UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

September 26, 1995

4WD-SSRB

MEMORANDUM:

SUBJECT: Review of CERCLA Sites for Determination of NFRAP Status

FROM: John A. McKeown
Site Assessment Section
South Superfund Remedial Branch, WMD

TO: File

The U.S. EPA has recently reviewed the CERCLA files for the following sites:

1) Amoco Fabrics Co. Hazelhurst Mills - GAD046907689
2) Boeing Machine Products - GAD000615914
3) D&D Drums & Pallets - GAD980729511
4) Griffin Shoal Creek Landfill - GAD981025240
5) Mathis Brothers Chickamauga RD LF - GAD980838494
6) Lafayette Sheet Metal - GAD984270553
7) Westinghouse Electric - GAD003295144

After review of the files, a determination of No Further Response Action Planned (NFRAP) has been made for each of the aforementioned sites. A copy of this memorandum will be placed in each respective file.

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4WD-WPB
OCT 21 1991

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Milford Morgan
2 North Congress Street
Summerville, Georgia 30347

RE: Lafayette Sheet Metal
EPA ID No. GAD984270553

Dear Mr. Morgan:

The United States Environmental Protection Agency (EPA), pursuant to the authority and requirements of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act (SARA), Public Law 99-499, is planning to conduct an investigation of the above referenced site. The Lafayette Sheet Metal site is located at HWY 26 North in Lafayette, Georgia. EPA has reason to believe that there may be a release or threat of a release of hazardous substances from the site into the surrounding environment. The purpose of the investigation is to determine the nature and extent of contamination at the site and to determine what, if any, further response action would be appropriate.

As per our telephone conversation on October 10, 1991, with you, EPA was granted permission for access to your property beginning on or about November 18, 1991, and continuing through the completion of the investigation on or about November 22, 1991. Activities to be conducted during the investigation include:

1. Inspect, sketch, and photograph the premises;

2. Collect surface and subsurface soil samples;

3. Collect groundwater and subsurface water samples;

4. Collect sediment samples;

5. Conduct air monitoring;

6. Transportation of equipment onto and about the site as necessary to accomplish the activities above, including trucks and sampling equipment.

The above sampling activity will be conducted by personnel from EPA Region IV's Alternative Remedial Contracting Strategy (ARCS). Ms. Janice Hatches of B & V Waste Science & Technology Corporation will contact you prior to the actual site visit to make final arrangements and note any changes.

Split samples will be made available if requested. However, you will be required to furnish your own containers as well as your own laboratory analyses.

If you have any questions, please contact me at (404) 347-5065. Your cooperation in this matter is appreciated.

Sincerely,

Janice P. Thomas
Environmental Scientist

cc: Ron Wilde, B & V Waste Science & Technology Corp.

THOMAS:1s:10/16/91:x5065 DISK: Thomas DOC: Morgan

THOMAS VILLAMARZO

10-21-91

MW 10/21

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PS Form 3800, June 1990

JOE D. TANNER
Commissioner

J. LEONARD LEDBETTER
Division Director

Department of Natural Resources

ENVIRONMENTAL PROTECTION DIVISION
270 WASHINGTON STREET S.W.
ATLANTA, GEORGIA 30334

July 27, 1984

Honorable Forest Hays, Jr.
Representative, District 1
Route 2
Flintstone, Georgia 30725

Dear Representative Hays:

Thank you for your interest in the Division's current site investigation in Walker County. Our Remedial Actions Unit is currently investigating the environmental impact of disposal sites in Walker County suspected of containing hazardous waste. If hazardous waste in such a site is confirmed, its threat to the public health or environment is assessed. If immediate or long term clean-up is warranted, these actions can then be initiated.

We have, to date, identified six (6) potential sites in Walker County. These are as follows:

1. C. H. (Harold) Shaver's Farm (off Chickamauga Road north of LaFayette)
2. Mathis Brothers - South Marbletop Road Landfill (near Kensington)
3. Mathis Brothers - Chickamauga Road Landfill (near C. H. Shaver's Farm)
4. White's Landfill (off Cold Springs Road, Kensington)
5. Steel's Landfill (off Georgia Highway 341 near Kensington)
6. Southeastern Drum Sales (Rossville)

Recent investigations have centered around Shaver's Farm, the Chickamauga Road Landfill, and the South Marbletop Road Landfill, as they are suspected of receiving hazardous waste from the Velsicol Chemical Company in Chattanooga, Tennessee. Thus far, our results have been inconclusive. However, future sampling, laboratory analysis and further in-depth investigations should be more revealing.

These investigations are being conducted in conjunction with the review of some 500 sites statewide in which industrial wastes were previously disposed. Should these investigations confirm the presence of hazardous waste which present an imminent health hazard, the Georgia Environmental Protection Division would request that site be considered for clean-up under the Federal "Superfund" Program.

We will keep you informed as information becomes available on those sites being investigated in Walker County. We appreciate your concern and support. Should you have any further questions, feel free to contact me at 656-2833.

Sincerely,

John D. Taylor, Jr., Chief
Land Protection Branch

JDT:jsg:3639B
cc: Joseph T. Surowiec
File

AN AFFIRMATIVE ACTION/EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER

7-12-88

Bob Jourdan, Chief ERCS

Can your section provide more information on the "Lafayette Sheet Metal" business indicated on the attached memo from Sue Fields dated June 2, 1986. I would like to include it in CERCLIS if there is justification.
I need geographic coordinates, address, direction to site and any other info that may be pertinent to the site as it regards to CERCLA.

Mario Villamarzo.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: June 2, 1986

SUBJECT: Walker County Site, GA

FROM: OSC, ERCS

TO: Camilla Warren, ISC

On June 1, 1986, I investigated a report of drums behind the North Lafayette Baptist Chuch on Highway 27 in Lafayette, GA. Behind the church there is a Lafayette Sheet Metal business, phone 404/638-1228. Behind the building, there is a filled area approximately 60'X 100' by 5-6 feet deep. I could see several rusty 55 gallon drums containing solid material along the edge of the filled area. Additionally, 5 gallon and 1 gallon cans and smaller glass bottles were lying around. There is a small area where it appears fiberglass has been burned. I spoke with a gentleman from an adjacent boy scout office who told me the business used to be a body shop.

The filled area drains into a wet weather ditch which runs into a wooded area and an apparent pasture. I saw three homes within 200 yards of the site. Actually, it appears the business is in their back yards.

I'll be glad to accompany you on any site investigations.

Susan Fields

Susan Fields

Walker County Sheriff's Department

Mike Ellis
Sheriff

Post Office Box 767
LaFayette, Georgia 30728
(404) 638-2512

May 30, 1986

Sue Fields, Coordinator
Environmental Protection Agency
Atlanta, Georgia

Dear Ms. Fields:

This is to advise that I have had a discussion with Mose Mathis and Thomas Lewis regarding waste materials which they have hauled to various sites in Walker County. Those sites named by Mr. Mathis and Mr. Lewis are: Prospect Road (Wade Purser property), Kensington Road property, Sidney and Mose Mathis property, Steele property-off Cove Road, area behind Joe Upshaw's, and the Shaver Farm. We have also had a call pertaining to barrels being stored behind the North LaFayette Baptist Church on Highway 27. We have had numerous calls regardin these sites. Mr. Mathis and Mr. Lewis also have questions they would like answered.

Ms. Fields, I am requesting that this information be passed on to whomever necessary to get this matter resolved.

If the Walker County Sheriff's Department may be of further assistance, please don't hesitate to call.

Sincerely,

Mike Ellis

Mike Ellis
Walker County Sheriff's Department

FINAL

SITE INSPECTION

Lafayette Sheet Metal
Lafayette, Walker County, Georgia
EPA ID No. GAD984270553

EPA Work Assignment No. 11
EPA Contract No. 68-W9-0055

Prepared for
U.S. Environmental Protection Agency
Region IV

Prepared by
B&V Waste Science and Technology Corp.

Project No. 52011.011
August 20, 1993

Prepared by	Reviewed by	Approved by
Jancie S. Hatcher	Brooke Bettinger for	
Jancie S. Hatcher	Ron Wilde	Hubert Wieland
Site Manager	Technical Reviewer	Project Manager

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EXECUTIVE SUMMARY

LaFayette Sheet Metal is a 1.32 acre facility located on U.S. Highway 27, just north of the City of LaFayette, Georgia. The property contains two buildings, one of which was used as a sheet metal plating facility from November 1983 to August 1988. The site is currently owned by Mr. Milford Morgan, who leases the property for use as a day-care facility for mentally-handicapped adults.

The types or amounts of any wastes deposited onsite are not documented. The site was originally discovered through citizen complaints regarding a variety of drums and containers, which had been dumped in an open pit to the east of the plating building. Remains of drums were noted during the Site Inspection (SI) sampling event.

Fourteen environmental samples were collected during the field investigation associated with this study. The sampling indicated the presence of a variety of unidentified organic chemicals, and elevated levels of inorganics in the surface soil. These metals included cadmium, lead, nickel, cobalt, and zinc. Several pesticides were also found in surface soil. In general, migration of inorganics to subsurface soils was not noted.

The LaFayette Sheet Metal facility is located in the Valley and Ridge physiographic province. The province is distinguished by folded and faulted stratified rocks, consiting of limestone, dolomite, shale, and sandstone. The facility is situated on the exposed Conasauga Formation, and groundwater under the site is found in the residuum, and joints and solution cavities of the bedrock.

The primary pathway of concern at LaFayette Sheet Metal is the soil exposure pathway. At least 34 persons work at or attend the day-care facility onsite, and constitute a resident population. Several residential houses are also located adjacent to the property.

Based upon the analysis of possible migration pathways, the results of the sampling investigation, and information obtained from the references, it is recommended that LaFayette Sheet Metal receive further action due to the potential threat to human health through soil exposure.

1.0 INTRODUCTION

B & V Waste Science and Technology was tasked by the U. S. Environmental Protection Agency (EPA), Waste Management Division to conduct a Site Inspection (SI) at the LaFayette Sheet Metal facility in Walker County, Georgia. The inspection was performed under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA). The field investigation was conducted during the week of November 18, 1991.

1.1 OBJECTIVES

The objectives of this inspection 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. Further, this inspection sought to determine 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 was 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. These activities were to:

- 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 ground water, surface water, air and soil exposure pathways.
- Develop a site sketch, to scale.
- Collect environmental samples.

2.0 SITE CHARACTERIZATION

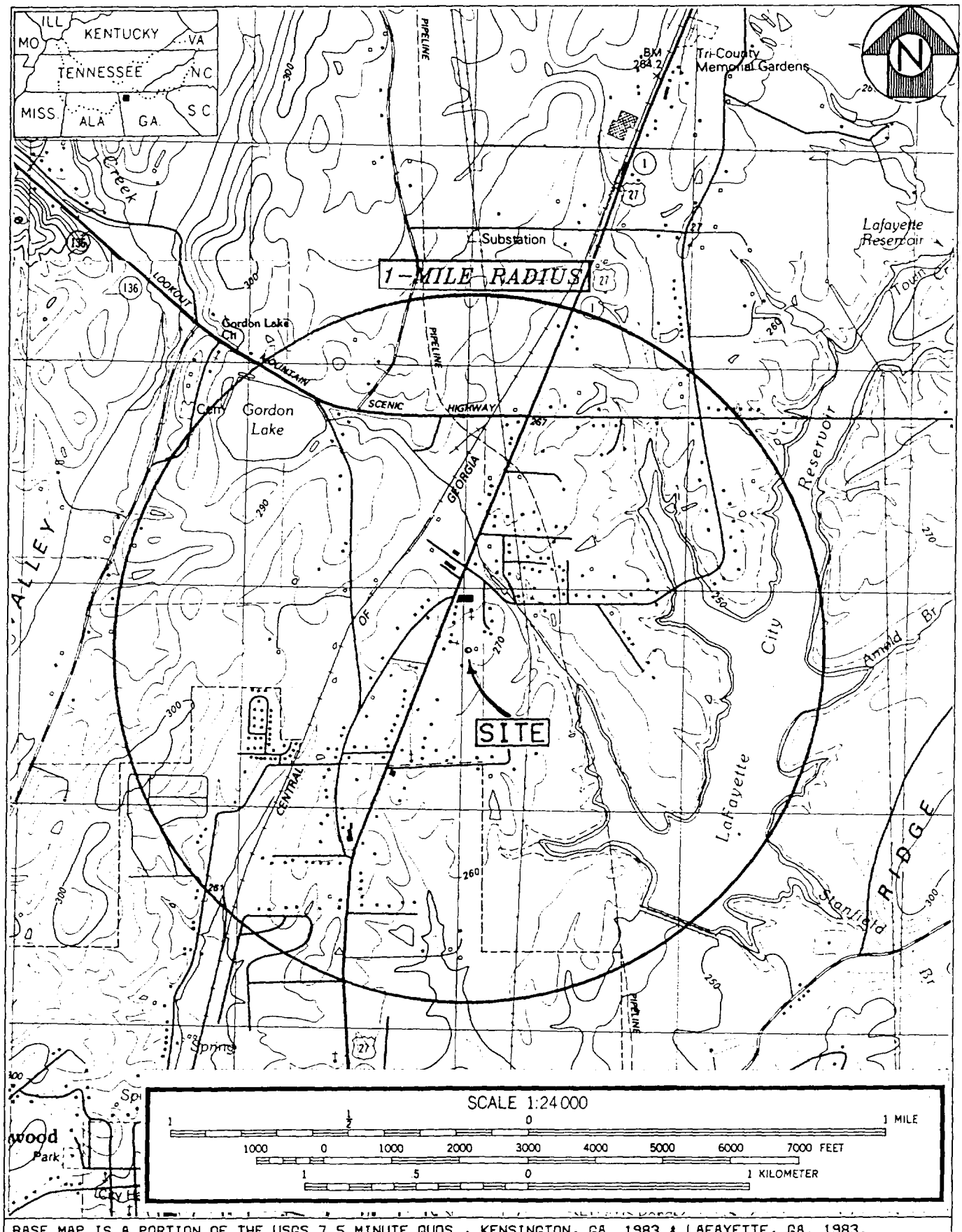
2.1 SITE LOCATION AND DESCRIPTION

The LaFayette Sheet Metal site is located in LaFayette, Georgia on Highway 27 North, directly behind the abandoned building of the North LaFayette Baptist Church. The site is more specifically located at 34° 44' 05" N latitude and 85° 16' 27" W longitude. The 1.32-acre property consists of two small buildings which are surrounded on three sides by a fence, and on the fourth side by heavy woods. No stressed vegetation was noted onsite. The buildings onsite are located on a slight hill, with a gravel parking lot between the buildings and the gate. Drainage from the site would travel either into the gravel parking lot and percolate into the ground, or drain away from the eastern portion of the site in wet-weather ditches. The surrounding area is mostly residential, with some small commercial businesses on Highway 27. Private residences are located adjacent to the site on the north and south. The site is easily accessible only from the east, as the other boundaries are fenced (Refs. 1, 2, 3, 4; Appendix A). The site location and site layout maps are shown as Figures 1 and 2.

2.2 SITE HISTORY AND WASTE CHARACTERISTICS

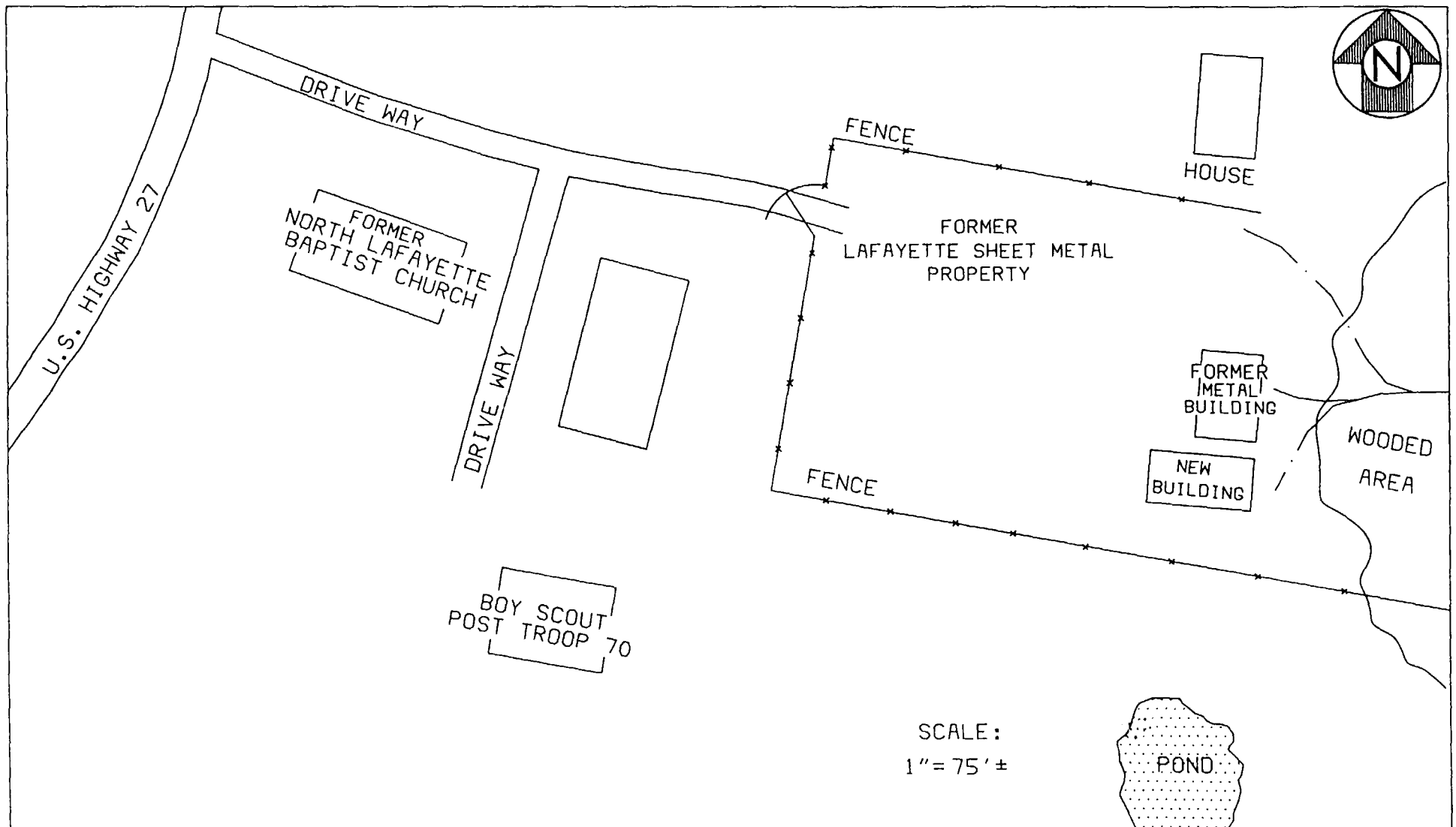
LaFayette Sheet Metal was discovered as a CERCLA site in May 1986 after the Walker County Sheriff's Department reported to EPA Region IV that his office had received numerous calls from private citizens regarding drums being stored outside on the property (Ref. 5). On June 1, 1986, an EPA official investigated the complaint, and observed a filled area with approximate dimensions of 60 x 100 x 5 feet behind the LaFayette Sheet Metal building. Numerous containers of various sizes were located in the filled area (Ref. 6). The containers observed in the fill area included several rusty 55-gallon drums, and numerous 1 and 5 gallon cans and glass bottles. Solid material was observed in some of the containers. Also seen onsite was a small area where it appeared that fiberglass had been burned (Ref. 6). During a 1988 offsite reconnaissance of the facility, no drums or other containers were observed onsite (Ref. 1). No available file material indicates what (if any) hazardous wastes are associated with LaFayette Sheet Metal. At the time of sampling, metal debris, glass, and pieces of metal drums were seen onsite (Ref. 2).

LaFayette Sheet Metal was owned and operated as a metal plating facility by Mr. Dexter Jumper from November 1983 to August 1988. It is unknown if the facility was used for metal plating before this time, although at one time it was operated as a car body shop. The property was then owned and operated by McGouirk Saw Mill Service (Ref. 1). At the present time, the property is owned by Milford Morgan of Summerville, Georgia. Mr. Morgan leases the property and buildings to Vista Community Programs, which operates a day-care facility for mentally-handicapped adults on the property (Refs. 2, 7). There is no currently recorded RCRA status for LaFayette Sheet Metal (Ref. 8).



BASE MAP IS A PORTION OF THE USGS 7.5 MINUTE QUDS., KENSINGTON, GA. 1983 & LAFAYETTE, GA. 1983.

BVE SOURCE AND TECHNOLOGY CORP	SITE LOCATION MAP LAFAYETTE SHEET METAL LAFAYETTE, WALKER COUNTY, GEORGIA	FIGURE 1



WASTE SCIENCE AND TECHNOLOGY CORP.

SITE LAYOUT MAP
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

FIGURE 2

3.0 FIELD INVESTIGATION

3.1 SAMPLE COLLECTION

During the field investigation, conducted the week of November 18, 1991, B & V Waste Science and Technology attempted to identify and characterize contaminants which may be present in the environment as a result of activities that were conducted at the LaFayette Sheet Metal facility. To accomplish this, BVWST collected environmental sediment, surface, and subsurface soil samples, as well as groundwater samples from a number of strategic locations. These locations were selected based on historical information, hydrogeological data for the region and site area, and direct observation at the site.

3.1.1 Sample Collection Methodology

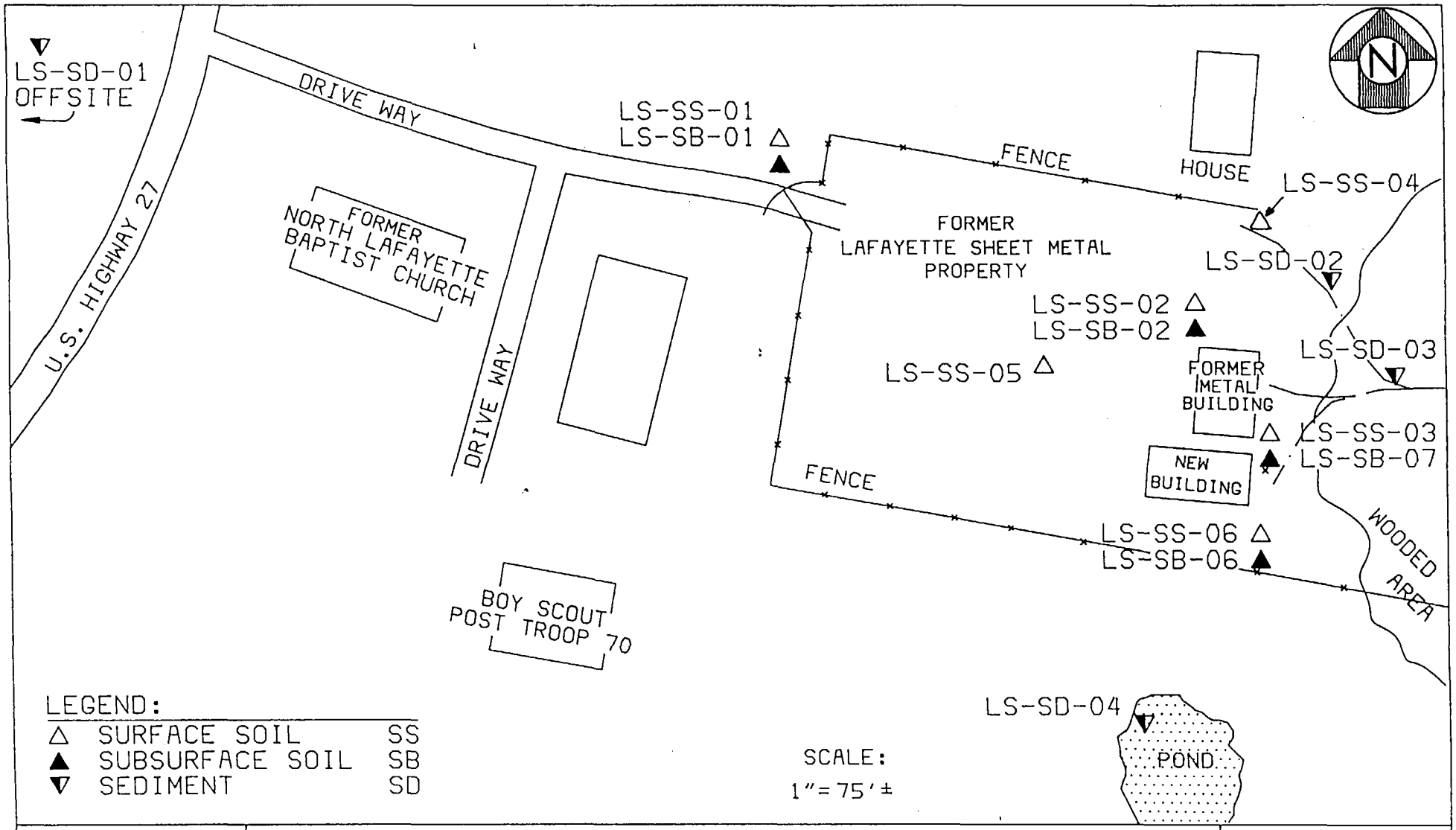
All sample collection, sample preservation, and chain-of-custody procedures used during this inspection were in accordance with the standard operating procedures as specified in Section 3 and 4 of the Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division, February 1, 1991, and with the Field Study Plan prepared by BVWST on September 23, 1991. Deviations from the study plan include the following: (1) one complete surface soil, subsurface soil, and temporary well set was eliminated because the site was smaller than expected; (2) no groundwater samples were taken because the geology of the site prevented access to groundwater; (3) several subsurface soil samples were eliminated because they weren't located in source areas; (4) a private well could not be located in the site vicinity.

3.1.2 Duplicate Samples

Duplicate samples were offered to and declined by Milford Morgan, owner of the former LaFayette Sheet Metal property, and Denise Gilreath, owner of the pond. Receipt for sample forms are on file at BVWST.

3.1.3 Description of Samples and Sample Locations

During the sampling investigation, a total of 14 environmental samples were collected. All sample locations are shown in Figure 3. Sample codes, descriptions, locations, and rationale are contained in Table 1.



WASTE SCIENCE AND TECHNOLOGY CORP.

SAMPLE LOCATION MAP
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

FIGURE 3

TABLE 1

Sample Locations and Rationale
LaFayette Sheet Metal
LaFayette, Walker County, Georgia

Sample Code	Sample Type	Location	Rationale
LS-SS-01	Surface Soil	Just west of the facility's gate	To characterize background conditions
LS-SS-02	Surface Soil	North of former metal building onsite	To establish presence or absence of contaminants
LS-SS-03	Surface Soil	South of former metal building in observed fill area	To establish presence or absence of contaminants
LS-SS-04	Surface Soil	Northeast of former metal building near property corner	To establish presence or absence of contaminants
LS-SS-05	Surface Soil	West of former metal building in front of unloading area	To establish presence or absence of contaminants
LS-SS-06	Surface Soil	South of new building near fence	To establish presence or absence of contaminants
LS-SB-01	Subsurface Soil	Just west of facility's gate	To characterize background conditions
LS-SB-02	Subsurface Soil	North of former metal building onsite	To establish presence or absence of contaminants
LS-SB-06	Subsurface Soil	South of new building near fence	To establish presence or absence of contaminants
LS-SB-07	Subsurface Soil	Southeast of former metal building; 8 feet east of SS-03	To establish presence or absence of contaminants
LS-SD-01	Sediment	Unnamed creek upstream of site; just off Hwy. 27	To characterize background conditions
LS-SD-02	Sediment	Wet-weather ditch onsite; just at property boundary	To establish presence or absence of contaminants
LS-SD-03	Sediment	Wet-weather ditch downstream of site	To establish presence or absence of contaminants
LS-SD-04	Sediment	Pond south of site; Gilreath property	To establish presence or absence of contaminants

LS Lafayette Sheet Metal
SS Surface Soil
SB Subsurface Soil
SD Sediment

3.1.4 Field Measurements

No field measurements were performed during the LaFayette Sheet Metal SI, as only soil samples were collected.

3.2 SAMPLE ANALYSIS

3.2.1 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 soil samples were performed by Southwest Research Institute of San Antonio, Texas. Inorganic analyses of soil samples were performed by IT Analytical Services of Exton, Pennsylvania.

All laboratory analyses and laboratory quality assurance procedures used during the investigation were in accordance with standard procedures and protocols as specified in the Laboratory Operations and Quality Control Manual, United States Environmental Protection Agency, Region IV, Environmental Services Division, issued October 24, 1990; or as specified by the existing United States Environmental Protection Agency standard procedures and protocols for the Contract Laboratory Program (CLP) Statement of Work (SOW), as applicable.

3.2.2 Analytical Data Quality and Data Qualifiers

All analytical data were subjected 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 a qualifier of "J". This indicates that the qualitative analysis was acceptable, but the quantitative value has been estimated. A few other compounds are qualified with an "N", indicating that they were detected based on the presumptive evidence of their presence. This means that the compound was tentatively identified, and its detection cannot be used as a positive indication of its presence. Results for some samples are reported with a "U" qualifier. This qualifier means that the material was analyzed for but not detected. The reported number is the laboratory-derived minimum quantitation limit (MQL) 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 labeled as "JN", indicating that they are tentatively identified at estimated quantities. Because these compounds are not routinely analyzed for or reported, background levels or MQL levels are not generally available for comparison. The complete analytical data sheets are presented in Appendix B.

3.3 PRESENTATION OF ANALYTICAL RESULTS

This section presents a discussion and interpretation of the analytical results from the environmental samples collected during the investigation at LaFayette Sheet Metal. Results of organic and inorganic samples are presented in Tables 2, 3, 4, 5, 6, and 7. Background samples have been designated for all media. Values for background sample results are presented either as a measured value or as the minimum quantitation limit (MQL). Samples containing concentrations of contaminants greater than three times the background level, or equal to or greater than the MQL of these contaminants are considered to be elevated. These samples are noted in the text.

3.3.1 Inorganic Surface Soil Samples

A variety of metals were detected at elevated levels in onsite surface soil samples. Only sample LS-SS-06 did not contain concentrations of metals at least 3 times the background. Sample LS-SS-02 contained antimony (estimated 260 mg/kg, 8 times background), cadmium (estimated 18 mg/kg, 40 times background), cobalt (73 mg/kg, 7 times background), copper (130 mg/kg, 6 times background), and iron (330,000 mg/kg, 10 times background). Other metals detected in the same sample include manganese (1,300 mg/kg, 4 times background), lead (estimated 110 mg/kg, 5 times background), nickel (170 mg/kg, 7 times background), and silver (1.6 mg/kg, 4 times background). Barium (480 mg/kg, 8 times background), cobalt (40 mg/kg, 4 times background), and manganese (3,400 mg/kg, 11 times background) were elevated in samples LS-SS-03. Samples LS-SS-04 contained barium (1,700 mg/kg, 27 times background), cobalt (120 mg/kg, 12 times background), copper (190 mg/kg, 8 times background), manganese (1,400 mg/kg, 4 times background), nickel (450 mg/kg, 20 times background), silver (2.8 mg/kg, 6 times background), and zinc (200 mg/kg, 4 times background). Cadmium (estimated 1.5 mg/kg, 3 times background), lead (estimated 100 mg/kg, 5 times background), magnesium (11,000 mg/kg, 3 times background), and zinc (390 mg/kg, 8 times background) were elevated in sample LS-SS-05 (Table 2). Natural occurrence of metals in surficial soils in the north Georgia area is as follows: cobalt - 7 mg/kg; iron - 1,000,000 mg/kg; magnesium - 200,000 mg/kg; copper - 50 mg/kg; manganese - 200 mg/kg; lead - 15 mg/kg; nickel - 20 mg/kg; barium - 300 mg/kg; and zinc - 45 mg/kg (Ref. 9). Surface soil inorganic analytical results are shown on Table 2.

The most contaminated surface soil areas are located on the northern portion of the property near the former metal shop (SS-02 and SS-04), and near the truck unloading area (SS-05). Several of the metals found in these locations could possible be attributed to metal plating operations. See Figure 3 for sample locations.

3.3.2 Organic Surface Soil Samples

Sample LS-SS-02 contained two miscellaneous purgeables, three miscellaneous extractables, one unidentified chlorinated compound, evidence of petroleum products, and 8 unidentified

TABLE 2

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

	Background	ONSITE				
Parameters (mg/kg)	LS-SS-01	LS-SS-02	LS-SS-03	LS-SS-04	LS-SS-05	LS-SS-06
ALUMINUM	26000	15000	19000	17000	6400	19000
ANTIMONY	31JN	260JN	26JN	41JN	31J	28JN
ARSENIC	5.1J	3.9J	3.9J	8.2J	2.4J	2.6J
BARIUM	63	58	480	1700	99	52
BERYLLIUM	1.6	1.3	1.8	2	1.3	1.7
CADMIUM	0.45U	18JN	–	–	1.5JN	–
CALCIUM	22000	4100	18000	22000	210000	2700
CHROMIUM	36	54	24	34	20	27
COBALT	10	73	40	120	7.6	15
COPPER	23	130	37	190	20	26
IRON	34000	330000	29000	35000	15000	34000
LEAD	20J	110J	19J	51J	100J	24J
MAGNESIUM	3500	2000	2400	3600	11000	2400
MANGANESE	320	1300	3400	1400	270	300
NICKEL	23	170	60	450	14	22
POTASSIUM	2500	1000	2100	2700	1100	1400
SILVER	0.45U	1.6	0.62	2.8	–	–
SODIUM	80U	–	630	1900	130	–
VANADIUM	29	23	23	26	13	25
ZINC	50	130	79	200	390	50

– Material analyzed for but not detected above minimum quantitation limit.
U Material analyzed for but not detected above minimum quantitation limit. The value is the minimum quantitation limit for the sample.
J Estimated value
N Presumptive Evidence of material

extractables (total concentration of 800,000 ug/kg). This sample also contained the pesticides heptachlor epoxide (46 ug/kg, 23 times MQL), gamma chlordane (1,500 ug/kg, 750 times MQL), and alpha chlordane (1,300 ug/kg, 650 times MQL).

Samples LS-SS-03 and LS-SS-04 each contained one miscellaneous extractable compound, evidence of petroleum products, and unidentified extractables (SS-03: 2 compounds at a total concentration of 1,000 ug/kg and SS-04: 3 compounds at a total concentration of 2,000 ug/kg). Samples LS-SS-04 also contained gamma chlordane (9.4 ug/kg, 5 times MQL). Alpha chlordane (140 ug/kg, 70 times MQL) and gamma chlordane (140 ug/kg, 70 times MQL) were found in LS-SS-05. This sample also contained evidence of petroleum products and 9 unidentified extractables at a total concentration of 400,000 ug/kg. Sample LS-SS-06 contained one miscellaneous extractable, evidence of a petroleum product, and 6 unidentified extractables at a total concentration of 6,000 ug/kg (Table 4).

3.3.3 Inorganic Subsurface Soil Samples

Few metals were detected at elevated levels in subsurface soil samples. Sample LS-SB-02 containes 5,400 mg/kg of magnesium (5,400 mg/kg, 3 times background) and nickel (49 mg/kg, 3 times background). Sample LS-SB-07 contained only calcium and sodium at elevated levels. Magnesium and nickel were detected in the corresponding surface soil (LS-SS-02) location also, indicating migration from the surface deeper into the soil for these two metals (Table 5).

3.3.4 Organic Subsurface Soil Samples

Sample LS-SB-02 contained evidence of petroleum products, unidentified extractables (3 compounds at a total concentration of 2,000 ug/kg), and gamma chlordane (6.3 ug/kg, 3 times MQL). Sample LS-SB-06 contained hexadecanoic acid and one unidentified extractable (500 ug/kg). Hexadecanoic acid, evidence of petroleum products, and one unidentified extractable (900 ug/kg) were detected in sample LS-SB-07 (Table 5).

3.3.5 Inorganic Sediment Samples

Nickel was detected at 78 mg/kg (4 times background) in sample LS-SD-02. Silver was detected at 1.3 mg/kg (above MQL). Barium (820 mg/kg, 6 times background), cobalt (72 mg/kg, 5 times background), copper (75 mg/kg, 4 times background), and nickel (140 mg/kg, 8 times background) were detected in sample LS-SD-03. No elevated inorganics were found in the pond sample. The metals detected in LS-SD-03 were also detected onsite; therefore, they are attributable to the site (Table 6).

3.3.6 Organic Sediment Samples

TABLE 3
SUMMARY OF ORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

	Background	ONSITE				
PARAMETERS (UG/KG)	LS-SS-01	LS-SS-02	LS-SS-03	LS-SS-04	LS-SS-05	LS-SS-06
PURGEABLE ORGANICS						
CARBON DISULFIDE	11U	–	–	9J	–	
TOLUENE	11U	–	–	14	–	11J
MISCELLANEOUS PURGEABLES						
METHYLENE (METHYLETHYL)CYCLOHEXANE		20JN				
CARENE		30JN				
EXTRACTABLE ORGANICS						
BENZYL BUTYL PHTHALATE	380U	–	–	150J	870	–
MISCELLANEOUS EXTRACTABLES						
HEXADECANOIC ACID	400JN	300JN	200JN	200JN		500JN
HEXACHLOROHEXAHYDROETHENEOPENTALENE		400JN				
HEXACHLOROTETRAHYDROMETHANOINDENE		600JN				
UNIDENTIFIED CHLORINATED COMPOUNDS/NO.		400J/1				
PETROLEUM PRODUCT		N	N	N	N	N
UNIDENTIFIED COMPOUNDS/NO.	9000J/7	800000J/8	1000J/2	2000J/3	400000J/9	6000J/6
PESTICIDES						
HEPTACHLOR EPOXIDE	2.0U	46	–	–	–	–
GAMMA CHLORDANE	2.0U	1500C	–	9.4	140	–
ALPHA CHLORDANE	2.0U	1300C	–	3.8	140	–
PCBs						
PCB-1254 (AROCLOR 1254)	38U	–	78	–	–	–

– Material analyzed for but not detected above minimum quantitation limit.
U Material analyzed for but not detected above minimum quantitation limit. The value is the minimum quantitation limit for the sample.
C Confirmed by GC/MS
J Estimated value
N Presumptive Evidence of material

TABLE 4

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SUBSURFACE SAMPLES
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

	Background	Onsite		
Parameters (mg/kg)	LS-SB-01	LS-SB-02	LS-SB-06	LS-SB-07
ALUMINUM	25000	28000	25000	22000
ANTIMONY	26JN	32JN	32JN	33JN
ARSENIC	5.9J	–	3J	5.1J
BARIUM	68	130	65	150
BERYLLIUM	1.6	2.1	1.7	1.8
CALCIUM	690	–	1500	3600
CHROMIUM	29	34	34	35
COBALT	27	25	12	19
COPPER	26	21	22	44
IRON	36000	38000	36000	37000
LEAD	24J	6.6J	9.8J	18J
MAGNESIUM	1800	5400	3100	2400
MANGANESE	1400	1100	180	480
NICKEL	16	49	26	41
POTASSIUM	1200	1600	2800	2300
SODIUM	70U	–	–	340
VANADIUM	30	24	29	30
ZINC	30	84	46	79

– Material analyzed for but not detected above minimum quantitation limit.
U Material analyzed for but not detected above minimum quantitation limit. The value is the minimum quantitation limit for the sample.
J Estimated value
N Presumptive Evidence of material

TABLE 5
SUMMARY OF ORGANIC ANALYTICAL RESULTS
SUBSURFACE SOIL SAMPLES
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

	Background	ONSITE		
PARAMETERS (UG/KG)	LS-SB-01	LS-SB-02	LS-SB-06	LS-SB-07
PURGEABLE ORGANICS				
TOLUENE	12U	–	10J	–
MISCELLANEOUS EXTRACTABLES				
HEXADECANOIC ACID	200JN		80JN	200JN
PETROLEUM PRODUCT		N		N
UNIDENTIFIED COMPOUNDS/NO.		2000J/3	500J/1	900J/1
PESTICIDES				
HEPTACHLOR EPOXIDE	2.1U	–	–	2.9
GAMMA CHLORDANE	2.1U	6.3	–	6.2
ALPHA CHLORDANE	2.1U	4.6	–	5.9

– Material analyzed for but not detected above minimum quantitation limit.
U Material analyzed for but not detected above minimum quantitation limit. The value is the minimum quantitation limit for the sample.
J Estimated value
N Presumptive Evidence of material

TABLE 6

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SEDIMENT SAMPLES
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

	Background	Downstream Samples		Pond
Parameters (mg/kg)	LS-SD-01	LS-SD-02	LS-SD-03	LS-SD-04
ALUMINUM	14000	15000	21000	12000
ANTIMONY	27J	25JN	30JN	28JN
ARSENIC	5.5J	3.7J	12J	4.7J
BARIUM	130	380	820	98
BERYLLIUM	2.1	1.7	2.2	1.8
CALCIUM	5100	4800	3700	1500
CHROMIUM	17	19	27	36
COBALT	14	31	72	28
COPPER	19	47	75	18
IRON	31000	29000	29000	33000
LEAD	34J	100J	56J	13J
MAGNESIUM	1700	1900	2600	1600
MANGANESE	2600	1000	2200	1200
NICKEL	18	78	140	18
POTASSIUM	1100	1400	2700	870
SILVER	0.94U	1.3	0.68J	–
SODIUM	150	340	830	95
VANADIUM	24	16	27	27
ZINC	83	160	160	61

– Material analyzed for but not detected above minimum quantitation limit.
U Material analyzed for but not detected above minimum quantitation limit. The value is the minimum quantitation limit for the sample.
J Estimated value
N Presumptive Evidence of material

Sample LS-SD-02 contained pentadecanoic acid and 7 unidentified extractable compounds (total concentration of 10,000 ug/kg). Sample LS-SD-03 contained hexadecanoic acid, pentadecanoic acid, and 6 unidentified extractable compounds (total concentration of 9,000 ug/kg). This sample also contained gamma chlordane and alpha chlordane at levels above the MQL. Hexadecanoic acid and 9 unidentified extractable compounds (total concentration of 100,000 ug/kg were detected in the pond sample LS-SD-04 (Table 7). Organics found in the background sediment sample include fluoranthene, hexadecanoic acid, and several unidentified extractables.

3.4 SUMMARY OF ANALYTICAL RESULTS

A wide variety of inorganics were detected at elevated levels at the LaFayette Sheet Metal site, particularly in the surface soil samples. The most contaminated areas are located at sampling locations SS-02 and SS-04, near the former metal shop building. However, few inorganics exhibited significant migration to co-located subsurface soil samples. Evidence of petroleum products and several miscellaneous organics was found in soil and sediment samples. Additionally, several pesticides were detected in the surface soil and subsurface soil samples, including gamma chlordane, alpha chlordane, and heptachlor epoxide.

4.0 GROUNDWATER PATHWAY

4.1 HYDROGEOLOGY

The LaFayette Sheet Metal facility is located in the Valley and Ridge Province of northwest Georgia, at an elevation of approximately 280 feet above mean sea level (Ref. 10; Appendix A). This is the southern extension of the Appalachian Valley and Ridge Physiographic Province that parallels the eastern continental margin of North America. The Valley and Ridge Physiographic Province is distinguished by folded and faulted stratified rocks consisting of limestone, dolomite, shale, and sandstone that trend in a northeast-southwest direction (Ref. 11, p. 7). The geologic units that outcrop within a 4-mile radius of the facility, in stratigraphically descending order, include the Fort Payne Chert, Red Mountain Formation, Chickamauga Limestone, Nauwala Limestone, Knox Group, and the Conasauga formation (Ref. 10, pp. 6-8). The particular soil type at the LaFayette Sheet Metal is Montevallo, which is composed of shaly silt loam with 15-45 percent slopes (Ref. 12). Groundwater occurs in the residuum overlying the bedrock and in joints, fractures, and solution openings in the bedrock. Recharge occurs locally by percolation of precipitation (Ref. 10).

The facility is situated on the exposed Conasauga Formation, which is composed of siltstone, claystone, shale, and limestone (Ref. 10, Figure 2). The lower part of the formation in the Walker county area is around 2,000 feet (Ref. 10, p. 6). The Knox Group outcrops adjacent to the Conasauga Formation to the east and west in the facility area, and is composed of limestone and dolomite. Intense folding, faulting, and solution activity present in the site

TABLE 7
SUMMARY OF ORGANIC ANALYTICAL RESULTS
SEDIMENT SAMPLES
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

PARAMETERS (UG/KG)	Background	Downstream Samples		Pond
	LS-SD-01	LS-SD-02	LS-SD-03	LS-SD-04
MISCELLANEOUS PURGEABLES				
TRIMETHYLCYCLOPROPANE	9JN			
EXTRACTABLE ORGANICS				
FLUORANTHENE	58J	–	–	–
MISCELLANEOUS EXTRACTABLES				
HEXADECANOIC ACID	600JN		700JN	2000JN
PENTADECANOIC ACID		500JN	400JN	
UNIDENTIFIED COMPOUNDS/NO.	4000J/3	10000J/7	9000J/6	100000J/9
PESTICIDES				
GAMMA CHLORDANE	2.6U	–	7.4	–
ALPHA CHLORDANE	2.6U	–	2.7	–

– Material analyzed for but not detected above minimum quantitation limit.
U Material analyzed for but not detected above minimum quantitation limit. The value is the minimum quantitation limit for the sample.
J Estimated value
N Presumptive Evidence of material

area provide sufficient hydraulic interconnection of these rock units. Therefore, all waterbearing rock units comprise one hydrologic system in the area and they define the aquifer of concern at the site. Most wells in the Conasauga formation yield sufficient water for domestic and farm use. Wells are typically 50 to 150 feet deep and yield 20-60 gallons per minute (Ref. 10, p. 11). Estimated hydraulic conductivity for the Conasauga formation is approximately 1.0×10^{-4} cm/sec (Ref. 13, p. 29). Ground water generally occurs under unconfined water-table conditions, but artesian conditions may exist at greater depths below ground surface (Ref. 10, p. 10). Depth to the water-table varies seasonally and with topographic location, ranging from 9 to 20 feet below land surface (bls) (Ref. 14, p. 10). Groundwater flow direction beneath the LaFayette Sheet Metal facility is estimated to be southeasterly (Appendix A).

4.2 GROUNDWATER TARGETS

Walker County Rural Water and Sewer serves portions of the eastern part of the 4-mile radius with potable water obtained from three blended wells. These wells are located at the intersection of Huffman Road and County Line Road, which is southeast of and outside the 4-mile radius (Refs. 15, 16, Appendix A). Additionally, the LaFayette Water System has a groundwater spring intake at Big Spring, 1.2 miles southwest of the site off West Indiana Street, which serves 61 percent of 5100 connections (or 8,244 persons) (Refs. 1, 17, 18). A total of 225 houses (596 persons) within the 4-mile radius utilize private wells for potable water. The nearest well to the site is located approximately 0.5 mile northwest (Refs. 18, Appendix A).

4.3 GROUNDWATER CONCLUSIONS

The groundwater pathway is of concern at the LaFayette Sheet Metal due to the large number of potential targets associated with the LaFayette Water System spring intake. However, travel time through the soils and mobility of contaminants detected onsite serve to lessen the threat to groundwater.

5.0 SURFACE WATER PATHWAY

5.1 HYDROLOGIC SETTING

5.1.1 Climatology

Walker County and its surrounding area is characterized by a humid, temperate climate (Ref. 10, p. 3). Total annual precipitation averages 53 inches with annnual evaporation of 38 inches, resulting in a net precipitation of 15 inches (Ref. 19). The 2-year, 24-hour rainfall total is approximately 3.75 inches (Ref. 20).

5.1.2 Overland Drainage

Surface water drains from the site to the east for approximately 1,200 feet through a series of wet-weather ditches, and then enters a small wetland area which feeds into the lower portion of the LaFayette City Reservoir. The reservoir feeds into Town Creek, which flows approximately 3.0 miles southwest and enters the Chattooga River. The 15-mile, surface water pathway ends in the Chattooga River (Appendix A). The LaFayette Sheet Metal facility is located within 0.25 mile of an area subject to inundation by the LaFayette City Reservoir. The facility is topographically 20 feet higher than the reservoir, indicating that flooding of the site via the reservoir would require a significant flood event (Appendix A).

5.2 SURFACE WATER TARGETS

The LaFayette City Reservoir, Town Creek, and the Chattooga River are potentially affected water bodies. No surface water intakes are located along the 15-mile, surface water pathway (Ref. 21). The LaFayette Water System serves the entire LaFayette city limits and much of the surrounding area. This water system has two water sources: a surface water intake at the intersection of Duck Creek and Dry Creek, and the above-mentioned spring intake at Big Spring. Emergency hook-up to Walker County Rural Water and Sewer and the Catoosa County Water System is also available. (Ref. 16). Neither system obtains water within the 4-mile radius (Refs. 22, 23). Recreational fishing occurs in the LaFayette Reservoir and in the Chattooga River (Ref. 24). The Coosa darter (*Etheostoma coosae*), a state endangered species, has been found in water bodies near LaFayette (Ref. 25). Two small wetlands are located within 1200 feet of the site near the LaFayette City Reservoir (Appendix A).

5.3 SURFACE WATER CONCLUSIONS

The surface water pathway is of concern at the LaFayette Sheet Metal site, due to the fisheries and the endangered species in the area. However, there are no drinking water targets associated with the 15-mile surface water pathway.

6.0 AIR AND SOIL EXPOSURE PATHWAYS

6.1 PHYSICAL CONDITIONS

The eastern portion of the LaFayette Sheet Metal site is covered with thin grass. The western portion of the site is mostly covered with gravel, and has thick grass at either end. The property is directly accessible only from the eastern side, as the other three sides are fenced. Facing Highway 27 the site has a gate which is locked at night (Refs. 2, Appendix C).

6.2 AIR AND SOIL TARGETS

6.2.1 Demography

LaFayette Sheet Metal is located just north of the city center of LaFayette, Walker County, Georgia. Numerous private residences and a few commercial establishments are located in the 1-mile radius, and the majority of the 4-mile radius (with the exception of the town of LaFayette) is sparsely populated. The nearest residence is located approximately 100 feet north of the facility, and the nearest school is North LaFayette School, approximately 1.25 miles south. The population within 1 mile is 1,969 persons, and within 4 miles is 10,011 persons (Ref. 26; Appendix A). The nearest persons are the 34 workers and students at the onsite day-care facility (Ref. 2).

6.2.2 Land Use

Land in the area of LaFayette Sheet Metal is primarily used for single-family residences and light agriculture. Also, much of the LaFayette City Reservoir is within the 1-mile radius of the facility. The reservoir is used for water conservation and flood control purposes. Small areas of wetlands are associated with the outer edges of the LaFayette City Reservoir, with the closest wetland being within 0.25 mile of the facility (Ref. 1, Appendix A). Endangered species in the Walker County area include the large-flower skullcap (*Scutellaria montana*). Also, a variety of plant and animal species are listed as endangered by the state of Georgia (Ref. 25).

6.3 AIR AND SOIL EXPOSURE PATHWAYS CONCLUSIONS

Because the area around the site is sparsely populated, the air pathway is of little concern at the LaFayette Sheet Metal site. Soil exposure is of great concern at this site. A variety of contaminants were detected in onsite surface soils. At least 34 persons attend or work at a day-care center for mentally-handicapped adults onsite. These persons constitute an onsite resident population.

7.0 SUMMARY AND CONCLUSIONS

The LaFayette Sheet Metal facility is a 1.32 acre, which was used as a metal plating facility from 1983 to 1988. Citizens in the area complained about a variety of drums and containers and drums that were dumped behind the plating building in June 1986. Currently, the property is owned by Milford Morgan, who leases the facility for use as a day-care program for mentally-handicapped adults. Analyses of contaminant migration pathways and sampling data shows the following: (1) most potential groundwater targets are located several miles from the site; (2) some surface water targets do exist, including recreational fishing; (3) the soil exposure pathway is of great concern due to the resident population; and (4) the air pathway is not of great concern because, with the exception of the resident population, the area is sparsely populated.

Various organics and inorganics were detected onsite, primarily in surface soil samples. Several pesticides were also detected in surface soils. Wet-weather ditches located to the east of the buildings onsite contained many inorganics similar to those onsite, suggesting that migration may be occurring from the site via the surface water pathway.

Based on the results of this field investigation, it is recommended that further action be planned for the LaFayette Sheet Metal facility.

REFERENCES

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3. Aerial photo of LaFayette Sheet Metal, obtained from LaFayette Sheet Metal file, NUS Corporation, TDD No. F4-8811-59.

4. Plat survey for Milford Morgan, Jr., Land Lot 298, 8th District, 4th Section, Walker County, Georgia, September 18, 1990.

5. Mike Ellis, Sheriff, Walker County Sheriff's Department, letter to Susan Fields, Environmental Protection Agency Onsite Coordinator (OSC), May 30, 1986. Subject: Sites in Walker County.

6. Susan Fields, OSC, Environmental Protection Agency, interoffice memorandum to Camilla Warren, ISC, June 2, 1986. Subject: Walker County Site.

7. Milford Morgan, Landowner, telephone conversation with Jancie Hatcher, B&V Waste Science and Technology Corp., November 11, 1991. Subject: PRP Contact.

8. U.S. Environmental Protection Agency, RCRA Notifiers List, Region IV Merge Database, p. 1694, November 13, 1991.

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18. U.S. Department of Commerce, Proof Copy of table generated for 1990, CPH-1: Summary Population and Housing Characteristics, issued by Bureau of Census (April 1991).

19. U.S. Department of Commerce, Climatic Atlas of the United States (Washington, D.C.: GPO, June 1968) Reprint: 1983, National Oceanic and Atmospheric Administration.

20. U.S. Department of Commerce, Rainfall Frequency Atlas of the United States, Technical Paper Number 40 (Washington, D.C.: GPO, 1961).

21. Georgia Department of Natural Resources, Water Availability & Use, Coosa River Basin, Environmental Protection Division, 1982.

22. Mike Nicholson, Assistant Manager, Walker County Water, telephone conversation with Jancie Hatcher, B&V Waste Science and Technology Corp., January 3, 1992. Subject: Walker County water service.

23. Rick Brown, Catoosa County Utilities, telephone conversation with Jancie Hatcher, B&V Waste Science and Technology Corp., September 24, 1991. Subject: Catoosa County water.

24. Gary Beisser, Georgia Department of Fisheries - Calhoun, telephone conversation with Jancie Hatcher, March 6, 1992. Subject: Fishing in the LaFayette area.

25. Charles V. Rabolli, Program Manager, Georgia Department of Natural Resources, letter and enclosures to Ronald A. Wilde, March 24, 1992. Subject: Endangered species in the LaFayette area.

26. U.S. Environmental Protection Agency, Graphical Exposure Modeling System (GEMS) Data Base, compiled from U.S. Bureau of the Census data (1980).

Ref. 1

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D984270553

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
LaFayette Sheet Metal	Hwy. 27 North

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
LaFayette	GA	30728	Walker		

09 COORDINATES LATITUDE	LONGITUDE
34 44 05._	_85 16 27._

10 DIRECTIONS TO SITE (Starting from nearest public road) Take Hwy. 136 west to LaFayette, at the intersection of Hwy. 136 andHwy. 27 in LaFayette turn right onto Hwy. 27 and travel 2.1 mi. north to North LaFayette Baptist Church which is on the right side of the Hwy., the site is located behind the church.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residence)
McGouirk Saw Mill Service Co., Inc.	Hwy. 27 North

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
LaFayette	GA	30728	404 638-4444

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residence)

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
			( )

13 TYPE OF OWNERSHIP (Check one)
☐ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
☐ A. RCRA 3001 DATE RECEIVED: __/__/__ (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: __/__/__ (MONTH DAY YEAR) ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☒ YES DATE 12 19 88 (MONTH DAY YEAR)
☐ NO

BY (Check all that apply)
☐ A. EPA ☒ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)

CONTRACTOR NAME(S): NUS Corporation

02 SITE STATUS (Check one)
☐ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION
____ (BEGINNING YEAR) ____ (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED June 1, 1986, a EPA investigator reported seeing several 55 gallon rusty drums containing solid material, empty 5 & 1 gallon cans and smaller glass bottles lying around in back of the building on site. December 19, 1988 an offsite recon was conducted by NUS at the site. There were no signs of any drums or cans on the site.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Unknown

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☒ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Mario Villamarzo	EPA Region IV	404 347-5065

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Dan L. Howard	NA	NUS Corp.	404 938-7710	7 24 89 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

PRELIMINARY ASSESSMENT
REVISION 0

Date: August 4, 1989

Prepared by: Daniel L. Howard
NUS Corporation, FIT 4, Atlanta, Georgia

Site: LaFayette Sheet Metal
Hwy. 27 North
LaFayette, Walker County, Georgia
EPA ID No. GAD984270553
TDD No. F4-8811-59

Recomendation and Justification

A screening site inspection of medium priority is recommended for the LaFayette Sheet Metal facility. This recommendation is based on the following reasons: there is documentation of rusty drums containing solid material being stored behind the facility, and there is a possibility of groundwater contamination.

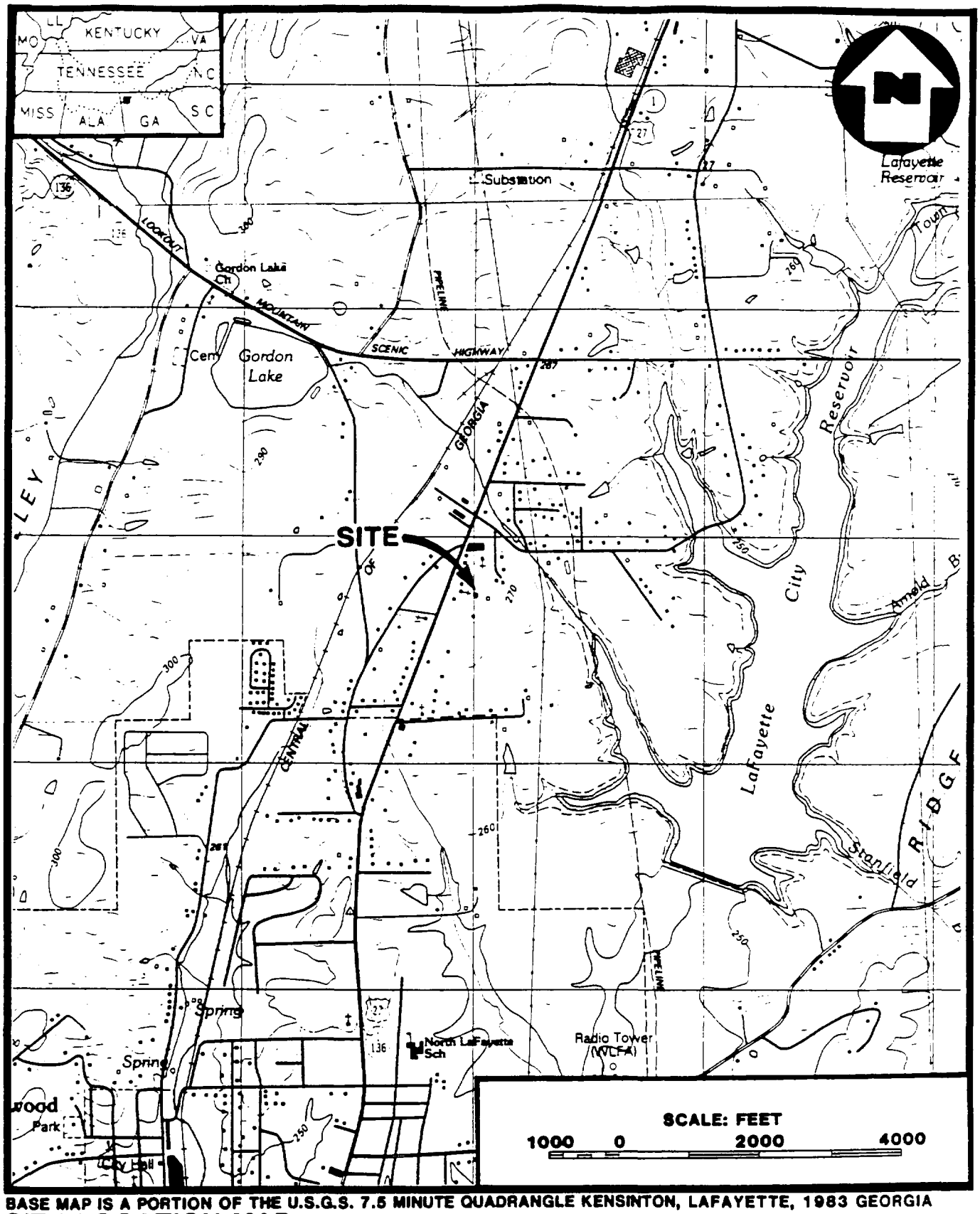
Site History

LaFayette Sheet Metal (now McGouisk Saw Mill Service Company, Inc.) is located on Highway 27 North behind the North LaFayette Baptist Church (Ref. 1, also see Figure 1). There are approximately 250 houses within a 1-mile radius of the facility (Ref. 2). Three houses are within 200 feet of the facility (Ref. 1).

The 1.35-acre property (shown in Figure 2) was owned by Dexter W. Jumper, Jr., during the time that LaFayette Sheet Metal was operating at this facility. Mr. Jumper owned the property from November 15, 1983, to August 12, 1988. From August 12, 1988, to the present date, the property has been owned by McGouisk Saw Mill Service Company, Inc. (Ref. 1). A body shop also operated at this location at one time (Ref. 3).

Disposal History and Waste Characteristics

On June 1, 1986, an EPA official investigated a report of drums behind the LaFayette Sheet Metal facility (Refs. 3, 4). Behind the building, there was a filled area that was approximately 60 by 100 feet

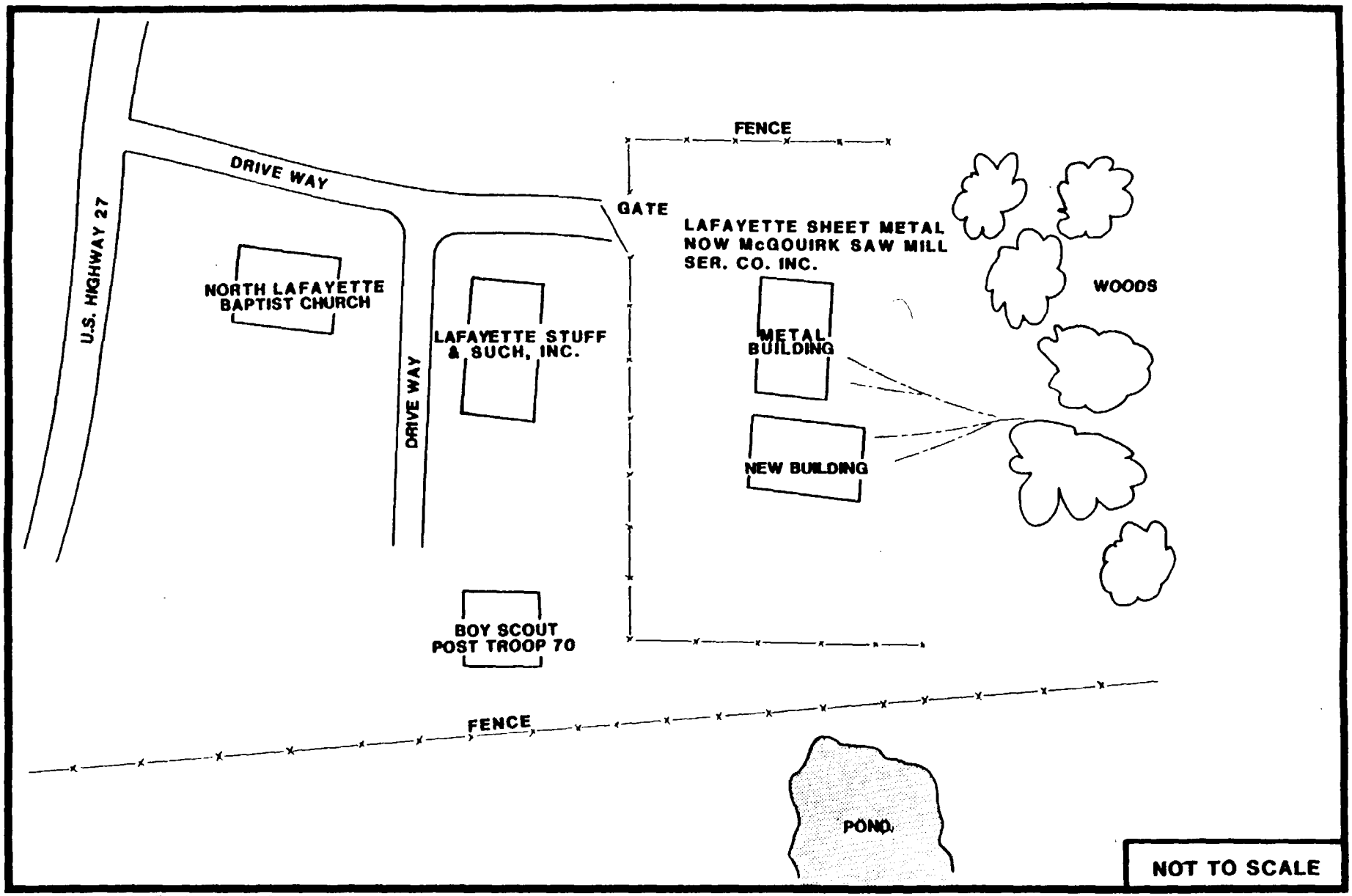


BASE MAP IS A PORTION OF THE U.S.G.S. 7.5 MINUTE QUADRANGLE KENSINTON, LAFAYETTE, 1983 GEORGIA

SITE LOCATION MAP
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY , GEORGIA

FIGURE 1

NUS CORPORATION



SITE LAYOUT MAP
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

FIGURE 2

Decide scale
from topo

NUS CORPORATION

and 5 to 6 feet deep. Several rusty 55-gallon drums containing solid material were along the edge of the filled area. Additionally, five-gallon and one-gallon cans and smaller glass bottles were noted. There was a small area where it appeared fiberglass had been burned (Ref. 3).

During an offsite reconnaissance of the facility on December 19, 1988, there was no sign of any drums on the facility grounds (Ref. 1).

Regulatory History

No information on this facility is contained in the files of the Georgia Department of Natural Resources, Environmental Protection Division (Ref. 5).

Groundwater Pathway

The LaFayette Sheet Metal facility is located in the Valley and Ridge Province of Georgia (Ref. 6). This is the southern extension of the Appalachian Valley and Ridge Physiographic Province that parallels the eastern continental margin of North America. The Valley and Ridge Province is distinguished by folded and faulted stratified rocks consisting of limestone, dolomite, shale and sandstone that trend in a northeast-southwest direction (Ref. 7, p. 7). The geologic units that outcrop within a 4-mile radius of the facility, in stratigraphically descending order, include the Fort Payne Chert, Red Mountain Formation, Chickamauga Limestone, Nauwala Limestone, Knox Group, and the Conasauga Formation (Ref. 6). Groundwater occurs in the residuum mantling the bedrock and in joints, fractures, and solution openings in the bedrock. Recharge occurs locally by percolation of precipitation. Average annual rainfall is 53 inches and average annual evaporation is 38 inches, giving a net rainfall of 15 inches (Ref. 8).

The facility is situated on the exposed Conasauga Formation, which is composed of siltstone, claystone, shale, and limestone. The lower part of the formation is composed predominantly of siltstone and claystone, while the upper 300 feet is composed of thick-bedded limestone. The total thickness of the formation in the Walker County area is around 2000 feet (Ref. 6, p. 6). The Knox Group outcrops adjacent to the Conasauga Formation to the east and west in the facility area, and is composed of limestone and dolomite. Intense folding, faulting, and solution activity present in the site area provide sufficient hydraulic interconnection of these rock units. Therefore, all water-bearing rock units comprise one hydrologic system in the area and they define the aquifer of concern at the site. Groundwater generally occurs under water-table conditions, but artesian conditions may exist at greater depths below ground surface (Ref. 6, p. 10). Depth to the water-table varies

seasonally and with topographic location, ranging from 9 to 20 feet below ground surface (Ref. 9, p. 10).

A house count identified approximately 95 private wells within a 3-mile radius of the facility (Refs. 1, 2). The closest well is approximately 100 feet northeast of the site, but this well is not in use (Ref. 1). The closest well in use is approximately 2900 feet east of the site (Refs. 1, 2). There are approximately 65 private wells located between the 3- and 4-mile radii (Ref. 2).

The LaFayette Water System obtains its water from four sources: Big Spring, Walker County Rural Water and Sewer, a surface intake on Duck Creek and from Catoosa County Water System. Big Spring is located off West Indiana Street, which is 1.2 miles southeast of the facility. LaFayette Water System, which supplies the city of LaFayette and some of the surrounding areas, also buys water from Walker County Rural Water and Sewer on an as needed basis (Ref. 1). Walker County Rural Water and Sewer obtains its water from groundwater. Its well is located north of the site and outside of the 4-mile site radius (Ref. 10). The LaFayette Water System services 4883 connections (Ref. 1).

Surface Water Pathway

LaFayette Water System surface water intake is not located along the surface water migration pathway of this facility. LaFayette Water System intake is where Duck Creek and Dry Creek meet. This intake is 3.5 miles southwest of the site. Duck Creek and Dry Creek are spring-fed creeks (Ref. 1). LaFayette Water System also has two connections to Catoosa County Water System. One connection is off Highway 151, approximately 1 mile north of the Walker County boundary. The second connection is north of LaFayette approximately 0.5 mile inside the Walker County boundary (Ref. 1). Catoosa County Water System obtains its water from surface water drawn from South Chickamauga Creek. The intakes are located upstream of the facility in question (Ref. 10).

Runoff from the site drains into a wet-weather ditch which runs into a wooded area toward the southeast (Ref. 1). Beyond the wooded area is the Highway 27 Bypass which causes runoff from the site to drain south (Ref. 1). Drainage runs south for approximately 3,500 feet and drains into a spring that runs into the lower part of LaFayette City Reservoir (Ref. 2). The reservoir was constructed for water conservation and flood control purposes (Ref. 10). The lake is also used for boating and fishing (Ref. 1). Water travels from the reservoir to the Chattooga River (Ref. 2). There are no surface water intakes along the 15-mile surface water pathway of the Chattooga River downgradient of the site's drainage pathway (Ref. 11).

Air Pathway

The air pathway is not of concern at this facility, since the only waste ever documented as being at this facility is solid waste material (Ref. 3).

HRS2 Concerns

Access to the facility is limited, since there is a fence on three sides of the facility, and access from the rear of the site is limited by a wooded area (Ref. 1). There are no schools close to the facility. The North LaFayette Baptist Church is in front of the facility, approximately 200 feet away (Ref. 1). Although, the ranges of some threatened or endangered species include the state of Georgia, no critical habitats have been designated in Walker County (Ref. 12).

REFERENCES

1. NUS Corporation Field Logbook No. F4-1163 for LaFayette Sheet Metal, TDD No. F4-8811-59. Documentation of facility reconnaissance, December 19, 1988.

2. U.S. Geological Survey, 7.5 minute series Topographic Quadrangle Maps of Georgia: LaFayette 1983, Catlett 1982, Kensington 1983, Nickajack Gap 1983, scale 1:24,000.

3. Susan Fields, OSC, ERCS, interoffice memorandum to Camilla Warren, ISC, United States Environmental Protection Agency, June 2, 1986. Subject: Walker County Site, Georgia.

4. Mike Ellis, Sheriff, Walker County, Sheriff's Department, letter to Susan Fields, Coordinator, Environmental Protection Agency, May 30, 1986. Subject: Sites in Walker County.

5. Marshall Ervin, DNR, Environmental Protection Division, telephone conversation with Daniel Howard, NUS Corporation, July 13, 1989. Subject: Regulatory information on LaFayette Sheet Metal.

6. Charles W. Cressler, Geology and Groundwater Resources of Walker County, Georgia, Georgia Geologic Survey, Information Circular 29, 2nd edition, prepared in cooperation with the U.S.G.S., (1981), Figure 2.

7. Charles Butts and Benjamin Gildersleeve, Geology and Mineral Resources of the Paleozoic Area in Northwest Georgia, Georgia Geologic Survey, Bulletin Number 54, 1948.

8. U.S. Department of Commerce, Climatic Atlas of the United States, (Washington, D.C.: GPO, June 1968), Reprint: 1983, National Oceanic and Atmospheric Administration.

9. C. N. Joiner, et al., Groundwater Data for Georgia, 1987, U.S. Geological Survey, Open-File Report 88-323, prepared in cooperation with the Georgia Geologic Survey, 1988.

10. Water Availability & Use, Tennessee River Basin, Georgia Department of Natural Resources, Environmental Protection Division, December 1986.

11. Water Availability & Use, Coosa River Basin, Georgia Department of Natural Resources, Environmental Protection Division, 1982.

12. Endangered and Threatened Species, U.S. Fish and Wildlife Service, Region 4-Atlanta, 1988.

LaFayette Sheet Metal
LaFayette, Walker Co., Georgia

Project No. 52011.011

November 18 - 19, 1991

Project Manager: Tancie Hatcher
Tancie J. Hatcher

Sampling Crew:
Ron Wilde Ronald Wilde 11/18/91
Laura Morrisson
Carter Helm

Ref. 2

11-18-91

1050 Arrived onsite. Milford Morgan had been here, but left. Met with one staff member, Hope. She told me that they run a day-care facility for the adult mentally ill and handicapped. My crew is not yet here — they probably got lost like I did. Weather - approx. 50°, cool, ~~clear~~ cloudy

1100 John McKeown and Janice Thomas of EPA showed up. They had gotten lost, and seen my crew, who was also lost. They went to hunt them down.

1105 Crew arrives onsite. Did set-up of decon line, etc. Ran calibrated HNu Serial 31013.

1155 Laura and Carter suit up and get equipment for first sample = background. The garbage man came and emptied the dumpster that was located next to the bullet. I met with Milford Morgan, property owner. He showed me where the limits of the property were.

11-18-91

1215 LS-SS-01 - taken by Carter and Laura - Soil is reddish-brown hard silty clay
No readings on HNu - sample taken at approximately ~~4~~ inches
JTH 11-18-91

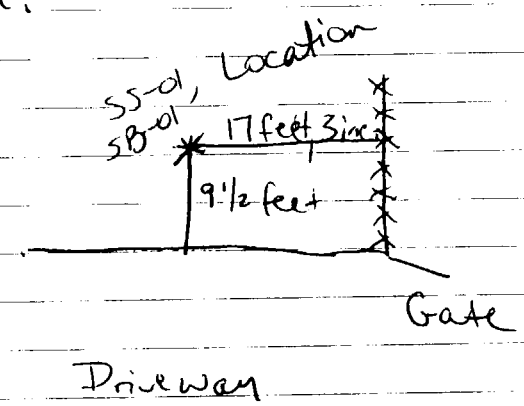
8 inches.

1230 Ron Wilde and Janice pulled water trip blank. LS-TB-01

1240 LS-SB-01 - taken at 3 feet - Soil is orange-brownish silty. This sample was somewhat difficult to get to. After consultation with John McKeown, Janice Thomas, and Carter Helm (geologist), we decided not to even go for groundwater. It was their opinion that it would be wasted time, and that it would be more useful in terms of scoring the site to get several private wells in the area.

11-18-91

They think that, with no temp. wells, the subsurface might be more important to take. No readings on HNu.



This sample is the matrix duplicate.

1300 John McKeown & Janice depart to get ice.

1310 They return, and depart site for Atlanta via one of Janice's other sites.

11-18-91

1325 Photo Log

① Sheet Metal Building from front
② New building adjacent to sheet metal building
③ picture of suspected loading area in front of building (sheet metal)
④ Rusted suspected drum, muffler? taken near SS-01 location
⑤ Picture taken towards Hwy. 27 from Location near (in gate)

Carter and Laura left to take sediment-01, a couple tenths of a mile north off Hwy. 27 intersection with unnamed creek that runs toward site and then towards reservoir.

11-18-91

1425

After driving around for several minutes located sampling point for LS-SD-01. Very near Hwy. 136 out of almost stagnant creek.

1430

LS-SD-01

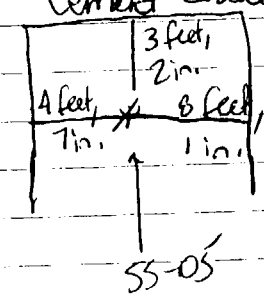
Dark, Organic-containing wet mud. No readings on HNu.

1505

LS-SS-05

Taken at approx. 4 inches from surface. Taken in front of the area that was possibly used for truck unloading. Brown, silty to sandy soil. No readings were recorded on HNu

Cement Loading Area



11-18-91

Lots of paper, aluminum, wood debris in the surface at this Sample Location, Portion of drum was discovered at this ~~porti~~ Location. JSH 11-18-91

1515 Photo Log

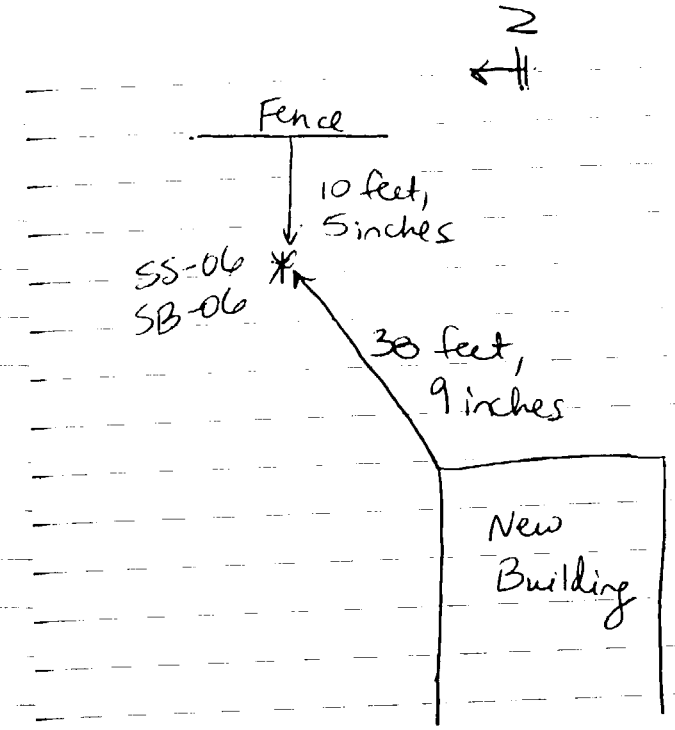
(6) Picture of drum at this Location.

(7) Picture of wood and aluminum debris.

1525 LS-SS-06
Rocky, silty brownish-orange dirt. No readings on HNu. Taken at approx. 4 inches. Pulled up some hair-like material about 1 foot down.

1540 LS-SB-06
Brownish silty to sand-like material. No readings on HNu. Sampled at approx. 3 feet bls.

11-18-91



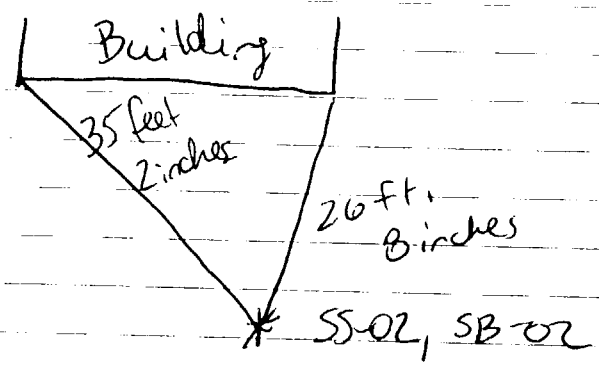
1600 Soil is somewhat discolored. Very gravelly, and visible metal debris approx. 2 inches below the surface.

1610 LS-SS-02
taken at approx. 6 inches - dark gravelley soil No readings on HNu.

11-18-91

1625 LS-SB-02
Soil was yellowish shale with numerous chunks of shale in it. No reading on HNu.

1630 Started breaking down site for day.



1700 Left site for day. Starting to rain.

11-19-91

0905 Arrived onsite. Crew began setup. Jim Grey of EPA-ESD Athens arrives.

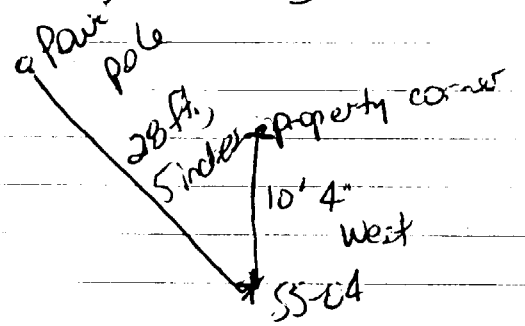
0920 Ron Wilde calibrated HNu Serial # 31013. Instrument took a little time to warm up. Mr. Grey told us that ESD now uses toluene to set HNu. He explained that the gas concentration in the cylinder should be set to 100 ppm - isobutylene concentration.
100 ppm isobutylene at span of 8.15 - zeroed instrument at 9.8 span setting.

0945 Went to field for first sample. Weather cloudy, starting to rain, 60° F.

0955 LS-SS-04 - taken at 4 inches. Soil is dark brown silt. 0.5 ~~rea~~ ppm reading on HNu at this location.

11-19-91

SS-04 location



1010 LS-SS-03
Soil is light-brownish silt to light clay. Reading of approx. 2 ppm on HNu. Taken at approx. 5 inches b/s.

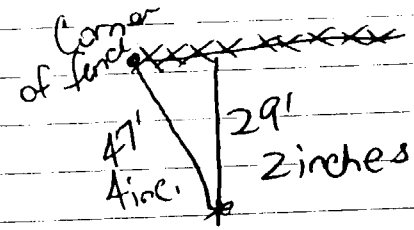
1020 Carter got auger refusal in the surface soil hole at approx. 6 inches. Moved hole approx. 2 feet to the east.

2nd hole also had auger refusal. Moved approx. 6 feet to the east and renumbered

11-19-91

the sample. This will now be LS-SB-07. LS-SB-03 will not be taken.

1055 LS-SB-07 - taken at a depth of approx. 2½ feet b/s. Soil is a dense, dark brown, slightly moist clay. No readings on HNu in this sample location.



SB-07 Location

1110 Part of crew went to get lunch, and stayed at site to watch equipment. Jim Grey, Ron, & I go to try and find private well sampling locations.

1135 Went to house to South. Spoke to grandmother. She

thought that sampling out of pond would be OK, but wanted to call her daughter, who is really the landowner.

1150 Jim, Ron, & I drove close to location of the SD-01 sample. Located a private well at an abandoned house - 2nd house on right. The well could be sampled with a bailer but we didn't have one. Talked to lady at ~~1st~~ 2nd house on left. She didn't know of anyone on private wells on her street. 11-19-91

1210 Ron and ~~I~~ walked behind the sheet metal building to the nearest resident - house approx. 250 yards behind and to the northwest. There was no one at home to talk to, and no well house was visible from the outside. Switched up to take sediment samples from wet-weather ditches.

11-19-91

1245 Wood debris, glass, discolored soil noted when ground was turned over. Taken at approx. 4 inches in depth.

1250 LS-SD-02 taken just even with pin at property boundary. - 25 feet to east in the obvious runoff drainage area. No reading on the HNu at this location. - soil was dark, and filled with debris. No HNu readings.

1255 Photo Log

(8) Picture of metal debris behind the filled-in pit near sediment samples

(9) Picture of metal drums near SB-07 location.

11-19-91

1300 LS-SD-03
soil was dark brown clay - very sticky. No readings on HNu in this location.

1320 Went to next-door house. Spoke on the phone with landowner. She had spoken with Hubert, but after speaking with me, agreed to let us take sample. I told her that she would be able to get a copy of the analysis when it was available, and could also request a copy of the report.

1340 Carter and Lara go to take sample. I show them location. Then I go back and have receipt for samples form signed. The mother of wife at this house signed - Geraldine Finster. Owned by Gilreaths (404) 638-2037

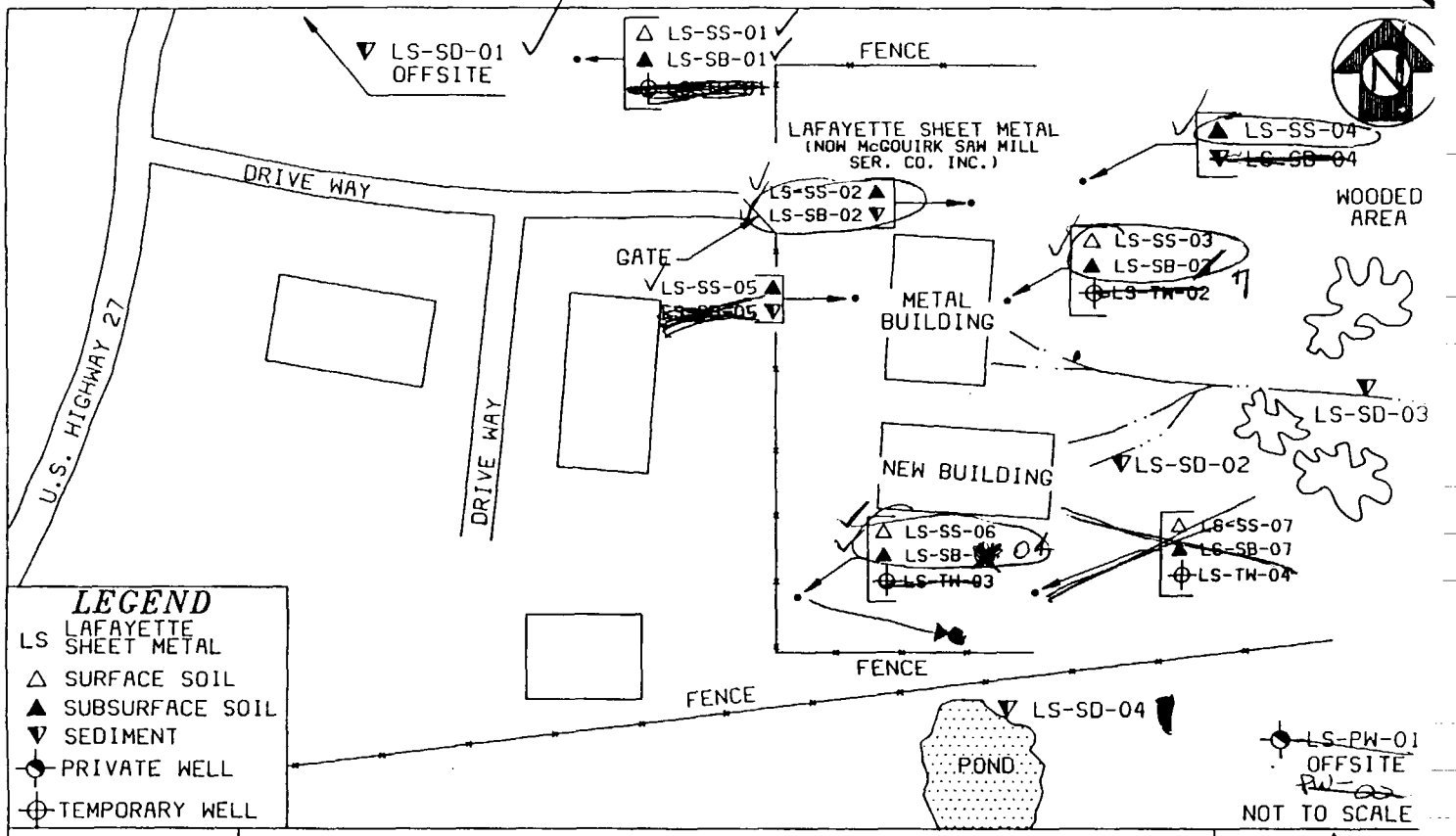
LS-SD-04 -
Soil is dark, brown - very organic looking.

11-19-91

1350 We return to site. Crew starts packing up. I go up to inquire about receipt for samples.

1410 Left message on Mr. Morgan's answering machine that I would have Farrell Hale sign receipt for samples, and mail him a copy next week. I spoke with Ms. Hale, and gave her the EPA Contact name. They are also interested in getting a copy of the report, as is Mr. Morgan and the Gilreaths.

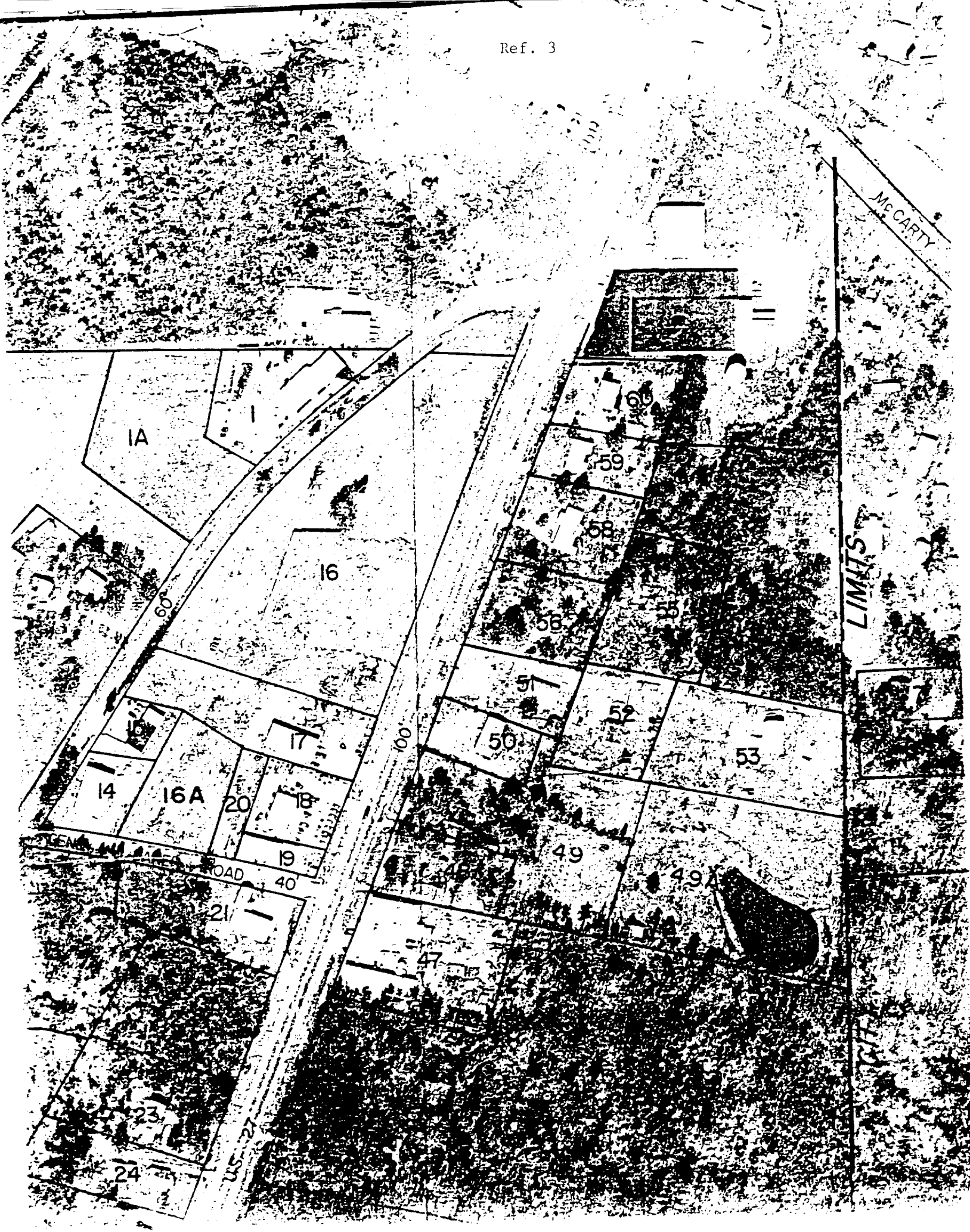
1450 Left site for day.



SAMPLE LOCATION MAP
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

FIGURE 3

Ref. 3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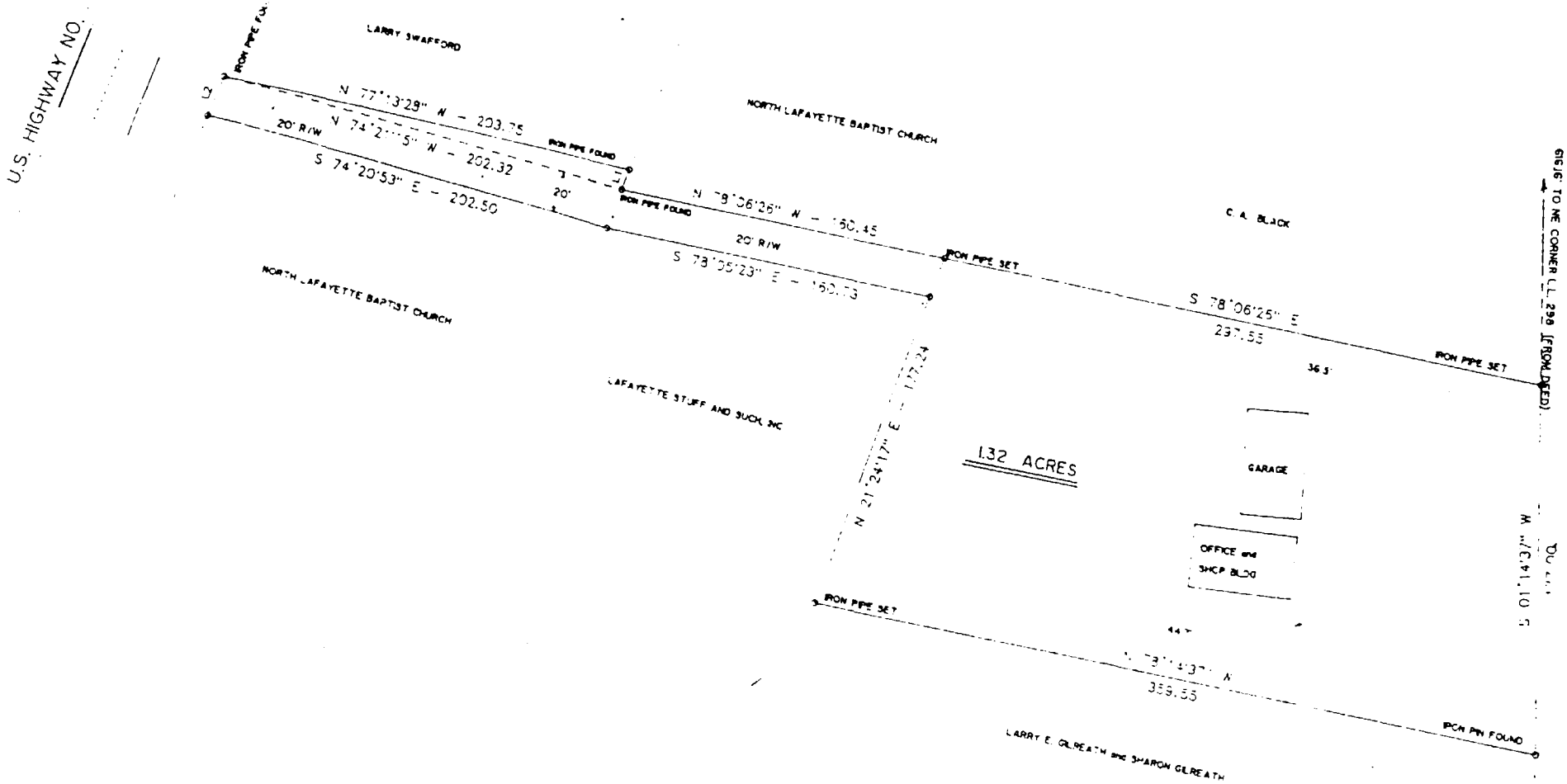

PLAT OF SURVEY FOR

MILFORD MORGAN, JR.

BEING IN LAND LOT 298,
8TH DISTRICT, 4TH SECTION,
WALKER COUNTY, GEORGIA

DATE: SEPTEMBER 18, 1990

THE FIELD DATA UPON WHICH THIS PLAT IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 20000 FEET, AND AN ANGULAR ERROR OF 6 SECONDS PER ANGLE POINT AND WAS ADJUSTED USING COMPASS RULE.

THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND IS FOUND TO BE ACCURATE WITHIN ONE FOOT IN 100,000 FEET.

EQUIPMENT USED FOR ANGULAR AND LINEAR MEASUREMENTS: TOPCON GTS 100 EDM

CAMPBELL SURVEYING & MAPPING
[illegible] NORTH DUKE STREET

Ref. 4

Walker County Sheriff's Department

Ref. 5

Mike Ellis
Sheriff

Post Office Box 767
LaFayette, Georgia 30728
(404) 638-2512

May 30, 1986

Sue Fields, Coordinator
Environmental Protection Agency
Atlanta, Georgia

Dear Ms. Fields:

This is to advise that I have had a discussion with Mose Mathis and Thomas Lewis regarding waste materials which they have hauled to various sites in Walker County. Those sites named by Mr. Mathis and Mr. Lewis are: Prospect Road (Wade Purser property), Kensington Road property, Sidney and Mose Mathis property, Steele property-off Cove Road, area behind Joe Upshaw's, and the Shaver Farm. We have also had a call pertaining to barrels being stored behind the North LaFayette Baptist Church on Highway 27. We have had numerous calls regardin these sites. Mr. Mathis and Mr. Lewis also have questions they would like answered.

Ms. Fields, I am requesting that this information be passed on to whomever necessary to get this matter resolved.

If the Walker County Sheriff's Department may be of further assistance, please don't hesitate to call.

Sincerely,

Mike Ellis

Mike Ellis
Walker County Sheriff's Department

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: June 2, 1986

Ref. 6

SUBJECT Walker County Site, GA

FROM OSC, ERCS

TO Camilla Warren, ISC

On June 1, 1986, I investigated a report of drums behind the North Lafayette Baptist Chuch on Highway 27 in Lafayette, GA. Behind the church there is a Lafayette Sheet Metal business, phone 404/638-1228. Behind the building, there is a filled area approximately 60'X 100' by 5-6 feet deep. I could see several rusty 55 gallon drums containing solid material along the edge of the filled area. Additionally, 5 gallon and 1 gallon cans and smaller glass bottles were lying around. There is a small area where it appears fiberglass has been burned. I spoke with a gentleman from an adjacent boy scout office who told me the business used to be a body shop.

The filled area drains into a wet weather ditch which runs into a wooded area and an apparent pasture. I saw three homes within 200 yards of the site. Actually, it appears the business is in their back yards.

I'll be glad to accompany you on any site investigations.

Susan Fields

Susan Fields

B&V WASTE SCIENCE AND TECHNOLOGY CORP.

Ref. 7

TELEPHONE MEMORANDUM

EPA Region IV
LaFayette Sheet Metal
PRP Contact

BVWST Project 52011.011
BVWST File
November 11, 1991
10:00 a.m.

To: Mr. Milford Morgan
Company: Landowner
Phone No.: 404-857-7856

Recorded by: J. S. Hatcher JSH 11-11-91

I spoke with Mr. Morgan and confirmed that he had received the access letter and spoken with Janice Thomas of EPA. I told him that we planned to be at the site about 10:30-10:45 next Monday morning. He said he will meet us there. The site is currently leased by Vista Community Programs, which runs a day-time care facility. He plans to be there to reassure these people that nothing too strange is happening. He bought the land from the Small Business Administration and received no environmental disclosure. EPA has advised him that he has little to no liability for any problems that might be incurred.

ms

RCRA Notifiers List State: TN Region IV Merge Database Run 18.13.09 11/13/91

Facility/ID Leg. Dist		Contact - Name	- Phone	Notif.Date	Facil. Type TSD	GEN	TRNS	BBL	REC
KUT KWIK CORPORATION		WILL PHILLIPS	(912)265-1630	10/15/90	-	SQG	-	-	-
GAD981282809	Facil.: 1927 NEW CASTLE ST BRUNSWICK GA 31520 GLYNN CO.								
	Mail: 1927 NEW CASTLE ST BRUNSWICK GA 31520								
KWICK KLEEN CAR WASH		HARRY PROUDFOOT	(912)264-3472	02/20/91	-	CEG	-	-	-
GAD981283203	Facil.: 2109 NORWICH STREET BRUNSWICK GA 315205832 GLYNN CO.								
	Mail: 2109 NORWICH STREET BRUNSWICK GA 315205832								
KWIK KORNER		HAROLD MATTHEWS	(404)981-5040	05/22/91	-	CEG	-	-	-
GAD984293167	Facil.: 1785 PANOLA ROAD ELLENWOOD GA 30049 CLAYTON CO.								
	Mail: 1785 PANOLA ROAD ELLENWOOD GA 30049								
KYZERS AUTOMOTIVE		BARBARA MCKAIG	(404)398-3473	05/15/90	-	SQG	-	-	-
GAD981271612	Facil.: HWY 11 SOUTH TRENTON GA 30752 DADE CO.								
	Mail: P O BOX 39 TRENTON GA 30752								
L & M PAINT & BODY SHOP		JAMES MORRIS	(404)974-2853	12/11/89	-	CEG	-	-	-
GAD981269277	Facil.: 3176 ALABAMA RD ACWORTH GA 30101 COBB CO.								
	Mail: 3176 ALABAMA RD ACWORTH GA 30101								
GMC		JOEY SIRMANS	(912)781-7171	01/28/88	-	SQG	-	-	-
81241284	Facil.: 3010 BROADWAY MACON GA 31206 BIBB CO.								
	Mail: 3010 BROADWAY MACON GA 31206								
INTERNATIONAL		TONY GILBERT	(912)784-3100	01/28/88	-	SQG	-	-	-
81241276	Facil.: 2855 BROADWAY MACON GA 31206 BIBB CO.								
	Mail: P O BOX 783 MACON GA 31206								
AUTO PAINTING & BODY		DOYLE HARRIS	(912)236-7145	06/24/88	-	SQG	-	-	-
81247729	Facil.: 1501 MONTGOMERY ST SAVANNAH GA 31401 CHATHAM CO.								
	Mail: 1501 MONTGOMERY ST SAVANNAH GA 31401								
LACEY E D MILLS INC		KENNETH BURTON	(404)337-5331	01/15/81	-	SQG	-	-	-
GAD063777734	Facil.: GA 53 & HWY 411 FAIRMOUNT GA 30139 GORDON CO.								
BB	Mail: P O BOX 69 FAIRMOUNT GA 30139								
LAGRANGE TOYOTA INC		JAMES STOGNER	(404)882-2963	05/26/87	-	SQG	-	-	-
GAD981234255	Facil.: 1031 HOGANSVILLE RD LAGRANGE GA 30240 TROUP CO.								
JO	Mail: 1031 HOGANSVILLE RD LAGRANGE GA 30240								
LAGRANGE WWTP		STUART WHITE	(404)884-7233	11/19/80	-	-N-	-	-	-
GAD991275165	Facil.: ORCHARD HILL RD LAGRANGE GA 30240 TROUP CO.								
	Mail: P O BOX 430 LAGRANGE GA 30241								
LAKE CITY TRANSMISSION SERVICES		JAMES CISSOM	(404)361-8931	07/01/91	-	SQG	-	-	-
GAD984296343	Facil.: 5354 JONESBORO ROAD MORROW GA 30260 CLAYTON CO.								
	Mail: 5354 JONESBORO ROAD MORROW GA 30260								

Ref. 8

Ref. 9

Dohertz

Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States

By HANSFORD T. SHACKLETTE *and* JOSEPHINE G. BOERNGEN

U.S. GEOLOGICAL SURVEY PROFESSIONAL PAPER 1270

An account of the concentrations of 50 chemical elements in samples of soils and other regoliths

UNITED STATES GOVERNMENT PRINTING OFFICE, WASHINGTON : 1984

UNITED STATES DEPARTMENT OF THE INTERIOR

WILLIAM P. CLARK, *Secretary*

GEOLOGICAL SURVEY

Dallas L. Peck, *Director*

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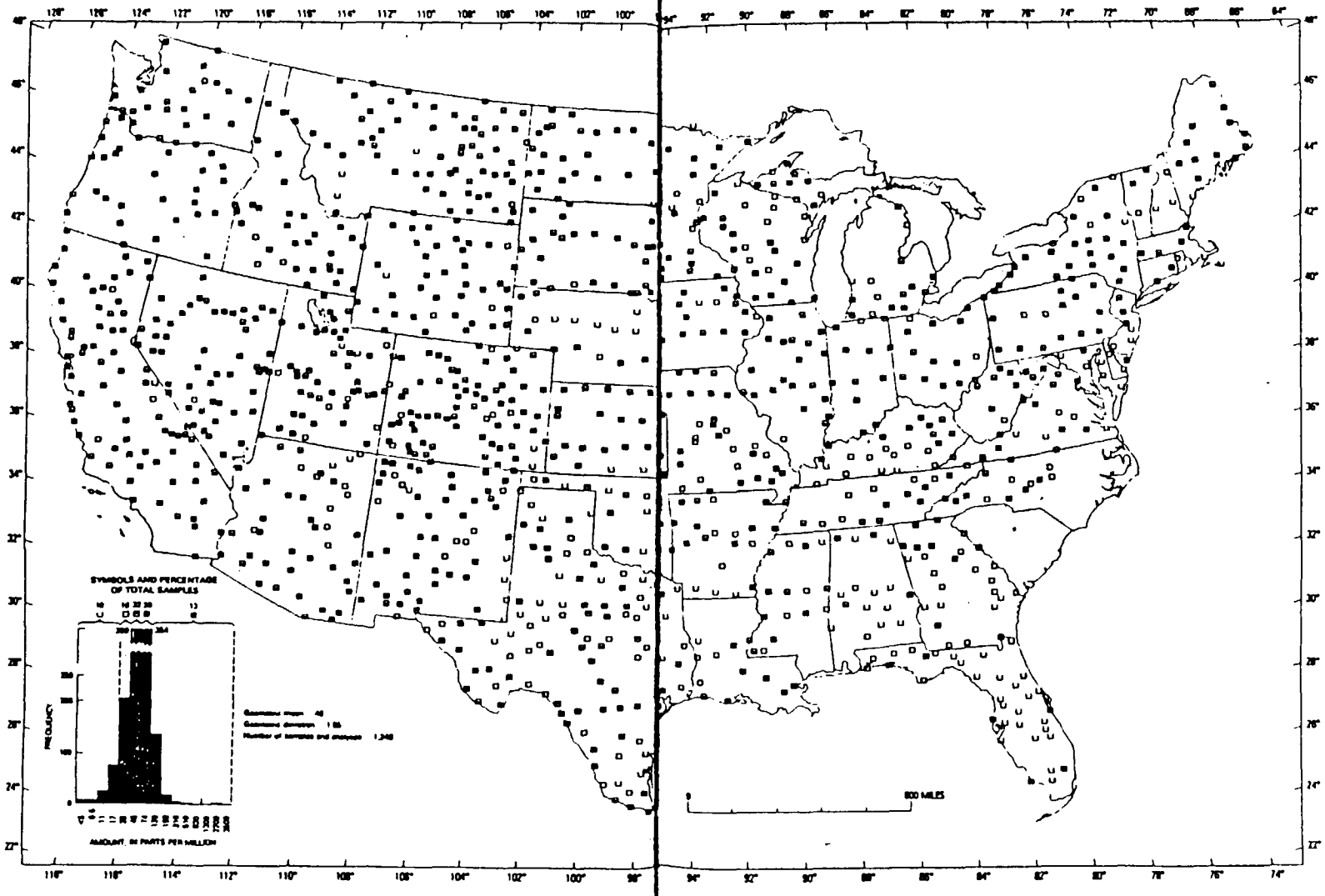

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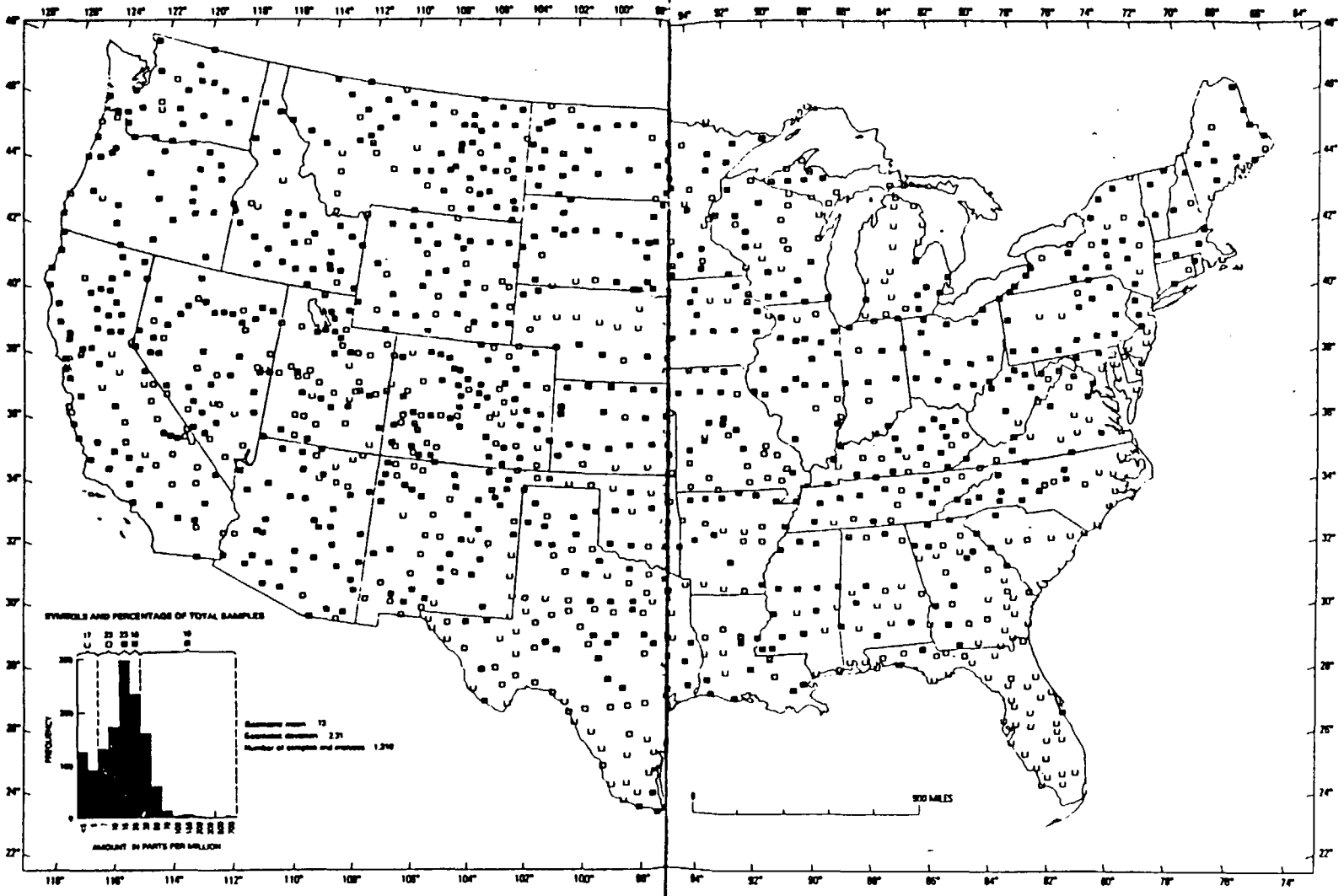

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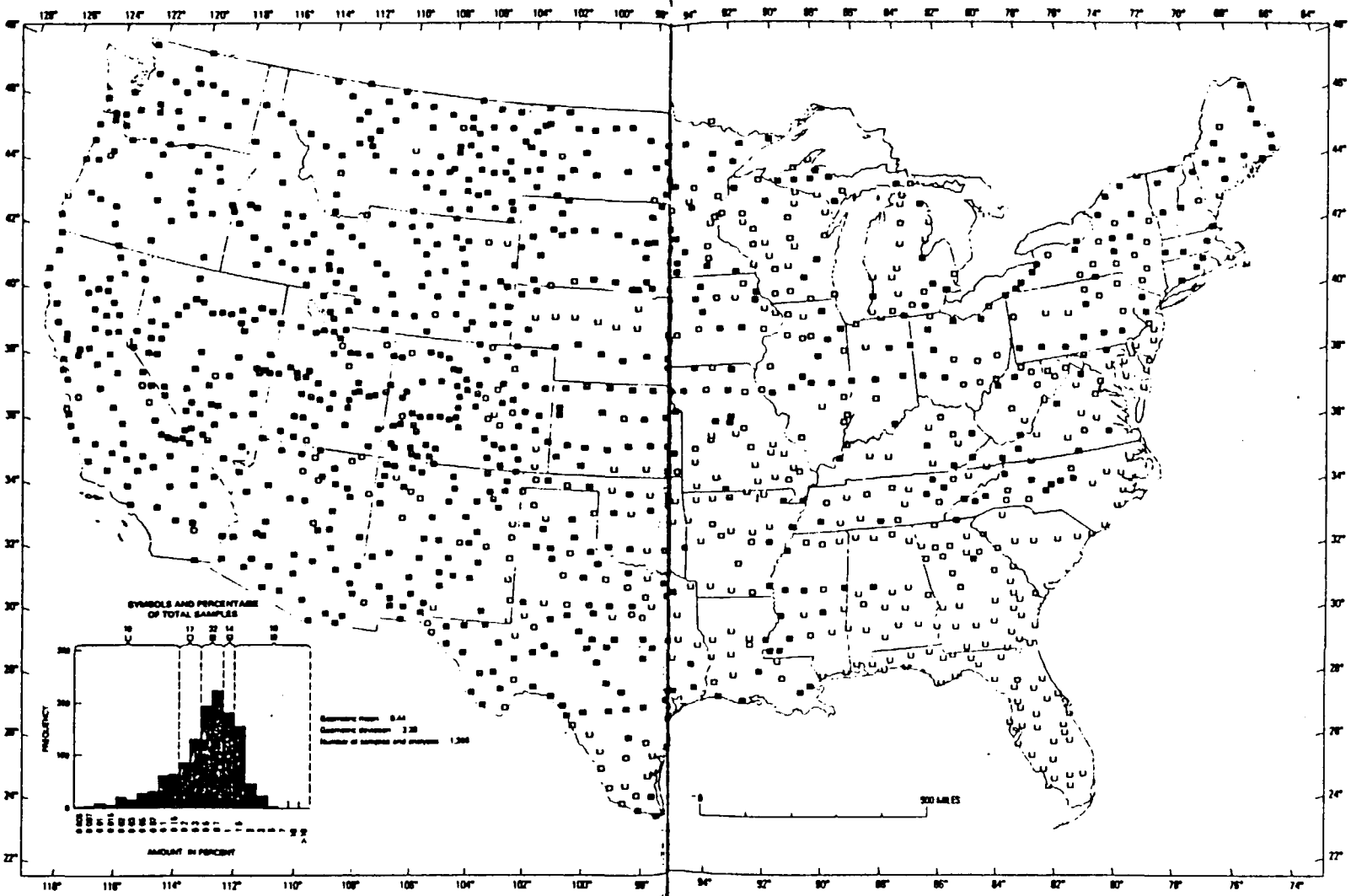

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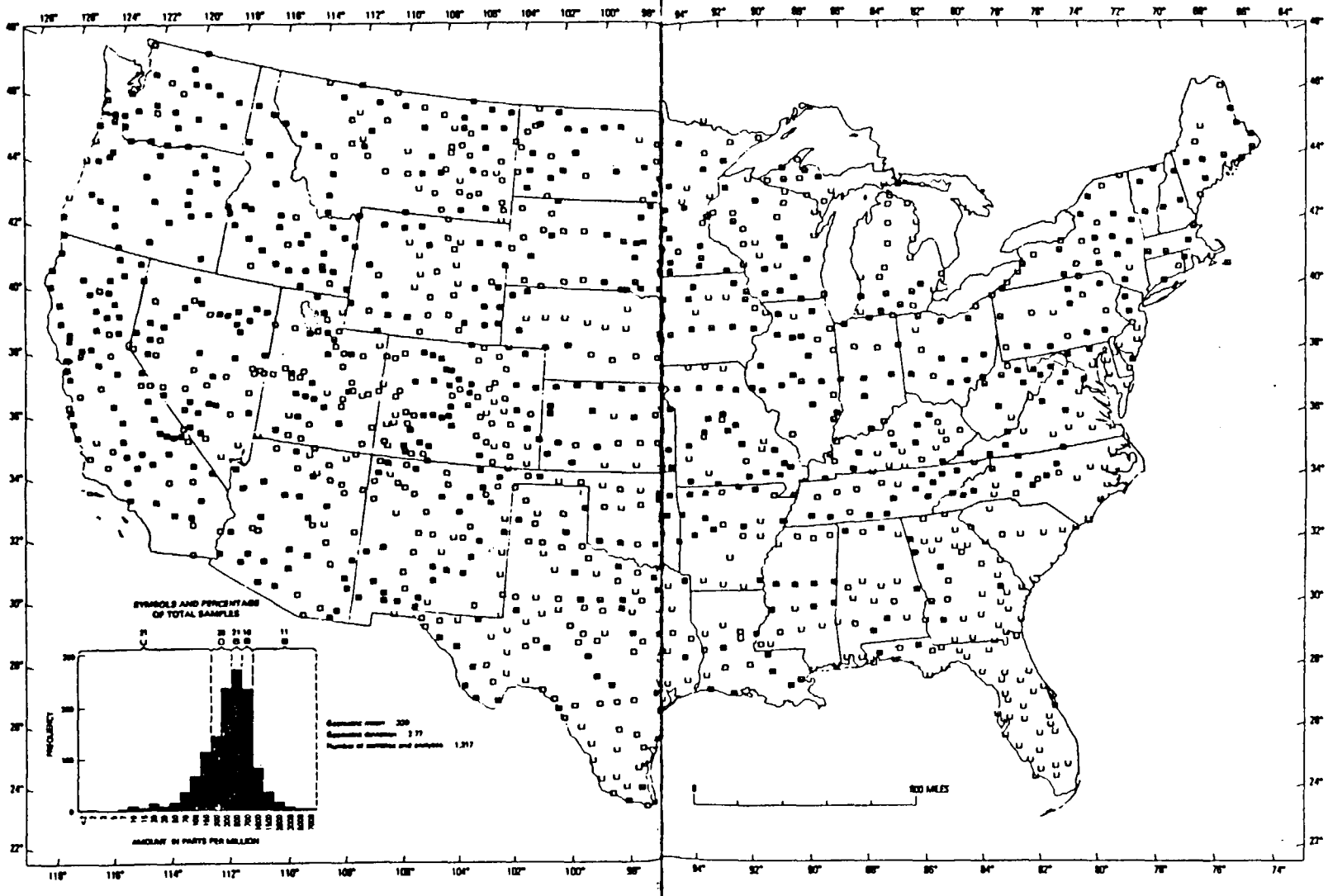

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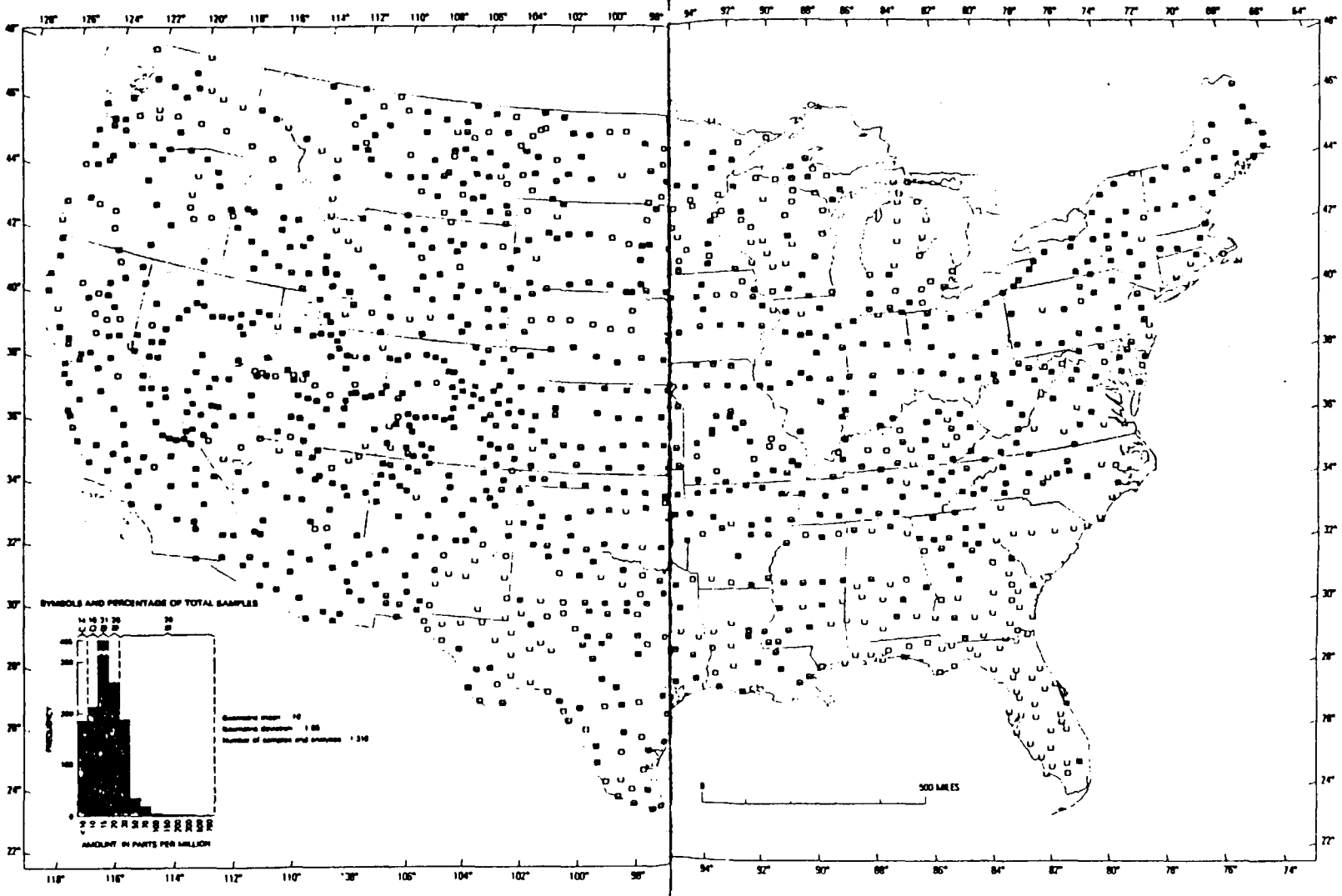

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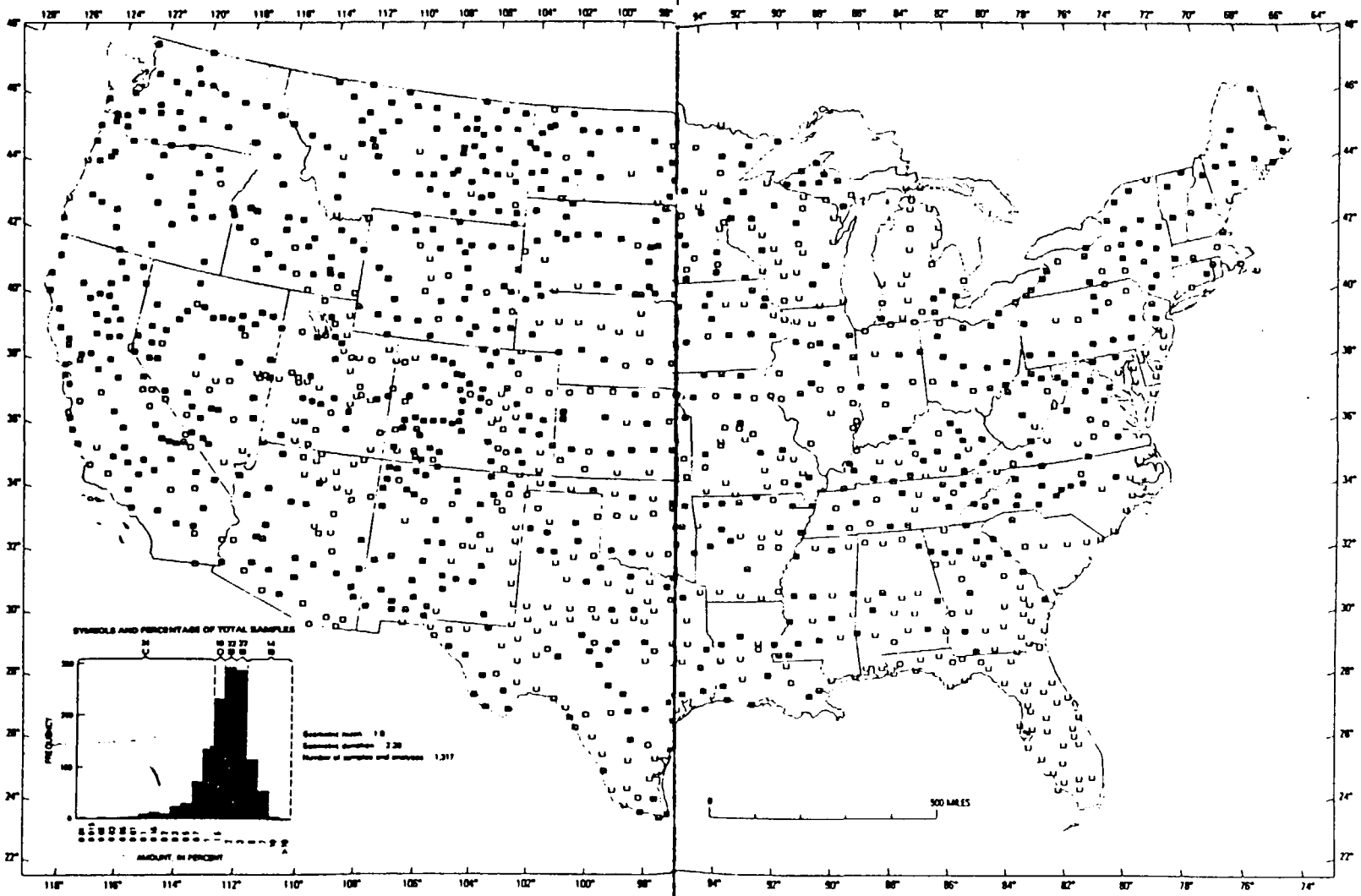

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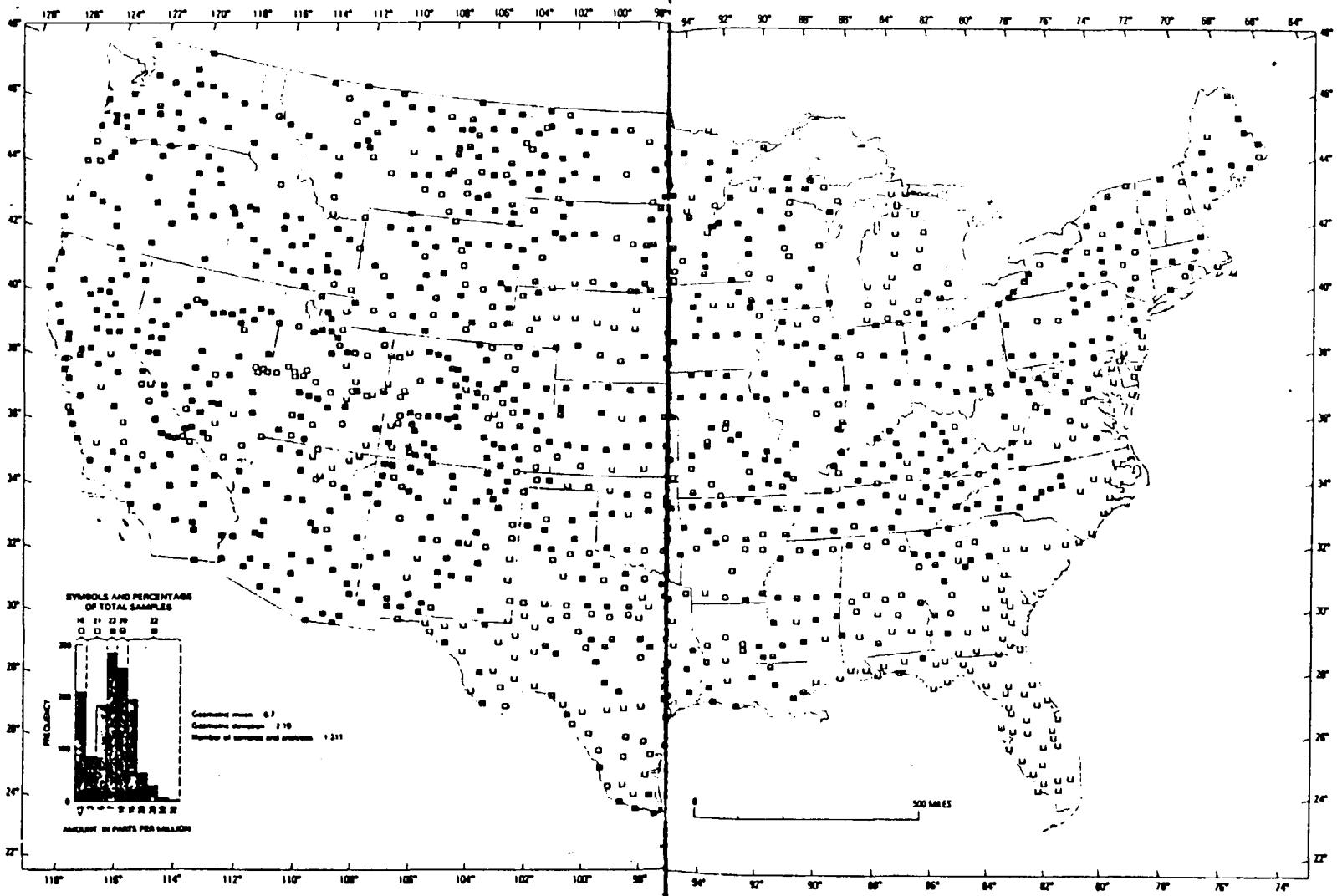

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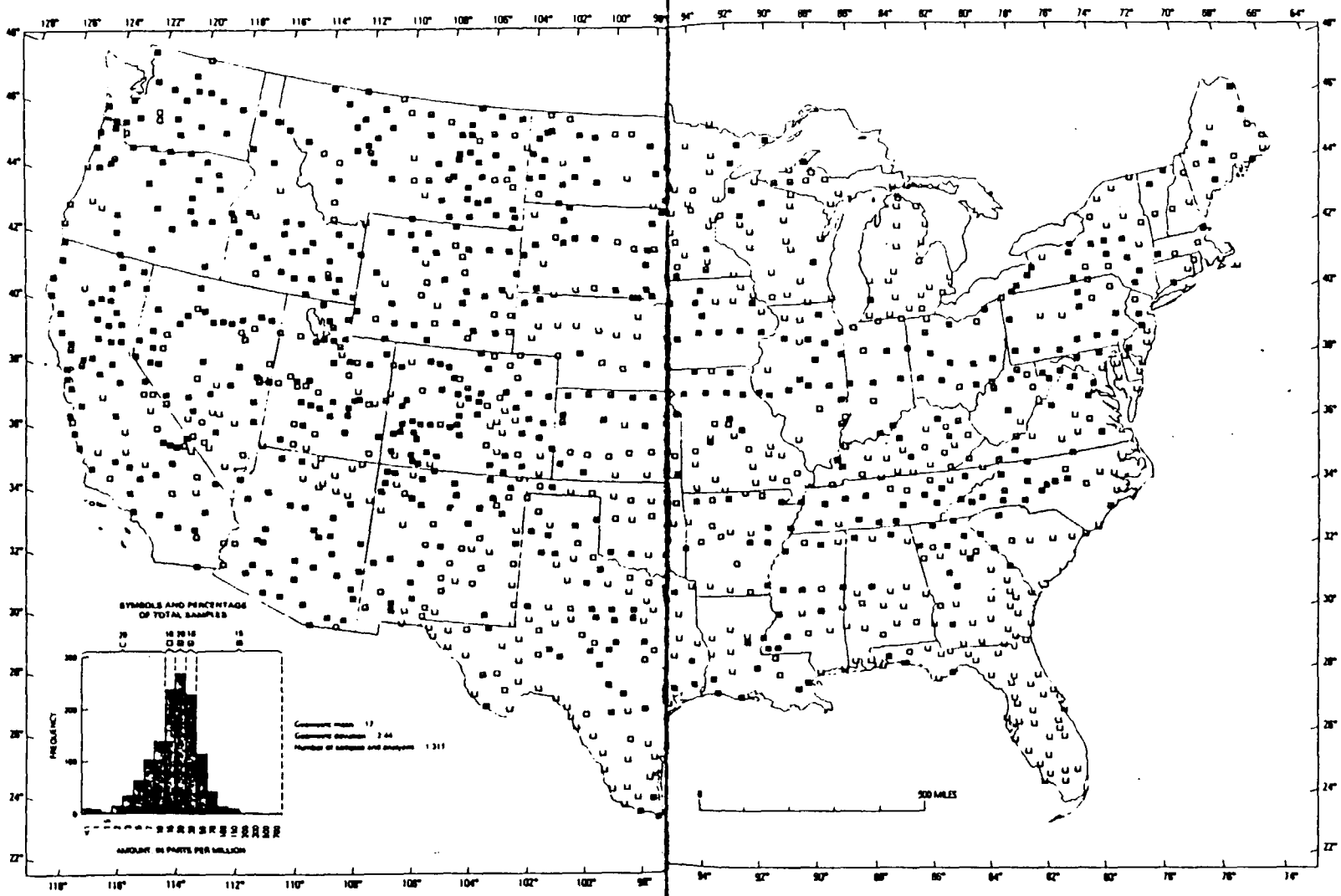

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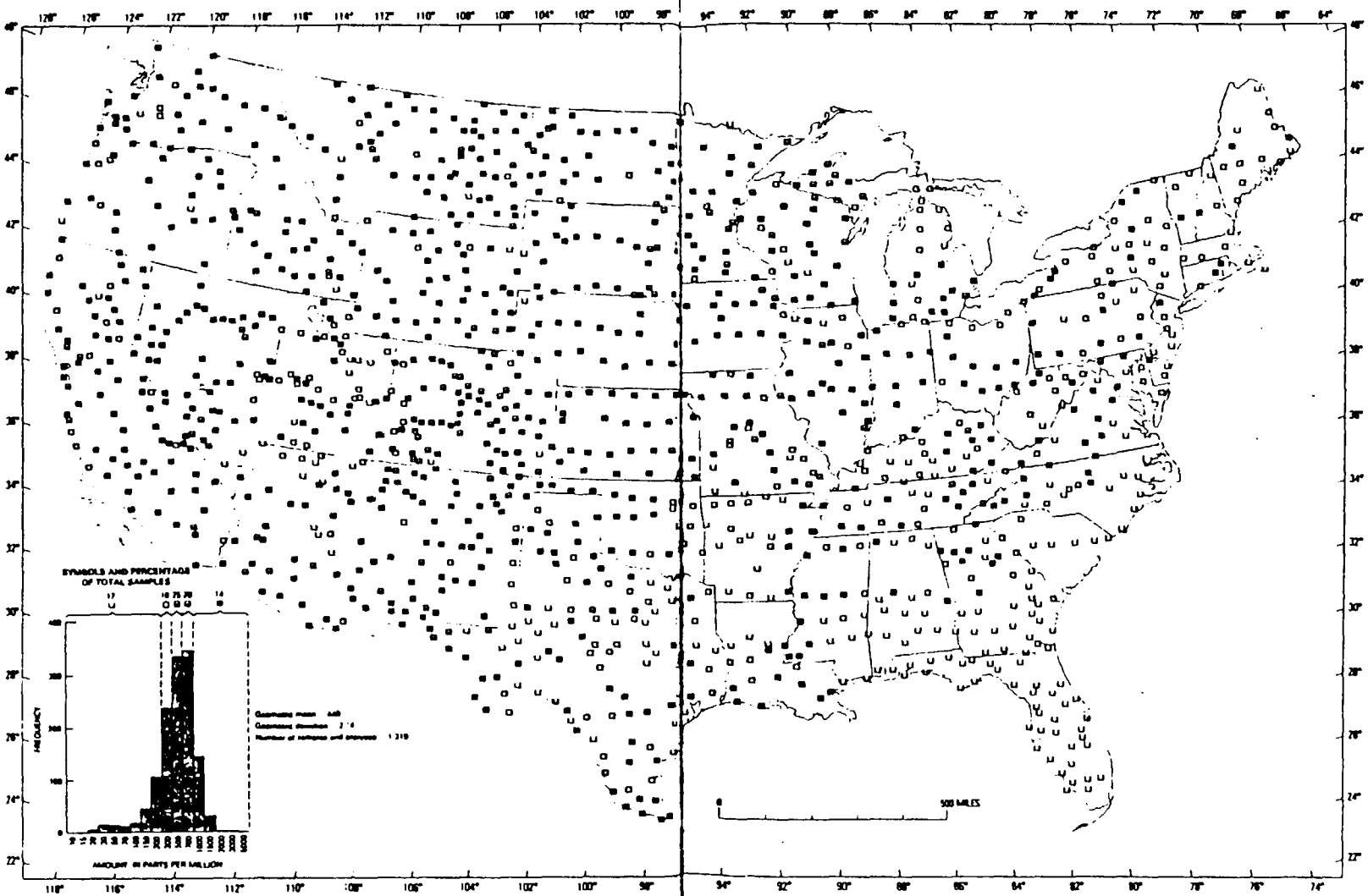

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GEOLOGY AND GROUND-WATER RESOURCES OF WALKER COUNTY, GEORGIA

By

Charles W. Cressler
U.S. Geological Survey

Prepared in cooperation with the U.S. Geological Survey

DEPARTMENT OF NATURAL RESOURCES
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ENVIRONMENTAL PROTECTION DIVISION
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GEORGIA GEOLOGIC SURVEY
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Atlanta

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GEOLOGY AND GROUND-WATER RESOURCES OF WALKER COUNTY, GEORGIA

by Charles W. Cressler

ABSTRACT

ker County is in the Cumberland Plateau and lley and Ridge physiographic provinces of a. It is underlain by rocks ranging in age arly Cambrian (Rome Formation) to Pennian (Rockcastle Sandstone). All the geologic ions except the Chattanooga Shale yield ent water to wells for domestic and farm ost wells in the county are between 50 and et deep, but a few are deeper than 300 feet.

largest sustained pumpage from a well was m (gallons per minute), but wells in the Group, the Conasauga Formation, the Chicka Limestone and the Mississippian rocks ly would supply more. Some artesian wells Chickamauga Limestone and the Floyd flow.

dness of ground water from wells sampled ghout the county ranges from 17 to 400 ppm per million). The mineral constituents vary erably with each formation, but the iron t generally is less than 0.02 ppm.

ings in the Knox Group and the Mississipocks discharged more than 21 mgd (million s per day) during 1960. Of this amount, at 15 mgd was unused. Much of this spring flow be used as a source of industrial supply in r County.

dness of the spring water ranges from 86 ppm. The iron content generally is less than pm.

INTRODUCTION

lker County includes an area of 448 square in northwestern Georgia (fig. 1). It is led on the east and south by Catoosa, Whit-Gordon, and Chattooga Counties, Ga., on the by DeKalb County, Ala. and Dade County, nd on the north by Hamilton County, Tenn. yette, the county seat, is on U.S. Highway 27 25 miles south of Chattanooga, Tenn.

lker County has a mild climate with an ge January temperature of 41°F and an ge July temperature of 78°F. The frost-free n averages about 190 days. The average y precipitation is about 55 inches and ins a small amount of snow. Precipitation in ounty is heaviest in the winter and midsum-Autumn is the driest season of the year.

e county is in the drainage basins of the essee and the Coosa Rivers. Areas north of yette, including McLemore Cove, drain to the Tennessee. The remainder of the county drains southward into the Coosa River.

The principal industries of Walker County are textile and furniture manufacturing, dairying and milk processing, poultry and egg raising, and farming. Agriculture is mainly part-time and residential farming. A major part of the agricultural income is derived from poultry and poultry products. The soils of the county are of medium productivity. The valleys are used for growing cotton, corn, small grains, and pasture crops. The lower ridges are used for truck, hog, and pasture crops, and the rougher terrane is used for growing timber.

A good network of all-weather roads make all sections of Walker County easily accessible. The main roads serving the county are U.S. Highway 27 that connects LaFayette, the largest city, with Chattanooga, Tenn. to the north and Rome, Ga. to the south. Georgia Highway 151 links LaFayette with U.S. Highway 41 and Atlanta. The Central of Georgia Railroad and the Tennessee, Alabama, and Georgia Railroad serve the county.

The writer wishes to express his sincere appreciation to the well and spring owners of Walker County for their cooperation in supplying data on their water supplies.

Dr. A. T. Allen and Mr. R. J. Martin, of Emory University Geology Department, were very helpful on problems concerning geology.

The U.S. Park Service permitted the installation of a recording gage on a well in the Chickamauga and Chattanooga National Military Park.

The writer was assisted by Harry E. Blanchard, hydrologic engineering technician, U.S. Geological Survey, in making the well and spring inventory.

This investigation was made under the supervision of J. T. Callahan, former district geologist, Ground Water Branch, U.S. Geological Survey.

PURPOSE AND SCOPE

This investigation was made by the U.S. Geological Survey in cooperation with the Georgia Department of Mines, Mining, and Geology to evaluate the ground-water resources of Walker County. The investigation is part of a statewide program of reconnaissance designed to appraise Georgia's ground-water resources, the amount of ground water being used, and the quantity, quality, and availability of ground water in each county. Walker County is one of ten counties that will be studied in the Paleozoic rock area of

Table 1. *Geologic formations and their water-bearing properties, Walker County, Ga.*

System	*Group or formation*	*Thickness (feet)*	*Lithology*	*Water-bearing characteristics*
Pennsylvanian	Pennsylvanian rocks, undifferentiated	1,200±	Shale and massively bedded conglomeratic sandstone at base; coarse-grained sandstone and sandstone interbedded with shale; commercial deposits of coal.	Wells less than 100 feet deep; adequate for domestic and farm needs; iron content high in many areas.
Mississippian	Mississippian rocks, undifferentiated	1,500±	Western facies: Bedded chert at base; thick-bedded cherty and noncherty, fine- to coarse-grained limestone; thin sandstone and shale beds; shale and little sandstone interbedded at top.	Chert and limestone; good aquifer; may yield several hundred gpm from solution openings and joints; wells less than 200 feet deep; several springs in limestone; mostly small.
		1,500±	Eastern facies: Gray to black fossiliferous shale; many places includes limestone and sandstone members similar to those of western facies; bedded chert at base.	Wells less than 100 feet deep; some yield more than 30 gpm, but most less than 10 gpm; best yields from limestone members, poorest from shale.
Devonian and Mississippian	Chattanooga Shale	15	Black hard shale, high cleaved; top 1 to 3 feet is greenish phosphatic clay.	Not an aquifer; locally may be a confining layer; contains iron and hydrogen sulfide and should be cased off from well.
Silurian	Red Mountain Formation	1,000±	Sandstone, shale and limestone; more sandstone on east side of county.	Wells less than 100 feet deep; supplies domestic and farm needs; water high in iron in some areas; yields as much as 30 gpm from sandstone.
Ordovician	Chickamauga Limestone	1,400-2,300	Thin and thick-bedded limestone, clayey limestone, and siltstone in western outcrops; siltstone and claystone in eastern outcrops.	Good aquifer; wells generally less than 100 feet deep; yields 10 to 20 gpm common; higher yields probable; some hydrogen sulfide; yields poor in siltstone areas.
	Knox Group	3,550±	Thin and thick-bedded dolomite; limestone and dolomite at top; weathers deeply and has thick chert and clay mantle.	Very good aquifer; wells and springs of good yield; wells between 150 and 200 feet deep and supply 20 to 60 gpm; larger yields from solution openings and joints; springs discharge 25 to 40 mgd, depending on precipitation.
Cambrian	Conasauga Formation	2,000±	Limestone, limy siltstone, claystone, shale.	Good aquifer, wells 50 to 150 feet deep; yields adequate for domestic and farm needs, and many are 20 to 60 gpm; much larger yields from solution openings in limestone part of formation.
	Rome Formation	2,000±	Sandstone, siltstone, claystone; highly cleaved and folded.	Poor aquifer in Walker County; may supply farm or home, but many wells unreliable; iron is problem in places.

in Walker County probably are water-table wells, but many are nonflowing artesian wells.

The quantity of ground water stored in the zone of saturation depends on the amount of open space in the rocks. Openings in the rocks of Walker County consist mainly of joints and fractures. Joints and fractures in shale and sandstone are narrow and have small storage capacity. Joints in limestone, on the other hand, commonly are enlarged by solution and have large capacity. For this reason, limestone is the most important ground-water reservoir in Walker County.

The degree to which rock openings are interconnected affects the productivity of an aquifer. Joints in limestone and dolomite are highly interconnected; a well penetrating a single joint of small storage capacity may have a large yield, because the joint is part of an extensive system which supplies water to the well.

Ground water moves in response to gravity just as surface water does, though more slowly, because it loses energy by friction as it passes through openings in rocks.

CHEMICAL QUALITY

Ground water dissolves material from the soil and rocks with which it comes in contact. The kind and amount of material dissolved in water is important because it largely determines how the water can be used. The U.S. Public Health Service (1946) recommends that water for domestic and municipal supplies contain no more than 250 ppm (parts per million) chloride, 250 ppm sulfate, 125 ppm magnesium, 1.5 ppm fluoride, 0.3 ppm iron and manganese together, and 500 ppm dissolved solids.

Water containing too much iron tends to stain laundry and enameled ware. Iron in concentrations greater than about 0.5 to 1.0 ppm can be tasted. Livestock are sensitive to the taste of iron and may not drink water with a high iron content.

Hardness of water is caused almost entirely by calcium and magnesium, though other constituents, such as iron, aluminum, and free acid also cause hardness. Hard water is objectionable in the home because of its soap-consuming capacity. For satisfactory operation commercial laundries require water that is practically of zero hardness. The processing water for textile mills is required to be very soft. Water with a calcium, magnesium hardness of 1 to 60 ppm is considered soft; 61 to 120 ppm, moderately hard; 121 to 200 ppm, hard; and 201 ppm and above, hard to very hard (Lamar, 1940, p. 25).

Water for industrial use can have a wide range of chemical quality; almost every industrial application has different standards. Many industries require water with an iron content less than 0.2 ppm. Hardness as calcium and magnesium generally should be less than 100 ppm, though it may be as high as 250 ppm for carbonated beverages. Textiles and general dyeing require a dissolved solids content of 200 ppm or less (Moore, 1940, p. 271).

UTILIZATION

During 1960 the amount of ground water used in Walker County was about 6.8 mgd (million gallons per day). This included about 1.7 mgd distributed by Chickamauga and LaFayette, which is mainly spring water. Industry used about 4 mgd directly from springs. The remainder, or 1.1 mgd, is derived from wells throughout the county.

WATER-LEVEL FLUCTUATIONS

A continuous water-level record was obtained for well 237. The well, in the lower part of the Chickamauga Limestone, is 72 feet deep. It is similar in depth and construction to many wells in the county.

The record shows that the water table rises very rapidly after a heavy rain (fig. 3). This rise may be less than an inch or several feet, depending on the duration, intensity, and amount of rain. Shortly after the rain stops, the water table begins a slow decline, which continues at a progressively slower rate until it is reversed by another rain. The hydraulic gradient decreases as the water table declines, and ground water travels more slowly to discharge points. During dry periods, the water table recedes below the channels of most small streams, causing them to go dry.

Water-level records obtained during the investigation show that the water table is highest during the wet months of January, February, and March and lowest during July, August, and September, when precipitation is very light and water loss through evaporation and transpiration is greatest.

Long-term records of water levels are not available for Walker County; therefore, it is impossible to determine whether the water table has declined, as many residents report. However, judging by the small number of old dug wells that have gone dry permanently or that have required deepening, any decline has been slight.

WATER-BEARING CHARACTER OF THE GEOLOGIC FORMATIONS

A geologic formation that yields water in useful quantities is an aquifer. All the geologic formations exposed in Walker County are aquifers except the Chattanooga Shale. The formations are discussed separately beginning with the oldest.

Rome Formation

The outcrop area of the Rome Formation in Walker County is sparsely populated, and the formation is practically unused as an aquifer. In Catoosa County to the north, however, the Rome yields enough water to wells for most domestic and farm needs, and, on the flanks of sandstone ridges, yields of 20 gpm (gallons per minute) are reported. Most wells in the Rome in Catoosa County are less than 100 feet deep, but some are deeper than 200 feet.

In areas where sandstone is lacking, wells tend to go dry after several minutes of continuous pumping, but they usually recover overnight.

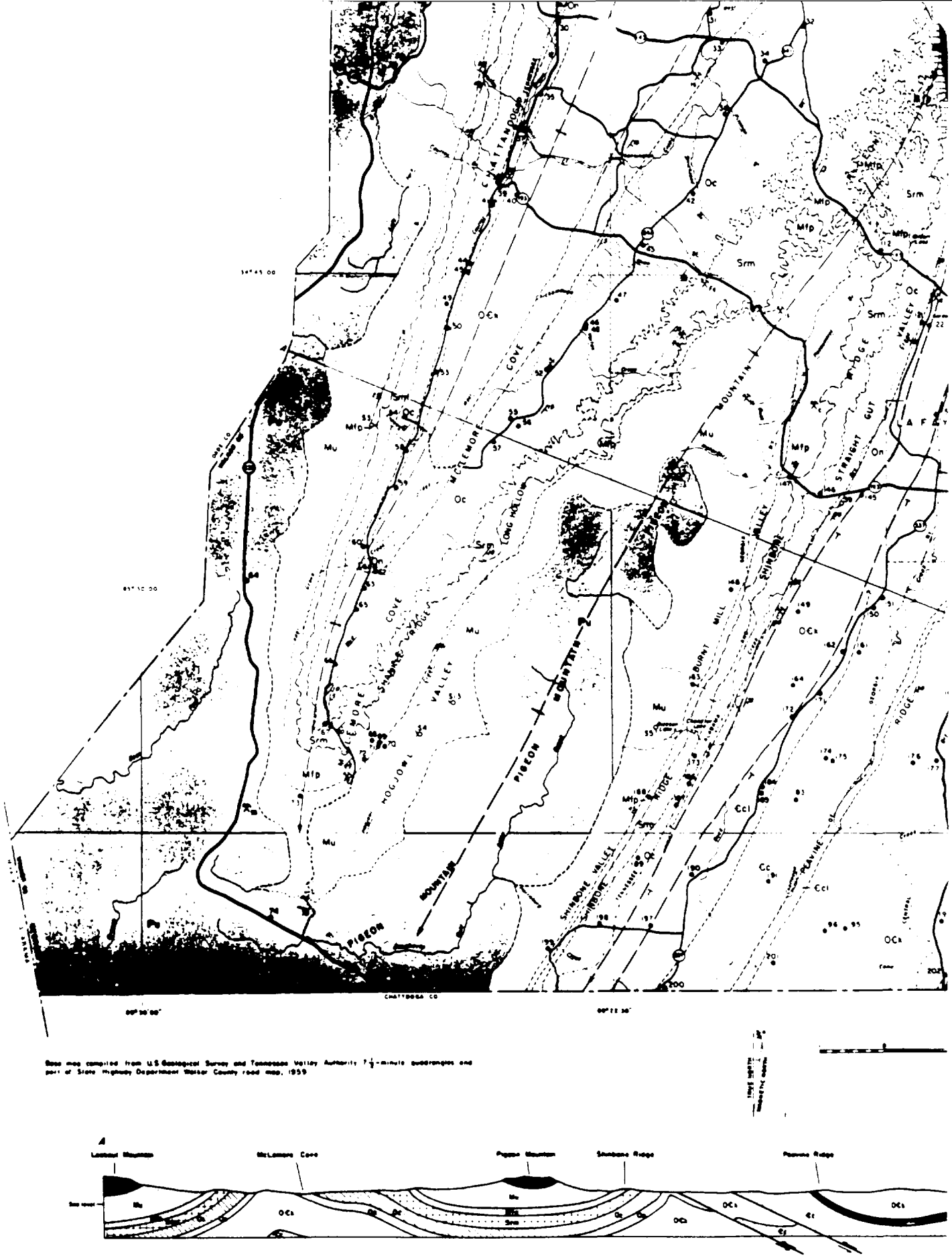
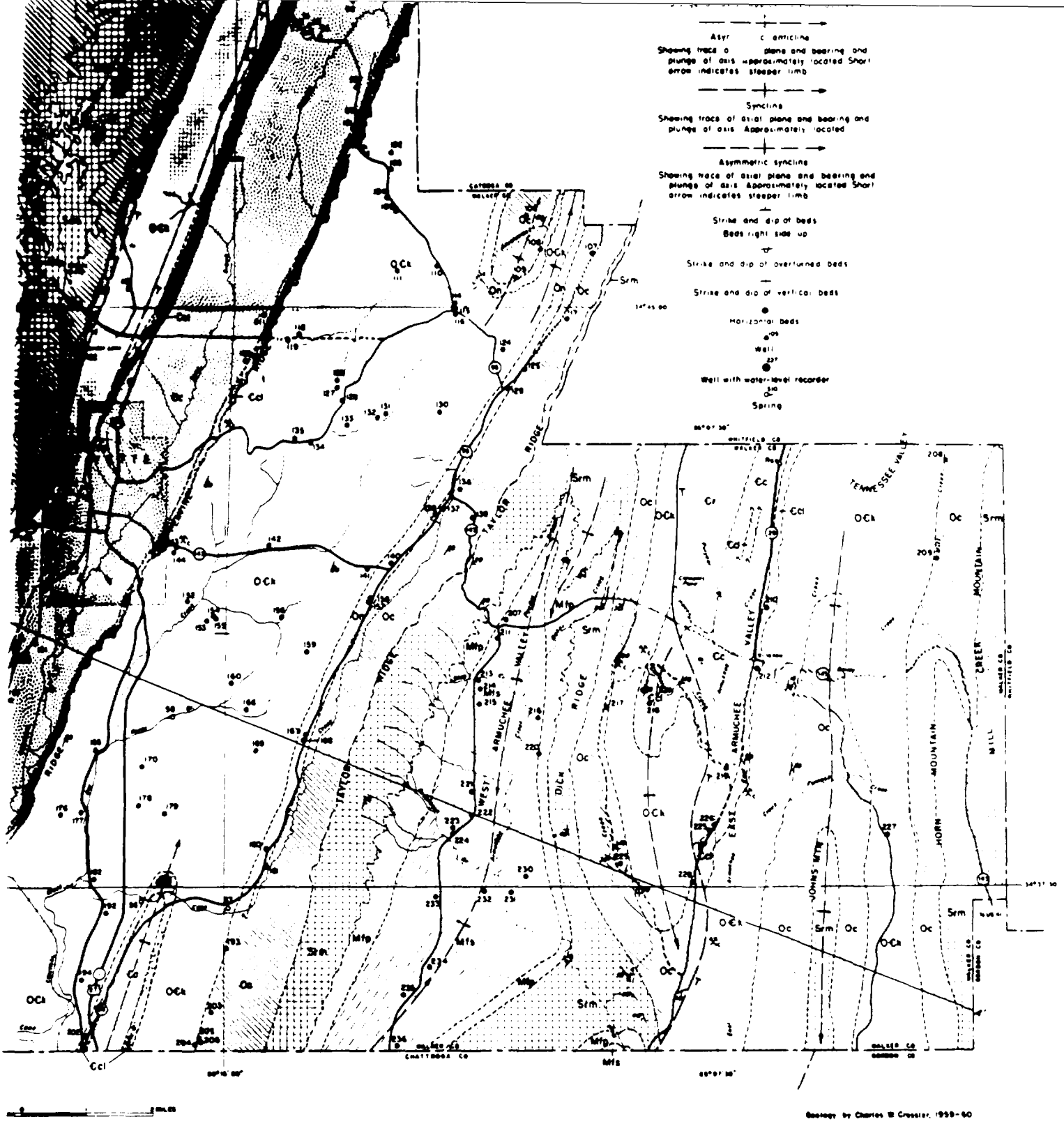
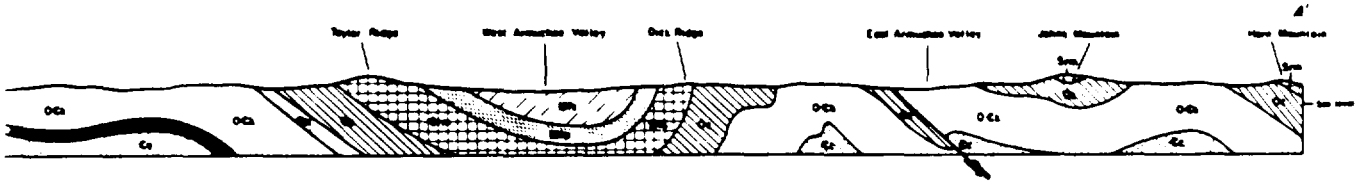


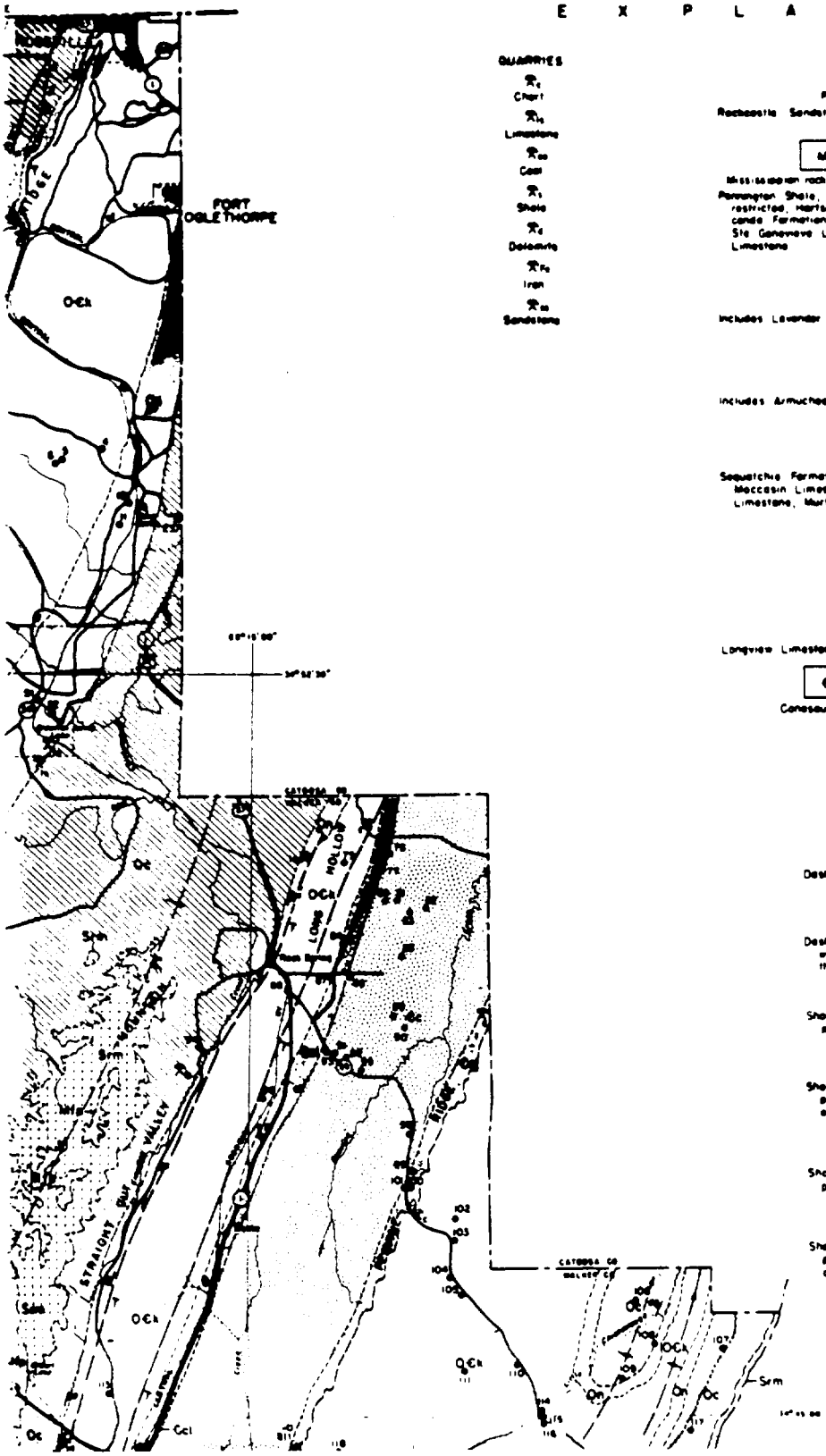
Figure 2.—Geology and well and spring





ɔring locations, Walker County, Georgia.

CHICKAMAUGA
HILLS
THE
COVE
VALLEY
MOUNTAIN
CHATTANOOGA
Ocb
Sm
Mfp



E X P L A N A T I O N

QUARRIES

- Chert
- Limestone
- Coal
- Shale
- Dolomite
- Iron
- Sandstone

PENNSYLVANIAN

Pennsylvanian rocks undifferentiated

Rockcastle Sandstone, Vanderver Shale, Bonair Sandstone, Whitwell Shale, Lookout Sandstone

CARBONIFEROUS

Mu — Mississippian rocks undifferentiated

Pennington Shale, Bangor Limestone, restricted, Hartselle Sandstone, Golconda Formation, Gasper Limestone, Ste Genevieve Limestone, St Louis Limestone

Mfs — Floyd Shale

Limestone and sandstone units developed locally

Mfp — Fort Payne Chert

Includes Lavender Shale Member locally; Chattanooga Shale of Devonian age at base

SILURIAN

Srm — Red Mountain Formation

Includes Armuchee Chert of Devonian age at top where present

ORDOVICIAN

Ob — Chickamauga Limestone

Sequatchie Formation, Maysville Formation; Trenton Limestone, Lowville-Moccasin Limestone, Lebanon Limestone, Lenoir Limestone, Mosheim Limestone, Murfreesboro Limestone

On — Newala Limestone

Includes much dolomite in lower part

CAMBRIAN

O€k — Knox Group

Longview Limestone, Chepultepec Dolomite, Copper Ridge Dolomite

Cc — Conasauga Shale

Cl — Conasauga Limestone

Limestone in contact with Knox Group probably equivalent to Maynardville Limestone of Tennessee

Cr — Rome Formation

Contact

Dashed where approximately located, short dashed where inferred

Fault

Dashed where approximately located, queried where doubtful U, upthrown side, D, downthrown side T, upper plate

Anticline

Showing trace of axial plane and bearing and plunge of axis Approximately located

Asymmetric anticline

Showing trace of axial plane and bearing and plunge of axis Approximately located Short arrow indicates steeper limb

Syncline

Showing trace of axial plane and bearing and plunge of axis Approximately located

Asymmetric syncline

Showing trace of axial plane and bearing and plunge of axis Approximately located Short arrow indicates steeper limb

Strike and dip of beds

Beds right side up

Strike and dip of overturned beds

Strike and dip of vertical beds

Horizontal beds

Ref. 11

Georgia
State Division of Conservation

DEPARTMENT OF MINES, MINING AND GEOLOGY

Garland Peyton, Director

THE GEOLOGICAL SURVEY
Bulletin Number 54

GEOLOGY AND MINERAL RESOURCES OF THE PALEOZOIC AREA IN NORTHWEST GEORGIA

By
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Geologist,
TVA

Published in Cooperation with the Tennessee Valley Authority
ATLANTA
1948

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SOIL SURVEY LEGEND
CATOOSA, DADE AND WALKER COUNTIES, GEORGIA
(Catoosa County GA-S&WCD-27 and a part of Coosa River GA-S&WCD-1)

Ref. 12

September 17, 1970

Symbol	Soil Mapping Unit	Class.	Woo Sui Gro
29B1 (29B2)	Albertville fine sandy loam, 2 to 6 percent slopes	IIe-6	3o7
29C2 (29C1)	Albertville fine sandy loam, 6 to 10 percent slopes	IIIe-4	3o7
29D2 (29D1)	Albertville fine sandy loam, 10 to 15 percent slopes	IVe-5	3o7
29E1 (29E2)	Albertville fine sandy loam, 15 to 25 percent slopes	VIe-3	3o7
7B2	Allen fine sandy loam, 2 to 6 percent slopes	IIe-3	3o7
7C2	Allen fine sandy loam, 6 to 10 percent slopes	IIIe-3	3o7
7D1 (7D2)	Allen fine sandy loam, 10 to 15 percent slopes	IVe-1	3o7
7E1	Allen fine sandy loam, 15 to 25 percent slopes	VIe-1	3r7
27	Allen fine sandy loam - Rock outcrop complex	VIe-1	3r7
8C3	Allen clay loam, 6 to 10 percent slopes, eroded	IVe-1	3r8
8E3	Allen clay loam, 10 to 25 percent slopes, eroded	VIIe-1	3r8
36B2	Aragon fine sandy loam, 2 to 6 percent slopes	IIe-6	3o7
36C2	Aragon fine sandy loam, 6 to 10 percent slopes	IIIe-4	3o7
36D2	Aragon fine sandy loam, 10 to 15 percent slopes	IVe-5	3o7
36E1	Aragon fine sandy loam, 15 to 25 percent slopes	VIe-3	3r7
42E1 (42D1)	Bodine stony silt loam, 10 to 25 percent slopes	VIs-1	3f8
42F1	Bodine stony silt loam, 25 to 60 percent slopes	VIIs-1	4f8
79A1 (79A1, 164A1)	Cartecay silt loam	IIIw-1	2w8
99A1 (93A1)	Cedarbluff loam	IIIw-2	2w8
48B1 (48A1, 48B2)	Conasauga silt loam, 0 to 6 percent slopes	IIIe-4	3c2
48C1 (48C2)	Conasauga silt loam, 6 to 10 percent slopes	VIe-3	3c2
48C	Conasauga-Urban land complex, 2 to 10 percent slopes	VIe-3	3c2
97B2	Cunningham silt loam, 2 to 6 percent slopes	IIe-1	3o1
97C2	Cunningham silt loam, 6 to 10 percent slopes	IIIe-4	3o1
97D1	Cunningham silt loam, 10 to 15 percent slopes	IVe-5	3o1
97E1	Cunningham silt loam, 15 to 25 percent slopes	VIe-3	3r1
153B3	Cunningham silty clay loam, 2 to 6 percent slopes, eroded	IIIe-4	3c2
153D3 (153C3)	Cunningham silty clay loam, 6 to 15 percent slopes, eroded	VIe-3	3c2
52B2	Decatur silt loam, 2 to 6 percent slopes	IIe-1	3o7
52C2	Decatur silt loam, 6 to 10 percent slopes	IIIe-1	3o7
52D2	Decatur silt loam, 10 to 15 percent slopes	IVe-1	3o7
52E2	Decatur silt loam, 15 to 25 percent slopes	VIe-1	3r7
53C3 (53B3)	Decatur silty clay loam, 6 to 10 percent slopes, eroded	IVe-1	4c3e
53D3 (53E3)	Decatur silty clay loam, 10 to 15 percent slopes, eroded	VIe-1	4c3e

8[illegible]C2	Linker fine sandy loam, 6 to 10 percent slopes	IIIe-5	4o1
8[illegible]D2	Linker fine sandy loam, 10 to 15 percent slopes	IVe-[illegible]	4o1
44B1 (44B2)	Lyerly silt loam, 2 to 6 percent slopes	IIIs-2	4c2
44C2 (44C1, 44D2)	Lyerly silt loam, 6 to 10 percent slopes	IVs-1	4c2
244	Lyerly-Urban land complex	IVs-1	4c2
245 (45C2, 45D1)	Lyerly silt loam - Rock outcrop complex	VIIIs-1	4c2
165	Mine pits	Unclassified	
84C1 (84C2, 84D2)	Montevallo shaly silt loam, 6 to 15 percent slopes	VIe-4	4d2
84F1 (84E1, 31F1)	Montevallo shaly silt loam, 15 to 45 percent slopes	VIIe-3	5d3
76B1	Nella-Holston association, sloping	IVe-2	3x8
76F1	Nella-Holston association, steep	VIIe-3	3x8
94A1	Roanoke loam	Vw-1	2w9
123A1	Rome silt loam, 0 to 2 percent slopes	I-2	3o7
123B1 (123C2)	Rome silt loam, 2 to 6 percent slopes	IIe-3	3o7
96A1	Sequatchie fine sandy loam, 0 to 2 percent slopes	I-2	2o7
96B1 (96B2)	Sequatchie fine sandy loam, 2 to 6 percent slopes	IIe-1	2o7
40B1 (40B2)	Minvale-Shack cherty silt loam complex, 2 to 6 percent slopes	IIe-2	3o7
40C1 (40C2)	Minvale-Shack cherty silt loam complex, 6 to 10 percent slopes	IIIe-[illegible]	[illegible]o7
40D1 (40D2)	Minvale-Shack cherty silt loam complex, 10 to 15 percent slopes	IVe-[illegible]	[illegible]o7
40E1 (40E2)	Minvale-Shack cherty silt loam complex, 15 to 25 percent slopes	VIe-1	[illegible]o7
122A1	Staser silt loam	II[illegible]-1	2o7
90A1	Subligna gravelly loam, 1 to 6 percent slopes	IIIs-1	3o7
102B2	Talbott silt loam, 2 to 6 percent slopes	IIIe-6	3c2
102C2	Talbott silt loam, 6 to 10 percent slopes	IVe-4	3c2
102D2	Talbott silt loam, 10 to 15 percent slopes	VIe-5	3c2
103C3 (120B3)	Talbott silty clay loam, 6 to 10 percent slopes, eroded	IVe-5	4c3e
103D3 (120C3)	Talbott silty clay loam, 10 to 25 percent slopes, eroded	VIe-3	4c3e
171B1 (29B1)	Tidings gravelly loam, 2 to 6 percent slopes	IIe-4	3o7
171C1 (30C1)	Tidings gravelly loam, 6 to 10 percent slopes	IIIe-5	3o7
171D1 (30D1)	Tidings gravelly loam, 10 to 25 percent slopes	IVe-3	3o7
171F1 (29F1, 30F1)	Tidings gravelly loam, 25 to 45 percent slopes	VIIe-3	3r7
91A1 (75A1)	Toccoa fine sandy loam	IIw-2	1o7
31C2 (112C2)	Townley silt loam, 6 to 10 percent slopes	IVe-6	4o1
31E1 (112D2)	Townley silt loam, 10 to 25 percent slopes	VIe-6	4o1
31F1 (112F1)	Townley silt loam, 25 to 45 percent slopes	VIe-6	4r1
3[illegible]C2	Townley silty clay loam, 2 to 10 percent slopes	VIe-6	4o1
[illegible]E3	Townley silty clay loam, 10 to 25 percent slopes	VIe-6	4o1

Prophecy
North Baptist
Lafayette
Kingdom Hall
Jehovah's Witness
North Lafayette

Ref. 13

GROUNDWATER

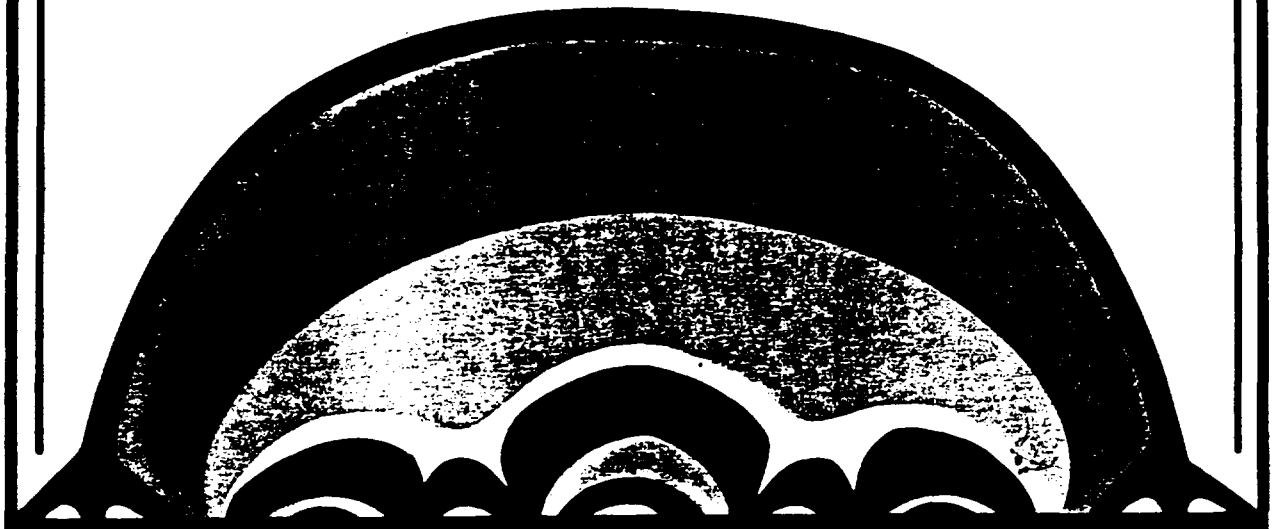

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Table 2.2 Range of Values of Hydraulic Conductivity and Permeability

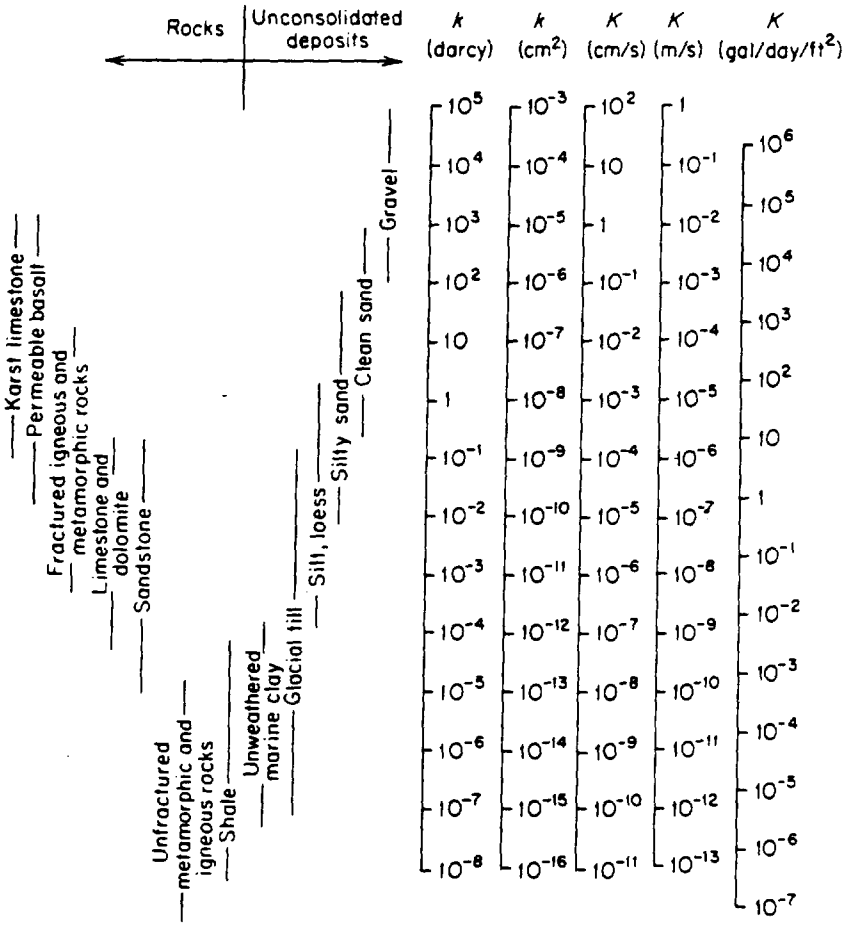

Table 2.3 Conversion Factors for Permeability and Hydraulic Conductivity Units

	Permeability, k*			Hydraulic conductivity, K		
	cm^2	ft^2	darcy	m/s	ft/s	gal/day/ft^2
cm^2	1	1.08×10^{-3}	1.01×10^{8}	9.80×10^{2}	3.22×10^{3}	1.85×10^{9}
ft^2	9.29×10^{2}	1	9.42×10^{10}	9.11×10^{5}	2.99×10^{6}	1.71×10^{12}
darcy	9.87×10^{-9}	1.06×10^{-11}	1	9.66×10^{-6}	3.17×10^{-5}	1.82×10^{1}
m/s	1.02×10^{-3}	1.10×10^{-6}	1.04×10^{5}	1	3.28	2.12×10^{6}
ft/s	3.11×10^{-4}	3.35×10^{-7}	3.15×10^{4}	3.05×10^{-1}	1	5.74×10^{5}
gal/day/ft^2	5.42×10^{-10}	5.83×10^{-13}	5.49×10^{-2}	4.72×10^{-7}	1.74×10^{-6}	1

*To obtain k in ft^2, multiply k in cm^2 by 1.08×10^{-3}.

Ref. 14

GROUND-WATER DATA FOR GEORGIA, 1987

By C.N. Joiner, M.S. Reynolds, W.L. Stayton, and F.G. Boucher

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U.S. GEOLOGICAL SURVEY

Open-File Report 88-323

Prepared in cooperation with the

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION
GEORGIA GEOLOGIC SURVEY

Doraville, Georgia

1988

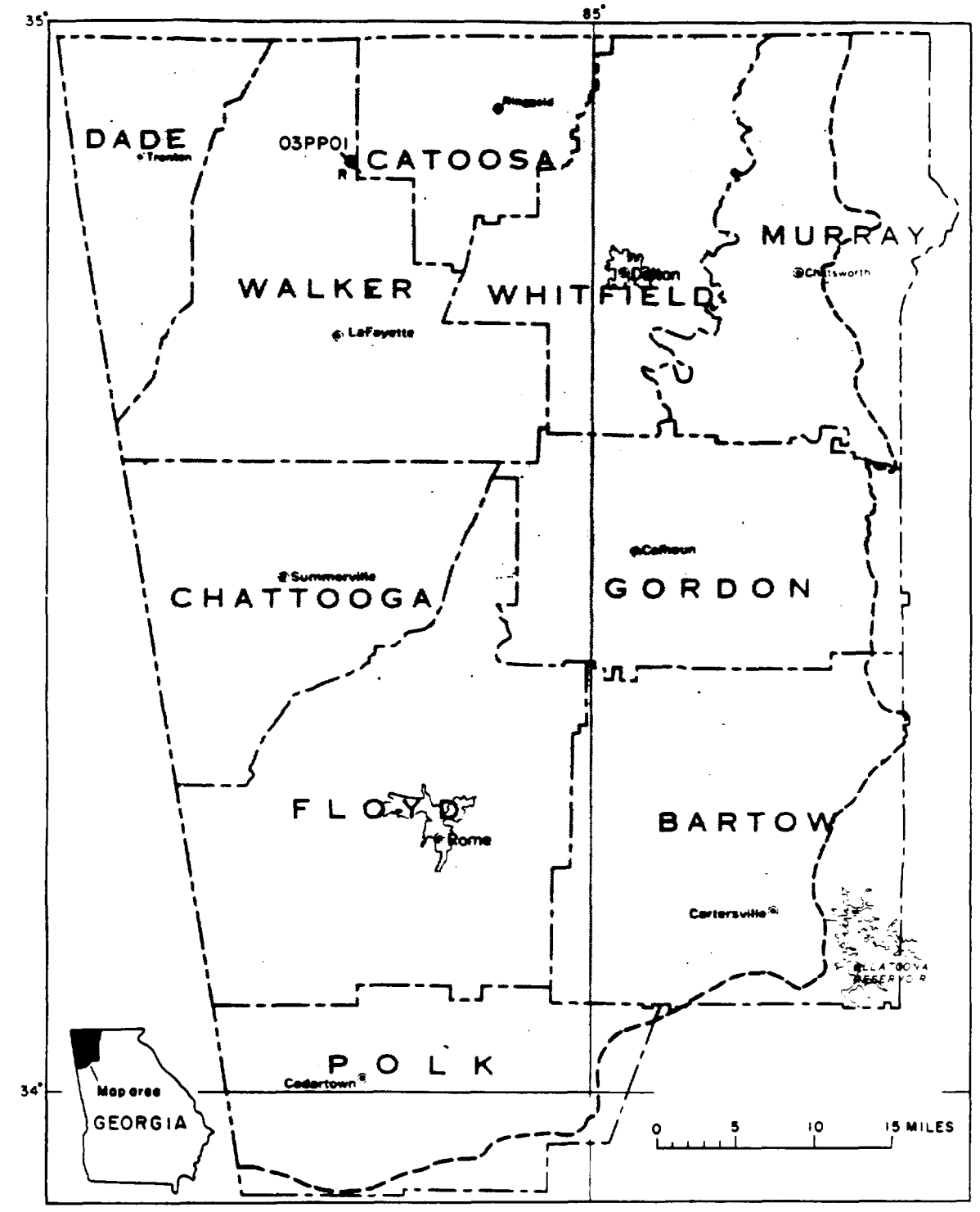
2.1 Paleozoic Rock Aquifers

During 1985, about 29 Mgal/d (Turlington and others, 1987) was withdrawn from the Paleozoic rock aquifers, primarily for industrial supply. Water in the Paleozoic rock aquifers generally occurs under water-table conditions, and storage is limited mainly to the residuum and to joints, fractures, and solution openings in the bedrock.

Ground-water levels in the Paleozoic rock aquifers are affected mainly by precipitation. Rainfall in the area generally is heavy in winter and mid-summer and relatively light in spring and fall. Water levels generally are at their highest for the year in March or April and at their lowest for the year in October or November.

Wells in areas having a thin soil cover commonly show a rapid response to rainfall, and water levels may rise several feet within a few minutes or hours. In areas having a thick soil cover, wells may show little response to individual rains, but undergo a gradual rise in water level during wet periods. The water level in most wells declines slowly between rains.

The hydrographs for observation well 03PP01 in Walker County illustrate the effect that precipitation has on water levels in areas of thin soil cove The mean water level in well 03PP01 during 1987 was 1.2 ft lower than in 1986. However, by the end of February, the water level had recovered about 17.3 ft from the low measured during the 1986 drought. Although there was some recovery during the year, the water level at the end of 1987 was 3.2 ft lower than at the end of 1986.



EXPLANATION

AREA OF PALEOZOIC ROCK AQUIFERS

03PP01 OBSERVATION WELL AND IDENTIFICATION NUMBER—Equipped with recorder; hydrograph included in this report

Figure 2.1-1.—Location of observation well in the Paleozoic rock aquifers.

03PP01 FORT OGLETHORPE WALKER COUNTY

345403085160001 Local number, 03PP01.
LOCATION.--Lat 34°54'08", long 85°16'00", Hydrologic Unit 06020001, Chickamauga and Chattanooga National Military Park.
Owner: National Park Service, Fort Oglethorpe.
AQUIFER.--Paleozoic Rock (Chickamauga Limestone).
WELL CHARACTERISTICS.--Cable-tooled, observation well, diameter 8 in., depth 72 ft.
DATUM.--Elevation of land-surface datum is 730 ft.
Measuring point: Pointer on recorder shelter, 2.09 ft above land surface.
REMARKS.--Well sounded October 18, 1977.
PERIOD OF RECORD.--1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.97 ft below land-surface datum, March 9, 1978; lowest, 21.70 ft below land-surface datum, August 5, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) CALENDAR YEAR JANUARY 1987 TO DECEMBER 1987
MEAN VALUES

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	10.05	9.82	6.85	9.67	10.50	14.01	15.36	18.60	19.38	19.51	20.24	19.63
2	10.18	8.66	9.45	9.75	10.66	14.16	15.50	18.65	19.41	19.53	20.25	19.77
3	10.35	9.57	9.70	9.27	10.83	14.27	15.63	18.72	19.45	19.58	20.25	19.83
4	10.53	9.75	9.76	9.54	10.42	14.36	15.73	18.77	19.49	19.60	20.25	19.90
5	10.73	9.79	9.79	9.72	10.11	14.51	15.83	18.25	19.52	19.60	20.27	19.95
6	10.89	9.81	9.82	9.77	10.22	14.64	15.86	18.11	19.55	19.64	20.30	19.99
7	11.07	9.82	9.82	9.79	10.33	14.74	15.87	18.48	19.56	19.77	20.30	20.04
8	11.28	9.85	9.77	9.81	10.51	14.82	16.13	18.56	19.58	19.83	20.31	20.07
9	11.44	9.90	7.40	9.83	10.71	14.90	16.87	18.55	19.61	19.86	20.32	20.08
10	11.54	9.91	9.51	9.84	10.89	15.04	16.94	18.62	19.62	19.88	18.22	20.10
11	11.77	9.90	9.75	9.85	11.11	15.13	17.00	18.68	19.54	19.89	19.35	20.12
12	11.94	9.90	9.77	9.86	11.30	15.23	17.05	18.76	17.69	19.91	19.74	20.15
13	12.07	9.95	9.79	9.88	11.40	15.32	17.10	18.81	17.52	19.95	19.91	20.21
14	12.17	9.95	9.80	9.36	11.54	15.40	17.18	18.86	17.77	19.99	20.01	19.50
15	12.26	9.69	9.82	8.01	11.69	15.49	17.25	18.89	18.34	20.01	20.09	15.11
16	12.35	5.35	9.84	9.58	11.83	15.33	17.33	18.94	18.64	20.03	20.12	15.89
17	12.40	9.06	9.85	9.73	11.97	15.41	17.41	18.92	18.75	20.06	16.13	16.57
18	4.37	9.71	7.79	9.79	12.12	15.55	17.49	18.65	18.86	20.08	17.81	17.27
19	3.81	9.78	6.78	9.82	12.26	15.65	17.63	18.75	18.93	20.10	18.80	17.90
20	8.98	9.82	9.45	9.84	12.81	15.71	17.71	18.82	18.99	20.11	19.16	18.08
21	9.70	9.82	9.71	9.85	12.97	15.05	17.77	18.89	19.05	20.03	19.34	17.78
22	9.61	7.92	9.77	9.86	13.12	14.24	17.83	18.94	19.11	20.10	19.45	17.82
23	9.53	8.40	9.80	9.87	13.26	14.55	17.91	18.99	19.15	20.13	19.54	18.28
24	9.58	9.67	9.82	9.89	13.40	14.64	18.09	19.04	19.19	20.14	19.58	15.91
25	9.19	9.75	9.81	9.93	13.52	14.59	18.16	19.09	19.26	20.15	19.61	14.69
26	9.14	8.26	9.82	10.01	13.66	14.74	18.21	19.13	19.31	20.15	19.64	14.32
27	9.57	2.64	9.84	10.07	13.80	14.86	18.28	19.17	19.35	20.16	19.66	12.49
28	9.73	3.37	9.86	10.16	13.94	15.04	18.33	19.21	19.39	20.19	19.64	11.59
29	9.76	---	9.86	10.26	14.08	15.12	18.41	19.35	19.41	20.20	19.18	12.22
30	9.76	---	6.03	10.35	13.97	15.24	18.48	19.36	19.47	20.22	19.42	12.84
31	9.81	---	8.71	---	13.87	---	18.55	19.35	---	20.24	---	13.20
MEAN	10.18	8.92	9.28	9.77	12.03	14.92	17.19	18.84	19.10	19.96	19.56	17.46

CAL YR 1987 MEAN 14.80 HIGH 2.64 LOW 20.32

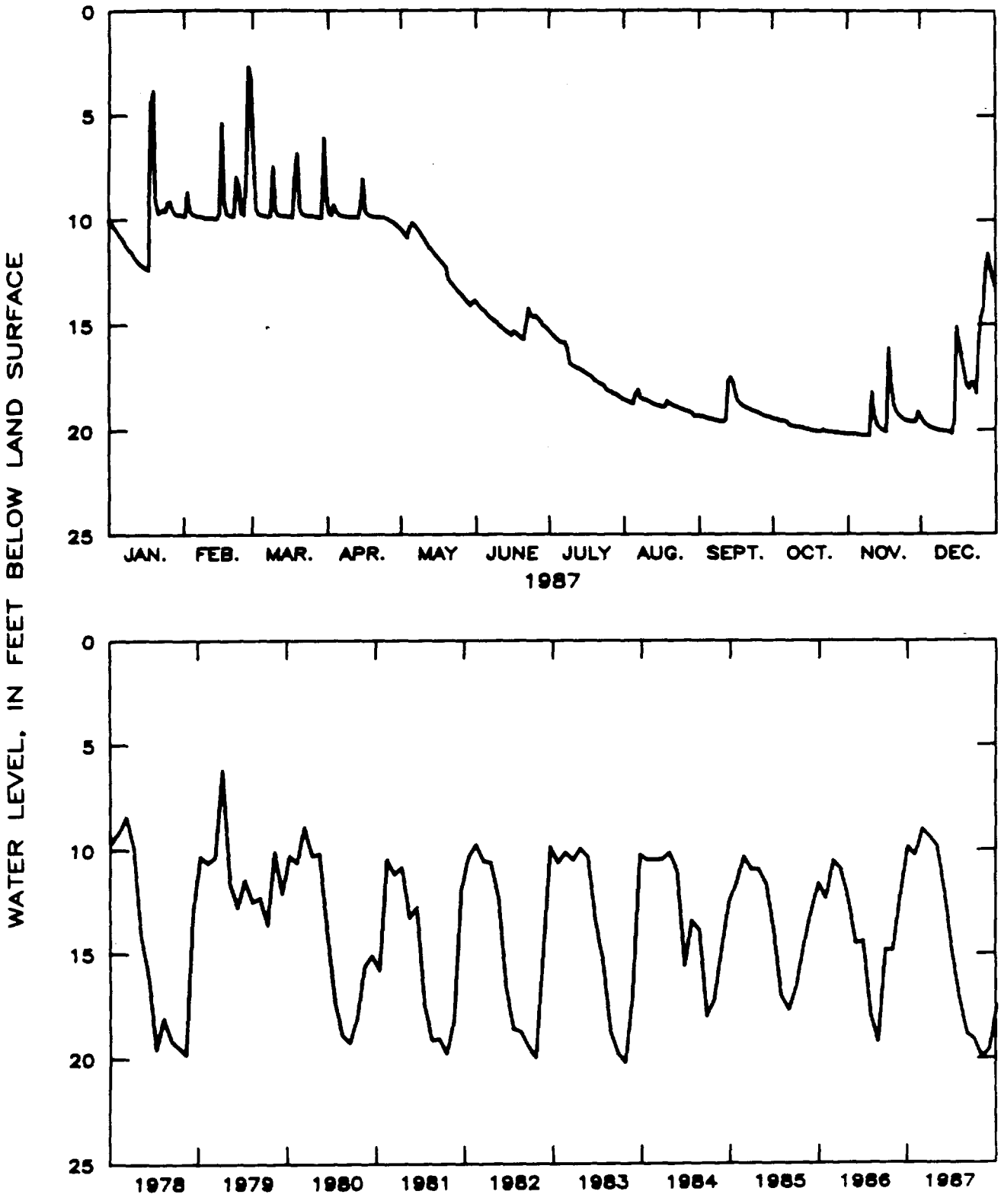


Figure 2.1–2.--Water level in observation well 03PP01, Walker County.

B&V WASTE SCIENCE AND TECHNOLOGY CORP.

TELEPHONE MEMORANDUM

EPA Region IV
LaFayette Sheet Metal
Walker County Rural Water System

BVWST Project 52011.011
BVWST File
January 23, 1992
10:40 a.m.

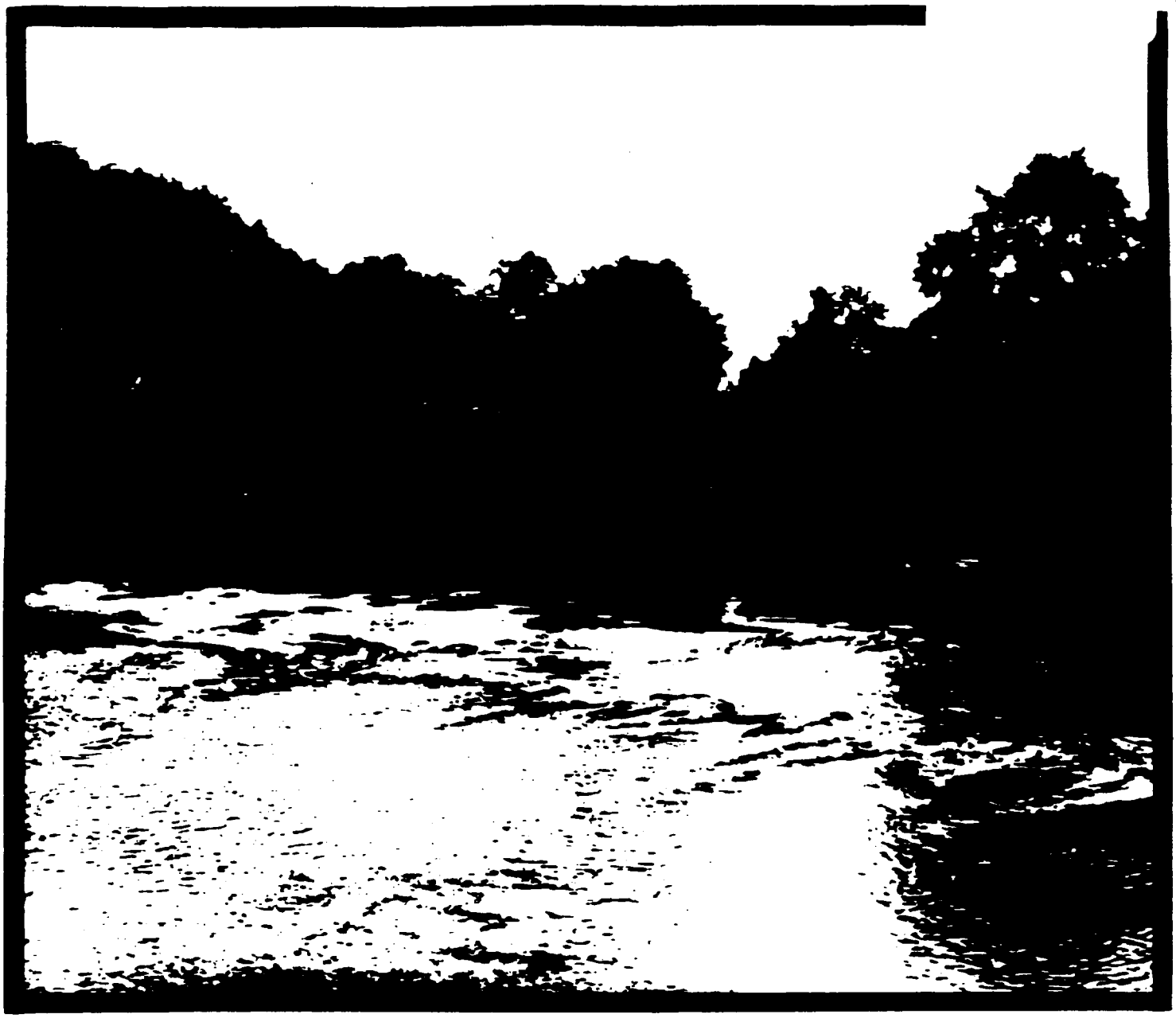
To: Ms. Edith Brumbelow
Company: Walker County Rural Water & Sewer Authority
Phone No.: 404-764-2950

Recorded by: J. S. Hatcher JSH 1-23-92

Walker County Rural Water & Sewer Authority serves the area northeast and east of LaFayette. Catlett is the main area of their service, and they serve south to Naomi. They do not cross into any of LaFayette's water lines. She stated that they have never sold to the LaFayette City Water System, but that there is an emergency hookup between the two systems. The Walker County Rural System has approximately 725 connections. The system's source is three blended wells located at the corner of Huffman and County Line Road. They have a 250,000 gallon tank that holds water for distribution.

ms

Ref. 16



Water Availability & Use

Tennessee River Basin

Georgia Department of Natural Resources
Environmental Protection Division

FINAL

DRAFT

WATER AVAILABILITY AND USE REPORT

TENNESSEE RIVER BASIN

GEORGIA ENVIRONMENTAL PROTECTION DIVISION

DECEMBER 1986

MAJOR PERMITTED FACILITIES
HYDROLOGIC UNIT NO. 3

FACILITY I.D. NUMBER	FACILITY NAME	COUNTY	CITY	STREAM	RIVER MILE	PLANT DISCHARGE (mgd)	PERMITTED WITHDRAWAL (mgd)	DRAINAGE AREA (sq. mi.)	7Q10 (cfs)	LEVEL OF SERVICE (%)
3-010(MSW)	City of Blue Ridge	Fannin	Blue Ridge	Toccoa River	53.0	—	1.00	232.0	164.0	99
3-020(MSD)	Blue Ridge WPCP	Fannin	Blue Ridge	Dry Creek	2.5	0.62	—	--	—	--
3-030(MSW)	City of McCaysville	Fannin	McCaysville	Toccoa River	14.5	—	0.29	347.0	230.0	99

MAJOR PERMITTED FACILITIES
HYDROLOGIC UNIT NO. 4

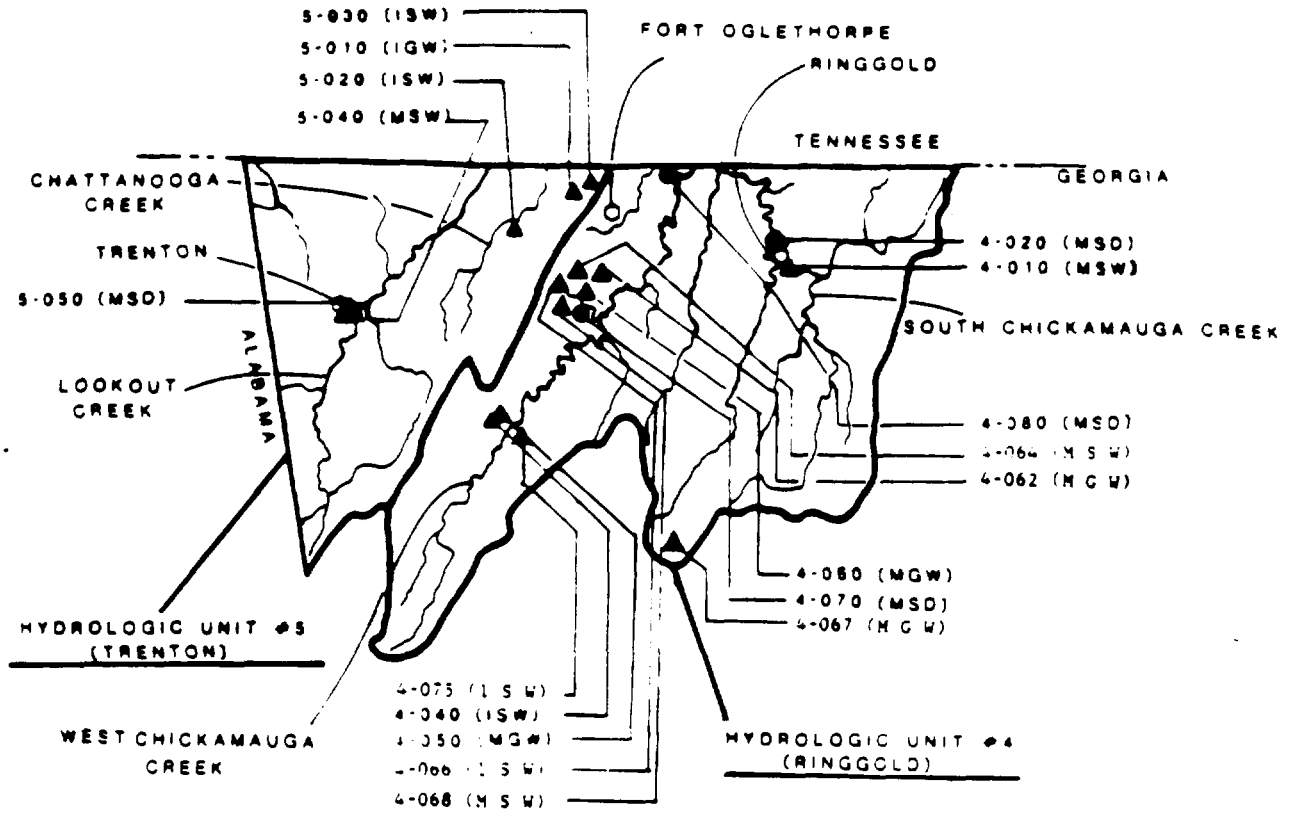
FACILITY I.D. NUMBER	FACILITY NAME	COUNTY	CITY	STREAM	RIVER MILE	PLANT DISCHARGE (mgd)	PERMITTED WITHDRAWAL (mgd)	DRAINAGE AREA (sq. mi.)	7Q10 (cfs)	LEVEL OF SERVICE (%)
4-010(MSW)	City of Ringgold	Catoosa	Ringgold	S. Chickamauga Cr.	32.8	—	1.0	170	34.7	99
4-020(MSD)	Ringgold WPCP	Catoosa	Ringgold	S. Chickamauga Creek	27.4	0.70	—	--	—	—
4-040(ISW)	Reichold Polymers Inc.	Walker	Kensington	Mill Creek	0.5	—	1.0	11.9	4.3	99
4-050(MGW)	Kensington Water & Sewer	Walker	Kensington	—	—	—	1.0	—	--	--
4-060(MGW)	Walker County Water & Sewer	Walker	Flintstone	—	—	—	1.3	—	—	--
4-062(MGW)	City of Chickamauga	Walker	Chickamauga	—	—	—	0.42	—	--	--
4-064(MSW)	City of Chickamauga	Walker	Chickamauga	Crawfish Springs		—	1.0			-
4-066(ISW)	Crystal Springs	Walker	Chickamauga	Crawfish Springs		—	0.72			-
4-067(MGW)	Walker County Rural	Walker	LaFayette	—	—	—	0.20	--	—	--
4-068(MSW)	Walker County Water & Sewer	Walker	Chickamauga	Crawfish Springs		—	1.43			—

Legend to Facility Identification Number: M: Municipal Facility / I: Industrial Facilitiy
S: Surface Water / G: Ground Water
W: Withdrawals / D: Discharges

TENNESSEE RIVER BASIN
WATER AVAILABILITY AND
USE REPORT

GEORGIA ENVIRONMENTAL
PROTECTION DIVISION

MAJOR FACILITIES IN HYDROLOGIC
UNITS 3 AND 4
FIGURE 5



LEGEND

M: MUNICIPAL FACILITIES / I: INDUSTRIAL FACILITIES
S: SURFACE WATER / G: GROUND WATER
▲, W: WITHDRAWALS / ●, D: DISCHARGES
○, CITY

10 0 10 20
MILES

TENNESSEE RIVER BASIN WATER AVAILABILITY AND USE REPORT

GEORGIA ENVIRONMENTAL PROTECTION DIVISION

FIGURE 8

MAJOR WATER USERS (H.U.'s 4 and 5)

flow condition of 7Q10, it is estimated that the flow will be 230 cfs, which is 0.65 cfs per square mile. These estimates do not reflect the regulation of the Toccoa River at Blue Ridge Lake, but they are representative of the surface water resources available in the hydrologic unit.

In summary, the availability of surface water in Hydrologic Unit Three increases towards the northern end of the unit. The southern end contains the headwaters of the Toccoa River. The Toccoa River is regulated by Blue Ridge Lake located in the middle of the unit. Due to the size of this unit and the presence of Blue Ridge Lake, this unit contains the most surface water resources in the basin. As before, ground water resources are limited.

Hydrologic Unit Four (Ringgold)

In comparison to the three previous hydrologic units, the 418 square miles in Hydrologic Unit Four, located in the western portion of the basin, are more intensely developed. The largest cities in the unit include Fort Oglethorpe with a population of around 5,000, Rossville with about 4,000 people, and Ringgold with almost 2,000 people. This unit contains all of Catoosa County and portions of Walker and Whitfield counties and extends for approximately 23 miles south of the Georgia/Tennessee border. Most of the unit is within the Chattanooga Standard Metropolitan Area (SMA).

Two streams drain separate portions of the hydrologic unit. South Chickamauga Creek drains the eastern half of the unit, while West Chickamauga Creek drains the western half. These two creeks cross the state line separately, and West Chickamauga Creek empties into South Chickamauga Creek within a mile after crossing the state line. South Chickamauga Creek flows for another 13 miles through Chattanooga before joining the Tennessee River.

Surface water resources in the hydrologic unit consist mainly of the two major streams and their tributaries. There are no large impoundments in the unit.

The quantity of surface water available from the two major streams has been estimated from data collected at U.S.G.S. gaging station (No. 03567500) located on South Chickamauga Creek in Tennessee, after the confluence with West Chickamauga Creek. The annual average flow in the South Chickamauga Creek at the state line is estimated to be 430 cfs and the corresponding flow in the West Chickamauga Creek is 250 cfs. These flows were both determined from a yield factor of 1.6 cfs per square mile (22 inches per year). The 7Q10 flow for South Chickamauga Creek is 53 cfs and for West Chickamauga Creek is 31 cfs, based on a yield factor of 0.2 cfs per square mile.

These estimates of surface water availability were developed for the watershed areas of each of the two streams, which are 267 square miles for South Chickamauga Creek and 155 square miles for West Chickamauga Creek. These watershed areas include some areas in Tennessee which drain into Georgia and other areas in Georgia that drain to small streams which join South Chickamauga Creek in Tennessee.

Ground water resources in the hydrologic unit are localized, with water-bearing rock formations underlying portions of the unit. The western

edge of the unit is in the Cumberland Plateau physiographic province, while the central and eastern areas are part of the Ridge and Valley province, which generally has the higher potential for finding large volumes of ground water.

In summary, the availability of surface water in Hydrologic Unit Four increases towards the northern end of the unit. The southeastern end contains the headwaters of South Chickamauga Creek and the southwestern end contains the headwaters of West Chickamauga Creek. These two creeks cross the state line separately, and West Chickamauga empties into South Chickamauga Creek within a mile above the Georgia state line. Surface water availability in the unit consists mainly of the two creeks. This unit, unlike previous ones is the most populated in the basin. Ground water resources are localized, with water-bearing rock formations underlying portions of the unit, but surface water remains the primary water resource in Hydrologic Unit Four.

Hydrologic Unit Five (Trenton)

Hydrologic Unit Five consists of 229 square miles in the northwestern corner of the state. It is defined by the drainage area of several streams that discharge to the Tennessee River outside Georgia. The largest of these streams are Lookout Creek, Chattanooga Creek, and Cole City Creek.

This unit encompasses most of Dade County and a small portion of Walker County, both of which are within the Chattanooga SMA. The portion of Lookout Mountain in Georgia is located within this hydrologic unit. The largest cities in the unit are Trenton and Lookout Mountain, each with a population of approximately 1,500.

Surface water resources in the unit are divided between the streams, and there are no major impoundments to contribute to the resources. Thus, surface water availability is limited, compared to other areas of the state.

The quantity of surface water in the unit is monitored by U.S.G.S. gaging stations. One gaging station (No. 03568500) was formerly maintained on Chattanooga Creek near the state line. Based on the data collected for this station, the flow in Chattanooga Creek at the state line was estimated to be 80 cfs on an annual average basis and 3 cfs for the 7Q10 condition. Over the 51 square miles that drain to this creek, these flows indicate yield factors of 1.6 cfs per square mile (22 inches per year) for annual average flows, and 0.06 cfs per square mile for 7Q10 flows.

Another continuous recording gaging station (No. 03568933) has been established on Lookout Creek near New England, Georgia. However, since this station has only been in operation since 1979, its data base is not complete enough to accurately indicate streamflow patterns. Therefore, streamflow rates for the other major streams in the hydrologic unit were estimated from data collected for Chattanooga Creek and South Chickamauga Creek. These data suggest yield factors of 1.6 cfs per square mile (22 inches per year) for the annual average flow and 0.1 cfs per square mile for the 7Q10 flow.

Based on a watershed of 169 square miles, Lookout Creek is estimated to have an annual average flow of 270 cfs as it crosses the state line and a 7Q10 flow of 17 cfs. The watershed area for this creek includes 39 square miles in Alabama and Tennessee that contain the headwaters of the creek and which drain into Georgia.

The City of Blue Ridge (3-010(MSW)) can withdraw up to 1.0 mgd from the Toccoa River just below Blue Ridge Lake and the City of McCaysville can withdraw 0.29 mgd from the Toccoa River almost 40 miles downstream from the lake. Water availability at both intakes is well in excess of the permitted withdrawal rates. McCaysville is initiating plans to expand its surface water withdrawal in the near future.

Hydrologic Unit Four (Ringgold)

Water supplies in this hydrologic unit are drawn from both surface and ground water resources. All major permitted facilities are illustrated on Figure 8.

Within the portion of the unit that drains to South Chickamauga Creek, the City of Ringgold is the largest permitted water user. It withdraws (4-010(MSW)) from the main stem of South Chickamauga Creek upstream from the city and discharges (4-020(MSD)) to the same stream downstream from the city. In 1981 an average of 0.63 mgd was withdrawn by the city while 0.56 mgd was discharged. Thus, in terms of the water budget the consumptive use of surface water by Ringgold was 0.07 mgd. Since the 7Q10 stream flow in South Chickamauga Creek at the intake is 22 mgd (34.7 cfs), the permitted withdrawal rate of 1.0 mgd is readily available.

Walker County Rural Water and Sewer Authority has municipal water supply wells in the southwest corner of the South Chickamauga Creek watershed. The Authority has a permit to withdraw up to 0.20 mgd from those wells.

Within the portion of the unit that drains to West Chickamauga Creek, there are eight organizations holding major water use permits. In the upper half of this drainage area, there are three users located near Kensington, while the others are in the lower half of the area near Chattanooga.

The three water users in the upper half of the area consist of one ground water withdrawal, namely Kensington Water and Sewage Authority (4-050(MGW)), and two surface water withdrawals: Reichold Polymers, Inc. (4-040(ISW)), and E. T. Barwick Incorporated (4-075(ISW)).

In the lower half of the drainage area of West Chickamauga Creek many of the cities, including Lakeview, obtain water supplies from the Tennessee American Water Company in Chattanooga. The City of Chickamauga holds three water use permits: one to withdraw 1.0 mgd from Crawfish Spring Lake (4-064(MSW)); a second to withdraw 0.42 mgd ground water (4-062 (MGW)); and a third to discharge up to 5.25 mgd below Crawfish Spring Lake (4-070(MSD)). The Walker County Water and Sewage Authority operates wells (4-060(MGW)) and has recently constructed a surface water withdrawal from Crawfish Spring Lake (4-068(MSW)). The authority serves Flintstone and areas in unincorporated Walker County. Their system is connected to the City of Chickamauga to enhance the reliability of the city's system. When water is withdrawn from Crawfish Springs and distributed to Flintstone where it is discharged to Chattanooga Creek, an intra-basin diversion occurs from West Chickamauga Creek to Chattanooga Creek. Walker County has recently requested an increase in the permitted withdrawal to 4.5 mgd. At this time it is not yet known whether Crawfish Spring Lake can reliably support the increased withdrawal in an environmentally sound manner.

Additional permitted water users are an industrial surface water withdrawal by Crystal Springs Print Works (4-066 (ISW)) and a municipal discharge into West Chickamauga Creek by Fort Oglethorpe (4-080(MSD)).

In summary, water resources issues in this hydrologic unit relate primarily to ground water supply protection, since many of the major facilities withdraw from ground water resources and springs. Surface water issues focus mainly on water quality protection. Provision of water supply to support the growth in communities surrounding Chattanooga is another major water resources issue.

Hydrologic Unit Five (Trenton)

The only permitted ground water withdrawer is Standard-Coosa-Thatcher (5-010(IGW)), which is located in Rossville and is permitted to withdraw a monthly average quantity of 1.4 mgd. As for surface water withdrawals, two are in the Chattanooga Creek drainage area and one is in the Lookout Creek drainage area. All major withdrawal and discharge facilities are illustrated on Figure 8.

In the Chattanooga Creek area, Yates Bleachery Co. (5-020(ISW)) is permitted to withdraw 0.60 mgd from Bleachery Springs near Flintstone and the Rossville Development Co. (5-030(ISW)) is permitted to withdraw 0.30 mgd from Poplar Springs near Rossville. Some cities in this area, including Rossville, are supplied water from the Tennessee American Water Company in Chattanooga.

In the Lookout Creek area, the Dade County Water and Sewerage Authority (5-040(MSW)) is permitted to withdraw 1.0 mgd from the main stem of the creek. Since the 7Q10 low flow in the creek at the intake is estimated to be 6.8 mgd (10.5 cfs), the creek has been a reliable source of water supply for the authority. Water withdrawn by the authority is distributed primarily within the City of Trenton and to surrounding areas of Dade County. A portion of the water withdrawn is returned to Lookout Creek by the discharge from Trenton WPCP (5-050(MSD)). The authority has requested a modification to their surface water withdrawal permit. EPD is reviewing the proposed 0.5 mgd increase.

In summary, surface water is the primary source of water supply in this hydrologic unit. The most crucial water resources issue is the lack of sufficient raw water supplies during seasonal low flow periods of the streams.

B&V WASTE SCIENCE AND TECHNOLOGY CORP. Ref. 17

TELEPHONE MEMORANDUM

EPA Region IV
LaFayette Sheet Metal
LaFayette Water System

BVWST Project 52011.011
BVWST File
February 28, 1992
10:20 a.m.

To: Roger Brandy, Superintendent
Company: LaFayette Water System
Phone No.: 404-638-1723

Recorded by: J. S. Hatcher JSH 2-28-92

They still intake water from a surface intake at the intersection of Duck Creek and Dry Creek, and at a spring intake from Big Spring. They also have emergency hookup to Walker County rural water and Catoosa County water, if needed. The two intakes are blended with following pumpages:

Duck and Dry Creek - 900,000 gallons per day pumpage.

Big Spring - 1.4 million gallons per day pumpage.

They currently serve 5,100 connections.

ms

Table 6. Household, Family, and Group Quarters Characteristics: 1990 —Con.

[For definitions of terms and meanings of symbols, see text]

State / County / Place and [In Selected States] County Subdivision	Persons in households	All households	Family households: Total	Family households: Married-couple family	Family households: Female householder, no husband present	Nonfamily households: Total	Householder living alone: Total	Householder living alone, 65 years and over: Total	Householder living alone, 65 years and over: Female	Persons per—: Household	Persons per—: Family	Persons in group quarters: Total	Persons in group quarters: Institutionalized persons	Persons in group quarters: Other persons in group quarters
COUNTY—Con.														
Long County	6 119	2 196	1 683	1 383	318	513	447	185	136	2.79	3.22	83	4	79
Lowndes County	71 652	26 311	19 123	14 300	4 012	7 188	5 744	2 086	1 661	2.72	3.22	4 329	1 814	2 515
Lumpkin County	13 318	4 976	3 872	3 282	438	1 104	882	370	383	2.68	3.07	1 253	158	1 099
McDuffie County	19 862	7 270	5 508	3 985	1 286	1 762	1 558	676	536	2.73	3.19	257	232	25
McIntosh County	8 622	3 186	2 371	1 688	540	815	730	340	246	2.71	3.19	12	12	-
Macon County	12 626	4 386	3 322	2 090	1 046	1 066	901	513	412	2.92	3.46	288	288	-
Madison County	20 902	7 740	6 081	5 075	749	1 679	1 450	677	559	2.70	3.09	144	109	39
Marion County	5 512	1 962	1 524	1 132	317	438	392	203	166	2.81	3.22	78	78	-
Meriwether County	21 893	7 637	5 800	4 122	1 383	1 837	1 665	838	676	2.87	3.38	518	341	177
Miller County	6 184	2 336	1 741	1 334	318	595	554	316	250	2.65	3.14	96	96	-
Mitchell County	19 884	6 798	5 254	3 533	1 457	1 544	1 414	750	632	2.94	3.42	289	212	77
Monroe County	16 308	5 838	4 547	3 540	800	1 291	1 130	477	374	2.83	3.25	604	599	5
Montgomery County	6 714	2 493	1 842	1 432	323	651	599	313	235	2.69	3.20	449	213	236
Morgan County	12 705	4 399	3 442	2 580	681	957	854	417	325	2.89	3.32	178	158	20
Murray County	25 860	9 363	7 499	6 230	881	1 864	1 628	806	484	2.77	3.14	167	161	6
Muscogee County	171 700	65 858	47 235	33 380	11 803	18 623	16 122	5 847	4 716	2.61	3.12	7 578	2 963	4 615
Newton County	41 040	14 401	11 337	8 908	1 915	3 064	2 633	1 210	887	2.85	3.25	768	318	450
Oconee County	17 474	6 156	4 980	4 253	555	1 196	887	394	329	2.84	3.19	144	140	4
Oglethorpe County	9 681	3 581	2 748	2 168	448	833	737	317	240	2.70	3.14	82	82	-
Paulding County	41 289	14 326	11 999	10 350	1 216	2 327	1 864	772	598	2.88	3.17	322	309	13
Peach County	19 954	7 142	5 465	3 644	1 385	1 677	1 428	603	481	2.79	3.23	1 235	82	1 153
Pickens County	14 252	5 386	4 239	3 607	455	1 147	1 051	516	390	2.65	3.03	180	180	-
Pierce County	13 282	4 807	3 759	3 104	507	1 048	982	488	390	2.76	3.19	66	66	-
Pike County	10 100	3 526	2 824	2 385	317	702	647	321	255	2.86	3.26	124	124	-
Polk County	33 410	12 519	9 455	7 404	1 628	3 064	2 833	1 518	1 217	2.67	3.13	405	379	26
Pulaski County	7 988	3 098	2 185	1 584	504	913	842	432	348	2.58	3.15	122	122	-
Putnam County	13 856	5 229	3 938	3 043	702	1 291	1 118	429	330	2.63	3.07	281	277	4
Quitman County	2 206	857	626	428	167	231	214	112	72	2.57	3.08	4	-	4
Rabun County	11 460	4 630	3 477	2 840	412	1 153	1 036	524	404	2.48	2.90	188	166	22
Randolph County	7 684	2 815	2 003	1 301	595	812	773	463	365	2.73	3.36	329	104	225
Richmond County	179 514	68 675	47 665	32 998	12 384	20 990	17 907	5 732	4 570	2.61	3.14	10 205	3 423	6 782
Rockdale County	53 544	18 337	15 121	12 771	1 817	3 216	2 638	932	780	2.92	3.23	545	499	46
Schley County	3 581	1 315	964	739	178	351	324	171	153	2.72	3.25	7	7	-
[illegible]	13 883	5 046	3 886	2 880	886	1 380	1 238	618	500	2.70	3.23	229	204	25
[illegible]	9 400	3 137	2 326	1 720	516	801	747	410	325	2.89	3.19	380	88	402
[illegible]	53 883	19 486	14 901	11 044	3 222	4 585	3 894	1 771	1 407	2.76	3.16	844	836	8
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2 316	2 121	1 086	887	2.54	3.00	560	90	470
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	543	[illegible]	[illegible]	713	[illegible]	[illegible]	111	111	-
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2 375	[illegible]	2 844	1 487	[illegible]	2.75	3.30	1 437	771	646
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[illegible]	6 887	2 380	1 887	1 170	386	881	883	386	343	2.74	3.27	77	88	12
[illegible] County	54 880	20 371	14 980	11 083	3 382	5 391	4 771	2 321	1 887	2.69	3.16	1 608	711	395
[illegible] County	8 686	3 043	2 331	1 683	576	712	673	379	312	2.82	3.32	117	117	-
[illegible] County	9 660	3 286	2 570	1 888	583	726	666	391	222	2.93	3.39	156	151	5
[illegible] County	11 700	4 709	3 683	3 182	355	1 086	990	535	406	2.50	2.86	224	221	3
[illegible] County	25 840	9 911	7 335	5 487	1 541	2 576	2 377	1 282	1 046	2.61	3.09	460	448	12
[illegible] County	57 524	21 487	16 887	13 806	2 336	4 610	4 366	2 111	1 758	2.68	3.06	616	606	10
[illegible] County	38 229	13 433	10 749	8 634	1 613	2 684	2 332	1 101	883	2.85	3.22	367	367	-
Ware County	33 784	13 046	9 416	7 068	1 845	3 630	3 311	1 624	1 317	2.59	3.12	1 683	1 583	90
Warren County	5 974	2 130	1 603	1 056	467	527	467	296	241	2.80	3.30	104	104	-
Washington County	18 780	6 730	4 986	3 386	1 330	1 754	1 606	776	624	2.79	3.32	323	311	12
Wayne County	21 761	7 922	6 113	4 803	1 053	1 809	1 670	783	606	2.75	3.18	595	582	13
Webster County	2 283	798	610	445	131	188	172	86	61	2.84	3.32	-	-	-
Wheeler County	4 817	1 786	1 331	1 028	235	455	441	273	225	2.70	3.21	86	65	21
White County	12 523	4 907	3 798	3 285	382	1 109	1 023	475	374	2.55	2.95	483	161	322
Whitfield County	71 804	26 860	20 504	16 611	2 940	6 353	5 455	1 995	1 633	2.67	3.08	654	571	83
Wilcox County	6 807	2 511	1 833	1 389	360	678	640	376	293	2.71	3.27	201	201	-
Wilkes County	10 511	4 022	2 932	2 132	646	1 090	1 008	566	415	2.61	3.12	86	86	-
Wilkinson County	10 183	3 619	2 755	2 032	618	864	798	352	274	2.81	3.31	45	45	-
Worth County	19 618	6 885	5 428	4 107	1 067	1 457	1 345	675	541	2.85	3.27	127	53	74
PLACE AND COUNTY SUBDIVISION														
Abbeville city	809	303	221	153	54	82	76	49	40	2.67	3.16	98	98	-
Dodge County	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wilcox County	809	303	221	153	54	82	76	49	40	2.67	3.16	98	98	-
Acworth city, Cobb County	4 517	1 758	1 280	1 017	199	498	402	153	137	2.57	3.04	2	2	-
Adairsville city, Bartow County	2 131	772	587	391	160	185	168	96	78	2.76	3.19	-	-	-
Adel city, Cook County	4 827	1 783	1 289	859	359	504	466	246	207	2.75	3.33	164	128	36
Adrian city	615	238	170	116	45	68	62	33	30	2.58	3.08	-	-	-
Emanuel County	293	113	86	64	18	27	26	15	14	2.59	2.98	-	-	-
Johnson County	322	125	84	52	27	41	36	18	16	2.58	3.18	-	-	-
Ailey city, Montgomery County	484	183	135	100	24	48	46	26	22	2.64	3.15	95	-	95
Alamo city, Wheeler County	848	319	232	142	56	87	86	58	48	2.66	3.24	6	6	-
Alapaha town, Berrien County	790	287	222	146	64	65	63	27	23	2.75	3.20	23	-	23
Albany city, Dougherty County	75 233	27 825	19 677	12 351	6 724	7 948	6 990	2 482	1 992	2.69	3.25	2 909	1 129	1 780
Aldora town, Lamar County	127	46	35	30	4	11	11	8	8	2.76	3.29	-	-	-
Allenhurst town, Liberty County	584	210	163	136	20	47	36	11	10	2.83	3.20	-	-	-
Allentown town	273	105	80	65	14	25	23	13	11	2.60	3.05	-	-	-
Bleckley County	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laurens County	2	1	1	1	-	-	-	-	-	2.00	2.00	-	-	-
Twiggs County	40	14	11	8	2	3	3	1	1	2.86	3.36	-	-	-
Wilkinson County	231	90	68	55	12	22	20	12	10	2.57	3.01	-	-	-
Alma city, Bacon County	3 533	1 397	959	571	355	438	417	234	191	2.53	3.11	130	121	9
Alpharetta city, Fulton County	12 684	5 285	3 603	3 013	476	1 682	1 282	280	240	2.45	2.95	118	118	-
Alston town, Montgomery County	160	56	42	36	4	14	13	11	8	2.86	3.45	-	-	-

TPS8 (POSTSCRIPT) CPH113 CENSUS90 79888000 08/08/91 8:18 AM MACHINE: C DATA:CENSUS90'PH1TPSDAT13 08/08/91 08:08:14 OUTPUT:ONSITE-P3284 PAGE 91
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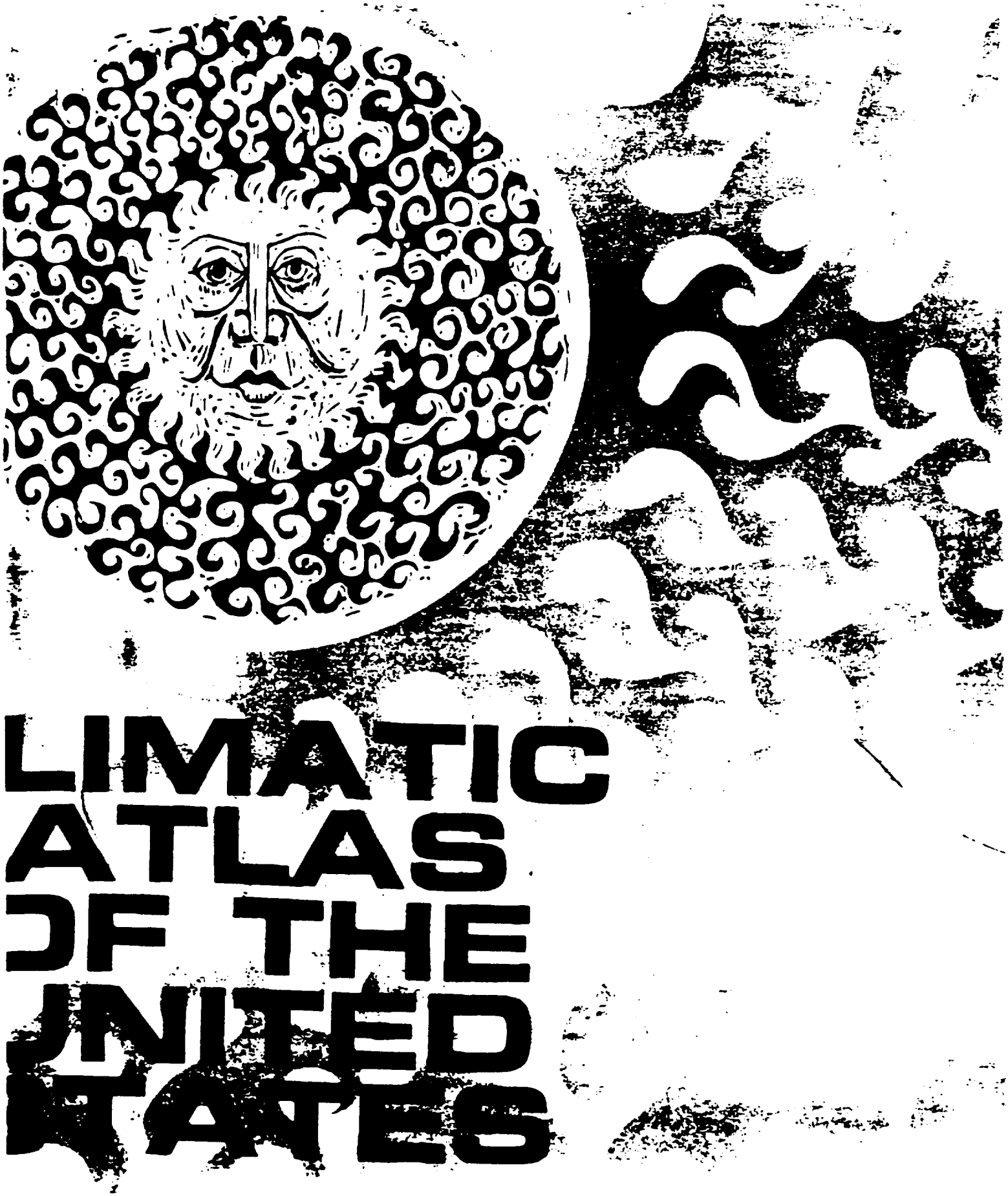
Ref. 19



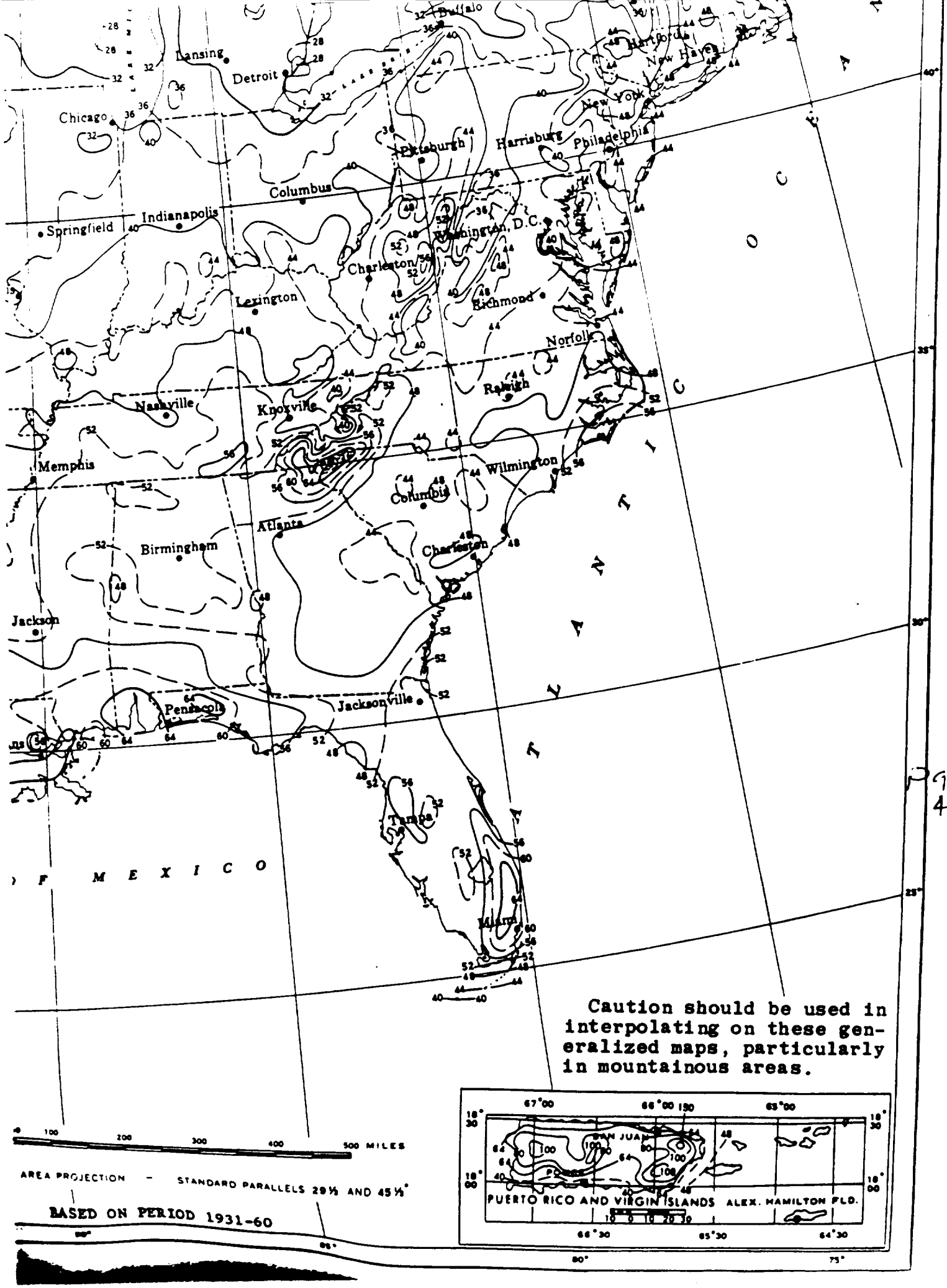
U.S. DEPARTMENT OF COMMI
C. R. Smith, Secretary

ENVIRONMENTAL SCIENCE SERVICES ADMIT
Robert M. White, Administrator

ENVIRONMENTAL DATA SERVICE
Woodrow C. Jacobs, Director

JUNE 1968

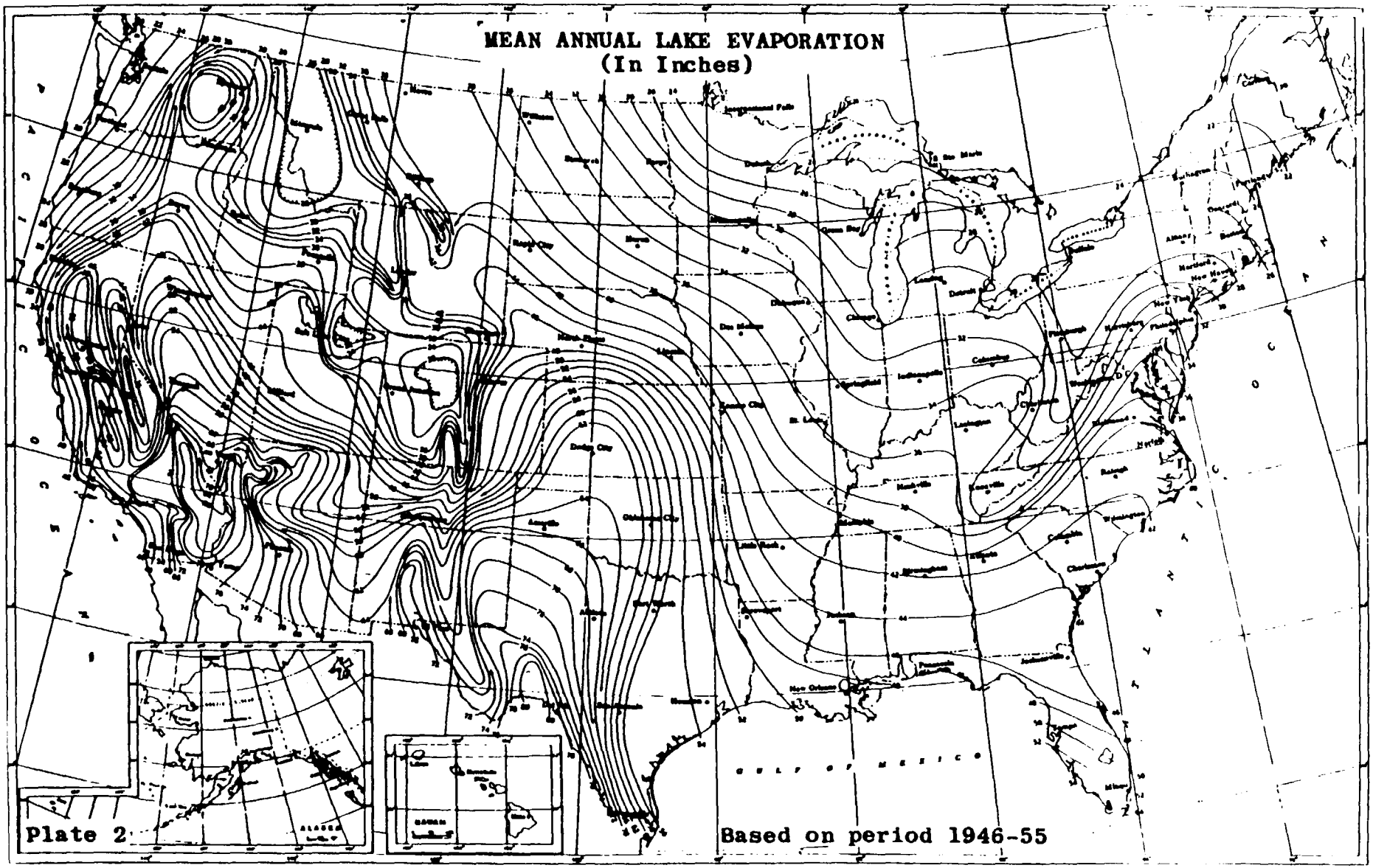
REPRINTED BY THE
NATIONAL OCEANIC AND ATMOSPHERIC ADM
1983

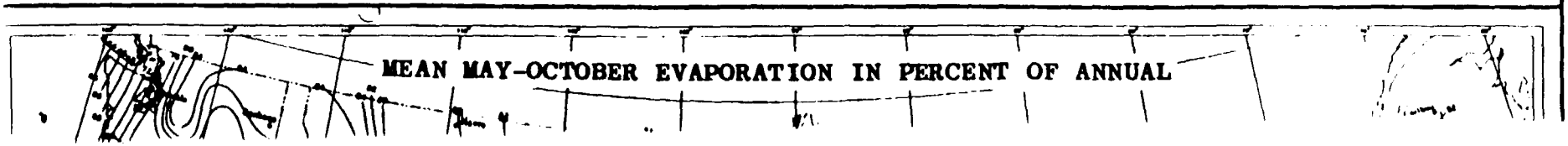


Caution should be used in interpolating on these generalized maps, particularly in mountainous areas.

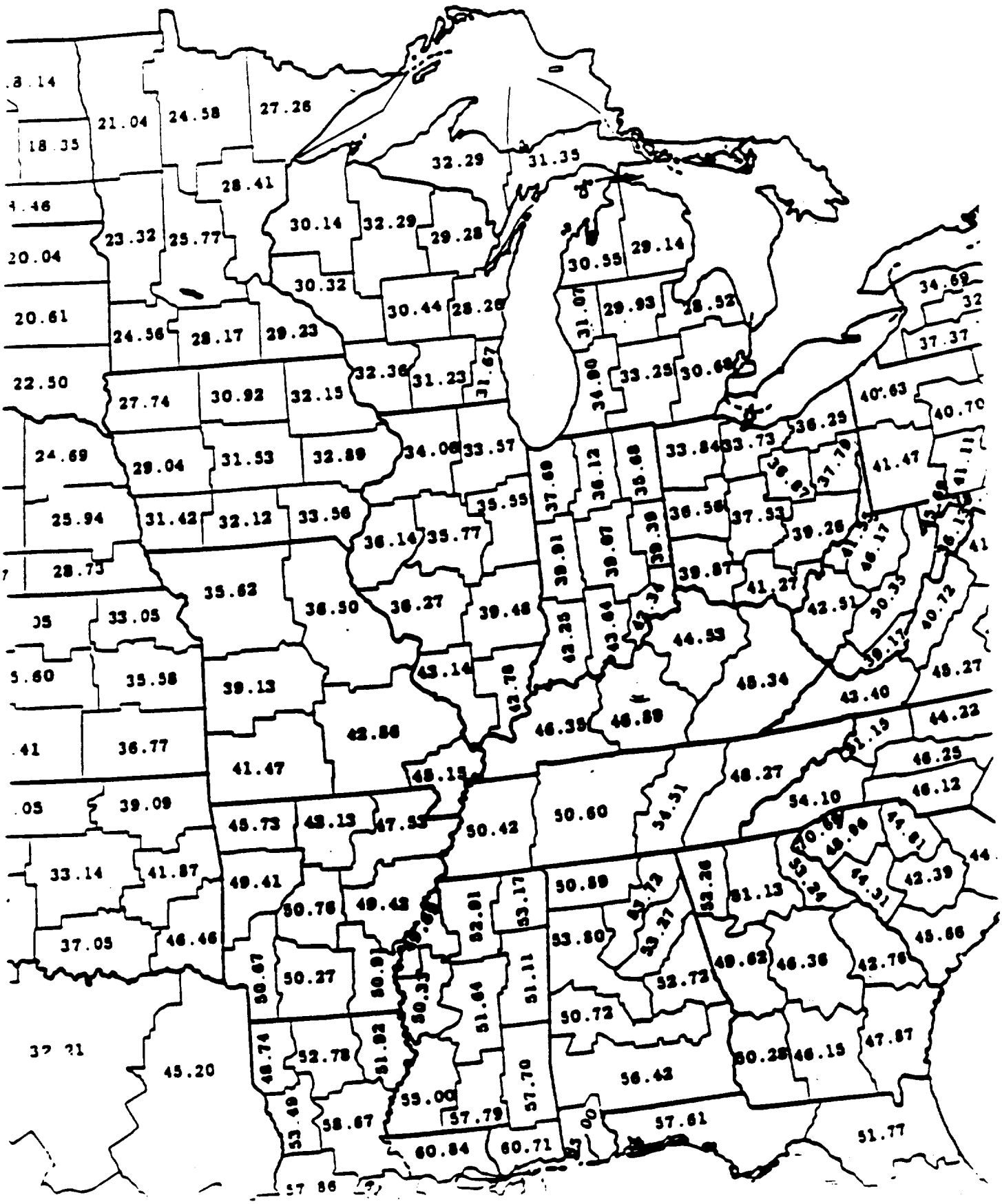
P9
43

LAKE EVAPORATION





ON (inches) BY STATE CLIMATIC DIVISIONS



DEPARTMENT OF COMMERCE
[illegible] Hodges, Secretary

WEATHER BUREAU
F. W. Reichelderfer, Chief

TECHNICAL PAPER NO. 40

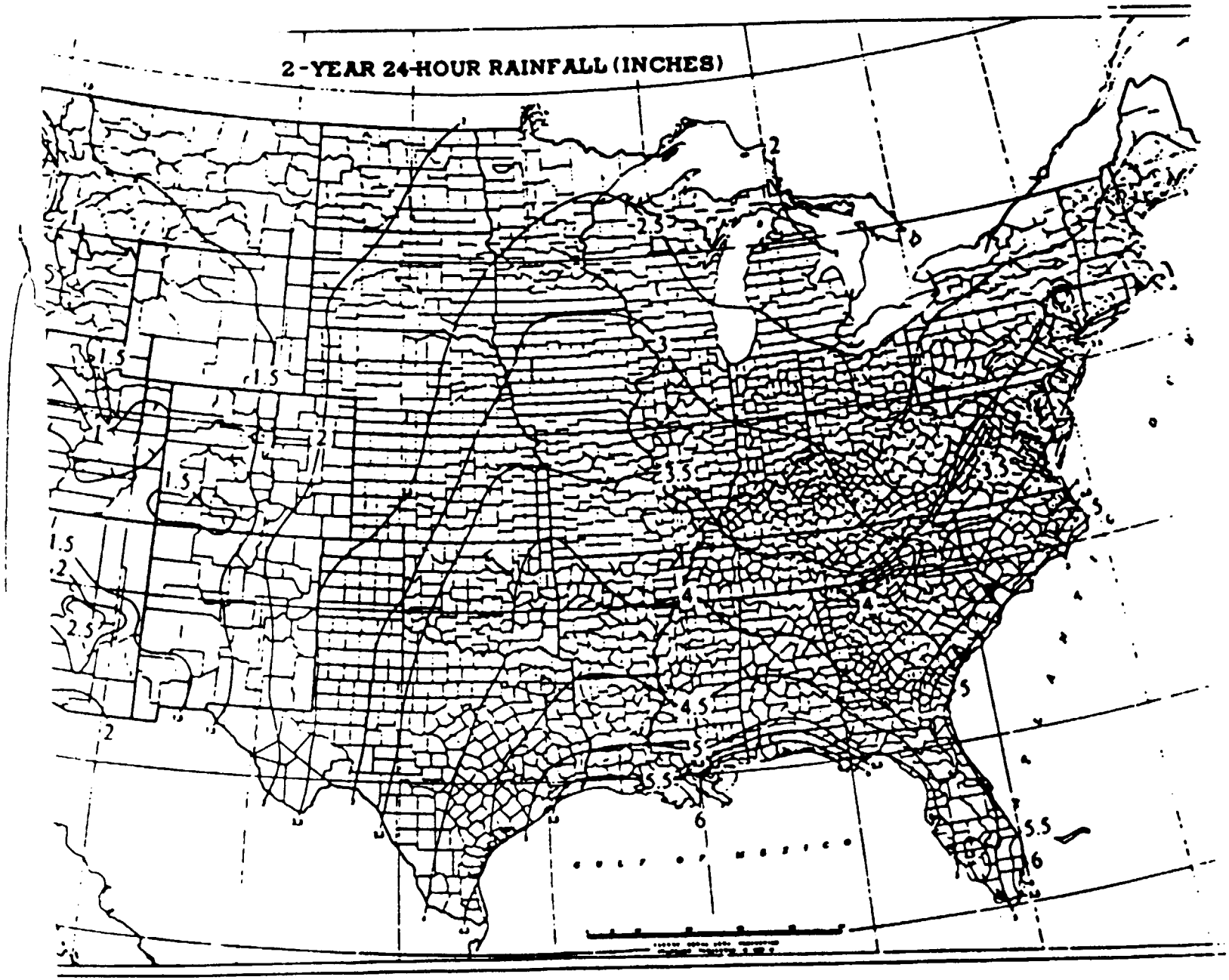
RAINFALL FREQUENCY ATLAS OF THE UNITED STATES

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

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

Ref. 20

PROPERTY OF EPA
FIT IV


2-YEAR 24-HOUR RAINFALL (INCHES)
2
2.5
3
3.5
4
4.5
5
5.5
6
1.5
2.5

Water Availability & Use Coosa River Basin

Georgia Department of Natural Resources
Environmental Protection Division

WATER AVAILABILITY AND USE

COOSA RIVER BASIN

GEORGIA

1982

SUBPART 10

Summerville-LaFayette Hydrologic Unit

The Summerville-LaFayette Hydrologic Unit lies in the Ridge and Valley Physiographic Province in the northwest corner of the State and is bordered to the east and west by linear ridges. The Chattooga River and all of its Georgia tributaries are located within this hydrologic unit. The terrain in the northern portion of the unit has tended to hamper economic development, leaving most of the area sparsely populated with the exceptions of LaFayette and Trion. Rural, undeveloped areas also predominate the southern portion of this unit with the only major town being Summerville. The unit ends as the Chattooga River flows across the Georgia-Alabama State line.

Surface water withdrawals in this hydrologic unit are relatively small compared to its neighboring hydrologic units. Three surface water users have a combined withdrawal of 5.7 cfs. Other supplies are obtained from springs and wells.

The City of LaFayette obtains its water from three sources: Big Spring, Dixon Spring, and a surface water intake on Duck Creek. LaFayette withdraws all available water from both springs (1.5 - 1.9 cfs from Big Spring and 0.8 - 1.2 cfs from Dixon Spring). The third source of water, Duck Creek, provides an average of 0.8 cfs which is 38% of the 7Q10 (2.1 cfs) at the point of withdrawal.

Existing sources in LaFayette have been taxed to their limit. One potential solution to the water needs of LaFayette during periods of low flow would be to withdraw water from a 200 acre impoundment that has recently been constructed to the northeast of the town. At present, this lake is not being used for water supply purposes because the water treatment plant is located across town and the cost to pump the water to the existing plant or to build a new plant at the impoundment would be substantial. The lake was constructed for water conservation and flood control purposes.

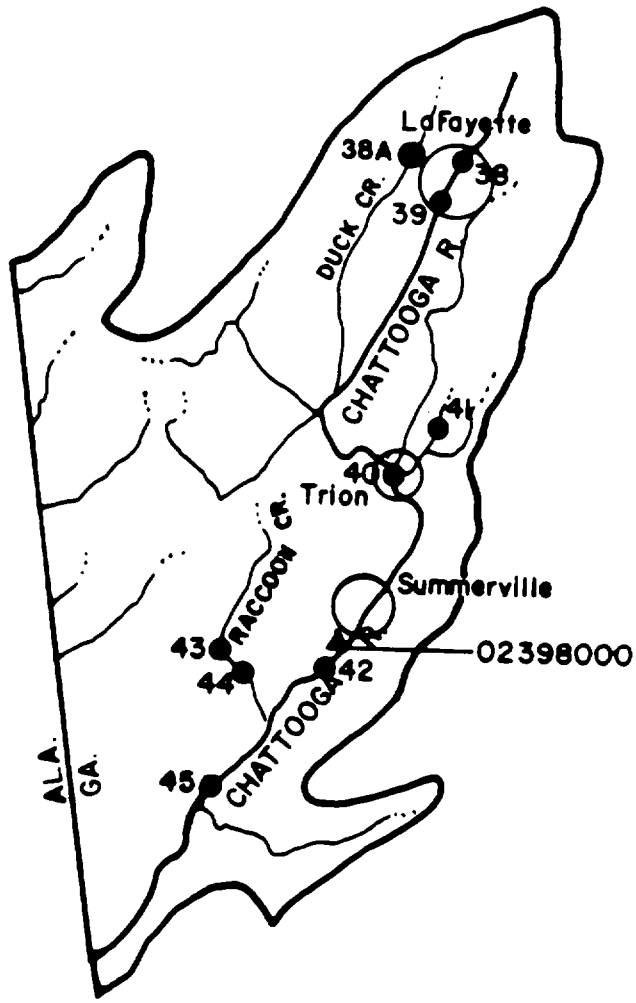
Riegel Spring, near Trion, supplies water to a number of users in the area. Riegel Textile Corporation and the City of Trion currently withdraw an average of 10.8 cfs from the Spring. No water supply problems appear to exist in this area.

The City of Summerville receives its water from two sources, Low Spring and a surface water intake on Raccoon Creek. Supply from these sources is limited. All of the 0.5 - 0.6 cfs of Low Spring is currently being utilized. The City withdraws an average of 2.8 cfs from Raccoon Creek which is 39% of the 7Q10 (7.2 cfs).

Summerville has seven above-ground storage tanks which retain 3.4 mg of water. Both the spring and the surface water withdrawal are used to replenish the tanks.

Bigelow-Sanford, Inc. withdraws an average of 2.2 cfs from Raccoon Creek, which has a 7Q10 of 7.2 cfs at the point of withdrawal. This represents approximately 30% of the 7Q10. The fact that the City of Summerville and Bigelow-Sanford, Inc. both draw water from the same creek during low flow periods could compound Bigelow-Sanford's problem during a period of extreme drought.

In general, the flow of the Chattooga River is sufficient to dilute wastewater discharges. Water quality problems that do exist tend to be found on tributaries to the Chattooga. For example, the City of LaFayette discharges 1.6 cfs of treated wastewater into Chattooga Creek which only has a 7Q10 of 0.8 cfs at the point of discharge. The large dischargers in this hydrologic unit discharge directly into the Chattooga: Riegel Textile Company (5.6 cfs), Trion WPCP (4.2 cfs), Summerville WPCP (3.1 cfs) and Bigelow-Sanford, Inc. (1.6 cfs).



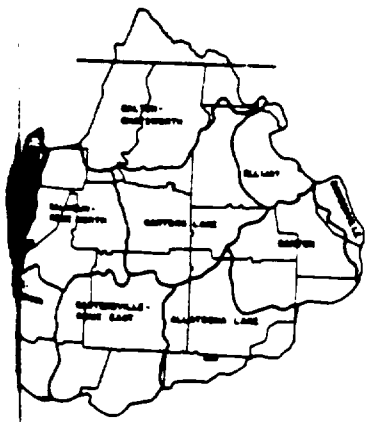


FIGURE 12
SUMMERVILLE-LAFAYETTE
HYDROLOGIC UNIT

TABLE 11

Intakes and Discharges in the Coosa River Basin

HYDROLOGIC UNIT/Facility Name	Location Number	River Mile(mi)	Drainage Area(sq.mi.)	7010 Low* Stream Flow (cfs)	September 1980 Average Daily Flow(cfs) Withdrawal	Discharge
SUMMERVILLE-LAFAYETTE HYDROLOGIC UNIT						
LaFayette Intake	38A	-	-	2.1	0.8	
LaFayette WPCP	38	657.7	2.8	0.8		1.6
Trion WPCP	40	637.9	180.0	60.0		4.2
Riegel Textile Company	41	644.2	-	60.0		5.6
Summerville WPCP	42	630.3	199.0	66.0		3.1
Summerville Intake	43	630.7	-	7.2	2.8	
Bigelow-Sanford, Inc.	44	630.0	-	7.2	2.2	
Bigelow-Sanford, Inc. - 1	45	625.2	-	72.0		1.6
Minor Facility Withdrawals					0.8	
Minor Facility Discharges						0.7

*The 7010's are a mixture of both natural and regulated flows.

SECTION V

Projected Water Needs for the Coosa River Basin

In making water management decisions, it is extremely important to consider future water needs in a given geographic area. In the case of permit decisions, the possibility of preempting more beneficial uses must be considered. In the case of designing water withdrawal and supply facilities, future growth must be accounted for if the sytem is to be cost effective.

Table 12 presents a water budget for the Coosa River basin in Georgia (by County). The 7Q10 flow is shown for each major withdrawal point in the basin (except Cartersville and Cobb County-Marietta Water Authority whose supplies are withdrawn directly from Lake Allatoona). The withdrawals shown are generally the rate on an average day during September, 1980. Groundwater withdrawals are shown for information on permitted use.

For the purposes of this river basin report future water demands on the Coosa River basin have been projected in five year increments through the year 2000. Those projected needs are based on the Georgia Office of Planning and Budget's (OPB) "Population Projections for Georgia Counties 1980-2000" dated September, 1977. It should be noted that OPB's population projections will be updated in the near future to take into account the 1980 census data. When updated projections are made available, the projected water needs for the Coosa Basin contained in this report will also be updated. Addition of an industry with large water requirements would be in addition to the projections shown in the table.

To project water needs, a "per capita use figure" was developed for each county based on September, 1980 withdrawals. (As mentioned earlier in this report, that month is considered to be representative of a critical low flow period). The "per capita use figure" was then multiplied by OPB's projected population to arrive at a projected water need.

Beginning in the year 1990, a water conservation factor of -10% was applied to the projected water needs. That factor was used to take into account the current trend toward industrial reuse and general conservation.

Three assumptions made in computing these projections should be noted:

1) In instances where only a portion of a county's water is withdrawn from the Coosa Basin, it was assumed that the current ratio of withdrawal will remain constant;

2) Current institutional agreements will remain unchanged; and

3) Projections assume continuation of the current industrial mix in each county.

As an example in reading the table, refer to the Etowah River in Bartow County. The 7Q10 flow below Allatoona Dam is 240 cfs. There is an industrial withdrawal from the river and Cartersville withdraws its supply directly from the lake. The present demand and its projected growth are small in relation to the water resource of the Etowah. A significant expansion of water-using industry could be supported as long as a high level of water quality is maintained in the return flows.

As shown in Table 12, the Oostanaula River in Floyd and Gordon Counties, the Cartecay and Ellijay Rivers in Gilmer County and the Etowah River in Cherokee County are other examples of stream reaches with ample water resources to support water-using industrial development. The Coosawattee below Carters Dam is shown to be another stream with excellent, dependable flow. Carters Dam has stabilized the stream and made it the subject of intense interest to communities in neighboring valleys.

The table contains numerous instances of small streams being overstressed by water users. Continuing population growth will create still more problems. The most critical problem is at Dalton, where the city's intakes withdraw the 7Q10 of Mill Creek (tributary to Coahulla Creek) and the Conasauga River. Other examples are:

Hickory Log Creek	Cherokee County
Beech Creek	Floyd County
Silver Creek	Floyd County
Holly Creek	Murray County
Tributary, Long Swamp Creek	Pickens County
Duck Creek	Walker County

Both the customer and the resource can generally be put in a stronger position by provision of storage. The amount of storage required is proportional to the amount of flow in the stream, the amount of water required for withdrawal, and instream needs.

Diversion of flow from one stream to another within the basin to move the water to the people is an attractive prospect. A permit has been granted to the City of Calhoun to withdraw up to 20.5 cfs from the Coosawattee River. The Cities of Chatsworth and Dalton have also expressed interest in diverting Coosawattee flow. Preliminary information gathered for this report indicates that such diversion in the amounts needed for those cities as shown in projections for this report can be accommodated without major detriment to the downstream needs. However, it will be necessary for storage to be provided on each system to allow the flow of the stream to pass the point of withdrawal when the flow equals or is less than the 7Q10. If the diversions are to be used and then treated by land spraying, there could be almost complete loss of these flows in the dry season. Such depletion of the resource would have serious impacts in the downstream valley.

Diversion of flow outside the Coosa would require exacting analysis. In view of the water quality situation below Rome and instream requirements down river in Alabama, diversion of significant flow will be discouraged generally. However, in those instances where diversion will uniquely satisfy a need and/or appropriate mitigation can be provided, a diversion could be considered favorably.

B&V WASTE SCIENCE AND TECHNOLOGY CORP.

TELEPHONE MEMORANDUM

BVWST Project 52012.048
January 3, 1992
10:35 a.m.

Walker County Water service

To: Mike Nicholson
Company: Asst. Manager, Walker Co. Water
Phone No.: (404) 820-1455

Recorded by: Jancie S. Hatcher JSH 1-3-92

The Walker County system serves the majority of NE Walker Co. that is not served by Tennessee-American water company. They are still supplied by the following:

3 wells in Chickamauga on Coke Oven property
Surface Water intake at Crawfish Springs Lake, south of Chickamauga

The system is blended only when necessary. In general, the portion of the system closest to the Surface water intake is served by the intake, and vice-versa with wells. They also have emergency hook-up to TN-American water available.

They do not serve any portion of Lookout Mt.- he said maybe call City of Lookout Mt. for that information.

They currently serve approximately 7,000 customers. He did not know number of connections.

B&V WASTE SCIENCE AND TECHNOLOGY CORP.

TELEPHONE MEMORANDUM

BVWST Project 52011.006
September 24, 1991
9:00 a.m.

Catoosa County Utility water

To: Rick Brown
Company: Catoosa County Utilities
Phone No.: (404) 937-4121

Recorded by: Jancie S. Hatcher JSH 9-24-91

Catoosa County Utilities is a private utility district. They have a sole source intake at Yates Spring, which is located in the southern portion of the county. The system has approximately 9,000 connections, and he stated that some areas in the county are still using private wells. This utility district serves most areas in Catoosa County, with the exception of Ft. Oglethorpe and Ringgold water systems. He told me that it was his understanding that Rossville used Walker County Water system.

B&V WASTE SCIENCE AND TECHNOLOGY CORP.

TELEPHONE MEMORANDUM

BVWST Project No. 52011.011
March 6, 1992
3:00 p.m.

Fishing in the LaFayette area

To: Gary Beisser
Company: Georgia Dept. of Fisheries - Calhoun
Phone No.: (404) 629-1259

Recorded by: Jancie Hatcher JSH 3-6-92

Mr. Beisser provided me with the following information:
Fishing occurs recreationally in LaFayette City Reservoir, Town Creek, and Chattooga River. The Reservoir contains the following: bass, bluegill, and channel catfish, etc. The creek contains the following: sunfish, large-mouth bass, minnows, etc. There have been several fish kills in Town Creek, which were attributed to sewage overflow from LaFayette City sewers. He does not know of any fishing in the area for commercial purposes.

[illegible] STEEL [illegible]
[illegible] [illegible]: 3 [illegible] 85:11:[illegible] [illegible] NUMBERING

[illegible]	0.00-.400	.400-.81[illegible]	.81[illegible]-1.6[illegible]	1.60-3.20	3.20-4.00	4.80-[illegible]	[illegible] TOTALS
S 1	0	0	0	0	0	0	0
S 2	0	0	0	0	0	0	0
S 3	0	0	473	0	980	0	1453
S 4	0	0	0	0	0	0	0
S 5	0	0	0	1485	857	1146	3488
S 6	0	0	1285	0	1276	2186	4747
S 7	0	0	0	132	0	0	132
S 8	0	0	0	0	0	0	0
SIND TOTALS	0	0	1757	1617	3013	3332	9719

press RETURN to continue

Georgia Department of Natural Resources

Game and Fish Division
Freshwater Wetlands and Heritage Inventory Program
John Bozeman, Program Manager
2117 U.S. Hwy 278 SE
Social Circle, Georgia 30279
(404) 557-2514

JOE TANNER, COMMISSIONER
DAVID WALLER, DIVISION DIRECTOR

Ref. 26

March 24, 1992

Mr. Ronald A. Wilde
B & V Waste Science and Technology Corporation
1117 Perimeter Center West
Suite W-212
Atlanta, Georgia 30338

Dear Mr. Wilde:

Enclosed is the information you requested on rare species possibly occurring in Walker, Gordon, Murray, Whitfield and Gilmer Counties, Georgia. For each of these counties you will find a list of all the rare species and important natural communities for which we have records of occurrence. These could therefore occur in the area of interest. For each of the specific 12 topographic quadrangles of interest we have likewise listed those rare elements known to occur in the quadrangle area. The county lists provide the information on which of these are state of federally protected.

The exact location of the occurrences is considered sensitive information due to the potential harm that could be done to these populations by publishing this information. If more detail or additional information is needed, please let me know.

Sincerely,

Charles V. Rabolli

Charles V. Rabolli
Asst. Program Manager

CVR/lg
see enclosures
cc: John Bozeman

TOPOGRAPHIC QUAD	SPECIES	COMMON NAME
Lafayette	Crockford-Pigeon Mtn.	Crockford-Pigeon Mountain Wildlife Management Area
	Camassia scilloides	Wild Hyacinth
	Woodsia scopulina	Rocky Mountain cliff fern
	Viola conspersa	American dog violet
	Dryopteris celsa	Log fern
	Hydrastis canadensis	Golden seal
	Phacelia purshii	Miami-mist
	Etheostoma coosae	Coosa darter
	Plethodon petraeus	Pigeon Mountain Salamande
	Aneides aeneus	Green salamander
	Neviusia alabamensis	Alabama snow-wreath
	Aesculus glabra	Ohio buckeye
	Jefferson diphylla	Twinleaf
	Continus obovatus	American smoketree
Kensington	Crockford-Pigeon Mtn.	Crockford-Pigeon Mountain Wildlife Management Area
	Trillium lancifolium	Lanceleaf trillium
	Jefferson diphylla	Twinleaf
	Carex purpurifera	Purple sedge
	Hydrastis canadensis	Golden seal
	CU/RV Submesic Needleleaf Evergreen Forest	Cedar glade
	Notropis stilbius	Silverstripe shiner
	Leavenworthia Exigua var exigua	Glade-cress
	Notropis ariommus	Popeye shiner
	Etheostoma simoterum	Tennessee snubnose darter
	Etheostoma caeruleum	Rainbow darter
	Etheostoma rufileneatum	Redline darter
	Notropis ardens	Rosyfin shiner
	Etheostoma coosae	Coosa darter
	Mountain spring	Mountain spring
	CU/RV Cave	Cumberland Plateau/Ridge Valley Cave
Ramhurst	Ft. Mountain State Park	Ft. Mountain State Park
	Chattahoochee Natl. Forest	Chattahoochee National Forest
	Hydrophyllum macrophyllum	Largeleaf waterleaf
	Notropis caeruleus	Blue shiner
	Notropis asperifrons	Burrhead shiner
	Coosawattee/Talking Rock WMA	Coosawattee/Talking Rock Wildlife Management Area

OCCURRENCE RECORDS FOR RARE ELEMENTS IN WALKER COUNTY

SPECIES/COMMUNITY	COMMON NAME	FEDERAL STATUS	STATE STATUS	GLOBAL RANK	STATE RANK	LAST OBSERVATION
*** WALKER						
AESCULUS GLABRA	OHIO BUCKEYE			G5	S1	1987-07-18
AESCULUS GLABRA	OHIO BUCKEYE			G5	S1	1986-06-22
AESCULUS GLABRA	OHIO BUCKEYE			G5	S1	1987-07-18
ANEIDES AENEUS	GREEN SALAMANDER	C23C		G3G4	S2	1986-05
ANEIDES AENEUS	GREEN SALAMANDER	C23C		G3G4	S2	1986-05
BARE ROCK/LICHENS, CU/RV SANDSTONE OUTCROP	SANDSTONE OUTCROP ROCK/LICHENS					1987-06-17
BARE ROCK/LICHENS, CU/RV SANDSTONE OUTCROP	SANDSTONE OUTCROP ROCK/LICHENS					1987-06-17
BUCHNERA AMERICANA	BLUEHEARTS			G4G5	S1	1987-06-18
CAMASSIA SCILLOIDES	WILD HYACINTH			G4G5	S2	1982-04-06
CAMASSIA SCILLOIDES	WILD HYACINTH			G4G5	S2	1989-04-22
CAMASSIA SCILLOIDES	WILD HYACINTH			G4G5	S2	1984-05-06
CAREX PURPURIFERA	PURPLE SEDGE	3C	T	G3?	S2	1951-05-20
COTINUS OBOVATUS	AMERICAN SMOKETREE			G4	S1	1987-07-18
CU/RV CAVE	CUMBERLAND PLATEAU/RIDGE AND VALLEY CAVE					1963
CU/RV SUBMESIC NEEDLELEAF EVER. FOREST	CEDAR GLADE					1977-04-04
CU/RV SUBMESIC NEEDLELEAF EVER. FOREST	CEDAR GLADE					1977-04-04
CU/RV SUBMESIC NEEDLELEAF EVER. FOREST	CEDAR GLADE					1977-04-04
DRYOPTERIS CELSA	LOG FERN			G4	S2	1982-05-01
ERIGENIA BULBOSA	HARBINGER-OF-SPRING			G5	S1	1987-04-12
ETHEOSTOMA CAERULEUM	RAINBOW DARTER			G5	S1	1960-05-14
ETHEOSTOMA CAERULEUM	RAINBOW DARTER			G5	S1	1960-05-13
ETHEOSTOMA CAERULEUM	RAINBOW DARTER			G5	S1	1960-05-14
ETHEOSTOMA CAERULEUM	RAINBOW DARTER			G5	S1	1979-04-21
ETHEOSTOMA COOSAE	COOSA DARTER			G4	S3	1960-05-14
ETHEOSTOMA COOSAE	COOSA DARTER			G4	S3	1979-06-21
ETHEOSTOMA COOSAE	COOSA DARTER			G4	S3	1960-05-14
ETHEOSTOMA COOSAE	COOSA DARTER			G4	S3	1960-05-13
ETHEOSTOMA JESSIAE	BLUESIDE DARTER			G4Q	S2	1960-05-14

OCCURRENCE RECORDS FOR RARE ELEMENTS IN WALKER COUNTY

SPECIES/COMMUNITY	COMMON NAME	FEDERAL STATUS	STATE STATUS	GLOBAL RANK	STATE RANK	LAST OBSERVATION
ETHEOSTOMA RUFILINEATUM	REDLINE DARTER			G5	S2	1960-05-14
ETHEOSTOMA RUFILINEATUM	REDLINE DARTER			G5	S2	1960-05-14
ETHEOSTOMA RUFILINEATUM	REDLINE DARTER			G5	S2	1976-04-10
ETHEOSTOMA RUFILINEATUM	REDLINE DARTER			G5	S2	1968-09-28
ETHEOSTOMA SIMOTERUM	TENNESSEE SNUBNOSE DARTER			G5	S1	1960-05-14
ETHEOSTOMA SIMOTERUM	TENNESSEE SNUBNOSE DARTER			G5	S1	1968-09-28
ETHEOSTOMA SIMOTERUM	TENNESSEE SNUBNOSE DARTER			G5	S1	1979-04-21
ETHEOSTOMA SIMOTERUM	TENNESSEE SNUBNOSE DARTER			G5	S1	1960-05-13
ETHEOSTOMA SIMOTERUM	TENNESSEE SNUBNOSE DARTER			G5	S1	1960-05-14
FOTHERGILLA MAJOR	MOUNTAIN WITCH-ALDER			G3	S1	1986-04-15
FRAXINUS QUADRANGULATA	BLUE ASH			G5	S1	1987-04-12
HERBACEOUS VEG., CU-RV SANDSTONE OUTCROP	SANDSTONE OUTCROP HERB COMMUNITY					1987-06-17
HERBACEOUS VEG., CU-RV SANDSTONE OUTCROP	SANDSTONE OUTCROP HERB COMMUNITY					1987-06-17
HYDRASTIS CANADENSIS	GOLDEN SEAL	3C	E	G4	S2	1952-04-26
HYDRASTIS CANADENSIS	GOLDEN SEAL	3C	E	G4	S2	1987-04-11
HYDRASTIS CANADENSIS	GOLDEN SEAL	3C	E	G4	S2	1975-04-27
ICHTHYOMYZON CASTANEUS	CHESTNUT LAMPREY			G5	S3	
JEFFERSONIA DIPHYLLA	TWINLEAF		E	G5	S1	1971-03-31
JEFFERSONIA DIPHYLLA	TWINLEAF		E	G5	S1	1987-04-11
LEAVENWORTHIA EXIGUA VAR EXIGUA	GLADE-CRESS	C2	T	G3T3	S1	1978-00-00
LEAVENWORTHIA EXIGUA VAR EXIGUA	GLADE-CRESS	C2	T	G3T3	S1	1977-04-04
LILIUM PHILADELPHICUM	WOOD LILY			G5	S1	1987-06-18
MARSHALLIA MOHRII	MOHR BARBARA BUTTONS	LT	PE	G2	SH	1898-07-00
MATELEA OBLIQUA	LIMEROCK MILKVINE			G4?	S1	1982-??-??
MATELEA OBLIQUA	LIMEROCK MILKVINE			G4?	S1	1986-06-15
MATELEA OBLIQUA	LIMEROCK MILKVINE			G4?	S1	1986-06-15
MOUNTAIN SPRING	MOUNTAIN SPRING					1990-07-05
NEVIUSIA ALABAMENSIS	ALABAMA SNOW-WREATH	C2	PE	G2	S1	1987-07-18
NOTROPIS ARDENS	ROSYFIN SHINER			G5	S1	1968-09-28
NOTROPIS ARIOMMUS	POPEYE SHINER			G3	S1	1968-09-28
NOTROPIS ARIOMMUS	POPEYE SHINER			G3	S1	1976-04-10
NOTROPIS LIRUS	MOUNTAIN SHINER			G4	S3	1960-05-13
NOTROPIS LIRUS	MOUNTAIN SHINER			G4	S3	1979-04-21
NOTROPIS STILBIUS	SILVERSTRIPE SHINER			G4?	S3	1960-05-14

OCCURRENCE RECORDS FOR RARE ELEMENTS IN WALKER COUNTY

SPECIES/COMMUNITY	COMMON NAME	FEDERAL STATUS	STATE STATUS	GLOBAL RANK	STATE RANK	LAST OBSERVATION
NOTROPIS TELESCOPUS	TELESCOPE SHINER			G5	S2	1976-04-10
NOTROPIS TELESCOPUS	TELESCOPE SHINER			G5	S2	1980-11-12
PANAX QUINQUEFOLIUS	AMERICAN GINSENG	3C		G4	S3	1990-08-24
PARONYCHIA ARGYROCOMA	SILVERLING			G4	S1	1936-05-24
PHACELIA PURSHII	MIAMI-MIST			G5	S1	1984-05-05
PHILADELPHUS PUBESCENS	HAIRY MOCKORANGE			G5?	S1	1987-04-12
PIMEPHALES NOTATUS	BLUNTNOSE MINNOW			G5	S2?	1960-05-13
PIMEPHALES NOTATUS	BLUNTNOSE MINNOW			G5	S2?	1960-05-13
PLETHODON PETRAEUS	PIGEON MOUNTAIN SALAMANDER			G1G2	S1S2	1986-05
PLETHODON PETRAEUS	PIGEON MOUNTAIN SALAMANDER			G1G2	S1S2	1986-05
PLETHODON PETRAEUS	PIGEON MOUNTAIN SALAMANDER			G1G2	S1S2	1986-05
PLETHODON PETRAEUS	PIGEON MOUNTAIN SALAMANDER			G1G2	S1S2	1986-05
SABATIA CAPITATA	ROSE GENTIAN		PT	G2	S1	1987-07-16
SCUTELLARIA MONTANA	LARGE-FLOWER SKULLCAP	LE	T	G1	S1S2	1983-06-00
SCUTELLARIA MONTANA	LARGE-FLOWER SKULLCAP	LE	T	G1	S1S2	1989-05-19
SHRUB/SCRUB VEG., CU-RV SANDSTONE OUTCROP	SANDSTONE OUTCROP SHRUB/SCRUB COMMUNITY					1987-06-17
SHRUB/SCRUB VEG., CU-RV SANDSTONE OUTCROP	SANDSTONE OUTCROP SHRUB/SCRUB COMMUNITY					1987-06-17
SPIRAEA VIRGINIANA	VIRGINIA SPIREA	LT	PE	G1	S1	1988-06-04
SPIRAEA VIRGINIANA	VIRGINIA SPIREA	LT	PE	G1	S1	1988-06040
STYLOPHORUM DIPHYLLUM	CELANDINE POPPY			G5	S1	1987-04-12
TRICHOMANES PETERSII	DWARF FILMY FERN			G3	S2	1952-07-04
TRILLIUM FLEXIPES	BENT TRILLIUM			G5	S1	1987-04-12
TRILLIUM LANCIFOLIUM	LANCELEAF TRILLIUM			G3	S2	1985-04-19
TRILLIUM LANCIFOLIUM	LANCELEAF TRILLIUM			G3	S2	1957-03-31
TRILLIUM SULCATUM	BARKSDALE TRILLIUM			G3?Q	S2	1985-04-18
TRILLIUM SULCATUM	BARKSDALE TRILLIUM			G3?Q	S2	1985-04-18
VERATRUM WOODII	WOOD FALSE HELLEBORE	3C	E	G5	S2	1953-05-12
VIOLA CONSPERSA	AMERICAN DOG VIOLET			G5	S2	1982-03-19
WOODSIA SCOPULINA	ROCKY MOUNTAIN CLIFF FERN			G5	S1	1981-11-06

EXPLANATION OF RARITY RANKS AND STATUS

The "Global Rank" and "State Rank" columns indicate relative rarity of species at the rangewide or global level and the Georgia or state level, respectively. An explanation of those ranks and of federal and state protection status follows.

STATE [GLOBAL] RANK:

S1[G1] = Critically imperiled in state [globally] because of extreme rarity (5 or fewer occurrences).

S2[G2] = Imperiled in state [globally] because of rarity (6 to 20 occurrences).

S3[G3] = Rare or uncommon in state [rare and local throughout range or in a special habitat] (on the order of 21 to 100 occurrences).

S4[G4] = Apparently secure in state [globally].

S5[G5] = Demonstrably secure in state [globally].

SA = Accidental in state, including species (usually birds or butterflies) recorded once or twice or only at very great intervals.

SN = Regularly occurring, usually migratory and typically nonbreeding species.

SR = Reported from the state, but without persuasive documentation.

SU[GU] = Possibly in peril in state [range-wide] but status uncertain; need more information on threats.

SX[GX] = Apparently extirpated from state [extinct throughout range]. GXC is known only in cultivation/captivity.

SE = An exotic established in state; may be native elsewhere in North America; sometimes nativity is difficult to determine (SE?).

SH[GH] = Of historical occurrence in the state [throughout its range], perhaps not verified in the past 20 years, but suspected to be still extant.

FEDERAL STATUS:

LE = Listed endangered. The most critically imperiled species. A species that may become extinct or disappear from a significant part of its range if not immediately protected.

APPENDIX A

TOPOGRAPHIC MAP

OVERSIZED

DOCUMENT

APPENDIX B

ANALYTICAL DATA SHEETS

INORGANIC DATA QUALIFIERS REPORT

Case Number: 17446
Project Number: 92-0109
Site: Lafayette Sheet Metal, Lafayette, GA

Element	Flag	Samples Affected	Reason
Cu	U	All positives > IDL but < CRDL	Baseline instability
Ba, Ca, Fe, Na Zn	U	All positives > IDL but < 10x contaminant level	Positives in Blanks
Sb	JN	All positives with Al or Fe concentrations in solution > 75,000 ug/L	Suspected positive interference as noted in the contractor ICS
Cd	JN	All positives with Fe concentrations in solution > 53,000 ug/L	Suspected positive interference as noted in the contractor ICS
As	J	All	Matrix spike recovery = 67.5%
Sb	J	All	Matrix spike recovery = 35.6%
Pb	J	All	Matrix spike recovery = 67.5%
Ag	J	MDBC83	% RSD > 20% for ICP multiple exposures

ORGANIC DATA QUALIFIER REPORT

Case Number 17446 Project Number 92-0109 SAS Number
Site ID. Lafayette Sheet Metal, Lafayette, GA.

Affected Samples	Compound or Fraction	Flag Used	Reason
Volatiles			
63656,63657	toluene	J	<quantitation limit
63660	carbon disulfide	J	<quantitation limit
Extractables			
63654,63660	all positives	J	<quantitation limit
Pesticides			
none			

INORGANIC DATA QUALIFIERS REPORT

Case Number: 17446
Project Number: 92-0109
Site: Lafayette Sheet Metal, Lafayette, GA

Element	Flag	Samples Affected	Reason
Cu	U	All positives > IDL but < CRDL	Baseline instability
Ba, Ca, Fe, Na Zn	U	All positives > IDL but < 10x contaminant level	Positives in Blanks
Sb	JN	All positives with Al or Fe concentrations in solution > 75,000 ug/L	Suspected positive interference as noted in the contractor ICS
Cd	JN	All positives with Fe concentrations in solution > 53,000 ug/L	Suspected positive interference as noted in the contractor ICS
As	J	All	Matrix spike recovery = 67.5%
Sb	J	All	Matrix spike recovery = 35.6%
Pb	J	All	Matrix spike recovery = 67.5%
Ag	J	MDBC83	% RSD > 20% for ICP multiple exposures

ORGANIC DATA QUALIFIER REPORT

Case Number 17446 Project Number 92-0109 SAS Number
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63660	carbon disulfide	J	<quantitation limit
Extractables			
63654,63660	all positives	J	<quantitation limit
Pesticides			
none			

ORGANIC DATA QUALIFIER REPORT

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Volatiles			
63656,63657	toluene	J	<quantitation limit
63660	carbon disulfide	J	<quantitation limit
Extractables			
63654,63660	all positives	J	<quantitation limit
Pesticides			
none			

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63652 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-01

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1215 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB71

UG/KG	ANALYTICAL RESULTS
11U	CHLOROMETHANE
11U	BROMOMETHANE
11U	VINYL CHLORIDE
11U	CHLOROETHANE
11U	METHYLENE CHLORIDE
11U	ACETONE
11U	CARBON DISULFIDE
11U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
11U	1,1-DICHLOROETHANE
11U	1,2-DICHLOROETHENE (TOTAL)
11U	CHLOROFORM
11U	1,2-DICHLOROETHANE
11U	METHYL ETHYL KETONE
11U	1,1,1-TRICHLOROETHANE
11U	CARBON TETRACHLORIDE
11U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
11U	1,2-DICHLOROPROPANE
11U	CIS-1,3-DICHLOROPROPENE
11U	TRICHLOROETHENE(TRICHLOROETHYLENE)
11U	DIBROMOCHLOROMETHANE
11U	1,1,2-TRICHLOROETHANE
11U	BENZENE
11U	TRANS-1,3-DICHLOROPROPENE
11U	BROMOFORM
11U	METHYL ISOBUTYL KETONE
11U	METHYL BUTYL KETONE
11U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
11U	1,1,2,2-TETRACHLOROETHANE
11U	TOLUENE
11U	CHLOROBENZENE
11U	ETHYL BENZENE
11U	STYRENE
11U	TOTAL XYLENES
13	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63652 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-01

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1215 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB71

UG/KG	ANALYTICAL RESULTS
380U	PHENOL
380U	BIS(2-CHLOROETHYL) ETHER
380U	2-CHLOROPHENOL
380U	1,3-DICHLOROBENZENE
380U	1,4-DICHLOROBENZENE
380U	1,2-DICHLOROBENZENE
380U	2-METHYLPHENOL
380U	2,2'-CHLOROISOPROPYLETHER
380U	(3-AND/OR 4-)METHYLPHENOL
380U	N-NITROSODI-N-PROPYLAMINE
380U	HEXACHLOROETHANE
380U	NITROBENZENE
380U	ISOPHORONE
380U	2-NITROPHENOL
380U	2,4-DIMETHYLPHENOL
380U	BIS(2-CHLOROETHOXY) METHANE
380U	2,4-DICHLOROPHENOL
380U	1,2,4-TRICHLOROBENZENE
380U	NAPHTHALENE
380U	4-CHLOROANILINE
380U	HEXACHLOROBUTADIENE
380U	4-CHLORO-3-METHYLPHENOL
380U	2-METHYLNAPHTHALENE
380U	HEXACHLOROCYCLOPENTADIENE (HCCP)
380U	2,4,6-TRICHLOROPHENOL
920U	2,4,5-TRICHLOROPHENOL
380U	2-CHLORONAPHTHALENE
920U	2-NITROANILINE
380U	DIMETHYL PHTHALATE
[illegible]	ACENAPHTHYLENE
380U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
920U	3-NITROANILINE
380U	ACENAPHTHENE
920U	2,4-DINITROPHENOL
920U	4-NITROPHENOL
380U	DIBENZOFURAN
380U	2,4-DINITROTOLUENE
380U	DIETHYL PHTHALATE
380U	4-CHLOROPHENYL PHENYL ETHER
380U	FLUORENE
920U	4-NITROANILINE
920U	2-METHYL-4,6-DINITROPHENOL
380U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
380U	4-BROMOPHENYL PHENYL ETHER
380U	HEXACHLOROBENZENE (HCB)
920U	PENTACHLOROPHENOL
380U	PHENANTHRENE
380U	ANTHRACENE
380U	CARBAZOLE
380U	DI-N-BUTYLPHTHALATE
380U	FLUORANTHENE
380U	PYRENE
380U	BENZYL BUTYL PHTHALATE
380U	3,3'-DICHLOROBENZIDINE
380U	BENZO(A)ANTHRACENE
380U	CHRYSENE
380U	BIS(2-ETHYLHEXYL) PHTHALATE
380U	DI-N-OCTYLPHTHALATE
380U	BENZO(B AND/OR K)FLUORANTHENE
380U	BENZO-A-PYRENE
[illegible]	INDENO(1,2,3-CD)PYRENE
380U	DIBENZO(A,H)ANTHRACENE
380U	BENZO(GHI)PERYLENE
13	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63652   SAMPLE TYPE: SOIL          PROG ELEM: NSF    COLLECTED BY: R WILDE                     **
**   SOURCE: LAFAYETTE SHEET META                                        CITY: LAFAYETTE              ST: GA                       **
**   STATION ID: SS-01                                                   COLLECTION START: 11/18/91  1215   STOP: 00/00/00         **
**   CASE NO.: 17446          SAS NO.:                                   D. NO.: CB71               MD NO: CB71                    **
**                                                                                                                                 **
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ANALYTICAL RESULTS UG/KG

400JN	HEXADECANOIC ACID
9000J	7 UNIDENTIFIED COMPOUNDS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63652 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-01
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1215 STOP: 00/00/00
D. NUMBER: CB71

UG/KG	ANALYTICAL RESULTS
2.0U	ALPHA-BHC
2.0U	BETA-BHC
2.0U	DELTA-BHC
2.0U	GAMMA-BHC (LINDANE)
2.0U	HEPTACHLOR
2.0U	ALDRIN
2.0U	HEPTACHLOR EPOXIDE
2.0U	ENDOSULFAN I (ALPHA)
3.8U	DIELDRIN
3.8U	4,4'-DDE (P,P'-DDE)
3.8U	ENDRIN
3.8U	ENDOSULFAN II (BETA)
3.8U	4,4'-DDD (P,P'-DDD)
3.8U	ENDOSULFAN SULFATE
3.8U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
20U	METHOXYCHLOR
3.8U	ENDRIN KETONE
3.8U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
2.0U	GAMMA-CHLORDANE /2
2.0U	ALPHA-CHLORDANE /2
200U	TOXAPHENE
38U	PCB-1016 (AROCLOR 1016)
77U	PCB-1221 (AROCLOR 1221)
38U	PCB-1232 (AROCLOR 1232)
38U	PCB-1242 (AROCLOR 1242)
38U	PCB-1248 (AROCLOR 1248)
38U	PCB-1254 (AROCLOR 1254)
38U	PCB-1260 (AROCLOR 1260)
13	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63658 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-02

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1610 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB78

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE	12U	1,2-DICHLOROPROPANE
12U	BROMOMETHANE	12U	CIS-1,3-DICHLOROPROPENE
12U	VINYL CHLORIDE	12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	CHLOROETHANE	12U	DIBROMOCHLOROMETHANE
12U	METHYLENE CHLORIDE	12U	1,1,2-TRICHLOROETHANE
12U	ACETONE	12U	BENZENE
12U	CARBON DISULFIDE	12U	TRANS-1,3-DICHLOROPROPENE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	12U	BROMOFORM
12U	1,1-DICHLOROETHANE	12U	METHYL ISOBUTYL KETONE
12U	1,2-DICHLOROETHENE (TOTAL)	12U	METHYL BUTYL KETONE
12U	CHLOROFORM	12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,2-DICHLOROETHANE	12U	1,1,2,2-TETRACHLOROETHANE
12U	METHYL ETHYL KETONE	12U	TOLUENE
12U	1,1,1-TRICHLOROETHANE	12U	CHLOROBENZENE
12U	CARBON TETRACHLORIDE	12U	ETHYL BENZENE
12U	BROMODICHLOROMETHANE	12U	STYRENE
		12U	TOTAL XYLENES
		19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63658 SAMPLE TYPE: SOIL	PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META	CITY: LAFAYETTE ST: GA
STATION ID: SS-02	COLLECTION START: 11/18/91 1610 STOP: 00/00/00
CASE NO.: 17446 SAS NO.:	D. NO.: CB78 MD NO: CB78

ANALYTICAL RESULTS UG/KG

30JN	CARENE
20JN	METHYLENE(METHYLETHYL)CYCLOHEXANE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63658 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-02

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1610 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB78

UG/KG	ANALYTICAL RESULTS
410U	PHENOL
410U	BIS(2-CHLOROETHYL) ETHER
410U	2-CHLOROPHENOL
410U	1,3-DICHLOROBENZENE
410U	1,4-DICHLOROBENZENE
410U	1,2-DICHLOROBENZENE
410U	2-METHYLPHENOL
410U	2,2'-CHLOROISOPROPYLETHER
410U	(3-AND/OR 4-)METHYLPHENOL
410U	N-NITROSODI-N-PROPYLAMINE
410U	HEXACHLOROETHANE
410U	NITROBENZENE
410U	ISOPHORONE
410U	2-NITROPHENOL
410U	2,4-DIMETHYLPHENOL
410U	BIS(2-CHLOROETHOXY) METHANE
410U	2,4-DICHLOROPHENOL
410U	1,2,4-TRICHLOROBENZENE
410U	NAPHTHALENE
410U	4-CHLOROANILINE
410U	HEXACHLOROBUTADIENE
410U	4-CHLORO-3-METHYLPHENOL
410U	2-METHYLNAPHTHALENE
410U	HEXACHLOROCYCLOPENTADIENE (HCCP)
410U	2,4,6-TRICHLOROPHENOL
990U	2,4,5-TRICHLOROPHENOL
410U	2-CHLORONAPHTHALENE
990U	2-NITROANILINE
410U	DIMETHYL PHTHALATE
[illegible]	ACENAPHTHYLENE
410U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
990U	3-NITROANILINE
410U	ACENAPHTHENE
990U	2,4-DINITROPHENOL
990U	4-NITROPHENOL
410U	DIBENZOFURAN
410U	2,4-DINITROTOLUENE
410U	DIETHYL PHTHALATE
410U	4-CHLOROPHENYL PHENYL ETHER
410U	FLUORENE
990U	4-NITROANILINE
990U	2-METHYL-4,6-DINITROPHENOL
410U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
410U	4-BROMOPHENYL PHENYL ETHER
410U	HEXACHLOROBENZENE (HCB)
990U	PENTACHLOROPHENOL
410U	PHENANTHRENE
410U	ANTHRACENE
410U	CARBAZOLE
410U	DI-N-BUTYLPHTHALATE
410U	FLUORANTHENE
410U	PYRENE
410U	BENZYL BUTYL PHTHALATE
410U	3,3'-DICHLOROBENZIDINE
410U	BENZO(A)ANTHRACENE
410U	CHRYSENE
410U	BIS(2-ETHYLHEXYL) PHTHALATE
410U	DI-N-OCTYLPHTHALATE
410U	BENZO(B AND/OR K)FLUORANTHENE
410U	BENZO-A-PYRENE
[illegible]	INDENO(1,2,3-CD)PYRENE
410U	DIBENZO(A,H)ANTHRACENE
410U	BENZO(GHI)PERYLENE
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.
01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS DATA REPORT

*** ***
** PROJECT NO. 92-0109 SAMPLE NO. 63658 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SS-02 COLLECTION START: 11/18/91 1610 STOP: 00/00/00 **
** CASE NO.: 17446 SAS NO.: D. NO.: CB78 MD NO: CB78 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

800000J	8 UNIDENTIFIED COMPOUNDS
N	PETROLEUM PRODUCT
400JN	HEXACHLOROHEXAHYDROETHENOPENTALENE
600JN	HEXACHLOROTETRAHYDROMETHANOINDENE
300JN	HEXADECANOIC ACID
400J	1 UNIDENTIFIED CHLORINATED COMPOUND

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63658 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-02
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1610 STOP: 00/00/00
D. NUMBER: CB78

UG/KG	ANALYTICAL RESULTS
2.1U	ALPHA-BHC
2.1U	BETA-BHC
2.1U	DELTA-BHC
2.1U	GAMMA-BHC (LINDANE)
2.1U	HEPTACHLOR
2.1U	ALDRIN
46	**HEPTACHLOR EPOXIDE**
2.1U	ENDOSULFAN I (ALPHA)
4.1U	DIELDRIN
4.1U	4,4'-DDE (P,P'-DDE)
4.1U	ENDRIN
4.1U	ENDOSULFAN II (BETA)
4.1U	4,4'-DDD (P,P'-DDD)
4.1U	ENDOSULFAN SULFATE
4.1U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
21U	METHOXYCHLOR
4.1U	ENDRIN KETONE
4.1U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
1500C	**GAMMA-CHLORDANE /2**
1300C	**ALPHA-CHLORDANE /2**
210U	TOXAPHENE
41U	PCB-1016 (AROCLOR 1016)
83U	PCB-1221 (AROCLOR 1221)
41U	PCB-1232 (AROCLOR 1232)
41U	PCB-1242 (AROCLOR 1242)
41U	PCB-1248 (AROCLOR 1248)
41U	PCB-1254 (AROCLOR 1254)
41U	PCB-1260 (AROCLOR 1260)
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED. SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63661 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-03

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST. GA
COLLECTION START: 11/19/91 1010 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB81

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
12U	METHYLENE CHLORIDE
12U	ACETONE
12U	CARBON DISULFIDE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
12U	1,1-DICHLOROETHANE
12U	1,2-DICHLOROETHENE (TOTAL)
12U	CHLOROFORM
12U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
12U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
12U	1,2-DICHLOROPROPANE
12U	CIS-1,3-DICHLOROPROPENE
12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	DIBROMOCHLOROMETHANE
12U	1,1,2-TRICHLOROETHANE
12U	BENZENE
12U	TRANS-1,3-DICHLOROPROPENE
12U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
12U	TOLUENE
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
14	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63661 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-03

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1010 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB81

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
380U	PHENOL	930U	3-NITROANILINE
380U	BIS(2-CHLOROETHYL) ETHER	380U	ACENAPHTHENE
380U	2-CHLOROPHENOL	930U	2,4-DINITROPHENOL
380U	1,3-DICHLOROBENZENE	930U	4-NITROPHENOL
380U	1,4-DICHLOROBENZENE	380U	DIBENZOFURAN
380U	1,2-DICHLOROBENZENE	380U	2,4-DINITROTOLUENE
380U	2-METHYLPHENOL	380U	DIETHYL PHTHALATE
380U	2,2'-CHLOROISOPROPYLETHER	380U	4-CHLOROPHENYL PHENYL ETHER
380U	(3-AND/OR 4-)METHYLPHENOL	380U	FLUORENE
380U	N-NITROSODI-N-PROPYLAMINE	930U	4-NITROANILINE
380U	HEXACHLOROETHANE	930U	2-METHYL-4,6-DINITROPHENOL
380U	NITROBENZENE	380U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
380U	ISOPHORONE	380U	4-BROMOPHENYL PHENYL ETHER
380U	2-NITROPHENOL	380U	HEXACHLOROBENZENE (HCB)
380U	2,4-DIMETHYLPHENOL	930U	PENTACHLOROPHENOL
380U	BIS(2-CHLOROETHOXY) METHANE	380U	PHENANTHRENE
380U	2,4-DICHLOROPHENOL	380U	ANTHRACENE
380U	1,2,4-TRICHLOROBENZENE	380U	CARBAZOLE
380U	NAPHTHALENE	380U	DI-N-BUTYLPHTHALATE
380U	4-CHLOROANILINE	380U	FLUORANTHENE
380U	HEXACHLOROBUTADIENE	380U	PYRENE
380U	4-CHLORO-3-METHYLPHENOL	380U	BENZYL BUTYL PHTHALATE
380U	2-METHYLNAPHTHALENE	380U	3,3'-DICHLOROBENZIDINE
380U	HEXACHLOROCYCLOPENTADIENE (HCCP)	380U	BENZO(A)ANTHRACENE
380U	2,4,6-TRICHLOROPHENOL	380U	CHRYSENE
930U	2,4,5-TRICHLOROPHENOL	380U	BIS(2-ETHYLHEXYL) PHTHALATE
380U	2-CHLORONAPHTHALENE	380U	DI-N-OCTYLPHTHALATE
930U	2-NITROANILINE	380U	BENZO(B AND/OR K)FLUORANTHENE
380U	DIMETHYL PHTHALATE	380U	BENZO-A-PYRENE
[illegible]	[illegible]	[illegible]	[illegible]
380U	2,6-DINITROTOLUENE	380U	DIBENZO(A,H)ANTHRACENE
		380U	BENZO(GHI)PERYLENE
		14	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS -- DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63661   SAMPLE TYPE: SOIL        PROG ELEM: NSF    COLLECTED BY: R WILDE                 **
**   SOURCE: LAFAYETTE SHEET META                                      CITY: LAFAYETTE            ST: GA                       **
**   STATION ID: SS-03                                                 COLLECTION START: 11/19/91  1010   STOP: 00/00/00       **
**   CASE.NO.: 17446          SAS NO.:                                 D. NO.: CB81               MD NO: CB81                  **
**                                                                                                                             **
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ANALYTICAL RESULTS UG/KG

200JN	HEXADECANOIC ACID
N	PETROLEUM PRODUCT
1000J	2 UNIDENTIFIED COMPOUNDS

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63661 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-03
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1010 STOP: 00/00/00
D. NUMBER: CB81

UG/KG	ANALYTICAL RESULTS
2.0U	ALPHA-BHC
2.0U	BETA-BHC
2.0U	DELTA-BHC
2.0U	GAMMA-BHC (LINDANE)
2.0U	HEPTACHLOR
2.0U	ALDRIN
2.0U	HEPTACHLOR EPOXIDE
2.0U	ENDOSULFAN I (ALPHA)
3.8U	DIELDRIN
3.8U	4,4'-DDE (P,P'-DDE)
3.8U	ENDRIN
3.8U	ENDOSULFAN II (BETA)
3.8U	4,4'-DDD (P,P'-DDD)
3.8U	ENDOSULFAN SULFATE
3.8U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
20U	METHOXYCHLOR
3.8U	ENDRIN KETONE
3.8U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
2.0U	GAMMA-CHLORDANE /2
2.0U	ALPHA-CHLORDANE /2
200U	TOXAPHENE
38U	PCB-1016 (AROCLOR 1016)
78U	PCB-1221 (AROCLOR 1221)
38U	PCB-1232 (AROCLOR 1232)
38U	PCB-1242 (AROCLOR 1242)
38U	PCB-1248 (AROCLOR 1248)
78	PCB-1254 (AROCLOR 1254)
38U	PCB-1260 (AROCLOR 1260)
14	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63660 SAMPLE TYPE: SOIL
SOURCE. LAFAYETTE SHEET META
STATION ID: SS-04

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY. LAFAYETTE ST. GA
COLLECTION START: 11/19/91 0955 STOP: 00/00/00

CASE NO.: 17440 SAS NO.: D. NO.: C880

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
12U	METHYLENE CHLORIDE
12U	ACETONE
9J	**CARBON DISULFIDE**
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
12U	1,1-DICHLOROETHANE
12U	1,2-DICHLOROETHENE (TOTAL)
12U	CHLOROFORM
12U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
12U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
12U	1,2-DICHLOROPROPANE
12U	CIS 1,3 DICHLOROPROPENE
12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	DIBROMOCHLOROMETHANE
12U	1,1,2-TRICHLOROETHANE
12U	BENZENE
12U	TRANS-1,3-DICHLOROPROPENE
12U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
14	**TOLUENE**
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
15	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD. ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63660 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-04

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 0955 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB80

UG/KG	ANALYTICAL RESULTS
390U	PHENOL
390U	BIS(2-CHLOROETHYL) ETHER
390U	2-CHLOROPHENOL
390U	1,3-DICHLOROBENZENE
390U	1,4-DICHLOROBENZENE
390U	1,2-DICHLOROBENZENE
390U	2-METHYLPHENOL
390U	2,2'-CHLOROISOPROPYLETHER
390U	(3-AND/OR 4-)METHYLPHENOL
390U	N-NITROSODI-N-PROPYLAMINE
390U	HEXACHLOROETHANE
390U	NITROBENZENE
390U	ISOPHORONE
390U	2-NITROPHENOL
390U	2,4-DIMETHYLPHENOL
390U	BIS(2-CHLOROETHOXY) METHANE
390U	2,4-DICHLOROPHENOL
390U	1,2,4-TRICHLOROBENZENE
390U	NAPHTHALENE
390U	4-CHLOROANILINE
390U	HEXACHLOROBUTADIENE
390U	4-CHLORO-3-METHYLPHENOL
390U	2-METHYLNAPHTHALENE
390U	HEXACHLOROCYCLOPENTADIENE (HCCP)
390U	2,4,6-TRICHLOROPHENOL
940U	2,4,5-TRICHLOROPHENOL
390U	2-CHLORONAPHTHALENE
940U	2-NITROANILINE
390U	DIMETHYL PHTHALATE
[illegible]	ACENAPHTHYLENE
390U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
940U	3-NITROANILINE
390U	ACENAPHTHENE
940U	2,4-DINITROPHENOL
940U	4-NITROPHENOL
390U	DIBENZOFURAN
390U	2,4-DINITROTOLUENE
390U	DIETHYL PHTHALATE
390U	4-CHLOROPHENYL PHENYL ETHER
390U	FLUORENE
940U	4-NITROANILINE
940U	2-METHYL-4,6-DINITROPHENOL
390U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
390U	4-BROMOPHENYL PHENYL ETHER
390U	HEXACHLOROBENZENE (HCB)
940U	PENTACHLOROPHENOL
390U	PHENANTHRENE
390U	ANTHRACENE
390U	CARBAZOLE
390U	DI-N-BUTYLPHTHALATE
390U	FLUORANTHENE
390U	PYRENE
150J	BENZYL BUTYL PHTHALATE
390U	3,3'-DICHLOROBENZIDINE
390U	BENZO(A)ANTHRACENE
390U	CHRYSENE
390U	BIS(2-ETHYLHEXYL) PHTHALATE
390U	DI-N-OCTYLPHTHALATE
390U	BENZO(B AND/OR K)FLUORANTHENE
390U	BENZO-A-PYRENE
[illegible]	INDENO(1,2,3-CD) PYRENE
390U	DIBENZO(A,H)ANTHRACENE
390U	BENZO(GHI)PERYLENE
15	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63660   SAMPLE TYPE: SOIL        PROG ELEM: NSF    COLLECTED BY: R WILDE             **
**   SOURCE: LAFAYETTE SHEET META                                      CITY: LAFAYETTE          ST: GA                     **
**   STATION ID: SS-04                                                 COLLECTION START: 11/19/91  0955   STOP: 00/00/00   **
**   CASE NO.: 17446          SAS NO.:                                 D. NO.: CB80             MD NO: CB80                **
**                                                                                                                         **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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ANALYTICAL RESULTS UG/KG

N	PETROLEUM PRODUCT
2000J	3 UNIDENTIFIED COMPOUNDS
200JN	HEXADECANOIC ACID

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63660 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-04
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 0955 STOP: 00/00/00
D. NUMBER: CB80

UG/KG	ANALYTICAL RESULTS
2.0U	ALPHA-BHC
2.0U	BETA-BHC
2.0U	DELTA-BHC
2.0U	GAMMA-BHC (LINDANE)
2.0U	HEPTACHLOR
2.0U	ALDRIN
2.0U	HEPTACHLOR EPOXIDE
2.0U	ENDOSULFAN I (ALPHA)
3.9U	DIELDRIN
3.9U	4,4'-DDE (P,P'-DDE)
3.9U	ENDRIN
3.9U	ENDOSULFAN II (BETA)
3.9U	4,4'-DDD (P,P'-DDD)
3.9U	ENDOSULFAN SULFATE
3.9U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
20U	METHOXYCHLOR
3.9U	ENDRIN KETONE
3.9U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
9.4	GAMMA-CHLORDANE /2
3.8	ALPHA-CHLORDANE /2
200U	TOXAPHENE
39U	PCB-1016 (AROCLOR 1016)
79U	PCB-1221 (AROCLOR 1221)
39U	PCB-1232 (AROCLOR 1232)
39U	PCB-1242 (AROCLOR 1242)
39U	PCB-1248 (AROCLOR 1248)
39U	PCB-1254 (AROCLOR 1254)
39U	PCB-1260 (AROCLOR 1260)
15	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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
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*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63655 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-05

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1505 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB75

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
12U	METHYLENE CHLORIDE
12U	ACETONE
12U	CARBON DISULFIDE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
12U	1,1-DICHLOROETHANE
12U	1,2-DICHLOROETHENE (TOTAL)
12U	CHLOROFORM
12U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
12U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
12U	1,2-DICHLOROPROPANE
12U	CIS-1,3-DICHLOROPROPENE
12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	DIBROMOCHLOROMETHANE
12U	1,1,2-TRICHLOROETHANE
12U	BENZENE
12U	TRANS-1,3-DICHLOROPROPENE
12U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
12U	TOLUENE
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
18	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63655 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-05

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1505 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB75

UG/KG	ANALYTICAL RESULTS
400U	PHENOL
400U	BIS(2-CHLOROETHYL) ETHER
400U	2-CHLOROPHENOL
400U	1,3-DICHLOROBENZENE
400U	1,4-DICHLOROBENZENE
400U	1,2-DICHLOROBENZENE
400U	2-METHYLPHENOL
400U	2,2'-CHLOROISOPROPYLETHER
400U	(3-AND/OR 4-)METHYLPHENOL
400U	N-NITROSODI-N-PROPYLAMINE
400U	HEXACHLOROETHANE
400U	NITROBENZENE
400U	ISOPHORONE
400U	2-NITROPHENOL
400U	2,4-DIMETHYLPHENOL
400U	BIS(2-CHLOROETHOXY) METHANE
400U	2,4-DICHLOROPHENOL
400U	1,2,4-TRICHLOROBENZENE
400U	NAPHTHALENE
400U	4-CHLOROANILINE
400U	HEXACHLOROBUTADIENE
400U	4-CHLORO-3-METHYLPHENOL
400U	2-METHYLNAPHTHALENE
400U	HEXACHLOROCYCLOPENTADIENE (HCCP)
400U	2,4,6-TRICHLOROPHENOL
980U	2,4,5-TRICHLOROPHENOL
400U	2-CHLORONAPHTHALENE
980U	2-NITROANILINE
400U	DIMETHYL PHTHALATE
[illegible]	[illegible]
400U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
980U	3-NITROANILINE
400U	ACENAPHTHENE
980U	2,4-DINITROPHENOL
980U	4-NITROPHENOL
400U	DIBENZOFURAN
400U	2,4-DINITROTOLUENE
400U	DIETHYL PHTHALATE
400U	4-CHLOROPHENYL PHENYL ETHER
400U	FLUORENE
980U	4-NITROANILINE
980U	2-METHYL-4,6-DINITROPHENOL
400U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
400U	4-BROMOPHENYL PHENYL ETHER
400U	HEXACHLOROBENZENE (HCB)
980U	PENTACHLOROPHENOL
400U	PHENANTHRENE
400U	ANTHRACENE
400U	CARBAZOLE
400U	DI-N-BUTYLPHTHALATE
400U	FLUORANTHENE
400U	PYRENE
870	**BENZYL BUTYL PHTHALATE**
400U	3,3'-DICHLOROBENZIDINE
400U	BENZO(A)ANTHRACENE
400U	CHRYSENE
400U	BIS(2-ETHYLHEXYL) PHTHALATE
400U	DI-N-OCTYLPHTHALATE
400U	BENZO(B AND/OR K)FLUORANTHENE
400U	BENZO-A-PYRENE
[illegible]	[illegible]
400U	DIBENZO(A,H)ANTHRACENE
400U	BENZO(GHI)PERYLENE
18	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63655  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                    **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE                ST: GA                      **
**   STATION ID: SS-05                                                COLLECTION START: 11/18/91  1505   STOP: 00/00/00          **
**   CASE.NO.: 17446          SAS NO.:                                D. NO.: CB75                MD NO: CB75                    **
**                                                                                                                               **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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ANALYTICAL RESULTS UG/KG

400000J	9 UNIDENTIFIED COMPOUNDS
N	PETROLEUM PRODUCT

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63655 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-05
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1505 STOP: 00/00/00
D. NUMBER: CB75

UG/KG	ANALYTICAL RESULTS
2.1U	ALPHA-BHC
2.1U	BETA-BHC
2.1U	DELTA-BHC
2.1U	GAMMA-BHC (LINDANE)
2.1U	HEPTACHLOR
2.1U	ALDRIN
7.7U	HEPTACHLOR EPOXIDE
2.1U	ENDOSULFAN I (ALPHA)
4.0U	DIELDRIN
4.0U	4,4'-DDE (P,P'-DDE)
4.0U	ENDRIN
4.0U	ENDOSULFAN II (BETA)
4.0U	4,4'-DDD (P,P'-DDD)
4.0U	ENDOSULFAN SULFATE
4.0U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
21U	METHOXYCHLOR
4.0U	ENDRIN KETONE
4.0U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
140	GAMMA-CHLORDANE /2
140	ALPHA-CHLORDANE /2
210U	TOXAPHENE
40U	PCB-1016 (AROCLOR 1016)
82U	PCB-1221 (AROCLOR 1221)
40U	PCB-1232 (AROCLOR 1232)
40U	PCB-1242 (AROCLOR 1242)
40U	PCB-1248 (AROCLOR 1248)
40U	PCB-1254 (AROCLOR 1254)
40U	PCB-1260 (AROCLOR 1260)
18	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63656 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-06

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1525 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB76

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
12U	METHYLENE CHLORIDE
12U	ACETONE
12U	CARBON DISULFIDE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
12U	1,1-DICHLOROETHANE
12U	1,2-DICHLOROETHENE (TOTAL)
12U	CHLOROFORM
12U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
12U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
12U	1,2-DICHLOROPROPANE
12U	CIS-1,3-DICHLOROPROPENE
12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	DIBROMOCHLOROMETHANE
12U	1,1,2-TRICHLOROETHANE
12U	BENZENE
12U	TRANS-1,3-DICHLOROPROPENE
12U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
11J	TOLUENE
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
16	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63656 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-06

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1525 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB76

UG/KG	ANALYTICAL RESULTS
390U	PHENOL
390U	BIS(2-CHLOROETHYL) ETHER
390U	2-CHLOROPHENOL
390U	1,3-DICHLOROBENZENE
390U	1,4-DICHLOROBENZENE
390U	1,2-DICHLOROBENZENE
390U	2-METHYLPHENOL
390U	2,2'-CHLOROISOPROPYLETHER
390U	(3-AND/OR 4-)METHYLPHENOL
390U	N-NITROSODI-N-PROPYLAMINE
390U	HEXACHLOROETHANE
390U	NITROBENZENE
390U	ISOPHORONE
390U	2-NITROPHENOL
390U	2,4-DIMETHYLPHENOL
390U	BIS(2-CHLOROETHOXY) METHANE
390U	2,4-DICHLOROPHENOL
390U	1,2,4-TRICHLOROBENZENE
390U	NAPHTHALENE
390U	4-CHLOROANILINE
390U	HEXACHLOROBUTADIENE
390U	4-CHLORO-3-METHYLPHENOL
390U	2-METHYLNAPHTHALENE
390U	HEXACHLOROCYCLOPENTADIENE (HCCP)
390U	2,4,6-TRICHLOROPHENOL
950U	2,4,5-TRICHLOROPHENOL
390U	2-CHLORONAPHTHALENE
950U	2-NITROANILINE
390U	DIMETHYL PHTHALATE
[illegible]	ACENAPHTHYLENE
390U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
950U	3-NITROANILINE
390U	ACENAPHTHENE
950U	2,4-DINITROPHENOL
950U	4-NITROPHENOL
390U	DIBENZOFURAN
390U	2,4-DINITROTOLUENE
390U	DIETHYL PHTHALATE
390U	4-CHLOROPHENYL PHENYL ETHER
390U	FLUORENE
950U	4-NITROANILINE
950U	2-METHYL-4,6-DINITROPHENOL
390U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
390U	4-BROMOPHENYL PHENYL ETHER
390U	HEXACHLOROBENZENE (HCB)
950U	PENTACHLOROPHENOL
390U	PHENANTHRENE
390U	ANTHRACENE
390U	CARBAZOLE
390U	DI-N-BUTYLPHTHALATE
390U	FLUORANTHENE
390U	PYRENE
390U	BENZYL BUTYL PHTHALATE
390U	3,3'-DICHLOROBENZIDINE
390U	BENZO(A)ANTHRACENE
390U	CHRYSENE
390U	BIS(2-ETHYLHEXYL) PHTHALATE
390U	DI-N-OCTYLPHTHALATE
390U	BENZO(B AND/OR K)FLUORANTHENE
390U	BENZO-A-PYRENE
[illegible]	INDENO (1,2,3-CD) PYRENE
390U	DIBENZO(A,H)ANTHRACENE
390U	BENZO(GHI)PERYLENE
16	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63656  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                    **
**   SOURCE: LAFAYETTE SHEET META                                    CITY: LAFAYETTE                ST: GA                    **
**   STATION ID: SS-06                                               COLLECTION START: 11/18/91  1525   STOP: 00/00/00          **
**   CASE NO.: 17446          SAS NO.:                               D. NO.: CB76                MD NO: CB76                  **
**                                                                                                                               **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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ANALYTICAL RESULTS UG/KG

N	PETROLEUM PRODUCT
6000J	6 UNIDENTIFIED COMPOUNDS
500JN	HEXADECANOIC ACID

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63656 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-06
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1525 STOP: 00/00/00
D. NUMBER: CB76

UG/KG	ANALYTICAL RESULTS
2.0U	ALPHA-BHC
2.0U	BETA-BHC
2.0U	DELTA-BHC
2.0U	GAMMA-BHC (LINDANE)
2.0U	HEPTACHLOR
2.0U	ALDRIN
2.0U	HEPTACHLOR EPOXIDE
2.0U	ENDOSULFAN I (ALPHA)
3.9U	DIELDRIN
3.9U	4,4'-DDE (P,P'-DDE)
3.9U	ENDRIN
3.9U	ENDOSULFAN II (BETA)
3.9U	4,4'-DDD (P,P'-DDD)
3.9U	ENDOSULFAN SULFATE
3.9U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
20U	METHOXYCHLOR
3.9U	ENDRIN KETONE
3.9U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
2.0U	GAMMA-CHLORDANE /2
2.0U	ALPHA-CHLORDANE /2
200U	TOXAPHENE
39U	PCB-1016 (AROCLOR 1016)
80U	PCB-1221 (AROCLOR 1221)
39U	PCB-1232 (AROCLOR 1232)
39U	PCB-1242 (AROCLOR 1242)
39U	PCB-1248 (AROCLOR 1248)
39U	PCB-1254 (AROCLOR 1254)
39U	PCB-1260 (AROCLOR 1260)
16	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63653 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-01

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1240 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB73

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
12U	METHYLENE CHLORIDE
12U	ACETONE
12U	CARBON DISULFIDE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
12U	1,1-DICHLOROETHANE
12U	1,2-DICHLOROETHENE (TOTAL)
12U	CHLOROFORM
12U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
12U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
12U	1,2-DICHLOROPROPANE
12U	CIS-1,3-DICHLOROPROPENE
12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	DIBROMOCHLOROMETHANE
12U	1,1,2-TRICHLOROETHANE
12U	BENZENE
12U	TRANS-1,3-DICHLOROPROPENE
12U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
12U	TOLUENE
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
18	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109   SAMPLE NO. 63653   SAMPLE TYPE: SOIL   PROG ELEM: NSF   COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META   CITY: LAFAYETTE   ST: GA
STATION ID: SB-01   COLLECTION START: 11/18/91 1240   STOP: 00/00/00

CASE NO.: 17446   SAS NO.:   D. NO.: CB73

UG/KG	ANALYTICAL RESULTS
400U	PHENOL
400U	BIS(2-CHLOROETHYL) ETHER
400U	2-CHLOROPHENOL
400U	1,3-DICHLOROBENZENE
400U	1,4-DICHLOROBENZENE
400U	1,2-DICHLOROBENZENE
400U	2-METHYLPHENOL
400U	2,2'-CHLOROISOPROPYLETHER
400U	(3-AND/OR 4-)METHYLPHENOL
400U	N-NITROSODI-N-PROPYLAMINE
400U	HEXACHLOROETHANE
400U	NITROBENZENE
400U	ISOPHORONE
400U	2-NITROPHENOL
400U	2,4-DIMETHYLPHENOL
400U	BIS(2-CHLOROETHOXY) METHANE
400U	2,4-DICHLOROPHENOL
400U	1,2,4-TRICHLOROBENZENE
400U	NAPHTHALENE
400U	4-CHLOROANILINE
400U	HEXACHLOROBUTADIENE
400U	4-CHLORO-3-METHYLPHENOL
400U	2-METHYLNAPHTHALENE
400U	HEXACHLOROCYCLOPENTADIENE (HCCP)
400U	2,4,6-TRICHLOROPHENOL
980U	2,4,5-TRICHLOROPHENOL
400U	2-CHLORONAPHTHALENE
980U	2-NITROANILINE
400U	DIMETHYL PHTHALATE
400U	ACENAPHTHYLENE
400U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
980U	3-NITROANILINE
400U	ACENAPHTHENE
980U	2,4-DINITROPHENOL
980U	4-NITROPHENOL
400U	DIBENZOFURAN
400U	2,4-DINITROTOLUENE
400U	DIETHYL PHTHALATE
400U	4-CHLOROPHENYL PHENYL ETHER
400U	FLUORENE
980U	4-NITROANILINE
980U	2-METHYL-4,6-DINITROPHENOL
400U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
400U	4-BROMOPHENYL PHENYL ETHER
400U	HEXACHLOROBENZENE (HCB)
980U	PENTACHLOROPHENOL
400U	PHENANTHRENE
400U	ANTHRACENE
400U	CARBAZOLE
400U	DI-N-BUTYLPHTHALATE
400U	FLUORANTHENE
400U	PYRENE
400U	BENZYL BUTYL PHTHALATE
400U	3,3'-DICHLOROBENZIDINE
400U	BENZO(A)ANTHRACENE
400U	CHRYSENE
400U	BIS(2-ETHYLHEXYL) PHTHALATE
400U	DI-N-OCTYLPHTHALATE
400U	BENZO(B AND/OR K)FLUORANTHENE
400U	BENZO-A-PYRENE
400U	INDENO (1,2,3-CD) PYRENE
400U	DIBENZO(A,H)ANTHRACENE
400U	BENZO(GHI)PERYLENE
18	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63653 SAMPLE TYPE: SOIL	PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META	CITY: LAFAYETTE ST: GA
STATION ID: SB-01	COLLECTION START: 11/18/91 1240 STOP: 00/00/00
CASE NO.: 17446 SAS NO.:	D. NO.: CB73 MD NO: CB73

ANALYTICAL RESULTS UG/KG

[redacted] HEXADECANOIC ACID

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63653 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-01
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1240 STOP: 00/00/00
D. NUMBER: CB73

UG/KG	ANALYTICAL RESULTS
2.1U	ALPHA-BHC
2.1U	BETA-BHC
2.1U	DELTA-BHC
2.1U	GAMMA-BHC (LINDANE)
2.1U	HEPTACHLOR
2.1U	ALDRIN
2.1U	HEPTACHLOR EPOXIDE
2.1U	ENDOSULFAN I (ALPHA)
4.0U	DIELDRIN
4.0U	4,4'-DDE (P,P'-DDE)
4.0U	ENDRIN
4.0U	ENDOSULFAN II (BETA)
4.0U	4,4'-DDD (P,P'-DDD)
4.0U	ENDOSULFAN SULFATE
4.0U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
21U	METHOXYCHLOR
4.0U	ENDRIN KETONE
4.0U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
2.1U	GAMMA-CHLORDANE /2
2.1U	ALPHA-CHLORDANE /2
210U	TOXAPHENE
40U	PCB-1016 (AROCLOR 1016)
82U	PCB-1221 (AROCLOR 1221)
40U	PCB-1232 (AROCLOR 1232)
40U	PCB-1242 (AROCLOR 1242)
40U	PCB-1248 (AROCLOR 1248)
40U	PCB-1254 (AROCLOR 1254)
40U	PCB-1260 (AROCLOR 1260)
18	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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
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*C-CONFIRMED BY GCMS 1 WHEN NO VALUE IS REPORTED. SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63659 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-02

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1625 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB79

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE	12U	1,2-DICHLOROPROPANE
12U	BROMOMETHANE	12U	CIS-1,3-DICHLOROPROPENE
12U	VINYL CHLORIDE	12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	CHLOROETHANE	12U	DIBROMOCHLOROMETHANE
12U	METHYLENE CHLORIDE	12U	1,1,2-TRICHLOROETHANE
12U	ACETONE	12U	BENZENE
12U	CARBON DISULFIDE	12U	TRANS-1,3-DICHLOROPROPENE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	12U	BROMOFORM
12U	1,1-DICHLOROETHANE	12U	METHYL ISOBUTYL KETONE
12U	1,2-DICHLOROETHENE (TOTAL)	12U	METHYL BUTYL KETONE
12U	CHLOROFORM	12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,2-DICHLOROETHANE	12U	1,1,2,2-TETRACHLOROETHANE
12U	METHYL ETHYL KETONE	12U	TOLUENE
12U	1,1,1-TRICHLOROETHANE	12U	CHLOROBENZENE
12U	CARBON TETRACHLORIDE	12U	ETHYL BENZENE
12U	BROMODICHLOROMETHANE	12U	STYRENE
		12U	TOTAL XYLENES
		15	PERCENT MOISTURE

REMARKS ***REMARKS***

FOOTNOTES
*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.

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63659 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA
STATION ID: SB-02 COLLECTION START: 11/18/91 1625 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB79

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
390U	PHENOL	940U	3-NITROANILINE
390U	BIS(2-CHLOROETHYL) ETHER	390U	ACENAPHTHENE
390U	2-CHLOROPHENOL	940U	2,4-DINITROPHENOL
390U	1,3-DICHLOROBENZENE	940U	4-NITROPHENOL
390U	1,4-DICHLOROBENZENE	390U	DIBENZOFURAN
390U	1,2-DICHLOROBENZENE	390U	2,4-DINITROTOLUENE
390U	2-METHYLPHENOL	390U	DIETHYL PHTHALATE
390U	2,2'-CHLOROISOPROPYLETHER	390U	4-CHLOROPHENYL PHENYL ETHER
390U	(3-AND/OR 4-)METHYLPHENOL	390U	FLUORENE
390U	N-NITROSODI-N-PROPYLAMINE	940U	4-NITROANILINE
390U	HEXACHLOROETHANE	940U	2-METHYL-4,6-DINITROPHENOL
390U	NITROBENZENE	390U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
390U	ISOPHORONE	390U	4-BROMOPHENYL PHENYL ETHER
390U	2-NITROPHENOL	390U	HEXACHLOROBENZENE (HCB)
390U	2,4-DIMETHYLPHENOL	940U	PENTACHLOROPHENOL
390U	BIS(2-CHLOROETHOXY) METHANE	390U	PHENANTHRENE
390U	2,4-DICHLOROPHENOL	390U	ANTHRACENE
390U	1,2,4-TRICHLOROBENZENE	390U	CARBAZOLE
390U	NAPHTHALENE	390U	DI-N-BUTYLPHTHALATE
390U	4-CHLOROANILINE	390U	FLUORANTHENE
390U	HEXACHLOROBUTADIENE	390U	PYRENE
390U	4-CHLORO-3-METHYLPHENOL	390U	BENZYL BUTYL PHTHALATE
390U	2-METHYLNAPHTHALENE	390U	3,3'-DICHLOROBENZIDINE
390U	HEXACHLOROCYCLOPENTADIENE (HCCP)	390U	BENZO(A)ANTHRACENE
390U	2,4,6-TRICHLOROPHENOL	390U	CHRYSENE
940U	2,4,5-TRICHLOROPHENOL	390U	BIS(2-ETHYLHEXYL) PHTHALATE
390U	2-CHLORONAPHTHALENE	390U	DI-N-OCTYLPHTHALATE
940U	2-NITROANILINE	390U	BENZO(B AND/OR K)FLUORANTHENE
390U	DIMETHYL PHTHALATE	390U	BENZO-A-PYRENE
[illegible]	[illegible]	[illegible]	[illegible]
390U	2,6-DINITROTOLUENE	390U	DIBENZO(A,H)ANTHRACENE
		390U	BENZO(GHI)PERYLENE
		15	PERCENT MOISTURE

REMARKS ***REMARKS***

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63659  SAMPLE TYPE: SOIL       PROG ELEM: NSF   COLLECTED BY: R WILDE                   **
**   SOURCE: LAFAYETTE SHEET META                                    CITY: LAFAYETTE            ST: GA                        **
**   STATION ID: SB-02                                               COLLECTION START: 11/18/91  1625  STOP: 00/00/00         **
**   CASE NO.: 17446          SAS NO.:                               D. NO.: CB79               MD NO: CB79                   **
**                                                                                                                            **
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ANALYTICAL RESULTS UG/KG

2000J	8 UNIDENTIFIED COMPOUNDS
N	PETROLEUM PRODUCT

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63659 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-02
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1625 STOP: 00/00/00
D. NUMBER: CB79

UG/KG	ANALYTICAL RESULTS
2.0U	ALPHA-BHC
2.0U	BETA-BHC
2.0U	DELTA-BHC
2.0U	GAMMA-BHC (LINDANE)
2.0U	HEPTACHLOR
2.0U	ALDRIN
2.0U	HEPTACHLOR EPOXIDE
2.0U	ENDOSULFAN I (ALPHA)
3.9U	DIELDRIN
3.9U	4,4'-DDE (P,P'-DDE)
3.9U	ENDRIN
3.9U	ENDOSULFAN II (BETA)
3.9U	4,4'-DDD (P,P'-DDD)
3.9U	ENDOSULFAN SULFATE
3.9U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
20U	METHOXYCHLOR
3.9U	ENDRIN KETONE
3.9U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
6.3	GAMMA-CHLORDANE /2
4.6	ALPHA-CHLORDANE /2
200U	TOXAPHENE
39U	PCB-1016 (AROCLOR 1016)
79U	PCB-1221 (AROCLOR 1221)
39U	PCB-1232 (AROCLOR 1232)
39U	PCB-1242 (AROCLOR 1242)
39U	PCB-1248 (AROCLOR 1248)
39U	PCB-1254 (AROCLOR 1254)
39U	PCB-1260 (AROCLOR 1260)
15	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63657 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-06

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1540 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB77

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
12U	METHYLENE CHLORIDE
12U	ACETONE
12U	CARBON DISULFIDE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
12U	1,1-DICHLOROETHANE
12U	1,2-DICHLOROETHENE (TOTAL)
12U	CHLOROFORM
12U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
12U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
12U	1,2-DICHLOROPROPANE
12U	CIS-1,3-DICHLOROPROPENE
12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	DIBROMOCHLOROMETHANE
12U	1,1,2-TRICHLOROETHANE
12U	BENZENE
12U	TRANS-1,3-DICHLOROPROPENE
12U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
10J	TOLUENE
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
14	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63657 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-06

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1540 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB77

UG/KG	ANALYTICAL RESULTS
380U	PHENOL
380U	BIS(2-CHLOROETHYL) ETHER
380U	2-CHLOROPHENOL
380U	1,3-DICHLOROBENZENE
380U	1,4-DICHLOROBENZENE
380U	1,2-DICHLOROBENZENE
380U	2-METHYLPHENOL
380U	2,2'-CHLOROISOPROPYLETHER
380U	(3-AND/OR 4-)METHYLPHENOL
380U	N-NITROSODI-N-PROPYLAMINE
380U	HEXACHLOROETHANE
380U	NITROBENZENE
380U	ISOPHORONE
380U	2-NITROPHENOL
380U	2,4-DIMETHYLPHENOL
380U	BIS(2-CHLOROETHOXY) METHANE
380U	2,4-DICHLOROPHENOL
380U	1,2,4-TRICHLOROBENZENE
380U	NAPHTHALENE
380U	4-CHLOROANILINE
380U	HEXACHLOROBUTADIENE
380U	4-CHLORO-3-METHYLPHENOL
380U	2-METHYLNAPHTHALENE
380U	HEXACHLOROCYCLOPENTADIENE (HCCP)
380U	2,4,6-TRICHLOROPHENOL
930U	2,4,5-TRICHLOROPHENOL
380U	2-CHLORONAPHTHALENE
930U	2-NITROANILINE
380U	DIMETHYL PHTHALATE
[illegible]	ACENAPHTHYLENE
380U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
930U	3-NITROANILINE
380U	ACENAPHTHENE
930U	2,4-DINITROPHENOL
930U	4-NITROPHENOL
380U	DIBENZOFURAN
380U	2,4-DINITROTOLUENE
380U	DIETHYL PHTHALATE
380U	4-CHLOROPHENYL PHENYL ETHER
380U	FLUORENE
930U	4-NITROANILINE
930U	2-METHYL-4,6-DINITROPHENOL
380U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
380U	4-BROMOPHENYL PHENYL ETHER
380U	HEXACHLOROBENZENE (HCB)
930U	PENTACHLOROPHENOL
380U	PHENANTHRENE
380U	ANTHRACENE
380U	CARBAZOLE
380U	DI-N-BUTYLPHTHALATE
380U	FLUORANTHENE
380U	PYRENE
380U	BENZYL BUTYL PHTHALATE
380U	3,3'-DICHLOROBENZIDINE
380U	BENZO(A)ANTHRACENE
380U	CHRYSENE
380U	BIS(2-ETHYLHEXYL) PHTHALATE
380U	DI-N-OCTYLPHTHALATE
380U	BENZO(B AND/OR K)FLUORANTHENE
380U	BENZO-A-PYRENE
[illegible]	INDENO (1,2,3-CD) PYRENE
380U	DIBENZO(A,H)ANTHRACENE
380U	BENZO(GHI)PERYLENE
14	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA. 01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63657   SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                     **
**   SOURCE: LAFAYETTE SHEET META                                      CITY: LAFAYETTE                ST: GA                     **
**   STATION ID: SB-06                                                 COLLECTION START: 11/18/91  1540   STOP: 00/00/00         **
**   CASE NO.: 17446          SAS NO.:                                 D. NO.: CB77                MD NO: CB77                   **
**                                                                                                                               **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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ANALYTICAL RESULTS UG/KG

80JN HEXADECANOIC ACID
500J 1 UNIDENTIFIED COMPOUND

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63657 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-06
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1540 STOP: 00/00/00
D. NUMBER: CB77

UG/KG	ANALYTICAL RESULTS
2.0U	ALPHA-BHC
2.0U	BETA-BHC
2.0U	DELTA-BHC
2.0U	GAMMA-BHC (LINDANE)
2.0U	HEPTACHLOR
2.0U	ALDRIN
2.0U	HEPTACHLOR EPOXIDE
2.0U	ENDOSULFAN I (ALPHA)
3.8U	DIELDRIN
3.8U	4,4'-DDE (P,P'-DDE)
3.8U	ENDRIN
3.8U	ENDOSULFAN II (BETA)
3.8U	4,4'-DDD (P,P'-DDD)
3.8U	ENDOSULFAN SULFATE
3.8U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
20U	METHOXYCHLOR
3.8U	ENDRIN KETONE
3.8U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
2.0U	GAMMA-CHLORDANE /2
2.0U	ALPHA-CHLORDANE /2
200U	TOXAPHENE
38U	PCB-1016 (AROCLOR 1016)
78U	PCB-1221 (AROCLOR 1221)
38U	PCB-1232 (AROCLOR 1232)
38U	PCB-1242 (AROCLOR 1242)
38U	PCB-1248 (AROCLOR 1248)
38U	PCB-1254 (AROCLOR 1254)
38U	PCB-1260 (AROCLOR 1260)
14	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63662 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-07

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1055 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB82

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
13U	CHLOROMETHANE	13U	1,2-DICHLOROPROPANE
13U	BROMOMETHANE	13U	CIS-1,3-DICHLOROPROPENE
13U	VINYL CHLORIDE	13U	TRICHLOROETHENE(TRICHLOROETHYLENE)
13U	CHLOROETHANE	13U	DIBROMOCHLOROMETHANE
13U	METHYLENE CHLORIDE	13U	1,1,2-TRICHLOROETHANE
13U	ACETONE	13U	BENZENE
13U	CARBON DISULFIDE	13U	TRANS-1,3-DICHLOROPROPENE
13U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	13U	BROMOFORM
13U	1,1-DICHLOROETHANE	13U	METHYL ISOBUTYL KETONE
13U	1,2-DICHLOROETHENE (TOTAL)	13U	METHYL BUTYL KETONE
13U	CHLOROFORM	13U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
13U	1,2-DICHLOROETHANE	13U	1,1,2,2-TETRACHLOROETHANE
13U	METHYL ETHYL KETONE	13U	TOLUENE
13U	1,1,1-TRICHLOROETHANE	13U	CHLOROBENZENE
13U	CARBON TETRACHLORIDE	13U	ETHYL BENZENE
13U	BROMODICHLOROMETHANE	13U	STYRENE
		13U	TOTAL XYLENES
		25	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

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PROJECT NO. 92-0109 SAMPLE NO. 63662 SAMPLE TYPE: SOIL — PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META — CITY: LAFAYETTE ST: GA
STATION ID: SB-07 — COLLECTION START: 11/19/91 1055 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB82

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
440U	PHENOL	1100U	3-NITROANILINE
440U	BIS(2-CHLOROETHYL) ETHER	440U	ACENAPHTHENE
440U	2-CHLOROPHENOL	1100U	2,4-DINITROPHENOL
440U	1,3-DICHLOROBENZENE	1100U	4-NITROPHENOL
440U	1,4-DICHLOROBENZENE	440U	DIBENZOFURAN
440U	1,2-DICHLOROBENZENE	440U	2,4-DINITROTOLUENE
440U	2-METHYLPHENOL	440U	DIETHYL PHTHALATE
440U	2,2'-CHLOROISOPROPYLETHER	440U	4-CHLOROPHENYL PHENYL ETHER
440U	(3-AND/OR 4-)METHYLPHENOL	440U	FLUORENE
440U	N-NITROSODI-N-PROPYLAMINE	1100U	4-NITROANILINE
440U	HEXACHLOROETHANE	1100U	2-METHYL-4,6-DINITROPHENOL
440U	NITROBENZENE	440U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
440U	ISOPHORONE	440U	4-BROMOPHENYL PHENYL ETHER
440U	2-NITROPHENOL	440U	HEXACHLOROBENZENE (HCB)
440U	2,4-DIMETHYLPHENOL	1100U	PENTACHLOROPHENOL
440U	BIS(2-CHLOROETHOXY) METHANE	440U	PHENANTHRENE
440U	2,4-DICHLOROPHENOL	440U	ANTHRACENE
440U	1,2,4-TRICHLOROBENZENE	440U	CARBAZOLE
440U	NAPHTHALENE	440U	DI-N-BUTYLPHTHALATE
440U	4-CHLOROANILINE	440U	FLUORANTHENE
440U	HEXACHLOROBUTADIENE	440U	PYRENE
440U	4-CHLORO-3-METHYLPHENOL	440U	BENZYL BUTYL PHTHALATE
440U	2-METHYLNAPHTHALENE	440U	3,3'-DICHLOROBENZIDINE
440U	HEXACHLOROCYCLOPENTADIENE (HCCP)	440U	BENZO(A)ANTHRACENE
440U	2,4,6-TRICHLOROPHENOL	440U	CHRYSENE
1100U	2,4,5-TRICHLOROPHENOL	440U	BIS(2-ETHYLHEXYL) PHTHALATE
440U	2-CHLORONAPHTHALENE	440U	DI-N-OCTYLPHTHALATE
1100U	2-NITROANILINE	440U	BENZO(B AND/OR K)FLUORANTHENE
440U	DIMETHYL PHTHALATE	440U	BENZO-A-PYRENE
[illegible]	[illegible]	[illegible]	INDENO (1,2,3-CD) PYRENE
440U	2,6-DINITROTOLUENE	440U	DIBENZO(A,H)ANTHRACENE
		440U	BENZO(GHI)PERYLENE
		25	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63662  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                 **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE              ST: GA.                     **
**   STATION ID: SB-07                                                COLLECTION START: 11/19/91  1055   STOP: 00/00/00        **
**   CASE.NO.: 17446          SAS NO.:                                D. NO.: CB82                MD NO: CB82                  **
**                                                                                                                             **
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ANALYTICAL RESULTS UG/KG

900J	1 UNIDENTIFIED COMPOUND
200JN	HEXADECANOIC ACID
N	PETROLEUM PRODUCT

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63662 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-07
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1055 STOP: 00/00/00
D. NUMBER: CB82

UG/KG	ANALYTICAL RESULTS
2.3U	ALPHA-BHC
2.3U	BETA-BHC
2.3U	DELTA-BHC
2.3U	GAMMA-BHC (LINDANE)
2.3U	HEPTACHLOR
2.3U	ALDRIN
2.9	**HEPTACHLOR EPOXIDE**
2.3U	ENDOSULFAN I (ALPHA)
4.4U	DIELDRIN
4.4U	4,4'-DDE (P,P'-DDE)
4.4U	ENDRIN
4.4U	ENDOSULFAN II (BETA)
4.4U	4,4'-DDD (P,P'-DDD)
4.4U	ENDOSULFAN SULFATE
4.4U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
23U	METHOXYCHLOR
4.4U	ENDRIN KETONE
4.4U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
6.2	**GAMMA-CHLORDANE** /2
5.9	ALPHA-CHLORDANE /2
230U	TOXAPHENE
44U	PCB-1016 (AROCLOR 1016)
89U	PCB-1221 (AROCLOR 1221)
44U	PCB-1232 (AROCLOR 1232)
44U	PCB-1242 (AROCLOR 1242)
44U	PCB-1248 (AROCLOR 1248)
44U	PCB-1254 (AROCLOR 1254)
44U	PCB-1260 (AROCLOR 1260)
25	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
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*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED. SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63654 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-01

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1430 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB74

UG/KG	ANALYTICAL RESULTS
15U	CHLOROMETHANE
15U	BROMOMETHANE
15U	VINYL CHLORIDE
15U	CHLOROETHANE
15U	METHYLENE CHLORIDE
20U	ACETONE
15U	CARBON DISULFIDE
15U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
15U	1,1-DICHLOROETHANE
15U	1,2-DICHLOROETHENE (TOTAL)
15U	CHLOROFORM
15U	1,2-DICHLOROETHANE
15U	METHYL ETHYL KETONE
15U	1,1,1-TRICHLOROETHANE
15U	CARBON TETRACHLORIDE
15U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
15U	1,2-DICHLOROPROPANE
15U	CIS-1,3-DICHLOROPROPENE
15U	TRICHLOROETHENE(TRICHLOROETHYLENE)
15U	DIBROMOCHLOROMETHANE
15U	1,1,2-TRICHLOROETHANE
15U	BENZENE
15U	TRANS-1,3-DICHLOROPROPENE
15U	BROMOFORM
15U	METHYL ISOBUTYL KETONE
15U	METHYL BUTYL KETONE
15U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
15U	1,1,2,2-TETRACHLOROETHANE
15U	TOLUENE
15U	CHLOROBENZENE
15U	ETHYL BENZENE
15U	STYRENE
15U	TOTAL XYLENES
34	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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.
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

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**   PROJECT NO. 92-0109  SAMPLE NO. 63654  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                 **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE                ST: GA                  **
**   STATION ID: SD-01                                                COLLECTION START: 11/18/91  1430   STOP: 00/00/00      **
**   CASE NO.: 17446          SAS NO.:                                D. NO.: CB74               MD NO: CB74               **
**                                                                                                                           **
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ANALYTICAL RESULTS UG/KG

9[illegible] TRIMETHYLCYCLOPROPANE

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63654 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-01

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1430 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB74

UG/KG	ANALYTICAL RESULTS
500U	PHENOL
500U	BIS(2-CHLOROETHYL) ETHER
500U	2-CHLOROPHENOL
500U	1,3-DICHLOROBENZENE
500U	1,4-DICHLOROBENZENE
500U	1,2-DICHLOROBENZENE
500U	2-METHYLPHENOL
500U	2,2'-CHLOROISOPROPYLETHER
500U	(3-AND/OR 4-)METHYLPHENOL
500U	N-NITROSODI-N-PROPYLAMINE
500U	HEXACHLOROETHANE
500U	NITROBENZENE
500U	ISOPHORONE
500U	2-NITROPHENOL
500U	2,4-DIMETHYLPHENOL
500U	BIS(2-CHLOROETHOXY) METHANE
500U	2,4-DICHLOROPHENOL
500U	1,2,4-TRICHLOROBENZENE
500U	NAPHTHALENE
500U	4-CHLOROANILINE
500U	HEXACHLOROBUTADIENE
500U	4-CHLORO-3-METHYLPHENOL
500U	2-METHYLNAPHTHALENE
500U	HEXACHLOROCYCLOPENTADIENE (HCCP)
500U	2,4,6-TRICHLOROPHENOL
1200U	2,4,5-TRICHLOROPHENOL
500U	2-CHLORONAPHTHALENE
1200U	2-NITROANILINE
500U	DIMETHYL PHTHALATE
[illegible]	ACENAPHTHYLENE
500U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
1200U	3-NITROANILINE
500U	ACENAPHTHENE
1200U	2,4-DINITROPHENOL
1200U	4-NITROPHENOL
500U	DIBENZOFURAN
500U	2,4-DINITROTOLUENE
500U	DIETHYL PHTHALATE
500U	4-CHLOROPHENYL PHENYL ETHER
500U	FLUORENE
1200U	4-NITROANILINE
1200U	2-METHYL-4,6-DINITROPHENOL
500U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
500U	4-BROMOPHENYL PHENYL ETHER
500U	HEXACHLOROBENZENE (HCB)
1200U	PENTACHLOROPHENOL
500U	PHENANTHRENE
500U	ANTHRACENE
500U	CARBAZOLE
500U	DI-N-BUTYLPHTHALATE
58J	**FLUORANTHENE**
500U	PYRENE
500U	BENZYL BUTYL PHTHALATE
500U	3,3'-DICHLOROBENZIDINE
500U	BENZO(A)ANTHRACENE
500U	CHRYSENE
500U	BIS(2-ETHYLHEXYL) PHTHALATE
500U	DI-N-OCTYLPHTHALATE
500U	BENZO(B AND/OR K)FLUORANTHENE
500U	BENZO-A-PYRENE
[illegible]	INDENO (1,2,3-CD) PYRENE
500U	DIBENZO(A,H)ANTHRACENE
500U	BENZO(GHI)PERYLENE
34	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63654 SAMPLE TYPE: SOIL	PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META	CITY: LAFAYETTE ST: GA
STATION ID: SD-01	COLLECTION START: 11/18/91 1430 STOP: 00/00/00
CASE NO.: 17446 SAS NO.:	D. NO.: CB74 MD NO: CB74

ANALYTICAL RESULTS UG/KG

600JN	HEXADECANOIC ACID
4000J	3 UNIDENTIFIED COMPOUNDS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PESTICIDES/PCB'S DATA REPORT

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** PROJECT NO. 92-0109 SAMPLE NO. 63654 SAMPLE TYPE: SOIL — PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META — CITY: LAFAYETTE ST: GA **
** STATION ID: SD-01 — COLLECTION START: 11/18/91 1430 STOP: 00/00/00 **
** CASE NUMBER: 17446 SAS NUMBER: — D. NUMBER: CB74 **
**

*** ***

UG/KG	ANALYTICAL RESULTS
2.6U	ALPHA-BHC
2.6U	BETA-BHC
2.6U	DELTA-BHC
2.6U	GAMMA-BHC (LINDANE)
2.6U	HEPTACHLOR
2.6U	ALDRIN
2.6U	HEPTACHLOR EPOXIDE
2.6U	ENDOSULFAN I (ALPHA)
5.0U	DIELDRIN
5.0U	4,4'-DDE (P,P'-DDE)
5.0U	ENDRIN
5.0U	ENDOSULFAN II (BETA)
5.0U	4,4'-DDD (P,P'-DDD)
5.0U	ENDOSULFAN SULFATE
5.0U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
26U	METHOXYCHLOR
5.0U	ENDRIN KETONE
5.0U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
2.6U	GAMMA-CHLORDANE /2
2.6U	ALPHA-CHLORDANE /2
260U	TOXAPHENE
50U	PCB-1016 (AROCLOR 1016)
100U	PCB-1221 (AROCLOR 1221)
50U	PCB-1232 (AROCLOR 1232)
50U	PCB-1242 (AROCLOR 1242)
50U	PCB-1248 (AROCLOR 1248)
50U	PCB-1254 (AROCLOR 1254)
50U	PCB-1260 (AROCLOR 1260)
34	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63663 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-02

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1250 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB84

UG/KG	ANALYTICAL RESULTS
14U	CHLOROMETHANE
14U	BROMOMETHANE
14U	VINYL CHLORIDE
14U	CHLOROETHANE
14U	METHYLENE CHLORIDE
14U	ACETONE
14U	CARBON DISULFIDE
14U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
14U	1,1-DICHLOROETHANE
14U	1,2-DICHLOROETHENE (TOTAL)
14U	CHLOROFORM
14U	1,2-DICHLOROETHANE
14U	METHYL ETHYL KETONE
14U	1,1,1-TRICHLOROETHANE
14U	CARBON TETRACHLORIDE
14U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
14U	1,2-DICHLOROPROPANE
14U	CIS-1,3-DICHLOROPROPENE
14U	TRICHLOROETHENE(TRICHLOROETHYLENE)
14U	DIBROMOCHLOROMETHANE
14U	1,1,2-TRICHLOROETHANE
14U	BENZENE
14U	TRANS-1,3-DICHLOROPROPENE
14U	BROMOFORM
14U	METHYL ISOBUTYL KETONE
14U	METHYL BUTYL KETONE
14U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
14U	1,1,2,2-TETRACHLOROETHANE
14U	TOLUENE
14U	CHLOROBENZENE
14U	ETHYL BENZENE
14U	STYRENE
14U	TOTAL XYLENES
30	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63663 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-02

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1250 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB84

UG/KG	ANALYTICAL RESULTS
470U	PHENOL
470U	BIS(2-CHLOROETHYL) ETHER
470U	2-CHLOROPHENOL
470U	1,3-DICHLOROBENZENE
470U	1,4-DICHLOROBENZENE
470U	1,2-DICHLOROBENZENE
470U	2-METHYLPHENOL
470U	2,2'-CHLOROISOPROPYLETHER
470U	(3-AND/OR 4-)METHYLPHENOL
470U	N-NITROSODI-N-PROPYLAMINE
470U	HEXACHLOROETHANE
470U	NITROBENZENE
470U	ISOPHORONE
470U	2-NITROPHENOL
470U	2,4-DIMETHYLPHENOL
470U	BIS(2-CHLOROETHOXY) METHANE
470U	2,4-DICHLOROPHENOL
470U	1,2,4-TRICHLOROBENZENE
470U	NAPHTHALENE
470U	4-CHLOROANILINE
470U	HEXACHLOROBUTADIENE
470U	4-CHLORO-3-METHYLPHENOL
470U	2-METHYLNAPHTHALENE
470U	HEXACHLOROCYCLOPENTADIENE (HCCP)
470U	2,4,6-TRICHLOROPHENOL
1100U	2,4,5-TRICHLOROPHENOL
470U	2-CHLORONAPHTHALENE
1100U	2-NITROANILINE
470U	DIMETHYL PHTHALATE
[illegible]	[illegible]
470U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
1100U	3-NITROANILINE
470U	ACENAPHTHENE
1100U	2,4-DINITROPHENOL
1100U	4-NITROPHENOL
470U	DIBENZOFURAN
470U	2,4-DINITROTOLUENE
470U	DIETHYL PHTHALATE
470U	4-CHLOROPHENYL PHENYL ETHER
470U	FLUORENE
1100U	4-NITROANILINE
1100U	2-METHYL-4,6-DINITROPHENOL
470U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
470U	4-BROMOPHENYL PHENYL ETHER
470U	HEXACHLOROBENZENE (HCB)
1100U	PENTACHLOROPHENOL
470U	PHENANTHRENE
470U	ANTHRACENE
470U	CARBAZOLE
470U	DI-N-BUTYLPHTHALATE
470U	FLUORANTHENE
470U	PYRENE
470U	BENZYL BUTYL PHTHALATE
470U	3,3'-DICHLOROBENZIDINE
470U	BENZO(A)ANTHRACENE
470U	CHRYSENE
470U	BIS(2-ETHYLHEXYL) PHTHALATE
470U	DI-N-OCTYLPHTHALATE
470U	BENZO(B AND/OR K)FLUORANTHENE
470U	BENZO-A-PYRENE
[illegible]	[illegible]
470U	DIBENZO(A,H)ANTHRACENE
470U	BENZO(GHI)PERYLENE
30	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.
01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**    PROJECT NO. 92-0109   SAMPLE NO. 63663   SAMPLE TYPE: SOIL        PROG ELEM: NSF    COLLECTED BY: R WILDE             **
**    SOURCE: LAFAYETTE SHEET META                                      CITY: LAFAYETTE            ST: GA                      **
**    STATION ID: SD-02                                                 COLLECTION START: 11/19/91  1250   STOP: 00/00/00       **
**    CASE NO.: 17446            SAS NO.:                               D. NO.: CB84             MD NO: CB84                   **
**                                                                                                                              **
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ANALYTICAL RESULTS UG/KG

500JN	PENTADECANOIC ACID
10000J	7 UNIDENTIFIED COMPOUNDS

FOOTNOTES
*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.
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63663 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-02
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1250 STOP: 00/00/00
D. NUMBER: CB84

UG/KG	ANALYTICAL RESULTS
2.4U	ALPHA-BHC
2.4U	BETA-BHC
2.4U	DELTA-BHC
2.4U	GAMMA-BHC (LINDANE)
2.4U	HEPTACHLOR
2.4U	ALDRIN
2.4U	HEPTACHLOR EPOXIDE
2.4U	ENDOSULFAN I (ALPHA)
4.7U	DIELDRIN
4.7U	4,4'-DDE (P,P'-DDE)
4.7U	ENDRIN
4.7U	ENDOSULFAN II (BETA)
4.7U	4,4'-DDD (P,P'-DDD)
4.7U	ENDOSULFAN SULFATE
4.7U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
24U	METHOXYCHLOR
4.7U	ENDRIN KETONE
4.7U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
2.4U	GAMMA-CHLORDANE /2
2.4U	ALPHA-CHLORDANE /2
240U	TOXAPHENE
47U	PCB-1016 (AROCLOR 1016)
96U	PCB-1221 (AROCLOR 1221)
47U	PCB-1232 (AROCLOR 1232)
47U	PCB-1242 (AROCLOR 1242)
47U	PCB-1248 (AROCLOR 1248)
47U	PCB-1254 (AROCLOR 1254)
47U	PCB-1260 (AROCLOR 1260)
30	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63664 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-03

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1300 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB83

UG/KG	ANALYTICAL RESULTS
13U	CHLOROMETHANE
13U	BROMOMETHANE
13U	VINYL CHLORIDE
13U	CHLOROETHANE
13U	METHYLENE CHLORIDE
13U	ACETONE
13U	CARBON DISULFIDE
13U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
13U	1,1-DICHLOROETHANE
13U	1,2-DICHLOROETHENE (TOTAL)
13U	CHLOROFORM
13U	1,2-DICHLOROETHANE
13U	METHYL ETHYL KETONE
13U	1,1,1-TRICHLOROETHANE
13U	CARBON TETRACHLORIDE
13U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
13U	1,2-DICHLOROPROPANE
13U	CIS-1,3-DICHLOROPROPENE
13U	TRICHLOROETHENE(TRICHLOROETHYLENE)
13U	DIBROMOCHLOROMETHANE
13U	1,1,2-TRICHLOROETHANE
13U	BENZENE
13U	TRANS-1,3-DICHLOROPROPENE
13U	BROMOFORM
13U	METHYL ISOBUTYL KETONE
13U	METHYL BUTYL KETONE
13U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
13U	1,1,2,2-TETRACHLOROETHANE
13U	TOLUENE
13U	CHLOROBENZENE
13U	ETHYL BENZENE
13U	STYRENE
13U	TOTAL XYLENES
25	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63664 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-03

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1300 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB83

UG/KG	ANALYTICAL RESULTS
440U	PHENOL
440U	BIS(2-CHLOROETHYL) ETHER
440U	2-CHLOROPHENOL
440U	1,3-DICHLOROBENZENE
440U	1,4-DICHLOROBENZENE
440U	1,2-DICHLOROBENZENE
440U	2-METHYLPHENOL
440U	2,2'-CHLOROISOPROPYLETHER
440U	(3-AND/OR 4-)METHYLPHENOL
440U	N-NITROSODI-N-PROPYLAMINE
440U	HEXACHLOROETHANE
440U	NITROBENZENE
440U	ISOPHORONE
440U	2-NITROPHENOL
440U	2,4-DIMETHYLPHENOL
440U	BIS(2-CHLOROETHOXY) METHANE
440U	2,4-DICHLOROPHENOL
440U	1,2,4-TRICHLOROBENZENE
440U	NAPHTHALENE
440U	4-CHLOROANILINE
440U	HEXACHLOROBUTADIENE
440U	4-CHLORO-3-METHYLPHENOL
440U	2-METHYLNAPHTHALENE
440U	HEXACHLOROCYCLOPENTADIENE (HCCP)
440U	2,4,6-TRICHLOROPHENOL
1100U	2,4,5-TRICHLOROPHENOL
440U	2-CHLORONAPHTHALENE
1100U	2-NITROANILINE
440U	DIMETHYL PHTHALATE
[illegible]	ACENAPHTHYLENE
440U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
1100U	3-NITROANILINE
440U	ACENAPHTHENE
1100U	2,4-DINITROPHENOL
1100U	4-NITROPHENOL
440U	DIBENZOFURAN
440U	2,4-DINITROTOLUENE
440U	DIETHYL PHTHALATE
440U	4-CHLOROPHENYL PHENYL ETHER
440U	FLUORENE
1100U	4-NITROANILINE
1100U	2-METHYL-4,6-DINITROPHENOL
440U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
440U	4-BROMOPHENYL PHENYL ETHER
440U	HEXACHLOROBENZENE (HCB)
1100U	PENTACHLOROPHENOL
440U	PHENANTHRENE
440U	ANTHRACENE
440U	CARBAZOLE
440U	DI-N-BUTYLPHTHALATE
440U	FLUORANTHENE
440U	PYRENE
440U	BENZYL BUTYL PHTHALATE
440U	3,3'-DICHLOROBENZIDINE
440U	BENZO(A)ANTHRACENE
440U	CHRYSENE
440U	BIS(2-ETHYLHEXYL) PHTHALATE
440U	DI-N-OCTYLPHTHALATE
440U	BENZO(B AND/OR K)FLUORANTHENE
440U	BENZO-A-PYRENE
[illegible]	INDENO(1,2,3-CD)PYRENE
440U	DIBENZO(A,H)ANTHRACENE
440U	BENZO(GHI)PERYLENE
25	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA. 01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63664 SAMPLE TYPE: SOIL	PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META	CITY: LAFAYETTE ST: GA
STATION ID: SD-03	COLLECTION START: 11/19/91 1300 STOP: 00/00/00
CASE NO.: 17446 SAS NO.:	D. NO.: CB83 MD NO: CB83

ANALYTICAL RESULTS UG/KG

[illegible]	5 UNIDENTIFIED COMPOUNDS
400JN	PENTADECANOIC ACID
700JN	HEXADECANOIC ACID

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63664 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-03
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1300 STOP: 00/00/00
D. NUMBER: CB83

UG/KG	ANALYTICAL RESULTS
2.3U	ALPHA-BHC
2.3U	BETA-BHC
2.3U	DELTA-BHC
2.3U	GAMMA-BHC (LINDANE)
2.3U	HEPTACHLOR
2.3U	ALDRIN
2.3U	HEPTACHLOR EPOXIDE
2.3U	ENDOSULFAN I (ALPHA)
4.4U	DIELDRIN
4.4U	4,4'-DDE (P,P'-DDE)
4.4U	ENDRIN
4.4U	ENDOSULFAN II (BETA)
4.4U	4,4'-DDD (P,P'-DDD)
4.4U	ENDOSULFAN SULFATE
4.4U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
23U	METHOXYCHLOR
4.4U	ENDRIN KETONE
4.4U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
7.4	GAMMA-CHLORDANE /2
2.7	ALPHA-CHLORDANE /2
230U	TOXAPHENE
44U	PCB-1016 (AROCLOR 1016)
89U	PCB-1221 (AROCLOR 1221)
44U	PCB-1232 (AROCLOR 1232)
44U	PCB-1242 (AROCLOR 1242)
44U	PCB-1248 (AROCLOR 1248)
44U	PCB-1254 (AROCLOR 1254)
44U	PCB-1260 (AROCLOR 1260)
25	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*C-CONFIRMED BY GCMS 1 WHEN NO VALUE IS REPORTED. SEE CHLORDANE CONSTITUENTS

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63665 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-04

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1340 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB85

UG/KG	ANALYTICAL RESULTS
18U	CHLOROMETHANE
18U	BROMOMETHANE
18U	VINYL CHLORIDE
18U	CHLOROETHANE
18U	METHYLENE CHLORIDE
18U	ACETONE
18U	CARBON DISULFIDE
18U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
18U	1,1-DICHLOROETHANE
18U	1,2-DICHLOROETHENE (TOTAL)
18U	CHLOROFORM
18U	1,2-DICHLOROETHANE
18U	METHYL ETHYL KETONE
18U	1,1,1-TRICHLOROETHANE
18U	CARBON TETRACHLORIDE
18U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
18U	1,2-DICHLOROPROPANE
18U	CIS-1,3-DICHLOROPROPENE
18U	TRICHLOROETHENE(TRICHLOROETHYLENE)
18U	DIBROMOCHLOROMETHANE
18U	1,1,2-TRICHLOROETHANE
18U	BENZENE
18U	TRANS-1,3-DICHLOROPROPENE
18U	BROMOFORM
18U	METHYL ISOBUTYL KETONE
18U	METHYL BUTYL KETONE
18U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
18U	1,1,2,2-TETRACHLOROETHANE
18U	TOLUENE
18U	CHLOROBENZENE
18U	ETHYL BENZENE
18U	STYRENE
18U	TOTAL XYLENES
45	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63665 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-04

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1340 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB85

UG/KG	ANALYTICAL RESULTS
600U	PHENOL
600U	BIS(2-CHLOROETHYL) ETHER
600U	2-CHLOROPHENOL
600U	1,3-DICHLOROBENZENE
600U	1,4-DICHLOROBENZENE
600U	1,2-DICHLOROBENZENE
600U	2-METHYLPHENOL
600U	2,2'-CHLOROISOPROPYLETHER
600U	(3-AND/OR 4-)METHYLPHENOL
600U	N-NITROSODI-N-PROPYLAMINE
600U	HEXACHLOROETHANE
600U	NITROBENZENE
600U	ISOPHORONE
600U	2-NITROPHENOL
600U	2,4-DIMETHYLPHENOL
600U	BIS(2-CHLOROETHOXY) METHANE
600U	2,4-DICHLOROPHENOL
600U	1,2,4-TRICHLOROBENZENE
600U	NAPHTHALENE
600U	4-CHLOROANILINE
600U	HEXACHLOROBUTADIENE
600U	4-CHLORO-3-METHYLPHENOL
600U	2-METHYLNAPHTHALENE
600U	HEXACHLOROCYCLOPENTADIENE (HCCP)
600U	2,4,6-TRICHLOROPHENOL
1500U	2,4,5-TRICHLOROPHENOL
600U	2-CHLORONAPHTHALENE
1500U	2-NITROANILINE
600U	DIMETHYL PHTHALATE
[illegible]	ACENAPHTHYLENE
600U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
1500U	3-NITROANILINE
600U	ACENAPHTHENE
1500U	2,4-DINITROPHENOL
1500U	4-NITROPHENOL
600U	DIBENZOFURAN
600U	2,4-DINITROTOLUENE
600U	DIETHYL PHTHALATE
600U	4-CHLOROPHENYL PHENYL ETHER
600U	FLUORENE
1500U	4-NITROANILINE
1500U	2-METHYL-4,6-DINITROPHENOL
600U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
600U	4-BROMOPHENYL PHENYL ETHER
600U	HEXACHLOROBENZENE (HCB)
1500U	PENTACHLOROPHENOL
600U	PHENANTHRENE
600U	ANTHRACENE
600U	CARBAZOLE
600U	DI-N-BUTYLPHTHALATE
600U	FLUORANTHENE
600U	PYRENE
600U	BENZYL BUTYL PHTHALATE
600U	3,3'-DICHLOROBENZIDINE
600U	BENZO(A)ANTHRACENE
600U	CHRYSENE
600U	BIS(2-ETHYLHEXYL) PHTHALATE
600U	DI-N-OCTYLPHTHALATE
600U	BENZO(B AND/OR K)FLUORANTHENE
600U	BENZO-A-PYRENE
[illegible]	INDENO (1,2,3-CD) PYRENE
600U	DIBENZO(A,H)ANTHRACENE
600U	BENZO(GHI)PERYLENE
45	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 92-0109 SAMPLE NO. 63665 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SD-04 COLLECTION START: 11/19/91 1340 STOP: 00/00/00 **
** CASE NO.: 17446 SAS NO.: D. NO.: CB85 MD NO: CB85 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

100000J	9 UNIDENTIFIED COMPOUNDS
2000JN	HEXADECANOIC ACID

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63665 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-04
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1340 STOP: 00/00/00
D. NUMBER: CB85

UG/KG	ANALYTICAL RESULTS
3.1U	ALPHA-BHC
3.1U	BETA-BHC
3.1U	DELTA-BHC
3.1U	GAMMA-BHC (LINDANE)
3.1U	HEPTACHLOR
3.1U	ALDRIN
3.1U	HEPTACHLOR EPOXIDE
3.1U	ENDOSULFAN I (ALPHA)
6.0U	DIELDRIN
6.0U	4,4'-DDE (P,P'-DDE)
6.0U	ENDRIN
6.0U	ENDOSULFAN II (BETA)
6.0U	4,4'-DDD (P,P'-DDD)
6.0U	ENDOSULFAN SULFATE
6.0U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
31U	METHOXYCHLOR
6.0U	ENDRIN KETONE
6.0U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
3.1U	GAMMA-CHLORDANE /2
3.1U	ALPHA-CHLORDANE /2
310U	TOXAPHENE
60U	PCB-1016 (AROCLOR 1016)
120U	PCB-1221 (AROCLOR 1221)
60U	PCB-1232 (AROCLOR 1232)
60U	PCB-1242 (AROCLOR 1242)
60U	PCB-1248 (AROCLOR 1248)
60U	PCB-1254 (AROCLOR 1254)
60U	PCB-1260 (AROCLOR 1260)
45	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

METALS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63652 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-01
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1215 STOP: 00/00/00
MD NUMBER: CB71

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
20600	ALUMINUM	320	MANGANESE
31JN	ANTIMONY	0.11U	MERCURY
5.1J	ARSENIC	23	NICKEL
63	BARIUM	2500	POTASSIUM
1.6	BERYLLIUM	0.46U	SELENIUM
0.45U	CADMIUM	0.45U	SILVER
22000	CALCIUM	80U	SODIUM
36	CHROMIUM	0.23U	THALLIUM
10	COBALT	NA	TIN
23	COPPER	29	VANADIUM
34000	IRON	50	ZINC
20J	LEAD	15	PERCENT MOISTURE
3500	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63652  SAMPLE TYPE: SOIL      PROG ELEM: NSF   COLLECTED BY: R WILDE              **
**   SOURCE: LAFAYETTE SHEET META                                   CITY: LAFAYETTE            ST: GA                   **
**   STATION ID: SS-01                                              COLLECTION START: 11/18/91  1215   STOP: 00/00/00   **
**   CASE NO.: 17446          SAS NO.:                              D. NO.: CB71               MD NO: CB71              **
**                                                                                                                      **
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RESULTS	UNITS	PARAMETER
0.24U	MG/KG	CYANIDE

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63658 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-02
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1610 STOP: 00/00/00
MD NUMBER: CB78

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
15000	ALUMINUM	1300	MANGANESE
260JN	ANTIMONY	0.12U	MERCURY
3.9J	ARSENIC	170	NICKEL
58	BARIUM	1000	POTASSIUM
1.3	BERYLLIUM	0.48U	SELENIUM
18JN	CADMIUM	1.6	SILVER
4100	CALCIUM	90U	SODIUM
54	CHROMIUM	1U	THALLIUM
73	COBALT	NA	TIN
130	COPPER	23	VANADIUM
330000	IRON	130	ZINC
110J	LEAD	20	PERCENT MOISTURE
2000	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63658 SAMPLE TYPE: SOIL	PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META	CITY: LAFAYETTE ST: GA
STATION ID: SS-02	COLLECTION START: 11/18/91 1610 STOP: 00/00/00
CASE NO.: 17446 SAS NO.:	D. NO.: CB78 MD NO: CB78

RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63661 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-03
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1010 STOP: 00/00/00
MD NUMBER: CB81

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
19000	ALUMINUM	3400	MANGANESE
26JN	ANTIMONY	0.11U	MERCURY
3.9J	ARSENIC	60	NICKEL
480	BARIUM	2100	POTASSIUM
1.8	BERYLLIUM	0.46U	SELENIUM
0.45U	CADMIUM	0.62	SILVER
18000	CALCIUM	630	SODIUM
24	CHROMIUM	1U	THALLIUM
40	COBALT	NA	TIN
37	COPPER	23	VANADIUM
29000	IRON	79	ZINC
19J	LEAD	15	PERCENT MOISTURE
2400	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63661   SAMPLE TYPE: SOIL        PROG ELEM: NSF    COLLECTED BY: R WILDE               **
**   SOURCE: LAFAYETTE SHEET META                                      CITY: LAFAYETTE             ST: GA                    **
**   STATION ID: SS-03                                                 COLLECTION START: 11/19/91  1010   STOP: 00/00/00     **
**   CASE NO.: 17446          SAS NO.:                                 D. NO.: CB81               MD NO: CB81                **
**                                                                                                                           **
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RESULTS	UNITS	PARAMETER
0.24U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63660 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-04
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 0955 STOP: 00/00/00
MD NUMBER: CB80

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
17000	ALUMINUM	1400	MANGANESE
41JN	ANTIMONY	0.11U	MERCURY
8.2J	ARSENIC	460	NICKEL
1700	BARIUM	2700	POTASSIUM
2	BERYLLIUM	0.45U	SELENIUM
0.46U	CADMIUM	2.8	SILVER
22000	CALCIUM	1900	SODIUM
34	CHROMIUM	1U	THALLIUM
120	COBALT	NA	TIN
190	COPPER	26	VANADIUM
35000	IRON	200	ZINC
51J	LEAD	16	PERCENT MOISTURE
3600	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63660 SAMPLE TYPE: SOIL
PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META
CITY: LAFAYETTE ST: GA
STATION ID: SS-04
COLLECTION START: 11/19/91 0955 STOP: 00/00/00
CASE NO.: 17446 SAS NO.:
D. NO.: CB80 MD NO: CB80

RESULTS	UNITS	PARAMETER
0.24U	MG/KG	CYANIDE

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

** PROJECT NO. 92-0109 SAMPLE NO. 63655 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SS-05 COLLECTION START: 11/18/91 1505 STOP: 00/00/00 **
** CASE NUMBER: 17446 SAS NUMBER: MD NUMBER: C875 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
6400	ALUMINUM	270	MANGANESE
31J	ANTIMONY	0.12U	MERCURY
2.4J	ARSENIC	14	NICKEL
99	BARIUM	1100	POTASSIUM
1.3	BERYLLIUM	0.49U	SELENIUM
1.5JN	CADMIUM	0.48U	SILVER
210000	CALCIUM	130	SODIUM
20	CHROMIUM	0.24U	THALLIUM
7.6	COBALT	NA	TIN
20	COPPER	13	VANADIUM
15000	IRON	390	ZINC
100J	LEAD	19	PERCENT MOISTURE
11000	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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** PROJECT NO. 92-0109 SAMPLE NO. 63655 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SS-05 COLLECTION START: 11/18/91 1505 STOP: 00/00/00 **
** CASE.NO.: 17446 SAS NO.: D. NO.: CB75 MD NO: CB75 **
** **
*** ***

RESULTS	UNITS	PARAMETER
1U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63656 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-06
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1525 STOP: 00/00/00
MD NUMBER: CB76

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
19000	ALUMINUM	300	MANGANESE
28JN	ANTIMONY	0.11U	MERCURY
2.6J	ARSENIC	22	NICKEL
52	BARIUM	1400	POTASSIUM
1.7	BERYLLIUM	0.48U	SELENIUM
0.47U	CADMIUM	0.47U	SILVER
2700	CALCIUM	60U	SODIUM
27	CHROMIUM	0.24U	THALLIUM
15	COBALT	NA	TIN
26	COPPER	25	VANADIUM
34000	IRON	50	ZINC
24J	LEAD	17	PERCENT MOISTURE
2400	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63656 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-06
CASE NO.: 17446 SAS NO.:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1525 STOP: 00/00/00
D. NO.: CB76 MD NO: CB76

RESULTS	UNITS	PARAMETER
0.24U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63653 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-01
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1240 STOP: 00/00/00
MD NUMBER: CB73

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
25000	ALUMINUM	1400	MANGANESE
26JN	ANTIMONY	0.12U	MERCURY
5.9J	ARSENIC	16	NICKEL
68	BARIUM	1200	POTASSIUM
1.6	BERYLLIUM	0.49U	SELENIUM
0.49U	CADMIUM	0.49U	SILVER
690	CALCIUM	70U	SODIUM
29	CHROMIUM	1U	THALLIUM
27	COBALT	NA	TIN
26	COPPER	30	VANADIUM
36000	IRON	30	ZINC
24J	LEAD	19	PERCENT MOISTURE
1800	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63653 SAMPLE TYPE: SOIL
PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META
CITY: LAFAYETTE ST: GA
STATION ID: SB-01
COLLECTION START: 11/18/91 1240 STOP: 00/00/00
CASE NO.: 17446 SAS NO.:
D. NO.: CB73 MD NO: CB73

RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

METALS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63659 SAMPLE TYPE: SOIL	PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META	CITY: LAFAYETTE ST: GA
STATION ID: SB-02	COLLECTION START: 11/18/91 1625 STOP: 00/00/00
CASE NUMBER: 17446 SAS NUMBER:	MD NUMBER: CB79

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
28000	ALUMINUM	1100	MANGANESE
32JN	ANTIMONY	0.11U	MERCURY
3UJ	ARSENIC	49	NICKEL
130	BARIUM	1600	POTASSIUM
2.1	BERYLLIUM	0.47U	SELENIUM
0.48U	CADMIUM	0.48U	SILVER
100U	CALCIUM	90U	SODIUM
34	CHROMIUM	1U	THALLIUM
25	COBALT	NA	TIN
21	COPPER	24	VANADIUM
38000	IRON	84	ZINC
6.6J	LEAD	17	PERCENT MOISTURE
5400	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES
*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.
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63659  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE          ST: GA                       **
**   STATION ID: SB-02                                                COLLECTION START: 11/18/91  1625   STOP: 00/00/00     **
**   CASE.NO.: 17446            SAS NO.:                              D. NO.: CB79             MD NO: CB79                  **
**                                                                                                                          **
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RESULTS	UNITS	PARAMETER
0.24U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63657 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-06
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1540 STOP: 00/00/00
MD NUMBER: CB77

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
25000	ALUMINUM	180	MANGANESE
32JN	ANTIMONY	0.11U	MERCURY
3J	ARSENIC	26	NICKEL
65	BARIUM	2800	POTASSIUM
1.7	BERYLLIUM	0.46U	SELENIUM
0.46U	CADMIUM	0.46U	SILVER
1500	CALCIUM	80U	SODIUM
34	CHROMIUM	1U	THALLIUM
12	COBALT	NA	TIN
22	COPPER	29	VANADIUM
36000	IRON	46	ZINC
9.8J	LEAD	14	PERCENT MOISTURE
3100	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES
*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
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63657  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                  **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE            ST: GA                         **
**   STATION ID: SB-06                                                COLLECTION START: 11/18/91  1540   STOP: 00/00/00         **
**   CASE NO.: 17446          SAS NO.:                                D. NO.: CB77              MD NO: CB77                     **
**                                                                                                                              **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
0.23U	MG/KG	CYANIDE

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63662 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-07
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1055 STOP: 00/00/00
MD NUMBER: CB82

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
22000	ALUMINUM	480	MANGANESE
33JN	ANTIMONY	0.12U	MERCURY
5.1J	ARSENIC	41	NICKEL
150	BARIUM	2300	POTASSIUM
1.8	BERYLLIUM	0.51U	SELENIUM
0.52U	CADMIUM	0.52U	SILVER
3000	CALCIUM	340	SODIUM
35	CHROMIUM	1U	THALLIUM
19	COBALT	NA	TIN
44	COPPER	30	VANADIUM
37000	IRON	79	ZINC
18J	LEAD	23	PERCENT MOISTURE
2400	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

.01/03/92

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 92-0109 SAMPLE NO. 63662 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SB-07 COLLECTION START: 11/19/91 1055 STOP: 00/00/00 **
** CASE NO.: 17446 SAS NO.: D. NO.: CB82 MD NO: CB82 **
** **
*** ***

RESULTS	UNITS	PARAMETER
0.26U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63654 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-01
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1430 STOP: 00/00/00
MD NUMBER: CB74

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
14000	ALUMINUM	2600	MANGANESE
27J	ANTIMONY	0.21U	MERCURY
5.5J	ARSENIC	18	NICKEL
130	BARIUM	1100	POTASSIUM
2.1	BERYLLIUM	0.91U	SELENIUM
0.94U	CADMIUM	0.94U	SILVER
5100	CALCIUM	150	SODIUM
17	CHROMIUM	1U	THALLIUM
14	COBALT	NA	TIN
19	COPPER	24	VANADIUM
31000	IRON	83	ZINC
34J	LEAD	58	PERCENT MOISTURE
1700	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63654 SAMPLE TYPE: SOIL	PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META	CITY: LAFAYETTE ST: GA
STATION ID: SD-01	COLLECTION START: 11/18/91 1430 STOP: 00/00/00
CASE.NO.: 17446 SAS NO.:	D. NO.: CB74 MD NO: CB74

RESULTS	UNITS	PARAMETER
0.48U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63663 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA
STATION ID: SD-02 COLLECTION START: 11/19/91 1250 STOP: 00/00/00
CASE NUMBER: 17446 SAS NUMBER: MD NUMBER: CB84

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
15000	ALUMINUM	1000	MANGANESE
25JN	ANTIMONY	0.13U	MERCURY
3.7J	ARSENIC	78	NICKEL
380	BARIUM	1400	POTASSIUM
1.7	BERYLLIUM	0.49U	SELENIUM
0.49U	CADMIUM	1.3	SILVER
4000	CALCIUM	340	SODIUM
19	CHROMIUM	0.24U	THALLIUM
31	COBALT	NA	TIN
47	COPPER	16	VANADIUM
29000	IRON	160	ZINC
100J	LEAD	21	PERCENT MOISTURE
1900	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
**   PROJECT NO. 92-0109   SAMPLE NO. 63663  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                  **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE            ST: GA                       **
**   STATION ID: SD-02                                                COLLECTION START: 11/19/91  1250   STOP: 00/00/00       **
**   CASE NO.: 17446           SAS NO.:                               D. NO.: CB84               MD NO: CB84                  **
**                                                                                                                            **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63664 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-03
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1300 STOP: 00/00/00
MD NUMBER: CB83

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
21000	ALUMINUM	2200	MANGANESE
30JN	ANTIMONY	0.12U	MERCURY
12J	ARSENIC	140	NICKEL
820	BARIUM	2700	POTASSIUM
2.2	BERYLLIUM	0.54U	SELENIUM
0.54U	CADMIUM	0.68J	SILVER
3700	CALCIUM	830	SODIUM
27	CHROMIUM	1U	THALLIUM
72	COBALT	NA	TIN
75	COPPER	27	VANADIUM
29000	IRON	160	ZINC
56J	LEAD	27	PERCENT MOISTURE
2600	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63664 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA
STATION ID: SD-03 COLLECTION START: 11/19/91 1300 STOP: 00/00/00
CASE NO.: 17446 SAS NO.: D. NO.: CB83 MD NO: CB83

RESULTS	UNITS	PARAMETER
0.27U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63665 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-04
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1340 STOP: 00/00/00
MD NUMBER: CB85

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
12000	ALUMINUM	1200	MANGANESE
28JN	ANTIMONY	0.18U	MERCURY
4.7J	ARSENIC	18	NICKEL
98	BARIUM	870	POTASSIUM
1.8	BERYLLIUM	0.73U	SELENIUM
0.73U	CADMIUM	0.73U	SILVER
1500	CALCIUM	95	SODIUM
36	CHROMIUM	0.36U	THALLIUM
28	COBALT	NA	TIN
18	COPPER	27	VANADIUM
33000	IRON	61	ZINC
13J	LEAD	48	PERCENT MOISTURE
1600	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63665 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-04
CASE NO.: 17446 SAS NO.:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1340 STOP: 00/00/00
D. NO.: CB85 MD NO: CB85

RESULTS	UNITS	PARAMETER
0.38U	MG/KG	CYANIDE

FOOTNOTES
*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.

APPENDIX C

PHOTODOCUMENTATION LOG

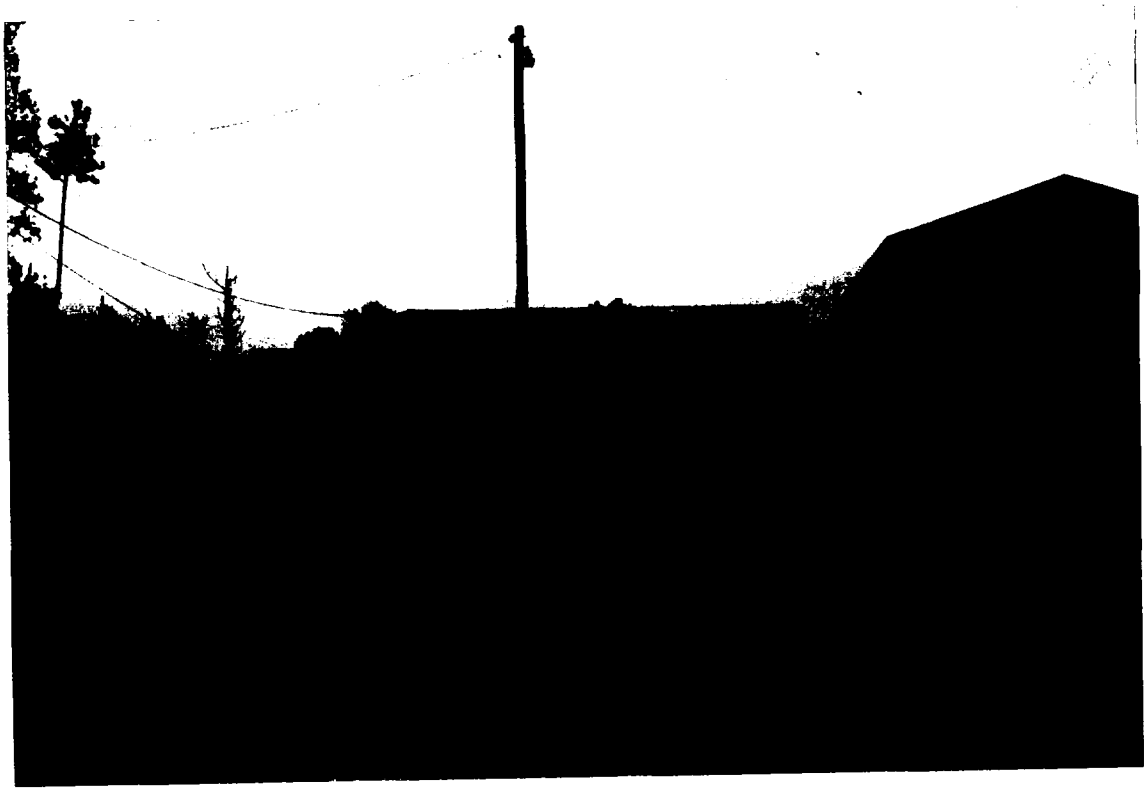

Photo 1 - Northern portion of the LaFayette Sheet Metal property

Photo 2 - Southern portion of the LaFayette Sheet Metal property

Photo 3 - Facing west toward Highway 27

Photo 4 - Portion of drum found near background sample location

Photo 5 - truck loading ramp in driveway

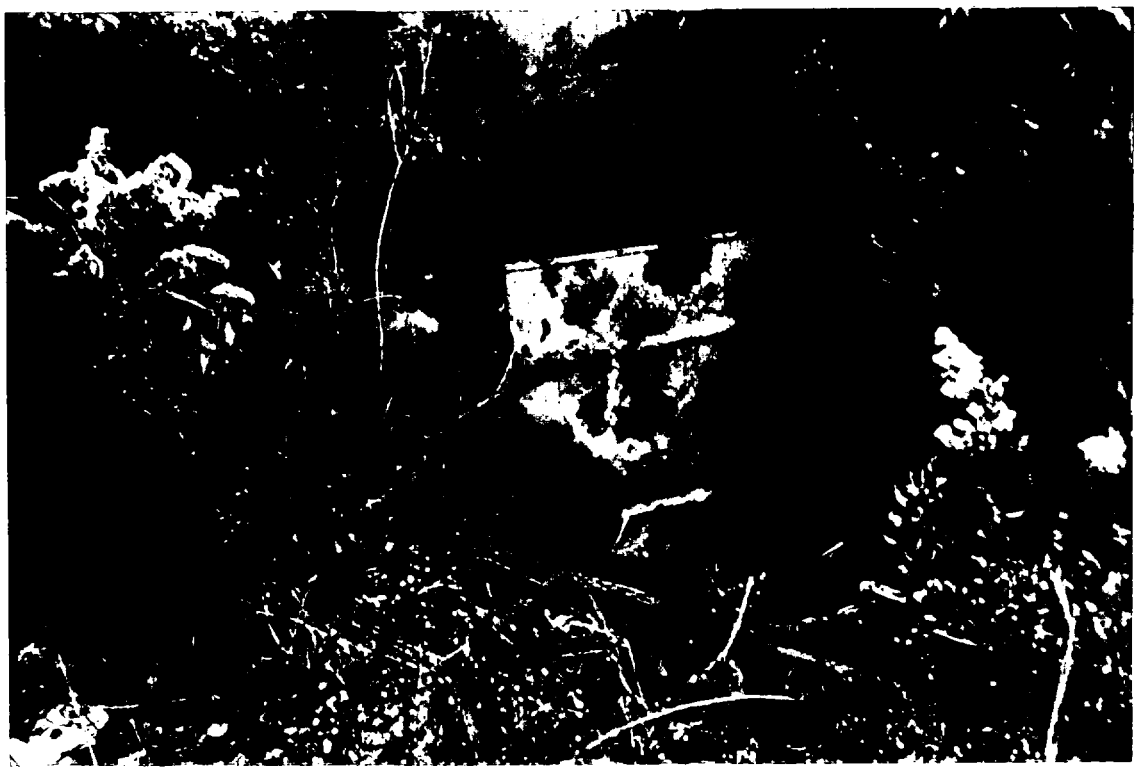

Photo 6 - Drum found near loading ramp

Photo 7 - Trash on ground behind the metal plating building

Photo 8 - Drum pieces found behind metal building

Photo 9 - Drums and trash behind the southern-most building

B & V WASTE SCIENCE & TECHNOLOGY CORP.

1117 PERIMETER CENTER WEST
SUITE W-212
ATLANTA, GEORGIA 30338
TEL (404) 392-9227
FAX: (404) 392-9289

WPB/SAS
APR 28 1992

USEPA
Site Inspection
Work Assignment No. 11

BVWST Project 52011.011
April 27, 1992

Mr. A.R. Hanke
Chief, Site Assessment Section
U.S. Environmental Protection Agency
345 Courtland St., NE
Atlanta, GA 30365

Subject: Draft Site Inspection
LaFayette Sheet Metal
LaFayette, Walker County, Georgia
EPA ID No. GAD984270553

Dear Mr. Hanke:

Enclosed please find one (1) copy of the Draft Site Inspection, references, and HRS Prescore package for the LaFayette Sheet Metal site.

Please feel free to contact me if you have any questions or comments.

Very truly yours,

B&V WASTE SCIENCE AND TECHNOLOGY CORP.

Jancie S. Hatcher

Jancie S. Hatcher
Project Scientist

Enclosures

cc: Charles Swan, Project Officer, w/ enclosures
Keith Mills, Contracting Specialist, w/ enclosures
Hubert Wieland, BVWST, w/o enclosures

DATE REPORT ACCEPTED 5-7-92

DISPOSITION ESI

SAM SIGNATURE Janice P Thomas

DRAFT

SITE INSPECTION

Lafayette Sheet Metal
Lafayette, Walker County, Georgia
EPA ID No. GAD984270553

EPA Work Assignment No. 11
EPA Contract No. 68-W9-0055

Prepared for
U.S. Environmental Protection Agency
Region IV

Prepared by
B&V Waste Science and Technology Corp.

Project No. 52011.011
April 27, 1992

Prepared by	Reviewed by	Approved by
Jancie S. Hatcher	Ronald A. Wilde	H. Wieland
Jancie S. Hatcher	Ron Wilde	Hubert Wieland
Site Manager	Technical Reviewer	Project Manager

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FIGURES

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EXECUTIVE SUMMARY

LaFayette Sheet Metal is a 1.32 acre facility located on U.S. Highway 27, just north of the City of LaFayette, Georgia. The property contains two buildings, one of which was used as a sheet metal plating facility from November 1983 to August 1988. The site is currently owned by Mr. Milford Morgan, who leases the property for use as a day-care facility for mentally-handicapped adults.

The types or amounts of any wastes deposited onsite are not documented. The site was originally discovered through citizen complaints regarding a variety of drums and containers, which had been dumped in an open pit to the east of the plating building. Remains of drums were noted during the Site Inspection (SI) sampling event.

Fourteen environmental samples were collected during the field investigation associated with this study. The sampling indicated the presence of a variety of unidentified organic chemicals, and elevated levels of inorganics in the surface soil. These metals included cadmium, lead, nickel, cobalt, and zinc. Several pesticides were also found in surface soil. In general, migration of inorganics to subsurface soils was not noted.

The LaFayette Sheet Metal facility is located in the Valley and Ridge physiographic province. The province is distinguished by folded and faulted stratified rocks, consiting of limestone, dolomite, shale, and sandstone. The facility is situated on the exposed Conasauga Formation, and groundwater under the site is found in the residuum, and joints and solution cavities of the bedrock.

The primary pathway of concern at LaFayette Sheet Metal is the soil exposure pathway. At least 34 persons work at or attend the day-care facility onsite, and constitute a resident population. Several residential houses are also located adjacent to the property.

Based upon the analysis of possible migration pathways, the results of the sampling investigation, and information obtained from the references, it is recommended that LaFayette Sheet Metal receive further action due to the potential threat to human health through soil exposure.

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1.0 INTRODUCTION

B & V Waste Science and Technology was tasked by the U. S. Environmental Protection Agency (EPA), Waste Management Division to conduct a Site Inspection (SI) at the LaFayette Sheet Metal facility in Walker County, Georgia. The inspection was performed under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA). The field investigation was conducted during the week of November 18, 1991.

1.1 OBJECTIVES

The objectives of this inspection 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. Further, this inspection sought to determine 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 was 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. These activities were to:

- 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 ground water, surface water, air and soil exposure pathways.
- Develop a site sketch, to scale.
- Collect environmental samples.

2.0 SITE CHARACTERIZATION

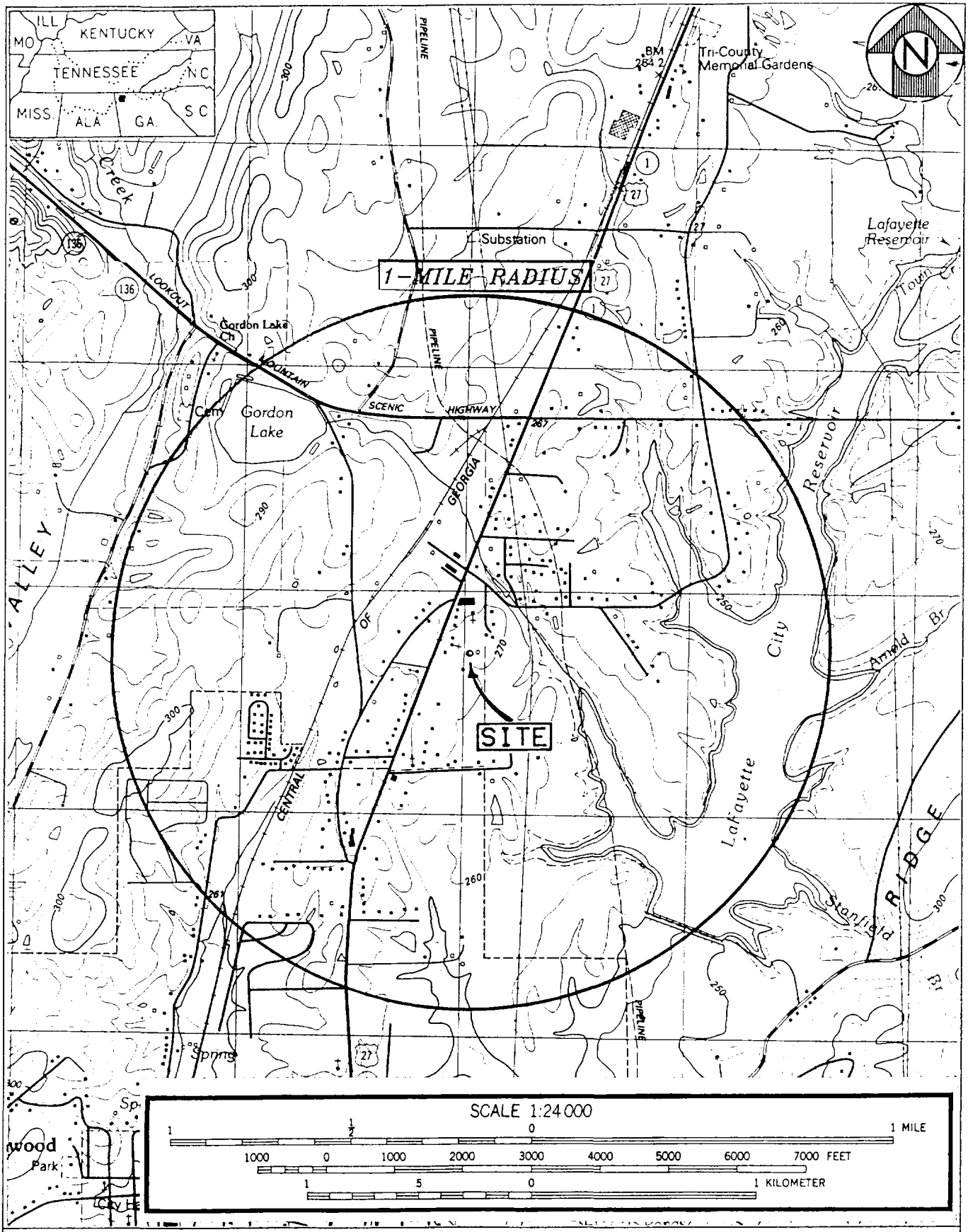
2.1 SITE LOCATION AND DESCRIPTION

The LaFayette Sheet Metal site is located in LaFayette, Georgia on Highway 27 North, directly behind the abandoned building of the North LaFayette Baptist Church. The site is more specifically located at 34° 44' 05" N latitude and 85° 16' 27" W longitude. The 1.32-acre property consists of two small buildings which are surrounded on three sides by a fence, and on the fourth side by heavy woods. No stressed vegetation was noted onsite. The buildings onsite are located on a slight hill, with a gravel parking lot between the buildings and the gate. Drainage from the site would travel either into the gravel parking lot and percolate into the ground, or drain away from the eastern portion of the site in wet-weather ditches. The surrounding area is mostly residential, with some small commercial businesses on Highway 27. Private residences are located adjacent to the site on the north and south. The site is easily accessible only from the east, as the other boundaries are fenced (Refs. 1, 2, 3, 4; Appendix A). The site location and site layout maps are shown as Figures 1 and 2.

2.2 SITE HISTORY AND WASTE CHARACTERISTICS

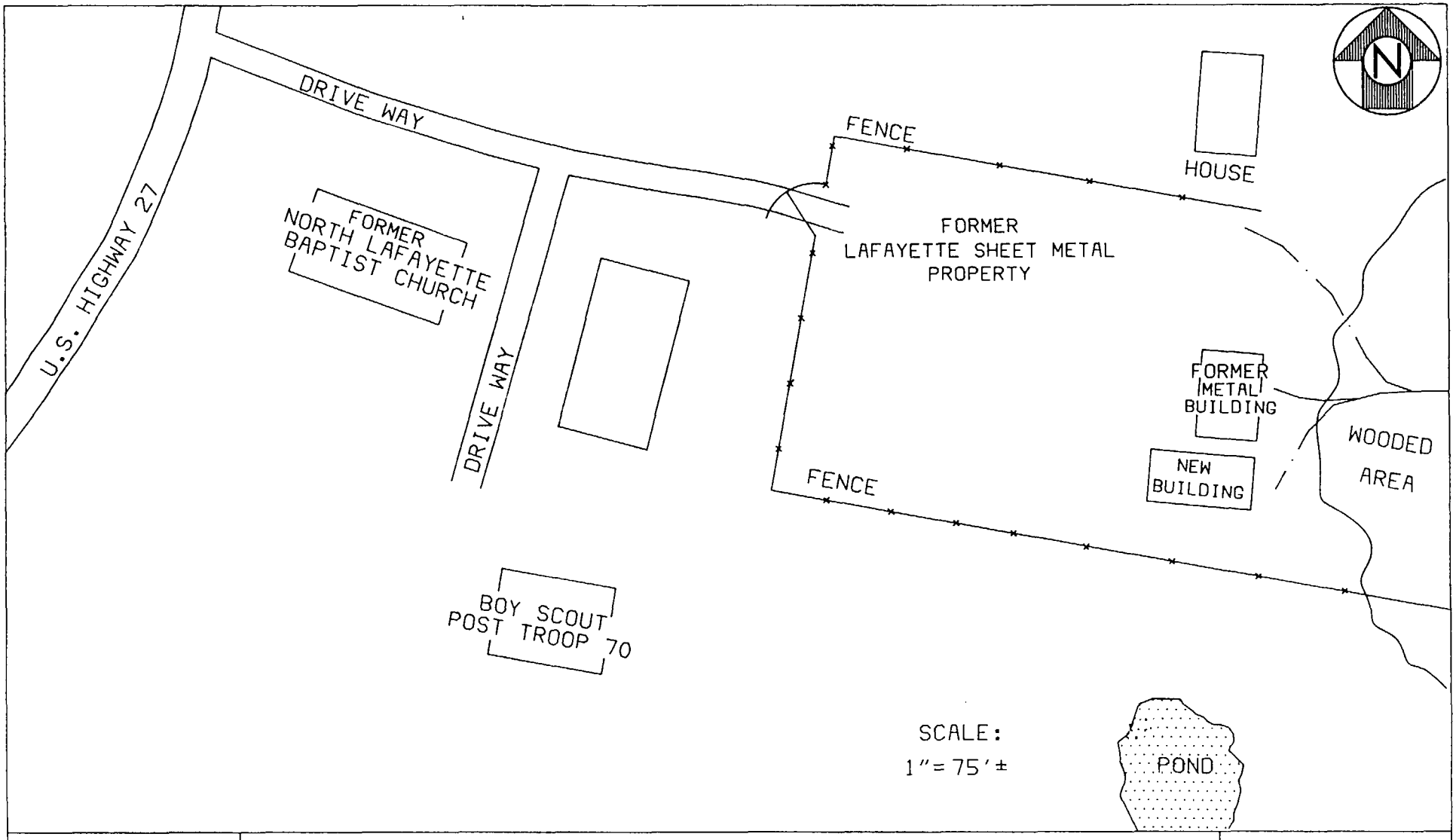
LaFayette Sheet Metal was discovered as a CERCLA site in May 1986 after the Walker County Sheriff's Department reported to EPA Region IV that his office had received numerous calls from private citizens regarding drums being stored outside on the property (Ref. 5). On June 1, 1986, an EPA official investigated the complaint, and observed a filled area with approximate dimensions of 60 x 100 x 5 feet behind the LaFayette Sheet Metal building. Numerous containers of various sizes were located in the filled area (Ref. 6). The containers observed in the fill area included several rusty 55-gallon drums, and numerous 1 and 5 gallon cans and glass bottles. Solid material was observed in some of the containers. Also seen onsite was a small area where it appeared that fiberglass had been burned (Ref. 6). During a 1988 offsite reconnaissance of the facility, no drums or other containers were observed onsite (Ref. 1). No available file material indicates what (if any) hazardous wastes are associated with LaFayette Sheet Metal. At the time of sampling, metal debris, glass, and pieces of metal drums were seen onsite (Ref. 2).

LaFayette Sheet Metal was owned and operated as a metal plating facility by Mr. Dexter Jumper from November 1983 to August 1988. It is unknown if the facility was used for metal plating before this time, although at one time it was operated as a car body shop. The property was then owned and operated by McGouirk Saw Mill Service (Ref. 1). At the present time, the property is owned by Milford Morgan of Summerville, Georgia. Mr. Morgan leases the property and buildings to Vista Community Programs, which operates a day-care facility for mentally-handicapped adults on the property (Refs. 2, 7). There is no currently recorded RCRA status for LaFayette Sheet Metal (Ref. 8).



BASE MAP IS A PORTION OF THE USGS 7.5 MINUTE QUDS., KENSINGTON, GA. 1983 & LAFAYETTE, GA. 1983.

BEST SCIENCE AND TECHNOLOGY CORP	SITE LOCATION MAP LAFAYETTE SHEET METAL LAFAYETTE, WALKER COUNTY, GEORGIA	FIGURE 1



WASTE SCIENCE AND TECHNOLOGY CORP.

SITE LAYOUT MAP
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

FIGURE 2

3.0 FIELD INVESTIGATION

3.1 SAMPLE COLLECTION

During the field investigation, conducted the week of November 18, 1991, B & V Waste Science and Technology attempted to identify and characterize contaminants which may be present in the environment as a result of activities that were conducted at the LaFayette Sheet Metal facility. To accomplish this, BVWST collected environmental sediment, surface, and subsurface soil samples, as well as groundwater samples from a number of strategic locations. These locations were selected based on historical information, hydrogeological data for the region and site area, and direct observation at the site.

3.1.1 Sample Collection Methodology

All sample collection, sample preservation, and chain-of-custody procedures used during this inspection were in accordance with the standard operating procedures as specified in Section 3 and 4 of the Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division, February 1, 1991, and with the Field Study Plan prepared by BVWST on September 23, 1991. Deviations from the study plan include the following: (1) one complete surface soil, subsurface soil, and temporary well set was eliminated because the site was smaller than expected; (2) no groundwater samples were taken because the geology of the site prevented access to groundwater; (3) several subsurface soil samples were eliminated because they weren't located in source areas; (4) a private well could not be located in the site vicinity.

3.1.2 Duplicate Samples

Duplicate samples were offered to and declined by Milford Morgan, owner of the former LaFayette Sheet Metal property, and Denise Gilreath, owner of the pond. Receipt for sample forms are on file at BVWST.

3.1.3 Description of Samples and Sample Locations

During the sampling investigation, a total of 14 environmental samples were collected. All sample locations are shown in Figure 3. Sample codes, descriptions, locations, and rationale are contained in Table 1.

TABLE 1

Sample Locations and Rationale
LaFayette Sheet Metal
LaFayette, Walker County, Georgia

Sample Code	Sample Type	Location	Rationale
LS-SS-01	Surface Soil	Just west of the facility's gate	To characterize background conditions
LS-SS-02	Surface Soil	North of former metal building onsite	To establish presence or absence of contaminants
LS-SS-03	Surface Soil	South of former metal building in observed fill area	To establish presence or absence of contaminants
LS-SS-04	Surface Soil	Northeast of former metal building near property corner	To establish presence or absence of contaminants
LS-SS-05	Surface Soil	West of former metal building in front of unloading area	To establish presence or absence of contaminants
LS-SS-06	Surface Soil	South of new building near fence	To establish presence or absence of contaminants
LS-SB-01	Subsurface Soil	Just west of facility's gate	To characterize background conditions
LS-SB-02	Subsurface Soil	North of former metal building onsite	To establish presence or absence of contaminants
LS-SB-06	Subsurface Soil	South of new building near fence	To establish presence or absence of contaminants
LS-SB-07	Subsurface Soil	Southeast of former metal building; 8 feet east of SS-03	To establish presence or absence of contaminants
LS-SD-01	Sediment	Unnamed creek upstream of site; just off Hwy. 27	To characterize background conditions
LS-SD-02	Sediment	Wet-weather ditch onsite; just at property boundary	To establish presence or absence of contaminants
LS-SD-03	Sediment	Wet-weather ditch downstream of site	To establish presence or absence of contaminants
LS-SD-04	Sediment	Pond south of site; Gilreath property	To establish presence or absence of contaminants

LS Lafayette Sheet Metal
SS Surface Soil
SB Subsurface Soil
SD Sediment

3.1.4 Field Measurements

No field measurements were performed during the LaFayette Sheet Metal SI, as only soil samples were collected.

3.2 SAMPLE ANALYSIS

3.2.1 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 soil samples were performed by Southwest Research Institute of San Antonio, Texas. Inorganic analyses of soil samples were performed by IT Analytical Services of Exton, Pennsylvania.

All laboratory analyses and laboratory quality assurance procedures used during the investigation were in accordance with standard procedures and protocols as specified in the Laboratory Operations and Quality Control Manual, United States Environmental Protection Agency, Region IV, Environmental Services Division, issued October 24, 1990; or as specified by the existing United States Environmental Protection Agency standard procedures and protocols for the Contract Laboratory Program (CLP) Statement of Work (SOW), as applicable.

3.2.2 Analytical Data Quality and Data Qualifiers

All analytical data were subjected 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 a qualifier of "J". This indicates that the qualitative analysis was acceptable, but the quantitative value has been estimated. A few other compounds are qualified with an "N", indicating that they were detected based on the presumptive evidence of their presence. This means that the compound was tentatively identified, and its detection cannot be used as a positive indication of its presence. Results for some samples are reported with a "U" qualifier. This qualifier means that the material was analyzed for but not detected. The reported number is the laboratory-derived minimum quantitation limit (MQL) 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 labeled as "JN", indicating that they are tentatively identified at estimated quantities. Because these compounds are not routinely analyzed for or reported, background levels or MQL levels are not generally available for comparison. The complete analytical data sheets are presented in Appendix B.

3.3 PRESENTATION OF ANALYTICAL RESULTS

This section presents a discussion and interpretation of the analytical results from the environmental samples collected during the investigation at LaFayette Sheet Metal. Results of organic and inorganic samples are presented in Tables 2, 3, 4, 5, 6, and 7. Background samples have been designated for all media. Values for background sample results are presented either as a measured value or as the minimum quantitation limit (MQL). Samples containing concentrations of contaminants greater than three times the background level, or equal to or greater than the MQL of these contaminants are considered to be elevated. These samples are noted in the text.

3.3.1 Inorganic Surface Soil Samples

A variety of metals were detected at elevated levels in onsite surface soil samples. Only sample LS-SS-06 did not contain concentrations of metals at least 3 times the background. Sample LS-SS-02 contained antimony (estimated 260 mg/kg, 8 times background), cadmium (estimated 18 mg/kg, 40 times background), cobalt (73 mg/kg, 7 times background), copper (130 mg/kg, 6 times background), and iron (330,000 mg/kg, 10 times background). Other metals detected in the same sample include manganese (1,300 mg/kg, 4 times background), lead (estimated 110 mg/kg, 5 times background), nickel (170 mg/kg, 7 times background), and silver (1.6 mg/kg, 4 times background). Barium (480 mg/kg, 8 times background), cobalt (40 mg/kg, 4 times background), and manganese (3,400 mg/kg, 11 times background) were elevated in samples LS-SS-03. Samples LS-SS-04 contained barium (1,700 mg/kg, 27 times background), cobalt (120 mg/kg, 12 times background), copper (190 mg/kg, 8 times background), manganese (1,400 mg/kg, 4 times background), nickel (450 mg/kg, 20 times background), silver (2.8 mg/kg, 6 times background), and zinc (200 mg/kg, 4 times background). Cadmium (estimated 1.5 mg/kg, 3 times background), lead (estimated 100 mg/kg, 5 times background), magnesium (11,000 mg/kg, 3 times background), and zinc (390 mg/kg, 8 times background) were elevated in sample LS-SS-05 (Table 2). Natural occurrence of metals in surficial soils in the north Georgia area is as follows: cobalt - 7 mg/kg; iron - 1,000,000 mg/kg; magnesium - 200,000 mg/kg; copper - 50 mg/kg; manganese - 200 mg/kg; lead - 15 mg/kg; nickel - 20 mg/kg; barium - 300 mg/kg; and zinc - 45 mg/kg (Ref. 9). Surface soil inorganic analytical results are shown on Table 2.

The most contaminated surface soil areas are located on the northern portion of the property near the former metal shop (SS-02 and SS-04), and near the truck unloading area (SS-05). Several of the metals found in these locations could possible be attributed to metal plating operations. See Figure 3 for sample locations.

3.3.2 Organic Surface Soil Samples

TABLE 2

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

Parameters (mg/kg)	Background	ONSITE				
	LS-SS-01	LS-SS-02	LS-SS-03	LS-SS-04	LS-SS-05	LS-SS-06
ALUMINUM	26000	15000	19000	17000	6400	19000
ANTIMONY	31JN	260JN	26JN	41JN	31J	28JN
ARSENIC	5.1J	3.9J	3.9J	8.2J	2.4J	2.6J
BARIUM	63	58	480	1700	99	52
BERYLLIUM	1.6	1.3	1.8	2	1.3	1.7
CADMIUM	0.45U	18JN	–	–	1.5JN	–
CALCIUM	22000	4100	18000	22000	210000	2700
CHROMIUM	36	54	24	34	20	27
COBALT	10	73	40	120	7.6	15
COPPER	23	130	37	190	20	26
IRON	34000	330000	29000	35000	15000	34000
LEAD	20J	110J	19J	51J	100J	24J
MAGNESIUM	3500	2000	2400	3600	11000	2400
MANGANESE	320	1300	3400	1400	270	300
NICKEL	23	170	60	450	14	22
POTASSIUM	2500	1000	2100	2700	1100	1400
SILVER	0.45U	1.6	0.62	2.8	–	–
SODIUM	80U	–	630	1900	130	–
VANADIUM	29	23	23	26	13	25
ZINC	50	130	79	200	390	50

– Material analyzed for but not detected above minimum quantitation limit.
U Material analyzed for but not detected above minimum quantitation limit. The value is the minimum quantitation limit for the sample.
J Estimated value
N Presumptive Evidence of material

TABLE 3
SUMMARY OF ORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

	Background	ONSITE				
PARAMETERS (UG/KG)	LS-SS-01	LS-SS-02	LS-SS-03	LS-SS-04	LS-SS-05	LS-SS-06
PURGEABLE ORGANICS						
CARBON DISULFIDE	11U	–	–	9J	–	
TOLUENE	11U	–	–	14	–	11J
MISCELLANEOUS PURGEABLES						
METHYLENE (METHYLETHYL)CYCLOHEXANE		20JN				
CARENE		30JN				
EXTRACTABLE ORGANICS						
BENZYL BUTYL PHTHALATE	380U	–	–	150J	870	–
MISCELLANEOUS EXTRACTABLES						
HEXADECANOIC ACID	400JN	300JN	200JN	200JN		500JN
HEXACHLOROHEXAHYDROETHENEOPENTALENE		400JN				
HEXACHLOROTETRAHYDROMETHANOINDENE		600JN				
UNIDENTIFIED CHLORINATED COMPOUNDS/NO.		400J/1				
PETROLEUM PRODUCT		N	N	N	N	N
UNIDENTIFIED COMPOUNDS/NO.	9000J/7	800000J/8	1000J/2	2000J/3	400000J/9	6000J/6
PESTICIDES						
HEPTACHLOR EPOXIDE	2.0U	46	–	–	–	–
GAMMA CHLORDANE	2.0U	1500C	–	9.4	140	–
ALPHA CHLORDANE	2.0U	1300C	–	3.8	140	–
PCBs						
PCB-1254 (AROCLOR 1254)	38U	–	78	–	–	–

– Material analyzed for but not detected above minimum quantitation limit.
U Material analyzed for but not detected above minimum quantitation limit. The value is the minimum quantitation limit for the sample.
C Confirmed by GC/MS
J Estimated value
N Presumptive Evidence of material

Sample LS-SS-02 contained two miscellaneous purgeables, three miscellaneous extractables, one unidentified chlorinated compound, evidence of petroleum products, and 8 unidentified extractables (total concentration of 800,000 ug/kg). This sample also contained the pesticides heptachlor epoxide (46 ug/kg, 23 times MQL), gamma chlordane (1,500 ug/kg, 750 times MQL), and alpha chlordane (1,300 ug/kg, 650 times MQL).

Samples LS-SS-03 and LS-SS-04 each contained one miscellaneous extractable compound, evidence of petroleum products, and unidentified extractables (SS-03: 2 compounds at a total concentration of 1,000 ug/kg and SS-04: 3 compounds at a total concentration of 2,000 ug/kg). Samples LS-SS-04 also contained gamma chlordane (9.4 ug/kg, 5 times MQL). Alpha chlordane (140 ug/kg, 70 times MQL) and gamma chlordane (140 ug/kg, 70 times MQL) were found in LS-SS-05. This sample also contained evidence of petroleum products and 9 unidentified extractables at a total concentration of 400,000 ug/kg. Sample LS-SS-06 contained one miscellaneous extractable, evidence of a petroleum product, and 6 unidentified extractables at a total concentration of 6,000 ug/kg (Table 4).

3.3.3 Inorganic Subsurface Soil Samples

Few metals were detected at elevated levels in subsurface soil samples. Sample LS-SB-02 containes 5,400 mg/kg of magnesium (5,400 mg/kg, 3 times background) and nickel (49 mg/kg, 3 times background). Sample LS-SB-07 contained only calcium and sodium at elevated levels. Magnesium and nickel were detected in the corresponding surface soil (LS-SS-02) location also, indicating migration from the surface deeper into the soil for these two metals (Table 5).

3.3.4 Organic Subsurface Soil Samples

Sample LS-SB-02 contained evidence of petroleum products, unidentified extractables (3 compounds at a total concentration of 2,000 ug/kg), and gamma chlordane (6.3 ug/kg, 3 times MQL). Sample LS-SB-06 contained hexadecanoic acid and one unidentified extractable (500 ug/kg). Hexadecanoic acid, evidence of petroleum products, and one unidentified extractable (900 ug/kg) were detected in sample LS-SB-07 (Table 5).

3.3.5 Inorganic Sediment Samples

Nickel was detected at 78 mg/kg (4 times background) in sample LS-SD-02. Silver was detected at 1.3 mg/kg (above MQL). Barium (820 mg/kg, 6 times background), cobalt (72 mg/kg, 5 times background), copper (75 mg/kg, 4 times background), and nickel (140 mg/kg, 8 times background) were detected in sample LS-SD-03. No elevated inorganics were found in the pond sample. The metals detected in LS-SD-03 were also detected onsite; therefore, they are attributable to the site (Table 6).

TABLE 4

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SUBSURFACE SAMPLES
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

Parameters (mg/kg)	Background	Onsite		
	LS–SB–01	LS–SB–02	LS–SB–06	LS–SB–07
ALUMINUM	25000	28000	25000	22000
ANTIMONY	26JN	32JN	32JN	33JN
ARSENIC	5.9J	–	3J	5.1J
BARIUM	68	130	65	150
BERYLLIUM	1.6	2.1	1.7	1.8
CALCIUM	690	–	1500	3600
CHROMIUM	29	34	34	35
COBALT	27	25	12	19
COPPER	26	21	22	44
IRON	36000	38000	36000	37000
LEAD	24J	6.6J	9.8J	18J
MAGNESIUM	1800	5400	3100	2400
MANGANESE	1400	1100	180	480
NICKEL	16	49	26	41
POTASSIUM	1200	1600	2800	2300
SODIUM	70U	–	–	340
VANADIUM	30	24	29	30
ZINC	30	84	46	79

– Material analyzed for but not detected above minimum quantitation limit.
U Material analyzed for but not detected above minimum quantitation limit. The value is the minimum quantitation limit for the sample.
J Estimated value
N Presumptive Evidence of material

TABLE 5
SUMMARY OF ORGANIC ANALYTICAL RESULTS
SUBSURFACE SOIL SAMPLES
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

PARAMETERS (UG/KG)	Background	ONSITE		
	LS-SB-01	LS-SB-02	LS-SB-06	LS-SB-07
PURGEABLE ORGANICS				
TOLUENE	12U	–	10J	–
MISCELLANEOUS EXTRACTABLES				
HEXADECANOIC ACID	200JN		80JN	200JN
PETROLEUM PRODUCT		N		N
UNIDENTIFIED COMPOUNDS/NO.		2000J/3	500J/1	900J/1
PESTICIDES				
HEPTACHLOR EPOXIDE	2.1U	–	–	2.9
GAMMA CHLORDANE	2.1U	6.3	–	6.2
ALPHA CHLORDANE	2.1U	4.6	–	5.9

– Material analyzed for but not detected above minimum quantitation limit.
U Material analyzed for but not detected above minimum quantitation limit. The value is the minimum quantitation limit for the sample.
J Estimated value
N Presumptive Evidence of material

TABLE 6

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SEDIMENT SAMPLES
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

	Background	Downstream Samples		Pond
Parameters (mg/kg)	LS–SD–01	LS–SD–02	LS–SD–03	LS–SD–04
ALUMINUM	14000	15000	21000	12000
ANTIMONY	27J	25JN	30JN	28JN
ARSENIC	5.5J	3.7J	12J	4.7J
BARIUM	130	380	820	98
BERYLLIUM	2.1	1.7	2.2	1.8
CALCIUM	5100	4800	3700	1500
CHROMIUM	17	19	27	36
COBALT	14	31	72	28
COPPER	19	47	75	18
IRON	31000	29000	29000	33000
LEAD	34J	100J	56J	13J
MAGNESIUM	1700	1900	2600	1600
MANGANESE	2600	1000	2200	1200
NICKEL	18	78	140	18
POTASSIUM	1100	1400	2700	870
SILVER	0.94U	1.3	0.68J	–
SODIUM	150	340	830	95
VANADIUM	24	16	27	27
ZINC	83	160	160	61

– Material analyzed for but not detected above minimum quantitation limit.
U Material analyzed for but not detected above minimum quantitation limit. The value is the minimum quantitation limit for the sample.
J Estimated value
N Presumptive Evidence of material

3.3.6 Organic Sediment Samples

Sample LS-SD-02 contained pentadecanoic acid and 7 unidentified extractable compounds (total concentration of 10,000 ug/kg). Sample LS-SD-03 contained hexadecanoic acid, pentadecanoic acid, and 6 unidentified extractable compounds (total concentration of 9,000 ug/kg). This sample also contained gamma chlordane and alpha chlordane at levels above the MQL. Hexadecanoic acid and 9 unidentified extractable compounds (total concentration of 100,000 ug/kg were detected in the pond sample LS-SD-04 (Table 7). Organics found in the background sediment sample include fluoranthene, hexadecanoic acid, and several unidentified extractables.

3.4 SUMMARY OF ANALYTICAL RESULTS

A wide variety of inorganics were detected at elevated levels at the LaFayette Sheet Metal site, particularly in the surface soil samples. The most contaminated areas are located at sampling locations SS-02 and SS-04, near the former metal shop building. However, few inorganics exhibited significant migration to co-located subsurface soil samples. Evidence of petroleum products and several miscellaneous organics was found in soil and sediment samples. Additionally, several pesticides were detected in the surface soil and subsurface soil samples, including gamma chlordane, alpha chlordane, and heptachlor epoxide.

4.0 GROUNDWATER PATHWAY

4.1 HYDROGEOLOGY

The LaFayette Sheet Metal facility is located in the Valley and Ridge Province of northwest Georgia, at an elevation of approximately 280 feet above mean sea level (Ref. 10; Appendix A). This is the southern extension of the Appalachian Valley and Ridge Physiographic Province that parallels the eastern continental margin of North America. The Valley and Ridge Physiographic Province is distinguished by folded and faulted stratified rocks consisting of limestone, dolomite, shale, and sandstone that trend in a northeast-southwest direction (Ref. 11, p. 7). The geologic units that outcrop within a 4-mile radius of the facility, in stratigraphically descending order, include the Fort Payne Chert, Red Mountain Formation, Chickamauga Limestone, Nauwala Limestone, Knox Group, and the Conasauga formation (Ref. 10, pp. 6-8). The particular soil type at the LaFayette Sheet Metal is Montevallo, which is composed of shaly silt loam with 15-45 percent slopes (Ref. 12). Groundwater occurs in the residuum overlying the bedrock and in joints, fractures, and solution openings in the bedrock. Recharge occurs locally by percolation of precipitation (Ref. 10).

The facility is situated on the exposed Conasauga Formation, which is composed of siltstone, claystone, shale, and limestone (Ref. 10, Figure 2). The lower part of the

TABLE 7
SUMMARY OF ORGANIC ANALYTICAL RESULTS
SEDIMENT SAMPLES
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

PARAMETERS (UG/KG)	Background	Downstream Samples		Pond
	LS–SD–01	LS–SD–02	LS–SD–03	LS–SD–04
MISCELLANEOUS PURGEABLES				
TRIMETHYLCYCLOPROPANE	9JN			
EXTRACTABLE ORGANICS				
FLUORANTHENE	58J	–	–	–
MISCELLANEOUS EXTRACTABLES				
HEXADECANOIC ACID	600JN		700JN	2000JN
PENTADECANOIC ACID		500JN	400JN	
UNIDENTIFIED COMPOUNDS/NO.	4000J/3	10000J/7	9000J/6	100000J/9
PESTICIDES				
GAMMA CHLORDANE	2.6U	–	7.4	–
ALPHA CHLORDANE	2.6U	–	2.7	–

– Material analyzed for but not detected above minimum quantitation limit.
U Material analyzed for but not detected above minimum quantitation limit. The value is the minimum quantitation limit for the sample.
J Estimated value
N Presumptive Evidence of material

formation in the Walker county area is around 2,000 feet (Ref. 10, p. 6). The Knox Group outcrops adjacent to the Conasauga Formation to the east and west in the facility area, and is composed of limestone and dolomite. Intense folding, faulting, and solution activity present in the site area provide sufficient hydraulic interconnection of these rock units. Therefore, all waterbearing rock units comprise one hydrologic system in the area and they define the aquifer of concern at the site. Most wells in the Conasauga formation yield sufficient water for domestic and farm use. Wells are typically 50 to 150 feet deep and yield 20-60 gallons per minute (Ref. 10, p. 11). Estimated hydraulic conductivity for the Conasauga formation is approximately 1.0×10^{-4} cm/sec (Ref. 13, p. 29). Ground water generally occurs under unconfined water-table conditions, but artesian conditions may exist at greater depths below ground surface (Ref. 10, p. 10). Depth to the water-table varies seasonally and with topographic location, ranging from 9 to 20 feet below land surface (bls) (Ref. 14, p. 10). Groundwater flow direction beneath the LaFayette Sheet Metal facility is estimated to be southeasterly (Appendix A).

4.2 GROUNDWATER TARGETS

Walker County Rural Water and Sewer serves portions of the eastern part of the 4-mile radius with potable water obtained from three blended wells. These wells are located at the intersection of Huffman Road and County Line Road, which is southeast of and outside the 4-mile radius (Refs. 15, 16, Appendix A). Additionally, the LaFayette Water System has a groundwater spring intake at Big Spring, 1.2 miles southwest of the site off West Indiana Street, which serves 61 percent of 5100 connections (or 8,244 persons) (Refs. 1, 17, 18). A total of 225 houses (596 persons) within the 4-mile radius utilize private wells for potable water. The nearest well to the site is located approximately 0.5 mile northwest (Refs. 18, Appendix A).

4.3 GROUNDWATER CONCLUSIONS

The groundwater pathway is of concern at the LaFayette Sheet Metal due to the large number of potential targets associated with the LaFayette Water System spring intake. However, travel time through the soils and mobility of contaminants detected onsite serve to lessen the threat to groundwater.

5.0 SURFACE WATER PATHWAY

5.1 HYDROLOGIC SETTING

5.1.1 Climatology

Walker County and its surrounding area is characterized by a humid, temperate climate (Ref. 10, p. 3). Total annual precipitation averages 53 inches with annnual evaporation

of 38 inches, resulting in a net precipitation of 15 inches (Ref. 19). The 2-year, 24-hour rainfall total is approximately 3.75 inches (Ref. 20).

5.1.2 Overland Drainage

Surface water drains from the site to the east for approximately 1,200 feet through a series of wet-weather ditches, and then enters a small wetland area which feeds into the lower portion of the LaFayette City Reservoir. The reservoir feeds into Town Creek, which flows approximately 3.0 miles southwest and enters the Chattooga River. The 15-mile, surface water pathway ends in the Chattooga River (Appendix A). The LaFayette Sheet Metal facility is located within 0.25 mile of an area subject to inundation by the LaFayette City Reservoir. The facility is topographically 20 feet higher than the reservoir, indicating that flooding of the site via the reservoir would require a significant flood event (Appendix A).

5.2 SURFACE WATER TARGETS

The LaFayette City Reservoir, Town Creek, and the Chattooga River are potentially affected water bodies. No surface water intakes are located along the 15-mile, surface water pathway (Ref. 21). The LaFayette Water System serves the entire LaFayette city limits and much of the surrounding area. This water system has two water sources: a surface water intake at the intersection of Duck Creek and Dry Creek, and the above-mentioned spring intake at Big Spring. Emergency hook-up to Walker County Rural Water and Sewer and the Catoosa County Water System is also available. (Ref. 16). Neither system obtains water within the 4-mile radius (Refs. 22, 23). Recreational fishing occurs in the LaFayette Reservoir and in the Chattooga River (Ref. 24). The Coosa darter (*Etheostoma coosae*), a state endangered species, has been found in water bodies near LaFayette (Ref. 25). Two small wetlands are located within 1200 feet of the site near the LaFayette City Reservoir (Appendix A).

5.3 SURFACE WATER CONCLUSIONS

The surface water pathway is of concern at the LaFayette Sheet Metal site, due to the fisheries and the endangered species in the area. However, there are no drinking water targets associated with the 15-mile surface water pathway.

6.0 AIR AND SOIL EXPOSURE PATHWAYS

6.1 PHYSICAL CONDITIONS

The eastern portion of the LaFayette Sheet Metal site is covered with thin grass. The western portion of the site is mostly covered with gravel, and has thick grass at either

end. The property is directly accessible only from the eastern side, as the other three sides are fenced. Facing Highway 27 the site has a gate which is locked at night (Refs. 2, Appendix C).

6.2 AIR AND SOIL TARGETS

6.2.1 Demography

LaFayette Sheet Metal is located just north of the city center of LaFayette, Walker County, Georgia. Numerous private residences and a few commercial establishments are located in the 1-mile radius, and the majority of the 4-mile radius (with the exception of the town of LaFayette) is sparsely populated. The nearest residence is located approximately 100 feet north of the facility, and the nearest school is North LaFayette School, approximately 1.25 miles south. The population within 1 mile is 1,969 persons, and within 4 miles is 10,011 persons (Ref. 26; Appendix A). The nearest persons are the 34 workers and students at the onsite day-care facility (Ref. 2).

6.2.2 Land Use

Land in the area of LaFayette Sheet Metal is primarily used for single-family residences and light agriculture. Also, much of the LaFayette City Reservoir is within the 1-mile radius of the facility. The reservoir is used for water conservation and flood control purposes. Small areas of wetlands are associated with the outer edges of the LaFayette City Reservoir, with the closest wetland being within 0.25 mile of the facility (Ref. 1, Appendix A). Endangered species in the Walker County area include the large-flower skullcap (*Scutellaria montana*). Also, a variety of plant and animal species are listed as endangered by the state of Georgia (Ref. 25).

6.3 AIR AND SOIL EXPOSURE PATHWAYS CONCLUSIONS

Because the area around the site is sparsely populated, the air pathway is of little concern at the LaFayette Sheet Metal site. Soil exposure is of great concern at this site. A variety of contaminants were detected in onsite surface soils. At least 34 persons attend or work at a day-care center for mentally-handicapped adults onsite. These persons constitute an onsite resident population.

7.0 SUMMARY AND CONCLUSIONS

The LaFayette Sheet Metal facility is a 1.32 acre, which was used as a metal plating facility from 1983 to 1988. Citizens in the area complained about a variety of drums and containers and drums that were dumped behind the plating building in June 1986. Currently, the property is owned by Milford Morgan, who leases the facility for use as a day-care program for mentally-handicapped adults. Analyses of contaminant migration pathways and sampling data shows the following: (1) most potential groundwater targets are located several miles from the site; (2) some surface water targets do exist, including recreational fishing; (3) the soil exposure pathway is of great concern due to the resident population; and (4) the air pathway is not of great concern because, with the exception of the resident population, the area is sparsely populated.

Various organics and inorganics were detected onsite, primarily in surface soil samples. Several pesticides were also detected in surface soils. Wet-weather ditches located to the east of the buildings onsite contained many inorganics similar to those onsite, suggesting that migration may be occurring from the site via the surface water pathway.

Based on the results of this field investigation, it is recommended that further action be planned for the LaFayette Sheet Metal facility.

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NPL Characteristics Data Collection Form
LAFAYETTE SHEET METAL - 03/31/92

Record Information

1. Site Name: LAFAYETTE SHEET METAL
   (as entered in CERCLIS)

2. Site CERCLIS Number: GAD984270553

3. Site Reviewer: Jancie Hatcher

4. Date: March 4, 1992

5. Site Location: LaFayette, Walker County, Georgia
   (City/County,State)

6. Congressional District:

7. Site Coordinates: Single

   Latitude: 34 44'05.0" Longitude: 085 16'27.0"

Site Description

1. Setting: Rural

2. Current Owner: Private - Individual

3. Current Site Status: Inactive

4. Years of Operation: Active Site , from and to dates: 1983-1988

5. How Initially Identified: Citizen Complaint

6. Entity Responsible for Waste Generation:

   - Manufacturing
     - Metal Coating

7. Site Activities/Waste Deposition:

   - Waste Piles
   - Drum/Container Storage

DRAFT COPY

Waste Description

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8. Wastes Deposited or Detected Onsite:

   - Organic Chemicals
   - Inorganic Chemicals
   - Metals
   - Lead

Response Actions

9. Response/Removal Actions:

RCRA Information

10. For All Active Facilities, RCRA Site Status:

    - Not Applicable

Demographic Information

11. Workers Present Onsite: Yes

12. Distance to Nearest Non-Worker Individual: Onsite

13. Residential Population Within 1 Mile: 1969.0

14. Residential Population Within 4 Miles: 10011.0

Water Use Information

15. Local Drinking Water Supply Source:

    - Ground Water (within 4 mile distance limit)

16. Total Population Served by Local Drinking Water Supply Source: 8840.0

17. Drinking Water Supply System Type for Local Drinking Water Supply Sources:

- Municipal (Services over 25 People)
- Private

18. Surface Water Adjacent to/Draining Site:

- Stream

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HRS DOCUMENTATION RECORD
LAFAYETTE SHEET METAL - 03/31/92

1. Site Name: LAFAYETTE SHEET METAL
   (as entered in CERCLIS)

2. Site CERCLIS Number: GAD984270553

3. Site Reviewer: Jancie Hatcher

4. Date: March 4, 1992

5. Site Location: LaFayette, Walker County, Georgia
   (City/County,State)

6. Congressional District:

7. Site Coordinates: Single

   Latitude: 34 44'05.0" Longitude: 085 16'27.0"

	Score
Ground Water Migration Pathway Score (Sgw)	2.04
Surface Water Migration Pathway Score (Ssw)	1.21
Soil Exposure Pathway Score (Ss)	57.61
Air Migration Pathway Score (Sa)	0.89

Site Score	28.83

NOTE

EPA uses the terms "facility," "site," and "release" interchangeably. The term "facility" is broadly defined in CERCLA to include any area where hazardous substances have "come to be located" (CERCLA Section 109(9)), and the listing process is not intended to define or reflect boundaries of such facilities or releases. Site names, and references to specific parcels or properties, are provided for general identification purposes only. Knowledge regarding the extent of sites will be refined as more information is developed during the RI/FS and even during implementation of the remedy.

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WASTE QUANTITY
LAFAYETTE SHEET METAL - 03/31/92

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Contaminated Soil

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

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2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	Contaminated Soil
b. Source Type	Contaminated Soil
c. Secondary Source Type	N.A.
d. Source Volume (yd3) | Source Area (ft2)	0.00 | 57499.00
e. Source Volume/Area Value	1.69E+00
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b)	0.00E+00
g. Data Complete?	NO
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of 1f)	0.00E+00
i. Data Complete?	NO
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	1.69E+00

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Barium	< 2	NO	1.7E+03	ppm
Chlordane	< 2	NO	1.5E+00	ppm
Cobalt	< 2	NO	1.2E+02	ppm
Copper	< 2	NO	1.9E+02	ppm
Heptachlor epoxide	< 2	NO	4.6E-02	ppm
Iron	< 2	NO	3.3E+05	ppm
Manganese	< 2	NO	3.4E+03	ppm
Nickel	< 2	NO	4.5E+02	ppm
Sodium	< 2	NO	1.9E+03	ppm
Zinc	< 2	NO	3.9E+02	ppm

Documentation for Source Type:

Only source applicable to site is contaminated soil.

Reference: 2

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Documentation for Source Hazardous Substances:

Sample SS-01 - Background Soil - Iron 34,000 mg/kg, manganese 320 mg/kg, barium 63 mg/kg, cobalt 10 mg/kg, copper 23 mg/kg, nickel 23 g/kg, sodium 80U mg/kg, zinc 50 mg/kg, heptachlor epoxide 2.0U ug/kg, gamma chlordane 1500 ug/kg

Sample SS-02 - Iron 330,000 mg/kg , heptachlor epoxide 46 ug/kg, chlordane, 1500 ug/kg - collected north of the old metal building

Sample SS-03 - manganese 3,400 mg/kg - collected south of the old metal building

Sample SS-04 - barium 1700 mg/kg, cobalt 120 mg/kg, copper 190 mg/kg, nickel 450 mg/kg, sodium 1900 mg/kg - collected at northeastern property boundary

3 times background levels or > or equal to the MQL is considered elevated.

Reference: 2, Appendix B

Documentation for Source Area:

Assume entire area of site is contaminated. Plat map lists size of the property as 1.32 acres.

Reference: 3,4

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3. SITE HAZARDOUS WASTE QUANTITY SUMMARY

No.	Source ID	Migration Pathways	Vol. or Area Value (2e)	Constituent or Wastestream Value (2f,2h)	Hazardous Waste Qty. Value (2k)
1	Contaminated Soil	GW-SW-SE-A	1.69E+00	0.00E+00	1.69E+00

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4. PATHWAY HAZARDOUS WASTE QUANTITY AND WASTE CHARACTERISTICS SUMMARY TABLE

Migration Pathway	Contaminant Values		HWQVs*	WCVs**
Ground Water	Toxicity/Mobility	1.00E+02	10	6
SW: Overland Flow, DW	Tox./Persistence	1.00E+04	10	18
SW: Overland Flow, HFC	Tox./Persis./Bioacc.	5.00E+08	10	180
SW: Overland Flow, Env	Etox./Persis./Bioacc.	5.00E+08	10	180
SW: GW to SW, DW	Tox./Persistence	1.00E+02	10	6
SW: GW to SW, HFC	Tox./Persis./Bioacc.	5.00E+06	10	56
SW: GW to SW, Env	Etox./Persis./Bioacc.	5.00E+04	10	18
Soil Exposure:Resident	Toxicity	1.00E+04	10	18
Soil Exposure: Nearby	Toxicity	1.00E+04	10	18
Air	Toxicity/Mobility	2.00E+02	10	6

* Hazardous Waste Quantity Factor Values
** Waste Characteristics Factor Category Values

Note: SW = Surface Water
GW = Ground Water
DW = Drinking Water Threat
HFC = Human Food Chain Threat
Env = Environmental Threat

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GROUND WATER MIGRATION PATHWAY SCORESHEET
LAFAYETTE SHEET METAL - 03/31/92

GROUND WATER MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release to an Aquifer Aquifer: Residuum		
1. Observed Release	550	0
2. Potential to Release		
2a. Containment	10	10
2b. Net Precipitation	10	3
2c. Depth to Aquifer	5	5
2d. Travel Time	35	15
2e. Potential to Release [lines 2a(2b+2c+2d)]	500	230
3. Likelihood of Release	550	230
Waste Characteristics		
4. Toxicity/Mobility	*	1.00E+02
5. Hazardous Waste Quantity	*	10
6. Waste Characteristics	100	6
Targets		
7. Nearest Well	50	1.80E+01
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	9.90E+01
8d. Population (lines 8a+8b+8c)	**	9.90E+01
9. Resources	5	5.00E+00
10. Wellhead Protection Area	20	0.00E+00
11. Targets (lines 7+8d+9+10)	**	1.22E+02
12. Targets (including overlaying aquifers)	**	1.22E+02
13. Aquifer Score	100	2.04
GROUND WATER MIGRATION PATHWAY SCORE (Sgw)	100	2.04

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

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GROUND WATER PATHWAY AQUIFER SUMMARY
LAFAYETTE SHEET METAL - 03/31/92

No.	Aquifer ID	Type	Overlaying No.	Inter-Connected with	Likelihood of Release	Targets
1	Residuum	Non K	0	0	230	1.22E+02

Containment

No.	Source ID	HWQ Value	Containment Value
1	Contaminated Soil	1.69E+00	10
	Containment Factor		10

Documentation for Ground Water Containment, Source Contaminated Soil:

No containment factors of any sort are found on the site, and soil contamination was found onsite.

Reference: 2, Appendix B

Net Precipitation

Net Precipitation (inches) 15.00

Documentation for Net Precipitation:

Climatic Atlas of the United States was used to derive net precipitation value.

Reference: 19

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GROUND WATER PATHWAY LIKELIHOOD OF RELEASE Residuum AQUIFER
LAFAYETTE SHEET METAL - 03/31/92

Aquifer: Residuum

Type of Aquifer: Non Karst

Overlaying Aquifer: 0

Interconnected with: 0

Documentation for Residuum Aquifer:

Intense folding, faulting, and solution activity present in the site area provide sufficient hydraulic interconnection of rock units. Therefore, all waterbearing rock units comprise one hydrologic system in the area.

Reference: 10

OBSERVED RELEASE

No.	Well ID	Well Type	Distance (miles)	Level of Contamination

- N/A and/or data not specified

Observed Release Factor 0

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POTENTIAL TO RELEASE

Containment

Containment Factor	10	

Net Precipitation

Net Precipitation Factor	3	

Depth to Aquifer

A. Depth of Hazardous Substances	3.00	feet

Documentation for Depth of Hazardous Substances:

Containers were reported to be in a shallow pit, and subsurface samples showed some contamination at approximately 3 feet bls.

Reference: 1, Appendix B

B. Depth to Aquifer from Surface	20.00	feet

Documentation for Depth to Aquifer from Surface :

Estimated depth to water table varies, but the site is located on a topographic high, and groundwater would be expected to be lower than normal bls.

Reference: Appendix A

C. Depth to Aquifer (B - A)	17.00	feet

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Depth to Aquifer Factor	5

Travel Time

Are All Layers Karst?	NO	
Thickness of Layer(s) with Lowest Conductivity	2000.00	feet

Documentation for Thickness of Layers with Lowest Conductivity:

Aquifers are hydraulically interconnected, and therefore the depth is the total depth of the Conasauga formation.

Reference: 10

Hydraulic Conductivity (cm/sec)	1.0E-04

Documentation for Hydraulic Conductivity:

Estimated from Freeze and Cherry data.

Reference: 13

Travel Time Factor	15

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Potential to Release Factor 230

GROUND WATER PATHWAY WASTE CHARACTERISTICS
LAFAYETTE SHEET METAL - 03/31/92

Source: 1 Contaminated Soil

Source Hazardous Waste Quantity Value: 1.69

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Barium	10000	1.00E-02	1.00E+02
Chlordane	10000	2.00E-07	2.00E-03
Cobalt	100	1.00E-02	1.00E+00
Copper	100	1.00E-02	1.00E+00
Heptachlor epoxide	10000	2.00E-03	2.00E+01
Iron	100	1.00E-02	1.00E+00
Manganese	10000	1.00E-02	1.00E+02
Nickel	10000	2.00E-05	2.00E-01
Sodium	100	1.00E-02	1.00E+00
Zinc	10	2.00E-03	2.00E-02

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GROUND WATER PATHWAY WASTE CHARACTERISTICS
LAFAYETTE SHEET METAL - 03/31/92

Hazardous Substances Found in an Observed Release

Well No.	Observed Release Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value

- N/A and/or data not specified

Toxicity/Mobility Value from Source Hazardous Substances:	1.00E+02
Toxicity/Mobility Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Mobility Factor:	1.00E+02
Sum of Source Hazardous Waste Quantity Values:	1.69E+00
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	6

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Population by Well

No.	Well ID	Sample Type	Distance (miles)	Level of Contamination	Population

- N/A and/or data not specified

Level I Population Factor: 0.00

Level II Population Factor: 0.00

Potential Contamination by Distance Category

Distance Category (miles)	Population	Value
> 0 to 1/4	0.0	0.00E+00
> 1/4 to 1/2	8.0	2.00E-01
> 1/2 to 1	45.0	1.70E+00
> 1 to 2	8411.0	9.39E+01
> 2 to 3	215.0	2.10E+00
> 3 to 4	162.0	1.30E+00

Potential Contamination Factor: 99.000

Documentation for Target Population > 0 to 1/4 mile Distance Category:

No private wells were identified within 0.25 mile of the site. The LaFayette Water System serves the entire 0.25 mile radius.

Reference: 1,2

Documentation for Target Population > 1/4 to 1/2 mile Distance Category:

House count off topo and census per household information used to calculate the number of private well users.

3 houses x 2.65 persons per household = 8 persons

Reference: 18, Appendix A

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Documentation for Target Population > 1/2 to 1 mile Distance Category:

House count and census per household figures used to calculate the number of private wells.

17 houses x 2.65 persons per household = 45 persons

Reference: 18, Appendix A

Documentation for Target Population > 1 to 2 miles Distance Category:

This distance ring includes not only private wells, but also users of the LaFayette Water System who use the Big Spring intake.

The LaFayette Water System serves 61 percent of their connections with a spring intake. 61 percent x 5100 connections = 3111 connections x 2.65 persons per household = 8244 persons

The private wells in the distance ring are as follows: 63 houses x 2.65 persons per household = 167 persons.

167 + 8244 = 8411 persons total

Reference: 16, 17, 18, Appendix A

Documentation for Target Population > 2 to 3 miles Distance Category:

Houses counted from topos marked with water systems in the area, and multiplied by the census per household figure for Walker County.

81 houses x 2.65 persons per household = 215 persons

Reference: 18, Appendix A

Documentation for Target Population > 3 to 4 miles Distance Category:

Houses counted off topos marked with water systems in the area, and multiplied by the census per household figure.

61 houses x 2.65 persons per household = 162 persons.

Reference: 18, Appendix A

Nearest Well

Level of Contamination: Potential
Distance in miles: 0.50

Nearest Well Factor: 1.80E+01

Documentation for Nearest Well:

Nearest well is a private well, approximately 0.5 miles to the northwest of the site.

Reference: APPENDIX A

Resources

Resource Use: YES

Resource Factor: 5.00E+00

Documentation for Resources:

Assume that well water is used for commercial livestock watering, since the area is primarily rural.

Reference:

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Wellhead Protection Area

No wellhead protection area

Wellhead Protection Area Factor: 0.00E+00

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
LAFAYETTE SHEET METAL - 03/31/92

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors DRINKING WATER THREAT	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release	550	0
2. Potential to Release by Overland Flow		
2a. Containment	10	10
2b. Runoff	25	1
2c. Distance to Surface Water	25	9
2d. Potential to Release by Overland Flow [lines 2a(2b+2c)]	500	100
3. Potential to Release by Flood		
3a. Containment (Flood)	10	10
3b. Flood Frequency	50	7
3c. Potential to Release by Flood (lines 3a x 3b)	500	70
4. Potential to Release (lines 2d+3c)	500	170
5. Likelihood of Release	550	170
Waste Characteristics		
6. Toxicity/Persistence	*	1.00E+04
7. Hazardous Waste Quantity	*	10
8. Waste Characteristics	100	18
Targets		
9. Nearest Intake	50	0.00E+00
10. Population		
10a. Level I Concentrations	**	0.00E+00
10b. Level II Concentrations	**	0.00E+00
10c. Potential Contamination	**	0.00E+00
10d. Population (lines 10a+10b+10c)	**	0.00E+00
11. Resources	5	5.00E+00
12. Targets (lines 9+10d+11)	**	5.00E+00
13. DRINKING WATER THREAT SCORE	100	0.19

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

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SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
LAFAYETTE SHEET METAL - 03/31/92

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT	Maximum Value	Value Assigned
Likelihood of Release		
14. Likelihood of Release (same as line 5)	550	170
Waste Characteristics		
15. Toxicity/Persistence/Bioaccumulation	*	5.00E+08
16. Hazardous Waste Quantity	*	10
17. Waste Characteristics	1000	180
Targets		
18. Food Chain Individual	50	2.00E+00
19. Population		
19a. Level I Concentrations	**	0.00E+00
19b. Level II Concentrations	**	0.00E+00
19c. Pot. Human Food Chain Contamination	**	6.30E-04
19d. Population (lines 19a+19b+19c)	**	6.30E-04
20. Targets (lines 18+19d)	**	2.00E+00
21. HUMAN FOOD CHAIN THREAT SCORE	100	0.74

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
LAFAYETTE SHEET METAL - 03/31/92

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors ENVIRONMENTAL THREAT	Maximum Value	Value Assigned
Likelihood of Release		
22. Likelihood of Release (same as line 5)	550	170
Waste Characteristics		
23. Ecosystem Toxicity/Persistence/Bioacc.	*	5.00E+08
24. Hazardous Waste Quantity	*	10
25. Waste Characteristics	1000	180
Targets		
26. Sensitive Environments		
26a. Level I Concentrations	**	0.00E+00
26b. Level II Concentrations	**	0.00E+00
26c. Potential Contamination	**	7.50E-01
26d. Sensitive Environments (lines 26a+26b+26c)	**	7.50E-01
27. Targets (line 26d)	**	7.50E-01
28. ENVIRONMENTAL THREAT SCORE	60	0.28
29. WATERSHED SCORE	100	1.21
30. SW: OVERLAND/FLOOD COMPONENT SCORE (Sof)	100	1.21

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

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SURFACE WATER PATHWAY SEGMENT SUMMARY
LAFAYETTE SHEET METAL - 03/31/92

No.	Segment ID	Segment Type	Water Type	Start Point (mi)	End Point (mi)	Average Flow (cfs)
1	LaFayette City Res.	Lake	Fresh	0.00	0.70	10
2	Town Creek	River	Fresh	0.70	3.70	10
3	Chattooga River	River	Fresh	3.70	15.00	1000

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SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
LAFAYETTE SHEET METAL - 03/31/92

OBSERVED RELEASE

No.	Sample ID	Sample Type	Distance (miles)	Level of Contamination DW	HFC	Env

- N/A and/or data not specified

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SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
LAFAYETTE SHEET METAL - 03/31/92

POTENTIAL TO RELEASE

Potential to Release by Overland Flow

Containment

No.	Source ID	HWQ Value	Containment Value

Containment Factor: 1

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Distance to Surface Water

Documentation for Overland Flow Containment, Source Contaminated Soil:

There is evidence in the sediment samples taken in the ditches that contamination is migrating offsite.

Reference: Appendix B

Distance to Surface Water Factor: 0

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Runoff

Documentation for Distance to Surface Water:

Distance measured from the topo map. Approximately 1,200 feet through intermittent drainage ditches.

Reference: Appendix A, 1

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Documentation for Drainage Area:

Assume entire area of site is drained by the surface water pathway.

Reference: 2,3,4

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Documentation for Rainfall:

Rainfall Frequenc Atlas of the United States used to derive the 2-year, 24-hour rainfall total.

Reference: 20

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Documentation for Soil Group:

Conasauga Formation is composed of siltstone, claystone, shale, and limestone.

Reference: 10

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Potential to Release by Overland Flow Factor: 1

Potential to Release by Flood

No.	Source ID	HWQ Value	Flood Containment Value	Flood Frequency Value	Potential to Release by Flood
100	- / y	6.01E-154	5888	12280	3906

Potential to Release by Flood Factor: 1

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Documentation for Flood Containment, Source Contaminated Soil:

It is estimated that the site is contained for a 100-year flood because it is on a topographic high relative to the LaFayette City Reservoir.

Reference: Appendix A

Documentation for Flood Frequency, Source Contaminated Soil:

Estimated floodplain.

Reference: Appendix A

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LAFAYETTE SHEET METAL - 03/31/92

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LAFAYETTE SHEET METAL - 03/31/92

Source: 1 Contaminated Soil

Source Hazardous Waste Quantity Value: 1.69

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Barium	10000	1.00E+00	1.00E+04
Chlordane	10000	1.00E+00	1.00E+04
Cobalt	100	1.00E+00	1.00E+02
Copper	100	1.00E+00	1.00E+02
Heptachlor epoxide	10000	1.00E+00	1.00E+04
Iron	0	1.00E+00	0.00E+00
Manganese	10000	1.00E+00	1.00E+04
Nickel	10000	1.00E+00	1.00E+04
Sodium	0	1.00E+00	0.00E+00
Zinc	10	1.00E+00	1.00E+01

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LAFAYETTE SHEET METAL - 03/31/92

Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value

- N/A and/or data not specified

LAFAYETTE SHEET METAL - 03/31/92

Toxicity/Persistence Value from Source Hazardous Substances:	1.00E+04
Toxicity/Persistence Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Persistence Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	1.69E+00
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	18

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Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT DRINKING WATER THREAT TARGETS
LAFAYETTE SHEET METAL - 03/31/92

Level I Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
- N/A and/or data not specified		

Population Served by Level I Intakes: 0.0

Level I Population Factor: 0.00E+00

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SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT DRINKING WATER THREAT TARGETS
LAFAYETTE SHEET METAL - 03/31/92

Level II Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
- N/A and/or data not specified		

Population Served by Level II Intakes: 0.0

Level II Population Factor: 0.00E+00

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT DRINKING WATER THREAT TARGETS
LAFAYETTE SHEET METAL - 03/31/92

Potential Contamination

Intake ID	Average Annual Flow (cfs)	Population Served
- N/A and/or data not specified		

Type of Surface Water Body	Total Population	Dilution-Weighted Population
- N/A and/or data not specified		

Dilution-Weighted Population Served
by Potentially Contaminated Intakes: 0.0

Potential Contamination Factor: 0.0

Nearest Intake

Location of Nearest Drinking Water Intake: N.A.

Nearest Intake Factor: 0.00

Resources

Resource Use: YES

Resource Value: 5.00E+00

Documentation for Resources:

Useable for drinking water.

Reference:

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SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
LAFAYETTE SHEET METAL - 03/31/92

Source: 1 Contaminated Soil

Source Hazardous Waste Quantity Value: 1.69

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Barium	10000	1.00E+00	5.00E-01	5.00E+03
Chlordane	10000	1.00E+00	5.00E+04	5.00E+08
Cobalt	100	1.00E+00	5.00E+03	5.00E+05
Copper	100	1.00E+00	5.00E+04	5.00E+06
Heptachlor epoxide	10000	1.00E+00	5.00E+04	5.00E+08
Iron	0	1.00E+00	5.00E-01	0.00E+00
Manganese	10000	1.00E+00	5.00E+03	5.00E+07
Nickel	10000	1.00E+00	5.00E+02	5.00E+06
Sodium	0	1.00E+00	5.00E-01	0.00E+00
Zinc	10	1.00E+00	5.00E+04	5.00E+05

Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value

- N/A and/or data not specified

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SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
LAFAYETTE SHEET METAL - 03/31/92

Toxicity/Persistence/Bioaccumulation Value from Source Hazardous Substances:	5.00E+08
Toxicity/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Persistence/Bioaccumulation Factor:	5.00E+08
Sum of Source Hazardous Waste Quantity Values:	1.69E+00
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	180

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

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SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT HUMAN FOOD CHAIN THREAT TARGETS
LAFAYETTE SHEET METAL - 03/31/92

Level I Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
- N/A and/or data not specified		

Sum of Human Food Chain Population Values: 0.00E+00

Level I Concentrations Factor: 0.00E+00

Level II Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
- N/A and/or data not specified		

Sum of Human Food Chain Population Values: 0.00E+00

Level II Concentrations Factor: 0.00E+00

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SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT HUMAN FOOD CHAIN THREAT TARGETS
LAFAYETTE SHEET METAL - 03/31/92

Potential Contamination

Fishery	Annnual Production (pounds)	Type of Surface Water Body	Average Annual Flow (cfs)	Pop. Value (Pi)	Dilution Weight (Di)	Pi*Di
2 Town Creek	1.0	River	10	0.0	1.00E-01	3.00E-03
3 Chattooga River	1.0	River	1000	0.0	1.00E-02	3.00E-04

Sum of (Pi*Di): 3.30E-03

Potential Human Food Chain Contamination Factor: 6.30E-04

Documentation for LaFayette City Res. Fishery:

Production for all segments of the surface water pathway is estimated to be one pound per year, as specific information regarding harvest was not available.

Reference:

Food Chain Individual

Location of Nearest Fishery: LaFayette City Res.
Distance from the Probable Point of Entry: 0.00 miles
Type of Surface Water Body: Lake
Dilution Weight: 0.1000000
Level of Contamination: Potential

Food Chain Individual Factor: 2.00

Documentation for LaFayette City Res.:

Reservoir is impounded at one end, and would be expected to exhibit a very slow flow toward town creek.

Reference: Appendix A

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
LAFAYETTE SHEET METAL - 03/31/92

Source: 1 Contaminated Soil

Source Hazardous Waste Quantity Value: 1.69

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Barium	1	1.00E+00	5.00E-01	5.00E-01
Chlordane	10000	1.00E+00	5.00E+04	5.00E+08
Cobalt	0	1.00E+00	5.00E+03	0.00E+00
Copper	1000	1.00E+00	5.00E+04	5.00E+07
Heptachlor epoxide	0	1.00E+00	5.00E+04	0.00E+00
Iron	10	1.00E+00	5.00E-01	5.00E+00
Manganese	0	1.00E+00	5.00E+04	0.00E+00
Nickel	1000	1.00E+00	5.00E+02	5.00E+05
Sodium	0	1.00E+00	5.00E-01	0.00E+00
Zinc	100	1.00E+00	5.00E+04	5.00E+06

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Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value

- N/A and/or data not specified

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
LAFAYETTE SHEET METAL - 03/31/92

Ecotoxicity/Persistence/Bioaccummulation Value from Source Hazardous Substances:	5.00E+08
Ecotoxicity/Persistence/Bioaccummulation Value from Observed Release Hazardous Substances:	0.00E+00
Ecotoxicity/Persistence/Bioaccummulation Factor:	5.00E+08
Sum of Source Hazardous Waste Quantity Values:	1.69E+00
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	180

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Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT ENVIRONMENTAL THREAT TARGETS
LAFAYETTE SHEET METAL - 03/31/92

Level I Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
- N/A and/or data not specified		

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
- N/A and/or data not specified		

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level I Concentrations Factor: 0.00E+00

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SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT ENVIRONMENTAL THREAT TARGETS
LAFAYETTE SHEET METAL - 03/31/92

Level II Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
- N/A and/or data not specified		

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
- N/A and/or data not specified		

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level II Concentrations Factor: 0.00E+00

Potential Contamination

Sensitive Environments

Type of Surface Water Body	Sensitive Environment	Sensitive Environment Value

Wetlands

Type of Surface Water Body	Sensitive Environment	Wetlands Frontage	Wetlands Value
Lake	2 Wetlands	0.40	25

Documentation for Sensitive Environment Wetlands:

Some wetlands are located approximately 1200 feet from the site adjacent to the LaFayette City Reservoir.

Reference: Appendix A

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SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT ENVIRONMENTAL THREAT TARGETS
LAFAYETTE SHEET METAL - 03/31/92

Type of Surface Water Body	Sum of Sens. Environment Values(Sj)	Sum of Wetland Frontage Values(Wj)	Dilution Weight (Dj)	Dj(Wj+Sj)
Small to Moderate Stream	0	25	1.00E-01	2.50E+00

Sum of Dj(Wj+Sj): 2.50E+00
Sum of Dj(Wj+Sj)/10: 2.50E-01

==========

Potential Contamination Sensitive Environment Factor: 7.50E-01

SOIL EXPOSURE PATHWAY SCORESHEET
LAFAYETTE SHEET METAL - 03/31/92

SOIL EXPOSURE PATHWAY Factor Categories & Factors RESIDENT POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
1. Likelihood of Exposure	550	550
Waste Characteristics		
2. Toxicity	*	1.00E+04
3. Hazardous Waste Quantity	*	10
4. Waste Characteristics	100	18
Targets		
5. Resident Individual	50	5.00E+01
6. Resident Population		
6a. Level I Concentrations	**	3.00E+02
6b. Level II Concentrations	**	0.00E+00
6c. Resident Population (lines 6a+6b)	**	3.00E+02
7. Workers	15	5.00E+00
8. Resources	5	0.00E+00
9. Terrestrial Sensitive Environments	***	1.25E+02
10. Targets (lines 5+6c+7+8+9)	**	4.80E+02
11. RESIDENT POPULATION THREAT SCORE	**	4.75E+06

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.
*** No specific maximum value applies, see HRS for details.

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SOIL EXPOSURE PATHWAY SCORESHEET
LAFAYETTE SHEET METAL - 03/31/92

SOIL EXPOSURE PATHWAY Factor Categories & Factors NEARBY POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
12. Attractiveness/Accessibility	100	7.50E+01
13. Area of Contamination	100	2.00E+01
14. Likelihood of Exposure	500	5.00E+01
Waste Characteristics		
15. Toxicity	*	1.00E+04
16. Hazardous Waste Quantity	*	10
17. Waste Characteristics	100	18
Targets		
18. Nearby Individual	1	0.00E+00
19. Population Within 1 Mile	**	1.00E+00
20. Targets (lines 18+19)	**	1.00E+00
21. NEARBY POPULATION THREAT SCORE	**	9.00E+02
SOIL EXPOSURE PATHWAY SCORE (Ss)	100	57.61

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

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SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT LIKELIHOOD OF EXPOSURE
LAFAYETTE SHEET METAL - 03/31/92

Likelihood of Exposure

No.	Source ID	Level of Contamination
1	Contaminated Soil	Level I

Likelihood of Exposure Factor: 550

Source No.	Hazardous Substance	Depth (ft.)	Concent.	Cancer	RFD	Units
1	Barium	< 2	1.7E+03	0.0E+00	4.1E+04	ppm
1	Chlordane	< 2	1.5E+00	4.5E-01	3.5E+01	ppm
1	Cobalt	< 2	1.2E+02	0.0E+00	0.0E+00	ppm
1	Copper	< 2	1.9E+02	0.0E+00	2.2E+04	ppm
1	Heptachlor epoxide	< 2	4.6E-02	6.4E-02	7.6E+00	ppm
1	Iron	< 2	3.3E+05	0.0E+00	0.0E+00	ppm
1	Manganese	< 2	3.4E+03	0.0E+00	5.8E+04	ppm
1	Nickel	< 2	4.5E+02	0.0E+00	1.2E+04	ppm
1	Sodium	< 2	1.9E+03	0.0E+00	0.0E+00	ppm
1	Zinc	< 2	3.9E+02	0.0E+00	1.2E+05	ppm

Documentation for Source Contaminated Soil, Contaminants:

Sample SS-01 - Background Soil - Iron 34,000 mg/kg, manganese 320 mg/kg, barium 63 mg/kg, cobalt 10 mg/kg, copper 23 mg/kg, nickel 23 g/kg, sodium 80U mg/kg, zinc 50 mg/kg, heptachlor epoxide 2.0U ug/kg, gamma chlordane 1500 ug/kg

Sample SS-02 - Iron 330,000 mg/kg , heptachlor epoxide 46 ug/kg, chlordane, 1500 ug/kg - collected north of the old metal building

Sample SS-03 - manganese 3,400 mg/kg - collected south of the old metal building

Sample SS-04 - barium 1700 mg/kg, cobalt 120 mg/kg, copper 190 mg/kg, nickel 450 mg/kg, sodium 1900 mg/kg - collected at northeastern property boundary

3 times background levels or > or equal to the MQL is considered elevated.

Reference: 2, Appendix B

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SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
LAFAYETTE SHEET METAL - 03/31/92

Source: 1 Contaminated Soil

Source Hazardous Waste Quantity Value: 1.69

Hazardous Substance	Toxicity Value
Barium	10000
Chlordane	10000
Cobalt	100
Copper	100
Heptachlor epoxide	10000
Iron	0
Manganese	10000
Nickel	10000
Sodium	0
Zinc	10

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SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
LAFAYETTE SHEET METAL - 03/31/92

Toxicity Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	1.69E+00
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	18

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SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT TARGETS
LAFAYETTE SHEET METAL - 03/31/92

Targets

Level I Population: 30.0 Value: 300.00

Documentation for Level I Population:

Daycare program for mentally-ill adults is run onsite. Estimated 30 persons attend program.

Reference: 2, 7

Level II Population: 0.0 Value: 0.00

Workers: 4.0 Value: 5.00

Documentation for Workers:

Estimated number of workers from observation during sampling event.

Reference: 2

Resident Individual: Level I Value: 50.00

Resources: NO Value: 0.00

Terrestial Sensitive Environment	Value
Fed. Endang. Specie	75
State Endang. Speci	50

Terrestrial Sensitive Environments Factor: 125.00

Documentation for Terrestrial Environment Fed. Endang. Specie:

Federally-endangered species in the LaFayette area is the large-flower skullcap.

Reference: 25

Documentation for Terrestrial Environment State Endang. Speci:

State endangered species include a variety of plant and animal species.

Reference: 25

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SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT LIKELIHOOD OF EXPOSURE
LAFAYETTE SHEET METAL - 03/31/92

Likelihood of Exposure

No.	Source ID	Level of Contamination	Attractiveness/ Accessibility	Area of Contam. (sq. feet)
1	Contaminated Soil	Level I	75	57499

Highest Attractiveness/Accessibility Value: 75
Sum of Eligible Areas Of Contamination (sq. feet): 57499
Area of Contamination Value: 20

Likelihood of Exposure Factor Category: 50

Documentation for Attractiveness/Accessibility, Source Contaminated Soil:

The site is used by a day-care facility for mentally-ill adults, and therefore regular recreation takes place on the facility.

Reference: 2,7

Source No.	Hazardous Substance	Depth (ft.)	Concent.	Cancer	RFD	Units
1	Barium	< 2	1.7E+03	0.0E+00	4.1E+04	ppm
1	Chlordane	< 2	1.5E+00	4.5E-01	3.5E+01	ppm
1	Cobalt	< 2	1.2E+02	0.0E+00	0.0E+00	ppm
1	Copper	< 2	1.9E+02	0.0E+00	2.2E+04	ppm
1	Heptachlor epoxide	< 2	4.6E-02	6.4E-02	7.6E+00	ppm
1	Iron	< 2	3.3E+05	0.0E+00	0.0E+00	ppm
1	Manganese	< 2	3.4E+03	0.0E+00	5.8E+04	ppm
1	Nickel	< 2	4.5E+02	0.0E+00	1.2E+04	ppm
1	Sodium	< 2	1.9E+03	0.0E+00	0.0E+00	ppm
1	Zinc	< 2	3.9E+02	0.0E+00	1.2E+05	ppm

Documentation for Source Contaminated Soil, Contaminants:

Sample SS-01 - Background Soil - Iron 34,000 mg/kg, manganese 320 mg/kg, barium 63 mg/kg, cobalt 10 mg/kg, copper 23 mg/kg, nickel 23 g/kg, sodium 80U mg/kg, zinc 50 mg/kg, heptachlor epoxide 2.0U ug/kg, gamma chlordane 1500 ug/kg

Sample SS-02 - Iron 330,000 mg/kg , heptachlor epoxide 46 ug/kg, chlordane, 1500 ug/kg - collected north of the old metal building

Sample SS-03 - manganese 3,400 mg/kg - collected south of the old metal building

Sample SS-04 - barium 1700 mg/kg, cobalt 120 mg/kg, copper 190 mg/kg, nickel 450 mg/kg, sodium 1900 mg/kg - collected at northeastern property boundary

3 times background levels or > or equal to the MQL is considered elevated.

Reference: 2, Appendix B

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SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
LAFAYETTE SHEET METAL - 03/31/92

Source: 1 Contaminated Soil

Source Hazardous Waste Quantity Value: 1.69

Hazardous Substance	Toxicity Value
Barium	10000
Chlordane	10000
Cobalt	100
Copper	100
Heptachlor epoxide	10000
Iron	0
Manganese	10000
Nickel	10000
Sodium	0
Zinc	10

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
LAFAYETTE SHEET METAL - 03/31/92

Toxicity Factor:	1.00E+04
Sum of Source Hazardous Waste Quantity Values:	1.69E+00
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	18

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SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT TARGETS
LAFAYETTE SHEET METAL - 03/31/92

Nearby Individual

Population within 1/4 mile: 64.0

Nearby Individual Value: 0.0

Population Within 1 Mile

Travel Distance Category	Number of People	Value
> 0 to 1/4 mile	64.0	0.1
> 1/4 to 1/2 mile	148.0	0.2
> 1/2 to 1 mile	1757.0	1.0
Population Within 1 Mile Factor:		1.0

Documentation for Population > 0 to 1/4 mile Distance Category:

24 houses x 2.65 persons per household = 64 persons.

Reference: Appendix A, 18

Documentation for Population > 1/4 to 1/2 mile Distance Category:

56 houses x 2.65 persons per household = 148 persons.

Reference: Appendix A, 18

Documentation for Population > 1/2 to 1 mile Distance Category:

Figure obtained from GEMS database.

Reference: 26

AIR PATHWAY SCORESHEET
LAFAYETTE SHEET METAL - 03/31/92

AIR MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release	550	0
2. Potential to Release		
2a. Gas Potential to Release	500	300
2b. Particulate Potential to Release	500	280
2c. Potential to Release	500	300
3. Likelihood of Release	550	300
Waste Characteristics		
4. Toxicity/Mobility	*	2.00E+02
5. Hazardous Waste Quantity	*	10
6. Waste Characteristics	100	6
Targets		
7. Nearest Individual	50	2.00E+01
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	1.30E+01
8d. Population (lines 8a+8b+8c)	**	1.30E+01
9. Resources	5	0.00E+00
10. Sensitive Environments		
10a. Actual Contamination	***	0.00E+00
10b. Potential Contamination	***	8.00E+00
10c. Sens. Environments(lines 10a+10b)	***	8.00E+00
11. Targets (lines 7+8d+9+10c)	**	4.10E+01
AIR MIGRATION PATHWAY SCORE (Sa)	100	8.95E-01

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.
*** No specific maximum value applies, see HRS for details.

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AIR PATHWAY LIKELIHOOD OF RELEASE
LAFAYETTE SHEET METAL - 03/31/92

OBSERVED RELEASE

No.	Sample ID	Distance (miles)	Level of Contamination

- N/A and/or data not specified

Observed Release Factor: 0

AIR PATHWAY LIKELIHOOD OF RELEASE
LAFAYETTE SHEET METAL - 03/31/92

Gas Migration Potential

GAS POTENTIAL TO RELEASE

Source ID	Source Type	Gas Contain. Value (A)	Gas Source Type Value (B)	Gas Migrtn. Potent. Value (C)	Sum (B+C)	Gas Potential to Rel. Value A(B+C)
Contaminated Soil	Contaminated Soil	10	19	11	30	300

Gas Potential to Release Factor: 300

Documentation for Gas Containment, Source Contaminated Soil:

No containment other than vegetation.

Reference: 2

Documentation for Source Type, Source Contaminated Soil:

Only source applicable to site is contaminated soil.

Reference: 2

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AIR PATHWAY LIKELIHOOD OF RELEASE
LAFAYETTE SHEET METAL - 03/31/92

Source: Contaminated Soil

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Chlordane	6
Heptachlor epoxide	11

Average of Gas Migration Potential Value for 3 Hazardous Substances: 8.500

Gas Migration Potential Value From Table 6-7: 11

Particulate Migration Potential

PARTICULATE POTENTIAL TO RELEASE

Source ID	Source Type	Partic. Contain. Value (A)	Partic. Source Type Value (B)	Partic. Migrtn. Potent. Value (C)	Sum (B+C)	Partic. Potential to Rel. Value A(B+C)
Contaminated Soil	Contaminated Soil	10	22	6	28	280

Particulate Potential to Release Factor: 280

Documentation for Particulate Containment, Source Contaminated Soil:

No containment for source area other than vegetation.

Reference: 2

Documentation for Source Type, Source Contaminated Soil:

Only source applicable to site is contaminated soil.

Reference: 2

Documentation for Particulate Migration Potential:

HRS Figure 6-2 was used.

Reference: Federal Register

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Source: Contaminated Soil

Particulate Hazardous Substance
Barium
Chlordane
Cobalt
Copper
Heptachlor epoxide
Iron
Manganese
Nickel
Sodium
Zinc

AIR PATHWAY WASTE CHARACTERISTICS
LAFAYETTE SHEET METAL - 03/31/92

Source: 1 Contaminated Soil

Source Hazardous Waste Quantity Value: 1.69

Hazardous Substance	Toxicity Value	Gas Mobility Value	Particulate Mobility Value	Toxicity/ Mobility Value
Barium	10000	NA	8.00E-05	8.00E-01
Chlordane	10000	2.00E-03	8.00E-05	2.00E+01
Cobalt	100	NA	8.00E-05	8.00E-03
Copper	100	NA	8.00E-05	8.00E-03
Heptachlor epoxide	10000	2.00E-02	8.00E-05	2.00E+02
Iron	100	NA	8.00E-05	8.00E-03
Manganese	10000	NA	8.00E-05	8.00E-01
Nickel	10000	NA	8.00E-05	8.00E-01
Sodium	100	NA	8.00E-05	8.00E-03
Zinc	10	NA	8.00E-05	8.00E-04

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Hazardous Substances Found in an Observed Release

Sample ID	Observed Release Hazardous Substance	Particulate Toxicity/ Mobility Value	Gas Toxicity/ Mobility Value

- N/A and/or data not specified

Documentation for Particulate Mobility:

Figure HRS 6-3 was used.

Reference: Federal Register

AIR PATHWAY WASTE CHARACTERISTICS
LAFAYETTE SHEET METAL - 03/31/92

Toxicity/Mobility Value from Source Hazardous Substances:	2.00E+02
Toxicity/Mobility Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Mobility Factor:	2.00E+02
Sum of Source Hazardous Waste Quantity Values:	1.69E+00
Hazardous Waste Quantity Factor:	10
Waste Characteristics Factor Category:	6

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Actual Contamination

No.	Sample ID	Distance (miles)	Level of Contamination

- N/A and/or data not specified

Potential Contamination

Distance Categories Subject to Potential Contamination	Population	Value
Onsite	34.0	5.3000
> 0 to 1/4 mile	64.0	1.3000
> 1/4 to 1/2 mile	148.0	0.9000
> 1/2 to 1 mile	1757.0	2.6000
> 1 to 2 miles	1617.0	0.8000
> 2 to 3 miles	3093.0	1.2000
> 3 to 4 miles	3332.0	0.7000
	Potential Contaminantion Factor:	13.0000

Documentation for Population Onsite Distance Category:

Includes students at day-care facility and workers.

Reference: 2, 7

Documentation for Population > 0 to 1/4 mile Distance Category:

24 houses x 2.65 persons per household = 64 persons.

Reference: Appendix A, 18

Documentation for Population > 1/4 to 1/2 mile Distance Category:

56 houses x 2.65 persons per household = 148 persons.

Reference: Appendix A, 18

Documentation for Population > 1/2 to 1 mile Distance Category:

GEMS database was used.

Reference: 26

Documentation for Population > 1 to 2 miles Distance Category:

GEMS database was used.

Reference: 26

Documentation for Population > 2 to 3 miles Distance Category:

Gems database was used.

Reference: 26

Documentation for Population > 3 to 4 miles Distance Category:

GEMS database was used.

Reference: 26

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Nearest Individual Factor

Level of Contamination: Potential
Distance in miles: 0 to 1/8

Nearest Individual Value: 20

Documentation for Nearest Individual:

Regularly occupied building onsite.

Reference: 2, 7

Resources

Resource Use: NO

Resource Value: 0

Actual Contamination, Sensitive Environments

Sensitive Environment	Distance (miles)	Sensitive Environment Value
- N/A and/or data not specified		

Actual Contamination, Wetlands

Distance Category	Wetland Acreage	Wetland Acreage Value
- N/A and/or data not specified		

==========

Sensitive Environments Actual Contamination Factor: 0.000
(Sum of Sensitive Environments + Wetlands Values)

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Potential Contamination, Sensitive Environments

Sensitive Environment	Distance (miles)	Sensitive Environment Value	Distance Weight	Weighted Value/10
Federally-End.	0.000	75	1.0000	7.500
Sum of Sensitive Environments Weighted Values/10:				7.500

Potential Contamination, Wetlands

Distance Category	Wetland Acreage	Wetland Acreage Value	Distance Weight	Weighted Value/10
- N/A and/or data not specified				

Sensitive Environment Potential Contamination Factor: 8.000

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

*****MEMORANDUM******

DATE: 01/10/92

SUBJECT: Results of Purgeable Organic Analysis
92-0109 LAFAYETTE SHEET META
LAFAYETTE GA
CASE NO: 17446

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: JOE SLYKERMAN

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

CC

SISB/SAS
RECEIVED
JAN 16 1992
EPA - REGION IV

ORGANIC DATA QUALIFIER REPORT

Case Number 17446 Project Number 92-0109 SAS Number
Site ID. Lafayette Sheet Metal, Lafayette, GA.

Affected Samples	Compound or Fraction	Flag Used	Reason
Volatiles			
63656,63657	toluene	J	<quantitation limit
63660	carbon disulfide	J	<quantitation limit
Extractables			
63654,63660	all positives	J	<quantitation limit
Pesticides			
none			

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63652 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-01

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1215 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB71

UG/KG	ANALYTICAL RESULTS
11U	CHLOROMETHANE
11U	BROMOMETHANE
11U	VINYL CHLORIDE
11U	CHLOROETHANE
11U	METHYLENE CHLORIDE
11U	ACETONE
11U	CARBON DISULFIDE
11U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
11U	1,1-DICHLOROETHANE
11U	1,2-DICHLOROETHENE (TOTAL)
11U	CHLOROFORM
11U	1,2-DICHLOROETHANE
11U	METHYL ETHYL KETONE
11U	1,1,1-TRICHLOROETHANE
11U	CARBON TETRACHLORIDE
11U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
11U	1,2-DICHLOROPROPANE
11U	CIS-1,3-DICHLOROPROPENE
11U	TRICHLOROETHENE(TRICHLOROETHYLENE)
11U	DIBROMOCHLOROMETHANE
11U	1,1,2-TRICHLOROETHANE
11U	BENZENE
11U	TRANS-1,3-DICHLOROPROPENE
11U	BROMOFORM
11U	METHYL ISOBUTYL KETONE
11U	METHYL BUTYL KETONE
11U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
11U	1,1,2,2-TETRACHLOROETHANE
11U	TOLUENE
11U	CHLOROBENZENE
11U	ETHYL BENZENE
11U	STYRENE
11U	TOTAL XYLENES
13	PERCENT MOISTURE

REMARKS ***REMARKS***

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63653 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-01

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1240 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB73

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
12U	METHYLENE CHLORIDE
12U	ACETONE
12U	CARBON DISULFIDE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
12U	1,1-DICHLOROETHANE
12U	1,2-DICHLOROETHENE (TOTAL)
12U	CHLOROFORM
12U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
12U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
12U	1,2-DICHLOROPROPANE
12U	CIS-1,3-DICHLOROPROPENE
12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	DIBROMOCHLOROMETHANE
12U	1,1,2-TRICHLOROETHANE
12U	BENZENE
12U	TRANS-1,3-DICHLOROPROPENE
12U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
12U	TOLUENE
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
18	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63654 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-01

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1430 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB74

UG/KG	ANALYTICAL RESULTS
15U	CHLOROMETHANE
15U	BROMOMETHANE
15U	VINYL CHLORIDE
15U	CHLOROETHANE
15U	METHYLENE CHLORIDE
20U	ACETONE
15U	CARBON DISULFIDE
15U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
15U	1,1-DICHLOROETHANE
15U	1,2-DICHLOROETHENE (TOTAL)
15U	CHLOROFORM
15U	1,2-DICHLOROETHANE
15U	METHYL ETHYL KETONE
15U	1,1,1-TRICHLOROETHANE
15U	CARBON TETRACHLORIDE
15U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
15U	1,2-DICHLOROPROPANE
15U	CIS-1,3-DICHLOROPROPENE
15U	TRICHLOROETHENE(TRICHLOROETHYLENE)
15U	DIBROMOCHLOROMETHANE
15U	1,1,2-TRICHLOROETHANE
15U	BENZENE
15U	TRANS-1,3-DICHLOROPROPENE
15U	BROMOFORM
15U	METHYL ISOBUTYL KETONE
15U	METHYL BUTYL KETONE
15U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
15U	1,1,2,2-TETRACHLOROETHANE
15U	TOLUENE
15U	CHLOROBENZENE
15U	ETHYL BENZENE
15U	STYRENE
15U	TOTAL XYLENES
34	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63655 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-05

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1505 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB75

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
12U	METHYLENE CHLORIDE
12U	ACETONE
12U	CARBON DISULFIDE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
12U	1,1-DICHLOROETHANE
12U	1,2-DICHLOROETHENE (TOTAL)
12U	CHLOROFORM
12U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
12U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
12U	1,2-DICHLOROPROPANE
12U	CIS-1,3-DICHLOROPROPENE
12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	DIBROMOCHLOROMETHANE
12U	1,1,2-TRICHLOROETHANE
12U	BENZENE
12U	TRANS-1,3-DICHLOROPROPENE
12U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
12U	TOLUENE
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
18	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63656 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-06

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1525 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB76

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
12U	METHYLENE CHLORIDE
12U	ACETONE
12U	CARBON DISULFIDE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
12U	1,1-DICHLOROETHANE
12U	1,2-DICHLOROETHENE (TOTAL)
12U	CHLOROFORM
12U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
12U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
12U	1,2-DICHLOROPROPANE
12U	CIS-1,3-DICHLOROPROPENE
12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	DIBROMOCHLOROMETHANE
12U	1,1,2-TRICHLOROETHANE
12U	BENZENE
12U	TRANS-1,3-DICHLOROPROPENE
12U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
11J	TOLUENE
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
16	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63657 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-06

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1540 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB77

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
12U	METHYLENE CHLORIDE
12U	ACETONE
12U	CARBON DISULFIDE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
12U	1,1-DICHLOROETHANE
12U	1,2-DICHLOROETHENE (TOTAL)
12U	CHLOROFORM
12U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
12U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
12U	1,2-DICHLOROPROPANE
12U	CIS-1,3-DICHLOROPROPENE
12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	DIBROMOCHLOROMETHANE
12U	1,1,2-TRICHLOROETHANE
12U	BENZENE
12U	TRANS-1,3-DICHLOROPROPENE
12U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
10J	TOLUENE
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
14	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63658 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-02

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1610 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB78

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE	12U	1,2-DICHLOROPROPANE
12U	BROMOMETHANE	12U	CIS-1,3-DICHLOROPROPENE
12U	VINYL CHLORIDE	12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	CHLOROETHANE	12U	DIBROMOCHLOROMETHANE
12U	METHYLENE CHLORIDE	12U	1,1,2-TRICHLOROETHANE
12U	ACETONE	12U	BENZENE
12U	CARBON DISULFIDE	12U	TRANS-1,3-DICHLOROPROPENE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	12U	BROMOFORM
12U	1,1-DICHLOROETHANE	12U	METHYL ISOBUTYL KETONE
12U	1,2-DICHLOROETHENE (TOTAL)	12U	METHYL BUTYL KETONE
12U	CHLOROFORM	12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,2-DICHLOROETHANE	12U	1,1,2,2-TETRACHLOROETHANE
12U	METHYL ETHYL KETONE	12U	TOLUENE
12U	1,1,1-TRICHLOROETHANE	12U	CHLOROBENZENE
12U	CARBON TETRACHLORIDE	12U	ETHYL BENZENE
12U	BROMODICHLOROMETHANE	12U	STYRENE
		12U	TOTAL XYLENES
		19	PERCENT MOISTURE

REMARKS ***REMARKS***

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63659 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-02

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1625 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB79

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
12U	METHYLENE CHLORIDE
12U	ACETONE
12U	CARBON DISULFIDE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
12U	1,1-DICHLOROETHANE
12U	1,2-DICHLOROETHENE (TOTAL)
12U	CHLOROFORM
12U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
12U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
12U	1,2-DICHLOROPROPANE
12U	CIS-1,3-DICHLOROPROPENE
12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	DIBROMOCHLOROMETHANE
12U	1,1,2-TRICHLOROETHANE
12U	BENZENE
12U	TRANS-1,3-DICHLOROPROPENE
12U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
12U	TOLUENE
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
15	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63660 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-04

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 0955 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB80

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE	12U	1,2-DICHLOROPROPANE
12U	BROMOMETHANE	12U	CIS-1,3-DICHLOROPROPENE
12U	VINYL CHLORIDE	12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	CHLOROETHANE	12U	DIBROMOCHLOROMETHANE
12U	METHYLENE CHLORIDE	12U	1,1,2-TRICHLOROETHANE
12U	ACETONE	12U	BENZENE
9J	CARBON DISULFIDE	12U	TRANS-1,3-DICHLOROPROPENE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	12U	BROMOFORM
12U	1,1-DICHLOROETHANE	12U	METHYL ISOBUTYL KETONE
12U	1,2-DICHLOROETHENE (TOTAL)	12U	METHYL BUTYL KETONE
12U	CHLOROFORM	12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,2-DICHLOROETHANE	12U	1,1,2,2-TETRACHLOROETHANE
12U	METHYL ETHYL KETONE	14	TOLUENE
12U	1,1,1-TRICHLOROETHANE	12U	CHLOROBENZENE
12U	CARBON TETRACHLORIDE	12U	ETHYL BENZENE
12U	BROMODICHLOROMETHANE	12U	STYRENE
		12U	TOTAL XYLENES
		15	PERCENT MOISTURE

REMARKS ***REMARKS***

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63661 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-03

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1010 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB81

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
12U	METHYLENE CHLORIDE
12U	ACETONE
12U	CARBON DISULFIDE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
12U	1,1-DICHLOROETHANE
12U	1,2-DICHLOROETHENE (TOTAL)
12U	CHLOROFORM
12U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
12U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
12U	1,2-DICHLOROPROPANE
12U	CIS-1,3-DICHLOROPROPENE
12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
12U	DIBROMOCHLOROMETHANE
12U	1,1,2-TRICHLOROETHANE
12U	BENZENE
12U	TRANS-1,3-DICHLOROPROPENE
12U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
12U	TOLUENE
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
14	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63662 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-07

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1055 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB82

UG/KG	ANALYTICAL RESULTS
13U	CHLOROMETHANE
13U	BROMOMETHANE
13U	VINYL CHLORIDE
13U	CHLOROETHANE
13U	METHYLENE CHLORIDE
13U	ACETONE
13U	CARBON DISULFIDE
13U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
13U	1,1-DICHLOROETHANE
13U	1,2-DICHLOROETHENE (TOTAL)
13U	CHLOROFORM
13U	1,2-DICHLOROETHANE
13U	METHYL ETHYL KETONE
13U	1,1,1-TRICHLOROETHANE
13U	CARBON TETRACHLORIDE
13U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
13U	1,2-DICHLOROPROPANE
13U	CIS-1,3-DICHLOROPROPENE
13U	TRICHLOROETHENE(TRICHLOROETHYLENE)
13U	DIBROMOCHLOROMETHANE
13U	1,1,2-TRICHLOROETHANE
13U	BENZENE
13U	TRANS-1,3-DICHLOROPROPENE
13U	BROMOFORM
13U	METHYL ISOBUTYL KETONE
13U	METHYL BUTYL KETONE
13U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
13U	1,1,2,2-TETRACHLOROETHANE
13U	TOLUENE
13U	CHLOROBENZENE
13U	ETHYL BENZENE
13U	STYRENE
13U	TOTAL XYLENES
25	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63663 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-02

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1250 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB84

UG/KG	ANALYTICAL RESULTS
14U	CHLOROMETHANE
14U	BROMOMETHANE
14U	VINYL CHLORIDE
14U	CHLOROETHANE
14U	METHYLENE CHLORIDE
14U	ACETONE
14U	CARBON DISULFIDE
14U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
14U	1,1-DICHLOROETHANE
14U	1,2-DICHLOROETHENE (TOTAL)
14U	CHLOROFORM
14U	1,2-DICHLOROETHANE
14U	METHYL ETHYL KETONE
14U	1,1,1-TRICHLOROETHANE
14U	CARBON TETRACHLORIDE
14U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
14U	1,2-DICHLOROPROPANE
14U	CIS-1,3-DICHLOROPROPENE
14U	TRICHLOROETHENE(TRICHLOROETHYLENE)
14U	DIBROMOCHLOROMETHANE
14U	1,1,2-TRICHLOROETHANE
14U	BENZENE
14U	TRANS-1,3-DICHLOROPROPENE
14U	BROMOFORM
14U	METHYL ISOBUTYL KETONE
14U	METHYL BUTYL KETONE
14U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
14U	1,1,2,2-TETRACHLOROETHANE
14U	TOLUENE
14U	CHLOROBENZENE
14U	ETHYL BENZENE
14U	STYRENE
14U	TOTAL XYLENES
30	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63664 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-03

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1300 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB83

UG/KG	ANALYTICAL RESULTS
13U	CHLOROMETHANE
13U	BROMOMETHANE
13U	VINYL CHLORIDE
13U	CHLOROETHANE
13U	METHYLENE CHLORIDE
13U	ACETONE
13U	CARBON DISULFIDE
13U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
13U	1,1-DICHLOROETHANE
13U	1,2-DICHLOROETHENE (TOTAL)
13U	CHLOROFORM
13U	1,2-DICHLOROETHANE
13U	METHYL ETHYL KETONE
13U	1,1,1-TRICHLOROETHANE
13U	CARBON TETRACHLORIDE
13U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
13U	1,2-DICHLOROPROPANE
13U	CIS-1,3-DICHLOROPROPENE
13U	TRICHLOROETHENE(TRICHLOROETHYLENE)
13U	DIBROMOCHLOROMETHANE
13U	1,1,2-TRICHLOROETHANE
13U	BENZENE
13U	TRANS-1,3-DICHLOROPROPENE
13U	BROMOFORM
13U	METHYL ISOBUTYL KETONE
13U	METHYL BUTYL KETONE
13U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
13U	1,1,2,2-TETRACHLOROETHANE
13U	TOLUENE
13U	CHLOROBENZENE
13U	ETHYL BENZENE
13U	STYRENE
13U	TOTAL XYLENES
25	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63665 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-04

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1340 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB85

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
18U	CHLOROMETHANE	18U	1,2-DICHLOROPROPANE
18U	BROMOMETHANE	18U	CIS-1,3-DICHLOROPROPENE
18U	VINYL CHLORIDE	18U	TRICHLOROETHENE(TRICHLOROETHYLENE)
18U	CHLOROETHANE	18U	DIBROMOCHLOROMETHANE
18U	METHYLENE CHLORIDE	18U	1,1,2-TRICHLOROETHANE
18U	ACETONE	18U	BENZENE
18U	CARBON DISULFIDE	18U	TRANS-1,3-DICHLOROPROPENE
18U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	18U	BROMOFORM
18U	1,1-DICHLOROETHANE	18U	METHYL ISOBUTYL KETONE
18U	1,2-DICHLOROETHENE (TOTAL)	18U	METHYL BUTYL KETONE
18U	CHLOROFORM	18U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
18U	1,2-DICHLOROETHANE	18U	1,1,2,2-TETRACHLOROETHANE
18U	METHYL ETHYL KETONE	18U	TOLUENE
18U	1,1,1-TRICHLOROETHANE	18U	CHLOROBENZENE
18U	CARBON TETRACHLORIDE	18U	ETHYL BENZENE
18U	BROMODICHLOROMETHANE	18U	STYRENE
		18U	TOTAL XYLENES
		45	PERCENT MOISTURE

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63654  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                 **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE              ST: GA                   **
**   STATION ID: SD-01                                                COLLECTION START: 11/18/91  1430   STOP: 00/00/00     **
**   CASE NO.: 17446          SAS NO.:                                D. NO.: CB74                MD NO: CB74               **
**                                                                                                                          **
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ANALYTICAL RESULTS UG/KG

9JN TRIMETHYLCYCLOPROPANE

FOOTNOTES
*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
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS PURGEABLE ORGANICS   DATA REPORT

PROJECT NO. 92-0109   SAMPLE NO. 63658   SAMPLE TYPE: SOIL   PROG ELEM: NSF   COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META   CITY: LAFAYETTE   ST: GA
STATION ID: SS-02   COLLECTION START: 11/18/91 1610   STOP: 00/00/00
CASE NO.: 17446   SAS NO.:   D NO.: CB78   MD NO: CB78

ANALYTICAL RESULTS UG/KG

30JN	CARENE
20JN	METHYLENE(METHYLETHYL)CYCLOHEXANE

FOOTNOTES
*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.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

*****MEMORANDUM******

DATE: 01/10/92

SUBJECT: Results of Pesticide/PCB Analysis;
92-0109 LAFAYETTE SHEET META
LAFAYETTE GA
CASE NO: 17446

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: JOE SLYKERMAN

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

CC

SISB/SAS
RECEIVED
JAN 16 1992
EPA - REGION IV
ATLANTA, GA

ORGANIC DATA QUALIFIER REPORT

Case Number 17446 Project Number 92-0109 SAS Number
Site ID. Lafayette Sheet Metal, Lafayette, GA.

Affected Samples	Compound or Fraction	Flag Used	Reason
Volatiles			
63656,63657	toluene	J	<quantitation limit
63660	carbon disulfide	J	<quantitation limit
Extractables			
63654,63660	all positives	J	<quantitation limit
Pesticides			
none			

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63652 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-01
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1215 STOP: 00/00/00
D. NUMBER: CB71

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
2.0U	ALPHA-BHC	20U	METHOXYCHLOR
2.0U	BETA-BHC	3.8U	ENDRIN KETONE
2.0U	DELTA-BHC	3.8U	ENDRIN ALDEHYDE
2.0U	GAMMA-BHC (LINDANE)	--	CHLORDANE (TECH. MIXTURE) /1
2.0U	HEPTACHLOR	2.0U	GAMMA-CHLORDANE /2
2.0U	ALDRIN	2.0U	ALPHA-CHLORDANE /2
2.0U	HEPTACHLOR EPOXIDE	200U	TOXAPHENE
2.0U	ENDOSULFAN I (ALPHA)	38U	PCB-1016 (AROCLOR 1016)
3.8U	DIELDRIN	77U	PCB-1221 (AROCLOR 1221)
3.8U	4,4'-DDE (P,P'-DDE)	38U	PCB-1232 (AROCLOR 1232)
3.8U	ENDRIN	38U	PCB-1242 (AROCLOR 1242)
3.8U	ENDOSULFAN II (BETA)	38U	PCB-1248 (AROCLOR 1248)
3.8U	4,4'-DDD (P,P'-DDD)	38U	PCB-1254 (AROCLOR 1254)
3.8U	ENDOSULFAN SULFATE	38U	PCB-1260 (AROCLOR 1260)
3.8U	4,4'-DDT (P,P'-DDT)	13	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

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**   PROJECT NO. 92-0109   SAMPLE NO. 63653  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                                  **
**   SOURCE: LAFAYETTE SHEET META                                    CITY: LAFAYETTE                ST: GA                                  **
**   STATION ID: SB-01                                               COLLECTION START: 11/18/91  1240   STOP: 00/00/00                    **
**   CASE NUMBER: 17446          SAS NUMBER:                          D. NUMBER: CB73                                                     **
**                                                                                                                                           **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
    UG/KG                ANALYTICAL RESULTS                              UG/KG                ANALYTICAL RESULTS

    2.1U  ALPHA-BHC                                                      21U  METHOXYCHLOR
    2.1U  BETA-BHC                                                      4.0U  ENDRIN KETONE
    2.1U  DELTA-BHC                                                     4.0U  ENDRIN ALDEHYDE
    2.1U  GAMMA-BHC (LINDANE)                                     --         CHLORDANE (TECH. MIXTURE)  /1
    2.1U  HEPTACHLOR                                                    2.1U  GAMMA-CHLORDANE   /2
    2.1U  ALDRIN                                                        2.1U  ALPHA-CHLORDANE   /2
    2.1U  HEPTACHLOR EPOXIDE                                           210U  TOXAPHENE
    2.1U  ENDOSULFAN I (ALPHA)                                          40U  PCB-1016 (AROCLOR 1016)
    4.0U  DIELDRIN                                                      82U  PCB-1221 (AROCLOR 1221)
    4.0U  4,4'-DDE (P,P'-DDE)                                           40U  PCB-1232 (AROCLOR 1232)
    4.0U  ENDRIN                                                        40U  PCB-1242 (AROCLOR 1242)
    4.0U  ENDOSULFAN II (BETA)                                          40U  PCB-1248 (AROCLOR 1248)
    4.0U  4,4'-DDD (P,P'-DDD)                                           40U  PCB-1254 (AROCLOR 1254)
    4.0U  ENDOSULFAN SULFATE                                            40U  PCB-1260 (AROCLOR 1260)
    4.0U  4,4'-DDT (P,P'-DDT)                                            18  PERCENT MOISTURE
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REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63654 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-01
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1430 STOP: 00/00/00
D. NUMBER: CB74

UG/KG	ANALYTICAL RESULTS
2.6U	ALPHA-BHC
2.6U	BETA-BHC
2.6U	DELTA-BHC
2.6U	GAMMA-BHC (LINDANE)
2.6U	HEPTACHLOR
2.6U	ALDRIN
2.6U	HEPTACHLOR EPOXIDE
2.6U	ENDOSULFAN I (ALPHA)
5.0U	DIELDRIN
5.0U	4,4'-DDE (P,P'-DDE)
5.0U	ENDRIN
5.0U	ENDOSULFAN II (BETA)
5.0U	4,4'-DDD (P,P'-DDD)
5.0U	ENDOSULFAN SULFATE
5.0U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
26U	METHOXYCHLOR
5.0U	ENDRIN KETONE
5.0U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
2.6U	GAMMA-CHLORDANE /2
2.6U	ALPHA-CHLORDANE /2
260U	TOXAPHENE
50U	PCB-1016 (AROCLOR 1016)
100U	PCB-1221 (AROCLOR 1221)
50U	PCB-1232 (AROCLOR 1232)
50U	PCB-1242 (AROCLOR 1242)
50U	PCB-1248 (AROCLOR 1248)
50U	PCB-1254 (AROCLOR 1254)
50U	PCB-1260 (AROCLOR 1260)
34	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63655 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-05
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1505 STOP: 00/00/00
D. NUMBER: CB75

UG/KG	ANALYTICAL RESULTS
2.1U	ALPHA-BHC
2.1U	BETA-BHC
2.1U	DELTA-BHC
2.1U	GAMMA-BHC (LINDANE)
2.1U	HEPTACHLOR
2.1U	ALDRIN
7.7U	HEPTACHLOR EPOXIDE
2.1U	ENDOSULFAN I (ALPHA)
4.0U	DIELDRIN
4.0U	4,4'-DDE (P,P'-DDE)
4.0U	ENDRIN
4.0U	ENDOSULFAN II (BETA)
4.0U	4,4'-DDD (P,P'-DDD)
4.0U	ENDOSULFAN SULFATE
4.0U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
21U	METHOXYCHLOR
4.0U	ENDRIN KETONE
4.0U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
140	GAMMA-CHLORDANE /2
140	ALPHA-CHLORDANE /2
210U	TOXAPHENE
40U	PCB-1016 (AROCLOR 1016)
82U	PCB-1221 (AROCLOR 1221)
40U	PCB-1232 (AROCLOR 1232)
40U	PCB-1242 (AROCLOR 1242)
40U	PCB-1248 (AROCLOR 1248)
40U	PCB-1254 (AROCLOR 1254)
40U	PCB-1260 (AROCLOR 1260)
18	PERCENT MOISTURE

REMARKS

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63656 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-06
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1525 STOP: 00/00/00
D. NUMBER: CB76

UG/KG	ANALYTICAL RESULTS
2.0U	ALPHA-BHC
2.0U	BETA-BHC
2.0U	DELTA-BHC
2.0U	GAMMA-BHC (LINDANE)
2.0U	HEPTACHLOR
2.0U	ALDRIN
2.0U	HEPTACHLOR EPOXIDE
2.0U	ENDOSULFAN I (ALPHA)
3.9U	DIELDRIN
3.9U	4,4'-DDE (P,P'-DDE)
3.9U	ENDRIN
3.9U	ENDOSULFAN II (BETA)
3.9U	4,4'-DDD (P,P'-DDD)
3.9U	ENDOSULFAN SULFATE
3.9U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
20U	METHOXYCHLOR
3.9U	ENDRIN KETONE
3.9U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
2.0U	GAMMA-CHLORDANE /2
2.0U	ALPHA-CHLORDANE /2
200U	TOXAPHENE
39U	PCB-1016 (AROCLOR 1016)
80U	PCB-1221 (AROCLOR 1221)
39U	PCB-1232 (AROCLOR 1232)
39U	PCB-1242 (AROCLOR 1242)
39U	PCB-1248 (AROCLOR 1248)
39U	PCB-1254 (AROCLOR 1254)
39U	PCB-1260 (AROCLOR 1260)
16	PERCENT MOISTURE

REMARKS

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63657 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-06
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1540 STOP: 00/00/00
D. NUMBER: CB77

UG/KG	ANALYTICAL RESULTS
2.0U	ALPHA-BHC
2.0U	BETA-BHC
2.0U	DELTA-BHC
2.0U	GAMMA-BHC (LINDANE)
2.0U	HEPTACHLOR
2.0U	ALDRIN
2.0U	HEPTACHLOR EPOXIDE
2.0U	ENDOSULFAN I (ALPHA)
3.8U	DIELDRIN
3.8U	4,4'-DDE (P,P'-DDE)
3.8U	ENDRIN
3.8U	ENDOSULFAN II (BETA)
3.8U	4,4'-DDD (P,P'-DDD)
3.8U	ENDOSULFAN SULFATE
3.8U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
20U	METHOXYCHLOR
3.8U	ENDRIN KETONE
3.8U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
2.0U	GAMMA-CHLORDANE /2
2.0U	ALPHA-CHLORDANE /2
200U	TOXAPHENE
38U	PCB-1016 (AROCLOR 1016)
78U	PCB-1221 (AROCLOR 1221)
38U	PCB-1232 (AROCLOR 1232)
38U	PCB-1242 (AROCLOR 1242)
38U	PCB-1248 (AROCLOR 1248)
38U	PCB-1254 (AROCLOR 1254)
38U	PCB-1260 (AROCLOR 1260)
14	PERCENT MOISTURE

REMARKS

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63658 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-02
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1610 STOP: 00/00/00
D. NUMBER: CB78

UG/KG	ANALYTICAL RESULTS
2.1U	ALPHA-BHC
2.1U	BETA-BHC
2.1U	DELTA-BHC
2.1U	GAMMA-BHC (LINDANE)
2.1U	HEPTACHLOR
2.1U	ALDRIN
46	HEPTACHLOR EPOXIDE
2.1U	ENDOSULFAN I (ALPHA)
4.1U	DIELDRIN
4.1U	4,4'-DDE (P,P'-DDE)
4.1U	ENDRIN
4.1U	ENDOSULFAN II (BETA)
4.1U	4,4'-DDD (P,P'-DDD)
4.1U	ENDOSULFAN SULFATE
4.1U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
21U	METHOXYCHLOR
4.1U	ENDRIN KETONE
4.1U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
1500C	GAMMA-CHLORDANE /2
1300C	ALPHA-CHLORDANE /2
210U	TOXAPHENE
41U	PCB-1016 (AROCLOR 1016)
83U	PCB-1221 (AROCLOR 1221)
41U	PCB-1232 (AROCLOR 1232)
41U	PCB-1242 (AROCLOR 1242)
41U	PCB-1248 (AROCLOR 1248)
41U	PCB-1254 (AROCLOR 1254)
41U	PCB-1260 (AROCLOR 1260)
19	PERCENT MOISTURE

REMARKS

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63659 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-02
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1625 STOP: 00/00/00
D. NUMBER: CB79

UG/KG	ANALYTICAL RESULTS
2.0U	ALPHA-BHC
2.0U	BETA-BHC
2.0U	DELTA-BHC
2.0U	GAMMA-BHC (LINDANE)
2.0U	HEPTACHLOR
2.0U	ALDRIN
2.0U	HEPTACHLOR EPOXIDE
2.0U	ENDOSULFAN I (ALPHA)
3.9U	DIELDRIN
3.9U	4,4'-DDE (P,P'-DDE)
3.9U	ENDRIN
3.9U	ENDOSULFAN II (BETA)
3.9U	4,4'-DDD (P,P'-DDD)
3.9U	ENDOSULFAN SULFATE
3.9U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
20U	METHOXYCHLOR
3.9U	ENDRIN KETONE
3.9U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
6.3	GAMMA-CHLORDANE /2
4.6	ALPHA-CHLORDANE /2
200U	TOXAPHENE
39U	PCB-1016 (AROCLOR 1016)
79U	PCB-1221 (AROCLOR 1221)
39U	PCB-1232 (AROCLOR 1232)
39U	PCB-1242 (AROCLOR 1242)
39U	PCB-1248 (AROCLOR 1248)
39U	PCB-1254 (AROCLOR 1254)
39U	PCB-1260 (AROCLOR 1260)
15	PERCENT MOISTURE

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63660 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-04
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 0955 STOP: 00/00/00
D. NUMBER: CB80

UG/KG	ANALYTICAL RESULTS
2.0U	ALPHA-BHC
2.0U	BETA-BHC
2.0U	DELTA-BHC
2.0U	GAMMA-BHC (LINDANE)
2.0U	HEPTACHLOR
2.0U	ALDRIN
2.0U	HEPTACHLOR EPOXIDE
2.0U	ENDOSULFAN I (ALPHA)
3.9U	DIELDRIN
3.9U	4,4'-DDE (P,P'-DDE)
3.9U	ENDRIN
3.9U	ENDOSULFAN II (BETA)
3.9U	4,4'-DDD (P,P'-DDD)
3.9U	ENDOSULFAN SULFATE
3.9U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
20U	METHOXYCHLOR
3.9U	ENDRIN KETONE
3.9U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
9.4	GAMMA-CHLORDANE /2
3.8	ALPHA-CHLORDANE /2
200U	TOXAPHENE
39U	PCB-1016 (AROCLOR 1016)
79U	PCB-1221 (AROCLOR 1221)
39U	PCB-1232 (AROCLOR 1232)
39U	PCB-1242 (AROCLOR 1242)
39U	PCB-1248 (AROCLOR 1248)
39U	PCB-1254 (AROCLOR 1254)
39U	PCB-1260 (AROCLOR 1260)
15	PERCENT MOISTURE

REMARKS

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63661 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-03
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1010 STOP: 00/00/00
D. NUMBER: CB81

UG/KG	ANALYTICAL RESULTS
2.0U	ALPHA-BHC
2.0U	BETA-BHC
2.0U	DELTA-BHC
2.0U	GAMMA-BHC (LINDANE)
2.0U	HEPTACHLOR
2.0U	ALDRIN
2.0U	HEPTACHLOR EPOXIDE
2.0U	ENDOSULFAN I (ALPHA)
3.8U	DIELDRIN
3.8U	4,4'-DDE (P,P'-DDE)
3.8U	ENDRIN
3.8U	ENDOSULFAN II (BETA)
3.8U	4,4'-DDD (P,P'-DDD)
3.8U	ENDOSULFAN SULFATE
3.8U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
20U	METHOXYCHLOR
3.8U	ENDRIN KETONE
3.8U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
2.0U	GAMMA-CHLORDANE /2
2.0U	ALPHA-CHLORDANE /2
200U	TOXAPHENE
38U	PCB-1016 (AROCLOR 1016)
78U	PCB-1221 (AROCLOR 1221)
38U	PCB-1232 (AROCLOR 1232)
38U	PCB-1242 (AROCLOR 1242)
38U	PCB-1248 (AROCLOR 1248)
78	PCB-1254 (AROCLOR 1254)
38U	PCB-1260 (AROCLOR 1260)
14	PERCENT MOISTURE

REMARKS

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63662 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-07
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1055 STOP: 00/00/00
D. NUMBER: CB82

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
2.3U	ALPHA-BHC	23U	METHOXYCHLOR
2.3U	BETA-BHC	4.4U	ENDRIN KETONE
2.3U	DELTA-BHC	4.4U	ENDRIN ALDEHYDE
2.3U	GAMMA-BHC (LINDANE)	--	CHLORDANE (TECH. MIXTURE) /1
2.3U	HEPTACHLOR	6.2	GAMMA-CHLORDANE /2
2.3U	ALDRIN	5.9	ALPHA-CHLORDANE /2
2.9	HEPTACHLOR EPOXIDE	230U	TOXAPHENE
2.3U	ENDOSULFAN I (ALPHA)	44U	PCB-1016 (AROCLOR 1016)
4.4U	DIELDRIN	89U	PCB-1221 (AROCLOR 1221)
4.4U	4,4'-DDE (P,P'-DDE)	44U	PCB-1232 (AROCLOR 1232)
4.4U	ENDRIN	44U	PCB-1242 (AROCLOR 1242)
4.4U	ENDOSULFAN II (BETA)	44U	PCB-1248 (AROCLOR 1248)
4.4U	4,4'-DDD (P,P'-DDD)	44U	PCB-1254 (AROCLOR 1254)
4.4U	ENDOSULFAN SULFATE	44U	PCB-1260 (AROCLOR 1260)
4.4U	4,4'-DDT (P,P'-DDT)	25	PERCENT MOISTURE

REMARKS

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63663 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-02
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1250 STOP: 00/00/00
D. NUMBER: CB84

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
2.4U	ALPHA-BHC	24U	METHOXYCHLOR
2.4U	BETA-BHC	4.7U	ENDRIN KETONE
2.4U	DELTA-BHC	4.7U	ENDRIN ALDEHYDE
2.4U	GAMMA-BHC (LINDANE)	--	CHLORDANE (TECH. MIXTURE) /1
2.4U	HEPTACHLOR	2.4U	GAMMA-CHLORDANE /2
2.4U	ALDRIN	2.4U	ALPHA-CHLORDANE /2
2.4U	HEPTACHLOR EPOXIDE	240U	TOXAPHENE
2.4U	ENDOSULFAN I (ALPHA)	47U	PCB-1016 (AROCLOR 1016)
4.7U	DIELDRIN	96U	PCB-1221 (AROCLOR 1221)
4.7U	4,4'-DDE (P,P'-DDE)	47U	PCB-1232 (AROCLOR 1232)
4.7U	ENDRIN	47U	PCB-1242 (AROCLOR 1242)
4.7U	ENDOSULFAN II (BETA)	47U	PCB-1248 (AROCLOR 1248)
4.7U	4,4'-DDD (P,P'-DDD)	47U	PCB-1254 (AROCLOR 1254)
4.7U	ENDOSULFAN SULFATE	47U	PCB-1260 (AROCLOR 1260)
4.7U	4,4'-DDT (P,P'-DDT)	30	PERCENT MOISTURE

REMARKS

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63664 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-03
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1300 STOP: 00/00/00
D. NUMBER: CB83

UG/KG	ANALYTICAL RESULTS
2.3U	ALPHA-BHC
2.3U	BETA-BHC
2.3U	DELTA-BHC
2.3U	GAMMA-BHC (LINDANE)
2.3U	HEPTACHLOR
2.3U	ALDRIN
2.3U	HEPTACHLOR EPOXIDE
2.3U	ENDOSULFAN I (ALPHA)
4.4U	DIELDRIN
4.4U	4,4'-DDE (P,P'-DDE)
4.4U	ENDRIN
4.4U	ENDOSULFAN II (BETA)
4.4U	4,4'-DDD (P,P'-DDD)
4.4U	ENDOSULFAN SULFATE
4.4U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
23U	METHOXYCHLOR
4.4U	ENDRIN KETONE
4.4U	ENDRIN ALDEHYDE
--	CHLORDANE (TECH. MIXTURE) /1
7.4	GAMMA-CHLORDANE /2
2.7	ALPHA-CHLORDANE /2
230U	TOXAPHENE
44U	PCB-1016 (AROCLOR 1016)
89U	PCB-1221 (AROCLOR 1221)
44U	PCB-1232 (AROCLOR 1232)
44U	PCB-1242 (AROCLOR 1242)
44U	PCB-1248 (AROCLOR 1248)
44U	PCB-1254 (AROCLOR 1254)
44U	PCB-1260 (AROCLOR 1260)
25	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*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.
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*C-CONFIRMED BY GCMS 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63665 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-04
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1340 STOP: 00/00/00
D. NUMBER: CB85

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
3.1U	ALPHA-BHC	31U	METHOXYCHLOR
3.1U	BETA-BHC	6.0U	ENDRIN KETONE
3.1U	DELTA-BHC	6.0U	ENDRIN ALDEHYDE
3.1U	GAMMA-BHC (LINDANE)	--	CHLORDANE (TECH. MIXTURE) /1
3.1U	HEPTACHLOR	3.1U	GAMMA-CHLORDANE /2
3.1U	ALDRIN	3.1U	ALPHA-CHLORDANE /2
3.1U	HEPTACHLOR EPOXIDE	310U	TOXAPHENE
3.1U	ENDOSULFAN I (ALPHA)	60U	PCB-1016 (AROCLOR 1016)
6.0U	DIELDRIN	120U	PCB-1221 (AROCLOR 1221)
6.0U	4,4'-DDE (P,P'-DDE)	60U	PCB-1232 (AROCLOR 1232)
6.0U	ENDRIN	60U	PCB-1242 (AROCLOR 1242)
6.0U	ENDOSULFAN II (BETA)	60U	PCB-1248 (AROCLOR 1248)
6.0U	4,4'-DDD (P,P'-DDD)	60U	PCB-1254 (AROCLOR 1254)
6.0U	ENDOSULFAN SULFATE	60U	PCB-1260 (AROCLOR 1260)
6.0U	4,4'-DDT (P,P'-DDT)	45	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

*****MEMORANDUM******

DATE: 01/10/92

SUBJECT: Results of Extractable Organic Analysis;
92-0109 LAFAYETTE SHEET META
LAFAYETTE GA
CASE NO: 17446

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: JOE SLYKERMAN

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

CC

SISB/SAS
RECEIVED
JAN 16 1992
EPA - REGION IV

ORGANIC DATA QUALIFIER REPORT

Case Number 17446 Project Number 92-0109 SAS Number
Site ID. Lafayette Sheet Metal, Lafayette, GA.

Affected Samples	Compound or Fraction	Flag Used	Reason
Volatiles			
63656,63657	toluene	J	<quantitation limit
63660	carbon disulfide	J	<quantitation limit
Extractables			
63654,63660	all positives	J	<quantitation limit
Pesticides			
none			

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63652 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-01

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1215 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB71

UG/KG	ANALYTICAL RESULTS
380U	PHENOL
380U	BIS(2-CHLOROETHYL) ETHER
380U	2-CHLOROPHENOL
380U	1,3-DICHLOROBENZENE
380U	1,4-DICHLOROBENZENE
380U	1,2-DICHLOROBENZENE
380U	2-METHYLPHENOL
380U	2,2'-CHLOROISOPROPYLETHER
380U	(3-AND/OR 4-)METHYLPHENOL
380U	N-NITROSODI-N-PROPYLAMINE
380U	HEXACHLOROETHANE
380U	NITROBENZENE
380U	ISOPHORONE
380U	2-NITROPHENOL
380U	2,4-DIMETHYLPHENOL
380U	BIS(2-CHLOROETHOXY) METHANE
380U	2,4-DICHLOROPHENOL
380U	1,2,4-TRICHLOROBENZENE
380U	NAPHTHALENE
380U	4-CHLOROANILINE
380U	HEXACHLOROBUTADIENE
380U	4-CHLORO-3-METHYLPHENOL
380U	2-METHYLNAPHTHALENE
380U	HEXACHLOROCYCLOPENTADIENE (HCCP)
380U	2,4,6-TRICHLOROPHENOL
920U	2,4,5-TRICHLOROPHENOL
380U	2-CHLORONAPHTHALENE
920U	2-NITROANILINE
380U	DIMETHYL PHTHALATE
380U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
920U	3-NITROANILINE
380U	ACENAPHTHENE
920U	2,4-DINITROPHENOL
920U	4-NITROPHENOL
380U	DIBENZOFURAN
380U	2,4-DINITROTOLUENE
380U	DIETHYL PHTHALATE
380U	4-CHLOROPHENYL PHENYL ETHER
380U	FLUORENE
920U	4-NITROANILINE
920U	2-METHYL-4,6-DINITROPHENOL
380U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
380U	4-BROMOPHENYL PHENYL ETHER
380U	HEXACHLOROBENZENE (HCB)
920U	PENTACHLOROPHENOL
380U	PHENANTHRENE
380U	ANTHRACENE
380U	CARBAZOLE
380U	DI-N-BUTYLPHTHALATE
380U	FLUORANTHENE
380U	PYRENE
380U	BENZYL BUTYL PHTHALATE
380U	3,3'-DICHLOROBENZIDINE
380U	BENZO(A)ANTHRACENE
380U	CHRYSENE
380U	BIS(2-ETHYLHEXYL) PHTHALATE
380U	DI-N-OCTYLPHTHALATE
380U	BENZO(B AND/OR K)FLUORANTHENE
380U	BENZO-A-PYRENE
380U	DIBENZO(A,H)ANTHRACENE
380U	BENZO(GHI)PERYLENE
13	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63653 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-01

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1240 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB73

UG/KG	ANALYTICAL RESULTS
400U	PHENOL
400U	BIS(2-CHLOROETHYL) ETHER
400U	2-CHLOROPHENOL
400U	1,3-DICHLOROBENZENE
400U	1,4-DICHLOROBENZENE
400U	1,2-DICHLOROBENZENE
400U	2-METHYLPHENOL
400U	2,2'-CHLOROISOPROPYLETHER
400U	(3-AND/OR 4-)METHYLPHENOL
400U	N-NITROSODI-N-PROPYLAMINE
400U	HEXACHLOROETHANE
400U	NITROBENZENE
400U	ISOPHORONE
400U	2-NITROPHENOL
400U	2,4-DIMETHYLPHENOL
400U	BIS(2-CHLOROETHOXY) METHANE
400U	2,4-DICHLOROPHENOL
400U	1,2,4-TRICHLOROBENZENE
400U	NAPHTHALENE
400U	4-CHLOROANILINE
400U	HEXACHLOROBUTADIENE
400U	4-CHLORO-3-METHYLPHENOL
400U	2-METHYLNAPHTHALENE
400U	HEXACHLOROCYCLOPENTADIENE (HCCP)
400U	2,4,6-TRICHLOROPHENOL
980U	2,4,5-TRICHLOROPHENOL
400U	2-CHLORONAPHTHALENE
980U	2-NITROANILINE
400U	DIMETHYL PHTHALATE
400U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
980U	3-NITROANILINE
400U	ACENAPHTHENE
980U	2,4-DINITROPHENOL
980U	4-NITROPHENOL
400U	DIBENZOFURAN
400U	2,4-DINITROTOLUENE
400U	DIETHYL PHTHALATE
400U	4-CHLOROPHENYL PHENYL ETHER
400U	FLUORENE
980U	4-NITROANILINE
980U	2-METHYL-4,6-DINITROPHENOL
400U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
400U	4-BROMOPHENYL PHENYL ETHER
400U	HEXACHLOROBENZENE (HCB)
980U	PENTACHLOROPHENOL
400U	PHENANTHRENE
400U	ANTHRACENE
400U	CARBAZOLE
400U	DI-N-BUTYLPHTHALATE
400U	FLUORANTHENE
400U	PYRENE
400U	BENZYL BUTYL PHTHALATE
400U	3,3'-DICHLOROBENZIDINE
400U	BENZO(A)ANTHRACENE
400U	CHRYSENE
400U	BIS(2-ETHYLHEXYL) PHTHALATE
400U	DI-N-OCTYLPHTHALATE
400U	BENZO(B AND/OR K)FLUORANTHENE
400U	BENZO-A-PYRENE
400U	DIBENZO(A,H)ANTHRACENE
400U	BENZO(GHI)PERYLENE
18	PERCENT MOISTURE

REMARKS

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63654 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-01

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1430 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB74

UG/KG	ANALYTICAL RESULTS
500U	PHENOL
500U	BIS(2-CHLOROETHYL) ETHER
500U	2-CHLOROPHENOL
500U	1,3-DICHLOROBENZENE
500U	1,4-DICHLOROBENZENE
500U	1,2-DICHLOROBENZENE
500U	2-METHYLPHENOL
500U	2,2'-CHLOROISOPROPYLETHER
500U	(3-AND/OR 4-)METHYLPHENOL
500U	N-NITROSODI-N-PROPYLAMINE
500U	HEXACHLOROETHANE
500U	NITROBENZENE
500U	ISOPHORONE
500U	2-NITROPHENOL
500U	2,4-DIMETHYLPHENOL
500U	BIS(2-CHLOROETHOXY) METHANE
500U	2,4-DICHLOROPHENOL
500U	1,2,4-TRICHLOROBENZENE
500U	NAPHTHALENE
500U	4-CHLOROANILINE
500U	HEXACHLOROBUTADIENE
500U	4-CHLORO-3-METHYLPHENOL
500U	2-METHYLNAPHTHALENE
500U	HEXACHLOROCYCLOPENTADIENE (HCCP)
500U	2,4,6-TRICHLOROPHENOL
1200U	2,4,5-TRICHLOROPHENOL
500U	2-CHLORONAPHTHALENE
1200U	2-NITROANILINE
500U	DIMETHYL PHTHALATE
500U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
1200U	3-NITROANILINE
500U	ACENAPHTHENE
1200U	2,4-DINITROPHENOL
1200U	4-NITROPHENOL
500U	DIBENZOFURAN
500U	2,4-DINITROTOLUENE
500U	DIETHYL PHTHALATE
500U	4-CHLOROPHENYL PHENYL ETHER
500U	FLUORENE
1200U	4-NITROANILINE
1200U	2-METHYL-4,6-DINITROPHENOL
500U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
500U	4-BROMOPHENYL PHENYL ETHER
500U	HEXACHLOROBENZENE (HCB)
1200U	PENTACHLOROPHENOL
500U	PHENANTHRENE
500U	ANTHRACENE
500U	CARBAZOLE
500U	DI-N-BUTYLPHTHALATE
58J	FLUORANTHENE
500U	PYRENE
500U	BENZYL BUTYL PHTHALATE
500U	3,3'-DICHLOROBENZIDINE
500U	BENZO(A)ANTHRACENE
500U	CHRYSENE
500U	BIS(2-ETHYLHEXYL) PHTHALATE
500U	DI-N-OCTYLPHTHALATE
500U	BENZO(B AND/OR K)FLUORANTHENE
500U	BENZO-A-PYRENE
500U	DIBENZO(A,H)ANTHRACENE
500U	BENZO(GHI)PERYLENE
34	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63655 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-05

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1505 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB75

UG/KG	ANALYTICAL RESULTS
400U	PHENOL
400U	BIS(2-CHLOROETHYL) ETHER
400U	2-CHLOROPHENOL
400U	1,3-DICHLOROBENZENE
400U	1,4-DICHLOROBENZENE
400U	1,2-DICHLOROBENZENE
400U	2-METHYLPHENOL
400U	2,2'-CHLOROISOPROPYLETHER
400U	(3-AND/OR 4-)METHYLPHENOL
400U	N-NITROSODI-N-PROPYLAMINE
400U	HEXACHLOROETHANE
400U	NITROBENZENE
400U	ISOPHORONE
400U	2-NITROPHENOL
400U	2,4-DIMETHYLPHENOL
400U	BIS(2-CHLOROETHOXY) METHANE
400U	2,4-DICHLOROPHENOL
400U	1,2,4-TRICHLOROBENZENE
400U	NAPHTHALENE
400U	4-CHLOROANILINE
400U	HEXACHLOROBUTADIENE
400U	4-CHLORO-3-METHYLPHENOL
400U	2-METHYLNAPHTHALENE
400U	HEXACHLOROCYCLOPENTADIENE (HCCP)
400U	2,4,6-TRICHLOROPHENOL
980U	2,4,5-TRICHLOROPHENOL
400U	2-CHLORONAPHTHALENE
980U	2-NITROANILINE
400U	DIMETHYL PHTHALATE
400U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
980U	3-NITROANILINE
400U	ACENAPHTHENE
980U	2,4-DINITROPHENOL
980U	4-NITROPHENOL
400U	DIBENZOFURAN
400U	2,4-DINITROTOLUENE
400U	DIETHYL PHTHALATE
400U	4-CHLOROPHENYL PHENYL ETHER
400U	FLUORENE
980U	4-NITROANILINE
980U	2-METHYL-4,6-DINITROPHENOL
400U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
400U	4-BROMOPHENYL PHENYL ETHER
400U	HEXACHLOROBENZENE (HCB)
980U	PENTACHLOROPHENOL
400U	PHENANTHRENE
400U	ANTHRACENE
400U	CARBAZOLE
400U	DI-N-BUTYLPHTHALATE
400U	FLUORANTHENE
400U	PYRENE
870	BENZYL BUTYL PHTHALATE
400U	3,3'-DICHLOROBENZIDINE
400U	BENZO(A)ANTHRACENE
400U	CHRYSENE
400U	BIS(2-ETHYLHEXYL) PHTHALATE
400U	DI-N-OCTYLPHTHALATE
400U	BENZO(B AND/OR K)FLUORANTHENE
400U	BENZO-A-PYRENE
400U	DIBENZO(A,H)ANTHRACENE
400U	BENZO(GHI)PERYLENE
18	PERCENT MOISTURE

REMARKS

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63656 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-06

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1525 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB76

UG/KG	ANALYTICAL RESULTS
390U	PHENOL
390U	BIS(2-CHLOROETHYL) ETHER
390U	2-CHLOROPHENOL
390U	1,3-DICHLOROBENZENE
390U	1,4-DICHLOROBENZENE
390U	1,2-DICHLOROBENZENE
390U	2-METHYLPHENOL
390U	2,2'-CHLOROISOPROPYLETHER
390U	(3-AND/OR 4-)METHYLPHENOL
390U	N-NITROSODI-N-PROPYLAMINE
390U	HEXACHLOROETHANE
390U	NITROBENZENE
390U	ISOPHORONE
390U	2-NITROPHENOL
390U	2,4-DIMETHYLPHENOL
390U	BIS(2-CHLOROETHOXY) METHANE
390U	2,4-DICHLOROPHENOL
390U	1,2,4-TRICHLOROBENZENE
390U	NAPHTHALENE
390U	4-CHLOROANILINE
390U	HEXACHLOROBUTADIENE
390U	4-CHLORO-3-METHYLPHENOL
390U	2-METHYLNAPHTHALENE
390U	HEXACHLOROCYCLOPENTADIENE (HCCP)
390U	2,4,6-TRICHLOROPHENOL
950U	2,4,5-TRICHLOROPHENOL
390U	2-CHLORONAPHTHALENE
950U	2-NITROANILINE
390U	DIMETHYL PHTHALATE
390U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
950U	3-NITROANILINE
390U	ACENAPHTHENE
950U	2,4-DINITROPHENOL
950U	4-NITROPHENOL
390U	DIBENZOFURAN
390U	2,4-DINITROTOLUENE
390U	DIETHYL PHTHALATE
390U	4-CHLOROPHENYL PHENYL ETHER
390U	FLUORENE
950U	4-NITROANILINE
950U	2-METHYL-4,6-DINITROPHENOL
390U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
390U	4-BROMOPHENYL PHENYL ETHER
390U	HEXACHLOROBENZENE (HCB)
950U	PENTACHLOROPHENOL
390U	PHENANTHRENE
390U	ANTHRACENE
390U	CARBAZOLE
390U	DI-N-BUTYLPHTHALATE
390U	FLUORANTHENE
390U	PYRENE
390U	BENZYL BUTYL PHTHALATE
390U	3,3'-DICHLOROBENZIDINE
390U	BENZO(A)ANTHRACENE
390U	CHRYSENE
390U	BIS(2-ETHYLHEXYL) PHTHALATE
390U	DI-N-OCTYLPHTHALATE
390U	BENZO(B AND/OR K)FLUORANTHENE
390U	BENZO A PYRENE
390U	DIBENZO(A,H)ANTHRACENE
390U	BENZO(GHI)PERYLENE
16	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63657 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-06

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1540 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB77

UG/KG	ANALYTICAL RESULTS
380U	PHENOL
380U	BIS(2-CHLOROETHYL) ETHER
380U	2-CHLOROPHENOL
380U	1,3-DICHLOROBENZENE
380U	1,4-DICHLOROBENZENE
380U	1,2-DICHLOROBENZENE
380U	2-METHYLPHENOL
380U	2,2'-CHLOROISOPROPYLETHER
380U	(3-AND/OR 4-)METHYLPHENOL
380U	N-NITROSODI-N-PROPYLAMINE
380U	HEXACHLOROETHANE
380U	NITROBENZENE
380U	ISOPHORONE
380U	2-NITROPHENOL
380U	2,4-DIMETHYLPHENOL
380U	BIS(2-CHLOROETHOXY) METHANE
380U	2,4-DICHLOROPHENOL
380U	1,2,4-TRICHLOROBENZENE
380U	NAPHTHALENE
380U	4-CHLOROANILINE
380U	HEXACHLOROBUTADIENE
380U	4-CHLORO-3-METHYLPHENOL
380U	2-METHYLNAPHTHALENE
380U	HEXACHLOROCYCLOPENTADIENE (HCCP)
380U	2,4,6-TRICHLOROPHENOL
930U	2,4,5-TRICHLOROPHENOL
380U	2-CHLORONAPHTHALENE
930U	2-NITROANILINE
380U	DIMETHYL PHTHALATE
380U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
930U	3-NITROANILINE
380U	ACENAPHTHENE
930U	2,4-DINITROPHENOL
930U	4-NITROPHENOL
380U	DIBENZOFURAN
380U	2,4-DINITROTOLUENE
380U	DIETHYL PHTHALATE
380U	4-CHLOROPHENYL PHENYL ETHER
380U	FLUORENE
930U	4-NITROANILINE
930U	2-METHYL-4,6-DINITROPHENOL
380U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
380U	4-BROMOPHENYL PHENYL ETHER
380U	HEXACHLOROBENZENE (HCB)
930U	PENTACHLOROPHENOL
380U	PHENANTHRENE
380U	ANTHRACENE
380U	CARBAZOLE
380U	DI-N-BUTYLPHTHALATE
380U	FLUORANTHENE
380U	PYRENE
380U	BENZYL BUTYL PHTHALATE
380U	3,3'-DICHLOROBENZIDINE
380U	BENZO(A)ANTHRACENE
380U	CHRYSENE
380U	BIS(2-ETHYLHEXYL) PHTHALATE
380U	DI-N-OCTYLPHTHALATE
380U	BENZO(B AND/OR K)FLUORANTHENE
380U	BENZO-A-PYRENE
380U	DIBENZO(A,H)ANTHRACENE
380U	BENZO(GHI)PERYLENE
14	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 01/09/92

PROJECT NO. 92-0109 SAMPLE NO. 63658 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-02

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1610 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB78

UG/KG	ANALYTICAL RESULTS
410U	PHENOL
410U	BIS(2-CHLOROETHYL) ETHER
410U	2-CHLOROPHENOL
410U	1,3-DICHLOROBENZENE
410U	1,4-DICHLOROBENZENE
410U	1,2-DICHLOROBENZENE
410U	2-METHYLPHENOL
410U	2,2'-CHLOROISOPROPYLETHER
410U	(3-AND/OR 4-)METHYLPHENOL
410U	N-NITROSODI-N-PROPYLAMINE
410U	HEXACHLOROETHANE
410U	NITROBENZENE
410U	ISOPHORONE
410U	2-NITROPHENOL
410U	2,4-DIMETHYLPHENOL
410U	BIS(2-CHLOROETHOXY) METHANE
410U	2,4-DICHLOROPHENOL
410U	1,2,4-TRICHLOROBENZENE
410U	NAPHTHALENE
410U	4-CHLOROANILINE
410U	HEXACHLOROBUTADIENE
410U	4-CHLORO-3-METHYLPHENOL
410U	2-METHYLNAPHTHALENE
410U	HEXACHLOROCYCLOPENTADIENE (HCCP)
410U	2,4,6-TRICHLOROPHENOL
990U	2,4,5-TRICHLOROPHENOL
410U	2-CHLORONAPHTHALENE
990U	2-NITROANILINE
410U	DIMETHYL PHTHALATE
410U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
990U	3-NITROANILINE
410U	ACENAPHTHENE
990U	2,4-DINITROPHENOL
990U	4-NITROPHENOL
410U	DIBENZOFURAN
410U	2,4-DINITROTOLUENE
410U	DIETHYL PHTHALATE
410U	4-CHLOROPHENYL PHENYL ETHER
410U	FLUORENE
990U	4-NITROANILINE
990U	2-METHYL-4,6-DINITROPHENOL
410U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
410U	4-BROMOPHENYL PHENYL ETHER
410U	HEXACHLOROBENZENE (HCB)
990U	PENTACHLOROPHENOL
410U	PHENANTHRENE
410U	ANTHRACENE
410U	CARBAZOLE
410U	DI-N-BUTYLPHTHALATE
410U	FLUORANTHENE
410U	PYRENE
410U	BENZYL BUTYL PHTHALATE
410U	3,3'-DICHLOROBENZIDINE
410U	BENZO(A)ANTHRACENE
410U	CHRYSENE
410U	BIS(2-ETHYLHEXYL) PHTHALATE
410U	DI-N-OCTYLPHTHALATE
410U	BENZO(B AND/OR K)FLUORANTHENE
410U	BENZO-A-PYRENE
410U	DIBENZO(A,H)ANTHRACENE
410U	BENZO(GHI)PERYLENE
19	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 01/09/92

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** PROJECT NO. 92-0109   SAMPLE NO. 63659  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE          **
** SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE            ST: GA              **
** STATION ID: SB-02                                                COLLECTION START: 11/18/91  1625   STOP: 00/00/00 **
**                                                                                                                  **
** CASE NO.: 17446                          SAS NO.:                 D  NO.: CB79                                  **
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UG/KG	ANALYTICAL RESULTS
390U	PHENOL
390U	BIS(2-CHLOROETHYL) ETHER
390U	2-CHLOROPHENOL
390U	1,3-DICHLOROBENZENE
390U	1,4-DICHLOROBENZENE
390U	1,2-DICHLOROBENZENE
390U	2-METHYLPHENOL
390U	2,2'-CHLOROISOPROPYLETHER
390U	(3-AND/OR 4-)METHYLPHENOL
390U	N-NITROSODI-N-PROPYLAMINE
390U	HEXACHLOROETHANE
390U	NITROBENZENE
390U	ISOPHORONE
390U	2-NITROPHENOL
390U	2,4-DIMETHYLPHENOL
390U	BIS(2-CHLOROETHOXY) METHANE
390U	2,4-DICHLOROPHENOL
390U	1,2,4-TRICHLOROBENZENE
390U	NAPHTHALENE
390U	4-CHLOROANILINE
390U	HEXACHLOROBUTADIENE
390U	4-CHLORO-3-METHYLPHENOL
390U	2-METHYLNAPHTHALENE
390U	HEXACHLOROCYCLOPENTADIENE (HCCP)
390U	2,4,6-TRICHLOROPHENOL
940U	2,4,5-TRICHLOROPHENOL
390U	2-CHLORONAPHTHALENE
940U	2-NITROANILINE
390U	DIMETHYL PHTHALATE
390U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
940U	3-NITROANILINE
390U	ACENAPHTHENE
940U	2,4-DINITROPHENOL
940U	4-NITROPHENOL
390U	DIBENZOFURAN
390U	2,4-DINITROTOLUENE
390U	DIETHYL PHTHALATE
390U	4-CHLOROPHENYL PHENYL ETHER
390U	FLUORENE
940U	4-NITROANILINE
940U	2-METHYL-4,6-DINITROPHENOL
390U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
390U	4-BROMOPHENYL PHENYL ETHER
390U	HEXACHLOROBENZENE (HCB)
940U	PENTACHLOROPHENOL
390U	PHENANTHRENE
390U	ANTHRACENE
390U	CARBAZOLE
390U	DI-N-BUTYLPHTHALATE
390U	FLUORANTHENE
390U	PYRENE
390U	BENZYL BUTYL PHTHALATE
390U	3,3'-DICHLOROBENZIDINE
390U	BENZO(A)ANTHRACENE
390U	CHRYSENE
390U	BIS(2-ETHYLHEXYL) PHTHALATE
390U	DI-N-OCTYLPHTHALATE
390U	BENZO(B AND/OR K)FLUORANTHENE
390U	BENZO-A-PYRENE
390U	DIBENZO(A,H)ANTHRACENE
390U	BENZO(GHI)PERYLENE
15	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD. ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63660 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-04

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 0955 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB80

UG/KG	ANALYTICAL RESULTS
390U	PHENOL
390U	BIS(2-CHLOROETHYL) ETHER
390U	2-CHLOROPHENOL
390U	1,3-DICHLOROBENZENE
390U	1,4-DICHLOROBENZENE
390U	1,2-DICHLOROBENZENE
390U	2-METHYLPHENOL
390U	2,2'-CHLOROISOPROPYLETHER
390U	(3-AND/OR 4-)METHYLPHENOL
390U	N-NITROSODI-N-PROPYLAMINE
390U	HEXACHLOROETHANE
390U	NITROBENZENE
390U	ISOPHORONE
390U	2-NITROPHENOL
390U	2,4-DIMETHYLPHENOL
390U	BIS(2-CHLOROETHOXY) METHANE
390U	2,4-DICHLOROPHENOL
390U	1,2,4-TRICHLOROBENZENE
390U	NAPHTHALENE
390U	4-CHLOROANILINE
390U	HEXACHLOROBUTADIENE
390U	4-CHLORO-3-METHYLPHENOL
390U	2-METHYLNAPHTHALENE
390U	HEXACHLOROCYCLOPENTADIENE (HCCP)
390U	2,4,6-TRICHLOROPHENOL
940U	2,4,5-TRICHLOROPHENOL
390U	2-CHLORONAPHTHALENE
940U	2-NITROANILINE
390U	DIMETHYL PHTHALATE
390U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
940U	3-NITROANILINE
390U	ACENAPHTHENE
940U	2,4-DINITROPHENOL
940U	4-NITROPHENOL
390U	DIBENZOFURAN
390U	2,4-DINITROTOLUENE
390U	DIETHYL PHTHALATE
390U	4-CHLOROPHENYL PHENYL ETHER
390U	FLUORENE
940U	4-NITROANILINE
940U	2-METHYL-4,6-DINITROPHENOL
390U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
390U	4-BROMOPHENYL PHENYL ETHER
390U	HEXACHLOROBENZENE (HCB)
940U	PENTACHLOROPHENOL
390U	PHENANTHRENE
390U	ANTHRACENE
390U	CARBAZOLE
390U	DI-N-BUTYLPHTHALATE
390U	FLUORANTHENE
390U	PYRENE
150J	BENZYL BUTYL PHTHALATE
390U	3,3'-DICHLOROBENZIDINE
390U	BENZO(A)ANTHRACENE
390U	CHRYSENE
390U	BIS(2-ETHYLHEXYL) PHTHALATE
390U	DI-N-OCTYLPHTHALATE
390U	BENZO(B AND/OR K)FLUORANTHENE
390U	BENZO-A-PYRENE
390U	DIBENZO(A,H)ANTHRACENE
390U	BENZO(GHI)PERYLENE
15	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA. 01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63661 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA
STATION ID: SS-03 COLLECTION START: 11/19/91 1010 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB81

UG/KG	ANALYTICAL RESULTS
380U	PHENOL
380U	BIS(2-CHLOROETHYL) ETHER
380U	2-CHLOROPHENOL
380U	1,3-DICHLOROBENZENE
380U	1,4-DICHLOROBENZENE
380U	1,2-DICHLOROBENZENE
380U	2-METHYLPHENOL
380U	2,2'-CHLOROISOPROPYLETHER
380U	(3-AND/OR 4-)METHYLPHENOL
380U	N-NITROSODI-N-PROPYLAMINE
380U	HEXACHLOROETHANE
380U	NITROBENZENE
380U	ISOPHORONE
380U	2-NITROPHENOL
380U	2,4-DIMETHYLPHENOL
380U	BIS(2-CHLOROETHOXY) METHANE
380U	2,4-DICHLOROPHENOL
380U	1,2,4-TRICHLOROBENZENE
380U	NAPHTHALENE
380U	4-CHLOROANILINE
380U	HEXACHLOROBUTADIENE
380U	4-CHLORO-3-METHYLPHENOL
380U	2-METHYLNAPHTHALENE
380U	HEXACHLOROCYCLOPENTADIENE (HCCP)
380U	2,4,6-TRICHLOROPHENOL
930U	2,4,5-TRICHLOROPHENOL
380U	2-CHLORONAPHTHALENE
930U	2-NITROANILINE
380U	DIMETHYL PHTHALATE
[illegible]	[illegible]
380U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
930U	3-NITROANILINE
380U	ACENAPHTHENE
930U	2,4-DINITROPHENOL
930U	4-NITROPHENOL
380U	DIBENZOFURAN
380U	2,4-DINITROTOLUENE
380U	DIETHYL PHTHALATE
380U	4-CHLOROPHENYL PHENYL ETHER
380U	FLUORENE
930U	4-NITROANILINE
930U	2-METHYL-4,6-DINITROPHENOL
380U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
380U	4-BROMOPHENYL PHENYL ETHER
380U	HEXACHLOROBENZENE (HCB)
930U	PENTACHLOROPHENOL
380U	PHENANTHRENE
380U	ANTHRACENE
380U	CARBAZOLE
380U	DI-N-BUTYLPHTHALATE
380U	FLUORANTHENE
380U	PYRENE
380U	BENZYL BUTYL PHTHALATE
380U	3,3'-DICHLOROBENZIDINE
380U	BENZO(A)ANTHRACENE
380U	CHRYSENE
380U	BIS(2-ETHYLHEXYL) PHTHALATE
380U	DI-N-OCTYLPHTHALATE
380U	BENZO(B AND/OR K)FLUORANTHENE
380U	BENZO-A-PYRENE
[illegible]	[illegible]
380U	DIBENZO(A,H)ANTHRACENE
380U	BENZO(GHI)PERYLENE
14	PERCENT MOISTURE

REMARKS ***REMARKS***

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

*** ***
** PROJECT NO. 92-0109 SAMPLE NO. 63662 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SB-07 COLLECTION START: 11/19/91 1055 STOP: 00/00/00 **
** **
** CASE NO.: 17446 SAS NO.: D. NO.: CB82 **
*** ***

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
440U	PHENOL	1100U	3-NITROANILINE
440U	BIS(2-CHLOROETHYL) ETHER	440U	ACENAPHTHENE
440U	2-CHLOROPHENOL	1100U	2,4-DINITROPHENOL
440U	1,3-DICHLOROBENZENE	1100U	4-NITROPHENOL
440U	1,4-DICHLOROBENZENE	440U	DIBENZOFURAN
440U	1,2-DICHLOROBENZENE	440U	2,4-DINITROTOLUENE
440U	2-METHYLPHENOL	440U	DIETHYL PHTHALATE
440U	2,2'-CHLOROISOPROPYLETHER	440U	4-CHLOROPHENYL PHENYL ETHER
440U	(3-AND/OR 4-)METHYLPHENOL	440U	FLUORENE
440U	N-NITROSODI-N-PROPYLAMINE	1100U	4-NITROANILINE
440U	HEXACHLOROETHANE	1100U	2-METHYL-4,6-DINITROPHENOL
440U	NITROBENZENE	440U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
440U	ISOPHORONE	440U	4-BROMOPHENYL PHENYL ETHER
440U	2-NITROPHENOL	440U	HEXACHLOROBENZENE (HCB)
440U	2,4-DIMETHYLPHENOL	1100U	PENTACHLOROPHENOL
440U	BIS(2-CHLOROETHOXY) METHANE	440U	PHENANTHRENE
440U	2,4-DICHLOROPHENOL	440U	ANTHRACENE
440U	1,2,4-TRICHLOROBENZENE	440U	CARBAZOLE
440U	NAPHTHALENE	440U	DI-N-BUTYLPHTHALATE
440U	4-CHLOROANILINE	440U	FLUORANTHENE
440U	HEXACHLOROBUTADIENE	440U	PYRENE
440U	4-CHLORO-3-METHYLPHENOL	440U	BENZYL BUTYL PHTHALATE
440U	2-METHYLNAPHTHALENE	440U	3,3'-DICHLOROBENZIDINE
440U	HEXACHLOROCYCLOPENTADIENE (HCCP)	440U	BENZO(A)ANTHRACENE
440U	2,4,6-TRICHLOROPHENOL	440U	CHRYSENE
1100U	2,4,5-TRICHLOROPHENOL	440U	BIS(2-ETHYLHEXYL) PHTHALATE
440U	2-CHLORONAPHTHALENE	440U	DI-N-OCTYLPHTHALATE
1100U	2-NITROANILINE	440U	BENZO(B AND/OR K)FLUORANTHENE
440U	DIMETHYL PHTHALATE	440U	BENZO-A-PYRENE
[illegible]	[illegible]	[illegible]	[illegible]
440U	2,6-DINITROTOLUENE	440U	DIBENZO(A,H)ANTHRACENE
		440U	BENZO(GHI)PERYLENE
		25	PERCENT MOISTURE

REMARKS ***REMARKS***

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63663 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-02

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1250 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB84

UG/KG	ANALYTICAL RESULTS
470U	PHENOL
470U	BIS(2-CHLOROETHYL) ETHER
470U	2-CHLOROPHENOL
470U	1,3-DICHLOROBENZENE
470U	1,4-DICHLOROBENZENE
470U	1,2-DICHLOROBENZENE
470U	2-METHYLPHENOL
470U	2,2'-CHLOROISOPROPYLETHER
470U	(3-AND/OR 4-)METHYLPHENOL
470U	N-NITROSODI-N-PROPYLAMINE
470U	HEXACHLOROETHANE
470U	NITROBENZENE
470U	ISOPHORONE
470U	2-NITROPHENOL
470U	2,4-DIMETHYLPHENOL
470U	BIS(2-CHLOROETHOXY) METHANE
470U	2,4-DICHLOROPHENOL
470U	1,2,4-TRICHLOROBENZENE
470U	NAPHTHALENE
470U	4-CHLOROANILINE
470U	HEXACHLOROBUTADIENE
470U	4-CHLORO-3-METHYLPHENOL
470U	2-METHYLNAPHTHALENE
470U	HEXACHLOROCYCLOPENTADIENE (HCCP)
470U	2,4,6-TRICHLOROPHENOL
1100U	2,4,5-TRICHLOROPHENOL
470U	2-CHLORONAPHTHALENE
1100U	2-NITROANILINE
470U	DIMETHYL PHTHALATE
470U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
1100U	3-NITROANILINE
470U	ACENAPHTHENE
1100U	2,4-DINITROPHENOL
1100U	4-NITROPHENOL
470U	DIBENZOFURAN
470U	2,4-DINITROTOLUENE
470U	DIETHYL PHTHALATE
470U	4-CHLOROPHENYL PHENYL ETHER
470U	FLUORENE
1100U	4-NITROANILINE
1100U	2-METHYL-4,6-DINITROPHENOL
470U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
470U	4-BROMOPHENYL PHENYL ETHER
470U	HEXACHLOROBENZENE (HCB)
1100U	PENTACHLOROPHENOL
470U	PHENANTHRENE
470U	ANTHRACENE
470U	CARBAZOLE
470U	DI-N-BUTYLPHTHALATE
470U	FLUORANTHENE
470U	PYRENE
470U	BENZYL BUTYL PHTHALATE
470U	3,3'-DICHLOROBENZIDINE
470U	BENZO(A)ANTHRACENE
470U	CHRYSENE
470U	BIS(2-ETHYLHEXYL) PHTHALATE
470U	DI-N-OCTYLPHTHALATE
470U	BENZO(B AND/OR K)FLUORANTHENE
470U	BENZO-A-PYRENE
470U	DIBENZO(A,H)ANTHRACENE
470U	BENZO(GHI)PERYLENE
30	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD. ATHENS, GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63664 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-03

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1300 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB83

UG/KG	ANALYTICAL RESULTS
440U	PHENOL
440U	BIS(2-CHLOROETHYL) ETHER
440U	2-CHLOROPHENOL
440U	1,3-DICHLOROBENZENE
440U	1,4-DICHLOROBENZENE
440U	1,2-DICHLOROBENZENE
440U	2-METHYLPHENOL
440U	2,2'-CHLOROISOPROPYLETHER
440U	(3-AND/OR 4-)METHYLPHENOL
440U	N-NITROSODI-N-PROPYLAMINE
440U	HEXACHLOROETHANE
440U	NITROBENZENE
440U	ISOPHORONE
440U	2-NITROPHENOL
440U	2,4-DIMETHYLPHENOL
440U	BIS(2-CHLOROETHOXY) METHANE
440U	2,4-DICHLOROPHENOL
440U	1,2,4-TRICHLOROBENZENE
440U	NAPHTHALENE
440U	4-CHLOROANILINE
440U	HEXACHLOROBUTADIENE
440U	4-CHLORO-3-METHYLPHENOL
440U	2-METHYLNAPHTHALENE
440U	HEXACHLOROCYCLOPENTADIENE (HCCP)
440U	2,4,6-TRICHLOROPHENOL
1100U	2,4,5-TRICHLOROPHENOL
440U	2-CHLORONAPHTHALENE
1100U	2-NITROANILINE
440U	DIMETHYL PHTHALATE
440U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
1100U	3-NITROANILINE
440U	ACENAPHTHENE
1100U	2,4-DINITROPHENOL
1100U	4-NITROPHENOL
440U	DIBENZOFURAN
440U	2,4-DINITROTOLUENE
440U	DIETHYL PHTHALATE
440U	4-CHLOROPHENYL PHENYL ETHER
440U	FLUORENE
1100U	4-NITROANILINE
1100U	2-METHYL-4,6-DINITROPHENOL
440U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
440U	4-BROMOPHENYL PHENYL ETHER
440U	HEXACHLOROBENZENE (HCB)
1100U	PENTACHLOROPHENOL
440U	PHENANTHRENE
440U	ANTHRACENE
440U	CARBAZOLE
440U	DI-N-BUTYLPHTHALATE
440U	FLUORANTHENE
440U	PYRENE
440U	BENZYL BUTYL PHTHALATE
440U	3,3'-DICHLOROBENZIDINE
440U	BENZO(A)ANTHRACENE
440U	CHRYSENE
440U	BIS(2-ETHYLHEXYL) PHTHALATE
440U	DI-N-OCTYLPHTHALATE
440U	BENZO(B AND/OR K)FLUORANTHENE
440U	BENZO-A-PYRENE
440U	DIBENZO(A,H)ANTHRACENE
440U	BENZO(GHI)PERYLENE
25	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD. ATHENS. GA.

01/09/92

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63665 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-04

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1340 STOP: 00/00/00

CASE NO.: 17446 SAS NO.: D. NO.: CB85

UG/KG	ANALYTICAL RESULTS
600U	PHENOL
600U	BIS(2-CHLOROETHYL) ETHER
600U	2-CHLOROPHENOL
600U	1,3-DICHLOROBENZENE
600U	1,4-DICHLOROBENZENE
600U	1,2-DICHLOROBENZENE
600U	2-METHYLPHENOL
600U	2,2'-CHLOROISOPROPYLETHER
600U	(3-AND/OR 4-)METHYLPHENOL
600U	N-NITROSODI-N-PROPYLAMINE
600U	HEXACHLOROETHANE
600U	NITROBENZENE
600U	ISOPHORONE
600U	2-NITROPHENOL
600U	2,4-DIMETHYLPHENOL
600U	BIS(2-CHLOROETHOXY) METHANE
600U	2,4-DICHLOROPHENOL
600U	1,2,4-TRICHLOROBENZENE
600U	NAPHTHALENE
600U	4-CHLOROANILINE
600U	HEXACHLOROBUTADIENE
600U	4-CHLORO-3-METHYLPHENOL
600U	2-METHYLNAPHTHALENE
600U	HEXACHLOROCYCLOPENTADIENE (HCCP)
600U	2,4,6-TRICHLOROPHENOL
1500U	2,4,5-TRICHLOROPHENOL
600U	2-CHLORONAPHTHALENE
1500U	2-NITROANILINE
600U	DIMETHYL PHTHALATE
600U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
1500U	3-NITROANILINE
600U	ACENAPHTHENE
1500U	2,4-DINITROPHENOL
1500U	4-NITROPHENOL
600U	DIBENZOFURAN
600U	2,4-DINITROTOLUENE
600U	DIETHYL PHTHALATE
600U	4-CHLOROPHENYL PHENYL ETHER
600U	FLUORENE
1500U	4-NITROANILINE
1500U	2-METHYL-4,6-DINITROPHENOL
600U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
600U	4-BROMOPHENYL PHENYL ETHER
600U	HEXACHLOROBENZENE (HCB)
1500U	PENTACHLOROPHENOL
600U	PHENANTHRENE
600U	ANTHRACENE
600U	CARBAZOLE
600U	DI-N-BUTYLPHTHALATE
600U	FLUORANTHENE
600U	PYRENE
600U	BENZYL BUTYL PHTHALATE
600U	3,3'-DICHLOROBENZIDINE
600U	BENZO(A)ANTHRACENE
600U	CHRYSENE
600U	BIS(2-ETHYLHEXYL) PHTHALATE
600U	DI-N-OCTYLPHTHALATE
600U	BENZO(B AND/OR K)FLUORANTHENE
600U	BENZO-A-PYRENE
600U	DIBENZO(A,H)ANTHRACENE
600U	BENZO(GHI)PERYLENE
45	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 92-0109 SAMPLE NO. 63652 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SS-01 COLLECTION START: 11/18/91 1215 STOP: 00/00/00 **
** CASE NO.: 17446 SAS NO.: D. NO.: CB71 MD NO: CB71 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

400JN	HEXADECANOIC ACID
9000J	7 UNIDENTIFIED COMPOUNDS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63653 SAMPLE TYPE: SOIL	PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META	CITY: LAFAYETTE ST: GA
STATION ID: SB-01	COLLECTION START: 11/18/91 1240 STOP: 00/00/00
CASE NO.: 17446 SAS NO.:	D. NO.: CB73 MD NO: CB73

ANALYTICAL RESULTS UG/KG

200JN	HEXADECANOIC ACID

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 92-0109 SAMPLE NO. 63654 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SD-01 COLLECTION START: 11/18/91 1430 STOP: 00/00/00 **
** CASE.NO.: 17446 SAS NO.: D. NO.: CB74 MD NO: CB74 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

600JN	HEXADECANOIC ACID
4000J	3 UNIDENTIFIED COMPOUNDS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS -- DATA REPORT

*** ***
** PROJECT NO. 92-0109 SAMPLE NO. 63655 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SS-05 COLLECTION START: 11/18/91 1505 STOP: 00/00/00 **
** CASE NO.: 17446 SAS NO.: D. NO.: CB75 MD NO: CB75 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

400000J	9 UNIDENTIFIED COMPOUNDS
N	PETROLEUM PRODUCT

FOOTNOTES
*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.
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 92-0109 SAMPLE NO. 63656 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SS-06 COLLECTION START: 11/18/91 1525 STOP: 00/00/00 **
** CASE NO.: 17446 SAS NO.: D. NO.: CB76 MD NO: CB76 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

N	PETROLEUM PRODUCT
6000J	6 UNIDENTIFIED COMPOUNDS
500JN	HEXADECANOIC ACID

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63657  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                     **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE            ST: GA                          **
**   STATION ID: SB-06                                                COLLECTION START: 11/18/91  1540   STOP: 00/00/00          **
**   CASE NO.: 17446          SAS NO.:                                D. NO.: CB77              MD NO: CB77                      **
**                                                                                                                               **
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ANALYTICAL RESULTS UG/KG

80JN	HEXADECANOIC ACID
500J	1 UNIDENTIFIED COMPOUND

FOOTNOTES
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*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63658  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                      **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE              ST: GA                          **
**   STATION ID: SS-02                                                COLLECTION START: 11/18/91  1610   STOP: 00/00/00            **
**   CASE NO.: 17446          SAS NO.:                                D. NO.: CB78                 MD NO: CB78                     **
**                                                                                                                                 **
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ANALYTICAL RESULTS UG/KG

800000J	8 UNIDENTIFIED COMPOUNDS
N	PETROLEUM PRODUCT
400JN	HEXACHLOROHEXAHYDROETHENOPENTALENE
600JN	HEXACHLOROTETRAHYDROMETHANOINDENE
300JN	HEXADECANOIC ACID
400J	1 UNIDENTIFIED CHLORINATED COMPOUND

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63659  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE              ST: GA                  **
**   STATION ID: SB-02                                                COLLECTION START: 11/18/91  1625   STOP: 00/00/00        **
**   CASE.NO.: 17446          SAS NO.:                                D. NO.: CB79                MD NO: CB79                  **
**                                                                                                                            **
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ANALYTICAL RESULTS UG/KG

2000J	3 UNIDENTIFIED COMPOUNDS
N	PETROLEUM PRODUCT

FOOTNOTES

*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63660  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                **
**   SOURCE: LAFAYETTE SHEET META                                    CITY: LAFAYETTE              ST: GA                   **
**   STATION ID: SS-04                                               COLLECTION START: 11/19/91  0955   STOP: 00/00/00        **
**   CASE NO.: 17446          SAS NO.:                               D. NO.: CB80                MD NO: CB80                  **
**                                                                                                                           **
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ANALYTICAL RESULTS UG/KG

N	PETROLEUM PRODUCT
2000J	3 UNIDENTIFIED COMPOUNDS
200JN	HEXADECANOIC ACID

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63661 SAMPLE TYPE: SOIL	PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META	CITY: LAFAYETTE ST: GA
STATION ID: SS-03	COLLECTION START: 11/19/91 1010 STOP: 00/00/00
CASE.NO.: 17446 SAS NO.:	D. NO.: CB81 MD NO: CB81

ANALYTICAL RESULTS UG/KG

200JN	HEXADECANOIC ACID
N	PETROLEUM PRODUCT
1000J	2 UNIDENTIFIED COMPOUNDS

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63662  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                  **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE             ST: GA                      **
**   STATION ID: SB-07                                                COLLECTION START: 11/19/91  1055   STOP: 00/00/00       **
**   CASE.NO.: 17446          SAS NO.:                                D. NO.: CB82                MD NO: CB82                 **
**                                                                                                                             **
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ANALYTICAL RESULTS UG/KG

900J	1 UNIDENTIFIED COMPOUND
200JN	HEXADECANOIC ACID
N	PETROLEUM PRODUCT

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63663  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE              **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE              ST: GA                  **
**   STATION ID: SD-02                                                COLLECTION START: 11/19/91  1250   STOP: 00/00/00    **
**   CASE NO.: 17446          SAS NO.:                                D. NO.: CB84                MD NO: CB84              **
**                                                                                                                         **
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ANALYTICAL RESULTS UG/KG

500JN	PENTADECANOIC ACID
10000J	7 UNIDENTIFIED COMPOUNDS

FOOTNOTES
*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
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

MISCELLANEOUS EXTRACTABLE COMPOUNDS   DATA REPORT

*** ***
** PROJECT NO. 92-0109 SAMPLE NO. 63664 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SD-03 COLLECTION START: 11/19/91 1300 STOP: 00/00/00 **
** CASE.NO.: 17446 SAS NO.: D. NO.: CB83 MD NO: CB83 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

9000J	6 UNIDENTIFIED COMPOUNDS
400JN	PENTADECANOIC ACID
700JN	HEXADECANOIC ACID

FOOTNOTES
*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
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/09/92

MISCELLANEOUS EXTRACTABLE COMPOUNDS -- DATA REPORT

*** ***
** PROJECT NO. 92-0109 SAMPLE NO. 63665 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SD-04 COLLECTION START: 11/19/91 1340 STOP: 00/00/00 **
** CASE NO.: 17446 SAS NO.: D. NO.: CB85 MD NO: CB85 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

100000J	9 UNIDENTIFIED COMPOUNDS
2000JN	HEXADECANOIC ACID

FOOTNOTES
*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.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30605

SISB/SAS
RECEIVED
JAN 14 1992
EPA - REGION IV
ATLANTA GA

*****MEMORANDUM******

DATE: 01/04/92

SUBJECT: Results of Specified Analysis;
92-0109 LAFAYETTE SHEET META
LAFAYETTE GA
CASE NO: 17446

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: JOE SLYKERMAN

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

cc

INORGANIC DATA QUALIFIERS REPORT

Case Number: 17446
Project Number: 92-0109
Site: Lafayette Sheet Metal, Lafayette, GA

Element	Flag	Samples Affected	Reason
Cu	U	All positives > IDL but < CRDL	Baseline instability
Ba, Ca, Fe, Na Zn	U	All positives > IDL but < 10x contaminant level	Positives in Blanks
Sb	JN	All positives with Al or Fe concentrations in solution > 75,000 ug/L	Suspected positive interference as noted in the contractor ICS
Cd	JN	All positives with Fe concentrations in solution > 53,000 ug/L	Suspected positive interference as noted in the contractor ICS
As	J	All	Matrix spike recovery - 67.5%
Sb	J	All	Matrix spike recovery - 35.6%
Pb	J	All	Matrix spike recovery - 67.5%
Ag	J	MDBC83	% RSD > 20% for ICP multiple exposures

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63652  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                    **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE              ST: GA                       **
**   STATION ID: SS-01                                                COLLECTION START: 11/18/91  1215   STOP: 00/00/00         **
**   CASE NO.: 17446          SAS NO.:                                D  NO.: CB71                MD NO: CB71                   **
**                                                                                                                              **
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RESULTS	UNITS	PARAMETER
0.24U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 92-0109 SAMPLE NO. 63653 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SB-01 COLLECTION START: 11/18/91 1240 STOP: 00/00/00 **
** CASE NO.: 17446 SAS NO.: D. NO.: CB73 MD NO: CB73 **
** **
*** ***

RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63654  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                      **
**   SOURCE: LAFAYETTE SHEET META                                      CITY: LAFAYETTE            ST: GA                           **
**   STATION ID: SD-01                                                 COLLECTION START: 11/18/91  1430   STOP: 00/00/00           **
**   CASE NO.: 17446           SAS NO.:                                D. NO.: CB74               MD NO: CB74                      **
**                                                                                                                                 **
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RESULTS	UNITS	PARAMETER
0.48U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63655  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE              ST: GA                  **
**   STATION ID: SS-05                                                COLLECTION START: 11/18/91  1505   STOP: 00/00/00      **
**   CASE.NO.: 17446          SAS NO.:                                D. NO.: CB75                MD NO: CB75               **
**                                                                                                                          **
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RESULTS	UNITS	PARAMETER
1U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63656  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                 **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE              ST: GA                    **
**   STATION ID: SS-06                                                COLLECTION START: 11/18/91  1525   STOP: 00/00/00      **
**   CASE NO.: 17446          SAS NO.:                                D. NO.: CB76                 MD NO: CB76               **
**                                                                                                                           **
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RESULTS	UNITS	PARAMETER
0.24U	MG/KG	CYANIDE

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63657  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                  **
**   SOURCE: LAFAYETTE SHEET META                                      CITY: LAFAYETTE              ST: GA                     **
**   STATION ID: SB-06                                                 COLLECTION START: 11/18/91  1540   STOP: 00/00/00        **
**   CASE NO.: 17446           SAS NO.:                                D. NO.: CB77                 MD NO: CB77                **
**                                                                                                                              **
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RESULTS	UNITS	PARAMETER
0.23U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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** PROJECT NO. 92-0109 SAMPLE NO. 63658 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SS-02 COLLECTION START: 11/18/91 1610 STOP: 00/00/00 **
** CASE NO.: 17446 SAS NO.: D. NO.: CB78 MD NO: CB78 **
** **

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RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63659  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE         **
**   SOURCE: LAFAYETTE SHEET MFTA                                     CITY: LAFAYETTE            ST: GA              **
**   STATION ID: SB-02                                                COLLECTION START: 11/18/91  1625   STOP: 00/00/00 **
**   CASE NO.: 17446         SAS NO.:                                 D  NO.: CB79               MD NO: CB79         **
**                                                                                                                    **
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RESULTS	UNITS	PARAMETER
0.24U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63660  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                 **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE            ST: GA                     **
**   STATION ID: SS-04                                                COLLECTION START: 11/19/91  0955   STOP: 00/00/00      **
**   CASE NO.: 17446           SAS NO.:                               D. NO.: CB80               MD NO: CB80                **
**                                                                                                                          **
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RESULTS	UNITS	PARAMETER
0.24U	MG/KG	CYANIDE

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63661   SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                     **
**   SOURCE: LAFAYETTE SHEET META                                      CITY: LAFAYETTE              ST: GA                         **
**   STATION ID: SS-03                                                 COLLECTION START: 11/19/91  1010   STOP: 00/00/00           **
**   CASE NO.: 17446          SAS NO.:                                 D. NO.: CB81                 MD NO: CB81                    **
**                                                                                                                                 **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
0.24U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63662  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE             ST: GA                    **
**   STATION ID: SB-07                                                COLLECTION START: 11/19/91  1055   STOP: 00/00/00     **
**   CASE NO.: 17446            SAS NO.:                              D. NO.: CB82                MD NO: CB82               **
**                                                                                                                          **
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RESULTS	UNITS	PARAMETER
0.26U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 92-0109 SAMPLE NO. 63663 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SD-02 COLLECTION START: 11/19/91 1250 STOP: 00/00/00 **
** CASE.NO.: 17446 SAS NO.: D. NO: CB84 MD NO: CB84 **
** **
*** ***

RESULTS	UNITS	PARAMETER
0.25U	MG/KG	CYANIDE

FOOTNOTES
*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.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63664  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE           **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE             ST: GA                  **
**   STATION ID: SD-03                                                COLLECTION START: 11/19/91  1300   STOP: 00/00/00   **
**   CASE NO.: 17446          SAS NO.:                                D  NO.: CB83               MD NO: CB83              **
**                                                                                                                        **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
0.27U	MG/KG	CYANIDE

FOOTNOTES
*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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 92-0109   SAMPLE NO. 63665  SAMPLE TYPE: SOIL        PROG ELEM: NSF   COLLECTED BY: R WILDE                **
**   SOURCE: LAFAYETTE SHEET META                                     CITY: LAFAYETTE              ST: GA                  **
**   STATION ID: SD-04                                                COLLECTION START: 11/19/91  1340   STOP: 00/00/00      **
**   CASE NO.: 17446          SAS NO.:                                D. NO.: CB85                MD NO: CB85               **
**                                                                                                                          **
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RESULTS	UNITS	PARAMETER
0.38U	MG/KG	CYANIDE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

SISB/SAS
RECEIVED
JAN 14 1992
EPA - REGION IV
ATLANTA, GA.

*****MEMORANDUM******

DATE: 01/04/92

SUBJECT: Results of Metals Analysis;
92-0109 LAFAYETTE SHEET META
LAFAYETTE GA
CASE NO: 17446

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: JOE SLYKERMAN

Attached are the results of analysis of samples collected as part of the subject project.

As a result of the Quality Assurance Review, certain data qualifiers may have been placed on the data. Attached is a DATA QUALIFIER REPORT which explains the reasons that these qualifiers were required.

If you have any questions please contact me.

ATTACHMENT

INORGANIC DATA QUALIFIERS REPORT

Case Number: 17446
Project Number: 92-0109
Site: Lafayette Sheet Metal, Lafayette, GA

Element	Flag	Samples Affected	Reason
Cu	U	All positives > IDL but < CRDL	Baseline instability
Ba, Ca, Fe, Na Zn	U	All positives > IDL but < 10x contaminant level	Positives in Blanks
Sb	JN	All positives with Al or Fe concentrations in solution > 75,000 ug/L	Suspected positive interference as noted in the contractor ICS
Cd	JN	All positives with Fe concentrations in solution > 53,000 ug/L	Suspected positive interference as noted in the contractor ICS
As	J	All	Matrix spike recovery - 67.5%
Sb	J	All	Matrix spike recovery - 35.6%
Pb	J	All	Matrix spike recovery - 67.5%
Ag	J	MDBC83	% RSD > 20% for ICP multiple exposures

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63652 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SS-01
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1215 STOP: 00/00/00
MD NUMBER: CB71

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
26000	ALUMINUM	320	MANGANESE
31JN	ANTIMONY	0.11U	MERCURY
5.1J	ARSENIC	23	NICKEL
63	BARIUM	2500	POTASSIUM
1.6	BERYLLIUM	0.46U	SELENIUM
0.45U	CADMIUM	0.45U	SILVER
22000	CALCIUM	80U	SODIUM
36	CHROMIUM	0.23U	THALLIUM
10	COBALT	NA	TIN
23	COPPER	29	VANADIUM
34000	IRON	50	ZINC
20J	LEAD	15	PERCENT MOISTURE
3500	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES
*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
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*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV FSD, ATHENS, GA. 01/03/92

METALS DATA REPORT

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PROJECT NO. 92-0109 SAMPLE NO. 63653 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA
STATION ID: SB-01 COLLECTION START: 11/18/91 1240 STOP: 00/00/00
CASE NUMBER: 17446 SAS NUMBER: MD NUMBER: CB73

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
25000	ALUMINUM	1400	MANGANESE
26JN	ANTIMONY	0.12U	MERCURY
5.9J	ARSENIC	16	NICKEL
68	BARIUM	1200	POTASSIUM
1.6	BERYLLIUM	0.49U	SELENIUM
0.49U	CADMIUM	0.49U	SILVER
690	CALCIUM	70U	SODIUM
29	CHROMIUM	1U	THALLIUM
27	COBALT	NA	TIN
26	COPPER	30	VANADIUM
36000	IRON	30	ZINC
24J	LEAD	19	PERCENT MOISTURE
1800	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/03/92

METALS DATA REPORT

PROJECT NO. 92-0109 SAMPLE NO. 63654 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-01
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/18/91 1430 STOP: 00/00/00
MD NUMBER: CB74

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
14000	ALUMINUM	2600	MANGANESE
27J	ANTIMONY	0.21U	MERCURY
5.5J	ARSENIC	18	NICKEL
130	BARIUM	1100	POTASSIUM
2.1	BERYLLIUM	0.91U	SELENIUM
0.94U	CADMIUM	0.94U	SILVER
5100	CALCIUM	150	SODIUM
17	CHROMIUM	1U	THALLIUM
14	COBALT	NA	TIN
19	COPPER	24	VANADIUM
31000	IRON	83	ZINC
34J	LEAD	58	PERCENT MOISTURE
1700	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63655 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE
SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA
STATION ID: SS-05 COLLECTION START: 11/18/91 1505 STOP: 00/00/00
CASE NUMBER: 17446 SAS NUMBER: MD NUMBER: CB75

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
6400	ALUMINUM	270	MANGANESE
31J	ANTIMONY	0.12U	MERCURY
2.4J	ARSENIC	14	NICKEL
99	BARIUM	1100	POTASSIUM
1.3	BERYLLIUM	0.49U	SELENIUM
1.5JN	CADMIUM	0.48U	SILVER
210000	CALCIUM	130	SODIUM
20	CHROMIUM	0.24U	THALLIUM
7.6	COBALT	NA	TIN
20	COPPER	13	VANADIUM
15000	IRON	390	ZINC
100J	LEAD	19	PERCENT MOISTURE
11000	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

** PROJECT NO. 92 0109 SAMPLE NO. 63656 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SS-06 COLLECTION START: 11/18/91 1525 STOP: 00/00/00 **
** CASF NUMBER: 17446 SAS NUMBER: MD NUMBER: CB76 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
19000	ALUMINUM	300	MANGANESE
28JN	ANTIMONY	0.11U	MERCURY
2.6J	ARSENIC	22	NICKEL
52	BARIUM	1400	POTASSIUM
1.7	BERYLLIUM	0.48U	SELENIUM
0.47U	CADMIUM	0.47U	SILVER
2700	CALCIUM	60U	SODIUM
27	CHROMIUM	0.24U	THALLIUM
15	COBALT	NA	TIN
26	COPPER	25	VANADIUM
34000	IRON	50	ZINC
24J	LEAD	17	PERCENT MOISTURE
2400	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

** PROJECT NO. 92-0109 SAMPLE NO. 63657 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SB-06 COLLECTION START: 11/18/91 1540 STOP: 00/00/00 **
** CASE NUMBER: 17446 SAS NUMBER: MD NUMBER: CB77 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
25000	ALUMINUM	180	MANGANESE
32JN	ANTIMONY	0.11U	MERCURY
3J	ARSENIC	26	NICKEL
65	BARIUM	2800	POTASSIUM
1.7	BERYLLIUM	0.46U	SELENIUM
0.46U	CADMIUM	0.46U	SILVER
1500	CALCIUM	80U	SODIUM
34	CHROMIUM	1U	THALLIUM
12	COBALT	NA	TIN
22	COPPER	29	VANADIUM
36000	IRON	46	ZINC
9.8J	LEAD	14	PERCENT MOISTURE
3100	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

*** ***
** PROJECT NO. 92-0109 SAMPLE NO. 63658 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SS-02 COLLECTION START: 11/18/91 1610 STOP: 00/00/00 **
** CASE NUMBER: 17446 SAS NUMBER: MD NUMBER: CB78 **
** **
*** ***

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
15000	ALUMINUM	1300	MANGANESE
260JN	ANTIMONY	0.12U	MERCURY
3.9J	ARSENIC	170	NICKEL
58	BARIUM	1000	POTASSIUM
1.3	BERYLLIUM	0.48U	SELENIUM
18JN	CADMIUM	1.6	SILVER
4100	CALCIUM	90U	SODIUM
54	CHROMIUM	1U	THALLIUM
73	COBALT	NA	TIN
130	COPPER	23	VANADIUM
330000	IRON	130	ZINC
110J	LEAD	20	PERCENT MOISTURE
2000	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

** PROJECT NO. 92-0109 SAMPLE NO. 63659 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA
** STATION ID: SB-02 COLLECTION START: 11/18/91 1625 STOP: 00/00/00
** CASE NUMBER: 17446 SAS NUMBER: MD NUMBER: CB79

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
28000	ALUMINUM	1100	MANGANESE
32JN	ANTIMONY	0.11U	MERCURY
3UJ	ARSENIC	49	NICKEL
130	BARIUM	1600	POTASSIUM
2.1	BERYLLIUM	0.47U	SELENIUM
0.48U	CADMIUM	0.48U	SILVER
100U	CALCIUM	90U	SODIUM
34	CHROMIUM	1U	THALLIUM
25	COBALT	NA	TIN
21	COPPER	24	VANADIUM
38000	IRON	84	ZINC
6.6J	LEAD	17	PERCENT MOISTURE
5400	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

*** ***
** PROJECT NO. 92-0109 SAMPLE NO. 63660 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SS-04 COLLECTION START: 11/19/91 0955 STOP: 00/00/00 **
** CASE NUMBER: 17446 SAS NUMBER: MD NUMBER: CB80 **
**
*** ***

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
17000	ALUMINUM	1400	MANGANESE
41JN	ANTIMONY	0.11U	MERCURY
8.2J	ARSENIC	450	NICKEL
1700	BARIUM	2700	POTASSIUM
2	BERYLLIUM	0.45U	SELENIUM
0.46U	CADMIUM	2.8	SILVER
22000	CALCIUM	1900	SODIUM
34	CHROMIUM	1U	THALLIUM
120	COBALT	NA	TIN
190	COPPER	26	VANADIUM
35000	IRON	200	ZINC
51J	LEAD	16	PERCENT MOISTURE
3600	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

.01/03/92

METALS DATA REPORT

*** ***

** PROJECT NO. 92-0109 SAMPLE NO. 63661 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SS-03 COLLECTION START: 11/19/91 1010 STOP: 00/00/00 **
** CASE NUMBER: 17446 SAS NUMBER: MD NUMBER: CB81 **

*** ***

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
19000	ALUMINUM	3400	MANGANESE
26JN	ANTIMONY	0.11U	MERCURY
3.9J	ARSENIC	60	NICKEL
480	BARIUM	2100	POTASSIUM
1.8	BERYLLIUM	0.46U	SELENIUM
0.45U	CADMIUM	0.62	SILVER
18000	CALCIUM	630	SODIUM
24	CHROMIUM	1U	THALLIUM
40	COBALT	NA	TIN
37	COPPER	23	VANADIUM
29000	IRON	79	ZINC
19J	LEAD	15	PERCENT MOISTURE
2400	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63662 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SB-07
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1055 STOP: 00/00/00
MD NUMBER: C882

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
22000	ALUMINUM	480	MANGANESE
33JN	ANTIMONY	0.12U	MERCURY
5.1J	ARSENIC	41	NICKEL
150	BARIUM	2300	POTASSIUM
1.8	BERYLLIUM	0.51U	SELENIUM
0.52U	CADMIUM	0.52U	SILVER
3600	CALCIUM	340	SODIUM
35	CHROMIUM	1U	THALLIUM
19	COBALT	NA	TIN
44	COPPER	30	VANADIUM
37000	IRON	79	ZINC
18J	LEAD	23	PERCENT MOISTURE
2400	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63663 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-02
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1250 STOP: 00/00/00
MD NUMBER: CB84

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
15000	ALUMINUM	1000	MANGANESE
25JN	ANTIMONY	0.13U	MERCURY
3.7J	ARSENIC	78	NICKEL
380	BARIUM	1400	POTASSIUM
1.7	BERYLLIUM	0.49U	SELENIUM
0.49U	CADMIUM	1.3	SILVER
4800	CALCIUM	340	SODIUM
19	CHROMIUM	0.24U	THALLIUM
31	COBALT	NA	TIN
47	COPPER	16	VANADIUM
29000	IRON	160	ZINC
100J	LEAD	21	PERCENT MOISTURE
1900	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA. 01/03/92

METALS DATA REPORT

*** ***

** PROJECT NO. 92-0109 SAMPLE NO. 63664 SAMPLE TYPE: SOIL PROG ELEM: NSF COLLECTED BY: R WILDE **
** SOURCE: LAFAYETTE SHEET META CITY: LAFAYETTE ST: GA **
** STATION ID: SD-03 COLLECTION START: 11/19/91 1300 STOP: 00/00/00 **
** CASE NUMBER: 17446 SAS NUMBER: MD NUMBER: CB83 **

*** ***

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
21000	ALUMINUM	2200	MANGANESE
30JN	ANTIMONY	0.12U	MERCURY
12J	ARSENIC	140	NICKEL
820	BARIUM	2700	POTASSIUM
2.2	BERYLLIUM	0.54U	SELENIUM
0.54U	CADMIUM	0.68J	SILVER
3700	CALCIUM	830	SODIUM
27	CHROMIUM	1U	THALLIUM
72	COBALT	NA	TIN
75	COPPER	27	VANADIUM
29000	IRON	160	ZINC
56J	LEAD	27	PERCENT MOISTURE
2600	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
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*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 AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 01/03/92

PROJECT NO. 92-0109 SAMPLE NO. 63665 SAMPLE TYPE: SOIL
SOURCE: LAFAYETTE SHEET META
STATION ID: SD-04
CASE NUMBER: 17446 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: R WILDE
CITY: LAFAYETTE ST: GA
COLLECTION START: 11/19/91 1340 STOP: 00/00/00
MD NUMBER: CB85

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
12000	ALUMINUM	1200	MANGANESE
28JN	ANTIMONY	0.18U	MERCURY
4.7J	ARSENIC	18	NICKEL
98	BARIUM	870	POTASSIUM
1.8	BERYLLIUM	0.73U	SELENIUM
0.73U	CADMIUM	0.73U	SILVER
1500	CALCIUM	95	SODIUM
36	CHROMIUM	0.36U	THALLIUM
28	COBALT	NA	TIN
18	COPPER	27	VANADIUM
33000	IRON	61	ZINC
13J	LEAD	48	PERCENT MOISTURE
1600	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
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U. S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV, ATHENS, GEORGIA

MEMORANDUM

DATE: DEC 05 1991

SUBJECT: Overview of B&V Waste Science & Technology at LaFayette Sheet Metal LaFayette, Georgia; ESD Project No. 92E-007

FROM: James C. Gray
Hazardous Waste Section
Environmental Compliance Branch
Environmental Services Division

TO: Al Hanke, Chief
Site Assessment Section
Waste Programs Branch
Waste Management Division

THRU: William R. Bokey, Chief
Hazardous Waste Section
Environmental Compliance Branch
Environmental Services Division

SISB/SAS
RECEIVED
DEC 06 1991
EPA - REGION IV
ATLANTA GA

On November 19, 1991 an overview of B&V Waste Science and Technology was conducted. At the time of the overview, the contractor was engaged in a screening site inspection (SSI) of LaFayette Sheet Metal in LaFayette, Georgia. The overview consisted of a review of the contractor's safety plan, equipment storage and handling procedures, and the collection of three soil samples.

Overall, the contractor's personnel demonstrated an excellent knowledge of sampling methods and techniques. The equipment provided to the samplers was of adequate quality and quantity. The overall sampling strategy for the site was acceptable to achieve the stated objectives of the site's study plan.

There were however, some discrepancies noted during the overview. The following is a brief discussion of each.

- The site study plan called for the installation of groundwater monitoring wells and the samplers came to the site equipped with a power auger to accomplish this purpose. Upon arrival at the site, it was determined that groundwater sampling was not feasible. In that power auguring at the site was intended, the safety plan should have included some provision for locating underground utilities such as electrical, gas, water, etc. The safety plan should reference a number to call for local utility board personnel who are available to assist in the locating of underground systems. Samplers should be provided with some sort of metal detector capable of sensing pipes and conduits to a depth of three feet. Additionally, the safety plan should instruct samplers to advance the first three feet of a hole with hand auger or shovel before incorporating the use of power auguring or drilling equipment.

- Prior to collecting surface soil samples, the top four inches of soil and vegetation was removed. To accomplish this, the samplers used carbon steel shovels. Field personnel should be provided with stainless steel shovels to use during sampling operations.

- Safety monitoring was performed with a photoionization detector (PID). During calibration, the PID was calibrated to a calculated equivalency concentration rather than to the actual concentration of the calibration gas. The samplers were instructed to use the actual concentration of the cylinder gas when calibrating. To improve this operation, the field personnel should be provided with a more suitable calibration gas such as toluene.

- During sample collection, the samplers did not fill sample containers sequentially. Rather, one bottle was completely filled with soil prior to proceeding to the next.

A copy of the field overview checklist (pertinent sections only) completed for this overview is attached. If you have any questions concerning this overview or should you require further information, please call me at FTS:250-3308 or COMM:404/546-3308.

cc: Bokey/Hall

Facility/Site Name LaFayette Sheet Metal

Address LaFayette, Georgia

Project No. 92E-045 EPA ID No.

Facility Contact Milford Morgan Phone No.( )-

Overview Personnel James C. Gray Date 11-19-91

State/Contractor Project Leader Jancie S. Hatcher

Affiliation B&V Waste Science & Technology Phone No. (404) 392-9227

Address 1117 Perimeter Center West, Suite W-212, Atlanta, Georgia

Sampling Personnel Ron Wilde, Laura Morrison, Carter Helm

Other Personnel & Affiliation

Type of study? SSI

Study plan issued? Yes Date issued? 9-23-91

Study plan reviewed by ESD? Yes X No Acceptable? Yes X No

Was study plan followed? Yes X No

Comments

Was a safety plan prepared for the study? Yes X No

Was the safety plan adequate? Yes No X

Comments Plan needs section on underground utilities

Was the safety plan followed? Yes X No

Comments

Additional Comments or Information

Checklist sections completed for this overview: 1 X 2 3 X 4 5 6

KEY: 1 General Procedures; 2 Ground Water Sampling; 3 Soil, Sediment Sampling
4 Surface Water Sampling; 5 Waste Sampling; 6 Monitoring Well Installation

SECTION 3 - GENERAL PROCEDURES - SAFETY, RECORDS, QA/QC, CUSTODY, ETC.

1. Type samples collected? Surface and Subsurface Soil

2. Were sampling locations properly selected? Yes X No

   Comments

3. Were sampling locations adequately documented in a bound field log book using indelible ink? Yes X No

   Comments

4. Were photos taken and a photolog maintained? Yes X No

5. What field instruments were used during this study? None, only soil samples were observed being sampled

6. Were field instruments properly calibrated and calibrations recorded in a bound field log book? Yes No

   Comments N/A

7. Was sampling equipment properly wrapped and protected from possible contamination prior to sample collection? Yes X No

   Comments

8. Was sampling equipment constructed of Teflon, glass, or stainless steel?

   Shovels used to remove top layer of soil were carbon steel rather than stainless steel

9. Were samples collected in proper order? (least suspected contamination to most contaminated?) Yes X No

   Comments

10. Were clean disposable latex or vinyl gloves worn during sampling? Yes X No

    Comments

11. Were gloves changed for each sample station? Yes X No

    Comments

12. Was any equipment field cleaned? Yes No X

13. Type of equipment cleaned? N/A

14. Were proper field cleaning procedures used? Yes No

    Comments N/A

15. Were equipment rinse blanks collected after field cleaning? Yes____ No____

Comments N/A

16. Were proper sample containers used for samples? Yes X No____

Comments

17. Were split samples offered to the facility owner or his representative? Yes X No____

Comments Split Samples not Accepted

18. Was a receipt for samples form given to facility representative? Yes____ No X

19. Were any duplicate samples collected? Yes X No____

Comments

20. Were samples properly field preserved? Yes____ No____

Comments Only soil samples were observed being collected

21. Were preservative blanks utilized? Yes____ No____

Comments N/A

22. Were field and/or trip blanks utilized? Yes X No____

Comments

23. Were samples adequately identified with labels or tags? Yes X No____

Comments

24. Were samples sealed with custody seals after collection? Yes X No____

Comments

25. What security measures were taken to insure custody of the samples after collection?
Samples kept in coolers at command post under care of sample custodian

26. Were chain-of-custody and receipt for samples forms properly completed? Yes X No____

Comments

27. Were any samples shipped to a laboratory? Yes X No____

28. If yes to No. 27, were samples properly packed? Yes____ No____

Comments Did not observe sample shipment

29. If shipped to a CLP lab, were Traffic Report Forms properly completed?
Yes X No

Comments

30. What safety monitoring equipment, protection, and procedures were used prior to and during sampling? PID used to monitor while sampling.

Samplers wore tyvek, rubber boots, and double glove systems

31. Was safety monitoring equipment properly calibrated and calibrations recorded in a bound field log book? Yes ____ No X

Comments PID was not set to actual concentration of calibration gas

SECTION 3 - SAMPLING - SOIL, SEDIMENT, SLUDGE, ETC. (Non-containerized)

1. Type of samples collected? Surface and Subsurface Soil

2. General description of samples? Surface soil collected from top four inches, subsurface soil collected from approx. four feet

3. How many samples were collected? Three were observed

4. Were background and/or control samples collected? Yes X No

   Comments Collection of control sample was not observed

5. Were representative samples collected? Yes X No

   Comments

6. Were grab or composite samples collected? Grab

7. Were composite samples areal or vertical? N/A

8. How many aliquots were taken for the composite sample? N/A

9. What procedures and equipment were used to collect samples? Top layer of soil removed with carbon steel shovel. Sample collected with stainless steel spoon. Pyrex bowl used for mixing.

10. Were samples thoroughly mixed prior to putting them into the sample containers? Yes X No

    Comments VOA collected without mixing

11. Were samples properly placed into sample containers? Yes No X

    Comments Metals and extractable bottles not filled sequentially

12. Were samples iced immediately after collection? Yes X No

13. For what analyses were the samples collected? TCL/TAL/CN

14. If samples were split, what were the sample/station numbers for these?

    No splits taken

15. Was a drilling rig, back hoe, etc. used to collect soil samples? No

16. Were the drilling rig(s), backhoe(s), etc., properly cleaned according to the ESD SOP, Appendix B, prior to arriving on site? Yes No

    Comments N/A

17. What was the condition of the drilling and sampling equipment when it arrived on site? N/A

18. Was a decontamination area located where the cleaning activities would not cross-contaminate clean and/or drying equipment? Yes____ No____

Comments N/A

19. Was clean equipment properly wrapped and stored in a clean area?
Yes____ No____

Comments N/A

20. Was the drilling rig(s) properly cleaned between well borings?
Yes____ No____

Comments N/A

21. Were the cleaning and decontamination procedures conducted in accordance with the ESD SOP? Yes____ No____

Comments N/A

22. Other comments or observations None

U. S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV, ATHENS, GEORGIA

SISB/SAS

RECEIVED
OCT 04 1991
EPA - REGION IV

MEMORANDUM

DATE: OCT 03 1991

SUBJECT: Review of the SSI Study Plan for LaFayette Sheet Metal
Lafayette, Georgia; ESD Project No. 92E-007

FROM: James C. Gray JCG
Hazardous Waste Section
Environmental Compliance Branch
Environmental Services Division

TO: Al Hanke, Chief
Site Assessment Section
Waste Programs Branch
Waste Management Division

THRU: William R. Bokey, Chief
Hazardous Waste Section
Environmental Compliance Branch
Environmental Services Division

The screening site inspection (SSI) study plan for LaFayette Sheet Metal in LaFayette, Georgia has been reviewed. The plan has been found to be acceptable as written to achieve the objectives stated.

If you have any questions concerning this review, please call me at FTS:250-3308.

cc: Bokey/Hall

B&V WASTE SCIENCE AND TECHNOLOGY CORP. TEL. (404) 392-9227

1117 PERIMETER CENTER WEST
SUITE W-212
ATLANTA, GEORGIA 30338
FAX: (404) 392-9289

USEPA
Site Inspection Study Plan

B&V Project 52011.011
September 23, 1991

Mr. A. R. Hanke
Waste Programs Branch
Waste Management Division
U.S. Environmental Protection Agency
345 Courtland St., NE
Atlanta, GA 30365

Subject: Site Inspection Study Plan
LaFayette Sheet Metal
LaFayette, Walker County, Georgia
EPA ID No. GAD984270553

Dear Mr. Hanke:

Enclosed please find (2) copies of the Study Plan for LaFayette Sheet Metal in LaFayette, Walker County, Georgia.

Please feel free to contact me if you have any questions or comments.

Very truly yours,

Jancie S. Hatcher

Jancie S. Hatcher
Project Scientist

jv
Enclosure

FIELD STUDY PLAN
SITE INSPECTION

LaFayette Sheet Metal
LaFayette, Walker County, Georgia

EPA ID Nº GAD984270553

Prepared Under
CONTRACT Nº 68-W9-0055

For the
US ENVIRONMENTAL PROTECTION AGENCY

September 23, 1991

Prepared by
Jancie S. Hatcher

B&V WASTE SCIENCE AND TECHNOLOGY CORP

FIELD STUDY PLAN
SITE INSPECTION

LaFayette Sheet Metal
LaFayette, Walker County, Georgia

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Table 1 Sample Locations and Rationale . . . . . .

STUDY PLAN
SCREENING SITE INSPECTION
LaFayette Sheet Metal

LaFayette, Walker County, Georgia

EPA ID № GAD984270553

1.0 INTRODUCTION

Black & Veatch Waste Science & Technology has been tasked by the US Environmental Protection Agency (EPA) Waste Management Division to conduct a Site Inspection (SI) at the LaFayette Sheet Metal facility in Walker County, Georgia. The inspection will be performed under the authority of the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA).

1.1 Objectives

The objectives of this site inspection will be to determine the nature of contaminants present at the site and to determine if a release of these substances has occurred or may occur. Further, this inspection will seek to determine 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 will be made regarding future activities at the site.

Specific elements are:

- Obtain information to prepare a site-specific preliminary HRS
- Provide EPA the necessary information to make decisions on any other actions warranted at the site.

1.2 Scope of Work

The scope of this investigation will include the following activities:

- Obtain and review background materials relevant to HRS scoring of site
- Obtain aerial photographs and maps of site, if possible
- Obtain information on local water systems
- Evaluate target populations associated with the groundwater, surface water, air and onsite exposure pathways
- Conduct a survey of private wells
- Determine location and distance to nearest potable well
- Develop a site sketch
- Collect environmental samples

1.3 Schedule

Week of November 18, 1991.

1.4 Personnel

Site Manager: Jancie Hatcher

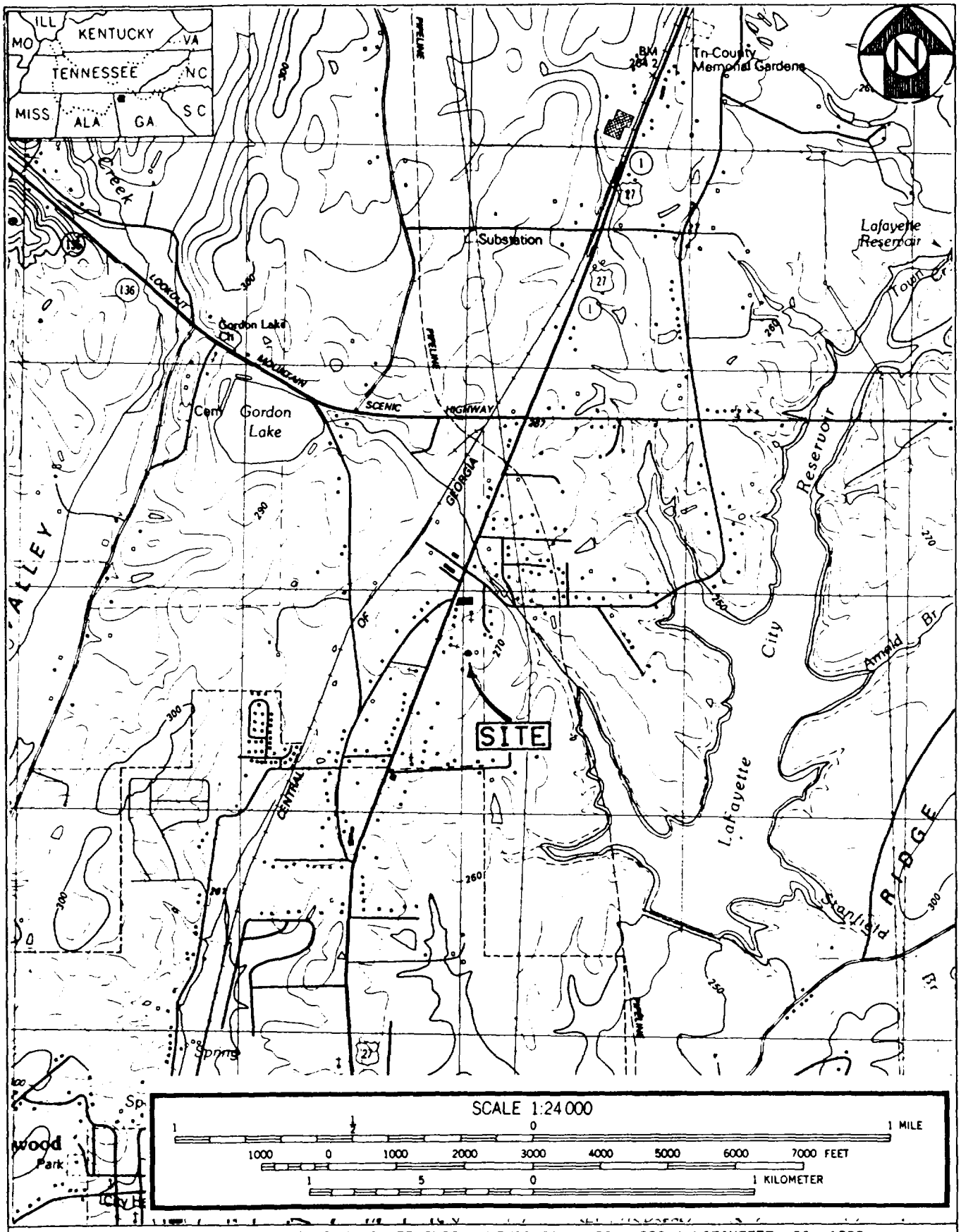
Site Safety Coordinator, Sample Custodian, Sampler.

1.5 Permits and Authorization Requirements

EPA is responsible for obtaining access to the site and permission to take photographs of site. In addition, EPA is responsible for all permits which may be required to accomplish this task.

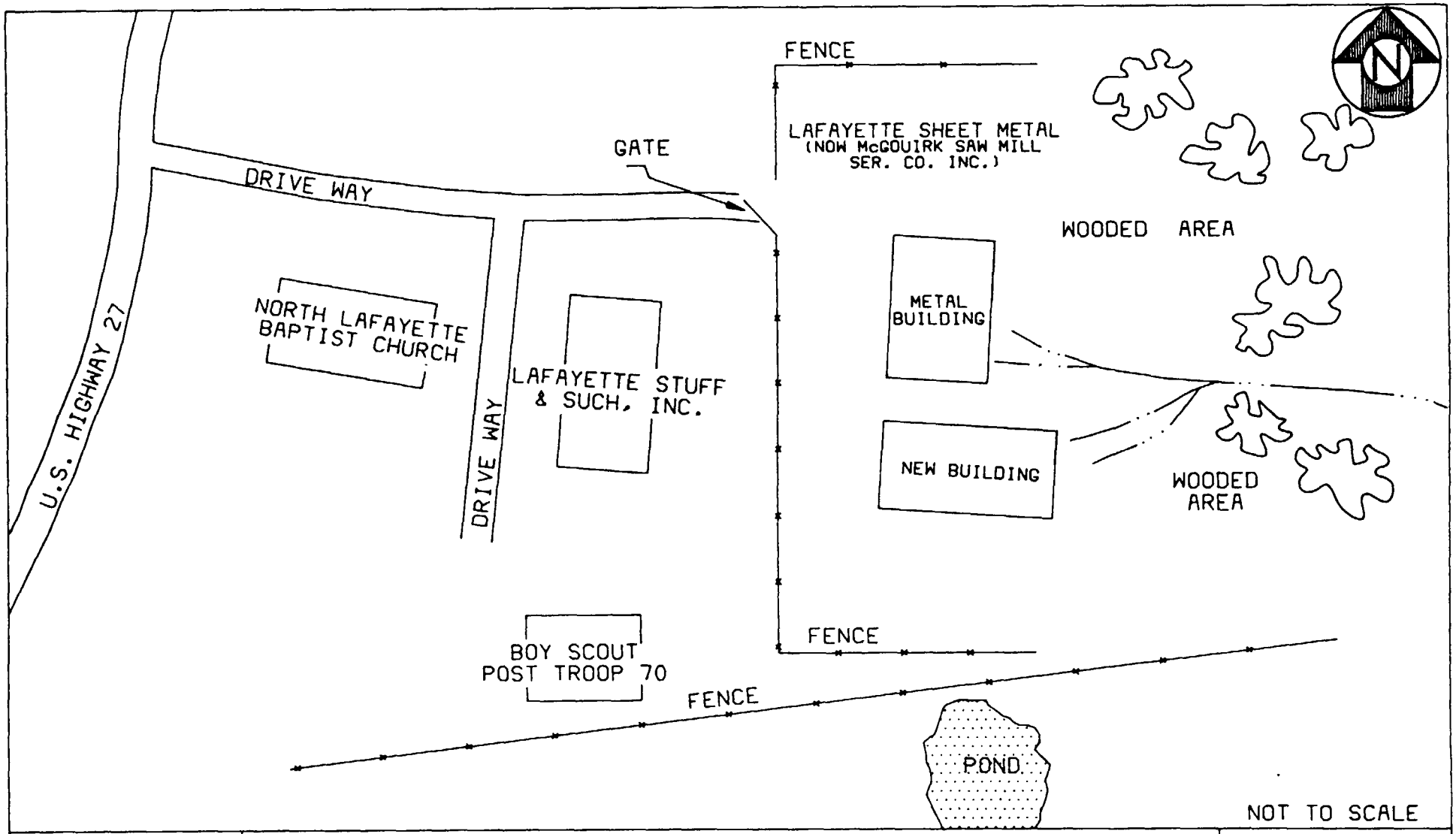
1.6 Site History and Description

The LaFayette Sheet Metal site is located in LaFayette, Georgia on Highway 27 North, directly behind the North LaFayette Baptist Church and within 0.5 mile of the LaFayette City Reservoir (see Figure 1). A church and several houses are located within 200 yards of the site. The 1.35-acre property consists of two small buildings which are surrounded on three sides by a fence, and on the fourth side by heavy woods. Drainage from the site flows from the fenced area to the east through wet weather ditches to the LaFayette City Reservoir. LaFayette Sheet Metal was owned and operatd by Mr. Dexter Jumper from November 1983 to August 1988. The property is currently owned and operated by McGouirk Saw Mill Service. The facility was also formerly operated as a car body shop. The site location and site layout are shown on Figures 1 and 2 (Refs. 1, 2).



BASE MAP IS A PORTION OF THE USGS 7.5 MINUTE QUDS., KENSINGTON, GA. 1983 & LAFAYETTE, GA. 1983.

	SITE LOCATION MAP LAFAYETTE SHEET METAL LAFAYETTE, WALKER COUNTY, GEORGIA	FIGURE 1



EARTH SCIENCE AND TECHNOLOGY CORP.

SITE LAYOUT MAP
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

FIGURE
2

LaFayette Sheet metal was originally discovered as a site after the Walker County Sheriff's Department on May 30, 1986, reported to the EPA that drums were being stored outside on the property (Ref. 3). On June 1, 1986, an EPA official investigated this complaint, and observed a filled area with approximate dimensions of 60 x 100 feet x 5 feet behind the LaFayette Sheet Metal building. The filled area contained several rusty 55-gallon drums, and numerous smaller cans and glass bottles. Solid material was observed in some of the containers. During a 1988 reconnaissance, no drums or other containers were observed onsite (Ref. 2). No file material was available concerning any hazardous wastes associated with LaFayette Sheet Metal.

1.7 Regional Hydrogeology

The LaFayette Sheet Metal facility is located in the Valley and Ridge Physiographic Province, at an elevation of approximately 280 feet above mean sea level (Refs.1, 4). The Valley and Ridge Physiographic Province is distinguished by folded and faulted stratified rocks consisting of limestone, dolomite, shale and sandstone that trend in a northeast-southwest direction (Ref.5, p. 7). The geologic units that outcrop within a 4-mile radius of the facility, in stratigraphically descending order, include the Fort Payne Chert, Red Mountain Formation, Chickamauga Limestone, Nauwala Limestone, Knox Group, and the Conasauga Formation. Groundwater occurs in the residuum mantling the bedrock and in joints, fractures, and solution openings in the bedrock. Recharge occurs locally by percolation of precipitation (Ref.4).

The facility is situated on the exposed Conasauga Formation, which is composed of siltstone, claystone, shale, and limestone. The lower part of the formation is composed predominantly of siltstone and claystone, while the upper 300 feet is composed of thick-bedded limestone. The total thickness of the formation in the Walker County area is around 2,000 feet (Ref.4, p. 6). The Knox Group outcrops adjacent to the Conasauga Formation to the east and west in the facility area, and is composed of limestone and dolomite. Intense folding, faulting, and solution activity present in the site area provide sufficient hydraulic interconnection of these rock units. Therefore, all waterbearing rock units comprise one hydrologic system in the area and they define the aquifer of concern bearing rock units comprise one hydrologic system in the area and they define the aquifer of concern at the site. Groundwater generally occurs under water-table conditions, but artesian conditions

may exist at greater depths below ground surface (Ref. 4, p. 10). Depth to the water-table varies seasonally and with topographic location, ranging from 9 to 20 feet below ground surface (Ref.6, p. 10).

2.0 SAMPLING INVESTIGATION

The sampling investigation will include the collection of surface soil, subsurface soil, sediment, and groundwater samples. Samples will be analyzed for extractable and purgeable organic compounds, PCBs, cyanides, and metals. Analyses will be performed under the contract Laboratory Program (CLP). Sample codes, locations and descriptions are found in Table 1, and shown in Figure 3.

2.1 Surface Soil and Subsurface Soil Sampling

Six surface soil samples will be collected from various locations within the fenced portion of the facility, in particular near the LaFayette Sheet Metal building. Subsurface soil samples will be collected from the same locations as surface soils. Background surface soil and subsurface soil samples will be taken just north of the facility. Samples are placed to assess the presence or absence of contaminants in soil, in both the observed area of disposal and downgradient of this area.

2.2 Sediment Sampling

Two sediment samples will be collected from wet-weather ditches which receive site runoff. One sediment sample will be collected from a nearby downgradient pond. a background sediment sample will be collected upstream of the facility in an unnamed creek which flows to the southeast and is upgradient of any surface water from the site. Samples are placed to assess whether contamination has migrated from the site through a surface water pathway.

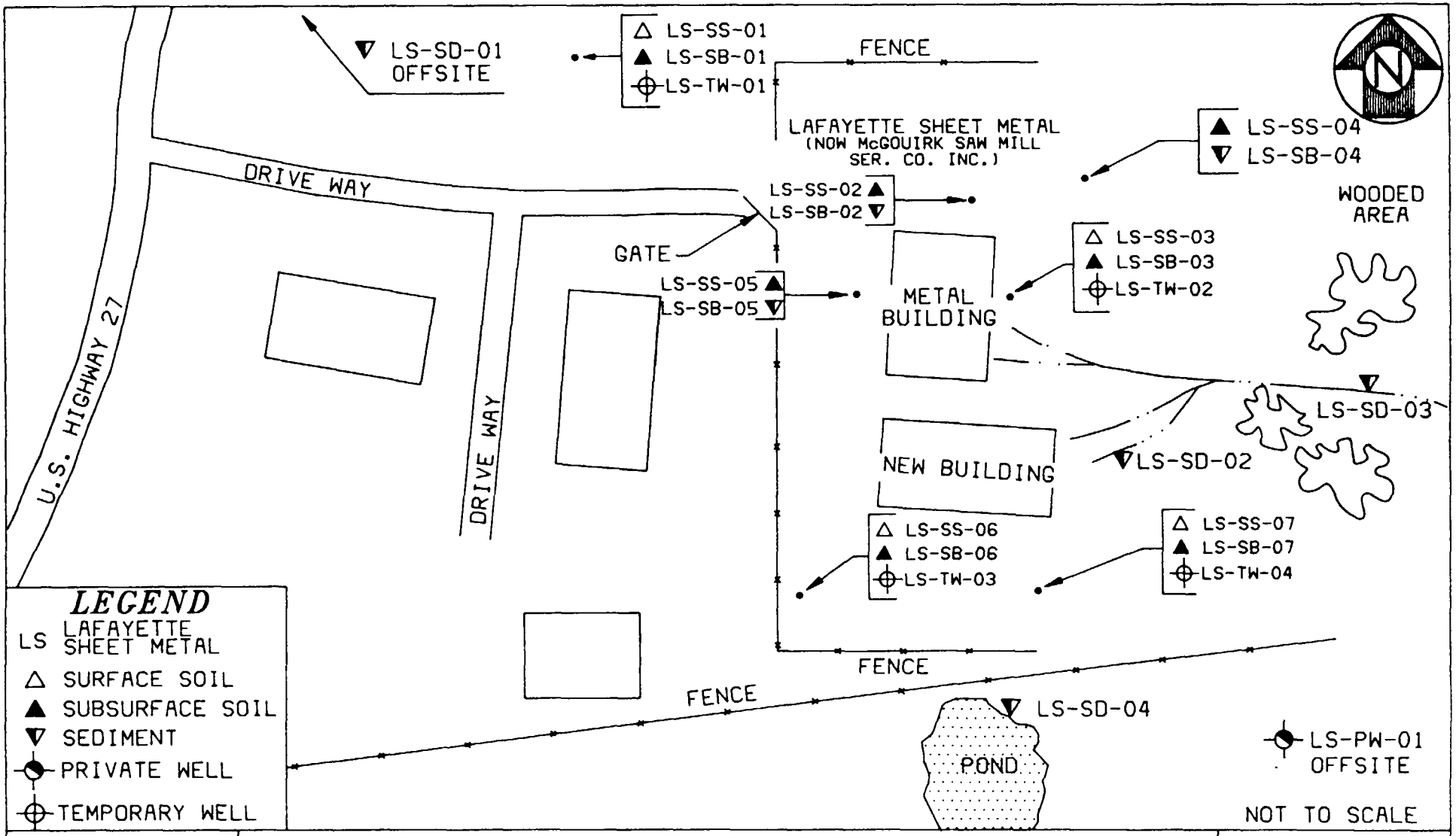
2.3 Groundwater Sampling

Three temporary wells will be placed onsite, to the eastern side of the Sheet Metal building and downgradient of the building. A nearby private well will be sampled if one can be located. The background groundwater sample will be collected from the

TABLE 1 SAMPLE LOCATIONS AND RATIONALE
LaFayette Sheet Metal
LaFayette, Walker county, Georgia

Sample Code	Sample Type	Location	Rationale
LS-SS-01	Surface Soil	Just north of Facility	Background
LS-SS-02	Surface Soil	North of metal building onsite	To establish presence or absence of contaminants
LS-SS-03	Surface Soil	East of metal building in observed fill area	To establish presence or absence of contaminants
LS-SS-04	Surface Soil	East of metal building near woods	To establish presence or absence of contaminants
LS-SS-05	Surface Soil	West of metal building onsite	To establish presence or absence of contaminants
LS-SS-06	Surface Soil	Southwestern portion of site	To establish presence or absence of contaminants
LS-SS-07	Surface Soil	Southeastern portion of site	To establish presence or absence of contaminants
LS-SB-01	Subsurface Soil	Just north of facility	Background
LS-SB-02	Subsurface Soil	North of metal building onsite	To establish presence or absence of contaminants
LS-SB-03	Subsurface Soil	East of metal building in observed fill area	To establish presence or absence of contaminants
LS-SB-04	Subsurface Soil	East of metal building near woods	To establish presence or absence of contaminants
LS-SB-05	Subsurface Soil	West of metal building onsite	To establish presence or absence of contaminants
LS-SB-06	Subsurface Soil	Southwestern portion of site	To establish presence or absence of contaminants
LS-SB-07	Subsurface Soil	Southeastern portion of site	To establish presence or absence of contaminants
LS-SD-01	Sediment	Unnamed creek upstream of site	Background
LS-SD-02	Sediment	Wet-weather ditch onsite	To establish presence or absence of contaminants
LS-SD-03	Sediment	Wet-weather ditch downstream of site	To establish presence or absence of contaminants
LS-SD-04	Sediment	Pond south of site	To establish presence or absence of contaminants
LS-TW-01	Groundwater	Just north of facility	Background
LS-TW-02	Groundwater	East of metal building near observed fill area	To establish presence or absence of contaminants
LS-TW-03	Groundwater	Southwestern portion of site	To establish presence or absence of contaminants
LS-TW-04	Groundwater	Southeastern portion of site	To establish presence or absence of contaminants
LS-PW-01	Groundwater	Nearest potable well offsite	To establish presence or absence of contaminants

LS Lafayette Sheet Metal
SS Surface Soil
SB Subsurface Soil
SD Sediment
TW Temporary Well
PW Private Well



SAMPLE LOCATION MAP
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

FIGURE 3

same location background subsurface soil. Samples are placed to determine the presence or absence of contaminants from the sheet metal operation in groundwater.

2.4 Analytical and Container Requirements

Sample containers used will be in accordance with the requirements specified in the Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual; US Environmental Protection Agency, Region IV, Environmental Services Division, February 1, 1991. The following is a description of the analysis and types of containers required.

Analyses	Container	Preservatives**
Ext. Organics, Water	1 gal., amber glass*	None
Volatile Organics, Water	3-40 ml., glass vial*	4 drops conc. HCL to pH <2
Metals, Water	1 liter, plastic	50% HNO_3 to pH <2
Cyanide, Water	1 liter, plastic	NaOH to pH >12
Ext. Organics Soil/Sediment	8 oz., glass*	None
Volatile Organics Soil/Sediment	2 oz. (60 ml VOA Vial)	None
Inorganics Soil/Sediment	8 oz., glass*	None

* Sample container lids are lined with teflon
** All samples will be iced to 4°C upon collection

2.5 Methodology

All sample collection, sample preservation, and chain-of-custody procedures used during this investigation will be in accordance with the standard operating procedures as specified in Section 3 and 4 of the Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual; US Environmental Protection Agency, Region IV, Environmental Services Division, February 1, 1991.

Surface soil and sediment samples will be collected using a stainless steel spoon and a 2-quart glass bowl. The portion of the sample being analyzed for volatile organic compounds (VOC) will be collected first, directly into the appropriate container. The remainder of the sample will be collected into the glass bowl, throughly mixed, and

then distributed to the proper containers. Surface soil samples will be collected from a depth of 4-6 inches below land surface (bls), and sediment samples will be collected from the top portion of sediment in wet weather ditches that drain from the sie.

Subsurface soil samples will be collected from boreholes advanced using either a hydraulic auger or a hand auger, depending on soil conditions. A clean auger bucket will be used to collect the actual sample after reaching the desired depth, and the VOC containers will be filled first. The rest of the sample is then collected into the glass bowl, mixed throughly, and put into the appropriate containers. Subsurface soil samples will be collected at a depth of 5 to 8 feet bls.

Groundwater samples from temporary wells will be collected after the subsurface soil borehole is advanced using the hydraulic auger or hand auger, and then the well casing will be placed in the borehole. The sample will be collected using a peristaltic pump fitted with teflon tubing, and purged until a reasonable sediment free water sample can be obtained. VOC samples will be collected directly from the teflon tubing in the well, and the remainder of the sample will be gathered in the 1 gallon glass jug, and evenly distributed into the other containers. Temporary well samples will be collected from a depth corresponding to the saturation zone, which is expected to be approximately 15 feet bls for this site.

All laboratory analyses and laboratory quality assurance procedures used during this investigation will be in accordance with standard procedures and protocols as specified in the Analytical Support Branch Operations and Quality Assurance Manual; US Environmental Protection Agency, Region IV, Environmental Services Division; revised June 1, 1985 or as specified by the existing US Environmental Protection Agency standard procedures and protocols for the contract analytical laboratory program.

2.6 Investigation Derived Waste

Investigation derived wastes in the form of soils and sludges will be returned to the boreholes from which they were collected. Aqueous wastes such as purged waters from temporary wells will be dispersed at a distance of 5 to 15 feet downgradient of the collection point. Potentially contaminated personal protective clothing will be collected and removed from the site for disposal at a later date. Decontamination

rinse and wash water will be dispersed onsite when feasible, or drummed and removed for disposal at a later date if conditions warrant.

REFERENCES

1. US Geological Survey, 7.5 Minute Series Topographic Quadrangle maps of Georgia: LaFayette 1983, Catlett 1982, Kensington 1983, Nickajack Gap 1983, scale 1:24,000.

2. Potential Hazardous Waste Site Preliminary Assessment for LaFayette Sheet Metal. Filed by Daniel L. Howard, NUS Corporation, August 4, 1989.

3. Mike Ellis, Sheriff, Walker County Sheriff's Department, letter to Susan Fields, Environmental Protection Agency, May 30, 1986. Subject: Sites in Walker county.

4. Charles W. Cressler, Geology and Groundwater Resources of Walker County, Georgia, Georgia Geologic Survey, Information Circular 29, 2nd edition, prepared in cooperation with the USGS, (1981), Figure 2.

5. Charles Butts and Benjamin Gildersleeve, Geology and Mineral Resources of the Paleozoic Area in Northwest Georgia, Georgia Geologic Survey, Bulletin Number 54, 1948.

6. C.N. Joiner, et al., Groundwater Data for Georgia, 1987, US Geological Survey, Open-File Report 88-323, prepared in cooperation with the Georgia Geologic Survey, 1988.

B & V WASTE SCIENCE & TECHNOLOGY CORP.

1117 PERIMETER CENTER WEST
SUITE W-212
ATLANTA, GEORGIA 30338
TEL. (404) 392-9227
FAX: (404) 392-9289

SITE/SAS
RECEIVED
SEP 3 0 1991
EPA - REGION IV

US EPA Region IV
Site Assessment

BVWST Project 52011.011
BVWST File 7006
September 23, 1991

Ms. Janice Thomas
Site Assessment Section
US EPA, Region IV
345 Courtland Street, NE
Atlanta, Georgia 30365

Subject: Access Letter for
LaFayette Sheet Metal

Dear Ms. Thomas:

Please find enclosed the access information for LaFayette Sheet Metal in Lafayette, Walker County, Georgia. Field work is scheduled for the week of November 18, 1991.

Very truly yours,

B&V WASTE SCIENCE AND TECHNOLOGY CORP.

Jancie S. Hatcher

Jancie S. Hatcher
Project Scientist

pem
Enclosure

ACCESS INFORMATION SHEET

Site Name:	LaFayette Sheet Metal	**FIT Project Manager:**	Hubert Wieland
Site Address:	Hwy. 27 North (behind North LaFayette Baptist Church) LaFayette, Walker Co.	**FIT ~~State Coordinator~~ Site Manager:**	Jancie Hatcher
		EPA Contact:	Janice Thomas
		Field Date:	November 18, 1991
EPA ID #:	GAD984270553	**~~TDD~~ Project Number:**	52011.011

	File Information	Verification
Facility Owner/Operator Address Phone No. Principal Contact	McGouirk Saw Mill Service Co. Hwy 27 N. LaFayette, Georgia 404-638-4444	* [638 1228] 404 638 2929
Landowner Address Phone No. Principal Contact (If different from above)	404 638-4679 Charles Morgan 210 East Villaivow LaFayette GA 30728	Plat #53 Milford Morgan Summerville GA 404 (857-7856)
Date of Information	August 1989	

Date Access Required (3 weeks prior to field date)	10/28/91	**Date Information Submitted to EPA**	9/23/91

Comments:

PROJECT WORK PLAN
SITE INSPECTION
LaFayette Sheet Metal
LaFayette, Walker County, Georgia

SISB/SAS
RECEIVED
SEP 04 1991
EPA - REGION IV
ATLANTA GA

AUGUST 2, 1991

1. Project Number: 52011.011

2. EPA Site ID: GAD 984270553

3. Description of Assignment: BVWST has been tasked by Region IV of the U. S. Environmental Protection Agency to conduct a Site Inspection (SI) of the LaFayette Sheet Metal facility in LaFayette, Walker County, Georgia. The objective of the Site Inspection is to provide data necessary to support completion of a site specific preliminary EPA Hazard Ranking System score and to recommend further investigation or no further action. This objective will be accomplished through environmental sampling and CLP analyses of samples.

4. Technical Approach:

   (A) The site reconnaissance will consist of a visit to the site to observe conditions, locate potential sampling locations and develop a site sketch. Additionally, offsite activities include a file search and target survey.

   (B) All sample collection, preservation and chain-of-custody procedures used during this investigation will be in accordance with the standard operating procedures as specified in Sections 3 and 4 of the Environmental Compliance Branch Standard Operation Procedures and Quality Assurance Manual. U.S. Environmental Protection Agency, Region IV, Environmental Services Division; February 1, 1991.

5. Task Breakdown of Assignment:

Task	Personnel	Approximate Date
a. Study Plan	J. Hatcher	prior to field study
b. Work Plan	J. Hatcher	prior to field study
c. Safety Plan	J. Hatcher	prior to field study

d. Review of Work Plan	H. Wieland	prior to field study
e. Review of Safety Plans	J. Schill	prior to field study
f. Response to EPA comments on Study Plan	J. Hatcher	prior to field study
g. Equipment Preparation	J. Hatcher	prior to field study
h. Safety Planning	J. Hatcher	prior to field study
i. Field Work Travel Collection of Environmental Samples	J. Hatcher	week of November 18, 1991
j. Report Preparation	J. Hatcher	
(1) Data Reduction		45 days after receipt of analytical data
(2) Draft Report Preparation		45 days after receipt of analytical data
(3) Final Report		10 days after receipt of EPA comments

6. Estimated Technical Hours: 484

7. Estimated Subcontract Cost: N/A

8. Priority Work: Medium

9. Site Manager: J. Hatcher

10. Project Personnel Requirements: Site Project Manager, Site Safety Coordinator,Sample Custodian, Sampler

11. Schedule of Activity: Week of November 18, 1991- See Item 5 of this Work Plan.

12. Background Data: See Study Plan for LaFayette Sheet Metal.

13. Required Resources List: See Study Plan and Equipment Location Log for LaFayette Sheet Metal.

14. Estimated Analytical Cost:

Type of Analysis	Unit Cost	No. of Samples	Analytical Cost
Water			
Hazardous Substance List (HSL) Organics	$1,000	5	$5,000
Inorganics	$ 250	5	$1,250
Soil			
HSL Organics	$1,000	17	$17,000
Inorganics	$ 250	17	$4,250
Total Estimated Analytical Costs			$27,500

- Does not include a blank and spike for each medium

15. Documents to be Generated:

a. Work Plan

b. Study Plan

c. Safety Plan

d. Logbook(s)

e. Chain-of-Custody Documentation

f. Inorganic Traffic Report

g. Organic Traffic Report

h. Analytical Data

i. Draft Site Inspection Report

j. Final Site Inspection Report

k. Photographs

l. Receipt for Samples Form

m. Sampling Field Sheets

n. Equipment Location Log

16. Report/Product Requirements: A draft site inspection report will be submitted for EPA review within 45 days after receipt of the analytical data. The final report will be submitted 10 days after receipt of EPA review comments.

17. Report/Product Review: The report will be reviewed by Hubert Wieland or his designee.

18. Quality Control Requirements:

    1. Sampling Procedures: All sample collection, sample preservation, and chain-of-custody procedures used during this investigation will be in accordance with the standard operating procedures as specified in Sections 3 and 4 of the Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual. U.S. Environmental Protection Agency, Region IV, Environmental Services Division, February 1, 1991.

    2. Sample Custody: Refer to sampling procedure cited above.

    3. Calibration Procedures: All field instruments used in the collection of evidentiary data will be maintained, calibrated and used in accordance with the manufacturer's specifications.

    4. Data Acquisition: Refer to Sampling Procedures and Calibration Procedures above.

    5. Data Reduction, Validation, and Reporting: To be conducted in accordance with the USEPA Contract Laboratory Program Statements of Work for Organic and Inorganic Analysis Multi-Media, Multi-Concentration (2/88; 7/88 Revisions); USEPA Region 4 Data Review Guidelines as amended July 1, 1987; and Laboratory Data Validation Functional Guidelines for Evaluating Organics, Inorganics, and Pesticides Analysis as authorized under TDD No. HQ-8410-01, Contract No. 68-01-6699.

    6. Internal Quality Control Checks and Frequency: Blanked, spiked, and/or replicate samples will be used to check the accuracy of data received from Contract Laboratories.

       Refer to the Statement of Work cited under Data Reduction, Validation, and Reporting Section above.

    7. Performance and System Audits: Refer to the Statements of Work cited under data Reduction, Validation, and Reporting section above.

8. Preventative Maintenance: Refer to the Statements of Work cited under Data Reduction, Validation, and Reporting section above.

9. Data Precision: Refer to the Statements of Work cited under Data Reduction, Validation, and Reporting section above.

10. Corrective Action: Refer to the Statements of Work cited under Data Reduction, Validation, and Reporting section above.

11. Quality Assurance Reports to the Management: Refer to the Statements of Work cited under Data Reduction, Validation, and Reporting section above.

19. Quality Assurance Requirements:

a. The project work plan will be written; reviewed, and if necessary revised in compliance with BVWST Standards for Written Communications and Section 6.0 of the BVWST Quality Assurance Plan.

b. Evidentiary data will be acquired, reduced, and validated in accordance with Section 6.7 of the BVWST Quality Assurance Plan.

c. All inspection and reconnaissance activities shall be conducted in accordance with EPA's Water Surveillance Branch SOP, Sections 3 and 4, February 1, 1991.

d. Controlled and accountable documents shall be issued and distributed in compliance with Section 1 of BVWST Office Policies and Procedures Manual.

e. Technical Reports shall be written, reviewed, and submitted in accordance with the BVWST Standards of Written Communications and Section 6.0 of the BVWST Quality Assurance Plan.

f. Samples collected during the investigation shall be controlled in accordance with Section 3 of the Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual, USEPA Region IV, Environmental Services Division, February 1, 1991.

g. Measuring and test equipment will be maintained, calibrated, and used in accordance with the manufacturer's specifications and Section 8.0 of the BVWST Health and Safety Manual for Hazardous Waste Site/Investigations.

h. Corrective action shall be implemented and documented in accordance with Section 8.0 of the BVWST Quality Assurance Plan.

i. Nonconformances will be reported, evaluated, and disposed of in accordance with Section 9.0 of the BVWST Quality Assurance Plan.

j. Quality Assurance records shall be prepared and maintained in accordance with Section 6.8 of the BVWST Quality Assurance Plan.

k. Surveillance of project activities will be conducted in accordance with Section 3.2 of the BVWST Quality Assurance Plan.

21. Community Relations Assistance Requirements: Community relations will be the responsibility of EPA, State, and local personnel.

22. Emergency Planning Considerations: See Safety Plan for LaFayette Sheet Metal facility.

23. Health and Safety Requirements: See Safety Plan for the LaFayette Sheet Metal facility.

NUS CORPORATION
1927 LAKESIDE PARKWAY
SUITE 614
TUCKER, GEORGIA 30084
404-938-7710

C-586-8-9-27

August 4, 1989

Mr. A. R. Hanke
Site Investigation and Support Branch
Waste Management Division
Environmental Protection Division
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Date: 8-17-89
Site Disposition: Go to SSI, RA I
EPA Project Manager: [signature]
Report is approved

Subject: Preliminary Assessment
Revision 0
LaFayette Sheet Metal
LaFayette, Walker County, Georgia
EPA ID No. GAD984270553
TDD No. F4-8811-59

← FILE

Dear Mr. Hanke:

Enclosed please find two (2) copies of the Preliminary Assessment, Revision 0, for LaFayette Sheet Metal, located in LaFayette, Walker County, Georgia. Please contact me at NUS Corporation if you have any questions concerning this site.

Very truly yours,

Daniel L. Howard

Daniel L. Howard
Project Manager

Approved:

Greg Schank

DLH/dwf

Enclosures (2)

cc: Mario Villamarzo

SISB/SAS
RECEIVED
AUG 03 1989
EPA - REGION IV
ATLANTA, GA.

PRELIMINARY ASSESSMENT
REVISION 0

Date: August 4, 1989

Prepared by: Daniel L. Howard
NUS Corporation, FIT 4, Atlanta, Georgia

Site: LaFayette Sheet Metal
Hwy. 27 North
LaFayette, Walker County, Georgia
EPA ID No. GAD984270553
TDD No. F4-8811-59

Recomendation and Justification

A screening site inspection of medium priority is recommended for the LaFayette Sheet Metal facility. This recommendation is based on the following reasons: there is documentation of rusty drums containing solid material being stored behind the facility, and there is a possibility of groundwater contamination.

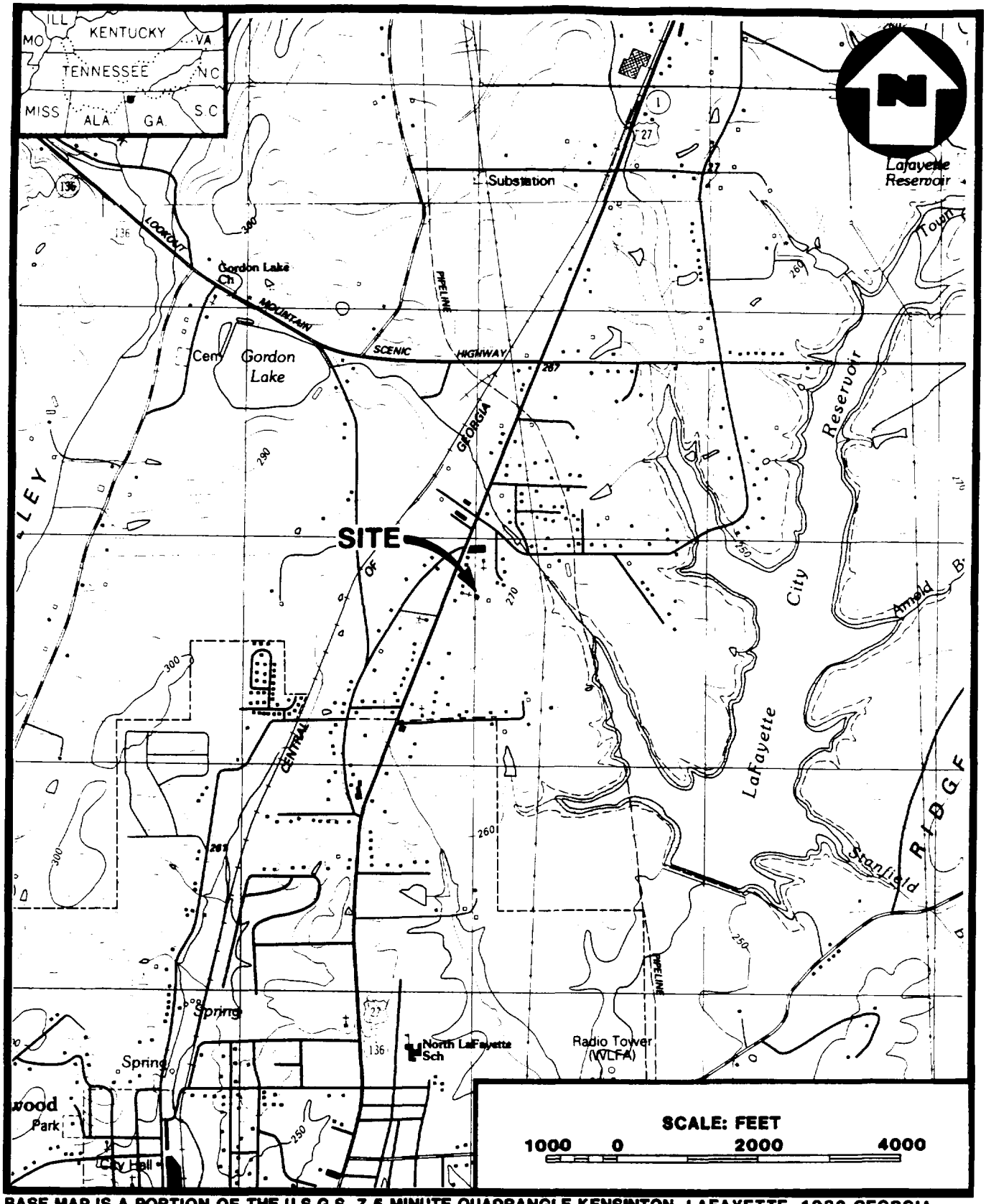
Site History

LaFayette Sheet Metal (now McGouisk Saw Mill Service Company, Inc.) is located on Highway 27 North behind the North LaFayette Baptist Church (Ref. 1, also see Figure 1). There are approximately 250 houses within a 1-mile radius of the facility (Ref. 2). Three houses are within 200 feet of the facility (Ref. 1).

The 1.35-acre property (shown in Figure 2) was owned by Dexter W. Jumper, Jr., during the time that LaFayette Sheet Metal was operating at this facility. Mr. Jumper owned the property from November 15, 1983, to August 12, 1988. From August 12, 1988, to the present date, the property has been owned by McGouisk Saw Mill Service Company, Inc. (Ref. 1). A body shop also operated at this location at one time (Ref. 3).

Disposal History and Waste Characteristics

On June 1, 1986, an EPA official investigated a report of drums behind the LaFayette Sheet Metal facility (Refs. 3, 4). Behind the building, there was a filled area that was approximately 60 by 100 feet

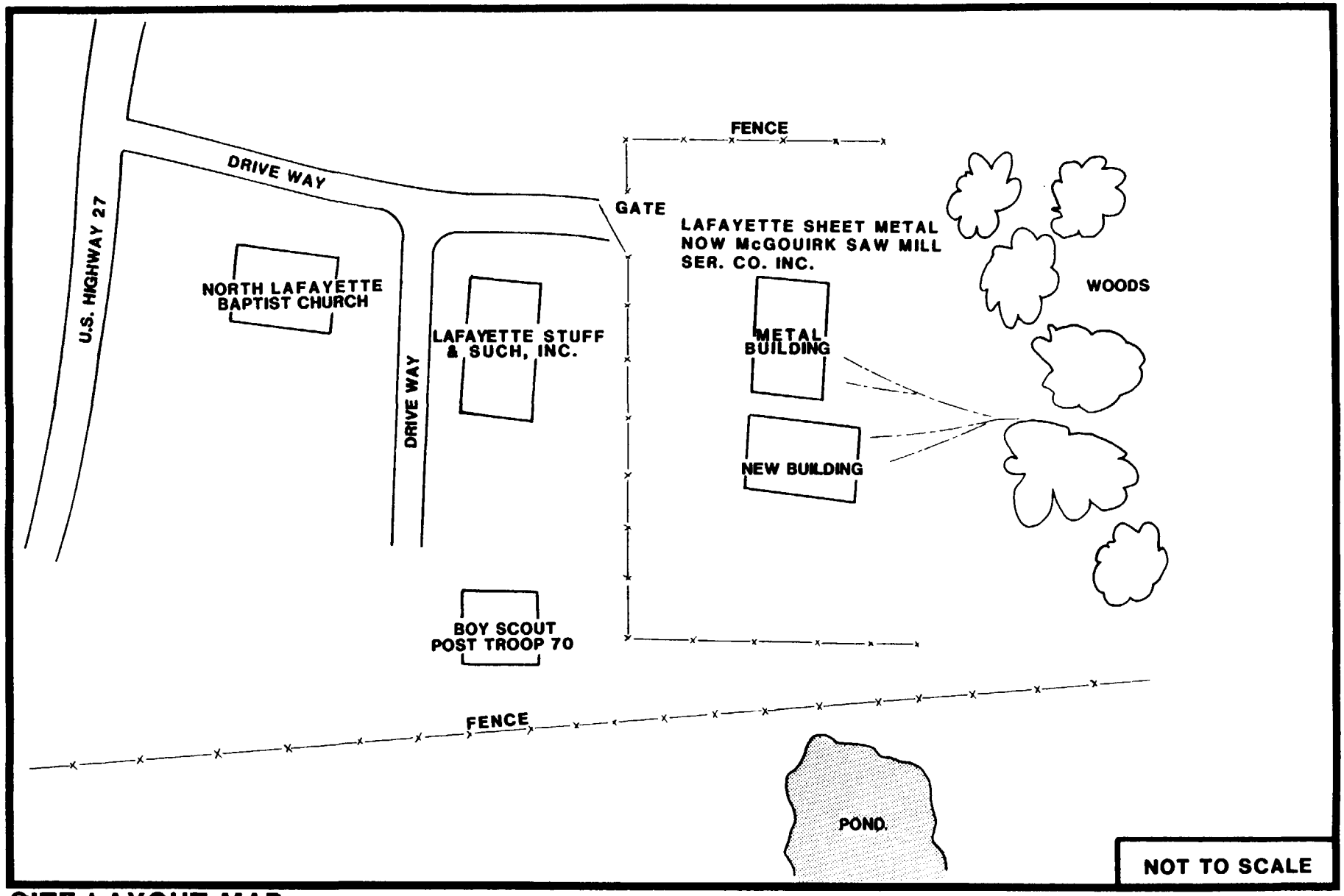


BASE MAP IS A PORTION OF THE U.S.G.S. 7.5 MINUTE QUADRANGLE KENSINTON, LAFAYETTE, 1983 GEORGIA

SITE LOCATION MAP
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY , GEORGIA

FIGURE 1

NUS CORPORATION



SITE LAYOUT MAP
LAFAYETTE SHEET METAL
LAFAYETTE, WALKER COUNTY, GEORGIA

FIGURE 2

NUS CORPORATION

and 5 to 6 feet deep. Several rusty 55-gallon drums containing solid material were along the edge of the filled area. Additionally, five-gallon and one-gallon cans and smaller glass bottles were noted. There was a small area where it appeared fiberglass had been burned (Ref. 3).

During an offsite reconnaissance of the facility on December 19, 1988, there was no sign of any drums on the facility grounds (Ref. 1).

Regulatory History

No information on this facility is contained in the files of the Georgia Department of Natural Resources, Environmental Protection Division (Ref. 5).

Groundwater Pathway

The LaFayette Sheet Metal facility is located in the Valley and Ridge Province of Georgia (Ref. 6). This is the southern extension of the Appalachian Valley and Ridge Physiographic Province that parallels the eastern continental margin of North America. The Valley and Ridge Province is distinguished by folded and faulted stratified rocks consisting of limestone, dolomite, shale and sandstone that trend in a northeast-southwest direction (Ref. 7, p. 7). The geologic units that outcrop within a 4-mile radius of the facility, in stratigraphically descending order, include the Fort Payne Chert, Red Mountain Formation, Chickamauga Limestone, Nauwala Limestone, Knox Group, and the Conasauga Formation (Ref. 6). Groundwater occurs in the residuum mantling the bedrock and in joints, fractures, and solution openings in the bedrock. Recharge occurs locally by percolation of precipitation. Average annual rainfall is 53 inches and average annual evaporation is 38 inches, giving a net rainfall of 15 inches (Ref. 8).

The facility is situated on the exposed Conasauga Formation, which is composed of siltstone, claystone, shale, and limestone. The lower part of the formation is composed predominantly of siltstone and claystone, while the upper 300 feet is composed of thick-bedded limestone. The total thickness of the formation in the Walker County area is around 2000 feet (Ref. 6, p. 6). The Knox Group outcrops adjacent to the Conasauga Formation to the east and west in the facility area, and is composed of limestone and dolomite. Intense folding, faulting, and solution activity present in the site area provide sufficient hydraulic interconnection of these rock units. Therefore, all water-bearing rock units comprise one hydrologic system in the area and they define the aquifer of concern at the site. Groundwater generally occurs under water-table conditions, but artesian conditions may exist at greater depths below ground surface (Ref. 6, p. 10). Depth to the water-table varies

seasonally and with topographic location, ranging from 9 to 20 feet below ground surface (Ref. 9, p. 10).

A house count identified approximately 95 private wells within a 3-mile radius of the facility (Refs. 1, 2). The closest well is approximately 100 feet northeast of the site, but this well is not in use (Ref. 1). The closest well in use is approximately 2900 feet east of the site (Refs. 1, 2). There are approximately 65 private wells located between the 3- and 4-mile radii (Ref. 2).

The LaFayette Water System obtains its water from four sources: Big Spring, Walker County Rural Water and Sewer, a surface intake on Duck Creek and from Catoosa County Water System. Big Spring is located off West Indiana Street, which is 1.2 miles southeast of the facility. LaFayette Water System, which supplies the city of LaFayette and some of the surrounding areas, also buys water from Walker County Rural Water and Sewer on an as needed basis (Ref. 1). Walker County Rural Water and Sewer obtains its water from groundwater. Its well is located north of the site and outside of the 4-mile site radius (Ref. 10). The LaFayette Water System services 4883 connections (Ref. 1).

Surface Water Pathway

LaFayette Water System surface water intake is not located along the surface water migration pathway of this facility. LaFayette Water System intake is where Duck Creek and Dry Creek meet. This intake is 3.5 miles southwest of the site. Duck Creek and Dry Creek are spring-fed creeks (Ref. 1). LaFayette Water System also has two connections to Catoosa County Water System. One connection is off Highway 151, approximately 1 mile north of the Walker County boundary. The second connection is north of LaFayette approximately 0.5 mile inside the Walker County boundary (Ref. 1). Catoosa County Water System obtains its water from surface water drawn from South Chickamauga Creek. The intakes are located upstream of the facility in question (Ref. 10).

Runoff from the site drains into a wet-weather ditch which runs into a wooded area toward the southeast (Ref. 1). Beyond the wooded area is the Highway 27 Bypass which causes runoff from the site to drain south (Ref. 1). Drainage runs south for approximately 3,500 feet and drains into a spring that runs into the lower part of LaFayette City Reservoir (Ref. 2). The reservoir was constructed for water conservation and flood control purposes (Ref. 10). The lake is also used for boating and fishing (Ref. 1). Water travels from the reservoir to the Chattooga River (Ref. 2). There are no surface water intakes along the 15-mile surface water pathway of the Chattooga River downgradient of the site's drainage pathway (Ref. 11).

Air Pathway

The air pathway is not of concern at this facility, since the only waste ever documented as being at this facility is solid waste material (Ref. 3).

HRS2 Concerns

Access to the facility is limited, since there is a fence on three sides of the facility, and access from the rear of the site is limited by a wooded area (Ref. 1). There are no schools close to the facility. The North LaFayette Baptist Church is in front of the facility, approximately 200 feet away (Ref. 1). Although, the ranges of some threatened or endangered species include the state of Georgia, no critical habitats have been designated in Walker County (Ref. 12).

REFERENCES

1. NUS Corporation Field Logbook No. F4-1163 for LaFayette Sheet Metal, TDD No. F4-8811-59. Documentation of facility reconnaissance, December 19, 1988.

2. U.S. Geological Survey, 7.5 minute series Topographic Quadrangle Maps of Georgia: LaFayette 1983, Catlett 1982, Kensington 1983, Nickajack Gap 1983, scale 1:24,000.

3. Susan Fields, OSC, ERCS, interoffice memorandum to Camilla Warren, ISC, United States Environmental Protection Agency, June 2, 1986. Subject: Walker County Site, Georgia.

4. Mike Ellis, Sheriff, Walker County, Sheriff's Department, letter to Susan Fields, Coordinator, Environmental Protection Agency, May 30, 1986. Subject: Sites in Walker County.

5. Marshall Ervin, DNR, Environmental Protection Division, telephone conversation with Daniel Howard, NUS Corporation, July 13, 1989. Subject: Regulatory information on LaFayette Sheet Metal.

6. Charles W. Cressler, Geology and Groundwater Resources of Walker County, Georgia, Georgia Geologic Survey, Information Circular 29, 2nd edition, prepared in cooperation with the U.S.G.S., (1981), Figure 2.

7. Charles Butts and Benjamin Gildersleeve, Geology and Mineral Resources of the Paleozoic Area in Northwest Georgia, Georgia Geologic Survey, Bulletin Number 54, 1948.

8. U.S. Department of Commerce, Climatic Atlas of the United States, (Washington, D.C.: GPO, June 1968), Reprint: 1983, National Oceanic and Atmospheric Administration.

9. C. N. Joiner, et al., Groundwater Data for Georgia, 1987, U.S. Geological Survey, Open-File Report 88-323, prepared in cooperation with the Georgia Geologic Survey, 1988.

10. Water Availability & Use, Tennessee River Basin, Georgia Department of Natural Resources, Environmental Protection Division, December 1986.

11. Water Availability & Use, Coosa River Basin, Georgia Department of Natural Resources, Environmental Protection Division, 1982.

12. Endangered and Threatened Species, U.S. Fish and Wildlife Service, Region 4-Atlanta, 1988.

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GA	D984270553

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
LaFayette Sheet Metal	Hwy. 27 North

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
LaFayette	GA	30728	Walker		

09 COORDINATES LATITUDE	LONGITUDE
34 44 05.	85 16 27.

10 DIRECTIONS TO SITE (Starting from nearest public road) Take Hwy. 136 west to LaFayette, at the intersection of Hwy. 136 andHwy. 27 in LaFayette turn right onto Hwy. 27 and travel 2.1 mi. north to North LaFayette Baptist Church which is on the right side of the Hwy., the site is located behind the church.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residence)
McGouirk Saw Mill Service Co., Inc.	Hwy. 27 North

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
LaFayette	GA	30728	(404) 638-4444

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residence)

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
			( )

13 TYPE OF OWNERSHIP (Check one)
☐ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
☐ A. RCRA 3001 DATE RECEIVED: / / (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: / / (MONTH DAY YEAR) ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☒ YES DATE 12 19 88 (MONTH DAY YEAR)
☐ NO

BY (Check all that apply)
☐ A. EPA ☒ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): NUS Corporation

02 SITE STATUS (Check one)
☐ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION
_____ BEGINNING YEAR | _____ ENDING YEAR ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED June 1, 1986, a EPA investigator reported seeing several 55 gallon rusty drums containing solid material, empty 5 & 1 gallon cans and smaller glass bottles lying around in back of the building on site. December 19, 1988 an offsite recon was conducted by NUS at the site. There were no signs of any drums or cans on the site.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Unknown

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☒ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Mario Villamarzo	EPA Region IV	(404) 347-5065

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Dan L. Howard	NA	NUS Corp.	(404) 938-7710	7 24 89 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

LAFAYETTE SHEET METAL
EPA SITE NUMBER GAD984270553
LAFAYETTE
WALKER COUNTY, GA
EPA REGION: 4

SCORE STATUS: IN PREPARATION

SCORED BY DANIEL HOWARD
OF NUS CORPORATION
ON 07/13/89

DATE OF THIS REPORT: 08/01/89
DATE OF LAST MODIFICATION: 08/01/89

GROUND WATER ROUTE SCORE	:	61.36
SURFACE WATER ROUTE SCORE	:	5.92
AIR ROUTE SCORE	:	0.00
MIGRATION SCORE	:	35.63

HRS GROUND WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
DEPTH TO WATER TABLE	9 FEET		
DEPTH TO BOTTOM OF WASTE	0 FEET		
DEPTH TO AQUIFER OF CONCERN	9 FEET	3	6
PRECIPITATION	53.0 INCHES		
EVAPORATION	38.0 INCHES		
NET PRECIPITATION	15.0 INCHES	2	2
PERMEABILITY	1.0X10-4 CM/SEC	2	2
PHYSICAL STATE		1	1
TOTAL ROUTE CHARACTERISTICS SCORE:			11
3. CONTAINMENT		3	3
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE:ASSIGNED VALUE,18			18
WASTE QUANTITY CUBIC YDS	2501		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	2501 CU. YDS	8	8
TOTAL WASTE CHARACTERISTICS SCORE:			26
5. TARGETS			
GROUND WATER USE		2	6
DISTANCE TO NEAREST WELL	2900 FEET		
AND	MATRIX VALUE	35	35
TOTAL POPULATION SERVED	18916 PERSONS		
NUMBER OF HOUSES	95		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	4883		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			41

GROUND WATER ROUTE SCORE (Sgw) = 61.36

HRS SURFACE WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
SITE LOCATED IN SURFACE WATER	NO		
SITE WITHIN CLOSED BASIN	NO		
FACILITY SLOPE	2.5 %		
INTERVENING SLOPE	1.4 %	0	0
24-HOUR RAINFALL	3.5 INCHES	3	3
DISTANCE TO DOWN-SLOPE WATER	3500 FEET	2	4
PHYSICAL STATE	1		1
TOTAL ROUTE CHARACTERISTICS SCORE:			8
3. CONTAINMENT	3		3
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE:ASSIGNED VALUE,18			18
WASTE QUANTITY CUBIC YDS	2501		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	2501 CU. YDS	8	8
TOTAL WASTE CHARACTERISTICS SCORE:			26
5. TARGETS			
SURFACE WATER USE		2	6
DISTANCE TO SENSITIVE ENVIRONMENTS		0	0
COASTAL WETLANDS	NONE		
FRESH-WATER WETLANDS	NONE		
CRITICAL HABITAT	NONE		
DISTANCE TO STATIC WATER	3500 FEET		
DISTANCE TO WATER SUPPLY INTAKE	> 1 MILE		
AND	MATRIX VALUE	0	0
TOTAL POPULATION SERVED	0		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			6

SURFACE WATER ROUTE SCORE (Ssw) = 5.82

HRS AIR ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0

2. WASTE CHARACTERISTICS

REACTIVITY:

MATRIX VALUE

INCOMPATIBILITY

TOXICITY

WASTE QUANTITY CUBIC YARDS
DRUMS
GALLONS
TONS

TOTAL

TOTAL WASTE CHARACTERISTICS SCORE: N/A

3. TARGETS

POPULATION WITHIN 4-MILE RADIUS
0 to 0.25 mile
0 to 0.50 mile
0 to 1.0 mile
0 to 4.0 miles

DISTANCE TO SENSITIVE ENVIRONMENTS
COASTAL WETLANDS
FRESH-WATER WETLANDS
CRITICAL HABITAT

DISTANCE TO LAND USES
COMMERCIAL/INDUSTRIAL
PARK/FOREST/RESIDENTIAL
AGRICULTURAL LAND
PRIME FARMLAND
HISTORIC SITE WITHIN VIEW?

TOTAL TARGETS SCORE: N/A

AIR ROUTE SCORE (Sa) = 0.00

HAZARD RANKING SYSTEM SCORING CALCULATIONS
FOR
SITE: LAFAYETTE SHEET METAL
AS OF 08/01/89

GROUND WATER ROUTE SCORE

ROUTE CHARACTERISTICS		11
CONTAINMENT	X	3
WASTE CHARACTERISTICS	X	26
TARGETS	X	41

= 35178 /57,330 X 100 = 61.36 = S_{gw}

SURFACE WATER ROUTE SCORE

ROUTE CHARACTERISTICS		8
CONTAINMENT	X	3
WASTE CHARACTERISTICS	X	26
TARGETS	X	6

= 3744 /64,350 X 100 = 5.82 = S_{sw}

AIR ROUTE SCORE

OBSERVED RELEASE 0 /35,100 X 100 = 0.00 = S_{air}

SUMMARY OF MIGRATION SCORE CALCULATIONS

	S	S^2
GROUND WATER ROUTE SCORE (S_{gw})	61.36	3765.05
SURFACE WATER ROUTE SCORE (S_{sw})	5.82	33.87
AIR ROUTE SCORE (S_{air})	0.00	0.00
$S^2_{gw} + S^2_{sw} + S^2_{air}$		3798.92
$\sqrt{(S^2_{gw} + S^2_{sw} + S^2_{air})}$		61.64
$S_M = \sqrt{(S^2_{gw} + S^2_{sw} + S^2_{air})}/1.73$		35.63

RECONNAISSANCE CHECKLIST FOR HRS2 CONCERNS

Instructions: Obtain as much "up front" information as possible prior to conducting fieldwork. Complete the form in as much detail as you can, providing attachments as necessary. Cite the source for all information obtained.

Site name: LaFayette Sheet Metal
City, County, State: LaFayette, Walker, Georgia
EPA ID No.: GAD984270553
Person responsible for form: Daniel Howard
Date: 12-19-88

Air Pathway

Describe any potential air emission sources onsite:

None known

Identify any sensitive environments within 4 miles:

None known

Identify the maximally exposed individual (nearest residence or regularly occupied building - workers do count): Workers at McGowan Lane Mill Lumber Company [illegible] which is where LaFayette Sheet Metal was located (Log Book F 4-116.3)

Groundwater Pathway

Identify any areas of karst terrain:

None

Identify additional population due to consideration of wells completed in overlying aquifers to the AOC: None

Do significant targets exist between 3 and 4 miles from the site?

[illegible]

Is the AOC a sole source aquifer according to Safe Drinking Water Act? (i.e. is the site located in Dade, Broward, Volusia, Putnam, or Flager County, Florida) No

Surface Water Pathway

Are there intakes located on the extended 15-mile migration pathway?

[illegible]

Are there recreational areas, sensitive environments, or human food chain targets (fisheries) along the extended pathway? [illegible]

Onsite Exposure Pathway

Is there waste or contaminated soil onsite at 2 feet below land surface or higher?

Unknown

Is the site accessible to non-employees (workers do not count)?

Yes

Are there residences, schools, or daycare centers onsite or in close proximity?

[illegible]

Are there barriers to travel (e.g., a river) within one mile?

No

RCRA/NPL POLICY QUESTIONNAIRE FOR INITIAL SCREENING

Site Name: La Fayette Sheet Metal

City: La Fayette State: Georgia

EPA I.D. Number: GAD984270553

Type of Facility: Generator____ Transporter____ Disposal____
Treatment____ Storage (more than 90 days)____
Non Handler X

I. RCRA APPLICABILITY	yes	no
Has this facility treated, stored or disposed of a RCRA hazardous waste since Nov. 19, 1980?	___	✓
Has a RCRA Facility Assessment (RFA) been performed on this site?	___	✓
Does the facility have a RCRA operating or post-closure permit? If so, date issued _____	___	✓
Did the facility file a RCRA Part A application?	___	✓
If so:		
1) Does the facility currently have interim status?	___	___
2) Did the facility withdraw its interim status?	___	___
3) Is the facility a known or possible protective filer?	___	___
Is the facility a late (after Nov. 19, 1980) or non-filer that has been identified by EPA or the State?	___	✓

STOP HERE IF ALL ANSWERS TO QUESTIONS IN SECTION I ARE NO

II. FINANCIAL STATUS		
Is the facility owned by an entity that has filed for bankruptcy under federal or State laws?	___	___

III. RCRA ENFORCEMENT STATUS		
Has the facility lost authorization to operate or had its interim status revoked?	___	___
Has the facility been involved in any other RCRA enforcement action?	___	___

REFERENCE 1

a product of

J. L. DARLING CORPORATION

TACOMA, WASHINGTON 98421 U.S.A.

"Rite in the Rain."
WEATHERPROOF

LEVEL

NOTEBOOK NO. 311

F4-1163 F4-8811-59

LaFayette Sheet Metal

LaFayette, Walker Co., Georg

Site Reconnaissance

Daniel Howard

Geoff Carton

LOGBOOK REQUIREMENTS
REVISED - JANUARY 6, 1988

NOTE: ALL LANGUAGE SHOULD BE FACTUAL AND OBJECTIVE

1. Record on front cover of the Logbook:

   TDD No., Site Name, Site Location, Project Manager

2. All entries are made using ink.

3. Provide statement referencing Equipment Location Log.

4. Statement of Work Plan, Study Plan, and Safety Plan discussion and distribution to field team with team member signatures.

5. Sign and date each page. Project Manager is to review and sign off on each logbook daily.

6. A single line is drawn through error. Each correction is dated/initialed.

7. Report weather conditions. Provide general site description and remarks.

8. Document all changes from project planning documents.

9. Provide a site sketch with sample locations.

10. Document all calibration and pre-operational checks of equipment.

11. Provide reference to Sampling Field Sheets for detailed sampling informaiton.

12. Maintain photo log by completing the stamped information at the end of the logbook.

13. If no site representative is on hand to accept the receipt for samples an entry to that effect must be placed in the logbook.

5-
2-19-88

I have read and understand the what I work plans for this facility.

Daniel L. Howard
Geoffrey Cotton

9:00 Cloudy 35°F

Arrived at the La Fayette Water System office. Met with Roger Bandy, Water Superintendent and Teddy Larmon, Chief Supervisor. Both outlined the area that La Fayette Water System supplies drinking water to.

La Fayette Water System has two intakes. The first intake is off West Indiana Street; the water is drawn from Big Spring which is 1.2 miles southwest of the city. The second intake is ~~from~~ Old ~~from~~ near Duck Creek on Dry Creek; the water is pump from the intake to a filtration plant. This intake is 3.5 miles

Daniel L. Howard

12-19-88

southwest side of Sand Creek and Big Lynch and Spring Branch creeks.

9:50 La Fayette also has two connections to Catoosa County Water System. The connection is off Highway 151 about one mile north of the Walker County line, which is east of La Fayette. The second connection is north of La Fayette about one-half mile inside the Walker County line. La Fayette in addition buys water from the Walker Co. Rural Water Sewer, on DLH as need basis, and pipes it into their water system.

Mr. Bandy stated that the Walker County Rural Rural Water & Sewer provides water to the northeast of La Fayette.

Mr. Lawson said that the La Fayette Water System started sometime in the 1920's.

The La Fayette Water System services 4883 connections. Mr Bandy stated that they have had no water quality problems

David L Howard

12-19-88

10:10

Drove at Est La Fayette city office to determine who was the present owner of the property were the sites is located and who owns the surrounding properties.

Lots and present owners

49: Roy C Shepard
Rt. 4 La Fayette

49A: Larry E. Gilreath + Sharon D. Wallace Gilreath
Route 4
2.53 acres pond on land

50: Penn G. Hoorlson + Nickey Joe Hoorlson
Rt. 4
100 x 200 feet

51: North ~~Left~~ DLH La Fayette Baptist Church
Rt. 1 La Fayette

David L. Howard

12 19 88

52: La Fayette Sheet Metal Inc

.65 ± acres

53: McGouirk Saw Mill Service
Company [illegible] 5/12/88
Lease [illegible] 11/15/88
1.33 acres
Site

54: C. A. Black

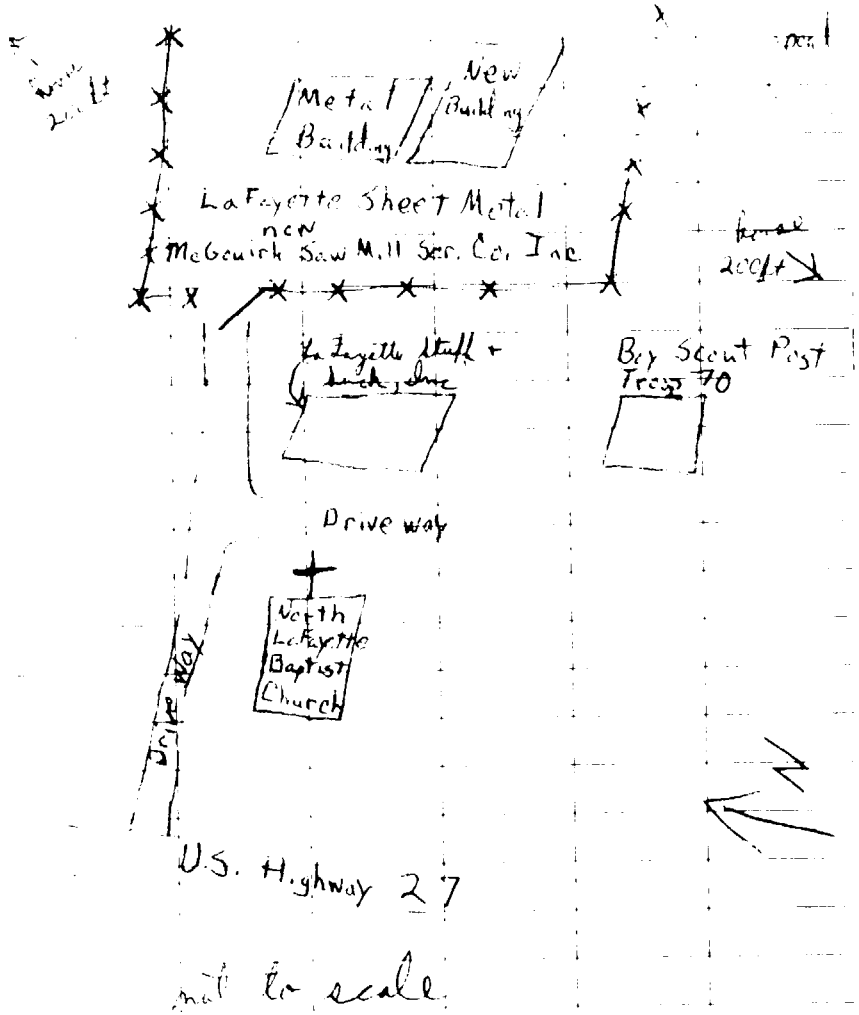
55: Richard Foster, Jones + C. A. Black
Location of the North La Fayette Baptist
Church
1 acre

56: Jerry Eugene Swafford
Mt. P La Fayette
[illegible]

Donald L. Howard

12 19 88

Site Sketch



not to scale

Donald L. Howard

12-19-88

10:50 talked to [illegible] of property adjacent to north side of site. He said that Mr. C. A. Black owned the property and that a well had been drilled on the property. He said that the well is over 100 feet deep, but that it was not in use. The well was capped and had no pump connected to it. He said that Mr. Black was going to put a trailer on the property, but he never did.

No signs of drums on the site or in the area.

11:15 Found well in use.
Clara Spayberry
572 McCarthy Rd
Deep well, the well was drilled in approx 1978.
Well located approx 3000 feet east of the site.

Runoff from the site, drains into a ditch which runs into a wooded area toward the southeast. Beyond the wooded

Daniel L. Harrold

12-19-88

area is Highway 21 bypass which carries runoff from the site to drain toward the south.

The Fayette City Reservoir is located to the east of the facility. There were people fishing at the lake on the day of the return.

Daniel L. Harrold
12-19-88

DDH

Date 12-19-88 [illegible]

Time 12:35

Location [illegible] adjacent to [illegible] of the site

Purpose [illegible] conditions [illegible]

DDH

Date 12-19-88 [illegible]

Time 10:30

Location [illegible] of site, [illegible]

Purpose [illegible] a small [illegible] of [illegible] and [illegible] buildings on site

DDH

Date 12-19-88 Geoff Carter

Time 12:50

Location [illegible] adjacent to [illegible] side of site

Purpose [illegible] site, back of [illegible] building on site.

REFERENCE 3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: June 2, 1986

SUBJECT: Walker County Site, GA

FROM: OSC, ERCS

TO: Camilla Warren, ISC

On June 1, 1986, I investigated a report of drums behind the North Lafayette Baptist Chuch on Highway 27 in Lafayette, GA. Behind the church there is a Lafayette Sheet Metal business, phone 404/638-1228. Behind the building, there is a filled area approximately 60'X 100' by 5-6 feet deep. I could see several rusty 55 gallon drums containing solid material along the edge of the filled area. Additionally, 5 gallon and 1 gallon cans and smaller glass bottles were lying around. There is a small area where it appears fiberglass has been burned. I spoke with a gentleman from an adjacent boy scout office who told me the business used to be a body shop.

The filled area drains into a wet weather ditch which runs into a wooded area and an apparent pasture. I saw three homes within 200 yards of the site. Actually, it appears the business is in their back yards.

I'll be glad to accompany you on any site investigations.

Susan Fields

Susan Fields

REFERENCE 4

Walker County Sheriff's Department

Mike Ellis
Sheriff

Post Office Box 767
LaFayette, Georgia 30728
(404) 638-2512

May 30, 1986

Sue Fields, Coordinator
Environmental Protection Agency
Atlanta, Georgia

Dear Ms. Fields:

This is to advise that I have had a discussion with Mose Mathis and Thomas Lewis regarding waste materials which they have hauled to various sites in Walker County. Those sites named by Mr. Mathis and Mr. Lewis are: Prospect Road (Wade Purser property), Kensington Road property, Sidney and Mose Mathis property, Steele property-off Cove Road, area behind Joe Upshaw's, and the Shaver Farm. We have also had a call pertaining to barrels being stored behind the North LaFayette Baptist Church on Highway 27. We have had numerous calls regardin these sites. Mr. Mathis and Mr. Lewis also have questions they would like answered.

Ms. Fields, I am requesting that this information be passed on to whomever necessary to get this matter resolved.

If the Walker County Sheriff's Department may be of further assistance, please don't hesitate to call.

Sincerely,

Mike Ellis

Mike Ellis
Walker County Sheriff's Department

REFERENCE 5

NUS CORPORATION AND SUBSIDIARIES — TELECON NOTE

CONTROL NO:	DATE:	TIME:
	7-13-89	11:25

DISTRIBUTION:

BETWEEN:	OF:	PHONE:
Marshall Ervin	DNR Environmental Protection Div	(404)669-3927

AND: Daniel L. Howard, NUS Corp.

DISCUSSION:

Regulatory information on La Fayette Sheet Metal

Ms. Ervin said that there was no information on this facility in their files as being a hazardous waste generator.

ACTION ITEMS:

NUS 087 REVISED 0685

REFERENCE 6

GEOLOGY AND GROUND-WATER RESOURCES OF WALKER COUNTY, GEORGIA

By

Charles W. Cressler
U.S. Geological Survey

Prepared in cooperation with the U.S. Geological Survey

DEPARTMENT OF NATURAL RESOURCES
Joe D. Tanner, Commissioner
ENVIRONMENTAL PROTECTION DIVISION
J. Leonard Ledbetter, Director
GEORGIA GEOLOGIC SURVEY
William H. McLemore, State Geologist

Atlanta

1981

Second Edition

(First Edition, 1964)

INFORMATION CIRCULAR 29

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GEOLOGY AND GROUND-WATER RESOURCES OF WALKER COUNTY, GEORGIA

by Charles W. Cressler

ABSTRACT

ker County is in the Cumberland Plateau and lley and Ridge physiographic provinces of a. It is underlain by rocks ranging in age Early Cambrian (Rome Formation) to Pennian (Rockcastle Sandstone). All the geologic ions except the Chattanooga Shale yield ent water to wells for domestic and farm ost wells in the county are between 50 and et deep, but a few are deeper than 300 feet.

largest sustained pumpage from a well was m (gallons per minute), but wells in the Group, the Conasauga Formation, the Chicka-a Limestone and the Mississippian rocks ly would supply more. Some artesian wells Chickamauga Limestone and the Floyd flow.

dness of ground water from wells sampled ghout the county ranges from 17 to 400 ppm per million). The mineral constituents vary erably with each formation, but the iron it generally is less than 0.02 ppm.

ings in the Knox Group and the Mississipocks discharged more than 21 mgd (million s per day) during 1960. Of this amount, at 15 mgd was unused. Much of this spring flow be used as a source of industrial supply in r County.

dness of the spring water ranges from 86 ppm. The iron content generally is less than pm.

INTRODUCTION

lker County includes an area of 448 square in northwestern Georgia (fig. 1). It is led on the east and south by Catoosa, Whit-Gordon, and Chattooga Counties, Ga., on the by DeKalb County, Ala. and Dade County, nd on the north by Hamilton County, Tenn. yette, the county seat, is on U.S. Highway 27 25 miles south of Chattanooga, Tenn.

lker County has a mild climate with an ge January temperature of 41°F and an ge July temperature of 78°F. The frost-free n averages about 190 days. The average y precipitation is about 55 inches and ins a small amount of snow. Precipitation in ounty is heaviest in the winter and midsum-Autumn is the driest season of the year.

e county is in the drainage basins of the essee and the Coosa Rivers. Areas north of yette, including McLemore Cove, drain to the Tennessee. The remainder of the county drains southward into the Coosa River.

The principal industries of Walker County are textile and furniture manufacturing, dairying and milk processing, poultry and egg raising, and farming. Agriculture is mainly part-time and residential farming. A major part of the agricultural income is derived from poultry and poultry products. The soils of the county are of medium productivity. The valleys are used for growing cotton, corn, small grains, and pasture crops. The lower ridges are used for truck, hog, and pasture crops, and the rougher terrane is used for growing timber.

A good network of all-weather roads make all sections of Walker County easily accessible. The main roads serving the county are U.S. Highway 27 that connects LaFayette, the largest city, with Chattanooga, Tenn. to the north and Rome, Ga. to the south. Georgia Highway 151 links LaFayette with U.S. Highway 41 and Atlanta. The Central of Georgia Railroad and the Tennessee, Alabama, and Georgia Railroad serve the county.

The writer wishes to express his sincere appreciation to the well and spring owners of Walker County for their cooperation in supplying data on their water supplies.

Dr. A. T. Allen and Mr. R. J. Martin, of Emory University Geology Department, were very helpful on problems concerning geology.

The U.S. Park Service permitted the installation of a recording gage on a well in the Chickamauga and Chattanooga National Military Park.

The writer was assisted by Harry E. Blanchard, hydrologic engineering technician, U.S. Geological Survey, in making the well and spring inventory.

This investigation was made under the supervision of J. T. Callahan, former district geologist, Ground Water Branch, U.S. Geological Survey.

PURPOSE AND SCOPE

This investigation was made by the U.S. Geological Survey in cooperation with the Georgia Department of Mines, Mining, and Geology to evaluate the ground-water resources of Walker County. The investigation is part of a statewide program of reconnaissance designed to appraise Georgia's ground-water resources, the amount of ground water being used, and the quantity, quality, and availability of ground water in each county. Walker County is one of ten counties that will be studied in the Paleozoic rock area of

Table 1. *Geologic formations and their water-bearing properties, Walker County, Ga.*

System	*Group or formation*	*Thickness (feet)*	*Lithology*	*Water-bearing characteristics*
Pennsylvanian	Pennsylvanian rocks, undifferentiated	1,200±	Shale and massively bedded conglomeratic sandstone at base; coarse-grained sandstone and sandstone interbedded with shale; commercial deposits of coal.	Wells less than 100 feet deep; adequate for domestic and farm needs; iron content high in many areas.
Mississippian	Mississippian rocks, undifferentiated	1,500±	Western facies: Bedded chert at base; thick-bedded cherty and noncherty, fine- to coarse-grained limestone; thin sandstone and shale beds; shale and little sandstone interbedded at top.	Chert and limestone; good aquifer; may yield several hundred gpm from solution openings and joints; wells less than 200 feet deep; several springs in limestone; mostly small.
		1,500±	Eastern facies: Gray to black fossiliferous shale; many places includes limestone and sandstone members similar to those of western facies; bedded chert at base.	Wells less than 100 feet deep; some yield more than 30 gpm, but most less than 10 gpm; best yields from limestone members, poorest from shale.
Devonian and Mississippian	Chattanooga Shale	15	Black hard shale, high cleaved; top 1 to 3 feet is greenish phosphatic clay.	Not an aquifer; locally may be a confining layer; contains iron and hydrogen sulfide and should be cased off from well.
Silurian	Red Mountain Formation	1,000±	Sandstone, shale and limestone; more sandstone on east side of county.	Wells less than 100 feet deep; supplies domestic and farm needs; water high in iron in some areas; yields as much as 30 gpm from sandstone.
Ordovician	Chickamauga Limestone	1,400-2,300	Thin and thick-bedded limestone, clayey limestone, and siltstone in western outcrops; siltstone and claystone in eastern outcrops.	Good aquifer; wells generally less than 100 feet deep; yields 10 to 20 gpm common; higher yields probable; some hydrogen sulfide; yields poor in siltstone areas.
	Knox Group	3,550±	Thin and thick-bedded dolomite; limestone and dolomite at top; weathers deeply and has thick chert and clay mantle.	Very good aquifer; wells and springs of good yield; wells between 150 and 200 feet deep and supply 20 to 60 gpm; larger yields from solution openings and joints; springs discharge 25 to 40 mgd, depending on precipitation.
Cambrian	Conasauga Formation	2,000±	Limestone, limy siltstone, claystone, shale.	Good aquifer, wells 50 to 150 feet deep; yields adequate for domestic and farm needs, and many are 20 to 60 gpm; much larger yields from solution openings in limestone part of formation.
	Rome Formation	2,000±	Sandstone, siltstone, claystone; highly cleaved and folded.	Poor aquifer in Walker County; may supply farm or home, but many wells unreliable; iron is problem in places.

in Walker County probably are water-table wells, but many are nonflowing artesian wells.

The quantity of ground water stored in the zone of saturation depends on the amount of open space in the rocks. Openings in the rocks of Walker County consist mainly of joints and fractures. Joints and fractures in shale and sandstone are narrow and have small storage capacity. Joints in limestone, on the other hand, commonly are enlarged by solution and have large capacity. For this reason, limestone is the most important ground-water reservoir in Walker County.

The degree to which rock openings are interconnected affects the productivity of an aquifer. Joints in limestone and dolomite are highly interconnected; a well penetrating a single joint of small storage capacity may have a large yield, because the joint is part of an extensive system which supplies water to the well.

Ground water moves in response to gravity just as surface water does, though more slowly, because it loses energy by friction as it passes through openings in rocks.

CHEMICAL QUALITY

Ground water dissolves material from the soil and rocks with which it comes in contact. The kind and amount of material dissolved in water is important because it largely determines how the water can be used. The U.S. Public Health Service (1946) recommends that water for domestic and municipal supplies contain no more than 250 ppm (parts per million) chloride, 250 ppm sulfate, 125 ppm magnesium, 1.5 ppm fluoride, 0.3 ppm iron and manganese together, and 500 ppm dissolved solids.

Water containing too much iron tends to stain laundry and enameled ware. Iron in concentrations greater than about 0.5 to 1.0 ppm can be tasted. Livestock are sensitive to the taste of iron and may not drink water with a high iron content.

Hardness of water is caused almost entirely by calcium and magnesium, though other constituents, such as iron, aluminum, and free acid also cause hardness. Hard water is objectionable in the home because of its soap-consuming capacity. For satisfactory operation commercial laundries require water that is practically of zero hardness. The processing water for textile mills is required to be very soft. Water with a calcium, magnesium hardness of 1 to 60 ppm is considered soft; 61 to 120 ppm, moderately hard; 121 to 200 ppm, hard; and 201 ppm and above, hard to very hard (Lamar, 1940, p. 25).

Water for industrial use can have a wide range of chemical quality; almost every industrial application has different standards. Many industries require water with an iron content less than 0.2 ppm. Hardness as calcium and magnesium generally should be less than 100 ppm, though it may be as high as 250 ppm for carbonated beverages. Textiles and general dyeing require a dissolved solids content of 200 ppm or less (Moore, 1940, p. 271).

UTILIZATION

During 1960 the amount of ground water used in Walker County was about 6.8 mgd (million gallons per day). This included about 1.7 mgd distributed by Chickamauga and LaFayette, which is mainly spring water. Industry used about 4 mgd directly from springs. The remainder, or 1.1 mgd, is derived from wells throughout the county.

WATER-LEVEL FLUCTUATIONS

A continuous water-level record was obtained for well 237. The well, in the lower part of the Chickamauga Limestone, is 72 feet deep. It is similar in depth and construction to many wells in the county.

The record shows that the water table rises very rapidly after a heavy rain (fig. 3). This rise may be less than an inch or several feet, depending on the duration, intensity, and amount of rain. Shortly after the rain stops, the water table begins a slow decline, which continues at a progressively slower rate until it is reversed by another rain. The hydraulic gradient decreases as the water table declines, and ground water travels more slowly to discharge points. During dry periods, the water table recedes below the channels of most small streams, causing them to go dry.

Water-level records obtained during the investigation show that the water table is highest during the wet months of January, February, and March and lowest during July, August, and September, when precipitation is very light and water loss through evaporation and transpiration is greatest.

Long-term records of water levels are not available for Walker County; therefore, it is impossible to determine whether the water table has declined, as many residents report. However, judging by the small number of old dug wells that have gone dry permanently or that have required deepening, any decline has been slight.

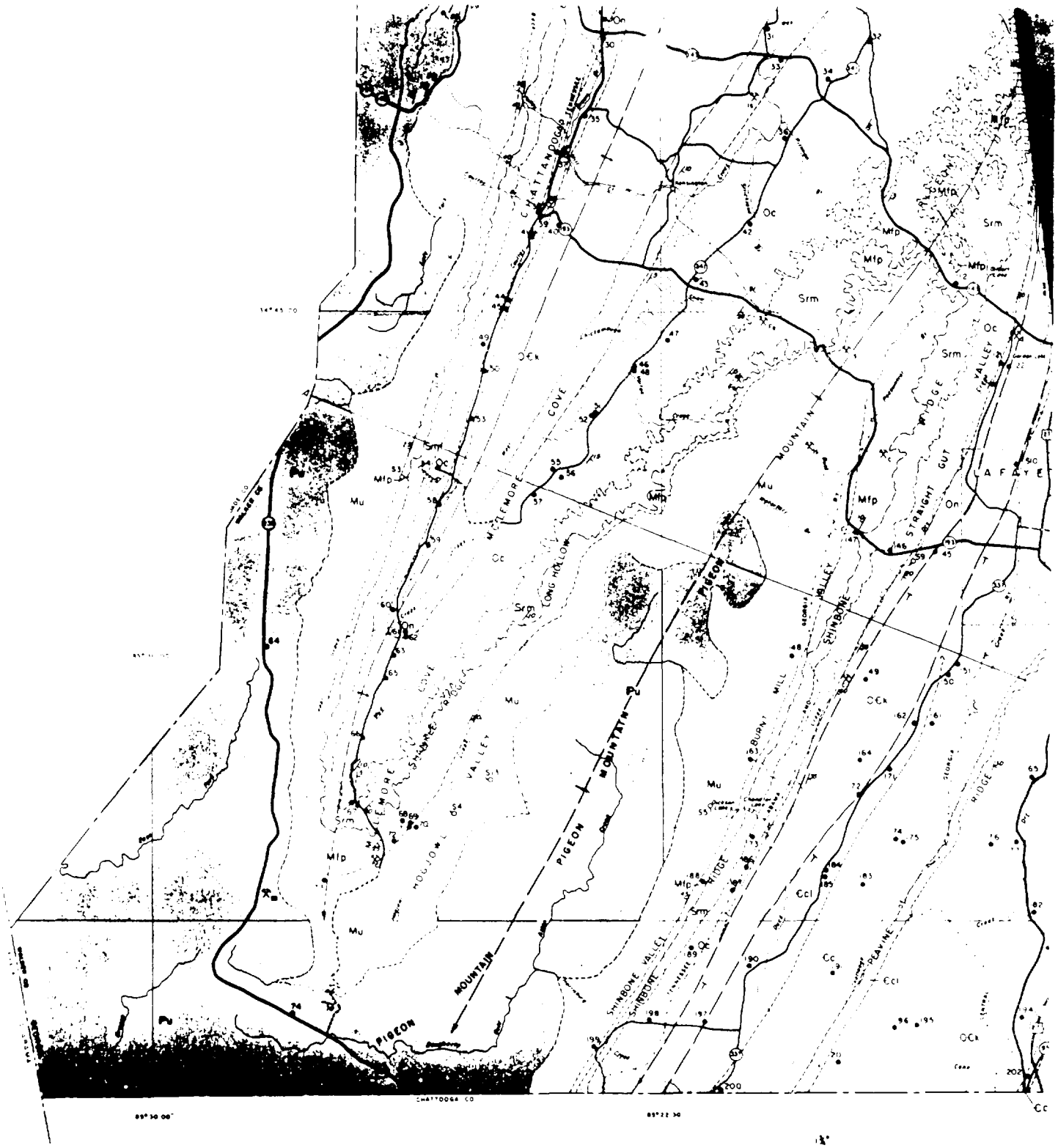
WATER-BEARING CHARACTER OF THE GEOLOGIC FORMATIONS

A geologic formation that yields water in useful quantities is an aquifer. All the geologic formations exposed in Walker County are aquifers except the Chattanooga Shale. The formations are discussed separately beginning with the oldest.

Rome Formation

The outcrop area of the Rome Formation in Walker County is sparsely populated, and the formation is practically unused as an aquifer. In Catoosa County to the north, however, the Rome yields enough water to wells for most domestic and farm needs, and, on the flanks of sandstone ridges, yields of 20 gpm (gallons per minute) are reported. Most wells in the Rome in Catoosa County are less than 100 feet deep, but some are deeper than 200 feet.

In areas where sandstone is lacking, wells tend to go dry after several minutes of continuous pumping, but they usually recover overnight.



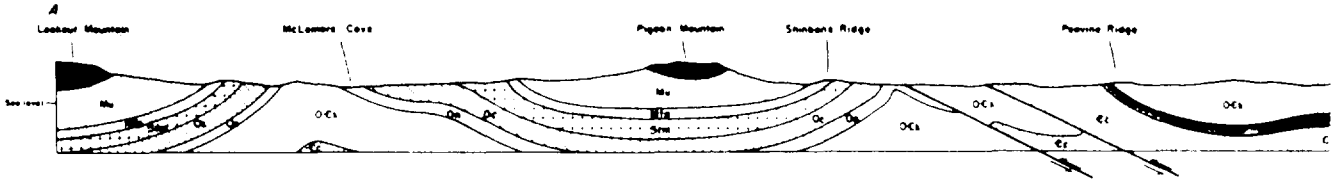
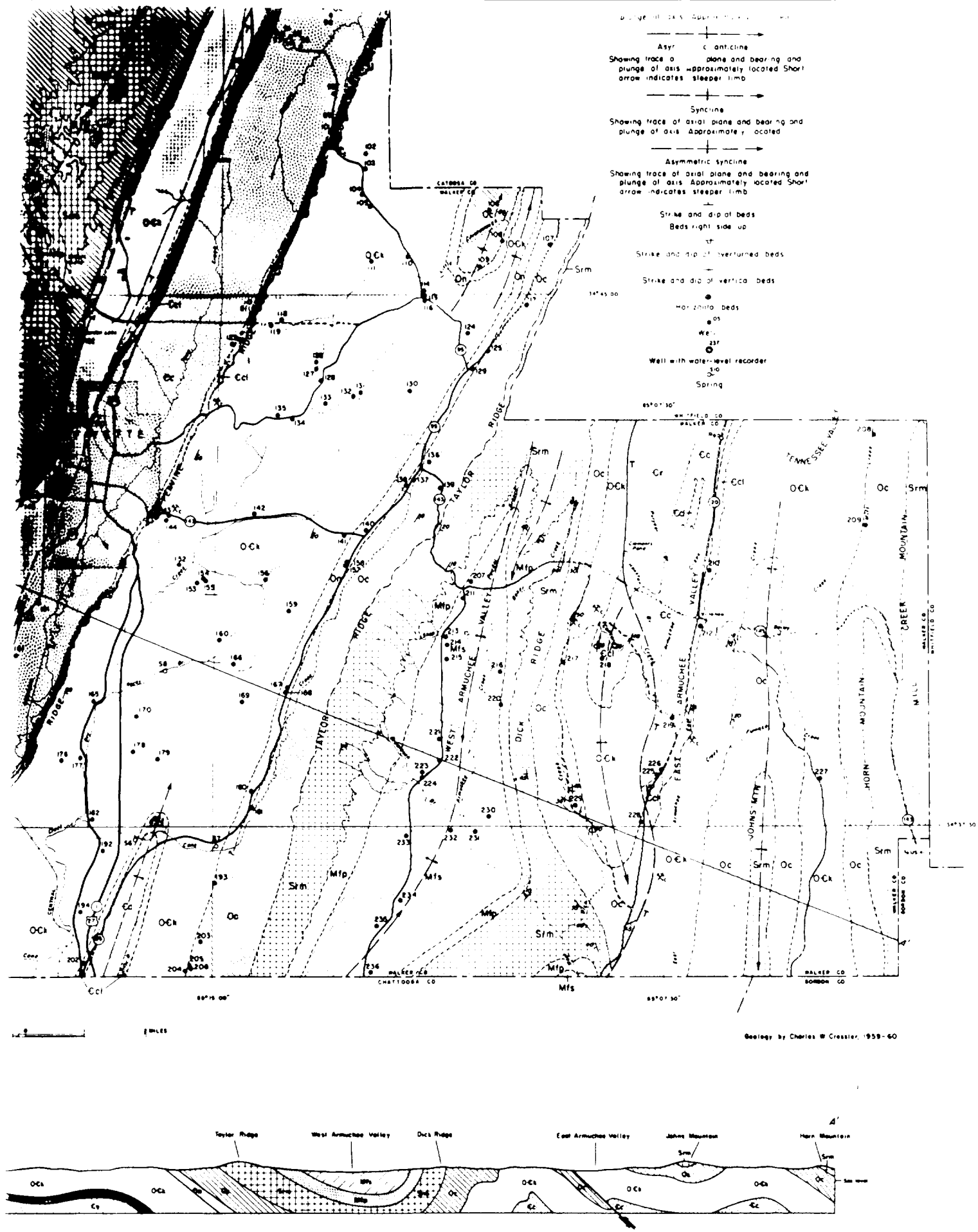
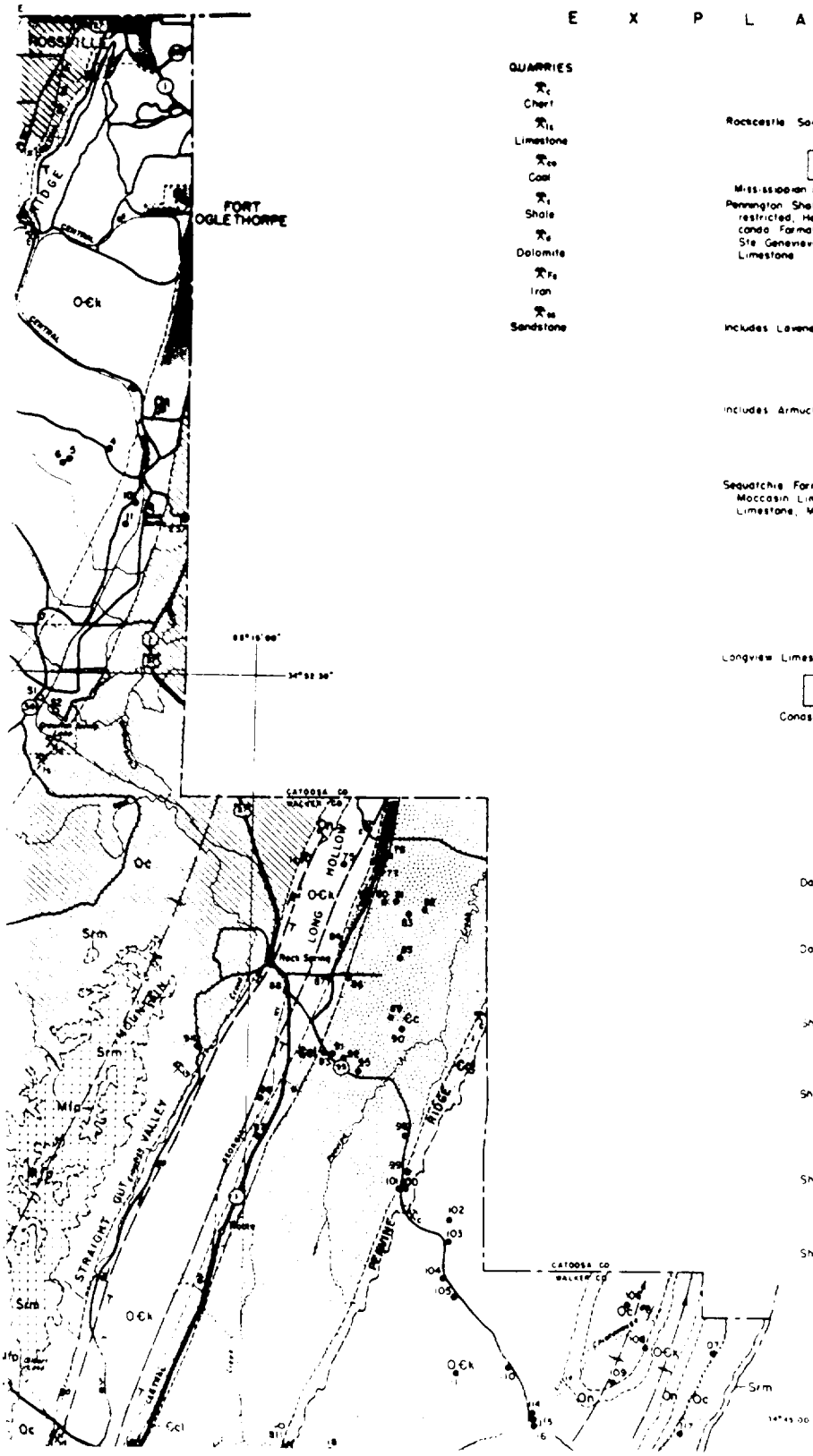


Figure 2.—Geology and well and spring l



oring locations, Walker County, Georgia.

CHICKAMAUGA
THE HILLS
MISSIONARY RIDGE
HAWKINS
COVE
MOUNTAIN
Mu
Srm
Mfp
Oc
On
O€k



E X P L A N A T I O N

QUARRIES

- Chert
- Limestone
- Coal
- Shale
- Dolomite
- Iron
- Sandstone

CARBONIFEROUS

PENNSYLVANIAN

Pennsylvanian rocks undifferentiated

Rockcastle Sandstone, Vandever Shale, Bonair Sandstone, Whitwell Shale, Lookout Sandstone

MISSISSIPPIAN

Mu — Mississippian rocks undifferentiated

Pennington Shale, Bangor Limestone, restricted, Hartselle Sandstone, Golconda Formation, Gasper Limestone, Ste Genevieve Limestone, St Louis Limestone

Mfs — Floyd Shale

Limestone and sandstone units developed locally

Mfp — Fort Payne Chert

Includes Lavender Shale Member locally, Chattanooga Shale of Devonian age at base

SILURIAN

Srm — Red Mountain Formation

Includes Armuchee Chert of Devonian age at top where present

ORDOVICIAN

Oc — Chickamauga Limestone

Sequatchie Formation, Maysville Formation, Trenton Limestone, Lowville-Moccasin Limestone, Lebanon Limestone, Lenoir Limestone, Mosheim Limestone, Murfreesboro Limestone

On — Newala Limestone

Includes much dolomite in lower part

CAMBRIAN

O€k — Knox Group

Longview Limestone, Chepultepec Dolomite, Copper Ridge Dolomite

€c — Conasauga Shale

€cl — Conasauga Limestone

Limestone in contact with Knox Group probably equivalent to Maynardville Limestone of Tennessee

€r — Rome Formation

Contact

Dashed where approximately located, short dashed where inferred

Fault

Dashed where approximately located, queried where doubtful. U, upthrown side. D, downthrown side. T, upper plate

Anticline

Showing trace of axial plane and bearing and plunge of axis. Approximately located

Asymmetric anticline

Showing trace of axial plane and bearing and plunge of axis. Approximately located. Short arrow indicates steeper limb

Syncline

Showing trace of axial plane and bearing and plunge of axis. Approximately located

Asymmetric syncline

Showing trace of axial plane and bearing and plunge of axis. Approximately located. Short arrow indicates steeper limb

Strike and dip of beds

Beds right side up

Strike and dip of overturned beds

Strike and dip of vertical beds

Horizontal beds

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Georgia
State Division of Conservation

DEPARTMENT OF MINES, MINING
AND GEOLOGY

Gaston Poole, Director

THE GEOLOGICAL SURVEY
Bulletin Number 54

GEOLOGY
AND MINERAL RESOURCES
OF THE
PALEOZOIC AREA
IN NORTHWEST GEORGIA

By
Charles Butts
Geologist, U. S. G. S. (Retired)
and
Benjamin Gildersleeve
Geologist
TVA

Published in Cooperation with the Tennessee Valley Authority
ATLANTA
1949

Georgia

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DEPARTMENT OF MINES, MINING AND GEOLOGY

Garland Peyton, Director

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1948

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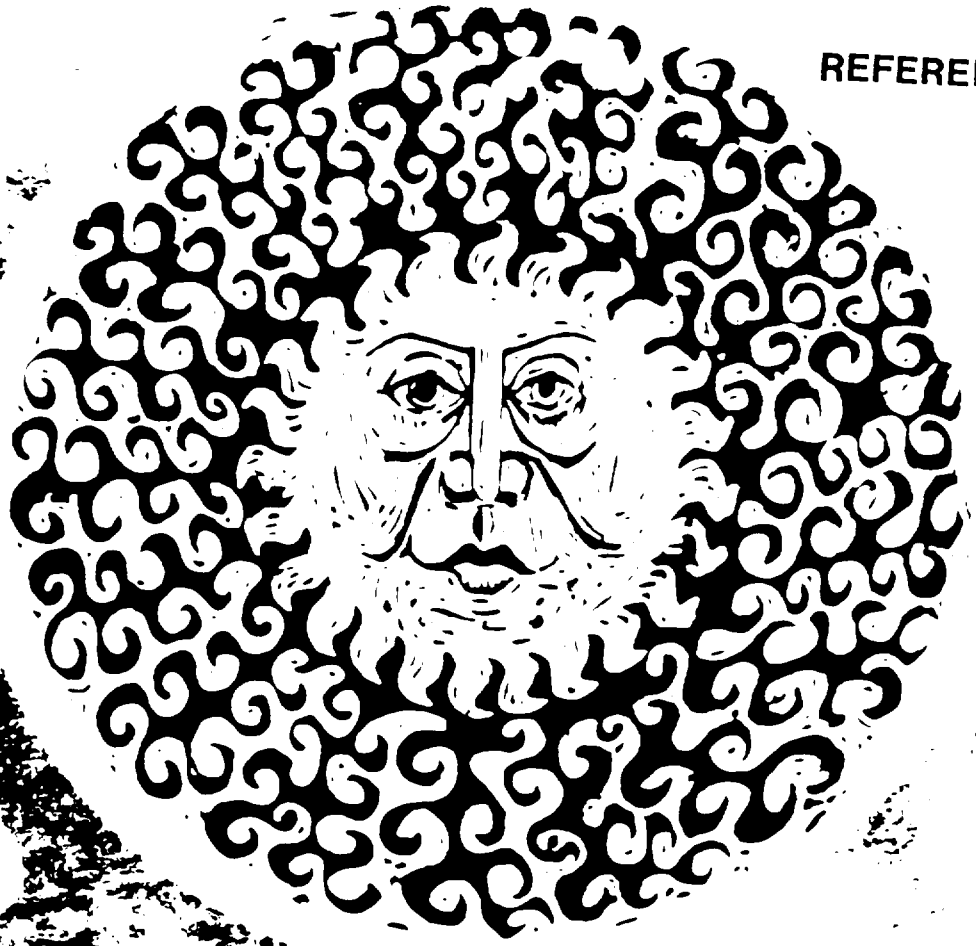

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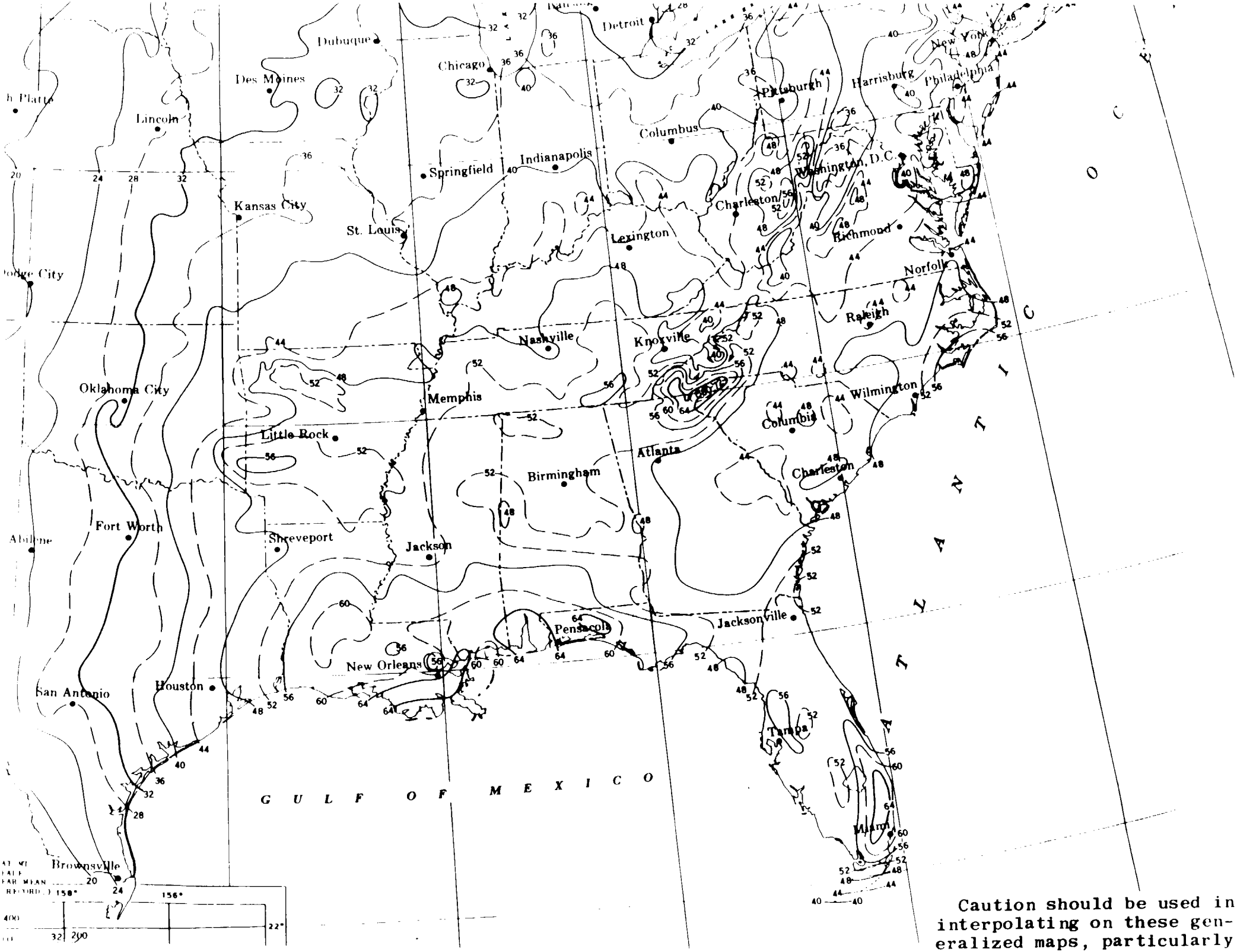


Caution should be used in interpolating on these generalized maps, particularly

AKE EVAPORATION

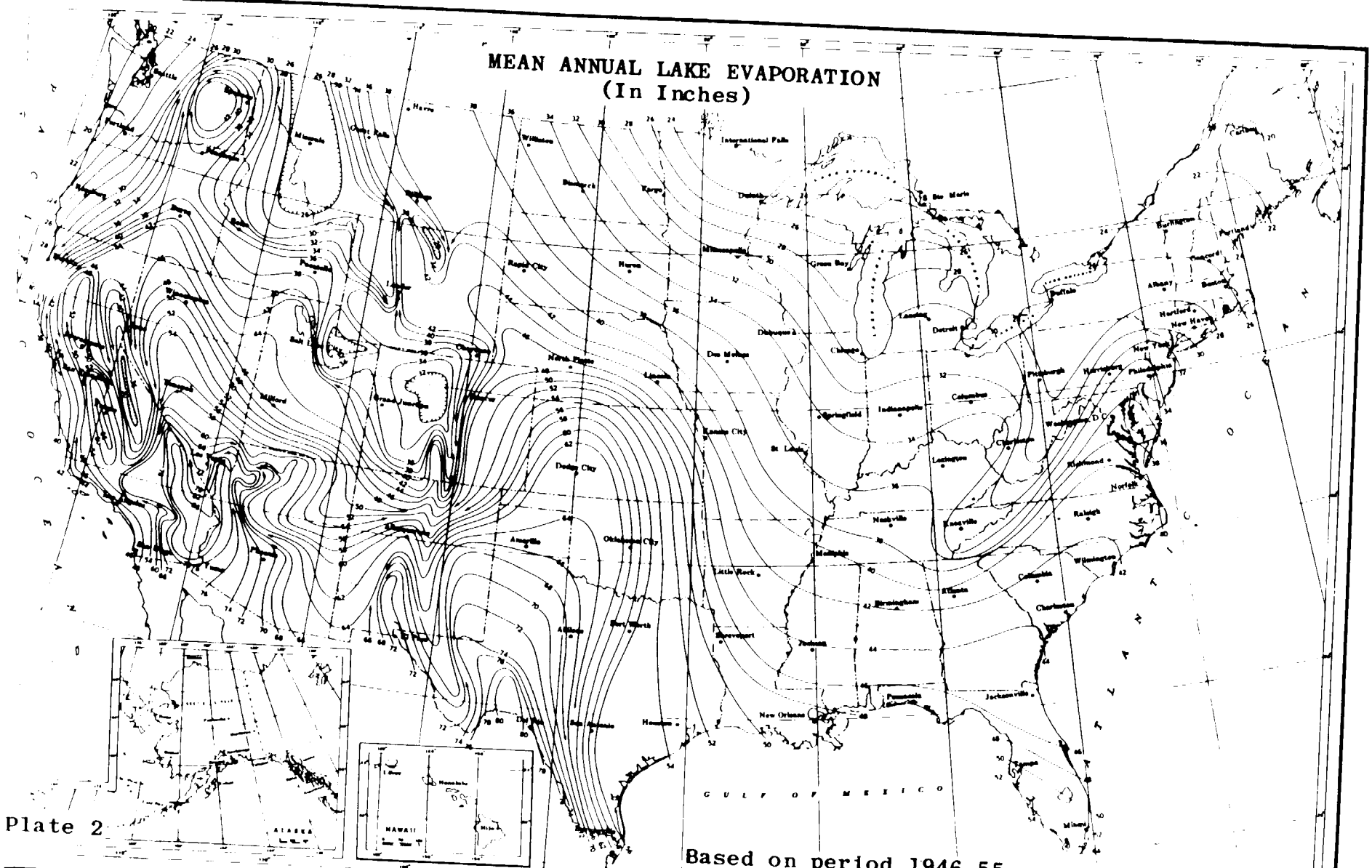
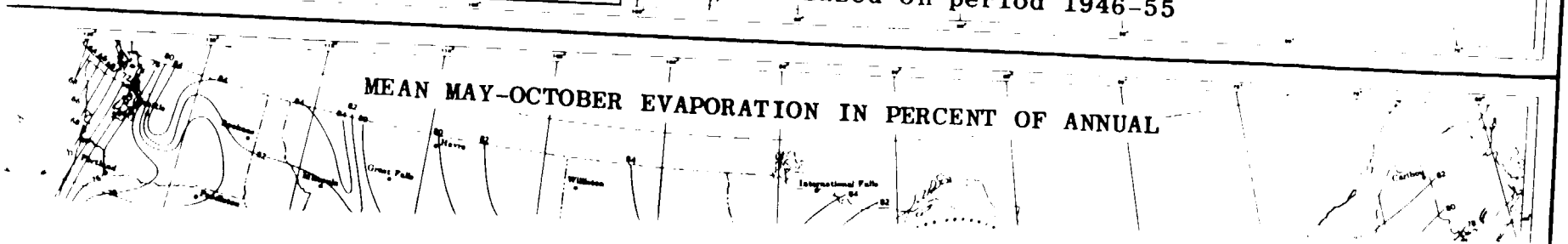


Plate 2



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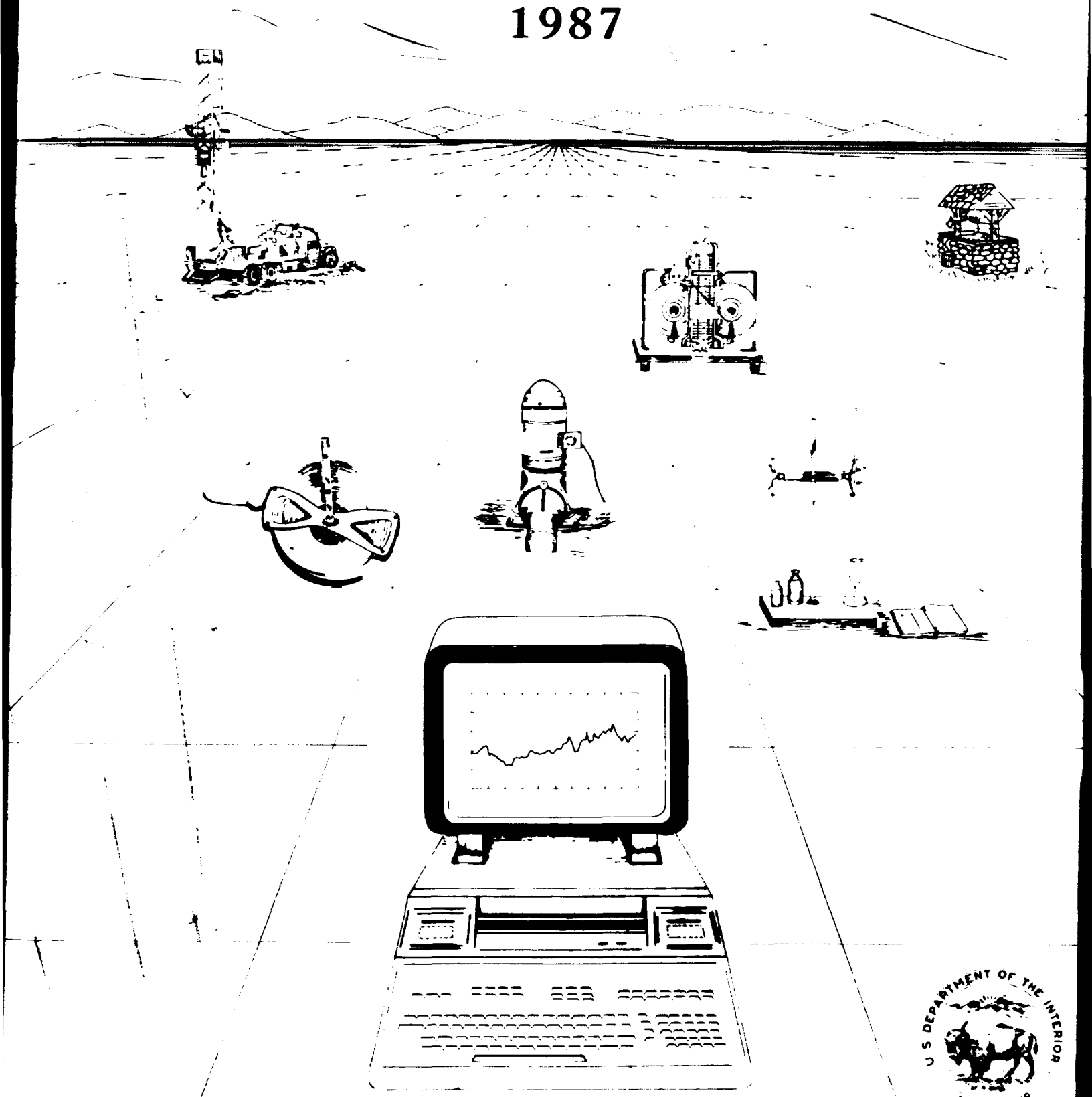
GROUND-WATER DATA FOR GEORGIA, 1987



U.S. GEOLOGICAL SURVEY

OPEN-FILE REPORT 88-323

GROUND-WATER DATA FOR GEORGIA, 1987

By C.N. Joiner, M.S. Reynolds, W.L. Stayton, and F.G. Boucher

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U.S. GEOLOGICAL SURVEY

Open-File Report 88-323

Prepared in cooperation with the

GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION
GEORGIA GEOLOGIC SURVEY

Doraville, Georgia

1988

2.1 Paleozoic Rock Aquifers

During 1985, about 29 Mgal/d (Turlington and others, 1987) was withdrawn from the Paleozoic rock aquifers, primarily for industrial supply. Water in the Paleozoic rock aquifers generally occurs under water-table conditions, and storage is limited mainly to the residuum and to joints, fractures, and solution openings in the bedrock.

Ground-water levels in the Paleozoic rock aquifers are affected mainly by precipitation. Rainfall in the area generally is heavy in winter and mid-summer and relatively light in spring and fall. Water levels generally are at their highest for the year in March or April and at their lowest for the year in October or November.

Wells in areas having a thin soil cover commonly show a rapid response to rainfall, and water levels may rise several feet within a few minutes or hours. In areas having a thick soil cover, wells may show little response to individual rains, but undergo a gradual rise in water level during wet periods. The water level in most wells declines slowly between rains.

The hydrographs for observation well 03PP01 in Walker County illustrate the effect that precipitation has on water levels in areas of thin soil cove The mean water level in well 03PP01 during 1987 was 1.2 ft lower than in 1986. However, by the end of February, the water level had recovered about 17.3 ft from the low measured during the 1986 drought. Although there was some recovery during the year, the water level at the end of 1987 was 3.2 ft lower than at the end of 1986.

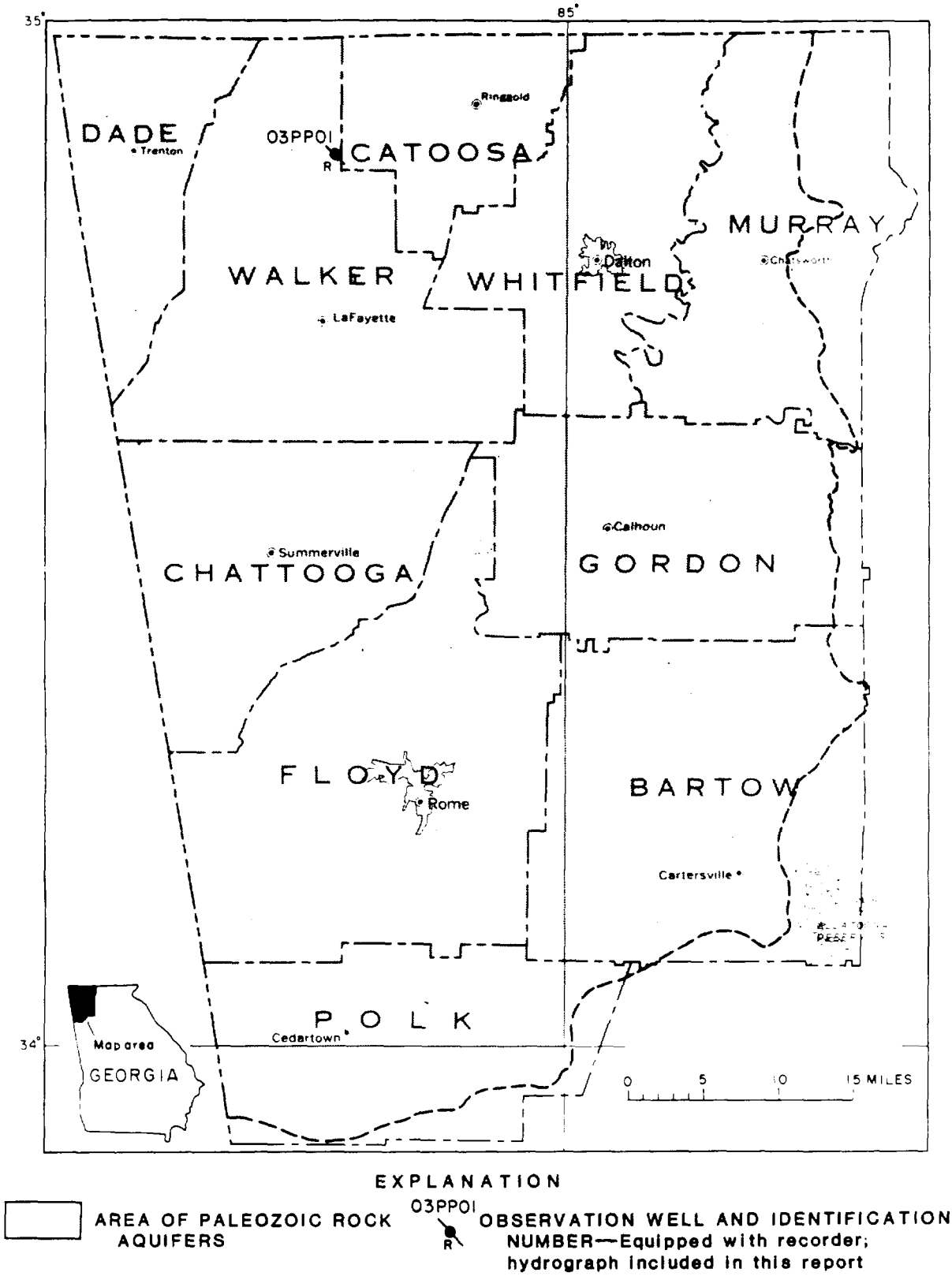

Figure 2.1-1.—Location of observation well in the Paleozoic rock aquifers.

03PP01 FORT OGLETHORPE WALKER COUNTY

345403085160001 Local number, 03PP01.
LOCATION.--Lat 34°54'08", long 85°16'00", Hydrologic Unit 06020001, Chickamauga and Chattanooga National Military Park.
Owner: National Park Service, Fort Oglethorpe.
AQUIFER.--Paleozoic Rock (Chickamauga Limestone).
WELL CHARACTERISTICS.--Cable-tooled, observation well, diameter 8 in., depth 72 ft.
DATUM.--Elevation of land-surface datum is 730 ft.
Measuring point: Pointer on recorder shelter, 2.09 ft above land surface.
REMARKS.--Well sounded October 18, 1977.
PERIOD OF RECORD.--1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.97 ft below land-surface datum, March 9, 1978; lowest, 21.70 ft below land-surface datum, August 5, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) CALENDAR YEAR JANUARY 1987 TO DECEMBER 1987
MEAN VALUES

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	10.05	9.82	6.85	9.67	10.50	14.01	15.36	18.60	19.38	19.51	20.24	19.63
2	10.18	8.66	9.45	9.75	10.66	14.16	15.50	18.65	19.41	19.53	20.25	19.77
3	10.35	9.57	9.70	9.27	10.83	14.27	15.63	18.72	19.45	19.58	20.25	19.83
4	10.53	9.75	9.76	9.54	10.42	14.36	15.73	18.77	19.49	19.60	20.25	19.90
5	10.73	9.79	9.79	9.72	10.11	14.51	15.83	18.25	19.52	19.60	20.27	19.95
6	10.89	9.81	9.82	9.77	10.22	14.64	15.86	18.11	19.55	19.64	20.30	19.99
7	11.07	9.82	9.82	9.79	10.33	14.74	15.87	18.48	19.56	19.77	20.30	20.04
8	11.28	9.85	9.77	9.81	10.51	14.82	16.13	18.56	19.58	19.83	20.31	20.07
9	11.44	9.90	7.40	9.83	10.71	14.90	16.87	18.55	19.61	19.86	20.32	20.08
10	11.54	9.91	9.51	9.84	10.89	15.04	16.94	18.62	19.62	19.88	18.22	20.10
11	11.77	9.90	9.75	9.85	11.11	15.13	17.00	18.68	19.54	19.89	19.35	20.12
12	11.94	9.90	9.77	9.86	11.30	15.23	17.05	18.76	17.69	19.91	19.74	20.15
13	12.07	9.95	9.79	9.88	11.40	15.32	17.10	18.81	17.52	19.95	19.91	20.21
14	12.17	9.95	9.80	9.36	11.54	15.40	17.18	18.86	17.77	19.99	20.01	19.50
15	12.26	9.69	9.82	8.01	11.69	15.49	17.25	18.89	18.34	20.01	20.09	15.11
16	12.35	5.35	9.84	9.58	11.83	15.33	17.33	18.94	18.64	20.03	20.12	15.89
17	12.40	9.06	9.85	9.73	11.97	15.41	17.41	18.92	18.75	20.06	16.13	16.57
18	4.37	9.71	7.79	9.79	12.12	15.55	17.49	18.65	18.86	20.08	17.81	17.27
19	3.81	9.78	6.78	9.82	12.26	15.65	17.63	18.75	18.93	20.10	18.80	17.90
20	8.98	9.82	9.45	9.84	12.81	15.71	17.71	18.82	18.99	20.11	19.16	18.08
21	9.70	9.82	9.71	9.85	12.97	15.05	17.77	18.89	19.05	20.03	19.34	17.78
22	9.61	7.92	9.77	9.86	13.12	14.24	17.83	18.94	19.11	20.10	19.45	17.82
23	9.53	8.40	9.80	9.87	13.26	14.55	17.91	18.99	19.15	20.13	19.54	18.28
24	9.58	9.67	9.82	9.89	13.40	14.64	18.09	19.04	19.19	20.14	19.58	15.91
25	9.19	9.75	9.81	9.93	13.52	14.59	18.16	19.09	19.26	20.15	19.61	14.69
26	9.14	8.26	9.82	10.01	13.66	14.74	18.21	19.13	19.31	20.15	19.64	14.32
27	9.57	2.64	9.84	10.07	13.80	14.86	18.28	19.17	19.35	20.16	19.66	12.49
28	9.73	3.37	9.86	10.16	13.94	15.04	18.33	19.21	19.39	20.19	19.64	11.59
29	9.76	---	9.86	10.26	14.08	15.12	18.41	19.35	19.41	20.20	19.18	12.22
30	9.76	---	6.03	10.35	13.97	15.24	18.48	19.36	19.47	20.22	19.42	12.84
31	9.81	---	8.71	---	13.87	---	18.55	19.35	---	20.24	---	13.20
MEAN	10.18	8.92	9.28	9.77	12.03	14.92	17.19	18.84	19.10	19.96	19.56	17.46

CAL YR 1987 MEAN 14.80 HIGH 2.64 LOW 20.32

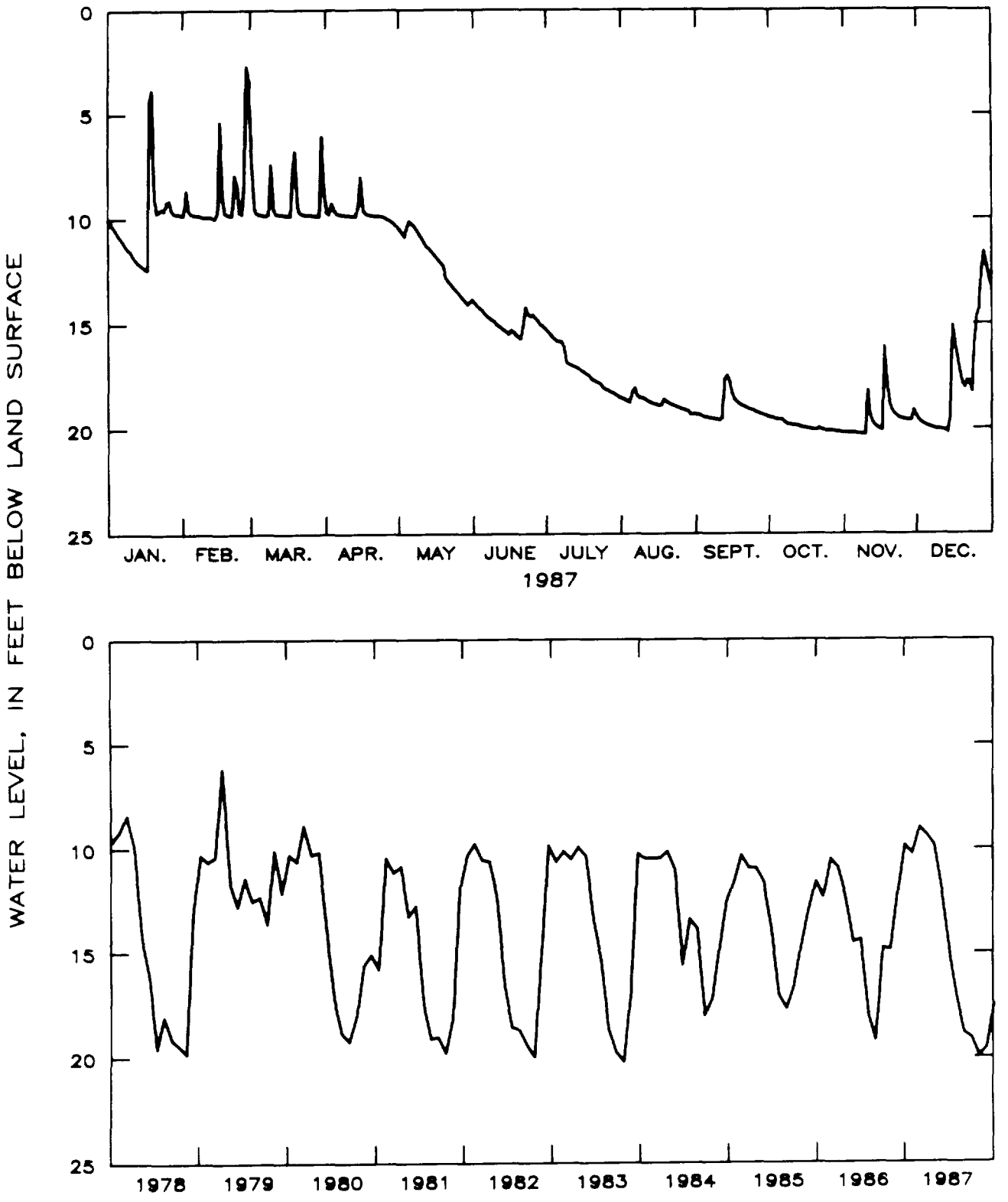

Figure 2.1–2.--Water level in observation well 03PP01, Walker County.

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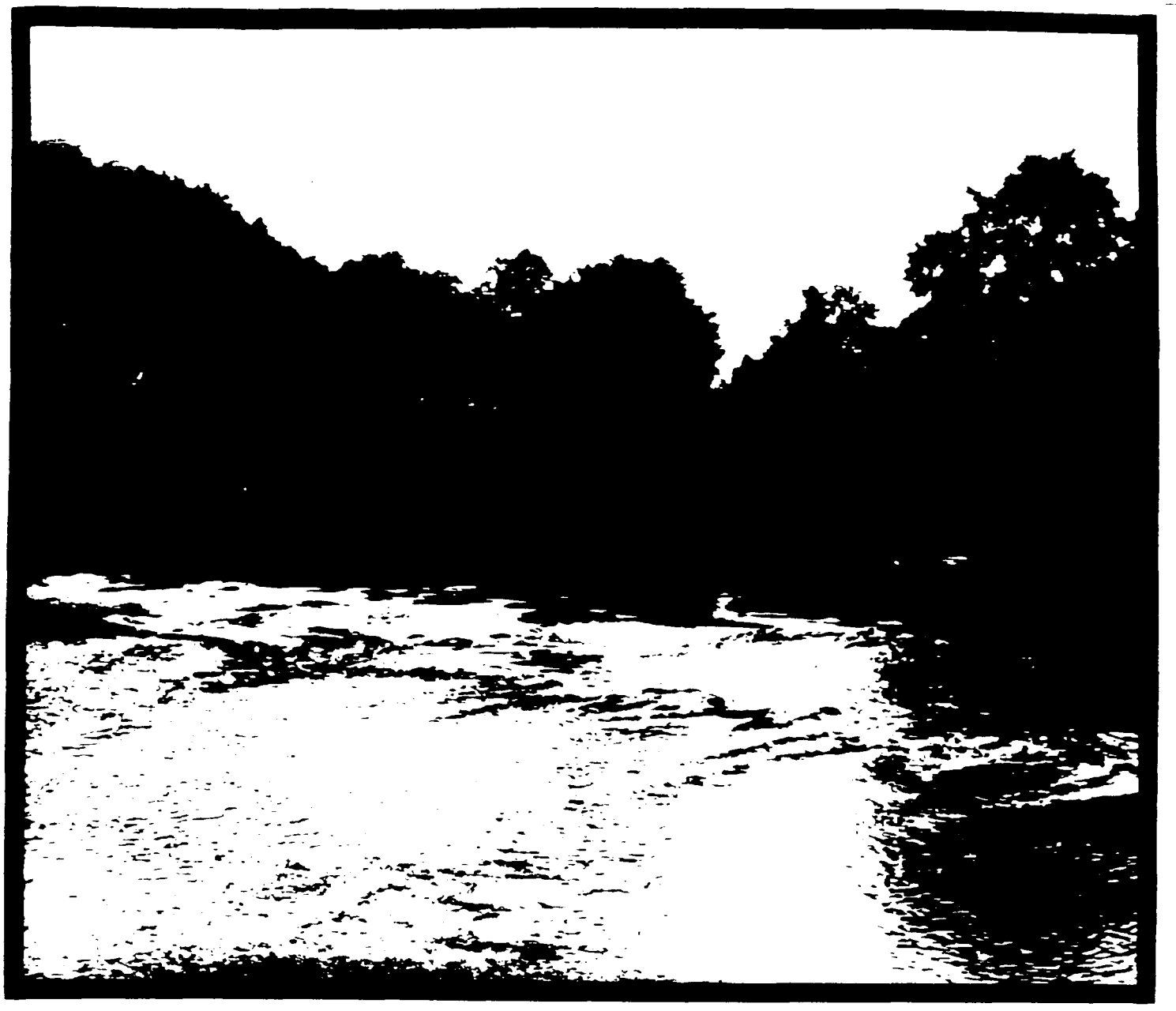


Water Availability & Use
Tennessee River Basin

Georgia Department of Natural Resources
Environmental Protection Division

FINAL

DRAFT

WATER AVAILABILITY AND USE REPORT

TENNESSEE RIVER BASIN

GEORGIA ENVIRONMENTAL PROTECTION DIVISION

DECEMBER 1986

MAJOR PERMITTED FACILITIES
HYDROLOGIC UNIT NO. 3

FACILITY I.D. NUMBER	FACILITY NAME	COUNTY	CITY	STREAM	RIVER MILE	PLANT DISCHARGE (mgd)	PERMITTED WITHDRAWAL (mgd)	DRAINAGE AREA (sq. mi.)	7Q10 (cfs)	LEVEL OF SERVICE (%)
3-010(MSW)	City of Blue Ridge	Fannin	Blue Ridge	Toccoa River	53.0	--	1.00	232.0	164.0	99
3-020(MSD)	Blue Ridge WPCP	Fannin	Blue Ridge	Dry Creek	2.5	0.62	--	--	--	--
3-030(MSW)	City of McCaysville	Fannin	McCaysville	Toccoa River	14.5	--	0.29	347.0	230.0	99

MAJOR PERMITTED FACILITIES
HYDROLOGIC UNIT NO. 4

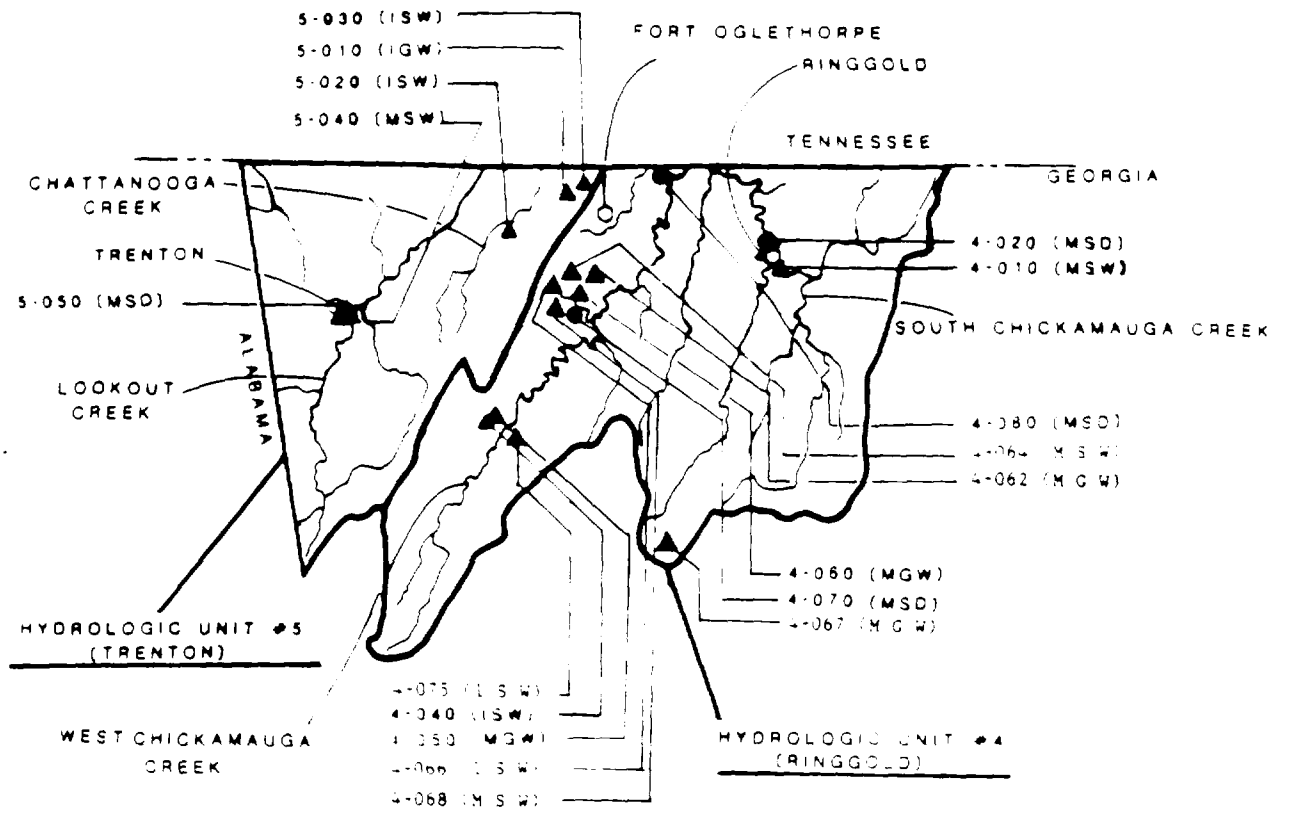
FACILITY I.D. NUMBER	FACILITY NAME	COUNTY	CITY	STREAM	RIVER MILE	PLANT DISCHARGE (mgd)	PERMITTED WITHDRAWAL (mgd)	DRAINAGE AREA (sq. mi.)	7Q10 (cfs)	LEVEL OF SERVICE (%)
4-010(MSW)	City of Ringgold	Catoosa	Ringgold	S. Chickamauga Cr.	32.8	--	1.0	170	34.7	99
4-020(MSD)	Ringgold WPCP	Catoosa	Ringgold	S. Chickamauga Creek	27.4	0.70	--	--	--	--
4-040(ISW)	Reichold Polymers Inc.	Walker	Kensington	Mill Creek	0.5	--	1.0	11.9	4.3	99
4-050(MGW)	Kensington Water & Sewer	Walker	Kensington	--	--	--	1.0	--	--	--
4-060(MGW)	Walker County Water & Sewer	Walker	Flintstone	--	--	--	1.3	--	--	--
4-062(MGW)	City of Chickamauga	Walker	Chickamauga	--	--	--	0.42	--	--	--
4-064(MSW)	City of Chickamauga	Walker	Chickamauga	Crawfish Springs		--	1.0			-
4-066(ISW)	Crystal Springs	Walker	Chickamauga	Crawfish Springs		--	0.72			-
4-067(MGW)	Walker County Rural	Walker	LaFayette	--	--	--	0.20	--	--	--
4-068(MSW)	Walker County Water & Sewer	Walker	Chickamauga	Crawfish Springs		--	1.43			--

Legend to Facility Identification Number: M: Municipal Facility / I: Industrial Facilitiy
S: Surface Water / G: Ground Water
W: Withdrawals / D: Discharges

TENNESSEE RIVER BASIN
WATER AVAILABILITY AND
USE REPORT

GEORGIA ENVIRONMENTAL
PROTECTION DIVISION

MAJOR FACILITIES IN HYDROLOGIC
UNITS 3 AND 4
FIGURE 5



LEGEND

M: MUNICIPAL FACILITIES /
I: INDUSTRIAL FACILITIES
S: SURFACE WATER / G: GROUND WATER
▲, W: WITHDRAWALS / ●, D: DISCHARGES
○, CITY

10 0 10 20
MILES

TENNESSEE RIVER BASIN WATER AVAILABILITY AND USE REPORT

GEORGIA ENVIRONMENTAL PROTECTION DIVISION

FIGURE 8

MAJOR WATER USERS (H.U.'s 4 and 5)

flow condition of 7Q10, it is estimated that the flow will be 230 cfs, which is 0.65 cfs per square mile. These estimates do not reflect the regulation of the Toccoa River at Blue Ridge Lake, but they are representative of the surface water resources available in the hydrologic unit.

In summary, the availability of surface water in Hydrologic Unit Three increases towards the northern end of the unit. The southern end contains the headwaters of the Toccoa River. The Toccoa River is regulated by Blue Ridge Lake located in the middle of the unit. Due to the size of this unit and the presence of Blue Ridge Lake, this unit contains the most surface water resources in the basin. As before, ground water resources are limited.

Hydrologic Unit Four (Ringgold)

In comparison to the three previous hydrologic units, the 418 square miles in Hydrologic Unit Four, located in the western portion of the basin, are more intensely developed. The largest cities in the unit include Fort Oglethorpe with a population of around 5,000, Rossville with about 4,000 people, and Ringgold with almost 2,000 people. This unit contains all of Catoosa County and portions of Walker and Whitfield counties and extends for approximately 23 miles south of the Georgia/Tennessee border. Most of the unit is within the Chattanooga Standard Metropolitan Area (SMA).

Two streams drain separate portions of the hydrologic unit. South Chickamauga Creek drains the eastern half of the unit, while West Chickamauga Creek drains the western half. These two creeks cross the state line separately, and West Chickamauga Creek empties into South Chickamauga Creek within a mile after crossing the state line. South Chickamauga Creek flows for another 13 miles through Chattanooga before joining the Tennessee River.

Surface water resources in the hydrologic unit consist mainly of the two major streams and their tributaries. There are no large impoundments in the unit.

The quantity of surface water available from the two major streams has been estimated from data collected at U.S.G.S. gaging station (No. 03567500) located on South Chickamauga Creek in Tennessee, after the confluence with West Chickamauga Creek. The annual average flow in the South Chickamauga Creek at the state line is estimated to be 430 cfs and the corresponding flow in the West Chickamauga Creek is 250 cfs. These flows were both determined from a yield factor of 1.6 cfs per square mile (22 inches per year). The 7Q10 flow for South Chickamauga Creek is 53 cfs and for West Chickamauga Creek is 31 cfs, based on a yield factor of 0.2 cfs per square mile.

These estimates of surface water availability were developed for the watershed areas of each of the two streams, which are 267 square miles for South Chickamauga Creek and 155 square miles for West Chickamauga Creek. These watershed areas include some areas in Tennessee which drain into Georgia and other areas in Georgia that drain to small streams which join South Chickamauga Creek in Tennessee.

Ground water resources in the hydrologic unit are localized, with water-bearing rock formations underlying portions of the unit. The western

edge of the unit is in the Cumberland Plateau physiographic province, while the central and eastern areas are part of the Ridge and Valley province, which generally has the higher potential for finding large volumes of ground water.

In summary, the availability of surface water in Hydrologic Unit Four increases towards the northern end of the unit. The southeastern end contains the headwaters of South Chickamauga Creek and the southwestern end contains the headwaters of West Chickamauga Creek. These two creeks cross the state line separately, and West Chickamauga empties into South Chickamauga Creek within a mile above the Georgia state line. Surface water availability in the unit consists mainly of the two creeks. This unit, unlike previous ones is the most populated in the basin. Ground water resources are localized, with water-bearing rock formations underlying portions of the unit, but surface water remains the primary water resource in Hydrologic Unit Four.

Hydrologic Unit Five (Trenton)

Hydrologic Unit Five consists of 229 square miles in the northwestern corner of the state. It is defined by the drainage area of several streams that discharge to the Tennessee River outside Georgia. The largest of these streams are Lookout Creek, Chattanooga Creek, and Cole City Creek.

This unit encompasses most of Dade County and a small portion of Walker County, both of which are within the Chattanooga SMA. The portion of Lookout Mountain in Georgia is located within this hydrologic unit. The largest cities in the unit are Trenton and Lookout Mountain, each with a population of approximately 1,500.

Surface water resources in the unit are divided between the streams, and there are no major impoundments to contribute to the resources. Thus, surface water availability is limited, compared to other areas of the state.

The quantity of surface water in the unit is monitored by U.S.G.S. gaging stations. One gaging station (No. 03568500) was formerly maintained on Chattanooga Creek near the state line. Based on the data collected for this station, the flow in Chattanooga Creek at the state line was estimated to be 80 cfs on an annual average basis and 3 cfs for the 7Q10 condition. Over the 51 square miles that drain to this creek, these flows indicate yield factors of 1.6 cfs per square mile (22 inches per year) for annual average flows, and 0.06 cfs per square mile for 7Q10 flows.

Another continuous recording gaging station (No. 03568933) has been established on Lookout Creek near New England, Georgia. However, since this station has only been in operation since 1979, its data base is not complete enough to accurately indicate streamflow patterns. Therefore, streamflow rates for the other major streams in the hydrologic unit were estimated from data collected for Chattanooga Creek and South Chickamauga Creek. These data suggest yield factors of 1.6 cfs per square mile (22 inches per year) for the annual average flow and 0.1 cfs per square mile for the 7Q10 flow.

Based on a watershed of 169 square miles, Lookout Creek is estimated to have an annual average flow of 270 cfs as it crosses the state line and a 7Q10 flow of 17 cfs. The watershed area for this creek includes 39 square miles in Alabama and Tennessee that contain the headwaters of the creek and which drain into Georgia.

The City of Blue Ridge (3-010(MSW)) can withdraw up to 1.0 mgd from the Toccoa River just below Blue Ridge Lake and the City of McCaysville can withdraw 0.29 mgd from the Toccoa River almost 40 miles downstream from the lake. Water availability at both intakes is well in excess of the permitted withdrawal rates. McCaysville is initiating plans to expand its surface water withdrawal in the near future.

Hydrologic Unit Four (Ringgold)

Water supplies in this hydrologic unit are drawn from both surface and ground water resources. All major permitted facilities are illustrated on Figure 8.

Within the portion of the unit that drains to South Chickamauga Creek, the City of Ringgold is the largest permitted water user. It withdraws (4-010(MSW)) from the main stem of South Chickamauga Creek upstream from the city and discharges (4-020(MSD)) to the same stream downstream from the city. In 1981 an average of 0.63 mgd was withdrawn by the city while 0.56 mgd was discharged. Thus, in terms of the water budget the consumptive use of surface water by Ringgold was 0.07 mgd. Since the 7Q10 stream flow in South Chickamauga Creek at the intake is 22 mgd (34.7 cfs), the permitted withdrawal rate of 1.0 mgd is readily available.

Walker County Rural Water and Sewer Authority has municipal water supply wells in the southwest corner of the South Chickamauga Creek watershed. The Authority has a permit to withdraw up to 0.20 mgd from those wells.

Within the portion of the unit that drains to West Chickamauga Creek, there are eight organizations holding major water use permits. In the upper half of this drainage area, there are three users located near Kensington, while the others are in the lower half of the area near Chattanooga.

The three water users in the upper half of the area consist of one ground water withdrawal, namely Kensington Water and Sewage Authority (4-050(MGW)), and two surface water withdrawals: Reichold Polymers, Inc. (4-040(ISW)), and E. T. Barwick Incorporated (4-075(ISW)).

In the lower half of the drainage area of West Chickamauga Creek many of the cities, including Lakeview, obtain water supplies from the Tennessee American Water Company in Chattanooga. The City of Chickamauga holds three water use permits: one to withdraw 1.0 mgd from Crawfish Spring Lake (4-064(MSW)); a second to withdraw 0.42 mgd ground water (4-062 (MGW)); and a third to discharge up to 5.25 mgd below Crawfish Spring Lake (4-070(MSD)). The Walker County Water and Sewage Authority operates wells (4-060(MGW)) and has recently constructed a surface water withdrawal from Crawfish Spring Lake (4-068(MSW)). The authority serves Flintstone and areas in unincorporated Walker County. Their system is connected to the City of Chickamauga to enhance the reliability of the city's system. When water is withdrawn from Crawfish Springs and distributed to Flintstone where it is discharged to Chattanooga Creek, an intra-basin diversion occurs from West Chickamauga Creek to Chattanooga Creek. Walker County has recently requested an increase in the permitted withdrawal to 4.5 mgd. At this time it is not yet known whether Crawfish Spring Lake can reliably support the increased withdrawal in an environmentally sound manner.

Additional permitted water users are an industrial surface water withdrawal by Crystal Springs Print Works (4-066 (ISW)) and a municipal discharge into West Chickamauga Creek by Fort Oglethorpe (4-080(MSD)).

In summary, water resources issues in this hydrologic unit relate primarily to ground water supply protection, since many of the major facilities withdraw from ground water resources and springs. Surface water issues focus mainly on water quality protection. Provision of water supply to support the growth in communities surrounding Chattanooga is another major water resources issue.

Hydrologic Unit Five (Trenton)

The only permitted ground water withdrawer is Standard-Coosa-Thatcher (5-010(IGW)), which is located in Rossville and is permitted to withdraw a monthly average quantity of 1.4 mgd. As for surface water withdrawals, two are in the Chattanooga Creek drainage area and one is in the Lookout Creek drainage area. All major withdrawal and discharge facilities are illustrated on Figure 8.

In the Chattanooga Creek area, Yates Bleachery Co. (5-020(ISW)) is permitted to withdraw 0.60 mgd from Bleachery Springs near Flintstone and the Rossville Development Co. (5-030(ISW)) is permitted to withdraw 0.30 mgd from Poplar Springs near Rossville. Some cities in this area, including Rossville, are supplied water from the Tennessee American Water Company in Chattanooga.

In the Lookout Creek area, the Dade County Water and Sewerage Authority (5-040(MSW)) is permitted to withdraw 1.0 mgd from the main stem of the creek. Since the 7Q10 low flow in the creek at the intake is estimated to be 6.8 mgd (10.5 cfs), the creek has been a reliable source of water supply for the authority. Water withdrawn by the authority is distributed primarily within the City of Trenton and to surrounding areas of Dade County. A portion of the water withdrawn is returned to Lookout Creek by the discharge from Trenton WPCP (5-050(MSD)). The authority has requested a modification to their surface water withdrawal permit. EPD is reviewing the proposed 0.5 mgd increase.

In summary, surface water is the primary source of water supply in this hydrologic unit. The most crucial water resources issue is the lack of sufficient raw water supplies during seasonal low flow periods of the streams.

REFERENCE 11

Water Availability & Use Coosa River Basin

Georgia Department of Natural Resources
Environmental Protection Division

WATER AVAILABILITY AND USE

COOSA RIVER BASIN

GEORGIA

1982

SUBPART 10

Summerville-LaFayette Hydrologic Unit

The Summerville-LaFayette Hydrologic Unit lies in the Ridge and Valley Physiographic Province in the northwest corner of the State and is bordered to the east and west by linear ridges. The Chattooga River and all of its Georgia tributaries are located within this hydrologic unit. The terrain in the northern portion of the unit has tended to hamper economic development, leaving most of the area sparsely populated with the exceptions of LaFayette and Trion. Rural, undeveloped areas also predominate the southern portion of this unit with the only major town being Summerville. The unit ends as the Chattooga River flows across the Georgia-Alabama State line.

Surface water withdrawals in this hydrologic unit are relatively small compared to its neighboring hydrologic units. Three surface water users have a combined withdrawal of 5.7 cfs. Other supplies are obtained from springs and wells.

The City of LaFayette obtains its water from three sources: Big Spring, Dixon Spring, and a surface water intake on Duck Creek. LaFayette withdraws all available water from both springs (1.5 - 1.9 cfs from Big Spring and 0.8 - 1.2 cfs from Dixon Spring). The third source of water, Duck Creek, provides an average of 0.8 cfs which is 38% of the 7Q10 (2.1 cfs) at the point of withdrawal.

Existing sources in LaFayette have been taxed to their limit. One potential solution to the water needs of LaFayette during periods of low flow would be to withdraw water from a 200 acre impoundment that has recently been constructed to the northeast of the town. At present, this lake is not being used for water supply purposes because the water treatment plant is located across town and the cost to pump the water to the existing plant or to build a new plant at the impoundment would be substantial. The lake was constructed for water conservation and flood control purposes.

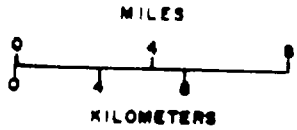
Riegel Spring, near Trion, supplies water to a number of users in the area. Riegel Textile Corporation and the City of Trion currently withdraw an average of 10.8 cfs from the Spring. No water supply problems appear to exist in this area.

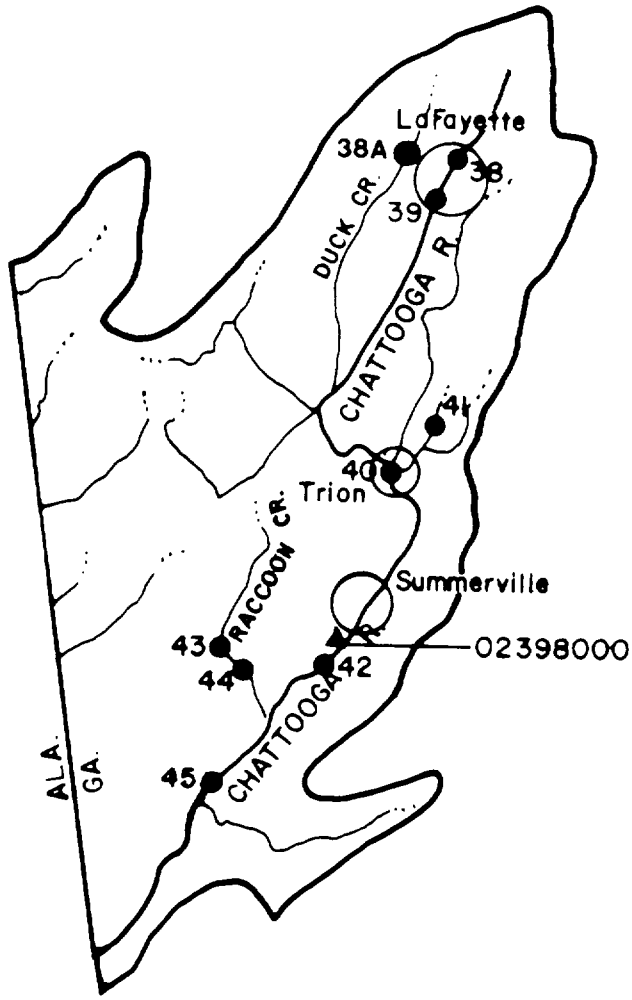
The City of Summerville receives its water from two sources, Low Spring and a surface water intake on Raccoon Creek. Supply from these sources is limited. All of the 0.5 - 0.6 cfs of Low Spring is currently being utilized. The City withdraws an average of 2.8 cfs from Raccoon Creek which is 39% of the 7Q10 (7.2 cfs).

Summerville has seven above-ground storage tanks which retain 3.4 mg of water. Both the spring and the surface water withdrawal are used to replenish the tanks.

Bigelow-Sanford, Inc. withdraws an average of 2.2 cfs from Raccoon Creek, which has a 7Q10 of 7.2 cfs at the point of withdrawal. This represents approximately 30% of the 7Q10. The fact that the City of Summerville and Bigelow-Sanford, Inc. both draw water from the same creek during low flow periods could compound Bigelow-Sanford's problem during a period of extreme drought.

In general, the flow of the Chattooga River is sufficient to dilute wastewater discharges. Water quality problems that do exist tend to be found on tributaries to the Chattooga. For example, the City of LaFayette discharges 1.6 cfs of treated wastewater into Chattooga Creek which only has a 7Q10 of 0.8 cfs at the point of discharge. The large dischargers in this hydrologic unit discharge directly into the Chattooga: Riegel Textile Company (5.6 cfs), Trion WPCP (4.2 cfs), Summerville WPCP (3.1 cfs) and Bigelow-Sanford, Inc. (1.6 cfs).





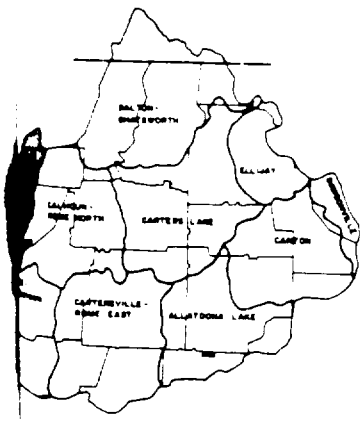


FIGURE 12
SUMMERVILLE-LAFAYETTE
HYDROLOGIC UNIT

TABLE 11

Intakes and Discharges in the Coosa River Basin

HYDROLOGIC UNIT/Facility Name	Location Number	River Mile(mi)	Drainage Area(sq.mi.)	7Q10 Low* Stream Flow (cfs)	September 1980 Average Daily Flow(cfs) Withdrawal	Discharge
SUMMERVILLE-LAFAYETTE HYDROLOGIC UNIT						
LaFayette Intake	38A	-	-	2.1	0.8	
LaFayette WPCP	38	657.7	2.8	0.8		1.6
Trion WPCP	40	637.9	180.0	60.0		4.2
Riegel Textile Company	41	644.2	-	60.0		5.6
Summerville WPCP	42	630.3	199.0	66.0		3.1
Summerville Intake	43	630.7	-	7.2	2.8	
Bigelow-Sanford, Inc.	44	630.0	-	7.2	2.2	
Bigelow-Sanford, Inc. - 1	45	625.2	-	72.0		1.6
Minor Facility Withdrawals					0.8	
Minor Facility Discharges						0.7

*The 7Q10's are a mixture of both natural and regulated flows.

SECTION V

Projected Water Needs for the Coosa River Basin

In making water management decisions, it is extremely important to consider future water needs in a given geographic area. In the case of permit decisions, the possibility of preempting more beneficial uses must be considered. In the case of designing water withdrawal and supply facilities, future growth must be accounted for if the sytem is to be cost effective.

Table 12 presents a water budget for the Coosa River basin in Georgia (by County). The 7Q10 flow is shown for each major withdrawal point in the basin (except Cartersville and Cobb County-Marietta Water Authority whose supplies are withdrawn directly from Lake Allatoona). The withdrawals shown are generally the rate on an average day during September, 1980. Groundwater withdrawals are shown for information on permitted use.

For the purposes of this river basin report future water demands on the Coosa River basin have been projected in five year increments through the year 2000. Those projected needs are based on the Georgia Office of Planning and Budget's (OPB) "Population Projections for Georgia Counties 1980-2000" dated September, 1977. It should be noted that OPB's population projections will be updated in the near future to take into account the 1980 census data. When updated projections are made available, the projected water needs for the Coosa Basin contained in this report will also be updated. Addition of an industry with large water requirements would be in addition to the projections shown in the table.

To project water needs, a "per capita use figure" was developed for each county based on September, 1980 withdrawals. (As mentioned earlier in this report, that month is considered to be representative of a critical low flow period). The "per capita use figure" was then multiplied by OPB's projected population to arrive at a projected water need.

Beginning in the year 1990, a water conservation factor of -10% was applied to the projected water needs. That factor was used to take into account the current trend toward industrial reuse and general conservation.

Three assumptions made in computing these projections should be noted:

1) In instances where only a portion of a county's water is withdrawn from the Coosa Basin, it was assumed that the current ratio of withdrawal will remain constant;

2) Current institutional agreements will remain unchanged; and

3) Projections assume continuation of the current industrial mix in each county.

As an example in reading the table, refer to the Etowah River in Bartow County. The 7Q10 flow below Allatoona Dam is 240 cfs. There is an industrial withdrawal from the river and Cartersville withdraws its supply directly from the lake. The present demand and its projected growth are small in relation to the water resource of the Etowah. A significant expansion of water-using industry could be supported as long as a high level of water quality is maintained in the return flows.

As shown in Table 12, the Oostanaula River in Floyd and Gordon Counties, the Cartecay and Ellijay Rivers in Gilmer County and the Etowah River in Cherokee County are other examples of stream reaches with ample water resources to support water-using industrial development. The Coosawattee below Carters Dam is shown to be another stream with excellent, dependable flow. Carters Dam has stabilized the stream and made it the subject of intense interest to communities in neighboring valleys.

The table contains numerous instances of small streams being overstressed by water users. Continuing population growth will create still more problems. The most critical problem is at Dalton, where the city's intakes withdraw the 7Q10 of Mill Creek (tributary to Coahulla Creek) and the Conasauga River. Other examples are:

Hickory Log Creek	Cherokee County
Beech Creek	Floyd County
Silver Creek	Floyd County
Holly Creek	Murray County
Tributary, Long Swamp Creek	Pickens County
Duck Creek	Walker County

Both the customer and the resource can generally be put in a stronger position by provision of storage. The amount of storage required is proportional to the amount of flow in the stream, the amount of water required for withdrawal, and instream needs.

Diversion of flow from one stream to another within the basin to move the water to the people is an attractive prospect. A permit has been granted to the City of Calhoun to withdraw up to 20.5 cfs from the Coosawattee River. The Cities of Chatsworth and Dalton have also expressed interest in diverting Coosawattee flow. Preliminary information gathered for this report indicates that such diversion in the amounts needed for those cities as shown in projections for this report can be accommodated without major detriment to the downstream needs. However, it will be necessary for storage to be provided on each system to allow the flow of the stream to pass the point of withdrawal when the flow equals or is less than the 7Q10. If the diversions are to be used and then treated by land spraying, there could be almost complete loss of these flows in the dry season. Such depletion of the resource would have serious impacts in the downstream valley.

Diversion of flow outside the Coosa would require exacting analysis. In view of the water quality situation below Rome and instream requirements down river in Alabama, diversion of significant flow will be discouraged generally. However, in those instances where diversion will uniquely satisfy a need and/or appropriate mitigation can be provided, a diversion could be considered favorably.

REFERENCE 12

ENDANGERED AND THREATENED SPECIES

U.S. FISH AND WILDLIFE SERVICE

REGION 4 - ATLANTA

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L A

M.2 - SITE MAINTENANCE FORM

DISCOVERY

ACTION: _

EPA ID: GAD984270553

SITE NAME: LAFAYETTE SHEET METAL SOURCE: _

STREET: Behind Lafayette Baptist Church on Hwy 27 CONG DIST: __

CITY: Lafayette ZIP: 30728

CNTY NAME: WALKER CNTY CODE: ___

LATITUDE: 0900 LONGITUDE: 0900

SMSA: ____ HYDRO UNIT: _____

INVENTORY IND: _ REMEDIAL IND: _ REMOVAL IND: _ FED FAC IND: _

NPL IND: _ NPL LISTING DATE: __/__ NPL DELISTING DATE: __/__

APPROACH: ___ SITE CLASS: __

SITE/SPILL IDS: __ __ __ __ __

RPM NAME: _____ RPM PHONE: ___-___-____

DIOXIN TIER: ____ REG FLD1: _____ REG FLD2: _

RESP TERM: PENDING (_) NO FURTHER ACTION (_)

ENF DISP: NO VIABLE RESP PARTY (_) VOLUNTARY RESPONSE (_)

ENFORCED RESPONSE (_) COST RECOVERY (_)

SITE DESCRIPTION: