44	37	6.5
24	do.	4-29-59	do.	WR	10	1.0	1.2	.9	1.2	0	8.8	2.5	0.0	25	6	4.4
15	Macon	5-29-47	do.	Turner	7.0		4.0				14	1.5		25	15	3.7
24	do.	12-17-42	do.	do.	24	.6	7.2	3.0			9.0	5.0		86	34	
35	do.	4-29-59	do.	WR	42	.4	14	2.0		50	5.0	4.0		110	43	
1	Peach	4-20-54	do.	WR	7.5	.15	1.4	.4	1.3	6	.2	1.5	.1	18	5	6.5
18	do.	10-25-48	do.	Turner	4.0	.4								51	35	
32	do.	4-29-59	do.	WR	9.5	.03	1.8	.4	1.5	7	2.4	2.8	.1	22	6	5.8
13	Schley	5-10-46	do.	WR	11	.64	10	1.0	2.4	22	12	2.5	.1	51	29	
14	do.	5-28-59	do.	WR	12	.2	16	1.7	2.5	38	16	3.5	.2	74	47	6.4
13	Taylor	5-29-59	do.	WR	6.8	.05	1.2	.2	.8	4	.4	1.5	.0	26	4	5.3

[1]Turner, Georgia Department of Mines, Mining, and Geology; WR, Quality of Water Branch, U. S. Geological Survey; others are private companies.

USE OF GROUND WATER

All the municipalities of the Macon area use water from wells except Macon, which treats water from the Ocmulgee River. The towns of Warner Robins and Fort Valley use between 1 and 2 mgd (million gallons per day). Montezuma, Perry, and Butler use slightly less than 1 mgd, and other towns use less amounts. Industrial use is not great, although several industries, a few miles south of Macon, in Bibb County, pump a total of 3 or 4 mgd. Warner Robins Air Base now (1960) uses about 1.5 mgd. Locally irrigation with well water is practiced but the overall use is small. Spraying peach trees during parts of the year is an important rural use of ground water. Table 2 shows the ground water used in the Macon area in 1959.

A feature of the use of ground water in the area is that no significant cone of depression has developed in the water table or artesian-pressure surface, not even at Warner Robins or in the area south of Macon. In both these areas, natural ground-water discharge by evapotranspiration and seepage into streams is great. An increase in pumping will result in a decrease in the natural discharge; thus, much of the apparent waste of water by natural discharge can be salvaged, and pumping levels may not be lowered appreciably by increased withdrawal. The potential supply of water from wells in these areas, as well as in almost all other areas of the Coastal Plain, is considerable.

Table 2.—Use of ground water in Macon area, 1959

Use of water	**Total water pumped**	
	mgd	**mgy**
Municipal	9.9	3,614
Rural	5.8	2,117
Industrial	2.4	876
Irrigation	.62	61.8

EPA United States Environmental Protection Agency
Office of Water

Reference No.: 20

Ground Water and Drinking Water

En español
Printable PDF version

Current Drinking Water Standards

National Primary Drinking Water Regulations (NPDWRs or primary standards) are legally enforceable standards that apply to public water systems. Primary standards protect public health by limiting the levels of contaminants in drinking water. The table below divides these contaminants into:

Microorganisms ~ Disinfectants & Disinfection Byproducts
Inorganic Chemicals ~ Organic Chemicals ~ Radionuclides

For more information, see Setting Standards for Safe Drinking Water to learn about EPA's standard-setting process or look at a timeline that shows the order in which EPA regulated these contaminants. For copies of the complete regulations regarding these contaminants, follow these links to the National Primary Drinking Water Regulations and National Secondary Drinking Water Regulations.

National Primary Drinking Water Regulations

Microorganisms	MCLG[1] (mg/L)[2]	MCL or TT[1] (mg/L)[2]	Potential Health Effects from Ingestion of Water	Sources of Contaminant in Drinking Water
Cryptosporidium	as of 01/01/02: zero	as of 01/01/02: TT[3]	Gastrointestinal illness (e.g., diarrhea, vomiting, cramps)	Human and animal fecal waste
Giardia lamblia	zero	TT[3]	Gastrointestinal illness (e.g., diarrhea, vomiting, cramps)	Human and animal fecal waste
Heterotrophic plate count	n/a	TT[3]	HPC has no health effects, but can indicate how effective treatment is at controlling microorganisms.	HPC measures a range of bacteria that are naturally present in the environment
Legionella	zero	TT[3]	Legionnaire's Disease, commonly known as pneumonia	Found naturally in water; multiplies in heating systems
Total Coliforms (including fecal coliform and *E. Coli*)	zero	5.0%[4]	Used as an indicator that other potentially harmful bacteria may be present[5]	Coliforms are naturally present in the environment; fecal coliforms and E. coli come from human and animal fecal waste.
Turbidity	n/a	TT[3]	Turbidity is a measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness (e.g., whether disease-causing organisms are present). Higher turbidity levels are often associated with higher levels of disease-causing microorganisms such as viruses, parasites and some bacteria. These organisms can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.	Soil runoff
Viruses (enteric)	zero	TT[3]	Gastrointestinal illness (e.g., diarrhea, vomiting, cramps)	Human and animal fecal waste

			diarrhea, vomiting, cramps)	

Disinfectants & Disinfection Byproducts	MCLG[1] (mg/L)[2]	MCL or TT[1] (mg/L)[2]	Potential Health Effects from Ingestion of Water	Sources of Contaminant in Drinking Water
Bromate	as of 01/01/02: zero	as of 01/01/02: 0.010	Increased risk of cancer	Byproduct of drinking water disinfection
Chloramines (as Cl_2)	as of 01/01/02: MRDLG=4[1]	as of 01/01/02: MRDL=4.0[1]	Eye/nose irritation; stomach discomfort, anemia	Water additive used to control microbes
Chlorine (as Cl_2)	as of 01/01/02: MRDLG=4[1]	as of 01/01/02: MRDL=4.0[1]	Eye/nose irritation; stomach discomfort	Water additive used to control microbes
Chlorine dioxide (as ClO_2)	as of 01/01/02: MRDLG=0.8[1]	as of 01/01/02: MRDL=0.8[1]	Anemia; infants & young children: nervous system effects	Water additive used to control microbes
Chlorite	as of 01/01/02: 0.8	as of 01/01/02: 1.0	Anemia; infants & young children: nervous system effects	Byproduct of drinking water disinfection
Haloacetic acids (HAA5)	as of 01/01/02: n/a[6]	as of 01/01/02: 0.060	Increased risk of cancer	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs)	none[7] ---------- as of 01/01/02: n/a[6]	0.10 ---------- as of 01/01/02: 0.080	Liver, kidney or central nervous system problems; increased risk of cancer	Byproduct of drinking water disinfection

Inorganic Chemicals	MCLG[1] (mg/L)[2]	MCL or TT[1] (mg/L)[2]	Potential Health Effects from Ingestion of Water	Sources of Contaminant in Drinking Water
Antimony	0.006	0.006	Increase in blood cholesterol; decrease in blood glucose	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic	none[7]	0.05	Skin damage; circulatory system problems; increased risk of cancer	Erosion of natural deposits; runoff from glass & electronics production wastes
Asbestos (fiber >10 micrometers)	7 million fibers per liter	7 MFL	Increased risk of developing benign intestinal polyps	Decay of asbestos cement in water mains; erosion of natural deposits
Barium	2	2	Increase in blood pressure	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium	0.004	0.004	Intestinal lesions	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium	0.005	0.005	Kidney damage	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (total)	0.1	0.1	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis	Discharge from steel and pulp mills; erosion of natural deposits
Copper	1.3	TT[8]; Action Level=1.3	Short term exposure: Gastrointestinal distress. Long term exposure: Liver or kidney damage. People with Wilson's	Corrosion of household plumbing systems; erosion of natural deposits

			damage. People with Wilson's Disease should consult their personal doctor if their water systems exceed the copper action level.	
Cyanide (as free cyanide)	0.2	0.2	Nerve damage or thyroid problems	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride	4.0	4.0	Bone disease (pain and tenderness of the bones); Children may get mottled teeth.	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Lead	zero	TT[8]; Action Level=0.015	Infants and children: Delays in physical or mental development. Adults: Kidney problems; high blood pressure	Corrosion of household plumbing systems; erosion of natural deposits
Mercury (inorganic)	0.002	0.002	Kidney damage	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland
Nitrate (measured as Nitrogen)	10	10	"Blue baby syndrome" in infants under six months - life threatening without immediate medical attention. Symptoms: Infant looks blue and has shortness of breath.	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (measured as Nitrogen)	1	1	"Blue baby syndrome" in infants under six months - life threatening without immediate medical attention. Symptoms: Infant looks blue and has shortness of breath.	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	0.05	0.05	Hair or fingernail loss; numbness in fingers or toes; circulatory problems	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines
Thallium	0.0005	0.002	Hair loss; changes in blood; kidney, intestine, or liver problems	Leaching from ore-processing sites; discharge from electronics, glass, and pharmaceutical companies

Organic Chemicals	MCLG[1] (mg/L)[2]	MCL or TT[1] (mg/L)[2]	Potential Health Effects from Ingestion of Water	Sources of Contaminant in Drinking Water
Acrylamide	zero	TT[9]	Nervous system or blood problems; increased risk of cancer	Added to water during sewage/wastewater treatment
Alachlor	zero	0.002	Eye, liver, kidney or spleen problems; anemia; increased risk of cancer	Runoff from herbicide used on row crops
Atrazine	0.003	0.003	Cardiovascular system problems; reproductive difficulties	Runoff from herbicide used on row crops
Benzene	zero	0.005	Anemia; decrease in blood platelets; increased risk of cancer	Discharge from factories; leaching from gas storage tanks and landfills
Benzo(a)pyrene (PAHs)	zero	0.0002	Reproductive difficulties; increased risk of cancer	Leaching from linings of water storage tanks and distribution lines
Carbofuran	0.04	0.04	Problems with blood or nervous system; reproductive difficulties.	Leaching of soil fumigant used on rice and alfalfa
Carbon tetrachloride	zero	0.005	Liver problems; increased risk of cancer	Discharge from chemical plants and other industrial activities
Chlordane	zero	0.002	Liver or nervous system problems; increased risk of cancer	Residue of banned termiticide
Chlorobenzene	0.1	0.1	Liver or kidney problems	Discharge from chemical and agricultural chemical factories
2,4-D	0.07	0.07	Kidney, liver, or adrenal gland problems	Runoff from herbicide used on row crops

Dalapon	0.2	0.2	Minor kidney changes	Runoff from herbicide used on rights of way
1,2-Dibromo-3-chloropropane (DBCP)	zero	0.0002	Reproductive difficulties; increased risk of cancer	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
o-Dichlorobenzene	0.6	0.6	Liver, kidney, or circulatory system problems	Discharge from industrial chemical factories
p-Dichlorobenzene	0.075	0.075	Anemia; liver, kidney or spleen damage; changes in blood	Discharge from industrial chemical factories
1,2-Dichloroethane	zero	0.005	Increased risk of cancer	Discharge from industrial chemical factories
1,1-Dichloroethylene	0.007	0.007	Liver problems	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene	0.07	0.07	Liver problems	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene	0.1	0.1	Liver problems	Discharge from industrial chemical factories
Dichloromethane	zero	0.005	Liver problems; increased risk of cancer	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane	zero	0.005	Increased risk of cancer	Discharge from industrial chemical factories
Di(2-ethylhexyl) adipate	0.4	0.4	General toxic effects or reproductive difficulties	Leaching from PVC plumbing systems; discharge from chemical factories
Di(2-ethylhexyl) phthalate	zero	0.006	Reproductive difficulties; liver problems; increased risk of cancer	Discharge from rubber and chemical factories
Dinoseb	0.007	0.007	Reproductive difficulties	Runoff from herbicide used on soybeans and vegetables
Dioxin (2,3,7,8-TCDD)	zero	0.00000003	Reproductive difficulties; increased risk of cancer	Emissions from waste incineration and other combustion; discharge from chemical factories
Diquat	0.02	0.02	Cataracts	Runoff from herbicide use
Endothall	0.1	0.1	Stomach and intestinal problems	Runoff from herbicide use
Endrin	0.002	0.002	Nervous system effects	Residue of banned insecticide
Epichlorohydrin	zero	TT[9]	Stomach problems; reproductive difficulties; increased risk of cancer	Discharge from industrial chemical factories; added to water during treatment process
Ethylbenzene	0.7	0.7	Liver or kidney problems	Discharge from petroleum refineries
Ethelyne dibromide	zero	0.00005	Stomach problems; reproductive difficulties; increased risk of cancer	Discharge from petroleum refineries
Glyphosate	0.7	0.7	Kidney problems; reproductive difficulties	Runoff from herbicide use
Heptachlor	zero	0.0004	Liver damage; increased risk of cancer	Residue of banned termiticide
Heptachlor epoxide	zero	0.0002	Liver damage; increased risk of cancer	Breakdown of hepatachlor
Hexachlorobenzene	zero	0.001	Liver or kidney problems; reproductive difficulties; increased risk of cancer	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene	0.05	0.05	Kidney or stomach problems	Discharge from chemical factories
Lindane	0.0002	0.0002	Liver or kidney problems	Runoff/leaching from insecticide used on catttle, lumber, gardens
Methoxychlor	0.04	0.04	Reproductive difficulties	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl (Vydate)	0.2	0.2	Slight nervous system effects	Runoff/leaching from insecticide used on apples, potatoes, and tomatoes

Polychlorinated biphenyls (PCBs)	zero	0.0005	Skin changes; thymus gland problems; immune deficiencies; reproductive or nervous system difficulties; increased risk of cancer	Runoff from landfils; discharge of waste chemicals
Pentachlorophenol	zero	0.001	Liver or kidney problems; increased risk of cancer	Discharge from wood preserving factories
Picloram	0.5	0.5	Liver problems	Herbicide runoff
Simazine	0.004	0.004	Problems with blood	Herbicide runoff
Styrene	0.1	0.1	Liver, kidney, and circulatory problems	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene	zero	0.005	Liver problems; increased risk of cancer	Discharge from factories and dry cleaners
Toluene	1	1	Nervous system, kidney, or liver problems	Discharge from petroleum factories
Toxaphene	zero	0.003	Kidney, liver, or thyroid problems; increased risk of cancer	Runoff/leaching from insecticide used on cotton and cattle
2,4,5-TP (Silvex)	0.05	0.05	Liver problems	Residue of banned herbicide
1,2,4-Trichlorobenzene	0.07	0.07	Changes in adrenal glands	Discharge from textile finishing factories
1,1,1-Trichloroethane	0.20	0.2	Liver, nervous system, or circulatory problems	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane	0.003	0.005	Liver, kidney, or immune system problems	Discharge from industrial chemical factories
Trichloroethylene	zero	0.005	Liver problems; increased risk of cancer	Discharge from petroleum refineries
Vinyl chloride	zero	0.002	Increased risk of cancer	Leaching from PVC pipes; discharge from plastic factories
Xylenes (total)	10	10	Nervous system damage	Discharge from petroleum factories; discharge from chemical factories

Radionuclides	MCLG[1] (mg/L)[2]	MCL or TT[1] (mg/L)[2]	Potential Health Effects from Ingestion of Water	Sources of Contaminant in Drinking Water
Alpha particles	none[7] --- as of 12/08/03: zero	15 picocuries per Liter (pCi/L)	Increased risk of cancer	Erosion of natural deposits
Beta particles and photon emitters	none[7] --- as of 12/08/03: zero	4 millirems per year	Increased risk of cancer	Decay of natural and man-made deposits
Radium 226 and Radium 228 (combined)	none[7] --- as of 12/08/03: zero	5 pCi/L	Increased risk of cancer	Erosion of natural deposits
Uranium	as of 12/08/03: zero	as of 12/08/03: 30 ug/L	Increased risk of cancer, kidney toxicity	Erosion of natural deposits

Notes

[1] Definitions:

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is

allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.
Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety and are non-enforceable public health goals.
Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

[2] Units are in milligrams per liter (mg/L) unless otherwise noted. Milligrams per liter are equivalent to parts per million.

[3] EPA's surface water treatment rules require systems using surface water or ground water under the direct influence of surface water to (1) disinfect their water, and (2) filter their water or meet criteria for avoiding filtration so that the following contaminants are controlled at the following levels:

- *Cryptosporidium:* (as of January 1, 2002) 99% removal/inactivation
- *Giardia lamblia:* 99.9% removal/inactivation
- Viruses: 99.99% removal/inactivation
- *Legionella:* No limit, but EPA believes that if *Giardia* and viruses are removed/inactivated, *Legionella* will also be controlled.
- Turbidity: At no time can turbidity (cloudiness of water) go above 5 nephelolometric turbidity units (NTU); systems that filter must ensure that the turbidity go no higher than 1 NTU (0.5 NTU for conventional or direct filtration) in at least 95% of the daily samples in any month. As of January 1, 2002, turbidity may never exceed 1 NTU, and must not exceed 0.3 NTU in 95% of daily samples in any month.
- HPC: No more than 500 bacterial colonies per milliliter.

[4] No more than 5.0% samples total coliform-positive in a month. (For water systems that collect fewer than 40 routine samples per month, no more than one sample can be total coliform-positive). Every sample that has total coliforms must be analyzed for fecal coliforms. There may not be any fecal coliforms or *E. coli.*

[5] Fecal coliform and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Disease-causing microbes (pathogens) in these wastes can cause diarrhea, cramps, nausea, headaches, or other symptoms. These pathogens may pose a special health risk for infants, young children, and people with severely compromised immune systems.

[6] Although there is no collective MCLG for this contaminant group, there are individual

MCLGs for some of the individual contaminants:

- Trihalomethanes: bromodichloromethane (zero); bromoform (zero); dibromochloromethane (0.06 mg/L). Chloroform is regulated with this group but has no MCLG.
- Haloacetic acids: dichloroacetic acid (zero); trichloroacetic acid (0.3 mg/L). Monochloroacetic acid, bromoacetic acid, and dibromoacetic acid are regulated with this group but have no MCLGs.

[7] MCLGs were not established before the 1986 Amendments to the Safe Drinking Water Act. Therefore, there is no MCLG for this contaminant.

[8] Lead and copper are regulated by a Treatment Technique that requires systems to control the corrosiveness of their water. If more than 10% of tap water samples exceed the action level, water systems must take additional steps. For copper, the action level is 1.3 mg/L, and for lead is 0.015 mg/L.

[9] Each water system must certify, in writing, to the state (using third-party or manufacturer's certification) that when acrylamide and epichlorohydrin are used in drinking water systems, the combination (or product) of dose and monomer level does not exceed the levels specified, as follows:

- Acrylamide = 0.05% dosed at 1 mg/L (or equivalent)
- Epichlorohydrin = 0.01% dosed at 20 mg/L (or equivalent)

National Secondary Drinking Water Regulations

National Secondary Drinking Water Regulations (NSDWRs or secondary standards) are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. EPA recommends secondary standards to water systems but does not require systems to comply. However, states may choose to adopt them as enforceable standards. For more information, read Secondary Drinking Water Regulations: Guidance for Nuisance Chemicals.

Contaminant	Secondary Standard
Aluminum	0.05 to 0.2 mg/L
Chloride	250 mg/L
Color	15 (color units)
Copper	1.0 mg/L
Corrosivity	noncorrosive
Fluoride	2.0 mg/L
Foaming Agents	0.5 mg/L
Iron	0.3 mg/L

Manganese	0.05 mg/L
Odor	3 threshold odor number
pH	6.5-8.5
Silver	0.10 mg/L
Sulfate	250 mg/L
Total Dissolved Solids	500 mg/L
Zinc	5 mg/L

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This page was updated 05/31/2001 18:44:45
http://www.epa.gov/safewater/mcl.html

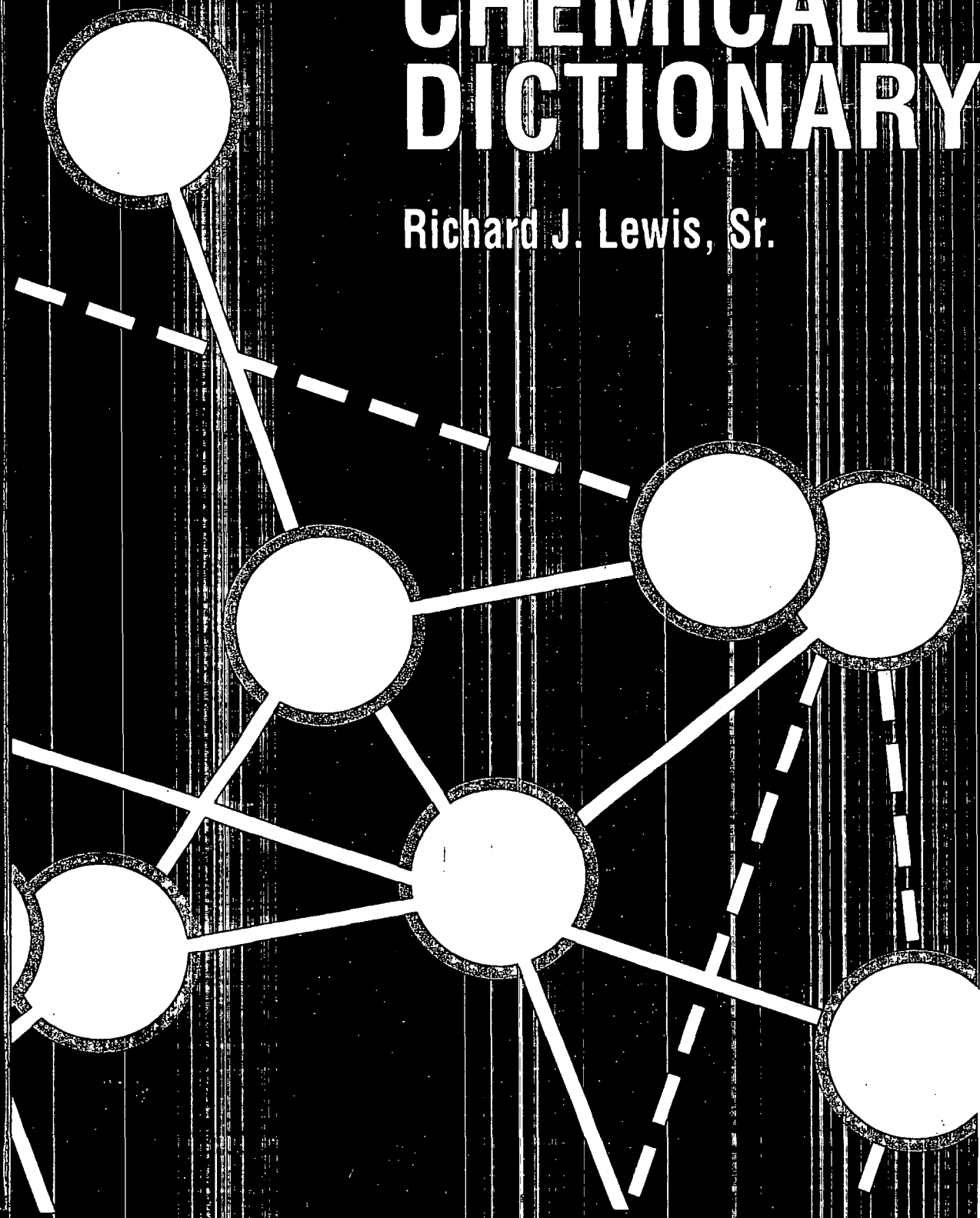
Hawley's

Twelfth Edition

Reference No.: 21

CONDENSED CHEMICAL DICTIONARY

Richard J. Lewis, Sr.



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m and compact fine-
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$)_2$. A carotenoid color-
natural products, it has
variety of edible mush-
n synthesized. The trans
line solid that is soluble in
as oils. It is a permissible
ugs, etc. It is used to pro-
of the skin, but is not ap-

ay cause loss of night vi-

[*Aqualon*]. TM for tech-
BHT (butylated hydroxy-
n as 2,6-di-tertiary butyl

TM for the hindered phe-
-methylene-bis(4-methyl-6-
ol).

ber.

or chloramphenicol.

capillarity. The attraction between molecules, similar to surface tension, which results in the rise of a liquid in small tubes or fibers or in the wetting of a solid by a liquid. It also accounts for the rise of sap in plant fibers and of blood in capillary (hair-like) vessels.

capillator. An instrument for colorimetrically comparing pH values in capillary tubes.

"Capoten" [*Squibb*]. TM for captopril.

"Capracyl" [*Du Pont*]. TM for a group of neutral-dyeing, premetalized acid colors that produce the highest possible degree of light fastness on nylon. Also suitable for dyeing wool, particularly in blends with cellulosic fibers.

capraldehyde. See n-decanal.

"Capran" [*Allied-Signal*]. TM for transparent nylon 6 thermoplastic film used for food packaging.

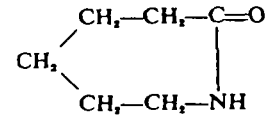
capreomycin (USAN). Antibiotic produced by *Streptomyces capreolus*. Used in medicine.

capric acid. (decanoic acid; decoic acid; decylic acid). CAS: 334-48-5. $CH_3(CH_2)_8COOH$. Occurs as a glyceride in natural oils.
Properties: White crystals, unpleasant odor, soluble in most organic solvents and dilute nitric acid, insoluble in water. D 0.8858 (40C), bp 270C, 172.6C (30 mm Hg), mp 31.5C, refr index 1.4288 (40C), acid number 308–315. Combustible.
Derivation: Fractional distillation of coconut-oil fatty acids.
Grade: Technical, 90%, FCC.
Use: Esters for perfumes and fruit flavors, base for wetting agents, intermediates, plasticizer, resins, intermediate for food-grade additives.

caproic acid. (hexanoic acid; hexylic acid; hexoic acid). CAS: 142-62-1. $CH_3(CH_2)_8COOH$. Present in milk fats to extent of approximately 2%.
Properties: Oily, colorless or slightly yellow liquid, odor of limburger cheese. Soluble in alcohol and ether, slightly soluble in water. D 0.9276 (20/4C), fp −4.0C, bp 205C, refr index 1.4168 (20C), wt/gal 7.7 lb, viscosity 0.031 poise (20C), flash p 215F (101C, OC). Combustible.
Derivation: From crude fermentation of butyric acid, fractional distillation of natural fatty acids.
Grade: Technical, reagent to 99.8%, FCC.
Hazard: Strong irritant to tissue.
Use: Analytical chemistry, flavors, manufacture of rubber chemicals, varnish driers, resins, and pharmaceuticals.

caproic aldehyde. See n-hexaldehyde.

caprolactam. (aminocaproic lactam; 2-oxohexamethyleneimine). CAS: 105-60-2. 50th highest-volume chemical produced in U.S. (1991).



Properties: White flakes or fused; mp 68–69C; bp 180C (50 mm Hg); d (70% solution) 1.05; refr index 1.4935 (40C); 1.4965 (31C); soluble in water, chlorinated solvents, petroleum distillate, and cyclohexene; heat of fusion 29 cal/g, heat of vaporization 116 cal/g; viscosity 9 cP at 78C; vap press 3 mm Hg at 100C, 50 mm Hg at 180C.
Derivation: (1) Catalytic oxidation of cyclohexane to cyclohexanol, reacting with peracetic acid to form caprolactone, and further reaction with ammonia; (2) catalytic hydrogenation of phenol to cyclohexanone, reaction with ammonia to cyclohexanone oxime with Beckmann rearrangement with sulfuric acid catalyst; (3) catalytic oxidation of cyclohexane to cyclohexanone, reaction with hydroxylamine sulfate and ammonia to cyclohexanone oxime followed by sulfuric acid-catalyzed Beckmann rearrangement; (4) UV-catalyzed reaction of cyclohexane with nitrosyl chloride to cyclohexanone oxime hydrochloride, followed by Beckmann rearrangement. Method (1) was never used commercially. Method (3) has been modified to minimize formation of by-product ammonium sulfate.
Forms: Flake, molten.
Hazard: Toxic by inhalation. TLV: (vapor) 5 ppm in air, (dust) 1 mg/m^3 of air.
Use: Manufacture of synthetic fibers (especially nylon 6), plastics, bristles, film, coatings; synthetic leather, plasticizers and paint vehicles, cross-linking agent for polyurethanes, synthesis of amino acid lysine.

caprolactone.
Derivation: Reaction product of peracetic acid and cyclohexanone; an intermediate product in manufacture of caprolactam.
Use: Intermediate in adhesives, urethane coatings, and elastomers; solvent; diluent for epoxy resins; synthetic fibers; organic synthesis.

"Caprolan" [*Allied-Signal*]. TM for a polyamide fiber made from polymerized caprolactam. Has excellent dyeability and a wide variety of end uses, maintains a superior level of dimensional stability after heat setting, and has outstanding mechanical qualities.
See also caprolactam, nylon.

FROST ASSOCIATES

88 Founders Village, Clinton, CT 06413
(860) 669-5859 FAX (860) 669-5859

Reference No.: 22

April 5, 2001

To: Roy F. Weston Inc
5405 Metric Place, Suite 200
Norcross, GA 30092

Attn: Jo Ellen Crownover Johnson

Fr: Bob Frost
Frost Associates
88 Founders Village
Clinton Conn 06413

Sub: Vienna Dump
Fort Valley, GA

CERCLIS:

Job: 12587-001-001-0035

Site Longitude: 83-52-26 83.873894
Site Latitude : 32-33-33 32.559170

The CENTRACTS report below identifies the population, households, and private water wells of each Block Group that lies within, or partially within, the 4, 3, 2, 1, .5, and .25, mile "rings" of the latitude and longitude coordinates above. A CENTRACTS report may have up to six radii of any length and 1500 block groups.

CENTRACTS uses the 1990 Block Group population and Block Group house count data found in the Census Bureau's 1990 STF-1A files. The sources of water supply data are from The Bureau's 1990 STF-3A files. The boundary line coordinates of the Block Groups were extracted from the Census Bureau's 1990 TIGER/Line Files.

CENTRACTS reports are created with programs written by Frost Associates, 88 Founders Village, Clinton Conn 06413. The code was written using Microsoft's Quick-Basic Ver. 4.5.

Latitude and Longitude coordinates identifying a site are entered in degrees and decimal degrees. One or more county files holding Block Group boundary lines are selected for use by CENTRACTS by determining whether the site coordinates fall within the minimum and maximum Lat\Lon coordinates of each county in the state.

Each Block Group line segment has Lat\Lon coordinates representing the "From" and "To" ends of that line. All coordinates from the selected county files are read and converted from degrees, decimal degrees to X\Y miles from the site location. Each line segment is then examined whether it lies within or partially within the maximum ring from the site.

The unique Block Group ID numbers of each line segment that lie within the maximum ring are retained. All Block Group boundary lines matching the Block Group numbers are then extracted from the respective county files to obtain all sides of the included Block Groups. Boundary records are then sorted in adjacent side order to determine the shape and area of each Block Group polygon.

A method to solve for the area of a polygon is to take one-half the sum of the products obtained by multiplying each X-coordinate by the difference between the adjacent Y-coordinates. For a polygon with coordinates at adjacent angles A, B, C, D, and E. The formula can be expressed:

$$\text{Area} = 1/2\{Xa(Ye-Yb)+ Xb(Ya-Yb)+ Xc(Yb-Yd)+ Xd(Yc-Ye)+ Xe(Yd-Ya)\}$$

For each ring, the selected Block Groups will be inside, outside, or intersected by the ring. When a polygon is intersected, the partial Block Group area within that ring is calculated using the method described below.

When a ring intersects a Block Group, the intersect points are solved and plotted at the points where the ring enters and exits the shape. The chord line, a line within the circle connecting the intersect points is determined. This chord line is used to calculate the segment area, the half moon shape between the chord line and the ring, and the sub-polygon created by the chord line and the Block Group boundaries that lie outside the ring.

The segment area is subtracted from the sub-polygon area to determine the area of the sub-polygon outside the ring. The area outside the ring is then subtracted from the area of the entire polygon to arrive at the inside area. This inside area is then divided by the tract's total area to determine the percentage of area within the ring. This process is repeated for each block group that is intersected by one of the rings. The total area, partial area, and percentage of partial area of those block groups within, or partially within a ring, are held in memory for the report.

On occasion, the algorithm described above is unable to determine the area of the partial area. Within the report program is a "Paint" routine which allows an enclosed shape to be highlighted. Another routine calculates the percentage of highlighted screen pixels to the pixels within the polygon. A manual entry is allowed. Both the "paint" method and manual entry method over ride the calculated method.

CENTRACTS lists, starting on page 4, all Block Groups in State, County, Census Tract, and Block Group ID order that lie within, or partially within, the maximum ring. Each Block Group is identified by a City or Town name and by the Block Group's State, County, Tract and Block Group ID number. Following is the Block Group's 1990 populu tion and house count extracted from the Census Bureau's 1990 STF-1A files.

The next four columns display water source data from the 1990 STF-3A files. The first column is "Units with Public system or private company source of water", followed by "Units with individual well, Drilled, source of water"; "Units with individual well, Dug, source of water" and "Units with Other source of water".

For each ring, CENTRACTS then shows the Block Groups that are within that ring, the Block Group's total area in square miles, the partial area of the Block Group within that ring, and the partial percentage within the ring. The areas of the included Block Group and the partial areas are then totaled.

The last section tallies the demographic data within each ring. The percentage of area for each Block Group is multiplied times the census data for that Block Group and totaled for all Block Group's within the ring. Ring totals are then determined by subtracting the three mile data from the four mile, the two mile from the three mile, one from the two, etc... Population on private wells is calculated using the formula: ((Drilled + Dug Wells) / Households) * Population

IS:
1258

No.	City	Block Group ID	Blk Grp People	House Holds	Public Water	Drilled Wells	Dug Wells	Other
1	Zenith	13079 0702 3	1021	358	35	298	42	0
2	Fort Valley	13225 0402 1	1930	718	453	194	19	0
3	Fort Valley	13225 0402 2	1842	600	476	85	23	10
4	Fort Valley	13225 0404 1	4415	1258	1275	36	0	0
5	Fort Valley	13225 0404 2	1160	456	435	28	0	0
6	Fort Valley	13225 0404 3	132	49	4	24	4	0
7	Fort Valley	13225 0403011	2434	888	744	100	52	0
8	Fort Valley	13225 0403012	267	136	122	0	0	0
9	Fort Valley	13225 0403013	74	25	11	16	0	0
10	Fort Valley	13225 0403021	1773	728	702	45	0	0
	Totals:		15048	5216	4257	826	140	10

IS:
1258

City	Census Tract ID	Tract People	House Count	Public Water	Drilled Wells	Dug Wells	Other Sources
Fort Valley	13225 0404 3	132	49	4	24	4	0
Fort Valley	13225 0402 1	1930	718	453	194	19	0
Fort Valley	13225 0402 2	1842	600	476	85	23	10
Fort Valley	13225 0404 1	4415	1258	1275	36	0	0
Fort Valley	13225 0404 2	1160	456	435	28	0	0
Fort Valley	13225 0403012	267	136	122	0	0	0
Fort Valley	13225 0403011	2434	888	744	100	52	0
Fort Valley	13225 0403021	1773	728	702	45	0	0
Fort Valley	13225 0403013	74	25	11	16	0	0
	Sub Totals:	14027	4858	4222	528	98	10
Zenith	13079 0702 3	1021	358	35	298	42	0
	Sub Totals:	1021	358	35	298	42	0

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1258

For Radius of 4 Mi., Circle Area = 50.265482

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
1	Zenith	13079 7023	54.969769	2.972716	5.41
2	Fort Valley	13225 403021	15.108291	4.297328	28.44
3	Fort Valley	13225 4022	25.238308	10.325915	40.91
4	Fort Valley	13225 4041	7.807547	5.945018	76.14
5	Fort Valley	13225 4042	3.236627	1.473623	45.53
6	Fort Valley	13225 4043	10.537948	0.666287	6.32
7	Fort Valley	13225 403011	11.289300	9.966001	88.28
8	Fort Valley	13225 403012	0.132086	0.132086	100.00
9	Fort Valley	13225 403013	0.533313	0.533313	100.00
10	Fort Valley	13225 4021	23.837082	13.953193	58.54
	Totals:		152.690262	50.265484	

For Radius of 3 Mi., Circle Area = 28.274334

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
2	Fort Valley	13225 403021	15.108291	2.349019	15.55
3	Fort Valley	13225 4022	25.238308	6.393419	25.33
4	Fort Valley	13225 4041	7.807547	3.617608	46.33
5	Fort Valley	13225 4042	3.236627	0.373409	11.54
6	Fort Valley	13225 4043	10.537948	0.029660	0.28
7	Fort Valley	13225 403011	11.289300	6.904396	61.16
8	Fort Valley	13225 403012	0.132086	0.132086	100.00
9	Fort Valley	13225 403013	0.533313	0.264768	49.65
10	Fort Valley	13225 4021	23.837082	8.209969	34.44
	Totals:		97.720505	28.274334	

For Radius of 2 Mi., Circle Area = 12.566371

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
2	Fort Valley	13225 403021	15.108291	0.917434	6.07
3	Fort Valley	13225 4022	25.238308	3.213632	12.73
4	Fort Valley	13225 4041	7.807547	1.366731	17.51
5	Fort Valley	13225 4042	3.236627	0.000436	0.01
7	Fort Valley	13225 403011	11.289300	2.850618	25.25
8	Fort Valley	13225 403012	0.132086	0.132086	100.00
10	Fort Valley	13225 4021	23.837082	4.085433	17.14
	Totals:		86.649246	12.566370	

For Radius of 1 Mi., Circle Area = 3.141593

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
2	Fort Valley	13225 403021	15.108291	0.010823	0.07
3	Fort Valley	13225 4022	25.238308	1.149255	4.55

IS:
1258

4	Fort Valley	13225 4041	7.807547	0.086725	1.11
7	Fort Valley	13225 403011	11.289300	0.561926	4.98
10	Fort Valley	13225 4021	23.837082	1.332864	5.59
Totals:			83.280533	3.141593	

For Radius of .5 Mi., Circle Area = 0.785398

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
3	Fort Valley	13225 4022	25.238308	0.626123	2.48
7	Fort Valley	13225 403011	11.289300	0.036368	0.32
10	Fort Valley	13225 4021	23.837082	0.122907	0.52
Totals:			60.364689	0.785398	

For Radius of .25 Mi., Circle Area = 0.196350

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
3	Fort Valley	13225 4022	25.238308	0.073031	0.29
10	Fort Valley	13225 4021	23.837082	0.123318	0.52
Totals:			49.075390	0.196350	

IS:
1258

========== Site Data ==========

Population:	8830.85
Households:	3005.72
Drilled Wells:	323.21
Dug Wells:	68.96
Other Water Sources:	4.09

========== Partial (RING) data ==========

---- Within Ring: 4 Mile(s) and 3 Mile(s) ----

Population:	3451.61
Households:	1166.10
Drilled Wells:	138.78
Dug Wells:	24.78
Other Water Sources:	1.56

** Population On Private Wells: 484.12

---- Within Ring: 3 Mile(s) and 2 Mile(s) ----

Population:	3051.63
Households:	1015.45
Drilled Wells:	106.07
Dug Wells:	24.87
Other Water Sources:	1.26

** Population On Private Wells: 393.48

---- Within Ring: 2 Mile(s) and 1 Mile(s) ----

Population:	1964.35
Households:	698.00
Drilled Wells:	58.23
Dug Wells:	14.62
Other Water Sources:	0.82

** Population On Private Wells: 205.02

---- Within Ring: 1 Mile(s) and .5 Mile(s) ----

Population:	299.77
Households:	104.72
Drilled Wells:	16.70
Dug Wells:	3.86
Other Water Sources:	0.21

** Population On Private Wells: 58.85

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1258

---- Within Ring: .5 Mile(s) and .25 Mile(s) ----

Population:	48.17
Households:	16.00
Drilled Wells:	2.18
Dug Wells:	0.67
Other Water Sources:	0.22

** Population On Private Wells: 8.59

---- Within Ring: .25 Mile(s) and 0 Mile(s) ----

Population:	15.31
Households:	5.45
Drilled Wells:	1.25
Dug Wells:	0.16
Other Water Sources:	0.03

** Population On Private Wells: 3.97

** Total Population On Private Wells: 1154.04

Reference No.: 23

Jo Ellen Crownover Johnson
Originator

PHONE CONVERSATION RECORD

Conversation with:

Name Mark Gatlin

Company Carter & Slope

Address

Phone

Date 4/9/01

Time AM/PM

☒ Originator Placed Call

☐ Originator Received Call

W.O. No.

Subject Vienna Dump Site City Well Use and Abandonment

Notes: Carter & Slope are the City's Engineers. According to Mark Well #1 is not in use and not sealed. Well #2 is not in use, not sealed, however the pump has been pulled out. Well #5 is the standby well. The Nix well and other old wells have been abandoned by backfilling with gravel and capping with concrete. Wells # 3,4,6,7,and 8 are in use. Population served is through 4,000 to 5,000 connections.

☒ **File:** Project

☐ **Tickle File:**

☐ **Follow-Up By:**

☐ **Copy/Route To:**

Follow-Up-Action:

Originator's Initials jcj

Reference No.: 24

U.S. Census Bureau

State and County QuickFacts

Jew

Peach County, Georgia

More data for this area ▶

Georgia counties

Select a county GO

Select a state
USA QuickFacts

County selection map
Locate a county by place name

Follow the ? link for definition and source information.

People QuickFacts	Peach County	Georgia
Population, 2000	23,668	8,186,453
Population, percent change, 1990 to 2000	11.7%	26.4%
Persons under 5 years old, percent, 2000	6.5%	7.3%
Persons under 18 years old, percent, 2000	26.0%	26.5%
Persons 65 years old and over, percent, 2000	9.8%	9.6%
White persons, percent, 2000 (a)	51.3%	65.1%
Black or African American persons, percent, 2000 (a)	45.4%	28.7%
American Indian and Alaska Native persons, percent, 2000 (a)	0.3%	0.3%
Asian persons, percent, 2000 (a)	0.3%	2.1%
Native Hawaiian and Other Pacific Islander, percent, 2000 (a)	Z	0.1%
Persons reporting some other race, percent, 2000 (a)	1.8%	2.4%
Persons reporting two or more races, percent, 2000	0.8%	1.4%
Female population, percent, 2000	51.6%	50.8%
Persons of Hispanic or Latino origin, percent, 2000 (b)	4.2%	5.3%
White persons, not of Hispanic/Latino origin, percent, 2000	49.2%	62.6%
High school graduates, persons 25 years and over, 1990	8,256	2,853,605
College graduates, persons 25 years and over, 1990	1,855	777,158
Housing units, 2000	9,093	3,281,737
Homeownership rate, 2000	68.4%	67.5%
Households, 2000	8,436	3,006,369
Persons per household, 2000	2.68	2.65
Households with persons under 18 years, percent, 2000	39.0%	39.1%
Median household money income, 1997 model-based estimate	$29,557	$36,372
Persons below poverty, percent, 1997 model-based estimate	25.6%	14.7%
Children below poverty, percent, 1997 model-based estimate	37.6%	22.8%

Business QuickFacts	Peach County	Georgia
Private nonfarm establishments with paid employees, 1998	448	194,213
Private nonfarm employment, 1998	6,263	3,198,950
Private nonfarm employment, percent change 1990-1998	14.6%	28.0%
Nonemployer establishments, 1997	1,022	419,856
Manufacturers shipments, 1997 ($1000)	D	124,526,834
Retail sales, 1997 ($1000)	146,690	72,212,484
Retail sales per capita, 1997	$6,147	$9,646
Minority-owned firms, 1992	132	52,131
Women-owned firms, 1992	389	143,045
Housing units authorized by building permits, 1999	175	89,581
Federal funds and grants, 1999 ($1000)	138,406	39,214,971
Local government employment - full-time equivalent, 1997	431	324,480

Geography QuickFacts	Peach County	Georgia
Land area, 2000 (square miles)	151	57,906
Persons per square mile, 2000	156.7	141.4
Metropolitan Area	Macon, GA MSA	

(a) Includes persons reporting only one race.
(b) Hispanics may be of any race, so also are included in applicable race categories.

FN: Footnote on this item for this area in place of data
NA: Not available
D: Suppressed to avoid disclosure of confidential information
X: Not applicable
S: Suppressed; does not meet publication standards
Z: Value greater than zero but less than half unit of measure shown

Data Quality Statement

What do you think of our new QuickFacts? Send comments to quickfacts@lists.census.gov

Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, 2000 Census of Population and Housing, 1990 Census of Population and Housing, Small Area Income and Poverty Estimates, County Business Patterns, 1997 Economic Census, Minority- and Women-Owned Business, Building Permits, Consolidated Federal Funds Report, 1997 Census of Governments

Last Revised: Tuesday, 03-Jul-2001 13:15:51 EDT

Reference No.: 25

WESTON

Paul I. Taylor
Originator

PHONE CONVERSATION RECORD

Conversation with:

Name Keith Spillers, Ft. Valley Water Foreman

Company Fort Valley Utility Commission

Address P.O. Box 1529

Fort Valley, GA 31030

Phone (478) 825-7701

Date 8/2/01

Time 1:40 PM AM

☑ Originator Placed Call

☐ Originator Received Call

W.O. No.

Subject Groundwater Well Data for the Ft. Valley, GA Area

Notes: Mr. Spillers informed me that there are six wells in use for their system. Well #8 is located at 3200 Housers Mill Rd. near Powersville, GA. It is well beyond our four-mile range. All wells in the system are used. Contrary to indications from Mark Gatlin (See Phone Conversation Record 4/9/01) Well #5 is not a regular standby well though it may be included among a rotation of wells. All wells in the system draw from the Tuscaloosa aquifer. The other five well locations are as follows: Well #3, Jones Water Plant on College Dr. (It is marked on the map as State University Dr. near Jones Alley); Well #4, Close to Well #3 on Charlevoix St.; Well #5, Central Ave. at the Courthouse; and Well #s 6 & 7, at 1252 Old River Rd.

☐ **File:**

☐ **Tickle File:**

☐ **Follow-Up By:**

☐ **Copy/Route To:**

Follow-Up-Action:

Originator's Initials PIT

Reference No.: 26

UTILITY COMMISSION

P. O. BOX 1529 • FORT VALLEY, GEORGIA 31030-1529 • (912) 825-7701 • FAX (912) 825-3177

June 30, 1999

Joseph Ferentz
Associate Project Scientist
Roy F. Weston, Inc.
5405 Metric Place Suite 200
Norcross, GA 30092-2550

Re: Your Letter June 22, 1999:
City Public Water Supply
Fabra Care Cleaners Superfund Site

Dear Mr. Ferentz:

Per your letter request, the following information is provided.

1. Location of municipal wells within a 4-mile radius of Fabra Care (the wells are in the Tuscaloosa Formation, a.k.a. Cretaceous Aquifer):
   a. Well #1, McLean Water Plant (Shut down August 1996 upon discovery of PCE in area, motor and pump removed).
   b. Well #2, Camellia Blvd (Shut down August 1996 upon discover of PCE in area, motor and pump removed).
   c. Well #3, Jones Alley at State University Drive.
   d. Well #4, Charlevoix Street near Pear Street.
   e. Well #5, Central Avenue behind Peach County Courthouse. (Tested weekly for PCE.)
   f. Well #6 (replacement well under construction, July 18, 1999 completion), River Road.
   g. Well #7 (replacement well under construction, September 1999 completion), River Road (1,450 feet north of Well #6).

   Outside 4 Miles:
   h. Well #8 (replacement well under construction, December 1999 completion), Housers Mill Road near GA247C and I-75.

2. Number of service connections serving Peach, Crawford and Macon Counties: 4,268.

3. No well provides more than 40 percent of the city's water system. However, Well #5 has operated up to 22 hours per day during summer drought periods.

4. Capacity for each well:

#1	1,000 gpm	(dismantled)
#2	1,000 gpm	(dismantled)
#3	1,000 gpm	
#4	1,350 gpm	
#5	1,500 gpm	
#6	1,500 gpm	(July 99)
#7	1,500 gpm	(Sept 99)
#8	1,500 gpm	(Dec 99)

5. Area Served by the municipal system: City of Fort Valley and immediate area of city to the north, west, and south in Peach County. Also Peach County northeast on GA 49 to Powersville, then east on Lakeview Road and part of Housers Mill Road. Macon County just across Peach County line along Willow Lake Road. Crawford County along U.S. 341 to the Crawford County Industrial Park. See enclosed map, as marked (Enclosure 1).

6. Analytical data for city Wells #1 and #2: Refer to attached documents:
   a. Geologic Survey Presentation to "The Alliance," August 12, 1998 (Enclosure 2).
   b. EPD Letter January 30, 1997, Source of PCE Contamination in Fort Valley Municipal Water Wells, with two attached EPD Memos of December 11, 1996 and Georgia Welllhead Protection Plan for City of Fort Valley Peach County September 23-27, 1996 (Enclosure 3).

I can be reached at (912) 825-7701, extension 11.

Sincerely,

Kenneth W. Werner

Kenneth W. Werner
General Manager

Enclosures (3)

cc: Claude Lawson, Fort Valley Utility Commission Chairman w/o enc
Charles Adams and Charles Cox, FVUC lawyers w/o enc
Timothy J. Ritzka, Assistant Attorney General w/o enc
Jennifer R. Kaduck, EPD Hazardous Waste Management Branch w/o enc
Daryl Shoemake, EPA Region IV w/o enc

Reference No.: 27

Listed Species in Peach County

(updated July 1999)

Species	Federal Status	State Status	Habitat	Threats
Bald eagle *Haliaeetus leucocephalus*	T	E	Inland waterways and estuarine areas in Georgia.	Major factor in initial decline was lowered reproductive success following use of DDT. Current threats include habitat destruction, disturbance at the nest, illegal shooting, electrocution, impact injuries, and lead poisoning.
Wood stork *Mycteria americana*	E	E	Primarily feed in fresh and brackish wetlands and nest in cypress or other wooded swamps	Decline due primarily to loss of suitable feeding habitat, particularly in south Florida. Other factors include loss of nesting habitat, prolonged drought/flooding, raccoon predation on nests, and human disturbance of rookeries.
Red-cockaded woodpecker *Picoides borealis*	E	E	Nest in mature pine with low understory vegetation (<1.5m); forage in pine and pine hardwood stands > 30 years of age, preferably > 10" dbh	Reduction of older age pine stands and to encroachment of hardwood midstory in older age pine stands due to fire suppression
Purple bankclimber mussel *Elliptoideus sloatianus*	T	T	Main channels of ACF basin rivers in moderate currents over sand, sand mixed with mud, or gravel substrates	Habitat modification, sedimentation, and water quality degradation
Shiny-rayed pocketbook mussel *Lampsilis subangulata*	E	E	Medium creeks to the mainstems of rivers with slow to moderate currents over sandy substrates and associated with rock or clay	Habitat modification, sedimentation, and water quality degradation
Gulf	E	E	Medium streams to large rivers with	Habitat

	E	E		
moccasinshell mussel *Medionidus pencillatus*			slight to moderate current over sand and gravel substrates; may be associated with muddy sand substrates around tree roots	modification, sedimentation, and water quality degradation
Oval pigtoe mussel *Pleurobema pyriforme*	E	E	River tributaries and main channels in slow to moderate currents over silty sand, muddy sand, sand, and gravel substrates	Habitat modification, sedimentation, and water quality degradation
Alligator snapping turtle *Macroclemys temminckii*	No Federal Status	T	Rivers, lakes, and large ponds near stream swamps.	Destruction and modification of habitat and overharvesting.
Atlantic white-cedar *Chamaecyparis thyoides*	No Federal Status	Rare	Wet sandy terraces along clear streams and in acedic bogs; often with sweet pitcherplant	
Indian olive *Nestronia umbellula*	No Federal Status	T	Dry open upland forests of mixed hardwood and pine	
Sweet pitcher-plant *Sarracenia rubra*	No Federal Status	E	Acid soils of open bogs, sandhill seeps, Atlantic white-cedar swamps, wet savannahs, low areas in pine flatwoods, and along sloughs and ditches	

Reference No.: 28

WESTON
MANAGERS DESIGNERS/CONSULTANTS

Paul I. Taylor
Originator

PHONE CONVERSATION RECORD

Conversation with:

Name Doretha Pride

Company Indian Oaks Apartments

Address

Ft. Valley, GA

Phone (478) 825-3156

Date 9/18/01

Time 9:50 AM AM/PM

☑ Originator Placed Call

☐ Originator Received Call

W.O. No.

Subject Occupation at the Indian Oaks Apartment Complex.

Notes: Ms. Pride stated that the complex consists of 150 apartments and that 147 of them are currently occupied. There is no data available for previous years.

☐ **File:**

☐ **Tickle File:**

☐ **Follow-Up By:**

☐ **Copy/Route To:**

Follow-Up-Action

Originator's Initials PIT

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