SITE INSPECTION PRIORITIZATION
BERKELEY COUNTY LANDFILL
SCD 981 028 095
BERKELEY COUNTY

SEA
9/15/92
Carl Bozard

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DATE COMPLETED:
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I. SCOPE OF WORK

Pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986, the United States Environmental Protection Agency (U.S. EPA) in March 1991, began implementation of significant revisions in the Hazard Ranking System (HRS) used to evaluate sites for inclusion on the National Priority List (NPL) for Superfund cleanup. Because of the extent of the changes, sites that had CERCLA/SARA inspections prior to the revisions are generally lacking the required data for evaluation under the revised HRS. A Site Inspection Prioritization (SIP) is designed to revaluate sites using the revised HRS. The SIP involves reviewing the files, identifying data gaps, and updating target information on the site.

The South Carolina Department of Health & Environmental Control (SCDHEC) has been tasked by the U.S. EPA to conduct a SIP on the Berkeley County Landfill. The landfill was the subject of a CERCLA/SARA Screening Site Inspection (SSI), Phase II, completed by the NUS Corporation March 12, 1991. Because of the recent date of the SSI, this SIP relies heavily on the findings of the SSI.

II. EXECUTIVE SUMMARY

The Berkeley County Landfill site is located in Berkeley County approximately three and one-half miles southwest of the Town of Moncks Corner, S.C. The landfill was operated by Berkeley County from 1972 until 1977. The application to construct the landfill specified that household wastes, commercial, industrial, and agricultural wastes would be accepted by the landfill. Concentrations of volatile organic compounds and heavy metals significantly higher than background concentrations were found in the soil at the landfill during the SSI conducted by NUS Corporation in 1990.

Samples taken during the SSI indicate that chlorobenzene, benzene, arsenic, cobalt, iron, manganese, and nickel have been released from the landfill to the Shallow aquifer. It is estimated that 255 people are supplied potable water from private wells located within four miles of the landfill and completed in the Shallow aquifer. The Cooper Formation is a hydrogeologic confining layer and is situated beneath the Shallow aquifer. There is potential for hazardous substances from the landfill to be released to the aquifers below the Cooper Formation. Approximately 9,300 people are supplies potable water from public and private wells located within four miles of the landfill and completed below the Cooper Formation.

Because the landfill is approximately two miles from perennial surface water, there is a small potential for hazardous substances to be released from the landfill to perennial surface water. Drinking water treatment plant intakes are not located within fifteen miles downstream of the landfill. Freshwater wetlands are located within fifteen miles downstream of the landfill; however, no other sensitive environments, including habitats for endangered species, are located within fifteen miles. During the SSI NUS Corporation found tetrachloroethene, chromium, manganese, nickel, and zinc in surface soil samples at concentrations significantly higher than background levels. However, the threat of exposure to hazardous substances via the soil is small because of the small residential and nearby population. Air samples were not taken during the SSI. The potential for hazardous substances to be released to the atmosphere is diminished by the fact that the landfill is overgrown.

Because of the relatively small number of people potentially affected by groundwater contamination, and because of the low potential for surface water and atmospheric contamination, it is recommended that no further remedial action be planned for the Berkeley County Landfill site under CERCLA/SARA. The site should be referred to the State Superfund or Drinking Water Protection.

III. SITE BACKGROUND AND HISTORY

A. Ownership History

Neither property nor facility ownership of the Berkeley County Landfill site has changed since the SSI report of March 12, 1991. The site is still owned by:

Bertha G. Neighbors
Route 6, Box 226
Moncks Corner, S.C. 29461 (Ref. 1).

The site was operated by Berkeley County. The contact for Berkeley County is:

Marvin E. Waddey, Director
Division of Solid Waste
P.O. Box 1090
Berkeley County Water and
Sanitation Authority
Goose Creek, S.C. 29445
Telephone: (803) 761-8106 (Ref. 2).

B. Site Description

The Berkeley County Landfill site was not visited during the SIP. The description given in the SSI is accurate. The landfill is approximately 86 acres in size, and the fill depth is estimated to be approximately 6 feet (Ref. 1, 3, 4, 5).

C. Regulatory History/RCRA Summary

In April 1972, Berkeley County applied to the South Carolina State Board of Health for a permit to construct a landfill. The application specified that household wastes, commercial, industrial, and agricultural wastes would be accepted by the landfill. On May 22, 1972, the Board of Health issued permit number 15 to Berkeley County to operate the landfill known as Berleley County Sanitary Landfill (Ref. 6, 7). There has been no RCRA involvement with the landfill (Ref. 8).

D. Process and Waste Disposal History

The process and waste disposal history of the Berkeley County Landfill is essentially described in the Waste Characteristics section of the SSI.

The landfill itself is the only source evaluated in the SSI, and in the SIP. During the SSI in 1990, the NUS Corporation took

surface soil and subsurface soil samples from the periphery of the landfill. Analysis of the samples found, among other substances, tetrachloroethene (0.068 mg/kg), carbon disulfide (0.021 mg/kg), toluene (0.007 mg/kg), arsenic (8.3 mg/kg), chromium (87 mg/kg), nickel (5.5 mg/kg), and zinc (22 mg/kg) at concentrations significantly higher than background concentrations (Ref. 9, 10, 11, 12, 13, 14).

E. Removal/Remedial Actions

There have been no removal or remedial actions at the Berkeley County Landfill site (Ref. 8).

IV. FIELD INVESTIGATIONS

Because of the recent date of the SSI on the Berkeley County Landfill site, the site was not visited to reconnoiter site conditions or targets in the immediate vicinity of the site. In addition, the NUS Corporation conducted adequate sampling during the SSI; therefore, additional sampling was not necessary.

V. GROUNDWATER PATHWAY

A. Regional Hydrogeology

The following geologic formations underlie the Berkeley County Landfill site:

Name	Description	Depth of Occurrence
Shallow Aquifer	Thin veneer of surficial sand.	0-30 ft.
Cooper Formation	Sandy, phosphatic, dark, greenish-gray marl with low intrinsic permeability.	30-155 ft.
Santee Limestone	Creamy white to gray fossiliferous and slightly glauconitic limestone.	155-485 ft.

Name	Description	Depth of Occurrence
Black Mingo Formation	Heterogeneous, fossiliferous sequence of white to pale gray limestone and dark gray to black clay.	485-795 ft.
Pee Dee Formation	Upper portion composed of olive to medium gray silty and sandy calcareous clay. Lower portion composed of olive to medium gray, fossiliferous, muddy sand containing small amounts of glauconite, phosphate and mica.	795-1125 ft.
Middendorf Formation	Upper portion consists of a cyclical sequence of red to reddish-brown and gray-green mottled clay, clayey silt and and silty clay. Lower portion consists of an interbedded red, brown or olive gray clay, silty clay and greenish gray, muddy, locally feldspathic sand.	1125 ft. +

The Cooper Formation, which lies between the Shallow aquifer and the Santee Limestone, acts as a confining layer, and is continuous throughout the four-mile site radius. The site is not in an area of karst topography (Ref. 4, 15, 16, 17).

During the SSI conducted by the NUS Corporation in 1990, the depth to groundwater in a temporary monitoring well was found to be five feet (Ref. 9-pgs. 12 & 13). Groundwater flow direction in the Shallow aquifer is south-southeasterly (Ref. 15). Groundwater flow direction in the remaining aquifers is unknown.

B. Groundwater Use

The Shallow aquifer is rarely used within four miles of the Berkeley County Landfill site. Of those wells completed in Shallow aquifer within four miles of the site, all are private wells. Marianna DePratter, Division of Hydrogeology, SCDHEC, estimates

that only eight percent of the wells in the area of the site obtain water from the Shallow aquifer. The SCDHEC's Bureau of Solid & Hazardous Waste's June 19, 1992 printout of groundwater supplies within four miles of the site shows that only four percent of the wells with given depths are completed in the Shallow aquifer (Ref. 15, 18). Therefore, conservatively it is estimated that eight percent of the wells within four miles of the site are completed in the Shallow aquifer (Ref. 19). Based on this percentage, the number of houses on USGS topographical maps not served by public waterlines, and 3.01 persons per household in Berkeley County, it is estimated that 255 people are supplied by private wells completed in the Shallow aquifer within four miles of the site (Ref. 4, 15, 18, 19, 20, 21).

The aquifers below the Cooper Formation, which is a confining layer, are considered a single hydrogeologic unit. It is estimated that ninety-two percent of the private wells located within four miles of the site are completed in the aquifers below the Cooper. Based on this percentage, the number of houses counted on USGS topographical maps, and 3.01 persons per household in Berkeley County, it is estimated that 3,012 people are supplied by private wells completed in the aquifers below the Cooper within four miles of the site (Ref. 4, 15, 18, 19, 21).

The Town of Moncks Corner is served by seven wells. Three of the wells are located within four miles of the site between three and four miles north-northeast of the site. The three wells are screened below the Cooper. Moncks Corner serves approximately 2,100 taps (Ref. 4, 22, 23). A.D. Hare Waterworks is served by eight wells. Two of the wells are located within four miles of the site between two and three miles north of the site. The two wells are screened below the Cooper. A.D. Hare serves 470 taps (Ref. 4, 24). The Berkeley County Water Company obtains fifty percent of it's water from seven wells, and fifty percent from the City of Charleston. Three of the Berkeley County Water Company's wells are located within four mile of the site between one and two miles away from the site. The wells are screened below the Cooper. The Company serves approximately 5,000 taps (Ref. 4, 25, 26). Based on the above, Table 1 gives the population served by wells within four miles of the site and screened below the Cooper.

TABLE 1: POPULATION USING WELLS SCREENED BELOW THE COOPER FORMATION WITHIN FOUR MILES OF THE BERKELEY COUNTY LANDFILL SITE			
Site Radius (miles)	**Private Well Population**	**Public Well Population**	**Total Population**
0 - ¼	12	N/A	12
Greater than ¼ - ½	18	N/A	18
Greater than ½ - 1	292	N/A	292
Greater than 1 - 2	689	3,225 (1)	3,914
Greater than 2 - 3	674	345 (2)	1,028
Greater than 3 - 4	1,327	2,709 (3)	4,036

1. Berkeley County Water Company.
2. A.D. Hare Waterworks.
3. Moncks Corner Water Company.

C. Groundwater Impact

The NUS Corporation sampled a temporary monitoring well (BL-TW-05) installed on the periphery of the Berkeley County Landfill during the SSI in 1990. The depth to groundwater in the well was five feet. Analysis of the water sample found chlorobenzene (0.12 mg/l), benzene (0.006 mg/l), arsenic (0.11 mg/l), cobalt (0.065 mg/l), iron (46 mg/l), manganese (3.3 mg/l), and nickel (0.033 mg/l). Relative to background concentrations, these concentrations in the water sample meet the criteria of being observed releases (Ref. 9-pgs. 12 & 13; 10; 27; 28). NUS Corporation also took surface and subsurface soil samples from the periphery of the landfill during the SSI and found, among other substances, arsenic, cobalt, iron, manganese, and nickel to be significantly higher than background concentrations (Ref. 9, 10, 11, 12).

During the SSI, NUS Corporation also found lead (0.055 mg/l) above the Maximum Contaminant Level under the Safe Drinking Water Act in a private well (BL-PW-01) approximately 1000 feet south of the landfill. However, relative to background concentrations, the findings did not meet the criteria of an observed release. In addition, the soil samples that NUS Corporation took during the SSI does not indicate that lead is associated with the landfill (Ref. 9, 10, 11, 12, 28). Also, the well is completed below the Cooper Formation, which acts as a confining layer throughout the four mile

site radius (Ref. 9-pgs 12 & 13; 15; 16; 29). Therefore, it is not deemed that a primary well has been impacted.

VI. SURFACE WATER PATHWAY

A. Regional Characteristics

Overland surface water runoff from the Berkeley County Landfill site to Molly Branch and an unnamed stream has been described in the SSI. However, Molly Branch is not a perennial stream in the vicinity of the landfill as indicated by USGS topographical maps. During the SSI in 1990, NUS Corporation found Molly Branch and the stream to be dry (Ref 9-pg. 7). According to a Berkeley County Official familiar with the landfill, Molley Branch runs dry several times each year (Ref. 2). The closest distance to perennial surface water is approximately 10,000 feet as Molly Branch flows southeast to freshwater wetlands (Ref. 3, 4).

After Molly Branch encounters perennial surface water in the freshwater wetlands, the branch flows southeast for approximately 4.4 miles to the West Branch Cooper River. The fifteen mile distance downstream of the site ends in the river (Ref. 3, 4). An official with the South Carolina Wildlife & Marine Resources Department catagorizes Molly Branch as having a flow between 10 and 100 cubic feet per second as it flows into the West Branch Cooper River, and catagorizes the West Branch Cooper River as having an average flow of 4,500 cubic feet per second within fifteen miles downstream of the site (Ref. 4, 30).

B. Surface Water Use

Drinking water treatment plant intakes are not located within fifteen miles downstream of the landfill (Ref. 3; 4; 31-fig. 119; 32). The West Branch Cooper River is used for fishing, swimming, and boating within fifteen miles of the landfill (Ref. 33).

Considering both banks of Molly Branch, freshwater wetlands interface Molly Branch for 8.8 miles as it flows into the West Branch Cooper River. Freshwater wetlands are located along both banks of the river within fifteen miles of the landfill. Considering both banks, freshwater wetlands interface the river at least 15 miles within fifteen miles downstream of the landfill. (Ref. 3, 4). Besides freshwater wetlands, there are no other sensitive environments, including habitats for endangered species, within fifteen miles downstream of the landfill (Ref. 3, 4, 34, 38).

C. Surface Water Impact

Perennial surface water was not sampled during the SSI, therefore it is not known if hazardous substances from the landfill have been released to perennial surface waters. NUS Corporation took sediment samples from Molly Branch and an unnamed stream during the SSI in 1990, however it has been determined that these streams are intermittent (Ref. 2; 3; 4; 9-pg. 7).

There is a small potential for hazardous substances from the site to be released to perennial surface waters. There is no documentation that the landfill has a functioning and maintained run-on control system and runoff management system (Ref. 8, 9). During the SSI, NUS Corporation found manganese (67 mg/kg) in a sediment sample (BL-SD-06) from Molly Branch taken approximately 4,000 feet downstream of the landfill to be significantly higher than the background concentration. Soil samples taken from the periphery of the landfill also found manganese to be associated with the landfill (Ref. 9, 10, 11, 12, 35). However, since the distance to perennial surface is approximately 10,000 feet, the potential for a release of hazardous substances to perennial surface water is small (Ref. 2; 4; 9-pg. 3; 13).

VII. SOIL EXPOSURE PATHWAY

The one mile site radius around the Berkeley County Landfill site is rural. Based on the number of houses counted on USGS topographical maps, it is estimated that the residential population within one mile of the site is less than 10,000 people (Ref. 3, 4). The landfill is fenced; however, people sometimes break the lock to dump trash at night (Ref. 9-pg. 3). There are no workers at the landfill, operations at the landfill ceased in June 1976 (Ref. 36).

NUS Corporation took three surface soil samples from the periphery of the landfill during the SSI in 1990. Analysis found the samples to contain, among other substances, tetrachloroethene (0.068 mg/kg), chromium (25 mg/kg), nickel (5.5 mg/kg), and zinc (22 mg/kg) at concentrations significantly higher than background concentrations (Ref. 9, 10, 11, 13). During the SSI, NUS Corporation documented one house approximately 200 feet east of the landfill. Based on the 1990 U.S. Census, it is assumed that three people reside in this house (Ref. 9-pgs. 14 & 15; 21). There are no schools or child day care centers within 200 feet of the landfill (Ref. 4, 9, 37).

Habitats for endangered species or other terrestrial sensitive environments are not located on the landfill (Ref. 4, 38).

VIII. AIR PATHWAY

A. Demography and Regional Use

The four mile site radius around the Berkeley County Landfill site is predominantly rural. The three to four mile site radius northeast of the site includes approximately forty percent of the Town of Moncks Corner, S.C. Moncks Corner has a population of 5,607 people (Ref 4, 39). The Whitesville Elementary School is located approximately 0.3 mile north of the site. The school has a student and staff population of approximately 710 people. Based on the population of the school, the number of houses counted on USGS topographical maps, and assuming 3.01 persons per household in Berkeley County, is estimated that 6,471 people are located within four miles of the site (4, 21, 40). Table 2 depicts the number of people located within four miles of the site.

TABLE 2: POPULATION LOCATED WITHIN FOUR MILES OF THE BERKELEY COUNTY LANDFILL SITE

Site Radius (miles)	Population
On-site	0
0 to ¼	21
Greater than ¼ to ½	851*
Greater than ½ to 1	659
Greater than 1 to 2	1,162
Greater than 2 to 3	1,135
Greater than 3 to 4	2,643

*Includes the population of the Whitesville Elementary School.

A habitat for the Reclined meadow-rue (*Thalictrum subrotundum*), a plant under federal status review is located approximately 3.5 miles south-southwest of the site (Ref. 4, 38). Freshwater wetlands are predominant throughout the four mile site radius (Ref. 4). Based on USGS topographical maps, Table 3 depicts the estimation of the number acres of freshwater wetlands located throughout the four mile site radius.

TABLE 3: ACREAGE OF FRESHWATER WETLANDS LOCATED WITHIN FOUR MILES OF THE BERKELEY COUNTY LANDFILL SITE	
Site Radius (miles)	**Wetland Acreage**
On-site	0
0 to ¼	6
Greater than ¼ to ½	17
Greater than ½ to 1	110
Greater than 1 to 2	450
Greater than 2 to 3	1,800
Greater than 3 to 4	2,050

B. Air Impact

NUS Corporation did not collect air samples during the SSI in 1990. Neither did they document a release of hazardous substances from the site to the atmosphere (Ref. 9). However, there is potential for hazardous substances from the site to be released to the atmosphere. Surface soil samples taken during the SSI established that there are hazardous substances in the top two feet of soil at the site. Analysis of the soil samples found, among other substances, tetrachloroethene (0.068 mg/kg), chromium (25 mg/kg), manganese (350 mg/kg), nickel (5.5 mg/kg), and zinc (22 mg/kg) at concentrations significantly higher than background concentrations (Ref 9, 10, 11, 13). The potential for hazardous substances to be released is lessened given the fact the landfill area is overgrown (Ref. 9-pg. 3).

IX. CONCLUSIONS AND RECOMMENDATIONS

Berkeley County operated the unlined Berkeley County Landfill from 1972 until 1976. The landfill permit application specified that household wastes, commercial, industrial, and agricultural wastes would be accepted by the landfill. It is reported that agricultural and industrial wastes were taken to the landfill. NUS Corporation conducted a SSI on the landfill in 1990. Analysis of soil samples taken from the periphery of the landfill during the SSI found, among other substances, tetrachloroethene, carbon disulfide, toluene, arsenic, chromium, nickel, and zinc at concentrations significantly higher than background concentrations.

During the SSI, the NUS Corporation sampled a temporary monitoring well completed into the shallow aquifer at the site. Analysis found that concentrations of chlorobenzene, benzene, arsenic, cobalt, iron, manganese, and nickel to meet the criteria of observed release. However, because it is estimated that only eight percent of the private wells within four miles of the site are completed in the shallow aquifer, it is estimated that only 255 people are served by these shallow aquifer wells. The vast majority of the wells, both public and private, are completed below the Cooper Formation, which is a confining layer continuous throughout the four mile site radius. The SSI did not demonstrate that hazardous substances have been release to the aquifers below the Cooper Formation. However, there is potential for hazardous substances to be released to the aquifers below the Cooper Formation. Approximately 9,300 people are supplied water by wells completed below the Cooper Formation. However, the impact on this potential population is mitigated by the fact that more than half of the population are served by wells located more than two miles away from the site.

NUS Corporation did not demonstrate an observed release to perennial surface water during the SSI. Manganese in a sediment sample taken from Molly Branch downstream of the landfill was found to be significantly higher than background concentrations; however, Molly Branch is an intermittent stream. The closest perennial surface water is approximately two miles away, therefore the potential for hazardous substances to be released to perennial surface waters is small.

NUS Corporation found tetrachloroethene, chromium, manganese, nickel, and zinc in surface soil samples at concentrations significantly higher than background levels. However, since there are no workers on-site, the resident population and nearby population is small, and there is limited access to the site, the potential for direct contact with hazardous substances at the site is small. NUS Corporation also did not demonstrate a release of hazardous substances to the atmosphere. The potential for release to the atmosphere is lessened by the fact that the landfill is overgrown.

Because of the relatively small number of people potentially affected by groundwater contamination, and because of the low potential for surface water and atmospheric contamination, it is recommended that no further remedial action be planned for the Berkeley County Landfill site under CERCLA/SARA. If the site is not addressed under CERCLA/SARA, the groundwater contamination should be referred to the State Superfund Program and/or the SCDHEC's Bureau of Drinking Water Protection for follow-up.

X. REFERENCES

All references are included unless otherwise indicated.

1. Aerial Photo of Berkeley County and attachment, Tax Map Number 180-00-01-037-C. September 18, 1990. See Reference 2 in the SSI Report.

2. Harvey Daniel, SCDHEC. Telephone conversation with Marvin Waddey, Berkeley County Water and Sanitation Authority. June 18, 1992.

3. NUS Corporation. Figure: Site Location Map, Berkeley County Landfill, Oakeley, Berkeley County, South Carolina. From Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991.

4. USGS Topographical Maps. 7.5 Minute Series: Moncks Corner, S.C., photorevised 1979; Cordesville, S.C., photorevised 1979; Mount Holly, S.C., photorevised 1979; Kittredge, S.C., photorevised 1979.

5. Ernie Ayers, SCDHEC. Telephone conversation with Johnny Ohlandt, Trident District, SCDHEC. October 25, 1988.

6. South Carolina State Board of Health. Application for Permit to Construct Solid Waste Management System. Filed by Berkeley County, S.C. April 13, 1972.

7. South Carolina State Board of Health. Permit No. 15. Berkeley County Sanitary Landfill. May 22, 1972.

8. SCDHEC, Bureau of Solid & Hazardous Waste Management. CERCLA File on: Berkeley County Landfill, SCD 981 028 095, Berkeley County. In Site Screening Section, SCDHEC.

9. NUS Corporation. Field Log Notebook for Berkeley County Landfill. Documentation of Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991. See Reference 3 in the SSI Report.

10. NUS Corporation. Figure: Sample Location Map. Berkeley County Landfill, Oakeley, Berkeley County, S.C. From Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991.

11. NUS Corporation. Table: Summary of Inorganic Analytical Results, Surface Soil Samples, Berkeley County Landfill. From Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991.

12. NUS Corporation. Table: Summary of Inorganic Analytical Results, Subsurface Soil Samples, Berkeley County Landfill. From Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991.

13. NUS Corporation. Table: Summary of Organic Analytical Results, Surface Soil Samples, Berkeley County Landfill. From Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991.

14. NUS Corporation. Table: Summary of Organic Analytical Results, Subsurface Soil Samples, Berkeley County Landfill. From Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991.

15. Marianna DePratter, SCDHEC. Memorandum to John Cresswell, SCDHEC. Re: Berkeley County Landfill. January 12, 1988.

16. Marion Feagin, SCDHEC. Memorandum to Harvey Daniel, SCDHEC. Re: Berkeley County Landfill. June 29, 1992.

17. S.C. Water Resources Commission. The Groundwater Resources of Charleston, Berkeley, and Dorchester Counties South Carolina. Report Number 139. 1985. See Reference 12 in the SSI Report.

18. SCDHEC, Bureau of Solid & Hazardous Waste. Printout: The Groundwater Supplies Found Within Four Miles of the Berkeley County Landfill. June 19, 1992.

19. Harvey Daniel, SCDHEC. Memorandum to Berkeley County Landfill File. Re: The Cooper Formation, and Surficial Aquifer Use in the Vicinity of the Berkeley County Landfill. June 24, 1992.

20. Waterline maps of: A.D. Hare Waterworks; Berkeley County Water Company; and, Moncks Corner Water Company. See Reference 12.

21. U.S. Census Bureau. Table: Housing Units by Occupancy Status, Total Population, and Persons Per House. 1990.

22. Harvey Daniel, SCDHEC. Telephone conversation with Carl Rueger, Moncks Corner Water Company. June 24, 1992.

23. Harvey Daniel, SCDHEC. Telephone conversation with Bobby Wall, Moncks Corner Water Company. July 7, 1992.

24. Harvey Daniel, SCDHEC. Telephone conversation with Dan Hare, A.D. Hare Waterworks. July 10, 1992.

25. Harvey Daniel, SCDHEC. Telephone conversation with Howard Henry, Berkeley County Water Company. June 23, 1992.

26. Berkeley County Water Company Well Locations. Reproduced on USGS topographical maps by Howard Henry, Berkeley County Water Company. See Reference 8 in the SSI Report.

27. NUS Corporation. Table: Summary of Organic Analytical Results, Groundwater Samples, Berkeley County Landfill. From Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991.

28. NUS Corporation. Table: Summary of Inorganic Analytical Results, Groundwater Samples, Berkeley County Landfill. From Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991.

29. Lisa Ward, NUS Corporation. Telephone conversation with Tri-County Well Drillers. December 4, 1990. See Reference 16 in the SSI Report.

30. Harvey Daniel, SCDHEC. Telephone conversation with Miller White, District V, South Carolina Wildlife & Marine Resources Department. June 23, 1992.

31. S.C. Water Resources Commission. South Carolina State Water Assessment, Report Number 140. September 1983.

32. Lisa Ward, NUS Corporation. Telephone conversation with Charleston City Public Works. January 2, 1991. See Reference 17 in the SSI Report.

33. Lisa Ward, NUS Corporation. Telephone conversation with Earl Turner, Moncks Corner's Wildlife Department. December 30, 1990. See Reference 9 in the SSI Report.

34. South Carolina Heritage Trust. Endangered Species List. May 1, 1991. Copy in Site Screening Section, SCDHEC.

35. NUS Corporation. Table: Summary of Inorganic Analytical Results, Sediment Samples, Berkeley County Landfill. From Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991.

36. J.D. Ohlandt, Charleston County Health Department. Letter to Clyde Umphlett, County Supervisors Office, Moncks Corner, S.C. October 22, 1976.

37. S.C. Department of Social Services. Listing of All Child Day Care Facilities on File. July 28, 1989. Copy in Site Screening Section, SCDHEC.

38. SCDHEC, Bureau of Solid & Hazardous Waste. Printout: The Endangered Species Found Within 4 Miles of the Berkeley County Landfill Site. June 22, 1992.

39. U.S. Census Bureau. Table: Selected Population and Housing Characteristics for South Carolina: 1990. Copy in Site Screening Section, SCDHEC.

40. Harvey Daniel, SCDHEC. Telephone conversation with Barbara Chapman, Whitesville Elementary School. June 26, 1992.

SIP
REPORT
DOCUMENTATION

HRS DOCUMENTATION RECORD
Berkeley County Landfill - 07/13/92

1. Site Name: Berkeley County Landfill
   (as entered in CERCLIS)

2. Site CERCLIS Number: SCD 981 028 095

3. Site Reviewer: Harvey S. Daniel

4. Date: June 24, 1992

5. Site Location: Oakley/Berkeley County, South Carolina
   (City/County,State)

6. Congressional District:

7. Site Coordinates: Single

   Latitude: 33°08'31.5" Longitude: 080°02'58.2"

	Score
Ground Water Migration Pathway Score (Sgw)	32.69
Surface Water Migration Pathway Score (Ssw)	0.24
Soil Exposure Pathway Score (Ss)	17.09
Air Migration Pathway Score (Sa)	1.59

Site Score	18.46

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.

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Landfill

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

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID		Landfill	
b. Source Type		Landfill	
c. Secondary Source Type		N.A.	
d. Source Volume (yd3)	Source Area (ft2)	832480.00	3746160.00
e. Source Volume/Area Value		3.33E+02	
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)		3.33E+02	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Aluminum	< 2	YES	1.7E+04	ppm
Arsenic	> 2	YES	8.3E+00	ppm
Barium	< 2	YES	1.2E+02	ppm
Beryllium	< 2	YES	2.8E+00	ppm
Cadmium	> 2	YES	3.9E+00	ppm
Carbon disulfide	> 2	YES	2.1E-02	ppm
Chromium	< 2	YES	2.5E+01	ppm
Cobalt	< 2	YES	3.4E+00	ppm
Manganese	< 2	YES	1.6E+03	ppm
Nickel	< 2	YES	5.5E+00	ppm
Sodium	< 2	YES	2.5E+02	ppm
Tetrachloroethene	< 2	YES	6.8E-02	ppm
Toluene	> 2	YES	7.0E-03	ppm
Zinc	< 2	YES	2.2E+01	ppm

Documentation for Source Hazardous Substances:

The NUS Corporation conducted a Site Screening Investigation at the landfill in 1990. Three surface samples and three subsurface soil samples were taken from the eastern and southern periphery of the landfill. In addition, background surface and subsurface soil samples were taken. In addition to other metals, anaylsis found arsenic (8.3 mg/kg), beryllium (2.8 mg/kg), cadmium (3.9 mg/kg), chromium (25.0 mg/kg), and zinc (22.0 mg/kg) to be significantly higher than background concentrations. Also, analysis found the soil samples to contain tetrachloroethene (0.068 mg/kg), carbon disulfide (0.021 mg/kg), and toluene (0.007 mg/kg) in concentrations significantly higher than background levels. It is reported that the MOBAY Corportation, which produces farm chemicals, disposed containers in the landfill. It is also reported that a company named Verona disposed of some dye wastes into the landfill. Presumably these wastes were deposited in liquid form. Also, it is likely that the dye wastes contained heavy metals.

Reference: 3, 4, 5, 6, 7, 8, 9.

Documentation for Source Volume:

The landfill is approximately 86 acres (3,746,160 square feet) in size. The fill depth is estimated to be 6 feet. Therefore the volume of the landfill is estimated to be 22,476,960 cubic feet, or 832,480 cubic yards.

Reference: 9, 10, 11, 12.

Documentation for Source Area:

The Berkeley County Landfill is approximately 86 acrea (3,746,160 square feet) in size.

Reference: 10, 11, 12.

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	Landfill	GW-SW-SE-A	3.33E+02	0.00E+00	3.33E+02

4. PATHWAY HAZARDOUS WASTE QUANTITY AND WASTE CHARACTERISTICS SUMMARY TABLE

Migration Pathway	Contaminant Values		HWQVs*	WCVs**
Ground Water	Toxicity/Mobility	1.00E+04	100	32
SW: Overland Flow, DW	Tox./Persistence	1.00E+04	100	32
SW: Overland Flow, HFC	Tox./Persis./Bioacc.	5.00E+08	100	320
SW: Overland Flow, Env	Etox./Persis./Bioacc.	5.00E+06	100	100
SW: GW to SW, DW	Tox./Persistence	1.00E+04	100	32
SW: GW to SW, HFC	Tox./Persis./Bioacc.	5.00E+08	100	320
SW: GW to SW, Env	Etox./Persis./Bioacc.	5.00E+06	100	100
Soil Exposure:Resident	Toxicity	1.00E+04	100	32
Soil Exposure: Nearby	Toxicity	1.00E+04	100	32
Air	Toxicity/Mobility	1.00E+03	100	18

* 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

GROUND WATER MIGRATION PATHWAY SCORESHEET
Berkeley County Landfill - 07/13/92

WATER MIGRATION PATHWAY Categories & Factors	Maximum Value	Value Assigned
ıood of Release to an Aquifer ·: Middendorf		
·rved Release	550	0
ntial to Release		
Containment	10	10
Net Precipitation	10	3
Depth to Aquifer	5	3
Travel Time	35	5
Potential to Release		
[lines 2a(2b+2c+2d)]	500	110
lihood of Release	550	430
ıaracteristics		
ɔity/Mobility	*	1.00E+04
ɔdous Waste Quantity	*	100
ɜ Characteristics	100	32
ɜst Well	50	2.00E+01
lation		
ɔevel I Concentrations	**	0.00E+00
ɔevel II Concentrations	**	0.00E+00
·otential Contamination	**	1.65E+02
·opulation (lines 8a+8b+8c)	**	1.65E+02
ırces	5	0.00E+00
ɩead Protection Area	20	0.00E+00
·ts (lines 7+8d+9+10)	**	1.85E+02
·ts (including overlaying aquifers)	**	1.96E+02
·er Score	100	32.69
·ATER MIGRATION PATHWAY SCORE (Sgw)	100	32.69

.m value applies to waste characteristics category.
m value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
Berkeley County Landfill - 07/13/92

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	3
2d. Potential to Release by Overland Flow [lines 2a(2b+2c)]	500	40
3. Potential to Release by Flood		
3a. Containment (Flood)	10	0
3b. Flood Frequency	50	0
3c. Potential to Release by Flood (lines 3a x 3b)	500	0
4. Potential to Release (lines 2d+3c)	500	40
5. Likelihood of Release	550	40
Waste Characteristics		
6. Toxicity/Persistence	*	1.00E+04
7. Hazardous Waste Quantity	*	100
8. Waste Characteristics	100	32
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	0.00E+00
12. Targets (lines 9+10d+11)	**	0.00E+00
13. DRINKING WATER THREAT SCORE	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
Berkeley County Landfill - 07/13/92

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	40
Waste Characteristics		
15. Toxicity/Persistence/Bioaccumulation	*	5.00E+08
16. Hazardous Waste Quantity	*	100
17. Waste Characteristics	1000	320
Targets		
18. Food Chain Individual	50	0.00E+00
19. Population		
19a. Level I Concentrations	**	0.00E+00
19b. Level II Concentrations	**	0.00E+00
19c. Pot. Human Food Chain Contamination	**	3.00E-06
19d. Population (lines 19a+19b+19c)	**	3.00E-06
20. Targets (lines 18+19d)	**	3.00E-06
21. HUMAN FOOD CHAIN THREAT SCORE	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
Berkeley County Landfill - 07/13/92

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	40
Waste Characteristics		
23. Ecosystem Toxicity/Persistence/Bioacc.	*	5.00E+06
24. Hazardous Waste Quantity	*	100
25. Waste Characteristics	1000	100
Targets		
26. Sensitive Environments		
26a. Level I Concentrations	**	0.00E+00
26b. Level II Concentrations	**	0.00E+00
26c. Potential Contamination	**	5.00E+00
26d. Sensitive Environments (lines 26a+26b+26c)	**	5.00E+00
27. Targets (line 26d)	**	5.00E+00
28. ENVIRONMENTAL THREAT SCORE	60	0.24
29. WATERSHED SCORE	100	0.24
30. SW: OVERLAND/FLOOD COMPONENT SCORE (Sof)	100	0.24

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET
Berkeley County Landfill - 07/13/92

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors DRINKING WATER THREAT	Maximum Value	Value Assigned
Likelihood of Release to Aquifer Aquifer: Shallow		
1. Observed Release	550	550
2. Potential to Release		
2a. Containment	10	10
2b. Net Precipitation	10	3
2c. Depth to Aquifer	5	5
2d. Travel Time	35	35
2e. Potential to Release [lines 2a(2b+2c+2d)]	500	430
3. Likelihood of Release	550	550
Waste Characteristics		
4. Toxicity/Mobility/Persistence	*	1.00E+04
5. Hazardous Waste Quantity	*	100
6. Waste Characteristics	100	32
Targets		
7. Nearest Intake	50	0.00E+00
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	0.00E+00
8d. Population (lines 8a+8b+8c)	**	0.00E+00
9. Resources	5	0.00E+00
10. Targets (lines 7+8d+9)	**	0.00E+00
11. DRINKING WATER THREAT SCORE	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET
Berkeley County Landfill - 07/13/92

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT	Maximum Value	Value Assigned
Likelihood of Release		
12. Likelihood of Release (same as line 3)	550	550
Waste Characteristics		
13. Toxicity/Mobility/Persistence/Bioacc.	*	5.00E+08
14. Hazardous Waste Quantity	*	100
15. Waste Characteristics	1000	320
Targets		
16. Food Chain Individual	50	0.00E+00
17. Population		
17a. Level I Concentrations	**	0.00E+00
17b. Level II Concentrations	**	0.00E+00
17c. Pot. Human Food Chain Contamination	**	0.00E+00
17d. Population (lines 17a+17b+17c)	**	0.00E+00
18. Targets (lines 16+17d)	**	0.00E+00
19. HUMAN FOOD CHAIN THREAT SCORE	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT SCORESHEET
Berkeley County Landfill - 07/13/92

GROUND WATER TO SURFACE WATER MIGRATION COMPONENT Factor Categories & Factors ENVIRONMENTAL THREAT	Maximum Value	Value Assigned
Likelihood of Release		
20. Likelihood of Release (same as line 3)	550	550
Waste Characteristics		
21. Ecosystem Tox./Mobility/Persist./Bioacc. 22. Hazardous Waste Quantity 23. Waste Characteristics	* * 1000	5.00E+06 100 100
Targets		
24. Sensitive Environments 24a. Level I Concentrations 24b. Level II Concentrations 24c. Potential Contamination 24d. Sensitive Environments (lines 24a+24b+24c) 25. Targets (line 24d)	 ** ** ** ** **	 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
26. ENVIRONMENTAL THREAT SCORE	60	0.00
27. WATERSHED SCORE	100	0.00
28. SW: GW to SW COMPONENT SCORE (Sgs)	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SOIL EXPOSURE PATHWAY SCORESHEET
Berkeley County Landfill — 07/13/92

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	*	100
4. Waste Characteristics	100	32
Targets		
5. Resident Individual	50	5.00E+01
6. Resident Population		
6a. Level I Concentrations	**	3.00E+01
6b. Level II Concentrations	**	0.00E+00
6c. Resident Population (lines 6a+6b)	**	3.00E+01
7. Workers	15	0.00E+00
8. Resources	5	0.00E+00
9. Terrestrial Sensitive Environments	***	0.00E+00
10. Targets (lines 5+6c+7+8+9)	**	8.00E+01
11. RESIDENT POPULATION THREAT SCORE	**	1.41E+06

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.
*** No specific maximum value applies, see HRS for details.

SOIL EXPOSURE PATHWAY SCORESHEET
Berkeley County Landfill - 07/13/92

SOIL EXPOSURE PATHWAY Factor Categories & Factors NEARBY POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
12. Attractiveness/Accessibility 13. Area of Contamination 14. Likelihood of Exposure	100 100 500	1.00E+01 1.00E+02 1.25E+02
Waste Characteristics		
15. Toxicity 16. Hazardous Waste Quantity 17. Waste Characteristics	* * 100	1.00E+04 100 32
Targets		
18. Nearby Individual 19. Population Within 1 Mile 20. Targets (lines 18+19)	1 ** **	0.00E+00 5.40E-01 5.40E-01
21. NEARBY POPULATION THREAT SCORE	**	2.16E+03
SOIL EXPOSURE PATHWAY SCORE (Ss)	100	17.09

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

AIR PATHWAY SCORESHEET
Berkeley County Landfill - 07/13/92

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	280
2b. Particulate Potential to Release	500	280
2c. Potential to Release	500	280
3. Likelihood of Release	550	280
Waste Characteristics		
4. Toxicity/Mobility	*	1.00E+03
5. Hazardous Waste Quantity	*	100
6. Waste Characteristics	100	18
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	**	5.00E+00
8d. Population (lines 8a+8b+8c)	**	5.00E+00
9. Resources	5	0.00E+00
10. Sensitive Environments		
10a. Actual Contamination	***	0.00E+00
10b. Potential Contamination	***	1.00E+00
10c. Sens. Environments(lines 10a+10b)	***	1.00E+00
11. Targets (lines 7+8d+9+10c)	**	2.60E+01
AIR MIGRATION PATHWAY SCORE (Sa)	100	1.59E+00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.
*** No specific maximum value applies, see HRS for details.

REFERENCES

Berkeley County Landfill - 07/13/92

1. Congressional Federal Register (40 CFR Part 300). Hazard Ranking System; Final Rule. Friday, December 14, 1990. Copy in Site Screening Section, SCDHEC.

2. Harvey Daniel, SCDHEC. Telephone conversation with Marvin Waddey, Berkeley County Water and Sanitation Authority. June 18, 1992.

3. NUS Corporation. Field Log Notebook for Berkeley County Landfill. Documentation of Screening Site Inspection, Phase II, September 17-19, 1990. See Reference 3 in the SSI Report.

4. NUS Corporation. Figure: Sample Location Map. Berkeley County Landfill, Oakeley, Berkeley County, S.C. From Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991.

5. NUS Corporation. Table: Summary of Inorganic Analytical Results, Surface Soil Samples, Berkeley County Landfill. From Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991.

6. NUS Corporation. Table: Summary of Inorganic Analytical Results, Subsurface Soil Samples, Berkeley County Landfill. From Screening Site Inspection, Phase II by NUS Corp. March 12, 1991.

7. NUS Corporation. Table: Summary of Organic Analytical Results, Surface Soil Samples, Berkeley County Landfill. From Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991.

8. NUS Corporation. Table: Summary of Organic Analytical Results, Subsurface Soil Samples, Berkeley County Landfill. From Screening Site Inspection, Phase II by NUS Corp. March 12, 1991.

9. Ernie Ayers, SCDHEC. Telephone conversation with Johnny Ohlandt, Trident District, SCDHEC. October 25, 1988.

10. Aerial Photograph of the Berkeley County Landfill and attached Tax Map Number 180-00-01-037-C. September 18, 1990. See Reference 2 in the SSI Report.

11. NUS Corporation. Figure: Site Location Map, Berkeley County Landfill, Oakley, Berkeley County, South Carolina. From Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991.

12. USGS Topographical Maps. 7.5 Minute Series: Moncks Corner, S.C., photorevised 1979; Cordesville, S.C., photorevised 1979; Mount Holly, S.C., photorevised 1979; Kittredge, S.C., photorev. 1979.

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Berkeley County Landfill - 07/13/92

13. Marianna DePratter, SCDHEC. Memorandum to John Cresswell, SCDHEC. Re: Berkeley County Landfill. January 12, 1988.

14. Marion Feagin, SCDHEC. Memorandum to Harvey Daniel, SCDHEC. Re: Berkeley County Landfill. June 29, 1992.

15. NUS Corporation. Table: Summary of Organic Analytical Results, Groundwater Samples, Berkeley County Landfill. From Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991.

16. NUS Corporation. Table: Summary of Inorganic Analytical Results, Groundwater Samples, Berkeley County Landfill. From Screening Site Inspection, Phase II by NUS Corporation. March 12, 1991.

17. Harvey Daniel, SCDHEC. Memorandum to Berkeley County Landfill File. Re: The Cooper Formation, and Surficial Aquifer Use in the Vicinity of the Berkeley County Landfill. June 24, 1992.

18. SCDHEC, Bureau of Solid & Hazardous Waste. Printout: The Groundwater Supplies Found Within Four Miles of the Berkeley County Landfill. June 19, 1992.

19. U.S. Census Bureau. Table: Housing Units by Occupancy Status, Total Population, and Persons Per Household. 1990.

20. S.C. Water Resources Commission. The Groundwater Resources of Charleston, Berkeley, and Dorchester Counties South Carolina. Report Number 139. 1985. See Reference 12 in the SSI Report.

21. Lisa Ward, NUS Corporation. Telephone conversation with Tri-County Well Drillers. December 4, 1990. See Reference 16 in the SSI Report.

22. Harvey Daniel, SCDHEC. Telephone conversation with Carl Rueger, Moncks Corner Water Company. June 24, 1992.

23. Harvey Daniel, SCDHEC. Telephone conversation with Bobby Wall, Moncks Corner Water Company. July 7, 1992.

24. Waterline maps of: A.D. Hare Waterworks; Berkeley County Water Company; and, Moncks Corner Water Company. See Reference 12.

25. Harvey Daniel, SCDHEC. Telephone conversation with Howard Henry, Berkeley County Water Company. June 23, 1992.

26. Berkeley County Water Company Well Locations. Reproduced on USGS topographical maps by Howard Henry, Berkeley County Water Company. See Reference 8 in the SSI Report.

REFERENCES

Berkeley County Landfill - 07/13/92

27. Harvey Daniel, SCDHEC. Telephone conversation with Dan Hare, A.D. Hare Waterworks. July 10, 1992.

28. CERCLA File on: Berkeley County Landfill, SCD 981 028 095, Berkeley County, S.C. In Site Screening Section, SCDHEC.

29. Federal Emergency Management Agency, National Flood Insurance Program. Flood Insurance Rate Map, Berkeley County, S.C. Community-Panel No. 450029 0280 B. September 30, 1983. In Site Screening, SCDHEC.

30. S.C. Water Resources Commission. Table: Maximum Rainfall Intensity Expected at Center of Each South Carolina County. Copy in Site Screening Section, SCDHEC.

31. U.S. Department of Agriculture, Soil Conservation and Forest Service. Soil Survey of Berkeley County, South Carolina. January 1980.

32. S.C. Water Resources Commission. South Carolina State Water Assessment, Report Number 140. September 1983.

33. Harvey Daniel, SCDHEC. Telephone conversation with Miller White, District V, South Carolina Wildlife & Marine Resources Department. June 23, 1992.

34. Lisa Ward, NUS Corporation. Telephone conversation with Earl Turner, Moncks Corner's Wildlife Department. December 3, 1990. See Reference 9 in the SSI Report.

35. South Carolina Heritage Trust. Endangered Species List. May 1, 1991. Copy in Site Screening Section, SCDHEC.

36. S.C. Department of Social Services. Listing of All Child Day Care Facilities on File. July 28, 1989. Copy in Site Screening Section, SCDHEC.

37. J.D. Ohlandt, Charleston County Health Department. Letter to Clyde Umphlett, County Supervisors Office, Moncks Corner, S.C. October 22, 1976.

38. Harvey Daniel, SCDHEC. Telephone conversation with Barbara Chapman, Whitesville Elementary School. June 26, 1992.

39. SCDHEC, Bureau of Solid & Hazardous Waste. Printout: The Endangered Species Found within 4 Miles of the Berkeley County Landfill Site. June 22, 1992.

Ref 2

RECORD OF COMMUNICATION

__X__ Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO:	Berkeley County Landfill File SCD 981 028 095	FROM:	Harvey S. Daniel Site Screening Section
DATE:	June 18, 1992	TIME:	2:00 PM

SUBJECT: Conversation with Marvin E. Waddey, Director of Solid Waste, Berkeley County Water and Sanitation Authority. (803) 761-8106

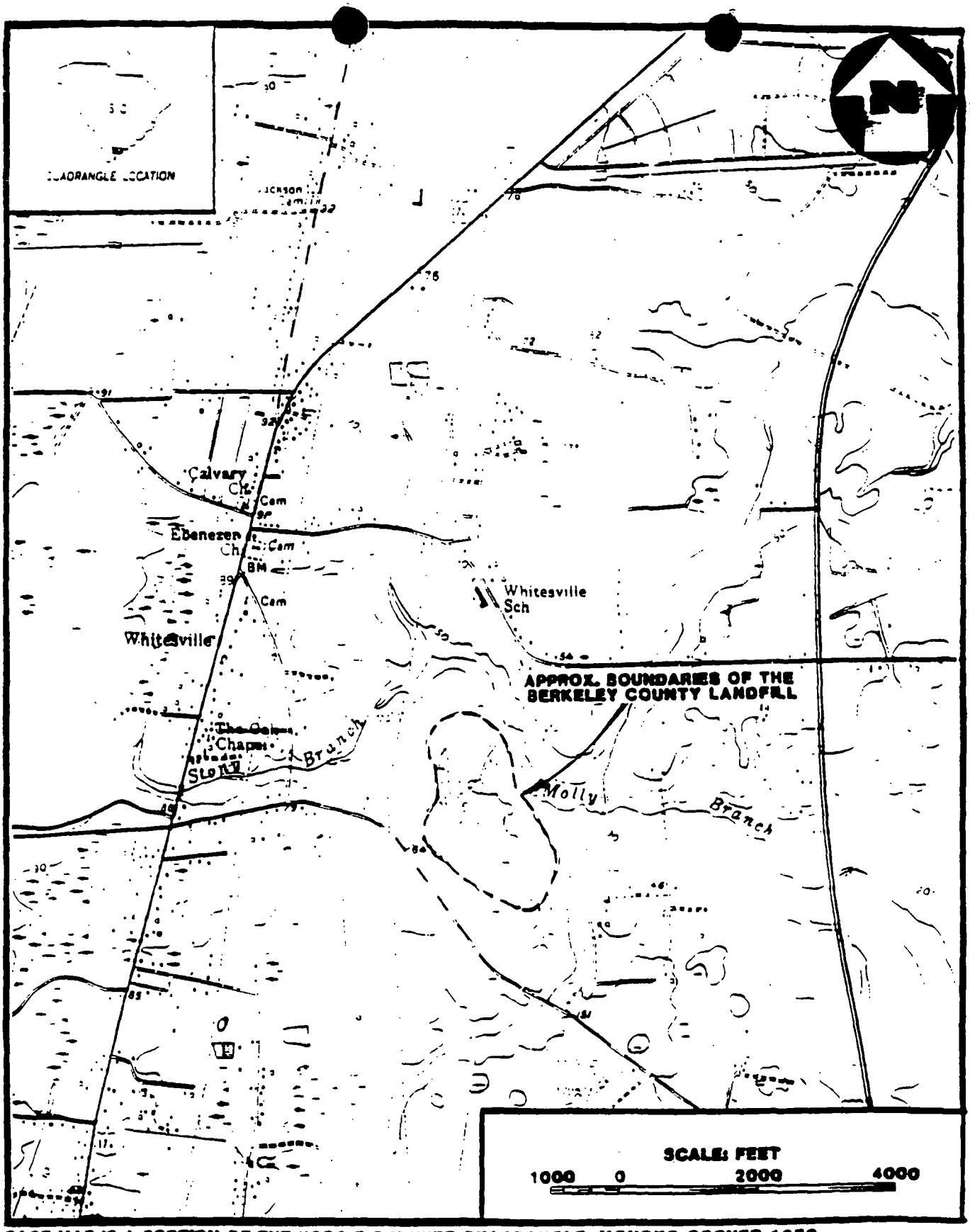
SUMMARY OF COMMUNICATION

I informed Mr. Waddey that in 1991, the NUS Corporation conducted a Site Screening Investigation on the Berkeley County Landfill for Region IV, U.S. EPA, and during the field investigations had found Molly Branch to be dry. I explained that I wanted to confirm that Molly Branch was in fact an intermittent stream. Mr. Waddey stated that he was out at the landfill just last week. He confirmed that the branch does run dry several times each year. Mr. Waddey also explained that when the landfill was operational, it was operated by Berkeley County Public Works. The landfill is unlined. About two years ago, a Department of Solid Waste was created within Berkeley County Public Works. Landfills are operated by the Solid Waste Department. About two months ago, Berkeley County Public Works became Berkeley County Water and Sanitation Authority. Mr. Waddey's address is:

Marvin E. Waddey, Director
Division of Solid Waste
P.O. Box 1090
Berkeley County Water and Sanitation Authority
Goose Creek, South Carolina 29445

INFORMATION COPIES
TO:

Ref. 3



BASE MAP IS A PORTION OF THE USGS 7.5 MINUTE QUADRANGLE, MONCKS CORNER 1979.

SITE LOCATION MAP
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

FIGURE 1

NUS CORPORATION

U. S. EPA REGION IV

SDMS

Unscannable Material Target Sheet

DocID: 10079038 Site ID: SCD981028095

Site Name: Berkeley Co. Landfill

Nature of Material:

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

Other (describe):

Amount of material: #1 - Reference 4

Please contact the appropriate Records Center to view the material.

~~Reference 2~~ Ref. 5

RECORD OF COMMUNICATION

___x Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO: Berkeley County Landfill file FROM: Ernie Ayers EA

DATE: October 25, 1988 TIME: 9:45 a.m.

SUBJECT: Conversation with Johnny Ohlandt, DHEC Trident District Consultant.

SUMMARY OF COMMUNICATION

W.N. Neighbors owns and has owned this land since it was used as a landfill. He leased it to Berkeley County and he was the landfill operator. Mr. Ohlandt says that next to nothing of an industrial nature placed in the fill, primarily municipal wastes and some commercial wastes (e.g. from supermarkets). The site was well managed and was properly closed. It was a shallow fill - 6 feet would be a good estimate. It is now used as pasture land. Mr. Ohlandt dows not know why the site was placed on CERCLIS. It is difficult to know precisely what materials were placed in the site since it was operated before hazardous waste laws were enacted. He does not know if the December 28, 1979 letter to himself from SCDHEC Engineer Albert McMeekin cites wastes that would be representative of what went into the old Neighbors landfill as opposed to the newer landfills.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES
TO:

~~Reference 1~~ (1)

Ref. 6

SOUTH CAROLINA STATE BOARD OF HEALTH

COLUMBIA, SOUTH CAROLINA

APPLICATION FOR PERMIT TO CONSTRUCT

SOLID WASTE MANAGEMENT SYSTEM

Name of Project (Location and description) Berkeley County Sanitary Landfill; 5 mi. east of Route 17 A on S. C. Route No. 50

Type(s) of Solid Waste Household wastes, commercial, industrial, and agricultural wastes

County Berkeley Design Capacity 60 (~~yds.~~ or tons/day)

Water Table 2.7 (ft.) Drainage Basin Cooper River 6 miles (~~ft.~~)

Nearest Stream Molly Branch Distance to Stream 700 (ft.)

Planned land use on completion of Project ~~pasture land~~

This application is being made in behalf of ~~Berkeley County~~ (~~xxxx~~) (leased)

whose address is ~~David D. Page, County Engineer, P. O. Box 936, Moncks Corner, S. C~~

Plans, specifications, and an engineering report are herewith submitted and made a part of this application.

Date of Application 4/13/72 Signed _____
City, Corporation, or Other Official Name

Designing Engineer

David D. Page By _____
Official Directly Responsible

Application No. _____ Director, Solid Waste Division
Official Title

File in Duplicate

(2)

Ref. 7

STATE OF SOUTH CAROLINA

STATE BOARD OF HEALTH

COLUMBIA, S. C.

Permit

BERKELEY COUNTY is hereby issued a permit to operate a Sanitary Landfill known as BERKELEY COUNTY SANITARY LANDFILL located at Approx. .5 mi. east of route 17 A on S. C. Route No. 50, in accordance with State laws, rules and regulations of the State Board of Health.

E. Kenneth Ayers, M.D.
State Health Officer

Dated this 22nd day of May, 19 72.

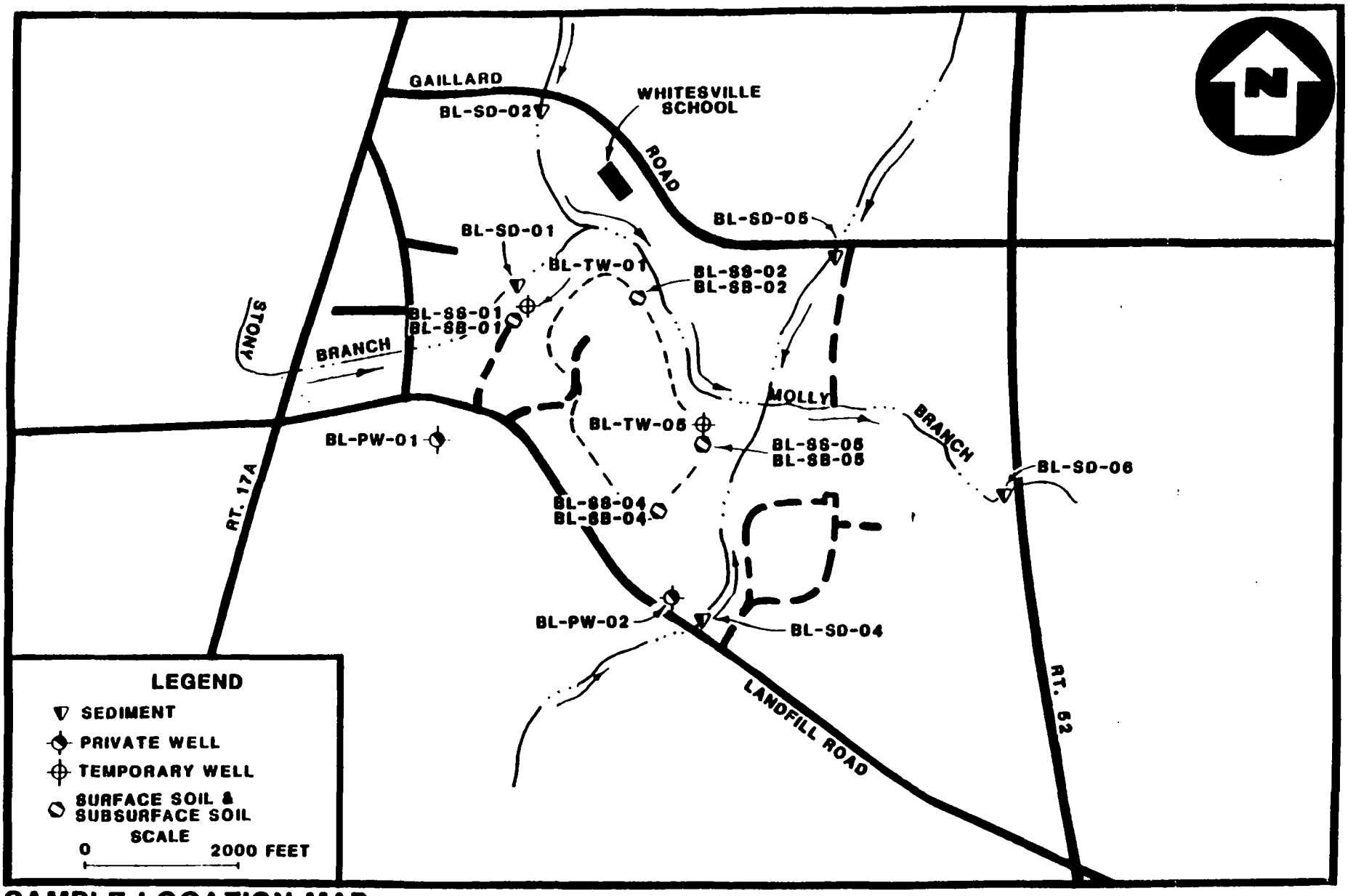
William E. Stilwell, Jr., Director
Solid Waste Division
Authorized Signature Title

Permit No. 15

THIS CERTIFICATE IS THE PROPERTY OF THE STATE BOARD OF HEALTH AND MUST BE SURRENDERED ON DEMAND. KEEP POSTED AT ALL TIMES IN A CONSPICUOUS PLACE ON THE PREMISES.

SPH-SWP-1

Pg. 10



SAMPLE LOCATION MAP
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

FIGURE 3

NUS CORPORATION

Ref. 11

TABLE 4

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (mg/kg)	Background BL-SS-01	Northwest Corner of Landfill BL-SS-02*	Southeast Corner of Landfill BL-SS-04	Northeast Corner of Landfill BL-SS-05
ALUMINUM	2600	17,000	7600	6000
ARSENIC	2J	3.4	-	-
BARIUM	21	120	27	25
BERYLLIUM	1U	2.8	-	-
CALCIUM	1000	5200	2700	3500
CHROMIUM	2U	25	10	7.2
COBALT	1.3U	2.7	-	3.4
IRON	1500	15,000	8500	5400
LEAD	8.4J	18J	11J	14J
MAGNESIUM	150	1600	300	340
MANGANESE	15	25	84	350
NICKEL	1.1U	5.5	2.7	2.3
POTASSIUM	60U	1200	260	170
SODIUM	30U	250	-	-
VANADIUM	4.2	36	14	7.2
ZINC	4U	-	22	-

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
U Material was analyzed for but not detected. The number given is the MQL.
*Note: Sample BL-SS-03 was not collected, because the sample location was inaccessible.

Ref. 12

TABLE 6

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SUBSURFACE SOIL SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (mg/kg)	Background BL-SB-01	Northwest Corner of Landfill BL-SB-02*	Southeast Corner of Landfill BL-SB-04	Northeast Corner of Landfill BL-SB-05
ALUMINUM	27,000	7500	7900	18,000
ARSENIC	2U	2.8	6.5	8.3
BARIUM	37	23	70	87
CADMIUM	0.66U	-	-	3.9
CALCIUM	30U	140,000	140,000	15,000
CHROMIUM	9.1	39	38	87
COBALT	5U	-	-	4
IRON	2200	9000	10,000	17,000
LEAD	17J	4.7J	4.3J	7J
MAGNESIUM	130	3700	5300	4700
MANGANESE	3U	65	81	160
NICKEL	6.2	11	12	17
POTASSIUM	130U	3400	2800	3300
SODIUM	40U	670	490	480
VANADIUM	11	14	13	34
ZINC	3U	-	-	95

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
U Material was analyzed for but not detected. The number given is the MQL.
*Note: Sample BL-SB-03 was not collected, because the sample location was inaccessible.

Samples BL-SB-06, 07, 08, and 09 were not collected due to a decision not to collect any samples on the actual landfill surface.

Ref. 13

TABLE 3

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (ug/kg)	Background BL-SS-01	Northwest Corner of Landfill BL-SS-02*	Southeast Corner of Landfill BL-SS-04	Northeast Corner of Landfill BL-SS-05
PURGEABLE COMPOUNDS				
METHYL ETHYL KETONE	15	-	-	-
TETRACHLOROETHENE	17J	-	68J	41J
EXTRACTABLE COMPOUNDS				
UNIDENFIED COMPOUND/NO (1)	4000J/4	5000J/7	3000J/4	20,000J/12

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
*Note: Sample BL-SS-03 was not collected, because the sample location was inaccessible.
(1) Tentatively identified and unidentified compounds. This compound is not on Target Compound List and is reported only as detected in individual samples; MQL not determined.

Ref. 17

TABLE 5

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SUBSURFACE SOIL SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (ug/kg)	Background BL-SB-01	Northwest Corner of Landfill BL-SB-02*	Southeast Corner of Landfill BL-SB-04	Northeast Corner of Landfill BL-SB-05
PURGEABLE COMPOUNDS				
CARBON DISULFIDE	6U	-	21	-
METHYL ETHYL KETONE	12U	-	-	-
TETRACHLOROETHENE	6U	10	8	-
TOLUENE	6U	7	4J	-
CHLOROBENZENE	6U	-	-	21
EXTRACTABLE COMPOUNDS				
DI-N-BUTYLPHTHALATE	790U	-	310J	-
UNIDENFIED COMPOUND/NO.(1)	400J/1		7000J/1	

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
U Material was analyzed for but not detected. The number given is the MQL.
(1) Tentatively identified and unidentified compounds. This compound is not on Target Compound List and is reported only as detected in individual samples; MQL not determined.
*Note: Sample BL-SB-03 was not collected, because the sample location was inaccessible.

Samples BL-SB-06, 07, 08, and 09 were not collected due to a decision not to collect any samples on the actual landfill surface.

~~Reference~~

Ref. 15

South Carolina Department of Health and Environmental Control

Please file

2600 Bull Street
Columbia, S.C. 29201

Commissioner
Michael D. Jarrett

Board
Moses H. Clarkson, Jr., Chairman
Oren L. Brady, Jr., Vice-Chairman
Euta M. Colvin, M.D., Secretary
Harry M. Hallman, Jr.
Henry S. Jordan, M.D.
Toney Graham, Jr. M.D.

MEMORANDUM

TO: John Cresswell, Manager
Site Screening Section
Division of Site Engineering & Screening

FROM: Marianna DePratter, EQM
Superfund and Solid Waste Section
Division of Hydrogeology

DATE: January 12, 1988

RE: Berkeley County Landfill(BCL)
CERCLA Site SCD 981 028 095

Abstract

The shallow water table aquifer, a thin veneer of sand and sandy clay, is the aquifer of concern at BCL. It is separated from underlying aquifers by a hydraulic barrier, the Cooper Formation. The aquifer of concern is infrequently used in the area.

BCL has been hydrogeologically evaluated using the Hazard Ranking System to determine, in part, its eligibility for placement on the National Priorities List. This hydrogeologic review of the area is based primarily on South Carolina Water Resources Commission (SCWRC) and United States Geologic Survey (USGS) well tabulations and geophysical logs. Domestic well records submitted to the Groundwater Protection Division were consulted and a review of Department of Health & Environmental Control files conducted. In addition, the site was visited on December 4, 1987. Surficial sediments adjacent to the site were augered for soil description (see figure 1) and a brief field survey was conducted to confirm domestic well depths in the area.

BCL lies within the South Carolina Coastal Plain physiographic region approximately 3.6 miles south-southwest of the town of Moncks Corner. The landfill is situated on a ridge trending northwest and southeast (see figure 2). The land adjacent to BCL is forested in pine and, except for a few rural homes, is undeveloped at present.

Locally, the site is bounded to the north by Molly Branch. Two unnamed tributaries to Molly Branch drain the area south and southeast. Surface drainage from the landfill area flows toward and eventually discharges to the Cooper River. Directly underlying the site is a thin veneer of surficial sand, thought to be Pleistocene terrace deposits (Cooke, 1936). These sands comprise a shallow water table aquifer susceptible to contamination by landfill effluent. This unconfined aquifer is the aquifer of concern.

The oldest sedimentary units underlying the site were deposited in continental to inner shelf marine environments and are Late Cretaceous in age. The Cretaceous section overlies Triassic basement and is approximately two thousand feet thick. Depositional units are, in ascending order, the Middendorf, Black Creek and Peedee Formations.

The Middendorf has been completely penetrated at Kiawah Island (SCWRC #20GG-v1) and at Clubhouse Crossroads in lower Dorchester County (SCWRC #23CC-i1). It has an approximate thickness of 600 feet and dips southwest at thirty-six feet per mile. Based on the Clubhouse Crossroads corehole, the lower two hundred feet of the Middendorf consists of an interbedded red, brown or olive gray clay, silty clay and greenish gray, muddy, locally feldspathic sand (Gohn et. al., 1977). The upper part of the formation consists of a cyclical sequence of red to reddish-brown and gray-green mottled clay, clayey silt and silty clay. Based on limited static water levels measured in wells penetrating the Middendorf, its regional potentiometric surface slopes to the east or possibly to the east-northeast (Park, 1985).

Berkeley County Water & Sewer (BCWSA) owns one well, SCWRC #19Y-w3, drilled in the upper Middendorf. This well, located approximately two miles north-northeast of the site, was drilled as an exploratory well and is unused. The well has not been fully developed, but water quality analyses indicate water from the Middendorf to be a soft, alkaline, sodium bicarbonate type. Total dissolved solids in the well were 870 mg/l, chloride was 68 mg/l and fluoride was 3.8 mg/l (Meadows, 1987). Aquifers in the overlying formations are less expensive to develop and contain water of equal or better chemical quality.

The Black Creek Formation is composed of abundantly fossiliferous silty clay, muddy sand and clean sand alternating with thinly interbedded sand and clay and some shelly limestone. Based on SCWRC #19Y-w3, the Black Creek is approximately 650 feet thick in the vicinity of the site. Its surface dips toward the southeast at about thirty feet per mile (Park, 1985). Black Creek sands are capable of yielding large amounts of water. Wells at Mt. Pleasant in Charleston County, twenty-five miles south-southeast of the site, have been tested at over a thousand gallons per minute and have specific capacities of seven gallons per minute per foot of drawdown. Yields seem to be lower in the Jamestown area, twenty miles northeast of the site, where five hundred gallons per minute would be considered maximum (Meadows, 1987).

Water from the Black Creek Aquifer is a soft, sodium bicarbonate type and becomes more mineralized toward the coast. For example, total dissolved solids range from a low of 350 mg/l in SCWRC well #15X-15 at Jamestown to a high of 1000 mg/l in well #17DD-m5 at Mt. Pleasant. Chloride shows a similar trend with 4.0 mg/l occurring in Jamestown and 135 mg/l in Mt. Pleasant. Fluoride concentrations are about 2.0 mg/l in Jamestown and 4.4 mg/l in Mt. Pleasant (Meadows, 1987). In the study area, total dissolved solids, chloride and fluoride would probably lie between Jamestown and Mt. Pleasant values. Although the unit is utilized in Berkeley County for water supply, it is undeveloped in the study area. Regionally, static water levels measured in Black Creek wells indicate ground-water flow to the east (Park, 1985).

The Peedee Formation, approximately 330 feet thick, is predominately composed of olive to medium gray, fossiliferous, muddy sand containing small amounts of glauconite, phosphate and mica. The upper Peedee is composed of olive to medium gray silty and sandy calcareous clay. The surface of the unit dips south westwardly at approximately twenty-five feet per mile (Park, 1985). Locally, only one well (SCWRC #19Y-s1) has been completed in the Peedee. This well is located four miles north-northwest of the landfill and is owned by the town of Moncks Corner. The well flowed ten gallons per minute and produced 200 gallons per minute with 240 feet of drawdown for a specific capacity of less than one gallon per minute per foot of drawdown (Meadows, 1987). This is typical of wells completed in the Peedee Formation near the coast, hence it is seldom used for water supply (Park, 1985). Well SCWRC #19Y-s1 yielded a soft sodium bicarbonate water with total dissolved solids measuring 920 mg/l, chloride measuring 59 mg/l and fluoride measuring 1.5 mg/l.

Above the Peedee Formation lie, in ascending order, the Black Mingo Formation, the Santee Limestone and the Cooper Formation. These sediments are Tertiary in age and were deposited in marginal marine to outer shelf environments. Sand, silt and clay dominate the lithology in the lower part of the section, and pure to very impure limestone dominate the upper part of the section.

The Black Mingo Formation, Paleocene to Lower Eocene in age, is a heterogeneous, fossiliferous sequence of white to pale gray limestone, green to gray argillaceous sand, carbonate and silica cemented sandstone and dark gray to black clay. Based on SCWRC well #19Y-w3, the unit is approximately 305 feet thick in the BCL area. The Black Mingo crops out north of Moncks Corner and its surface dips south-southwest beneath the Santee Limestone at approximately seventeen feet per mile (Park, 1985).

The Santee Limestone, Eocene in age, is a creamy white to gray fossiliferous and slightly glauconitic limestone. It has a total thickness of approximately sixty-five feet in the stuffy area. The unit dips southward at approximately eight feet per mile (Park, 1985). Two members have been recognized within the Santee Limestone, the lower Moultrie Member and the upper Cross Member.

The overlying Cross Member has a higher clay content, consists of a less soluble calcite and is, therefore, much less permeable (Park, 1985).

The Santee and Black Mingo formations supply most ground water in the area. Within a four mile radius of the landfill, only thirty-seven domestic wells of known depth have been identified. Many more domestic wells exist within this area, but well depths could not be documented. Of this limited sample, thirty-four (ninty-two percent) penetrate the Santee or the combined Santee/Black Mingo aquifer. These wells yield an average of seventy-five gallons per minute although yields range between thirty and a hundred gallons per minute. Well yield and specific capacity is dependent upon well construction, permeability enhancement within the Santee Limestone and the amount of Black Mingo penetration. BCWSA maintains three public supply wells approximately two miles north-northeast of the landfill. These wells serve approximately six hundred people and yield about 275 gallons per minute each (Howard Henry, BCWRC, pers. comm., Dec. 9, 1985). Wells are usually constructed as open holes with casings typically seated in the overlying Cooper Formation.

Ground water withdrawal in the Santee comes primarily from the lower Moultrie Member; withdrawal from the Black Mingo comes primarily from sand and limestone beds in the upper part of the unit. Examination of USGS geophysical logs from our four public supply wells (19Z-j1, 19Y-w1, 19Y-b1, 19Y-w3)and two irrigation wells(19Z-b3, 19Z-b5) located within the area indicate no hydraulic barrier between these two units. Water from the Black Mingo Formation is of low quality because of high mineral content (Park, 1985). The quality of water from wells open to the Santee and Black Mingo aquifers degrades with the degree of Black Mingo penetration.

The Santee and Black Mingo aquifers are recharged to the northwest at outcrop areas in Orangeburg and Clarendon counties. They are also recharged north-northeast in Berkeley and Charleston counties where they crop out along a belt ten to fifteen miles wide paralleling the Santee River. Regional static water levels measured in wells penetrating the Santee Limestone and the upper Black Mingo aquifers are less than ten feet above mean sea level in the BCL area. Lake Moultrie, located only four miles north of BCL, probably affects regional ground water flow toward the southeast. Because the water surface at the lake is maintained at seventy-five feet above mean sea level, it is possible that Lake Moultrie also serves as a recharge source.

Overlying the Santee Limestone is a sandy, phosphatic, dark greenish-gray marl called the Cooper Formation. A calcareous clay, the Cooper Formation has low intrinsic permeability. The Cooper Formation is Eocene to Oligocene in age. It is uniform in color, texture and generally has no obvious signs of bedding. The homogenous nature of the Cooper Formation inhibits the development of secondary porosity. Clays of this type typically have a permeability of only 10^{-5} to 10^{-7} centimeters per second (Freeze and Cherry, 1979).

Due to its impermeable nature, the Cooper acts as a confining unit to the underlying aquifers. It is approximately a hundred feet thick in the vicinity of BCL and crops out to the north below Lake Moultrie. It dips at approximately eight feet per mile towards the south-southeast (Park, 1985).

The Cooper Formation is overlain with a thin veneer of sand and sandy clay. Thickness varies from about fifty feet on ridges to zero in valleys where erosion has exposed the underlying Cooper Formation (Taber, 1939). Surficial sands are only about thirty feet thick on site.

Reported water levels within this surficial sand aquifer are also variable with values from three to fifteen feet below grade (Meadows, 1987). This variation is due to seasonal fluctuations in the amount of rainfall and to the effect of local topography. Permeability is 10^{-3} to 10^{-5} centimeters per second in unconsolidated sands (Freeze and Cherry, 1979). Regionally, the direction of ground water flow in the shallow water table aquifer is south-southeasterly, however local topography has strong influence.

Of the thirty-seven domestic wells of known depth in the area only three (eight percent) obtain water from the shallow aquifer of concern. These wells yield an average of only four gallons per minute. The shallow water table aquifer is not commonly used because yields are both low and unreliable (J. D. Sanders, Well Driller, pers. comm., Dec. 10, 1987). The closest known domestic well utilizing the aquifer of concern is located one mile southwest of BCL.

MD:hlg

References Cited

Cooke, C. W., 1936, Geology of the coastal Plain of South Carolina: U.S. Geological Survey Bulletin No. 867, 195 p.

Freeze, A. R., and Cherry, J. A., 1979, Groundwater: Englewood Cliffs, New Jersey; Prentice-Hall.

Gohn, G. S., Higgins, B. R., Smith, C. C., and Owens, J. P., 1977, Lithostratigraphy of the deep corehole (Clubhouse Crossroads Corehole 1) near Charleston: in Rankin, D. W., editor, Studies related to the Charleston, South Carolina, earthquake of 1886 - a preliminary report: U. S. Geological Survey Professional Paper 1028, p. 59-70.

Meadows, J. K., 1987, Ground water conditions in the Santee Limestone and Black Mingo Formation near Moncks Corner, Berkeley County South Carolina: South Carolina Water Resources Commission Report No. 156, 38 p.

Park, A. D., 1985, The ground-water resources of Charleston, Berkeley, and Dorchester Counties, South Carolina Water Resources Commission Report No. 139, 145 p.

Taber, Stephen, 1939, Geology of the Santee-Cooper Project: South Carolina Public Service Authority, 21 p.

SOIL BORING LOG

Location: Berkeley County Landfill **Date:** 12-4-87

CERCLA Site SCD 981 028 095

County: Berkeley **Latitude:** 33°08.37 **Longitude:** 80°03.00

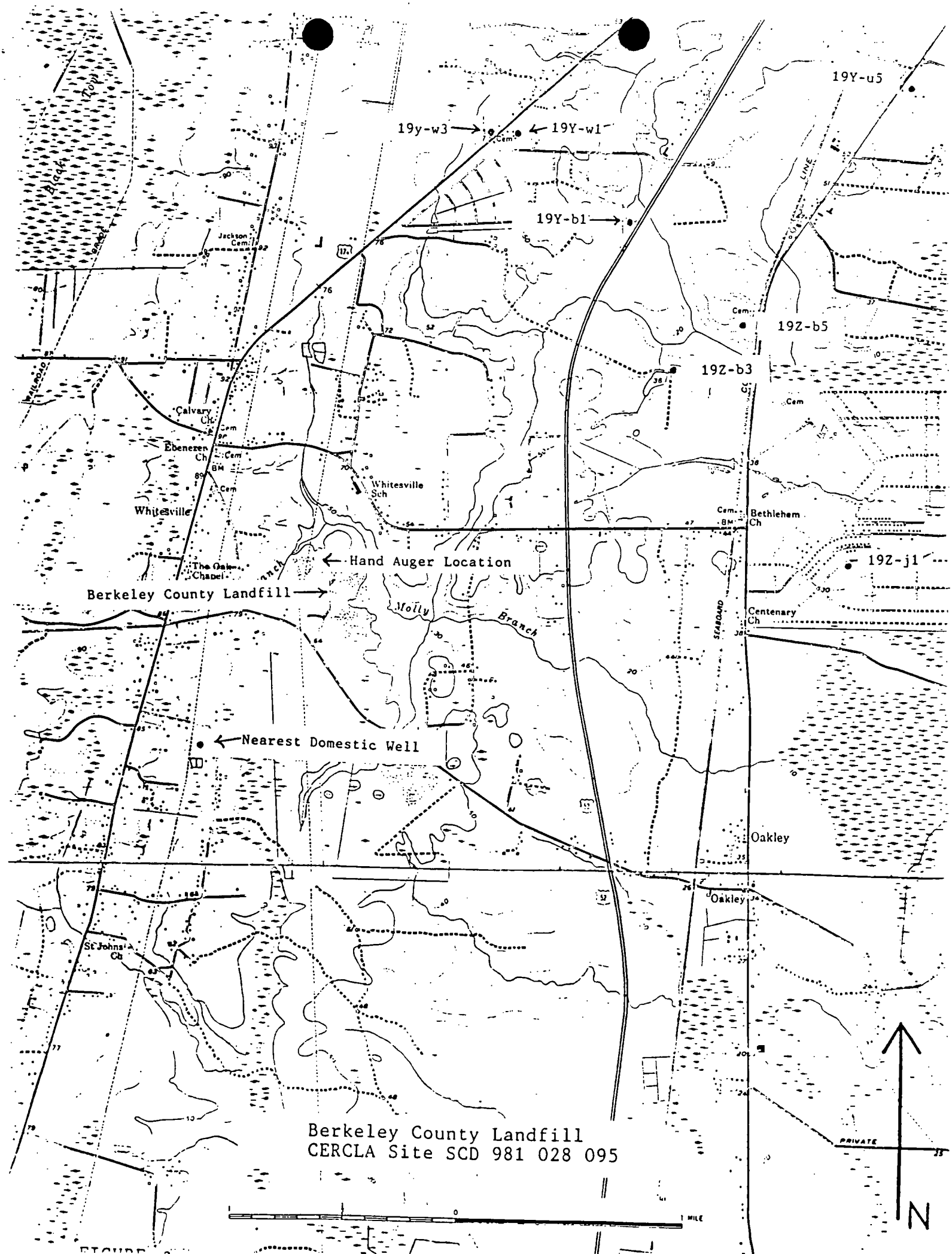
Elevation: 60 ft msl **Total depth:** _____ **Water table:** _____

Logged by: M. DePratter and J. L. Canova

Seasonal high water table (estimate): 4 feet below grade

Depth cm	Depth ft	Description
		Tan medium to coarse sand
60	2	
		Orange clayey fine to medium sand, poorly cemented with iron oxide.
120	4	
		White clay
180	6	
		Orange clayey medium grained sand
240	8	
300	10	
		Orange sandy clay grading into clay
	bottom	

Figure 1



Berkeley County Landfill
CERCLA Site SCD 981 028 095

FIGURE

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
STATE: S.C. | SITE NUMBER:

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY	SURFACE	WELL	02 STATUS: ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. ☐	B. ☐	A. ☐	B. ☐	C. ☐	A. ____ (mi)
NON-COMMUNITY	C. ☐	D. ☑	D. ☑	E. ☐	F. ☐	B. 1.0 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY
☑ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION ☐ D. NOT USED, UNUSEABLE

Although everyone in the area is served by ground water, most domestic wells in the area draw water from below the aquifer of concern. This water is protected from contamination by the landfill effluent by the Cooper Formation.

02 POPULATION SERVED BY GROUND WATER ____ 03 DISTANCE TO NEAREST DRINKING WATER WELL 1.0 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
7 (ft)	SE	14 (ft)	5,800 (gpd)	☐ YES ☐ NO

09 DESCRIPTION OF WELLS: Three shallow wells (< 65 feet deep) located within a four mile radius of the landfill.

10 RECHARGE AREA	COMMENTS	11 DISCHARGE AREA	COMMENTS
☑ YES ☐ NO	Water table aquifer is recharged by rainfall	☑ YES ☐ NO	Into streams

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE
☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ☑ C. $10^{-2} - 10^{-4}$ cm/sec ☐ D. GREATER THAN 10^{-2} cm/sec

02 PERMEABILITY OF BEDROCK
☑ A. IMPERMEABLE ☐ B. RELATIVELY IMPERMEABLE ☐ C. RELATIVELY PERMEABLE ☐ D. VERY PERMEABLE

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
900 (ft)	0 to 50 (ft) X	____

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern: The thin veneer of sand and sandy clay overlying the Cooper Marl comprise the aquifer of concern. These sands were probably deposited as Pleistocene terrace deposits.

Depth(s) from the ground surface to the highest seasonal level of the saturated zone (water table(s)) of the aquifer(s) of concern:

Depth to water has been reported at 3 feet below grade.

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Sand, clayey sand & sandy clay

Permeability associated with soil type:

10^{-3} cm/sec

Ground Water Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

Small domestic wells, although the deeper Santee/Black Mingo aquifer system is more commonly used. The deeper aquifer is protected.

Population Served by Ground Water Wells Within a 3-Mile Radius

Identify water-supply wells(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

Ambac nurseries irrigate from shallow ponds that may be impacted by the landfill.

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre):

Total population served by ground water within a 3-mile radius:

Ref. 16

South Carolina
DHEC
Department of Health and Environmental Control

MEMORANDUM

TO: Harvey Daniels
Site Screening Section
Division of Site Engineering and Screening
Bureau of Solid and Hazardous Waste Management

FROM: Marion Feagin, Hydrologist M.F.
Superfund and Solid Waste Section
Division of Hydrology
Bureau of Solid and Hazardous Waste Management

DATE: June 29, 1992

RE: Berkeley County Landfill
SCD 981 028 095
Berkeley County
Site Inspection Prioritization

A review of the existing hydrogeologic data for the referenced site has been conducted to assist in completing a Site Inspection Prioritization (SIP). The purpose of the review is to re-evaluate and update information regarding the migration route for potential contaminants.

According to Park (1985), the Cooper Formation underlies the site at a depth of approximately 25 feet and extends downward to a depth of approximately 175 feet. The Cooper Formation is a confining unit that likely restricts contaminants potentially present within the shallow water-table aquifer from migrating into deeper drinking-water aquifers. Park also indicates that the Cooper Formation is laterally extensive within the four-mile site radius.

The site is not located in an area of karst topography.

Reference Cited:

Park, A. Drennan, 1985, The Groundwater Resources of Charleston, Berkeley, and Dorchester Counties, South Carolina, SC Water Resources Commission Report #139.

Date: 06/19/92

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Juliet Simms
CONTACT: PHONE:
ADDRESS:
REMARKS: bLSD SWL -7.4' bMSL;
COUNTY:
LONGITUDE: 80-01-01
LATITUDE: 33-10-57
DISTANCE: 3.37 MILES NNE
AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 61.00
LOCATION: Moncks Corner, SC

COMPANY: H.G. Jones
CONTACT: PHONE:
ADDRESS: Rt 2 Box 350
Moncks Corner, SC 29461
REMARKS: File in Columbia
COUNTY:
LONGITUDE: 79-59-51
LATITUDE: 33-08-54
DISTANCE: 3.05 MILES ENE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 10.00
LOCATION: Moncks Corner

COMPANY: Oakley Voc. School
CONTACT: PHONE:
ADDRESS: Old US-52
Oakley, SC
REMARKS:
COUNTY:
LONGITUDE: 80-01-07
LATITUDE: 33-06-43
DISTANCE: 2.75 MILES SSE
AQUIFER:
COMP. DEPTH: 252
DRILL DEPTH: 252
ELEV: 21.00
LOCATION: Oakley

COMPANY: W W Truck & Tractor
CONTACT: Johnny Ward PHONE: 803-761-8220
ADDRESS: PO Box 98
Moncks Corner, SC 29461
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-00-51
LATITUDE: 33-10-37
DISTANCE: 3.16 MILES NNE
AQUIFER:
COMP. DEPTH: 300
DRILL DEPTH: 300
ELEV: 50.00
LOCATION: Moncks Corner

COMPANY: Murry B. Ayers
CONTACT: PHONE:
ADDRESS: Rt 6, Box 549
Moncks Corner, SC 29461
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-03-14
LATITUDE: 33-10-39
DISTANCE: 2.46 MILES NNW
AQUIFER:
COMP. DEPTH: 245
DRILL DEPTH: 245
ELEV: 94.00
LOCATION: Moncks Corner

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
LATITUDES OR LONGITUDES ENDING IN 91 ARE ONLY ACCURATE TO WITHIN 1 MINUTE.

Fig. 18

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Berkeley Ctry Club
CONTACT: Bubba Hightower PHONE:
ADDRESS: PO Box 397
Moncks Corner, SC 29461
REMARKS: Irrigates golf coarse in summertime.
COUNTY:
LONGITUDE: 80-00-50
LATITUDE: 33-09-14
DISTANCE: 2.22 MILES ENE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 40.00
LOCATION: Berkeley Country Club

COMPANY: Lemar Mullinax
CONTACT: PHONE: 803-761-6509
ADDRESS: Rt 2, Box 257
Moncks Corner, SC 29461
REMARKS: Water level reading may be off.
COUNTY:
LONGITUDE: 80-03-23
LATITUDE: 33-09-09
DISTANCE: 0.82 MILES NNW
AQUIFER:
COMP. DEPTH: 250
DRILL DEPTH: 250
ELEV: 80.00
LOCATION: Moncks Corner

COMPANY: Carolina Nurseries
CONTACT: Jay Guy PHONE: 803-889-6868
ADDRESS: Rt 6 Box 208
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-01-14
LATITUDE: 33-09-03
DISTANCE: 1.79 MILES ENE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 43.00
LOCATION: Moncks Corner

COMPANY: RJ Muller & JB Hood
CONTACT: PHONE: 803-761-7771
ADDRESS: 2612 S Live Oak Dr-Hwy17A
Moncks Corner, SC 29461
REMARKS: Small business.
COUNTY:
LONGITUDE: 80-04-26
LATITUDE: 33-06-25
DISTANCE: 2.81 MILES SSW
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 79.00
LOCATION: Moncks Corner

COMPANY: R.C. Dennis
CONTACT: PHONE:
ADDRESS: Lewisfield Pltn
,
REMARKS:
COUNTY:
LONGITUDE: 79-59-38
LATITUDE: 33-09-36
DISTANCE: 3.46 MILES ENE
AQUIFER:
COMP. DEPTH: 165
DRILL DEPTH: 165
ELEV: 11.00
LOCATION: Lewisfield Plantation

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
LATITUDES OR LONGITUDES ENDING IN 91 ARE ONLY ACCURATE TO WITHIN 1 MINUTE.

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Mulberry Pltn
CONTACT: PHONE:
ADDRESS:
Oakley, SC
REMARKS: also used for LS.
COUNTY:
LONGITUDE: 79-59-19
LATITUDE: 33-08-28
DISTANCE: 3.54 MILES ESE
AQUIFER:
COMP. DEPTH: 227
DRILL DEPTH: 227
ELEV: 20.00
LOCATION: Mulberry Plantation

COMPANY: Dodge Engineering
CONTACT: PHONE:
ADDRESS:
Moncks Corner, SC
REMARKS: top of well is below LSD.
COUNTY:
LONGITUDE: 80-02-08
LATITUDE: 33-12-08
DISTANCE: 4.23 MILES NNE
AQUIFER:
COMP. DEPTH: 261
DRILL DEPTH: 261
ELEV: 77.00
LOCATION:

COMPANY: Janie Wright
CONTACT: PHONE:
ADDRESS: Rt 1 Box 572
Moncks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-02-52
LATITUDE: 33-12-12
DISTANCE: 4.23 MILES NNE
AQUIFER:
COMP. DEPTH: 6
DRILL DEPTH: 6
ELEV: 86.00
LOCATION: Moncks Corner

COMPANY: Peter Grimes
CONTACT: PHONE:
ADDRESS: Box 1133
Moncks Corner, SC 29461
REMARKS: no pump
COUNTY:
LONGITUDE: 80-02-55
LATITUDE: 33-12-07
DISTANCE: 4.13 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 91.00
LOCATION: Moncks Corner

COMPANY: J.P. Strickland
CONTACT: PHONE:
ADDRESS: Rt 1 Hwy 16
Moncks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-04-22
LATITUDE: 33-11-30
DISTANCE: 3.68 MILES NNW
AQUIFER:
COMP. DEPTH: 200
DRILL DEPTH: -1
ELEV: 80.00
LOCATION: Hwy 16

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S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Leonard Piemows
CONTACT: PHONE:
ADDRESS: SC 16,Rt 1
Moncks Corner, SC
REMARKS: no file
COUNTY:
LONGITUDE: 80-04-24
LATITUDE: 33-11-29
DISTANCE: 3.67 MILES NNW
AQUIFER:
COMP. DEPTH: 200
DRILL DEPTH: 200
ELEV: 79.00
LOCATION: Moncks Hwy 16

COMPANY: Todd
CONTACT: PHONE:
ADDRESS:
,
REMARKS:
COUNTY:
LONGITUDE: 80-04-06
LATITUDE: 33-11-41
DISTANCE: 3.79 MILES NNW
AQUIFER:
COMP. DEPTH: 172
DRILL DEPTH: 200
ELEV: 75.00
LOCATION:

COMPANY: Ware Bros Const
CONTACT: PHONE:
ADDRESS:
Moncks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-03-03
LATITUDE: 33-11-44
DISTANCE: 3.69 MILES NNW
AQUIFER:
COMP. DEPTH: 133
DRILL DEPTH: 380
ELEV: 90.00
LOCATION: SC Hwy 16 #6

COMPANY: Berkley schools
CONTACT: PHONE:
ADDRESS: State Dept Educ.
Moncks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-02-09
LATITUDE: 33-11-19
DISTANCE: 3.95 MILES NNE
AQUIFER:
COMP. DEPTH: 220
ELEV: 55.00
LOCATION: US. 17A & SC 6

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S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
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COMPANY: Town of Moncks Cornr
CONTACT:
ADDRESS: Airport
Moncks Corner, SC
REMARKS:
PHONE:
COUNTY:
LONGITUDE: 80-01-53
LATITUDE: 33-11-33
DISTANCE: 3.63 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: -1.00
LOCATION: Moncks Corner Airport

COMPANY: Town of Moncks Cornr
CONTACT: Carl Reuger
ADDRESS:
,
REMARKS:
PHONE: 803-761-8041
COUNTY:
LONGITUDE: 80-01-02
LATITUDE: 33-11-29
DISTANCE: 3.88 MILES NNE
AQUIFER:
COMP. DEPTH: 261
DRILL DEPTH: 295
ELEV: 58.00
LOCATION: Hwy 17A & SC 6

COMPANY: Ralph Ford
CONTACT:
ADDRESS: Rt 6, Box 9
Moncks Corner, SC 29461
REMARKS:
PHONE:
COUNTY:
LONGITUDE: 80-01-24
LATITUDE: 33-11-03
DISTANCE: 3.28 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 47.00
LOCATION: US 17 & S-8-274

COMPANY: H W Rueger, Sr.
CONTACT:
ADDRESS:
,
REMARKS:
PHONE:
COUNTY:
LONGITUDE: 80-00-53
LATITUDE: 33-11-41
DISTANCE: 4.16 MILES NNE
AQUIFER:
COMP. DEPTH: 186
DRILL DEPTH: 186
ELEV: 55.00
LOCATION:

COMPANY: Joseph A. Brown
CONTACT:
ADDRESS: PO Box 141
Moncks Corner, SC 29461
REMARKS: File in Columbia.
PHONE: 803-899-4811
COUNTY:
LONGITUDE: 80-00-45
LATITUDE: 33-10-59
DISTANCE: 3.55 MILES NNE
AQUIFER:
COMP. DEPTH: 166
DRILL DEPTH: -1
ELEV: 50.00
LOCATION: Moncks Corner

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S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Ricky Koster
CONTACT: PHONE:
ADDRESS: Gippy Pltn
,
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-00-11
LATITUDE: 33-10-33
DISTANCE: 3.57 MILES ENE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: 221
ELEV: 25.00
LOCATION: Gippy Plantation

COMPANY: C.W. Umphlett
CONTACT: PHONE:
ADDRESS: Rte 2 Box 286
Moncks Corner, SC 29461
REMARKS: File in Columbia. Also used fof LS.
COUNTY:
LONGITUDE: 80-00-17
LATITUDE: 33-10-18
DISTANCE: 3.31 MILES ENE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 27.00
LOCATION:

COMPANY: Mary K. Center
CONTACT: PHONE: 803-761-4083
ADDRESS: PO Box 425
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-00-33
LATITUDE: 33-10-31
DISTANCE: 3.28 MILES ENE
AQUIFER:
COMP. DEPTH: 238
DRILL DEPTH: -1
ELEV: 45.00
LOCATION: Moncks Corner

COMPANY: D J's Mobl Hm Sales
CONTACT: Don Jett PHONE: 803-565-3727
ADDRESS:
,
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-01-25
LATITUDE: 33-10-18
DISTANCE: 2.54 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 50.00
LOCATION:

COMPANY: Berk Chrch of Christ
CONTACT: Jack McNeil,pastor PHONE: 803-761-8546
ADDRESS:
,
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-01-28
LATITUDE: 33-10-18
DISTANCE: 2.51 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 50.00
LOCATION:

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S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Dorothy Frasier
CONTACT: PHONE:
ADDRESS:
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-01-27
LATITUDE: 33-10-24
DISTANCE: 2.61 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 53.00
LOCATION:

COMPANY: Julian Selvy
CONTACT: PHONE: 803-761-5198
ADDRESS: PO Box 934
Moncks Corner, SC 29461
REMARKS: Drilled Fall '84. File in Columbia.
COUNTY:
LONGITUDE: 80-01-29
LATITUDE: 33-10-22
DISTANCE: 2.56 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 51.00
LOCATION: Moncks Corner

COMPANY: G. Garnet
CONTACT: PHONE: 803-899-4869
ADDRESS: Rt 5 Box 845
Moncks Corner, SC 29461
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-01-37
LATITUDE: 33-10-30
DISTANCE: 2.62 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 40.00
LOCATION: Moncks Corner

COMPANY: Rod Reid
CONTACT: PHONE:
ADDRESS: Rt 5 Box 851
Moncks Corner, SC 29461
REMARKS: File in Columbia. Intake depth: 135-140'.
COUNTY:
LONGITUDE: 80-01-29
LATITUDE: 33-10-19
DISTANCE: 2.51 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: 260
ELEV: 52.00
LOCATION: Moncks Corner

COMPANY: Brk Water & Swr Auth
CONTACT: Howard Henry PHONE: 803-572-4400
ADDRESS:
Summerville, SC
REMARKS: Poor pumping test data.
COUNTY:
LONGITUDE: 80-01-40
LATITUDE: 33-10-02
DISTANCE: 2.14 MILES NNE
AQUIFER:
COMP. DEPTH: 251
DRILL DEPTH: 317
ELEV: 40.00
LOCATION: Conifer Hall SID

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S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Bill Harrelson
CONTACT: PHONE:
ADDRESS: Rt 6 Box 15
Moncks Corner, SC 29461
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-01-58
LATITUDE: 33-10-39
DISTANCE: 2.63 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 51.00
LOCATION: Moncks Corner

COMPANY: Juliet Simms
CONTACT: PHONE:
ADDRESS: Rt 5 Box 880
Moncks Corner, SC 29461
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-01-01
LATITUDE: 33-10-57
DISTANCE: 3.37 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: 300
ELEV: 61.00
LOCATION: Moncks Corner

COMPANY: Tom Bilton
CONTACT: PHONE: 803-761-8284
ADDRESS: Hwy 52, PO Box 788
Moncks Corner, SC 29461
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-01-32
LATITUDE: 33-10-21
DISTANCE: 2.52 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: 385
ELEV: 50.00
LOCATION: Bilton Ford

COMPANY: Brk Water & Swr Auth
CONTACT: PHONE: 803-871-2876
ADDRESS:
Moncks Corner, SC
REMARKS: Inside pumphouse at end of Resinwood Rd. (Road 997).
COUNTY:
LONGITUDE: 80-02-15
LATITUDE: 33-10-22
DISTANCE: 2.23 MILES NNE
AQUIFER:
COMP. DEPTH: 315
DRILL DEPTH: 315
ELEV: 50.00
LOCATION: Conifer Hall

COMPANY: A D Hare Waterworks
CONTACT: PHONE: 803-899-2984
ADDRESS: PO Box 4645
Pinopolis, SC 29469
REMARKS: At Huntington Place Subdivision.
COUNTY:
LONGITUDE: 80-03-14
LATITUDE: 33-10-48
DISTANCE: 2.63 MILES NNW
AQUIFER:
COMP. DEPTH: 312
DRILL DEPTH: 312
ELEV: 94.00
LOCATION: Pinopolis

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BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
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COMPANY: COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-03-16 COMP. DEPTH: -1
ADDRESS: LATITUDE: 33-10-02 DRILL DEPTH: -1
DISTANCE: 1.76 MILES NNW ELEV: 88.00
REMARKS: File in Columbia. LOCATION:

COMPANY: Berk CC Golf Course COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-00-51 COMP. DEPTH: -1
ADDRESS: PO Box 397 LATITUDE: 33-09-15 DRILL DEPTH: 172
Moncks Corner, SC 29461 DISTANCE: 2.22 MILES ENE ELEV: 40.00
REMARKS: Located at golf course (?). LOCATION: Berkeley CC

COMPANY: AMFAC(Carolina) Nurs COUNTY: AQUIFER:
CONTACT: Jay Guy PHONE: 803-899-6868 LONGITUDE: 80-01-40 COMP. DEPTH: 222
ADDRESS: Rt 6 Box 208 LATITUDE: 33-09-04 DRILL DEPTH: -1
Moncks Corner, SC 29461 DISTANCE: 1.41 MILES ENE ELEV: 41.00
REMARKS: Also used for irrigation. LOCATION: AMFAC Nurseries

COMPANY: AMFAC(Carolina) Nurs COUNTY: AQUIFER:
CONTACT: Jay Guy PHONE: 803-899-6868 LONGITUDE: 80-01-30 COMP. DEPTH: 635
ADDRESS: Rt 6 Box 208 LATITUDE: 33-09-27 DRILL DEPTH: -1
Moncks Corner, SC 29461 DISTANCE: 1.78 MILES ENE ELEV: 40.00
REMARKS: LOCATION: AMFAC Nurseries

COMPANY: Brk Water & Swr Auth COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-02-15 COMP. DEPTH: 1607
ADDRESS: LATITUDE: 33-10-22 DRILL DEPTH: 1704
Moncks Corner, SC DISTANCE: 2.23 MILES NNE ELEV: 65.00
REMARKS: LOCATION: Conifer Hall

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BUREAU OF SOLID & HAZARDOUS WASTE
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COMPANY: Brk Water & Swr Auth COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-02-15 COMP. DEPTH: -1
ADDRESS: LATITUDE: 33-10-22 DRILL DEPTH: 1720
Moncks Corner, SC DISTANCE: 2.23 MILES NNE ELEV: 65.00
REMARKS: Well not completed. Log TD: 1320'. LOCATION: Conifer Hall

COMPANY: Derrell Fennell COUNTY: AQUIFER:
CONTACT: PHONE: 803-761-3590 LONGITUDE: 80-04-44 COMP. DEPTH: 425
ADDRESS: Rt 4, Box 434 Wenwood LATITUDE: 33-06-12 DRILL DEPTH: 425
Moncks Corner, SC DISTANCE: 3.17 MILES SSW ELEV: 75.00
REMARKS: Owner notes black sediment collects in filters. LOCATION: Moncks Corner

COMPANY: James Little COUNTY: AQUIFER:
CONTACT: PHONE: 803-761-3038 LONGITUDE: 80-04-16 COMP. DEPTH: 282
ADDRESS: LATITUDE: 33-07-04 DRILL DEPTH: 282
, DISTANCE: 2.09 MILES SSW ELEV: 80.00
REMARKS: Consent given to let scwrc to use well for obs and pump test LOCATION: Whitesville area

COMPANY: B F Burns COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-04-16 COMP. DEPTH: 290
ADDRESS: LATITUDE: 33-07-04 DRILL DEPTH: 290
, DISTANCE: 2.09 MILES SSW ELEV: 77.00
REMARKS: Unable to measure through vent hole in TOC. LOCATION: Whitesville area

COMPANY: B F Burns COUNTY: AQUIFER:
CONTACT: Joseph Burns PHONE: 803-899-7470 LONGITUDE: 80-04-16 COMP. DEPTH: -1
ADDRESS: LATITUDE: 33-07-04 DRILL DEPTH: -1
, DISTANCE: 2.09 MILES SSW ELEV: 77.00
REMARKS: or P A Burns 553-0251 LOCATION: Whitesville area

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S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
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COMPANY: Pleasant Valley TrPk COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-03-59 COMP. DEPTH: -1
ADDRESS: LATITUDE: 33-07-31 DRILL DEPTH: -1
, DISTANCE: 1.52 MILES SSW ELEV: 82.00
REMARKS: LOCATION: Pleasant Valley Trail

COMPANY: Pete Burbage COUNTY: AQUIFER:
CONTACT: PHONE: 803-761-2239 LONGITUDE: 80-03-53 COMP. DEPTH: 280
ADDRESS: Rt 4 Box 337 LATITUDE: 33-07-30 DRILL DEPTH: 280
Moncks Corner, SC DISTANCE: 1.47 MILES SSW ELEV: 65.00
REMARKS: Private system services 10 homes. Ltd by DHEC due to high F. LOCATION:

COMPANY: H B James, Jr COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-01-09 COMP. DEPTH: -1
ADDRESS: LATITUDE: 33-07-45 DRILL DEPTH: -1
Oakley, SC 29466 DISTANCE: 1.98 MILES ESE ELEV: 18.00
REMARKS: LOCATION:

COMPANY: Brkly Cty Water&Sewr COUNTY: AQUIFER:
CONTACT: Howard Henry PHONE: 803-572-4400 LONGITUDE: 80-00-45 COMP. DEPTH: 368
ADDRESS: LATITUDE: 33-08-43 DRILL DEPTH: -1
Summerville, SC DISTANCE: 2.16 MILES ENE ELEV: 33.00
REMARKS: LOCATION: Moncks Corner

COMPANY: AMFAC-Carolina Nurs COUNTY: AQUIFER:
CONTACT: PHONE: 803-889-6868 LONGITUDE: 80-01-45 COMP. DEPTH: -1
ADDRESS: Rt 2 Box 454 LATITUDE: 33-09-47 DRILL DEPTH: -1
Moncks Corner, SC 29461 DISTANCE: 1.87 MILES NNE ELEV: 48.00
REMARKS: LOCATION: AMFAC Nurseries nr Mo

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S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
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THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
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COMPANY: Earl Wenningham
CONTACT: PHONE: 803-899-5980
ADDRESS: Rt 6 Box 198
Moncks Corner, SC 29461
REMARKS: 160 is rept depth.
COUNTY:
LONGITUDE: 80-01-14
LATITUDE: 33-08-51
DISTANCE: 1.72 MILES ENE
LOCATION:
AQUIFER:
COMP. DEPTH: 160
DRILL DEPTH: 160
ELEV: 43.00

COMPANY: Joseph W Owens
CONTACT: PHONE: 803-761-2056
ADDRESS: Rt 6 PO Box 280W2
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-02-40
LATITUDE: 33-08-04
DISTANCE: 0.60 MILES SSE
LOCATION: Moncks Corner
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 50.00

COMPANY: Unknown
CONTACT: PHONE:
ADDRESS:
,
REMARKS:
COUNTY:
LONGITUDE: 80-02-01
LATITUDE: 33-08-50
DISTANCE: 0.99 MILES ENE
LOCATION: US 52 & S-8-357
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 52.00

COMPANY: Bethel Tempest Chrch
CONTACT: Ernest Liferidge,J PHONE:
ADDRESS:
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-02-49
LATITUDE: 33-08-55
DISTANCE: 0.47 MILES NNE
LOCATION: Moncks Corner
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 60.00

COMPANY: Edward Beavers
CONTACT: PHONE:
ADDRESS: Rt 6 Box 280E
Moncks Corner, SC 29461
REMARKS: 280 is rept depth.
COUNTY:
LONGITUDE: 80-02-58
LATITUDE: 33-08-17
DISTANCE: 0.28 MILES SSE
LOCATION: Moncks Corner
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: 280
ELEV: 60.00

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
LATITUDES OR LONGITUDES ENDING IN 91 ARE ONLY ACCURATE TO WITHIN 1 MINUTE.

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Sharon Gethers
CONTACT: PHONE:
ADDRESS: Rt6 Box 215
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-02-08
LATITUDE: 33-08-39
DISTANCE: 0.82 MILES ENE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 51.00
LOCATION:

COMPANY: Dr. Woodrow Ayers Sr
CONTACT: PHONE: 803-899-3437
ADDRESS: PO Box 81
Moncks Corner, SC
REMARKS: Supplies 10 homes
COUNTY:
LONGITUDE: 80-03-35
LATITUDE: 33-09-20
DISTANCE: 1.10 MILES NNW
AQUIFER:
COMP. DEPTH: 436
DRILL DEPTH: -1
ELEV: 21.00
LOCATION: Palmetto Meat Pkg. Co

COMPANY: AMFAC Nurseries
CONTACT: Jay Guy (Pres.) PHONE: 803-889-6868
ADDRESS: Rt 6 Box 208
Moncks Corner, SC 29461
REMARKS: Well tab book claims SWL 92.4
COUNTY:
LONGITUDE: 80-01-14
LATITUDE: 33-09-03
DISTANCE: 1.79 MILES ENE
AQUIFER: Black Mingo
COMP. DEPTH: 320
DRILL DEPTH: -1
ELEV: 40.00
LOCATION: AMFAC Nurseries

COMPANY: AMFAC Nurseries
CONTACT: Jay Guy (Pres.) PHONE: 803-761-8181
ADDRESS: Rt 6 Box 208
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-01-10
LATITUDE: 33-09-38
DISTANCE: 2.16 MILES ENE
AQUIFER:
COMP. DEPTH: 315
DRILL DEPTH: 360
ELEV: 35.00
LOCATION: AFMAC Nurseries

COMPANY: Church of God
CONTACT: PHONE:
ADDRESS:
Whitesville, SC
REMARKS:
COUNTY:
LONGITUDE: 80-03-45
LATITUDE: 33-08-25
DISTANCE: 0.77 MILES WSW
AQUIFER:
COMP. DEPTH: 450
DRILL DEPTH: 450
ELEV: 85.00
LOCATION: US 17 & S-8-50

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
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S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Brkly Ctry Club Est. COUNTY: AQUIFER:
CONTACT: Howard Henry PHONE: 803-572-4400 LONGITUDE: 80-00-45 COMP. DEPTH: 203
ADDRESS: Brkly Water & Sewer Auth. LATITUDE: 33-08-43 DRILL DEPTH: -1
Summerville, SC DISTANCE: 2.16 MILES ENE ELEV: 33.00
REMARKS: Measured depth of 191' - solid tail pipe from 198-203 LOCATION: Berkeley Country Club

COMPANY: John M Dangerfield COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-03-38 COMP. DEPTH: 320
ADDRESS: Rt 6 Box 288 LATITUDE: 33-08-28 DRILL DEPTH: 320
Moncks Corner, SC 29461 DISTANCE: 0.65 MILES WSW ELEV: 84.00
REMARKS: 320 is rept. depth. LOCATION: Moncks Corner

COMPANY: Lillian Martin COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-03-48 COMP. DEPTH: 8
ADDRESS: Rt4 Box 265 LATITUDE: 33-08-37 DRILL DEPTH: 8
Moncks Corner, SC DISTANCE: 0.81 MILES WNW ELEV: 87.00
REMARKS: LOCATION:

COMPANY: Robert Marino COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-03-27 COMP. DEPTH: -1
ADDRESS: Rt 4 Box 27 LATITUDE: 33-09-29 DRILL DEPTH: -1
Moncks Corner, SC 29461 DISTANCE: 1.20 MILES NNW ELEV: 90.00
REMARKS: Supplies home & restaraunt. DHEC monitors water quality. LOCATION: US 17A & S-8-34

COMPANY: AMFAC Nurseries COUNTY: AQUIFER:
CONTACT: Jay Guy(President) PHONE: 803-889-6868 LONGITUDE: 80-01-30 COMP. DEPTH: 220
ADDRESS: Carolina Nurs. Rt6 Box208 LATITUDE: 33-09-27 DRILL DEPTH: 220
Moncks Corner, SC DISTANCE: 1.78 MILES ENE ELEV: 41.00
REMARKS: No pump. LOCATION: AMFAC Nurseries

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S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
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THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Leroy Ferguson
CONTACT: PHONE: 803-899-4860
ADDRESS: Rt 6 Box 231
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-02-19
LATITUDE: 33-09-20
DISTANCE: 1.12 MILES NNE
LOCATION:
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 52.00

COMPANY: VFW Post 9509
CONTACT: PHONE:
ADDRESS:
Moncks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-02-56
LATITUDE: 33-09-57
DISTANCE: 1.64 MILES NNE
LOCATION:
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 75.00

COMPANY: Nathaniel Kinloch
CONTACT: PHONE:
ADDRESS: Rt 6 Box 229-C
Moncks Corner, SC 29461
REMARKS: 217 is rept. depth.
COUNTY:
LONGITUDE: 80-02-22
LATITUDE: 33-09-12
DISTANCE: 0.97 MILES NNE
LOCATION:
AQUIFER:
COMP. DEPTH: 217
DRILL DEPTH: 217
ELEV: 51.00

COMPANY: Mulberry Plantation
CONTACT: Mrs Brawley PHONE:
ADDRESS:
Oakley, SC
REMARKS:
COUNTY:
LONGITUDE: 80-01-08
LATITUDE: 33-08-28
DISTANCE: 1.78 MILES ESE
LOCATION: Mulberry Plantation
AQUIFER:
COMP. DEPTH: 225
DRILL DEPTH: 225
ELEV: 38.00

COMPANY: Tri-county concrete
CONTACT: PHONE:
ADDRESS:
,
REMARKS: Industrial & Domestic use
COUNTY:
LONGITUDE: 80-01-50
LATITUDE: 33-05-24
DISTANCE: 3.76 MILES SSE
LOCATION: Mount Holly
AQUIFER:
COMP. DEPTH: 280
DRILL DEPTH: 280
ELEV: 30.00

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
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S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Equipment rental
CONTACT: PHONE:
ADDRESS: Hwy 17A
Moncks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-04-25
LATITUDE: 33-06-24
DISTANCE: 2.82 MILES SSW
AQUIFER:
COMP. DEPTH: 275
DRILL DEPTH: -1
ELEV: 78.00
LOCATION: Moncks Corner

COMPANY: SC. Forestry Comm
CONTACT: PHONE:
ADDRESS:
Kingstree, SC
REMARKS:
COUNTY:
LONGITUDE: 80-01-10
LATITUDE: 33-06-03
DISTANCE: 3.34 MILES SSE
AQUIFER:
COMP. DEPTH: 235
DRILL DEPTH: 235
ELEV: 25.00
LOCATION: Mount Holly

COMPANY: Unknown
CONTACT: PHONE:
ADDRESS: Trailer Park on 17-A
,
REMARKS: Water use-WS?
COUNTY:
LONGITUDE: 80-04-30
LATITUDE: 33-05-51
DISTANCE: 3.41 MILES SSW
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 68.00
LOCATION: Trailer Park on 17A

COMPANY: Tri County Concrete
CONTACT: PHONE:
ADDRESS: Whitesville Plant
,
REMARKS: Well reworked Aug '71. DO use also.
COUNTY:
LONGITUDE: 80-04-38
LATITUDE: 33-05-50
DISTANCE: 3.49 MILES SSW
AQUIFER:
COMP. DEPTH: 353
DRILL DEPTH: 353
ELEV: 77.00
LOCATION: Whitesville

COMPANY: Unknown
CONTACT: PHONE:
ADDRESS:
,
REMARKS: No p[ump as of 12-12-85.
COUNTY:
LONGITUDE: 80-03-36
LATITUDE: 33-05-19
DISTANCE: 3.74 MILES SSW
AQUIFER:
COMP. DEPTH: 262
DRILL DEPTH: 262
ELEV: 51.00
LOCATION: Near Moncks Corner

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S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
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COMPANY: Mike Kendall
CONTACT: PHONE:
ADDRESS: Rt 2 Box 519
Moncks Corner, SC 29461
REMARKS: 360 is reported depth.
COUNTY:
LONGITUDE: 80-03-28
LATITUDE: 33-05-10
DISTANCE: 3.89 MILES SSW
LOCATION:
AQUIFER:
COMP. DEPTH: 360
DRILL DEPTH: 360
ELEV: 46.00

COMPANY: Mike Kendall
CONTACT: PHONE:
ADDRESS: Rt 2 Box 519
Moncks Corner, SC 29461
REMARKS: Next to 19Z--x04
COUNTY:
LONGITUDE: 80-03-28
LATITUDE: 33-05-10
DISTANCE: 3.89 MILES SSW
LOCATION: near Moncks Corner
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 46.00

COMPANY: David Welch
CONTACT: PHONE:
ADDRESS: Rt 2 Box 514
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-03-29
LATITUDE: 33-05-10
DISTANCE: 3.89 MILES SSW
LOCATION: near Moncks Corner
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 47.00

COMPANY: Home Telephone Co
CONTACT: H C Steer & Co PHONE: 803-899-2101
ADDRESS: Pimplico off 17A
,
REMARKS: 100gpm with air compressor.
COUNTY:
LONGITUDE: 80-03-37
LATITUDE: 33-05-10
DISTANCE: 3.91 MILES SSW
LOCATION:
AQUIFER:
COMP. DEPTH: 205
DRILL DEPTH: 205
ELEV: 55.00

COMPANY: American-Std Warehs
CONTACT: Mr. Murry PHONE: 803-797-9368
ADDRESS: Rt 2, Box 528
Monks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-01-91
LATITUDE: 33-05-91
DISTANCE: 0.00 MILES UNK
LOCATION:
AQUIFER:
COMP. DEPTH: 265
DRILL DEPTH: 287
ELEV: 30.00

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BUREAU OF SOLID & HAZARDOUS WASTE
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COMPANY: Tri-County Concrete COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-01-44 COMP. DEPTH: 248
ADDRESS: LATITUDE: 33-05-21 DRILL DEPTH: 296
, DISTANCE: 3.84 MILES SSE ELEV: 30.00
REMARKS: Hole filled with sand 248-296. Also used as DO. LOCATION: Mount Holly

COMPANY: WG Plymale COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-06-23 COMP. DEPTH: -1
ADDRESS: LATITUDE: 33-09-17 DRILL DEPTH: 240
Goose Creek, SC DISTANCE: 3.42 MILES WNW ELEV: 82.00
REMARKS: logged TD:237' LOCATION: Goose Creek

COMPANY: William A Murray COUNTY: AQUIFER:
CONTACT: PHONE: 803-899-3058 LONGITUDE: 80-05-21 COMP. DEPTH: -1
ADDRESS: Rt 1, Box 658 LATITUDE: 33-11-02 DRILL DEPTH: 181
Moncks Corner, SC 29481 DISTANCE: 3.69 MILES NNW ELEV: 75.00
REMARKS: borders 03050201. Suspended particles in water LOCATION: Moncks Corner

COMPANY: Carolina Nurseries COUNTY: Berkeley AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-01-30 COMP. DEPTH: 0
ADDRESS: 739 Gaillard Road LATITUDE: 33-09-27 DRILL DEPTH: 0
Moncks Corner, SC 29461 DISTANCE: 1.78 MILES ENE ELEV: 0.00
REMARKS: LOCATION:

COMPANY: Carolina Nurseries COUNTY: Berkeley AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-01-14 COMP. DEPTH: 0
ADDRESS: 739 Gaillard Road LATITUDE: 33-09-03 DRILL DEPTH: 0
Moncks Corner, SC 29461 DISTANCE: 1.79 MILES ENE ELEV: 0.00
REMARKS: LOCATION:

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
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THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Carolina Nurseries
CONTACT: PHONE:
ADDRESS: 739 Gaillard Road
Moncks Corner, SC 29461
REMARKS:
COUNTY: Berkeley
LONGITUDE: 80-01-10
LATITUDE: 33-09-38
DISTANCE: 2.16 MILES ENE
LOCATION:
AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 0.00

COMPANY: Carolina Nurseries
CONTACT: PHONE:
ADDRESS: 739 Gaillard Road
Moncks Corner, SC 29461
REMARKS:
COUNTY: Berkeley
LONGITUDE: 80-01-17
LATITUDE: 33-09-22
DISTANCE: 1.90 MILES ENE
LOCATION:
AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 0.00

COMPANY: Moncks Corner Water Works
CONTACT: PHONE:
ADDRESS: Post Office Box 266
Moncks Corner, SC 29461
REMARKS:
COUNTY: Berkeley
LONGITUDE: 80-01-05
LATITUDE: 33-11-32
DISTANCE: 3.91 MILES NNE
LOCATION:
AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 0.00

COMPANY: Moncks Corner Water Works
CONTACT: PHONE:
ADDRESS: Post Office Box 266
Moncks Corner, SC 29461
REMARKS:
COUNTY: Berkeley
LONGITUDE: 80-01-53
LATITUDE: 33-11-33
DISTANCE: 3.63 MILES NNE
LOCATION:
AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 0.00

COMPANY: Moncks Corner Water Works
CONTACT: PHONE:
ADDRESS: Post Office Box 266
Moncks Corner, SC 29461
REMARKS:
COUNTY: Berkeley
LONGITUDE: 80-01-02
LATITUDE: 33-11-29
DISTANCE: 3.88 MILES NNE
LOCATION:
AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 0.00

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THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Berkeley County Water & S
CONTACT: PHONE:
ADDRESS: Post Office Box 1090
Goose Creek, SC 29445
REMARKS:

COUNTY: Berkeley
LONGITUDE: 80-02-15
LATITUDE: 33-10-22
DISTANCE: 2.23 MILES NNE
LOCATION:

AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 0.00

COMPANY: Berkeley County Water & S
CONTACT: PHONE:
ADDRESS: Post Office Box 1090
Goose Creek, SC 29445
REMARKS:

COUNTY: Berkeley
LONGITUDE: 80-01-54
LATITUDE: 33-09-44
DISTANCE: 1.73 MILES NNE
LOCATION:

AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 0.00

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Ref. 19

South Carolina
DHEC
Department of Health and Environmental Control
2600 Bull Street, Columbia, SC 29201

Commissioner: Michael D. Jarrett

Board: William E. Applegate, III, Chairman
John H. Burriss, Vice Chairman
Richard E. Jabbour, DDS, Secretary
Toney Graham, Jr., MD
Sandra J. Molander
John B. Pate, MD
Robert J. Stripling, Jr.

Promoting Health, Protecting the Environment

MEMORANDUM

TO: Berkeley County Landfill File
SCD 981 028 095

FROM: Harvey S. Daniel
Site Screening Section

SUBJECT: The Cooper Formation, and Surficial Aquifer Use in the Vicinity of the Berkely County Landfill

DATE: June 24, 1992

According to South Carolina Water Resources Commission Report Number 139 (The Ground-Water Resources of Charleston, Berkeley, and Dorchester Counties South Carolina, 1985), the Cooper Formation underlie the surficial aquifer, acts as a confining layer, and is approximately 125 feet thick in the area of the Berkeley County Landfill. Marion Feagin, Division of Hydrogeology, reports in a June 29, 1992, memorandum to Harvey Daniel, Site Screening Section, that the Cooper Formation is continuous throughout the four-mile Berkeley County Landfill site radius.

Marianna DePratter, Division of Hydrogeology, in her January 12, 1988 memorandum to John Cresswell, Site Screening Section, reported that of the thirty-seven domestic wells of known depth in the area of the Berkeley County Landfill, only three (eight percent) obtain water from the surficial aquifer. The Bureau of Solid & Hazardous Waste's June 19, 1992 printout of groundwater supplies within four miles of the Berkeley County Landfill shows that of the fifty-seven wells with given depths, only two (four percent) are completed in the surficial aquifer. Conservatively, it is assumed that eight percent of the wells within four miles of the Berkeley County Landfill are completed in the surficial aquifer.

recycled paper

1990 CENSUS

Ref. 21

HOUSING UNITS BY OCCUPANCY STATUS, TOTAL POPULATION
AND PERSONS PER HOUSEHOLD

NAME	HOUSING UNITS	VACANT HU	OCCUPIED HU	TOTAL POP	GROUP QUARTERS	NON GQ POP	PERSONS PER HOUSEHOLD
SOUTH CAROLINA	1,424,155	166,111	1,258,044	3,486,703	116,543	3,370,160	2.68
ABBEVILLE COUNTY	9,846	1,066	8,780	23,862	646	23,216	2.64
AIKEN COUNTY	49,266	4,383	44,883	120,940	1,690	119,250	2.66
ALLENDALE COUNTY	4,242	451	3,791	11,722	1,076	10,646	2.81
ANDERSON COUNTY	60,745	5,264	55,481	145,196	1,638	143,558	2.59
BAMBERG COUNTY	6,408	821	5,587	16,902	1,011	15,891	2.84
BARNWELL COUNTY	7,854	754	7,100	20,293	297	19,996	2.82
BEAUFORT COUNTY	45,981	15,269	30,712	86,425	6,791	79,634	2.59
BERKELEY COUNTY	45,697	3,311	42,386	128,776	1,120	127,656	3.01
CALHOUN COUNTY	5,225	738	4,487	12,753	108	12,645	2.82
CHARLESTON COUNTY	123,550	16,481	107,069	295,039	16,119	278,920	2.61
CHEROKEE COUNTY	17,610	1,154	16,456	44,506	497	44,009	2.67
CHESTER COUNTY	12,293	845	11,448	32,170	118	32,052	2.80
CHESTERFIELD COUNTY	15,101	1,054	14,047	38,577	380	38,197	2.72
CLARENDON COUNTY	12,101	2,557	9,544	28,450	238	28,212	2.96
COLLETON COUNTY	14,926	2,886	12,040	34,377	282	34,095	2.83
DARLINGTON COUNTY	23,601	1,602	21,999	61,851	1,054	60,797	2.76
DILLON COUNTY	10,590	703	9,887	29,114	295	28,819	2.91
DORCHESTER COUNTY	30,632	2,419	28,213	83,060	2,092	80,968	2.87
EDGEFIELD COUNTY	7,290	866	6,424	18,375	268	18,107	2.82
FAIRFIELD COUNTY	8,730	1,263	7,467	22,295	435	21,860	2.93
FLORENCE COUNTY	43,209	2,992	40,217	114,344	2,699	111,645	2.78
GEORGETOWN COUNTY	21,134	4,859	16,275	46,302	205	46,097	2.83
GREENVILLE COUNTY	131,645	8,767	122,878	320,167	8,216	311,951	2.54
GREENWOOD COUNTY	24,735	2,005	22,730	59,567	1,630	57,937	2.55
HAMPTON COUNTY	7,058	736	6,322	18,191	66	18,125	2.87
HORRY COUNTY	89,960	34,196	55,764	144,053	3,563	140,490	2.52
JASPER COUNTY	6,070	772	5,298	15,487	266	15,221	2.87
KERSHAW COUNTY	17,479	1,669	15,810	43,599	409	43,190	2.73
LANCASTER COUNTY	20,929	1,151	19,778	54,516	399	54,117	2.74
LAURENS COUNTY	23,201	2,541	20,660	58,092	2,669	55,423	2.68
LEE COUNTY	6,537	483	6,054	18,437	153	18,284	3.02
LEXINGTON COUNTY	67,556	5,923	61,633	167,611	1,389	166,222	2.70
MCCORMICK COUNTY	3,347	616	2,731	8,868	1,367	7,501	2.75
MARION COUNTY	12,777	1,011	11,766	33,899	265	33,634	2.86
MARLBORO COUNTY	10,955	792	10,163	29,361	684	28,677	2.82
NEWBERRY COUNTY	14,455	2,141	12,314	33,172	766	32,406	2.63
OCONEE COUNTY	25,983	3,625	22,358	57,494	444	57,050	2.55
ORANGEBURG COUNTY	32,340	3,431	28,909	84,803	3,670	81,133	2.81
PICKENS COUNTY	35,865	2,443	33,422	93,894	7,506	86,388	2.58
RICHLAND COUNTY	109,564	7,974	101,590	285,720	26,091	259,629	2.56
SALUDA COUNTY	6,792	968	5,824	16,357	311	16,046	2.76
SPARTANBURG COUNTY	89,927	5,424	84,503	226,800	6,061	220,739	2.61
SUMTER COUNTY	35,016	2,293	32,723	102,637	7,574	95,063	2.91
UNION COUNTY	12,230	823	11,407	30,337	228	30,109	2.64
WILLIAMSBURG COUNTY	13,265	1,157	12,108	36,815	155	36,660	3.03
YORK COUNTY	50,438	3,432	47,006	131,497	3,602	127,895	2.72

POP. COUNTS ARE SUBJECT TO POSSIBLE CORRECTION FOR UNDERCOUNT OR OVERCOUNT.
U.S. DEPT. OF COMMERCE IS CONSIDERING WHETHER TO CORRECT THESE COUNTS, IF ANY, NO LATER THAN 7/15/91.

Ref. 22

RECORD OF COMMUNICATION

__X__ Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO:	Berkeley County Landfill File SCD 981 028 095	FROM:	Harvey S. Daniel Site Screening Section
DATE:	June 24, 1992	TIME:	8:25 AM

SUBJECT: Conversation with Carl Rueger, Superintendent of the Moncks Corner Water Company. (803) 761-8041

SUMMARY OF COMMUNICATION

Mr. Rueger confirmed that the Town of Moncks Corner has wells within four miles of the Berkeley County Landfill. However, the wells are cased and screened between 200 and 700 feet.

INFORMATION COPIES
TO:

Ref. 23

RECORD OF COMMUNICATION

__X__ Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO:	Berkeley County Landfill File SCD 981 028 095	FROM:	Harvey S. Daniel Site Screening Section
DATE:	July 7, 1992	TIME:	11:15 AM

SUBJECT: Conversation with Bobby Wall, Assistant Superintendent, Moncks Corner Water Company. (803) 761-8041

SUMMARY OF COMMUNICATION

The Moncks Corner Water Company is supplied by seven groundwater wells. Referring to a city map of Moncks Corner, Mr. Wall pointed out that three of the wells are located north of S.C. State Route 6 [located outside the four mile radius of the Berkeley County Landfill site]. A fourth well is located at the intersection of U.S. Route 52 and Heatley Street [located approximately 4.2 miles northeast of the site]. Two well are located at the bend in Winter Street [located approximately 3.75 miles north-northeast of the site]. And, the seventh well is located at the intersection of Whiteville Road and Center Street [located approximately 3.4 miles north-northeast of the site]. The Water Company supplies approximately 2100 taps.

INFORMATION COPIES
TO:

Ref. 24

RECORD OF COMMUNICATION

__X__ Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO:	Berkeley County Landfill File SCD 981 028 095	FROM:	Harvey S. Daniel Site Screening Section
DATE:	July 10, 1992	TIME:	9:15 AM

SUBJECT: Conversation with Dan Hare, A.D. Hare Waterworks.
Office phone: (803) 761-8444.
Mobile Phone: (803) 729-5650

SUMMARY OF COMMUNICATION

A.D. Hare Waterworks is served by eight wells. The majority of the wells are located on the Pinopolis Peninsula. Referring to a USGS topographical map, Mr. Hare pointed out that two of the wells are located less than one-quarter mile south of the intersection of Airport Road (the road on which the airport is located) and Whitesville Road (the road leading to the small community of Whitesville) [these two wells located between two and three miles north of the Berkeley County Landfill site are the only two well in the system that are located within four miles of the site]. The water in the system is mixed, and the wells are screened around 300 feet (below the Cooper Formation). A.D. Hare Waterworks serves 470 taps.

INFORMATION COPIES
TO:

Ref. 25

RECORD OF COMMUNICATION

__X__ Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO:	Berkeley County Landfill File SCD 981 028 095	FROM:	Harvey S. Daniel Site Screening Section
DATE:	June 23, 1992	TIME:	2:55 PM

SUBJECT: Conversation with Howard Henry, Superintendent of the Berkeley County Water Company. (803) 761-8817

SUMMARY OF COMMUNICATION

Mr. Henry confirmed that the water company has three wells within four miles of the Berkeley County Landfill as he indicated on the waterline map for the Site Screening Investigation conducted by the NUS Corporation. The wells are within 275 to 300 feet deep, and are screened below the Cooper Formation. The three well are part of a seven well system that serves approximately 5000 taps. Fifty percent of the water in the system is obtained from the City of Charleston.

INFORMATION COPIES
TO:

Ref 27

TABLE 9

SUMMARY OF ORGANIC ANALYTICAL RESULTS
GROUNDWATER SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (ug/l)	Background		Private Well East of Site	Northeast Corner of Landfill
	BL-PW-01	BL-TW-01	BL-PW-02	BL-TW-05
PURGEABLE COMPOUNDS				
VINYL CHLORIDE	10U	10U	-	11
CHLOROBENZENE	5U	5U	-	120
BENZENE	5U	5U	-	6
UNKNOWN COMPOUND/NO.(1)				10J/1
EXTRACTABLE COMPOUNDS				
UNIDENTIFIED COMPOUND/NO (1)				100J/6
TETRAHYDRO PYRAN(1)				20JN
DIETHYLMETHYLBENZAMIDE(1)				10JN

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
N Presumptive evidence of presence of material.
U Material was analyzed for but not detected. The number given is the MQL.
(1) Tentatively identified and unidentified compounds. This compound is not on Target Compound List and is reported only as detected in individual samples; MQL not determined.
Note: Samples BL-TW-02 and BL-TW-04 were not collected, because groundwater could not be reached.
Sample BL-TW-03 was not collected, because the sample location was inaccessible.

Ref. 28

TABLE 10

SUMMARY OF INORGANIC ANALYTICAL RESULTS
GROUNDWATER SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

	Preservative Blank	Background		Private Well East of Site	Northeast Corner of Landfill
PARAMETERS (ug/l)	BL-PB-01	BL-PW-01	BL-TW-01	BL-PW-02	BL-TW-05
ALUMINUM	110J	110UJ	7800J	-	1300J
ARSENIC	-	2UJ	2UJ	-	110J
BARIUM	-	2U	75	-	64
CALCIUM	-	2900	850U	2700	150,000
COBALT	-	4U	5U	-	65
IRON	-	90UJ	2800J	-	46,000J
LEAD	-	24J	5J	55J	-
MAGNESIUM	-	1400	1600	1400	12,000
MANGANESE	-	2U	5U	-	3300
NICKEL	-	6U	6U	-	33
POTASSIUM	-	9000	990	9200	6100
SODIUM	-	160,000	23,000	170,000	57,000
VANADIUM	-	4U	8	-	8

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
U Material was analyzed for but not detected. The number given is the MQL.
Note: Samples BL-TW-02 and BL-TW-04 were not collected, because groundwater could not be reached.
Sample BL-TW-03 was not collected, because the sample location was inaccessible.

Ref. 30

RECORD OF COMMUNICATION

__X__ Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO:	Berkeley County Landfill File SCD 981 028 095	FROM:	Harvey S. Daniel Site Screening Section
DATE:	June 23, 1992	TIME:	2:30 PM

SUBJECT: Conversation with Miller White, Fisheries Biologist, District V, South Carolina Wildlife & Marine Resources Department. (803) 825-3387

SUMMARY OF COMMUNICATION

The West Branch Cooper River has an average flow of 4500 cubic feet per second between Pinopolis Dam and the Atlantic Ocean. Mr. White estimates that Molly Branch has a flow betweem 10 and 100 cubic feet per second as it flows into the West Branch Cooper River.

INFORMATION COPIES
TO:

Ref. 31

South Carolina

STATE WATER ASSESSMENT

Report No. 140

H.Stephen Snyder
Project Manager

Steven J. de Kozlowski
Assistant Project Manager
and Project Biologist

Joseph A. Harrigan
Project Engineer

H. Thomas Shaw
Project Cartographer

Freddie L. Collins
Civil Engineer Associate

Teresa W. Greaney
Project Geologist

Mable K. Haralson
Public Information Director

George E. Siple
Consulting Hydrogeologist

Debra L. Miller
Engineering Technician

South Carolina Water Resources Commission
3830 Forest Drive, P.O. Box 4440
Columbia, South Carolina 29240

September 1983

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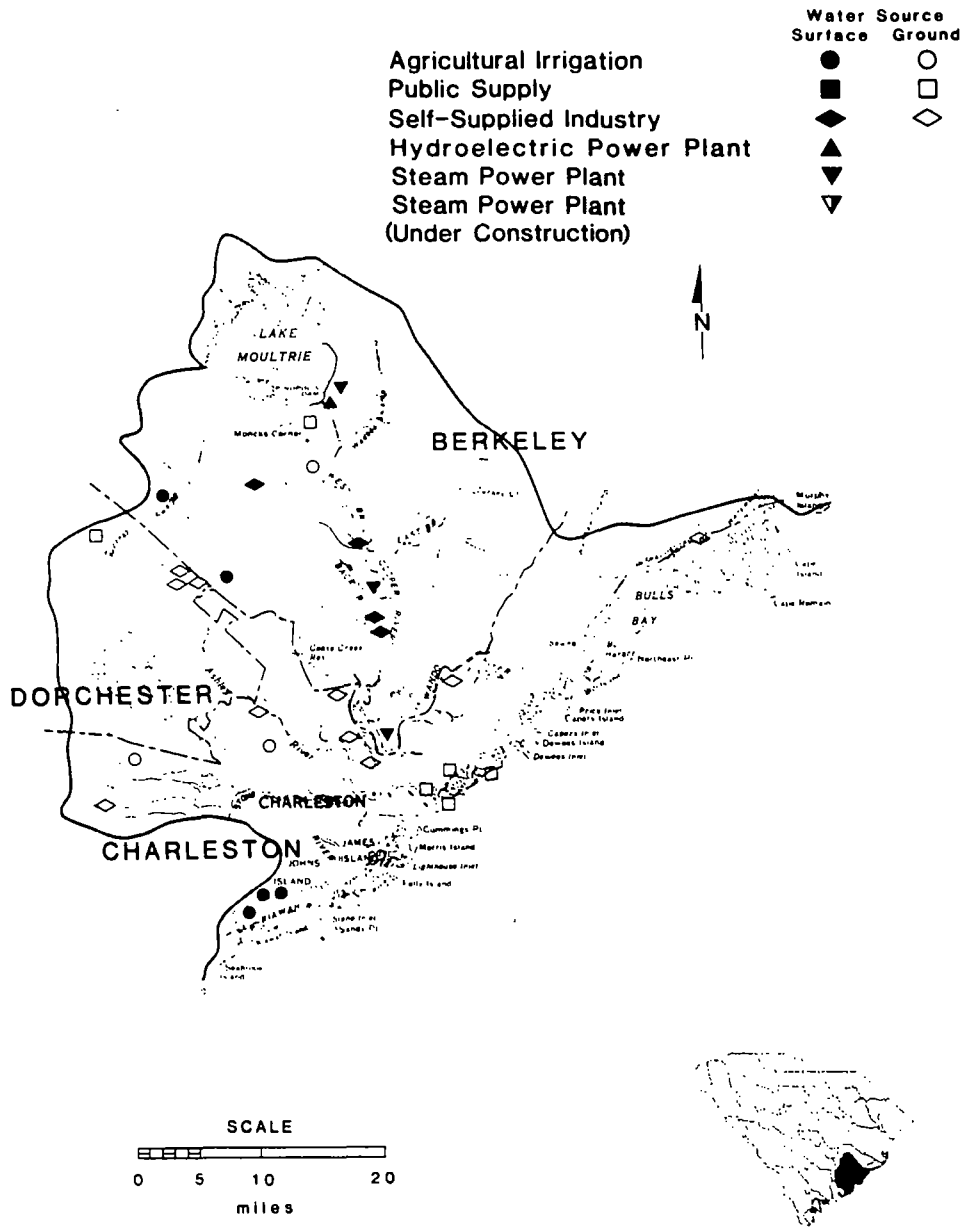

Figure 119.
Location, type, and supply source of water users in the Ashley-Cooper River Sub-basin, South Carolina.

Ref. 35

TABLE 8

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SEDIMENT SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (mg/kg)	Background BL-SD-01	Unnamed Creek Northwest of Landfill BL-SD-02*	Unnamed Creek Southeast of Landfill BL-SD-04	Unnamed Creek Northeast of Landfill BL-SD-05	East of Landfill on Molly Branch BL-SD-06
ALUMINUM	7000	1600	8100	2200	1100
BARIUM	80	10	24	-	7 8
CALCIUM	1800	-	2600	480	420
CHROMIUM	4U	-	8 1	-	-
IRON	2200	590	11,000	3300	790
LEAD	38J	5.3J	13J	7 4J	2 6J
MAGNESIUM	320	46	580	-	-
MANGANESE	16	-	21	6 7	6 8
NICKEL	2 9	-	3	-	-
POTASSIUM	250	-	440	-	-
VANADIUM	8 5	2 8	14	5 1	2 4

- Material analyzed for but not detected above minimum quantitation limit (MQL)
J Estimated value.
U Material was analyzed for but not detected. The number given is the MQL.
*Note: Sample BL-SD-03 was not collected, because the sample location was inaccessible.

Ref. 36

Charleston County Health Department

334 Calhoun Street
Charleston, South Carolina 29401

October 22, 1976

Mr. Clyde Umphlett
County Supervisors Office
P. O. Box 817
Moncks Corner, S. C. 29461

Dear Mr. Umphlett:

I am sure you are aware that Berkeley County has been using their new landfill site for over five months and the old site has been closed for the same amount of time. There is a serious problem existing with the old site in that it has never been properly covered with the two feet of final cover and graded as required by the solid waste regulations. Due to this failure we have raw uncovered garbage exposed, also serious leachate and erosion problems. The regulations require that the final cover be applied within one week of completion therefore I am sure that you would agree with me that five months is more than enough time to have completed and closed this site.

In speaking with Mr. Page during these past months it seems that the lack of hauling trucks was the main factor in not completing the site. I would request that you look into this matter immediately and take the necessary action to complete this site and have the permit terminated.

I respectfully request that you let me know when this can be accomplished. I feel that thirty days should be adequate to accomplish this if a conscientious effort is made.

Please contact me if there are any questions concerning this matter and I will be most happy to help in any way.

Sincerely,

J. D. Ohlandt
Regional Solid Waste Consultant

JDO/bji
cc: Mr. David Page, Berkeley County
Mr. Hartsell Truesdale, S.C. DHEC
Mr. J. Donovan Dukes, EQC Office
File

Date: 06/22/92

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE ENDANGERED SPECIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. HERITAGE TRUST FOUNDATION (01/92).

COMMON NAME SCIENTIFIC NAME	STATUS	LONGITUDE LATITUDE	DISTANCE FROM SITE	GRANK SRANK	DATE ADDED	TOPO MAP / COUNTY WHERE THE SPECIES IS LOCATED
SHADOW-WITCH PONTHIEVA RACEMOSA	UN	80-00-13 33-10-53	3.80 Miles NNE	G4G5 S?	10/01/72	MONCKS Berkeley
OSPREY PANDION HALIAETUS	SC	79-59-22 33-09-46	3.77 Miles ENE	G5 S4	03/01/80	CORDESVILLE Berkeley
RECLINED MEADOW-RUE THALICTRUM SUBROTUNDUM	CU	80-04-46 33-05-42	3.68 Miles SSW	G1G2 S?	08/11/39	MOUNT Berkeley
VIRGINIA BUNCHFLOWER MELANTHIUM VIRGINICUM	UN	80-04-46 33-05-42	3.68 Miles SSW	G5 S?	08/11/39	MOUNT Berkeley
SHADOW-WITCH PONTHIEVA RACEMOSA	UN	80-00-44 33-10-14	2.92 Miles ENE	G4G5 S?	09/01/66	MONCKS Berkeley
OSPREY PANDION HALIAETUS	SC	80-01-00 33-06-43	2.82 Miles SSE	G5 S4	03/01/80	MOUNT Berkeley

GRANK/SRANK - Nature Conservancy rating:

G1 - Critically imperiled globally because of extreme rarity or because of some factor(s) making it especially vulnerable to extinction.
G2 - Imperiled globally because of rarity or factor(s) making it vulnerable.
G3 - Either very rare throughout its range or found locally in a restricted range, or having factors making it vulnerable.
G4 - Apparently secure globally, though it may be rare in parts of its range.
G5 - Demonstrably secure globally, though it may be rare in parts of its range.
S1 - Critically imperiled state-wide because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation.
S2 - Imperiled state-wide because of rarity or factor(s) making it vulnerable.
S3 - Rare or uncommon in state.
S4 - Apparently secure in state.

STATUS - Legal status:

FE - Federal Endangered
FT - Federal Threatened
NC - Of Concern, National (plants)
RC - Of Concern, Regional (plants)
SE - State Endangered (animals)
ST - State Threatened (animals)
SC - Of Concern, State (animals)
SL - Of Concern, State (plants)
SX - State Extirpated
CU - Candidate (Federal review)
UN - Undetermined

Ref. 38

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE ENDANGERED SPECIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. HERITAGE TRUST FOUNDATION (01/92).

COMMON NAME SCIENTIFIC NAME	STATUS	LONGITUDE LATITUDE	DISTANCE FROM SITE	GRANK SRANK	DATE ADDED	TOPO MAP / COUNTY WHERE THE SPECIES IS LOCATED

S5 - Demonstrably secure in state.

Ref. 40

RECORD OF COMMUNICATION

__X__ Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO:	Berkeley County Landfill File SCD 981 028 095	FROM:	Harvey S. Daniel Site Screening Section
DATE:	June 26, 1992	TIME:	8:15 AM

SUBJECT: Conversation with Barbara Chapman, Secretary, Whitesville Elementary School. (803) 761-8322

SUMMARY OF COMMUNICATION

The Whitesville Elementary School [located approximately 0.3 miles north of the Berkeley County Landfill site] has a student population of approximately 650 students, and a staff population of approximately 60 people.

INFORMATION COPIES
TO:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

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

AUG 0 5 1992

4WD-WPB

Mr. Marvin E. Waddey
Director of Solid Waste
Berkeley County Solid Waste Facilities
223 N. Live Oak Dr.
Moncks Corner, SC 29461-2331

RE: 4-RIN-02205-92

Dear Mr. Waddey:

This is in response to your Freedom of Information Act (FOIA) request regarding Berkeley County Landfill, South Carolina (SCD981028095).

Please find enclosed the requested material.

Fees are waived as de minimis.

Should you have questions, please contact Earl Bozeman at (404) 347-5065.

Sincerely yours,

H. Kirk Lucius, Chief
Waste Programs Branch
Waste Management Division

Enclosure

bcc: FOIA Office
Action Office FOIA Coordinator

EB;M;07/30/92x5065 Disk: Bozeman Doc: 2205.foi

BOZEMAN DEIHL HANKE LUCIUS for
7/30/92 7/30 7/31 7/31

Printed on Recycled Paper

4WD-WPB

APR 10 1991

John K. Cresswell
Site Screening Section
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, SC 29201

RE: Berkeley County Landfill
SCD981028095

Dear Mr. Cresswell:

Enclosed is a copy for your files of the Screening Site Investigation prepared by NUS for the above referenced site. The site has been recommeneded for further action.

If you have any questions, please contact me at (404) 347-5065.

Sincerely yours,

Earl L. Bozeman, Jr.
Site Assessment Manager
State Project Officer

Enclosure

EB:mr:4/8/91x5065 Disk: Roth Doc: Berkely

BOZEMAN DEIHL

NUS CORPORATION
1927 LAKESIDE PARKWAY
SUITE 614
TUCKER, GEORGIA 30084
404-938-7710

SISD/SAS
RECEIVED
MAR 13 1991
EPA - REGION IV

C-586-3-1-123

March 12, 1991

Mr. A.R. Hanke
Waste Programs Branch
Waste Management Division
Environmental Protection Agency
345 Courtland Street, N. E.
Atlanta, Georgia 30365

Subject: Final Screening Site Inspection, Phase II
Berkeley County Landfill
Oakley, Berkeley County, South Carolina
TDD No. F4-9007-16
Revision 0

Dear Mr. Hanke:

Enclosed, please find three (3) copies of the Final Screening Site Inspection Report, Revision 0, for the Berkeley County Landfill in Oakley, Berkeley County, South Carolina.

If you have any questions concerning this report, please contact me.

Very truly yours,

Lisa Ward

Lisa Ward
Project Manager

Approved:

Greg Schaub

LW/tb

Enclosures (3)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

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

JAN 03 1991

SISB/SAB RECEIVED JAN 1991 EPA - REGION IV ATLANTA, GA

REF: 4WM-GP

H. Thomas
Route 6 Box 306
Moncks Corners, South Carolina 29461

Dear Mrs. Thomas:

On September 19, 1990, your well water was sampled by the Environmental Protection Agency (EPA) as part of an investigation into possible ground-water contamination in the area. The results from this investigation have been forwarded to our office. This letter is to inform you of the results from the analysis of your well water sample.

The sample collected from your well water was analyzed for metals, pesticides/PCBs, and extractable and volatile organic compounds. Lead was detected in your well water sample at an estimated concentration of 55 ug/l (micrograms per liter). This concentration exceeds EPA's action level for lead of 15 ug/l. EPA recommends that when lead is detected in groundwater above 15 ug/l, that an alternate water source (i.e., bottled water) be used for drinking and cooking purposes.

We are including a copy of "Lead And Your Drinking Water" for your information. You should read this pamphlet to learn more about this common problem. It would also be a good idea to have your tap water sampled specifically for lead.

If you have any questions or if we can be of any further assistance, please call Mr. Glenn Adams of my staff at 404/347-3866.

Sincerely,

James S. Kutzman

James S. Kutzman, Chief
Ground-Water Protection Branch

Berkeley County Landfill
SCD 981028095
Berkeley Co., Oakley

Printed on Recycled Paper

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

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

JAN 03 1991

REF: 4WM-GP

Bertha Neighbors
Route 6 Box 226
Moncks Corners, South Carolina 29461

Dear Mrs. Neighbors:

On September 19, 1990, your well water was sampled by the Environmental Protection Agency (EPA) as part of an investigation into possible ground-water contamination in the area. The results from this investigation have been forwarded to our office. This letter is to inform you of the results from the analysis of your well water sample.

The sample collected from your well water was analyzed for metals, pesticides/PCBs, and extractable and volatile organic compounds. Lead was detected in your well water sample at an estimated concentration of 24 ug/l (micrograms per liter). This concentration exceeds EPA's action level for lead of 15 ug/l. EPA recommends that when lead is detected in groundwater above 15 ug/l, that an alternate water source (i.e., bottled water) be used for drinking and cooking purposes.

We are including a copy of "Lead And Your Drinking Water" for your information. You should read this pamphlet to learn more about this common problem. It would also be a good idea to have your tap water sampled specifically for lead.

If you have any questions or if we can be of any further assistance, please call Mr. Glenn Adams of my staff at 404/347-3866.

Sincerely,

James S. Kutzman

James S. Kutzman, Chief
Ground-Water Protection Branch

Printed on Recycled Paper

U. S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV, ATHENS, GEORGIA

SISB/SAS
RECEIVED
SEP 14 1990
EPA - REGION IV
ATLANTA, GA.

MEMORANDUM

DATE: SEP 12 1990

SUBJECT: Review of SSI Study Plan, Berkeley County Landfill, Oakley, Berkeley County, South Carolina; ESD Project No. 90E-600

FROM: Steve Hall
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 study plan for the Berkeley County Landfill has been reviewed. The plan is acceptable as written to achieve the objectives stated.

If you have any questions concerning this review, please call me at FTS:250-3173.

cc: Finger/Wright
Bokey/Hall
Knight
Franklin

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

ENVIRONMENTAL SERVICES DIVISION
ATHENS, GEORGIA 30613

SISB/SAS
RECEIVED
SEP 12 1990
EPA - REGION IV
ATLANTA, GA.

MEMORANDUM

DATE: September 7, 1990

SUBJECT: Screening Site Inspection Study Plans

FROM: Pat Stamp Pat Stamp
Laboratory Quality Control Specialist
Laboratory Evaluation & Quality Assurance Section

TO: Al Hanke, Chief AWH
Site Assessment Section
Waste Programs Branch
Waste Management Division

THRU: Wade Knight, Chief WK
Laboratory Evaluation & Quality Assurance Section

We have reviewed the following subject documents and have no comments:

1. Georgia-Power-Plant Wansley, Roopville, Georgia
2. Aiken County Landfill, Clearwater, South Carolina
3. Aiken County Landfill(Former), Clearwater, South Carolina
4. Berkeley County Landfill, Oakley, South Carolina
5. Greenwood Mills Landfill, Joanna, South Carolina
6. Heywood-Wakefield Company, Newport, Tennessee
7. M&M Polishing and Plating, Inc., LaFollette, Tennessee
8. Old Jellico Dump, Jellico, Tennessee
9. Old Loudon City Dump, Loudon, Tennessee
10. Paramount Dump-Woodbury, Woodbury, Tennessee

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

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

SISB/SAS
RECEIVED
NOV 05 1990
EPA - REGION IV

4WD-WPB

DATE: 9/4/90

Mr. Phil Blackwell
NUS Corporation
1927 Lakeside Parkway
Tucker, Georgia 30084

Dear Mr. Blackwell:

This letter concerns the proposed/completed FIT report on the following CERCLA site:

Site Name: BERKELEY COUNTY LANDFILL

Site I.D.#: SCD981028095

Site Reference#: 3453

EPA Project Manager: EARL BOZEMAN

The above site has been assessed by EPA and a disposition made on it. Therefore, it has now been assigned to FIT for the following action:

_____ NFRAP

_____ PA

_____ SSI Phase I (PAR)

_____ SSI Phase II

_____ LSI Evaluation

_____ LSI

X Other IN CONJUNCTION WITH PHASE II SSI, FASP SOIL GAS ANALYSIS AND GEOPHYSICAL SCREENING TO LOCATE FILL BOUNDARY AND APPROPRIATE BACKGROUND SAMPLING LOCATION.

Sincerely,

Susan Deihl

Susan M. Deihl, Chief
North Unit
Site Assessment Section

cc: Fran Harrell

Acknowledging receipt of assignment

Date 09/07/90

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NUS CORPORATION
SUPERFUND DIVISION

SISD/SAS
RECEIVED
AUG 30 1990
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ATLANTA, GA.

INTERNAL CORRESPONDENCE

TO: Earl Bozeman

DATE: August 28, 1990

FROM: John Jenkins

COPIES:

SUBJECT: Access to Berkely County Landfill (EPA Id. No. SCD981028095)

Dear Mr. Bozeman:

Please disregard the access letter that I sent to you dated August 23, 1990. The subject landfill is no longer active and is not currently operated by Berkeley County. The owner of the property that the landfill was on is Bertha Neighbors. Her son, Gene Neighbors, is handling access. I contacted Mr. Neighbors and he granted verbal access for the week of September 17, 1990. Enclosed, please find the access letter to Mr. Gene Neighbors.

Thank You!

John Jenkins

NUS 064 58 1182

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. *(Extra charge)*
2. ☐ Restricted Delivery *(Extra charge)*

3. Article Addressed to:

MR GENE NEIGHBORS
RT 6 BOX 226
MONCKS CORNER SC
29461

4. Article Number

44962416

Type of Service:

- ☐ Registered
- ☒ Certified
- ☐ Express Mail
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- ☐ COD
- ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Addressee

X Gene Neighbors

6. Signature — Agent

X

7. Date of Delivery

Sept-14-90

8. Addressee's Address *(ONLY if requested and fee paid)*

PS Form **3811**, Apr. 1989 ★U.S.G.P.O. 1989-238-815 **DOMESTIC RETURN RECEIPT**

Berkeley County Landfill #1 - Berkeley County
SCD 981028095

The Berkeley County Landfill #1 is located 1 mile east of the intersection of U.S. Hwy 17A and Secondary Road 50 in Berkeley County. This inactive landfill which began operations in 1972 is believed to have received household, commercial industrial and agricultural solid waste from various industries within Berkeley County. Since its original permit date in 1972 (DWP015), landfilling of unknown quantities and waste types continued until its closure in 1977. Residents within the immediate area as well as a 3 mile radius (2500 people) rely solely on private or public wells for drinking water sources. Municipal wells are located 5 miles North in the town of Moncks Corner. Leachate leaving the landfill has been identified from previous inspections. Because of the shallow water table and potential for contamination of the groundwater, this site has been given a "Low Priority" for a Site Inspection at this time.

DATE REPORT ACCEPTED 3/14/91
DISPOSITION SIP Low Priority
SAM SIGNATURE Carl F. Bozeman Jr.

R-586-3-1-23

FINAL REPORT

SCREENING SITE INSPECTION, PHASE II
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA
EPA ID #: SCD981028095

Prepared Under
TDD No. F4-9007-16
CONTRACT NO. 68-01-7346

Revision 0

FOR THE

WASTE MANAGEMENT DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

MARCH 12, 1991

NUS CORPORATION
SUPERFUND DIVISION

Prepared By	Reviewed By	Approved By
Lisa Ward	Bob Donaghue	Phil Blackwell
Project Manager	Assistant Regional Project Manager	Regional Project Manager

NOTICE

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EXECUTIVE SUMMARY

The Berkeley County Landfill is located on Landfill Road in Oakley, Berkeley County, South Carolina. The landfill received commercial, agricultural, and industrial wastes from 1972 to 1977. There is no file material available that gives information about specific wastes deposited at the site. Upon closure of the landfill, the 86-acre area was covered with 2 feet of soil, graded, and seeded.

Berkeley County is located in the Atlantic Coastal Plain Physiographic Province. The geology of the study area involves discontinuous layers of sand and clay with minor amounts of shell and limestone. There is a confining layer between the surficial aquifer and the aquifer of concern. Nearly all residential water needs in the site area are provided by groundwater from deep wells drilled in the Black Mingo Formation.

The groundwater pathway was determined to be of primary concern for this site. If contaminants from the landfill were to percolate into the underlying aquifers, an estimated 19,450 people within 4 miles of the site would be at risk.

Seventeen environmental samples were collected during the field investigation associated with this study. Several inorganic constituents were detected in surface and subsurface soil samples. One of these, lead, was detected in the nearest private well sample, indicating that contaminants may have percolated into underlying formations.

Based on the analysis of possible migration pathways, the results of the sampling investigation, and the information obtained from file material, FIT 4 recommends that Phase I of a Listing Site Inspection be initiated at the Berkeley County Landfill.

1.0 INTRODUCTION

The NUS Corporation Region 4 Field Investigation Team (FIT) was tasked by the U.S. Environmental Protection Agency (EPA), Waste Management Division to conduct a Screening Site Inspection (SSI) at the Berkeley County Landfill site in Oakley, Berkeley County, South Carolina. The investigation 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 task was performed to satisfy the requirements stated in Technical Directive Document (TDD) number F4-9007-16. The field investigation was conducted during the week of September 17, 1990.

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 background materials relevant to HRS scoring of site.
- Evaluate target populations associated with the groundwater, surface water, air, and onsite exposure pathways.
- Obtain information on local water systems.
- Develop a site sketch.
- Collect environmental samples.

2.0 SITE CHARACTERIZATION

2.1 SITE BACKGROUND AND HISTORY

The Berkeley County Landfill, which is located 3 miles west of Oakley, South Carolina, is owned by Mr. Gene Neighbors and was leased to the county during its operation (Ref. 1). The landfill was used from 1972 to 1977 to receive primarily domestic waste, but it also received commercial, agricultural, and industrial waste (Ref. 1). The site location is shown on Figure 1.

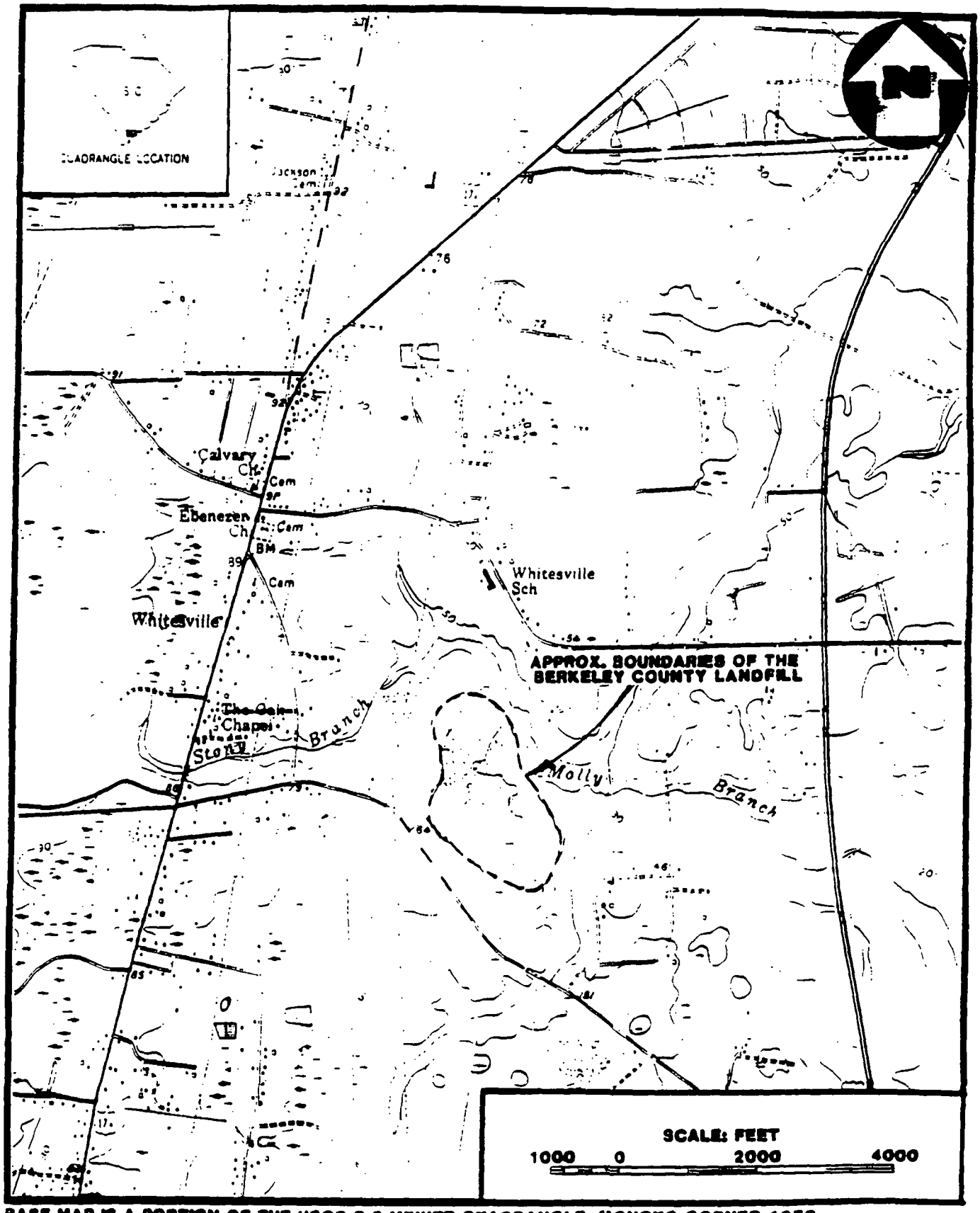
No file material is available on specific wastes that were disposed of in the landfill. However, a new county landfill site, Permit No. DWP021, was established upon closure of the old Berkeley County Landfill. The wastes disposed of at the new site include plastics, waste oil, titanium dioxide, sludge from textile operations, bark sludge, epoxy resins, chemical containers, scrap metal, and miscellaneous trash - all from area industries. Although none of the materials disposed of in the new landfill are known to be in the old site, it is possible that some or all of these may have been placed in the old site prior to 1976 (Ref. 1).

2.2 SITE DESCRIPTION

2.2.1 Site Features

The inactive landfill which is estimated at 6 feet deep covers an area of approximately 86 acres (Ref. 2). It is bounded on all sides by thick woods, and Molly Branch, which was dry during the field investigation, is adjacent to the north. The landfill itself is densely vegetated with pine trees and brush, and the surrounding area is relatively flat.

The property is completely surrounded by a fence, and the only entrance is through a locked gate located on the southwest end of the property. The land adjacent to the landfill is pine forested and undeveloped except for a few homes (Ref. 1, p. 3). The site layout is shown in Figure 2 (Ref. 3, Appendix A). The site layout is depicted in Figure 2.



BASE MAP IS A PORTION OF THE USGS 7.5 MINUTE QUADRANGLE, MONCKS CORNER 1979.

SITE LOCATION MAP
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

FIGURE 1

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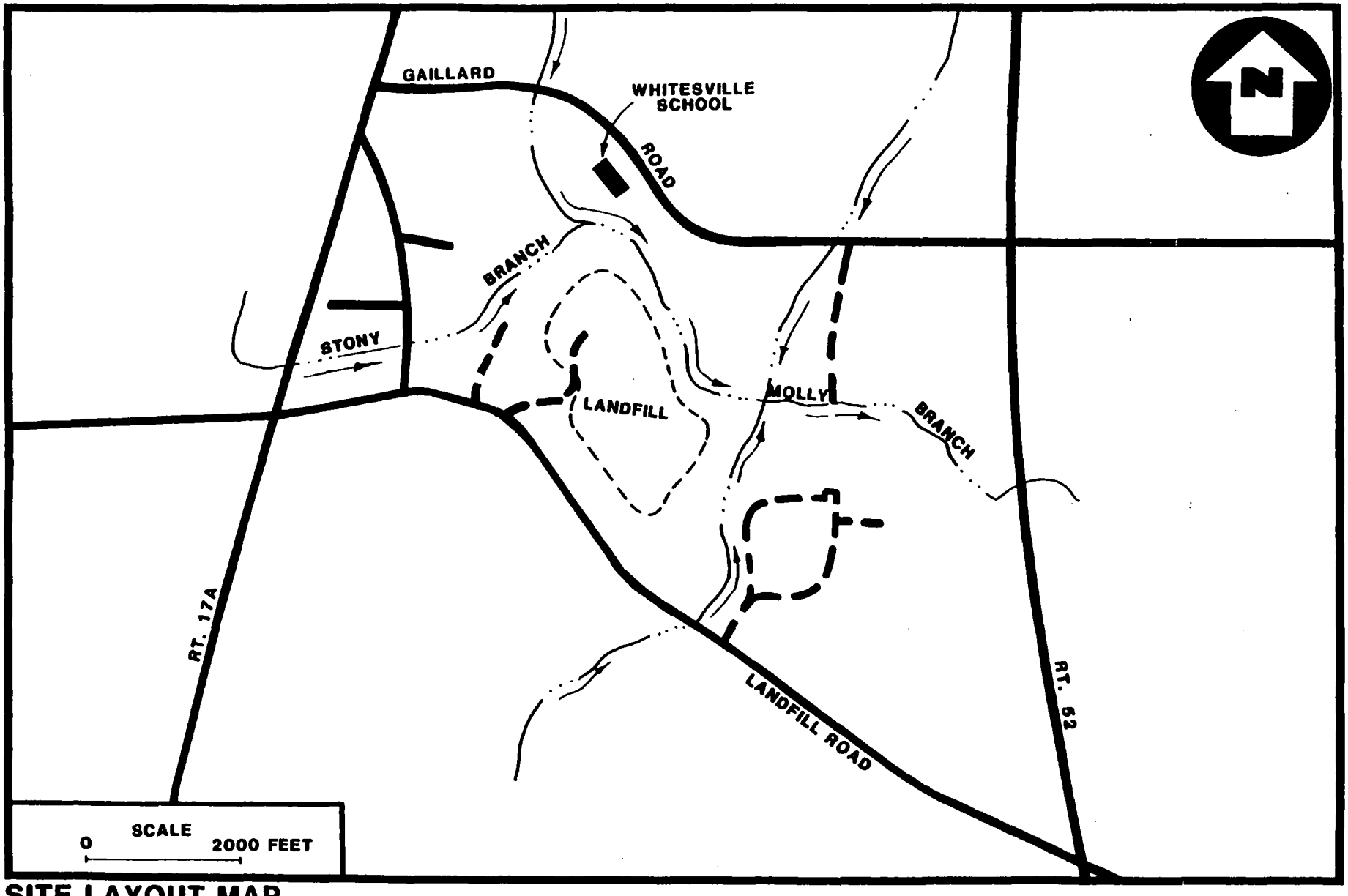


SITE LAYOUT MAP
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

FIGURE 2

NUS CORPORATION

2.2.2 Waste Characteristics

The Berkeley County Landfill was used for waste disposal from 1972 to 1977. Very little information is available on specific wastes that were placed in the landfill. The permit application submitted by Berkeley County cites the types of wastes to be placed in the landfill as household, commercial, industrial, and agricultural. Based on an aerial photograph, the landfill is about 86 acres in size, and the fill is estimated to be about 6 feet deep. Disposal at the site ceased in June 1976 when the landfill was covered with 2 feet of soil, graded, and seeded.

Upon closure of the Berkeley County Landfill, a new county landfill began operating. None of the materials disposed of in the new landfill are known to have been in the former site; however, since it was intended to receive industrial wastes, it is possible that some or all of these materials may have been placed in the old landfill. Wastes disposed of in the new landfill include plastics, waste oils, titanium dioxide, sludge from textile operations, bark sludge, epoxy resins, chemical containers, scrap metal, and miscellaneous trash from area industries (Ref. 1).

3.0 REGIONAL POPULATIONS AND ENVIRONMENTS

3.1 POPULATION AND LAND USE

3.1.1 Demography

The Berkeley County Landfill site is located in a rural area approximately 3 miles west of Oakley, South Carolina (Appendix A). Population within a 1-mile radius of the site is approximately 433; within a 4-mile radius, the population is estimated to be 4,402 (Ref. 4). The nearest residence is located approximately 200 feet southeast of the landfill (Ref. 3). The Whitesville Elementary School is located about 1,300 feet northwest of the landfill on Gaillard Road (Appendix A).

3.1.2 Land Use

The vast majority of the area within a 4-mile radius of the landfill is rural with scattered residential areas. This area also contains many isolated wetlands and the ranges of three federally endangered species of birds. These birds include the bald eagle (Haliaeetus leucocephalus), the Bachman's warbler (Vermivora bachmanii), and the red-cockaded woodpecker (Picoides (Dendrocopos) borealis) (Ref. 5).

3.2 SURFACE WATER

3.2.1 Climatology

Berkeley County has a subtropical climate with warm summers, mild winters, and ample precipitation. Rainfall is well distributed throughout the year. The annual distribution shows a maximum precipitation of about 7 inches in July and a minimum of about 2 inches in November (Ref. 6). The net annual precipitation is approximately 13.5 inches (Ref. 7). The mean annual temperature for this area is approximately 64°F (Ref. 6, p. 93).

3.2.2 Overland Drainage

Surface water run-off from the landfill flows east approximately 700 feet into Molly Branch and southeast approximately 1,000 feet into an unnamed tributary. Molly Branch flows east, and the unnamed tributary flows north into Molly Branch.

Overland drainage discharges into Molly Branch which flows eastward approximately 6.5 miles to its confluence with the West Branch of the Cooper River. The remainder of the 15-mile, surface water migration pathway flows south on the Cooper River (Appendix A).

3.2.3 Potentially Affected Water Bodies

There are no surface water intakes or sensitive environments potentially affected by surface water run-off from the landfill (Refs. 5, 8, Appendix A). Molly Branch is not used for recreation; however, the Cooper River is used for boating, swimming, and fishing (Ref. 9).

3.3 GROUNDWATER

3.3.1 Hydrogeology

The Berkeley County Landfill is located in the Atlantic Coastal Plain Physiographic Province and the Atlantic and Gulf Coastal Plain hydrogeologic setting (Ref. 10, plate 28; 11, pp. 270, 271). The climate of the area is characterized by moderate temperatures and humid days (Ref. 12, p. 7). The net annual precipitation is 5 inches, and the maximum 1-year, 24-hour rainfall is 3.5 inches (Ref. 13, pp. 43, 63; 14).

The landfill is underlain by surficial soils that consist of discontinuous layers of sand and clay with minor amounts of shell and limestone extending to a depth of 30 feet below land surface (bls) (Ref. 12, pp. 12, 13, 41). These surficial soils and underlying recent unconsolidated materials comprise the shallow aquifer, which occurs under water-table conditions. Water levels vary between 3 to 15 feet bls and reflect variations in the local topography and geographic position (Ref. 12, p. 41). Transmissivities of the shallow aquifer are generally less than 770 ft^2/day (Ref. 12, p. 43). The hydraulic conductivity for sediments similar to these is 1.0×10^{-3} cm/sec (Ref. 15, p. 29).

The Cooper Formation occurs beneath the surficial soils and is an impermeable, sandy limestone that acts as a confining zone between the shallow aquifer and the lower Santee Limestone aquifer (Ref. 12, p. 41). The Cooper Formation is approximately 125 feet thick in the landfill area (Ref. 12, p. 13). Formations that underlie the Cooper Formation, in descending order, are the Santee Limestone, the Black Mingo Formation, the Peedee Formation, the Black Creek Formation, and the Middendorf Formation (Ref. 12, p. 13). The Santee Limestone is a fossiliferous, slightly glauconitic limestone approximately 65 feet thick (Ref. 12, pp. 13, 18). The zone dips southward at 8 ft/mile and increases in thickness toward the south (Ref. 12, p. 18). The Black Mingo Formation consists of sand and limestone in the upper portion of the stratigraphic column and clay and shale in its lower half

(Ref. 12, p. 17). The formation is approximately 340 feet thick in this area (Ref. 12, p. 13). The Peedee Formation is represented by calcareous clays and silty sands that are approximately 320 feet thick (Ref. 12, pp. 13, 17). The Black Creek Formation consists of interbedded sands and clays that are 700 feet thick (Ref. 12, pp. 14, 17). The Middendorf Formation is composed of clays in the lower half with silty sand in the upper. It is encountered at a depth of 1,560 feet bls in the landfill area (Ref. 12, pp. 11, 13, 17).

The primary aquifer used in this area is groundwater from the Santee Limestone and Black Mingo Formation (Ref. 12, pp. 30-34). A significant amount of hydraulic interconnection occurs between the base of the Santee and the upper half of the Black Mingo Formation in this area (Ref. 12, p. 32). Most wells are of open-hole construction and penetrate into the sand beds of the Black Mingo Formation (Refs. 12, 31). These wells occur under artesian conditions due to the overlying confining clays of the Cooper Formation and the basal Black Mingo (Ref. 12, p. 30). The water level is approximately 25 feet bls in the landfill area (Ref. 12, p. 33). Water yields of 432,000 gal/day have been reported from wells in this area (Ref. 12, p. 31). The hydraulic conductivity for sediments similar to these is approximately 1.0×10^{-5} cm/sec (Ref. 12, p. 29).

Groundwater does occur in the deeper formations but, due to the quality of water and expense involved in completing wells, these aquifers are not used in the Berkeley landfill area (Ref. 12, pp. 27-30). Rainfall is the main source of recharge to the aquifers (Ref. 12, p. 32). Water quality from the Santee Limestone - Black Mingo Formation aquifer is generally good in this area but deteriorates downgradient due to increasing amounts of sodium, fluoride, and chlorides (Ref. 12, pp. 44, 53).

3.3.2 Aquifer Use

Greater than 70 percent of the residents within a 4-mile radius of the site receive their potable water from private wells (Ref. 8). These wells are cased in the Black Mingo aquifer (300 to 500 feet bls) which is the aquifer of concern (Ref. 16). The closest private well, which is located roughly 200 feet east of the landfill, is approximately 300 feet deep (Ref. 3, Appendix A).

Those residents without private wells are serviced by the Berkeley County Water Department. This department has approximately 5,000 connections. Fifty percent of the Berkeley County water is surface water supplied by the Charleston City Public Works which has a surface water intake on the Edisto River approximately 30 miles west of the landfill. The Edisto River is not along the surface water migration pathway (Ref. 17). Water from the Charleston system is mixed, prior to distribution, with the water from three municipal wells (Refs. 4, 8). One of these wells is located approximately 2.25 miles north of the landfill; the second is approximately 2 miles northeast ofthe landfill; the third

is about 2.25 miles east of the site (Ref. 8). The Charleston water system serves approximately 19,000 people (5,000 connections x 3.8 people per household) (Ref. 3). There are approximately 3,049 people within 3 miles of the site who utilize private wells for their potable water (Refs. 3, 4, Appendix A).

3.4 SUMMARY OF POTENTIALLY AFFECTED POPULATIONS AND ENVIRONMENTS

Groundwater is the pathway of concern at this facility; however, it is of limited concern due to a 125-foot-thick confining unit separating the aquifer of concern from land surface. The surface water pathway is of minimal concern due to lack of a potentially affected population. The onsite exposure is not of concern because access to the landfill is restricted via a fence (Ref. 4).

If contaminants were to leach through to the Black Mingo aquifer, there would be approximately 22,050 people affected by the contamination within 3 miles of the landfill.

4.0 FIELD INVESTIGATION

4.1 GEOPHYSICAL INVESTIGATION

Geophysics was to be utilized in order to better characterize the boundaries of the landfill. Upon arrival at the site, it was realized that because the landfill is very densely overgrown, and there was much damage (i.e., fallen trees) resulting from 1989's Hurricane Hugo, it would not be possible to perform geophysical techniques.

4.2 FIELD ANALYTICAL SCREENING PROJECT (FASP)

FASP was to be used in conjunction with Geophysics. FASP at this site was therefore canceled upon realization of the physical constraints posed by the field conditions.

4.3 SAMPLE COLLECTION

4.3.1 Sample Collection Methodology

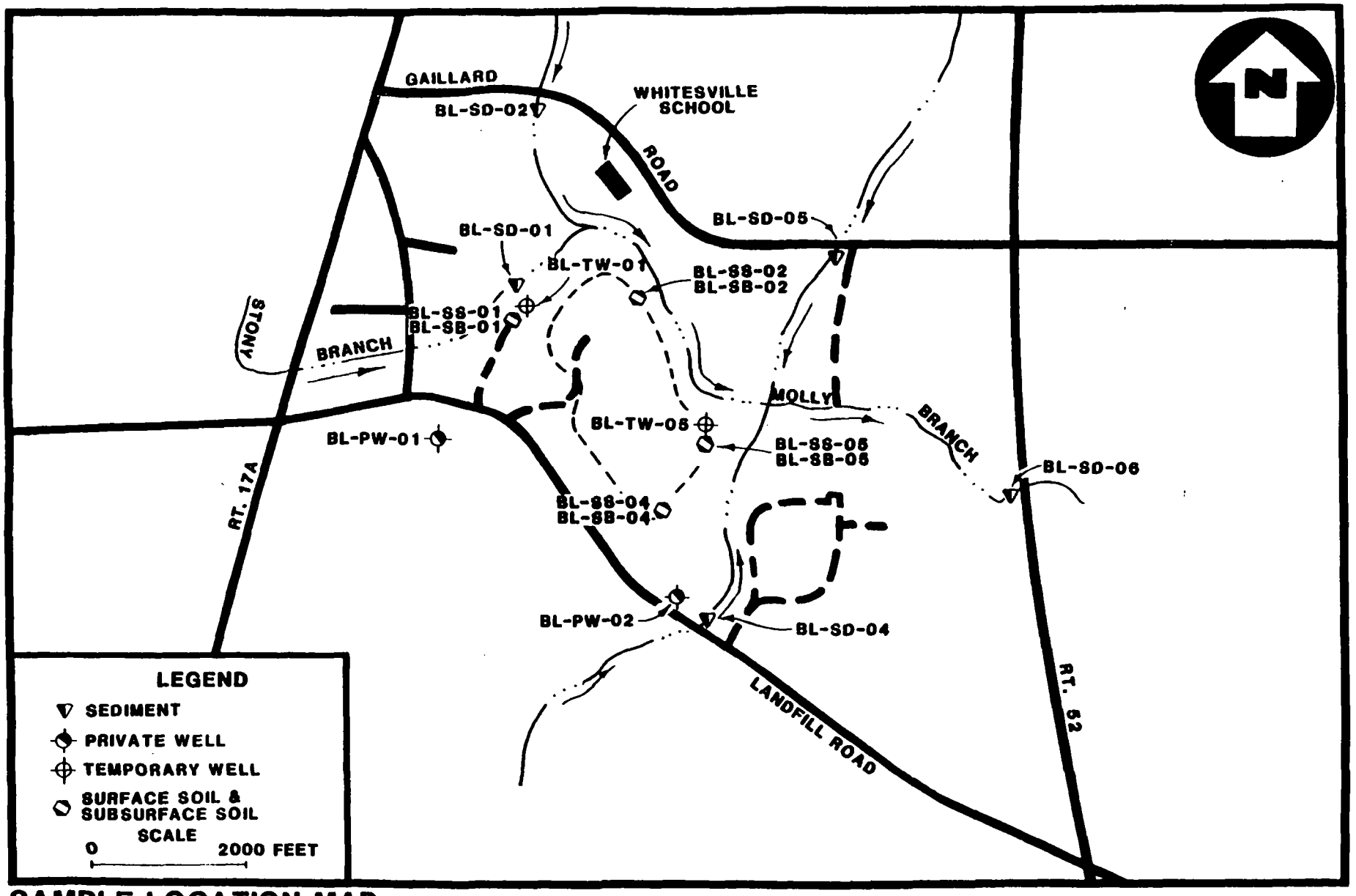
All sample collection, sample preservation, and chain-of-custody procedures used during this investigation were in accordance with the standard operating procedures as specified in Sections 3 and 4 of the Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services, Division, April 1, 1986.

4.3.2 Duplicate Samples

Mr. G. Neighbors, landfill owner, declined duplicate samples collected at the Berkeley County Landfill (Ref. 18). The owners of the private wells located off site also declined duplicate groundwater samples.

4.3.3 Description of Samples and Sample Locations

Seventeen environmental samples were collected for the investigation: four surface soil, four subsurface soil, two temporary well, two private well, and five sediment samples. Sample locations are shown in Figure 3. Sample codes, descriptions, and rationale are contained in Table 1.



SAMPLE LOCATION MAP
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

FIGURE 3

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TABLE 1

SAMPLE CODES, DESCRIPTION, LOCATION, AND RATIONALE
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

Sample Code	Description	Location	Rationale
BL-SD-01	Sediment	Upstream, west of site on Molly Branch	To provide background values
BL-SD-02	Sediment	Northwest of site on an unnamed tributary of Molly Branch	To determine presence or absence of contaminants
BL-SD-03	Sediment	West of intersection of Molly Branch and unnamed tributary east of site	Not collected
BL-SD-04	Sediment	Southeast of site on unnamed tributary of Molly Branch	To determine presence or absence of contaminants
BL-SD-05	Sediment	North intersection of Molly Branch and unnamed tributary east of site	To determine presence or absence of contaminants
BL-SD-06	Sediment	Downstream on Molly Branch	To determine presence or absence of contaminants
BL-SS-01 BL-SB-01 BL-TW-01	Surface Soil Subsurface Soil Groundwater	Upgradient, west of site	To provide background values
BL-SS-02 BL-SB-02	Surface Soil Subsurface Soil	Northwestern edge of landfill	To determine presence or absence of contaminants
BL-TW-02	Groundwater	Northwestern edge of landfill	Not collected
BL-SS-03 BL-SB-03 BL-TW-03	Surface Soil Subsurface Soil Groundwater	Southern edge of landfill	Not collected
BL-SS-04 BL-SB-04	Surface Soil Subsurface Soil	Southeastern edge of landfill	To determine presence or absence of contaminants attributable to the site
BL-TW-04	Groundwater	Southeastern edge of landfill	Not collected
BL-SS-05 BL-SB-05 BL-TW-05	Surface Soil Subsurface Soil Groundwater	Northeastern edge of landfill	To determine presence or absence of contaminants attributable to the site

BL - Berkeley County Landfill
SD - Sediment
SS - Surface Soil
SB - Subsurface Soil
TW - Temporary Well
PW - Private Well

TABLE 1

SAMPLE CODES, DESCRIPTION, LOCATION, AND RATIONALE
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

Sample Code	Description	Location	Rationale
BL-PW-01	Groundwater	Offsite well southwest of site	To provide background values
BL-PW-02	Groundwater	Offsite well southeast of site	To determine presence or absence of contaminants attributable to the site

BL - Berkeley County Landfill
SD - Sediment
SS - Surface Soil
SB - Subsurface Soil
TW - Temporary Well
PW - Private Well

4.3.4 Field Measurements

Field measurements were recorded for the groundwater samples. Parameters measured included temperature, pH, and conductivity of the sample at the time of collection. No field measurements were performed on the soil samples during the investigation. The groundwater data are presented in Table 2.

4.4 SAMPLE ANALYSIS

4.4.1 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). Organic analysis of soil and water samples was performed by S-Cubed, San Diego, California. Inorganic analysis of soil and water was performed by Skinner & Sherman, Waltham, Massachusetts.

All laboratory analyses and laboratory quality assurance procedures used during this 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, October 24, 1990; or as specified by the existing United States Environmental Protection Agency standard procedures and protocols for the contract analytical laboratory program.

4.4.2 Analytical Data Quality

All analytical data were subjected to a quality assurance review as described in the EPA Environmental Services Division laboratory data guidelines. In the tables, some of the concentrations of the organic and inorganic parameters have been flagged with a "J". This indicates that the qualitative analysis was acceptable, but the quantitative value has been estimated. A few other compounds are flagged 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 positive identification to its presence. Many compounds in the background samples are flagged with a "U". This means that the compound was analyzed for but was not detected, and the value is used as the minimum quantitation limit. The complete analytical data sheets are provided in Appendix C.

TABLE 2

FIELD MEASUREMENTS
WATER SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

Sample Code	Date (1990)	Time	Temp. (°C)	pH	Specific Conductance (umhos/cm)
BL-TW-01	9/19	1110	26.9	4.42	194
BL-PW-01	9/19	1220	27.8	7.96	840
BL-TW-05	9/19	1550	28.0	6.57	1175
BL-PW-02	9/19	1625	25.0	8.54	746

BL - Berkeley County Landfill
TW - Temporary Well
PW - Private Well

4.4.3 Presentation of Analytical Results

This section discusses the results from the analysis of the environmental samples collected during the investigation at the Berkeley County Landfill. Results for inorganic and organic analyses of surface soil, subsurface soil, sediment, and groundwater samples are presented in Tables 3 through 10. Throughout the following discussion, concentrations will be described as elevated. This means that the concentration is at least three times that found in the background sample or at least three times the minimum quantitation limit (MQL) of that contaminant in the background sample.

The organic analytical results can be found in Tables 3, 5, 7, and 9. From the southeast corner of the landfill, a surface and subsurface soil sample were collected (BL-SS-04 and BL-SB-04). The surface soil sample contained tetrachloroethene at an estimated concentration four times that found in the background sample. The subsurface soil sample was found to contain carbon disulfide at a concentration four times MQL.

Samples BL-SS-05, BL-SB-05, and BL-TW-05 were collected from the northeast corner of the landfill. The surface soil sample was free of organic contaminants, while the subsurface soil and groundwater samples contained elevated amounts of chlorobenzene. The concentration detected in the subsurface soil sample was four times MQL, and that detected in the groundwater was 24 times MQL.

A sediment sample BL-SD-05 was collected from an unnamed creek northeast of the landfill. Tetrachloroethene was detected in this sample at a concentration two times MQL. This sample was collected upstream from the site; therefore, the contamination cannot be attributed to the site.

File material indicates that the landfill received waste from area industries. The three organic contaminants detected in elevated amounts are commonly used in a wide variety of industries. Chlorobenzene, for example, is used to make pesticides, dyes, chemicals, and as a solvent for dry cleaning and color printing (Ref. 19). Tetrachloroethene is a commonly used solvent and is also used in dry cleaning, metal degreasing, and textile processing (Ref. 20). Carbon disulfide is principally used in the manufacturing of regenerated cellulose fibers and films, as a raw material for the manufacturing of carbon tetrachloride, and can be used as a solvent in some instances (Ref. 21).

The inorganic analytical results can be found in Tables 4, 6, 8, and 10. A surface and subsurface soil sample were collected from the northwest boundary of the landfill. The surface soil sample, BL-SS-02, contained 10 metals in elevated levels ranging from 5 to 20 times background or MQL. These metals include aluminum, barium, calcium, chromium, iron, magnesium, nickel, potassium, sodium, and vanadium. The subsurface soil taken at this sample location (BL-SB-02) contained seven metals in

TABLE 3

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (ug/kg)	Background BL-SS-01	Northwest Corner of Landfill BL-SS-02*	Southeast Corner of Landfill BL-SS-04	Northeast Corner of Landfill BL-SS-05
PURGEABLE COMPOUNDS				
METHYL ETHYL KETONE	15	-	-	-
TETRACHLOROETHENE	17J	-	68J	41J
EXTRACTABLE COMPOUNDS				
UNIDENFIED COMPOUND/NO.(1)	4000J/4	5000J/7	3000J/4	20,000J/12

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
*Note: Sample BL-SS-03 was not collected, because the sample location was inaccessible.
(1) Tentatively identified and unidentified compounds. This compound is not on Target Compound List and is reported only as detected in individual samples; MQL not determined.

TABLE 4

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (mg/kg)	Background BL-SS-01	Northwest Corner of Landfill BL-SS-02*	Southeast Corner of Landfill BL-SS-04	Northeast Corner of Landfill BL-SS-05
ALUMINUM	2600	17,000	7600	6000
ARSENIC	2J	3.4	-	-
BARIUM	21	120	27	25
BERYLLIUM	1U	2.8	-	-
CALCIUM	1000	5200	2700	3500
CHROMIUM	2U	25	10	7.2
COBALT	1.3U	2.7	-	3.4
IRON	1500	15,000	8500	5400
LEAD	8.4J	18J	11J	14J
MAGNESIUM	150	1600	300	340
MANGANESE	15	25	84	350
NICKEL	1.1U	5.5	2.7	2.3
POTASSIUM	60U	1200	260	170
SODIUM	30U	250	-	-
VANADIUM	4.2	36	14	7.2
ZINC	4U	-	22	-

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
U Material was analyzed for but not detected. The number given is the MQL.
*Note: Sample BL-SS-03 was not collected, because the sample location was inaccessible.

TABLE 5

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SUBSURFACE SOIL SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (ug/kg)	Background BL-SB-01	Northwest Corner of Landfill BL-SB-02*	Southeast Corner of Landfill BL-SB-04	Northeast Corner of Landfill BL-SB-05
PURGEABLE COMPOUNDS				
CARBON DISULFIDE	6U	-	21	-
METHYL ETHYL KETONE	12U	-	-	-
TETRACHLOROETHENE	6U	10	8	-
TOLUENE	6U	7	4J	-
CHLOROBENZENE	6U	-	-	21
EXTRACTABLE COMPOUNDS				
DI-N-BUTYLPHTHALATE	790U	-	310J	-
UNIDENFIED COMPOUND/NO.(1)	400J/1		7000J/1	

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
U Material was analyzed for but not detected. The number given is the MQL.
(1) Tentatively identified and unidentified compounds. This compound is not on Target Compound List and is reported only as detected in individual samples; MQL not determined.
*Note: Sample BL-SB-03 was not collected, because the sample location was inaccessible.

Samples BL-SB-06, 07, 08, and 09 were not collected due to a decision not to collect any samples on the actual landfill surface.

TABLE 6

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SUBSURFACE SOIL SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (mg/kg)	Background BL-SB-01	Northwest Corner of Landfill BL-SB-02*	Southeast Corner of Landfill BL-SB-04	Northeast Corner of Landfill BL-SB-05
ALUMINUM	27,000	7500	7900	18,000
ARSENIC	2U	2 8	6.5	8.3
BARIUM	37	23	70	87
CADMIUM	0 66U	-	-	3.9
CALCIUM	30U	140,000	140,000	15,000
CHROMIUM	9.1	39	38	87
COBALT	1.5U	-	-	4
IRON	2200	9000	10,000	17,000
LEAD	17J	4.7J	4.3J	7J
MAGNESIUM	130	3700	5300	4700
MANGANESE	3U	65	81	160
NICKEL	6.2	11	12	17
POTASSIUM	130U	3400	2800	3300
SODIUM	40U	670	490	480
VANADIUM	11	14	13	34
ZINC	3U	-	-	95

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
U Material was analyzed for but not detected. The number given is the MQL.
*Note: Sample BL-SB-03 was not collected, because the sample location was inaccessible.

Samples BL-SB-06, 07, 08, and 09 were not collected due to a decision not to collect any samples on the actual landfill surface.

TABLE 7

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SEDIMENT SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (ug/kg)	Trip Blank BL-TB-01S	Background BL-SD-01	Unnamed Creek Northwest of Landfill BL-SD-02*	Unnamed Creek Southeast of Landfill BL-SD-04	Unnamed Creek Northeast of Landfill BL-SD-05	East of Landfill on Molly Branch BL-SD-06
PURGEABLE COMPOUNDS						
TETRACHLOROETHENE	-	12U	-	-	26	-
TOLUENE	-	12U	-	6J	-	-
EXTRACTABLE COMPOUNDS						
UNIDENFIED COMPOUND/NO.(1)		30,000J/12	800J/2	10,000J/7	6000J/5	20,000J/10

- Material analyzed for but not detected above minimum quantitation limit (MQL).

J Estimated value.

U Material was analyzed for but not detected. The number given is the MQL.

(1) Tentatively identified and unidentified compounds. This compound is not on Target Compound List and is reported only as detected in individual samples; MQL not determined.

Note: Sample BL-SD-03 was not collected, because the sample location was inaccessible.

TABLE 8

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SEDIMENT SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (mg/kg)	Background BL-SD-01	Unnamed Creek Northwest of Landfill BL-SD-02*	Unnamed Creek Southeast of Landfill BL-SD-04	Unnamed Creek Northeast of Landfill BL-SD-05	East of Landfill on Molly Branch BL-SD-06
ALUMINUM	7000	1600	8100	2200	1100
BARIUM	80	10	24	-	7.8
CALCIUM	1800	-	2600	480	420
CHROMIUM	4U	-	8.1	-	-
IRON	2200	590	11,000	3300	790
LEAD	38J	5.3J	13J	7.4J	2.6J
MAGNESIUM	320	46	580	-	-
MANGANESE	16	-	21	6.7	6.8
NICKEL	2.9	-	3	-	-
POTASSIUM	250	-	440	-	-
VANADIUM	8.5	2.8	14	5.1	2.4

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
U Material was analyzed for but not detected. The number given is the MQL.
*Note: Sample BL-SD-03 was not collected, because the sample location was inaccessible.

TABLE 9

SUMMARY OF ORGANIC ANALYTICAL RESULTS
GROUNDWATER SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (ug/l)	Background		Private Well East of Site	Northeast Corner of Landfill
	BL-PW-01	BL-TW-01	BL-PW-02	BL-TW-05
PURGEABLE COMPOUNDS				
VINYL CHLORIDE	10U	10U	-	1J
CHLOROBENZENE	5U	5U	-	120
BENZENE	5U	5U	-	6
UNKNOWN COMPOUND/NO.(1)				10J/1
EXTRACTABLE COMPOUNDS				
UNIDENTIFIED COMPOUND/NO.(1)				100J/6
TETRAHYDRO PYRAN(1)				20JN
DIETHYLMETHYLBENZAMIDE(1)				10JN

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
N Presumptive evidence of presence of material.
U Material was analyzed for but not detected. The number given is the MQL.
(1) Tentatively identified and unidentified compounds. This compound is not on Target Compound List and is reported only as detected in individual samples; MQL not determined.
Note: Samples BL-TW-02 and BL-TW-04 were not collected, because groundwater could not be reached.
Sample BL-TW-03 was not collected, because the sample location was inaccessible.

TABLE 10

SUMMARY OF INORGANIC ANALYTICAL RESULTS
GROUNDWATER SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

	Preservative Blank	Background		Private Well East of Site	Northeast Corner of Landfill
PARAMETERS (ug/l)	BL-PB-01	BL-PW-01	BL-TW-01	BL-PW-02	BL-TW-05
ALUMINUM	110J	110UJ	7800J	-	1300J
ARSENIC	-	2UJ	2UJ	-	110J
BARIUM	-	2U	75	-	64
CALCIUM	-	2900	850U	2700	150,000
COBALT	-	4U	5U	-	65
IRON	-	90UJ	2800J	-	46,000J
LEAD	-	24J	5J	55J	-
MAGNESIUM	-	1400	1600	1400	12,000
MANGANESE	-	2U	5U	-	3300
NICKEL	-	6U	6U	-	33
POTASSIUM	-	9000	990	9200	6100
SODIUM	-	160,000	23,000	170,000	57,000
VANADIUM	-	4U	8	-	8

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
U Material was analyzed for but not detected. The number given is the MQL.
Note: Samples BL-TW-02 and BL-TW-04 were not collected, because groundwater could not be reached.
Sample BL-TW-03 was not collected, because the sample location was inaccessible.

elevated concentrations. These metals included calcium, chromium, iron, magnesium, manganese, potassium, and sodium.

Surface soil sample BL-SS-04 and subsurface soil sample BL-SB-04 were collected from the southeast corner of the landfill. BL-SS-04 contained chromium, iron, manganese, potassium, and zinc at concentrations ranging from four to six times background or MQL. The subsurface soil sample showed elevated amounts of arsenic, calcium, chromium, iron, magnesium, manganese, potassium, and sodium at concentrations from three to 30 times background or MQL.

Environmental samples collected from the northeast boundary of the landfill included a surface soil (BL-SS-05), a subsurface soil (BL-SB-05), and a groundwater (BL-TW-05) sample. The surface soil sample contained small amounts of calcium, chromium, iron, and manganese (four to 23 times background and MQL). Arsenic, cadmium, calcium, chromium, iron, magnesium, manganese, potassium, sodium, vanadium, and zinc were detected from three to 53 times background or MQL in sample BL-SB-05. The groundwater sample (BL-TW-05) contained arsenic (55 times MQL, estimated), calcium (176 times MQL), cobalt (13 times MQL), iron (16 times background, estimated), magnesium (eight times background), manganese (660 times MQL), nickel (six times MQL), and potassium (six times background). This was the only groundwater sample collected that was found to be contaminated.

Five offsite sediment samples were collected from Molly Branch and its tributaries. The only sample that contained any elevated concentration of metals was collected from an unnamed creek northeast of the landfill. This sample, BL-SD-04, was found to contain iron at a level five times that found in the background sample. The only other offsite sample collected was from the private well (BL-PW-02). This well is approximately 340 feet deep (Ref. 3). Lead was detected in this well in estimated levels exceeding the U.S. Environmental Protection Agency's level for drinking water standards; however, it is not known whether the contaminant is attributable to the landfill activities.

Determining whether or not the above-mentioned metals can be attributed to the landfill is difficult due to the lack of information available on what was actually deposited in the landfill when it was in operation. However, the detection of contaminants at the landfill (i.e., the presence of chromium in samples BL-SB-02, BL-SB-04, and BL-SB-05) suggests that contaminants may have been released in the landfill.

5.0 SUMMARY

The groundwater pathway is of primary concern at the Berkeley County Landfill. Approximately 3,200 people are considered at risk from potential releases of contaminants to the aquifer of concern.

The sampling investigation consisted of the collection of 17 environmental samples: four surface soil, four subsurface soil, two temporary well, two private well, and five sediment samples. BL-TW-05 was the only groundwater sample that showed significant concentrations of contaminants. Chlorobenzene (24 times MQL) and arsenic (55 times MQL, estimated) are the only two contaminants detected in the groundwater that would warrant any concern. However, this temporary well was 6.5 feet deep, therefore not representing the aquifer of concern. The private well that was sampled downgradient of the landfill contained lead at levels exceeding the EPA's level for drinking water. This well obtains water from the aquifer of concern.

Based on the analysis of possible migration pathways, the results of the sampling investigation, and the information obtained from the references, FIT 4 recommends that Phase I of a Listing Site Inspection be initiated at the Berkeley County Landfill.

REFERENCES

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

5. U.S. Fish and Wildlife Service, Endangered and Threatened Species of the Southeastern United States (Atlanta, Georgia, 1988).

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8. Water Distribution Map of Berkeley County; U.S. Geographical Survey, 7.5 minute series Topographic Quadrangle Maps of South Carolina: Moncks Corners 1958 (Photorevised 1979), Cordesville 1948 (PR 1979), Mount Holly 1957 (PR 1979), Kittredge 1950 (PR 1979), scale 1:24,000.

9. Earl Turner, Moncks Corners Wildlife Department, telephone conversation with Lisa Ward, NUS Corporation, December 3, 1990. Subject: Recreation on surface water bodies in the Oakley/Moncks Corners area.

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15. R. Allan Freeze and John A. Cherry, Groundwater (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1979).

16. Don, Tri-County Well Drillers, telephone conversation with Lisa Ward, NUS Corporation, December 4, 1990. Subject: Depth of private wells in Berkeley County.

17. David, Charleston City Public Works, telephone conversation with Lisa Ward, NUS Corporation, January 2, 1991. Subject: Surface water intake for Charleston with attached maps.

18. Gene Neighbors, Landowner of Berkeley County Landfill, telephone conversation with Lisa Ward, NUS Corporation, September 12, 1990. Subject: Duplicate field samples during FIT 4 investigation.

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20. S.L. Keil, "Tetrachloroethylene", Kirk-Othmer Encyclopedia of Chemical Technology, 3rd ed., Vol. 5 (New York: John Wiley & Sons, 1983).

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HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

BERKELEY COUNTY LANDFILL
EPA SITE NUMBER SCD981028095
OAKELY
BERKELEY COUNTY, SC
EPA REGION: 4

SCORE STATUS: IN PREPARATION

SCORED BY LISA WARD
OF NUS
ON 12/10/90

DATE OF THIS REPORT: 02/18/91
DATE OF LAST MODIFICATION: 02/18/91

GROUND WATER ROUTE SCORE :	33.33
SURFACE WATER ROUTE SCORE:	17.45
AIR ROUTE SCORE :	0.00
MIGRATION SCORE :	21.75

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	220 FEET		
DEPTH TO BOTTOM OF WASTE	6 FEET		
DEPTH TO AQUIFER OF CONCERN	214 FEET	0	0
PRECIPITATION	48.0 INCHES		
EVAPORATION	44.0 INCHES		
NET PRECIPITATION	4.0 INCHES	1	1
PERMEABILITY	1.0X10-6 CM/SEC	1	1
PHYSICAL STATE		3	3
TOTAL ROUTE CHARACTERISTICS SCORE:			5
3. CONTAINMENT		3	3
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE:ASSIGNED VALUE,18 (lead)			18
WASTE QUANTITY CUBIC YDS	832480		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	832480 CU. YDS	8	8
TOTAL WASTE CHARACTERISTICS SCORE:			26
5. TARGETS			
GROUND WATER USE		3	9
DISTANCE TO NEAREST WELL	200 FEET		
AND	MATRIX VALUE	40	40
TOTAL POPULATION SERVED	22049 PERSONS		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	22049		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			49

5000 connections x3.8 19,000 people + 3049 private wells 22049

GROUND WATER ROUTE SCORE (Sgw) = 33.33

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	1.4 %		
INTERVENING SLOPE	1.0 %	0	0
24-HOUR RAINFALL	4.0 INCHES	3	3
DISTANCE TO DOWN-SLOPE WATER	150 FEET	3	6
PHYSICAL STATE	3		3
TOTAL ROUTE CHARACTERISTICS SCORE:			12
3. CONTAINMENT	3		3
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE:ASSIGNED VALUE,18			18
WASTE QUANTITY CUBIC YDS	832480		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	832480 CU. YDS	8	8
TOTAL WASTE CHARACTERISTICS SCORE:			26
5. TARGETS			
SURFACE WATER USE		2	6
DISTANCE TO SENSITIVE ENVIRONMENTS		3	6
COASTAL WETLANDS	0 FEET		
FRESH-WATER WETLANDS	1200 FEET		
CRITICAL HABITAT	0 FEET		
DISTANCE TO STATIC WATER	> 3 MILES		
DISTANCE TO WATER SUPPLY INTAKE	> 3 MILES		
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:			12

landfill = 86 acres × 4840 yd²/acre = 416240 yd² } 832480 yd³
fill = 4 ft = 2 yds

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: BERKELEY COUNTY LANDFILL
AS OF 02/18/91

GROUND WATER ROUTE SCORE

ROUTE CHARACTERISTICS		5
CONTAINMENT	X	3
WASTE CHARACTERISTICS	X	26
TARGETS	X	49

= 19110 /57,330 X 100 = 33.33 = S_{gw}

SURFACE WATER ROUTE SCORE

ROUTE CHARACTERISTICS		12
CONTAINMENT	X	3
WASTE CHARACTERISTICS	X	26
TARGETS	X	12

= 11232 /64,350 X 100 = 17.45 = 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})	33.33	1110.89
SURFACE WATER ROUTE SCORE (S_{sw})	17.45	304.50
AIR ROUTE SCORE (S_{air})	0.00	0.00
$S^2_{gw} + S^2_{sw} + S^2_{air}$		1415.39
$\sqrt{(S^2_{gw} + S^2_{sw} + S^2_{air})}$		37.62
$S_M = \sqrt{(S^2_{gw} + S^2_{sw} + S^2_{air})}/1.73$		21.75

U.S. EPA REGION IV

SDMS

Unscannable Material Target Sheet

DocID: 10079038 Site ID: SCD981028095

Site Name: Berkeley Co., Landfill

Nature of Material:

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

Other (describe):

Amount of material: #1 Appendix A

Please contact the appropriate Records Center to view the material.

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

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1010 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W737

UG/KG	ANALYTICAL RESULTS
10U	CHLOROMETHANE
10U	BROMOMETHANE
10U	VINYL CHLORIDE
10U	CHLOROETHANE
20U	METHYLENE CHLORIDE
10U	ACETONE
5U	CARBON DISULFIDE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
5U	1,1-DICHLOROETHANE
5U	1,2-DICHLOROETHENE (TOTAL)
5U	CHLOROFORM
5U	1,2-DICHLOROETHANE
15	METHYL ETHYL KETONE
5U	1,1,1-TRICHLOROETHANE
5U	CARBON TETRACHLORIDE
10U	VINYL ACETATE
5U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
5U	1,2-DICHLOROPROPANE
5U	CIS-1,3-DICHLOROPROPENE
5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5U	DIBROMOCHLOROMETHANE
5U	1,1,2-TRICHLOROETHANE
5U	BENZENE
5U	TRANS-1,3-DICHLOROPROPENE
5U	BROMOFORM
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
17J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,1,2,2-TETRACHLOROETHANE
5U	TOLUENE
5U	CHLOROBENZENE
5U	ETHYL BENZENE
5U	STYRENE
5U	TOTAL XYLENES
5	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.

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1010 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W737

UG/KG	ANALYTICAL RESULTS
690U	PHENOL
690U	BIS(2-CHLOROETHYL) ETHER
690U	2-CHLOROPHENOL
690U	1,3-DICHLOROBENZENE
690U	1,4-DICHLOROBENZENE
690U	BENZYL ALCOHOL
690U	1,2-DICHLOROBENZENE
690U	2-METHYLPHENOL
690UR	BIS(2-CHLOROISOPROPYL) ETHER
690U	(3-AND/OR 4-)METHYLPHENOL
690U	N-NITROSODI-N-PROPYLAMINE
690U	HEXACHLOROETHANE
690UJ	NITROBENZENE
690U	ISOPHORONE
690UJ	2-NITROPHENOL
690UR	2,4-DIMETHYLPHENOL
3400U	BENZOIC ACID
690U	BIS(2-CHLOROETHOXY) METHANE
690U	2,4-DICHLOROPHENOL
690UR	1,2,4-TRICHLOROBENZENE
690U	NAPHTHALENE
690U	4-CHLOROANILINE
690U	HEXACHLOROBUTADIENE
690U	4-CHLORO-3-METHYLPHENOL
690U	2-METHYLNAPHTHALENE
690U	HEXACHLOROCYCLOPENTADIENE (HCCP)
690U	2,4,6-TRICHLOROPHENOL
3400U	2,4,5-TRICHLOROPHENOL
690UR	2-CHLORONAPHTHALENE
3400U	2-NITROANILINE
690U	DIMETHYL PHTHALATE
690U	ACENAPHTHYLENE
690U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
3400UR	3-NITROANILINE
690UJ	ACENAPHTHENE
3400U	2,4-DINITROPHENOL
3400U	4-NITROPHENOL
690U	DIBENZOFURAN
690U	2,4-DINITROTOLUENE
690U	DIETHYL PHTHALATE
690U	4-CHLOROPHENYL PHENYL ETHER
690U	FLUORENE
3400U	4-NITROANILINE
3400U	2-METHYL-4,6-DINITROPHENOL
690U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
690U	4-BROMOPHENYL PHENYL ETHER
690U	HEXACHLOROBENZENE (HCB)
3400U	PENTACHLOROPHENOL
690U	PHENANTHRENE
690U	ANTHRACENE
690U	DI-N-BUTYLPHTHALATE
690U	FLUORANTHENE
690U	PYRENE
690U	BENZYL BUTYL PHTHALATE
1400U	3,3'-DICHLOROBENZIDINE
690U	BENZO(A)ANTHRACENE
690U	CHRYSENE
690U	BIS(2-ETHYLHEXYL) PHTHALATE
690U	DI-N-OCTYLPHTHALATE
690U	BENZO(B AND/OR K)FLUORANTHENE
690U	BENZO-A-PYRENE
690U	INDENO (1,2,3-CD) PYRENE
690U	DIBENZO(A,H)ANTHRACENE
690U	BENZO(GHI)PERYLENE
5	PERCENT MOISTURE

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.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**  PROJECT NO. 90-803   SAMPLE NO. 50590  SAMPLE TYPE: SEDIM       PROG ELEM: NSF   COLLECTED BY: L WARD          **
**  SOURCE: BERKELEY CO LF                                          CITY: OAKLEY                ST: SC             **
**  STATION ID: SS-01                                               COLLECTION START: 09/19/90  1010   STOP: 00/00/00  **
**  CASE.NO.: 14889          SAS NO.:                               D. NO.: W737                MD NO: W737        **
**                                                                                                                 **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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ANALYTICAL RESULTS UG/KG

4000J   4 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.

11/15/90

PESTICIDES/PCB'S DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SS-01 COLLECTION START: 09/19/90 1010 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W737 **
** **
*** ***

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
8.4U	ALPHA-BHC	84U	METHOXYCHLOR
8.4U	BETA-BHC	17U	ENDRIN KETONE
8.4U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
8.4U	GAMMA-BHC (LINDANE)	84U	GAMMA-CHLORDANE /2
8.4U	HEPTACHLOR	84U	ALPHA-CHLORDANE /2
8.4U	ALDRIN	170U	TOXAPHENE
8.4U	HEPTACHLOR EPOXIDE	84U	PCB-1016 (AROCLOR 1016)
8.4U	ENDOSULFAN I (ALPHA)	84U	PCB-1221 (AROCLOR 1221)
17U	DIELDRIN	84U	PCB-1232 (AROCLOR 1232)
17U	4,4'-DDE (P,P'-DDE)	84U	PCB-1242 (AROCLOR 1242)
17U	ENDRIN	84U	PCB-1248 (AROCLOR 1248)
17U	ENDOSULFAN II (BETA)	170U	PCB-1254 (AROCLOR 1254)
17U	4,4'-DDD (P,P'-DDD)	170U	PCB-1260 (AROCLOR 1260)
17U	ENDOSULFAN SULFATE	5	PERCENT MOISTURE
17U	4,4'-DDT (P,P'-DDT)		

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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1745 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W753

UG/KG	ANALYTICAL RESULTS
15U	CHLOROMETHANE
15U	BROMOMETHANE
15U	VINYL CHLORIDE
15U	CHLOROETHANE
20U	METHYLENE CHLORIDE
15U	ACETONE
8U	CARBON DISULFIDE
8U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
8U	1,1-DICHLOROETHANE
8U	1,2-DICHLOROETHENE (TOTAL)
8U	CHLOROFORM
8U	1,2-DICHLOROETHANE
15U	METHYL ETHYL KETONE
8U	1,1,1-TRICHLOROETHANE
8U	CARBON TETRACHLORIDE
15U	VINYL ACETATE
8U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
8U	1,2-DICHLOROPROPANE
8U	CIS-1,3-DICHLOROPROPENE
8U	TRICHLOROETHENE(TRICHLOROETHYLENE)
8U	DIBROMOCHLOROMETHANE
8U	1,1,2-TRICHLOROETHANE
8U	BENZENE
8U	TRANS-1,3-DICHLOROPROPENE
8U	BROMOFORM
15U	METHYL ISOBUTYL KETONE
15U	METHYL BUTYL KETONE
8U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
8U	1,1,2,2-TETRACHLOROETHANE
8U	TOLUENE
8U	CHLOROBENZENE
8U	ETHYL BENZENE
8U	STYRENE
8U	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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1745 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W753

UG/KG	ANALYTICAL RESULTS
990U	PHENOL
990U	BIS(2-CHLOROETHYL) ETHER
990U	2-CHLOROPHENOL
990U	1,3-DICHLOROBENZENE
990U	1,4-DICHLOROBENZENE
990U	BENZYL ALCOHOL
990U	1,2-DICHLOROBENZENE
990U	2-METHYLPHENOL
990UR	BIS(2-CHLOROISOPROPYL) ETHER
990U	(3-AND/OR 4-)METHYLPHENOL
990U	N-NITROSODI-N-PROPYLAMINE
990U	HEXACHLOROETHANE
990UJ	NITROBENZENE
990U	ISOPHORONE
990UJ	2-NITROPHENOL
990UR	2,4-DIMETHYLPHENOL
4800U	BENZOIC ACID
990U	BIS(2-CHLOROETHOXY) METHANE
990U	2,4-DICHLOROPHENOL
990UR	1,2,4-TRICHLOROBENZENE
990U	NAPHTHALENE
990U	4-CHLOROANILINE
990U	HEXACHLOROBUTADIENE
990U	4-CHLORO-3-METHYLPHENOL
990U	2-METHYLNAPHTHALENE
990U	HEXACHLOROCYCLOPENTADIENE (HCCP)
990U	2,4,6-TRICHLOROPHENOL
4800U	2,4,5-TRICHLOROPHENOL
990UR	2-CHLORONAPHTHALENE
4800U	2-NITROANILINE
990U	DIMETHYL PHTHALATE
990U	ACENAPHTHYLENE
990U	2,6-DINITROTOLUENE
4800UR	3-NITROANILINE
990UJ	ACENAPHTHENE
4800U	2,4-DINITROPHENOL
4800U	4-NITROPHENOL
990U	DIBENZOFURAN
990U	2,4-DINITROTOLUENE
990U	DIETHYL PHTHALATE
990U	4-CHLOROPHENYL PHENYL ETHER
990U	FLUORENE
4800U	4-NITROANILINE
4800U	2-METHYL-4,6-DINITROPHENOL
990U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
990U	4-BROMOPHENYL PHENYL ETHER
990U	HEXACHLOROBENZENE (HCB)
4800U	PENTACHLOROPHENOL
990U	PHENANTHRENE
990U	ANTHRACENE
990U	DI-N-BUTYLPHTHALATE
990U	FLUORANTHENE
990U	PYRENE
990U	BENZYL BUTYL PHTHALATE
2000U	3,3'-DICHLOROBENZIDINE
990U	BENZO(A)ANTHRACENE
990U	CHRYSENE
990U	BIS(2-ETHYLHEXYL) PHTHALATE
990U	DI-N-OCTYLPHTHALATE
990U	BENZO(B AND/OR K)FLUORANTHENE
990U	BENZO-A-PYRENE
990U	INDENO (1,2,3-CD) PYRENE
990U	DIBENZO(A,H)ANTHRACENE
990U	BENZO(GHI)PERYLENE
34	PERCENT MOISTURE

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. 11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**  PROJECT NO. 90-803    SAMPLE NO. 50608  SAMPLE TYPE: SEDIM       PROG ELEM: NSF    COLLECTED BY: L WARD          **
**  SOURCE: BERKELEY CO LF                                          CITY: OAKLEY                ST: SC                **
**  STATION ID: SS-02                                               COLLECTION START: 09/19/90  1745   STOP: 00/00/00 **
**  CASE.NO.: 14889           SAS NO.:                              D. NO.: W753                MD NO: W753           **
**                                                                                                                    **
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ANALYTICAL RESULTS UG/KG

5000J 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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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PESTICIDES/PCB'S DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-02
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1745 STOP: 00/00/00
D. NUMBER: W753

UG/KG	ANALYTICAL RESULTS
12U	ALPHA-BHC
12U	BETA-BHC
12U	DELTA-BHC
12U	GAMMA-BHC (LINDANE)
12U	HEPTACHLOR
12U	ALDRIN
12U	HEPTACHLOR EPOXIDE
12U	ENDOSULFAN I (ALPHA)
24U	DIELDRIN
24U	4,4'-DDE (P,P'-DDE)
24U	ENDRIN
24U	ENDOSULFAN II (BETA)
24U	4,4'-DDD (P,P'-DDD)
24U	ENDOSULFAN SULFATE
24U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
120U	METHOXYCHLOR
24U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
120U	GAMMA-CHLORDANE /2
120U	ALPHA-CHLORDANE /2
240U	TOXAPHENE
120U	PCB-1016 (AROCLOR 1016)
120U	PCB-1221 (AROCLOR 1221)
120U	PCB-1232 (AROCLOR 1232)
120U	PCB-1242 (AROCLOR 1242)
120U	PCB-1248 (AROCLOR 1248)
240U	PCB-1254 (AROCLOR 1254)
240U	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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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1455 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W746

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
30U	METHYLENE CHLORIDE
12U	ACETONE
6U	CARBON DISULFIDE
6U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
6U	1,1-DICHLOROETHANE
6U	1,2-DICHLOROETHENE (TOTAL)
6U	CHLOROFORM
6U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
6U	1,1,1-TRICHLOROETHANE
6U	CARBON TETRACHLORIDE
12U	VINYL ACETATE
6U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
6U	1,2-DICHLOROPROPANE
6U	CIS-1,3-DICHLOROPROPENE
6U	TRICHLOROETHENE(TRICHLOROETHYLENE)
6U	DIBROMOCHLOROMETHANE
6U	1,1,2-TRICHLOROETHANE
6U	BENZENE
6U	TRANS-1,3-DICHLOROPROPENE
6U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
68J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
6U	1,1,2,2-TETRACHLOROETHANE
6U	TOLUENE
6U	CHLOROBENZENE
6U	ETHYL BENZENE
6U	STYRENE
6U	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.

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1455 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W746

UG/KG	ANALYTICAL RESULTS
780U	PHENOL
780U	BIS(2-CHLOROETHYL) ETHER
780U	2-CHLOROPHENOL
780U	1,3-DICHLOROBENZENE
780U	1,4-DICHLOROBENZENE
780U	BENZYL ALCOHOL
780U	1,2-DICHLOROBENZENE
780U	2-METHYLPHENOL
780UR	BIS(2-CHLOROISOPROPYL) ETHER
780U	(3-AND/OR 4-)METHYLPHENOL
780U	N-NITROSODI-N-PROPYLAMINE
780U	HEXACHLOROETHANE
780UJ	NITROBENZENE
780U	ISOPHORONE
780UJ	2-NITROPHENOL
780UR	2,4-DIMETHYLPHENOL
3800U	BENZOIC ACID
780U	BIS(2-CHLOROETHOXY) METHANE
780U	2,4-DICHLOROPHENOL
780UR	1,2,4-TRICHLOROBENZENE
780U	NAPHTHALENE
780U	4-CHLOROANILINE
780U	HEXACHLOROBUTADIENE
780U	4-CHLORO-3-METHYLPHENOL
780U	2-METHYLNAPHTHALENE
780U	HEXACHLOROCYCLOPENTADIENE (HCCP)
780U	2,4,6-TRICHLOROPHENOL
3800U	2,4,5-TRICHLOROPHENOL
780UR	2-CHLORONAPHTHALENE
3800U	2-NITROANILINE
780U	DIMETHYL PHTHALATE
780U	ACENAPHTHYLENE
780U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
3800UR	3-NITROANILINE
780UJ	ACENAPHTHENE
3800U	2,4-DINITROPHENOL
3800U	4-NITROPHENOL
780U	DIBENZOFURAN
780U	2,4-DINITROTOLUENE
780U	DIETHYL PHTHALATE
780U	4-CHLOROPHENYL PHENYL ETHER
780U	FLUORENE
3800U	4-NITROANILINE
3800U	2-METHYL-4,6-DINITROPHENOL
780U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
780U	4-BROMOPHENYL PHENYL ETHER
780U	HEXACHLOROBENZENE (HCB)
3800U	PENTACHLOROPHENOL
780U	PHENANTHRENE
780U	ANTHRACENE
780U	DI-N-BUTYLPHTHALATE
780U	FLUORANTHENE
780U	PYRENE
780U	BENZYL BUTYL PHTHALATE
1600U	3,3'-DICHLOROBENZIDINE
780U	BENZO(A)ANTHRACENE
780U	CHRYSENE
780U	BIS(2-ETHYLHEXYL) PHTHALATE
780U	DI-N-OCTYLPHTHALATE
780U	BENZO(B AND/OR K)FLUORANTHENE
780U	BENZO-A-PYRENE
780U	INDENO (1,2,3-CD) PYRENE
780U	DIBENZO(A,H)ANTHRACENE
780U	BENZO(GHI)PERYLENE
15	PERCENT MOISTURE

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.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-04 COLLECTION START: 09/19/90 1455 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W746 MD NO: W746

ANALYTICAL RESULTS UG/KG

3000J 4 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.

PESTICIDES/PCB'S DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-04
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1455 STOP: 00/00/00
D. NUMBER: W746

UG/KG	ANALYTICAL RESULTS
9.4U	ALPHA-BHC
9.4U	BETA-BHC
9.4U	DELTA-BHC
9.4U	GAMMA-BHC (LINDANE)
9.4U	HEPTACHLOR
9.4U	ALDRIN
9.4U	HEPTACHLOR EPOXIDE
9.4U	ENDOSULFAN I (ALPHA)
19U	DIELDRIN
19U	4,4'-DDE (P,P'-DDE)
19U	ENDRIN
19U	ENDOSULFAN II (BETA)
19U	4,4'-DDD (P,P'-DDD)
19U	ENDOSULFAN SULFATE
19U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
94U	METHOXYCHLOR
19U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
94U	GAMMA-CHLORDANE /2
94U	ALPHA-CHLORDANE /2
190U	TOXAPHENE
94U	PCB-1016 (AROCLOR 1016)
94U	PCB-1221 (AROCLOR 1221)
94U	PCB-1232 (AROCLOR 1232)
94U	PCB-1242 (AROCLOR 1242)
94U	PCB-1248 (AROCLOR 1248)
190U	PCB-1254 (AROCLOR 1254)
190U	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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*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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1450 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W749

UG/KG	ANALYTICAL RESULTS
13U	CHLOROMETHANE
13U	BROMOMETHANE
13U	VINYL CHLORIDE
13U	CHLOROETHANE
20U	METHYLENE CHLORIDE
13U	ACETONE
7U	CARBON DISULFIDE
7U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
7U	1,1-DICHLOROETHANE
7U	1,2-DICHLOROETHENE (TOTAL)
7U	CHLOROFORM
7U	1,2-DICHLOROETHANE
13U	METHYL ETHYL KETONE
7U	1,1,1-TRICHLOROETHANE
7U	CARBON TETRACHLORIDE
13U	VINYL ACETATE
7U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
7U	1,2-DICHLOROPROPANE
7U	CIS-1,3-DICHLOROPROPENE
7U	TRICHLOROETHENE(TRICHLOROETHYLENE)
7U	DIBROMOCHLOROMETHANE
7U	1,1,2-TRICHLOROETHANE
7U	BENZENE
7U	TRANS-1,3-DICHLOROPROPENE
7U	BROMOFORM
13U	METHYL ISOBUTYL KETONE
13U	METHYL BUTYL KETONE
41J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
7U	1,1,2,2-TETRACHLOROETHANE
7U	TOLUENE
7U	CHLOROBENZENE
7U	ETHYL BENZENE
7U	STYRENE
7U	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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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1450 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W749

UG/KG	ANALYTICAL RESULTS
880U	PHENOL
880U	BIS(2-CHLOROETHYL) ETHER
880U	2-CHLOROPHENOL
880U	1,3-DICHLOROBENZENE
880U	1,4-DICHLOROBENZENE
880U	BENZYL ALCOHOL
880U	1,2-DICHLOROBENZENE
880U	2-METHYLPHENOL
880UR	BIS(2-CHLOROISOPROPYL) ETHER
880U	(3-AND/OR 4-)METHYLPHENOL
880U	N-NITROSODI-N-PROPYLAMINE
880U	HEXACHLOROETHANE
880UJ	NITROBENZENE
880U	ISOPHORONE
880UJ	2-NITROPHENOL
880UR	2,4-DIMETHYLPHENOL
4300U	BENZOIC ACID
880U	BIS(2-CHLOROETHOXY) METHANE
880U	2,4-DICHLOROPHENOL
880UR	1,2,4-TRICHLOROBENZENE
880U	NAPHTHALENE
880U	4-CHLOROANILINE
880U	HEXACHLOROBUTADIENE
880U	4-CHLORO-3-METHYLPHENOL
880U	2-METHYLNAPHTHALENE
880U	HEXACHLOROCYCLOPENTADIENE (HCCP)
880U	2,4,6-TRICHLOROPHENOL
4300U	2,4,5-TRICHLOROPHENOL
880UR	2-CHLORONAPHTHALENE
4300U	2-NITROANILINE
880U	DIMETHYL PHTHALATE
880U	ACENAPHTHYLENE
880U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
4300UR	3-NITROANILINE
880UJ	ACENAPHTHENE
4300U	2,4-DINITROPHENOL
4300U	4-NITROPHENOL
880U	DIBENZOFURAN
880U	2,4-DINITROTOLUENE
880U	DIETHYL PHTHALATE
880U	4-CHLOROPHENYL PHENYL ETHER
880U	FLUORENE
4300U	4-NITROANILINE
4300U	2-METHYL-4,6-DINITROPHENOL
880U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
880U	4-BROMOPHENYL PHENYL ETHER
880U	HEXACHLOROBENZENE (HCB)
4300U	PENTACHLOROPHENOL
880U	PHENANTHRENE
880U	ANTHRACENE
880U	DI-N-BUTYLPHTHALATE
880U	FLUORANTHENE
880U	PYRENE
880U	BENZYL BUTYL PHTHALATE
1800U	3,3'-DICHLOROBENZIDINE
880U	BENZO(A)ANTHRACENE
880U	CHRYSENE
880U	BIS(2-ETHYLHEXYL) PHTHALATE
880U	DI-N-OCTYLPHTHALATE
880U	BENZO(B AND/OR K)FLUORANTHENE
880U	BENZO-A-PYRENE
880U	INDENO (1,2,3-CD) PYRENE
880U	DIBENZO(A,H)ANTHRACENE
880U	BENZO(GHI)PERYLENE
25	PERCENT MOISTURE

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. 11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SS-05 COLLECTION START: 09/19/90 1450 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W749 MD NO: W749 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

20000J 12 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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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-05
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1450 STOP: 00/00/00
D. NUMBER: W749

UG/KG	ANALYTICAL RESULTS
11U	ALPHA-BHC
11U	BETA-BHC
11U	DELTA-BHC
11U	GAMMA-BHC (LINDANE)
11U	HEPTACHLOR
11U	ALDRIN
11U	HEPTACHLOR EPOXIDE
11U	ENDOSULFAN I (ALPHA)
21U	DIELDRIN
21U	4,4'-DDE (P,P'-DDE)
21U	ENDRIN
21U	ENDOSULFAN II (BETA)
21U	4,4'-DDD (P,P'-DDD)
21U	ENDOSULFAN SULFATE
21U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
110U	METHOXYCHLOR
21U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
110U	GAMMA-CHLORDANE /2
110U	ALPHA-CHLORDANE /2
210U	TOXAPHENE
110U	PCB-1016 (AROCLOR 1016)
110U	PCB-1221 (AROCLOR 1221)
110U	PCB-1232 (AROCLOR 1232)
110U	PCB-1242 (AROCLOR 1242)
110U	PCB-1248 (AROCLOR 1248)
210U	PCB-1254 (AROCLOR 1254)
210U	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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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1020 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W738

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
10U	METHYLENE CHLORIDE
50U	ACETONE
6U	CARBON DISULFIDE
6U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
6U	1,1-DICHLOROETHANE
6U	1,2-DICHLOROETHENE (TOTAL)
6U	CHLOROFORM
6U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
6U	1,1,1-TRICHLOROETHANE
6U	CARBON TETRACHLORIDE
12U	VINYL ACETATE
6U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
6U	1,2-DICHLOROPROPANE
6U	CIS-1,3-DICHLOROPROPENE
6U	TRICHLOROETHENE(TRICHLOROETHYLENE)
6U	DIBROMOCHLOROMETHANE
6U	1,1,2-TRICHLOROETHANE
6U	BENZENE
6U	TRANS-1,3-DICHLOROPROPENE
6U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
6U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
6U	1,1,2,2-TETRACHLOROETHANE
6U	TOLUENE
6U	CHLOROBENZENE
6U	ETHYL BENZENE
6U	STYRENE
6U	TOTAL XYLENES
17	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1020 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W738

UG/KG	ANALYTICAL RESULTS
790U	PHENOL
790U	BIS(2-CHLOROETHYL) ETHER
790U	2-CHLOROPHENOL
790U	1,3-DICHLOROBENZENE
790U	1,4-DICHLOROBENZENE
790U	BENZYL ALCOHOL
790U	1,2-DICHLOROBENZENE
790U	2-METHYLPHENOL
790UR	BIS(2-CHLOROISOPROPYL) ETHER
790U	(3-AND/OR 4-)METHYLPHENOL
790U	N-NITROSODI-N-PROPYLAMINE
790U	HEXACHLOROETHANE
790UJ	NITROBENZENE
790U	ISOPHORONE
790UJ	2-NITROPHENOL
790UR	2,4-DIMETHYLPHENOL
3800U	BENZOIC ACID
790U	BIS(2-CHLOROETHOXY) METHANE
790U	2,4-DICHLOROPHENOL
790UR	1,2,4-TRICHLOROBENZENE
790U	NAPHTHALENE
790U	4-CHLOROANILINE
790U	HEXACHLOROBUTADIENE
790U	4-CHLORO-3-METHYLPHENOL
790U	2-METHYLNAPHTHALENE
790U	HEXACHLOROCYCLOPENTADIENE (HCCP)
790U	2,4,6-TRICHLOROPHENOL
3800U	2,4,5-TRICHLOROPHENOL
790UR	2-CHLORONAPHTHALENE
3800U	2-NITROANILINE
790U	DIMETHYL PHTHALATE
790U	ACENAPHTHYLENE
790U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
3800UR	3-NITROANILINE
790UJ	ACENAPHTHENE
3800U	2,4-DINITROPHENOL
3800U	4-NITROPHENOL
790U	DIBENZOFURAN
790U	2,4-DINITROTOLUENE
790U	DIETHYL PHTHALATE
790U	4-CHLOROPHENYL PHENYL ETHER
790U	FLUORENE
3800U	4-NITROANILINE
3800U	2-METHYL-4,6-DINITROPHENOL
790U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
790U	4-BROMOPHENYL PHENYL ETHER
790U	HEXACHLOROBENZENE (HCB)
3800U	PENTACHLOROPHENOL
790U	PHENANTHRENE
790U	ANTHRACENE
790U	DI-N-BUTYLPHTHALATE
790U	FLUORANTHENE
790U	PYRENE
790U	BENZYL BUTYL PHTHALATE
1600U	3,3'-DICHLOROBENZIDINE
790U	BENZO(A)ANTHRACENE
790U	CHRYSENE
790U	BIS(2-ETHYLHEXYL) PHTHALATE
790U	DI-N-OCTYLPHTHALATE
790U	BENZO(B AND/OR K)FLUORANTHENE
790U	BENZO-A-PYRENE
790U	INDENO (1,2,3-CD) PYRENE
790U	DIBENZO(A,H)ANTHRACENE
790U	BENZO(GHI)PERYLENE
17	PERCENT MOISTURE

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.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SB-01 COLLECTION START: 09/19/90 1020 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W738 MD NO: W738

ANALYTICAL RESULTS UG/KG

400J 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
*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 11/15/90

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**   PROJECT NO. 90-803    SAMPLE NO. 50591  SAMPLE TYPE: SEDIM      PROG ELEM: NSF   COLLECTED BY: L WARD                                **
**   SOURCE: BERKELEY CO LF                                         CITY: OAKLEY                ST: SC                                  **
**   STATION ID: SB-01                                              COLLECTION START: 09/19/90  1020   STOP: 00/00/00                   **
**   CASE NUMBER: 14889          SAS NUMBER:                         D. NUMBER: W738                                                    **
**                                                                                                                                          **
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UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
9.7UR	ALPHA-BHC	97UR	METHOXYCHLOR
9.7UR	BETA-BHC	19UR	ENDRIN KETONE
9.7UR	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
9.7UR	GAMMA-BHC (LINDANE)	97UR	GAMMA-CHLORDANE /2
9.7UR	HEPTACHLOR	97UR	ALPHA-CHLORDANE /2
9.7UR	ALDRIN	190UR	TOXAPHENE
9.7UR	HEPTACHLOR EPOXIDE	97UR	PCB-1016 (AROCLOR 1016)
9.7UR	ENDOSULFAN I (ALPHA)	97UR	PCB-1221 (AROCLOR 1221)
19UR	DIELDRIN	97UR	PCB-1232 (AROCLOR 1232)
19UR	4,4'-DDE (P,P'-DDE)	97UR	PCB-1242 (AROCLOR 1242)
19UR	ENDRIN	97UR	PCB-1248 (AROCLOR 1248)
19UR	ENDOSULFAN II (BETA)	190UR	PCB-1254 (AROCLOR 1254)
19UR	4,4'-DDD (P,P'-DDD)	190UR	PCB-1260 (AROCLOR 1260)
19UR	ENDOSULFAN SULFATE	17	PERCENT MOISTURE
19UR	4,4'-DDT (P,P'-DDT)		

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.

11/15/90

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50609 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1815 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W754

UG/KG	ANALYTICAL RESULTS
14U	CHLOROMETHANE
14U	BROMOMETHANE
14U	VINYL CHLORIDE
14U	CHLOROETHANE
20U	METHYLENE CHLORIDE
40U	ACETONE
7U	CARBON DISULFIDE
7U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
7U	1,1-DICHLOROETHANE
7U	1,2-DICHLOROETHENE (TOTAL)
7U	CHLOROFORM
7U	1,2-DICHLOROETHANE
14U	METHYL ETHYL KETONE
7U	1,1,1-TRICHLOROETHANE
7U	CARBON TETRACHLORIDE
14U	VINYL ACETATE
7U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
7U	1,2-DICHLOROPROPANE
7U	CIS-1,3-DICHLOROPROPENE
7U	TRICHLOROETHENE(TRICHLOROETHYLENE)
7U	DIBROMOCHLOROMETHANE
7U	1,1,2-TRICHLOROETHANE
7U	BENZENE
7U	TRANS-1,3-DICHLOROPROPENE
7U	BROMOFORM
14U	METHYL ISOBUTYL KETONE
14U	METHYL BUTYL KETONE
10	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
7U	1,1,2,2-TETRACHLOROETHANE
7	TOLUENE
7U	CHLOROBENZENE
7U	ETHYL BENZENE
7U	STYRENE
7U	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.

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50609 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1815 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W754

UG/KG	ANALYTICAL RESULTS
950U	PHENOL
950U	BIS(2-CHLOROETHYL) ETHER
950U	2-CHLOROPHENOL
950U	1,3-DICHLOROBENZENE
950U	1,4-DICHLOROBENZENE
950U	BENZYL ALCOHOL
950U	1,2-DICHLOROBENZENE
950U	2-METHYLPHENOL
950UR	BIS(2-CHLOROISOPROPYL) ETHER
950U	(3-AND/OR 4-)METHYLPHENOL
950U	N-NITROSODI-N-PROPYLAMINE
950U	HEXACHLOROETHANE
950UJ	NITROBENZENE
950U	ISOPHORONE
950UJ	2-NITROPHENOL
950UR	2,4-DIMETHYLPHENOL
4600U	BENZOIC ACID
950U	BIS(2-CHLOROETHOXY) METHANE
950U	2,4-DICHLOROPHENOL
950UR	1,2,4-TRICHLOROBENZENE
950U	NAPHTHALENE
950U	4-CHLOROANILINE
950U	HEXACHLOROBUTADIENE
950U	4-CHLORO-3-METHYLPHENOL
950U	2-METHYLNAPHTHALENE
950U	HEXACHLOROCYCLOPENTADIENE (HCCP)
950U	2,4,6-TRICHLOROPHENOL
4600U	2,4,5-TRICHLOROPHENOL
950UR	2-CHLORONAPHTHALENE
4600U	2-NITROANILINE
950U	DIMETHYL PHTHALATE
950U	ACENAPHTHYLENE
950U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
4600UR	3-NITROANILINE
950UJ	ACENAPHTHENE
4600U	2,4-DINITROPHENOL
4600U	4-NITROPHENOL
950U	DIBENZOFURAN
950U	2,4-DINITROTOLUENE
950U	DIETHYL PHTHALATE
950U	4-CHLOROPHENYL PHENYL ETHER
950U	FLUORENE
4600U	4-NITROANILINE
4600U	2-METHYL-4,6-DINITROPHENOL
950U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
950U	4-BROMOPHENYL PHENYL ETHER
950U	HEXACHLOROBENZENE (HCB)
4600U	PENTACHLOROPHENOL
950U	PHENANTHRENE
950U	ANTHRACENE
950U	DI-N-BUTYLPHTHALATE
950U	FLUORANTHENE
950U	PYRENE
950U	BENZYL BUTYL PHTHALATE
1900U	3,3'-DICHLOROBENZIDINE
950U	BENZO(A)ANTHRACENE
950U	CHRYSENE
950U	BIS(2-ETHYLHEXYL) PHTHALATE
950U	DI-N-OCTYLPHTHALATE
950U	BENZO(B AND/OR K)FLUORANTHENE
950U	BENZO-A-PYRENE
950U	INDENO (1,2,3-CD) PYRENE
950U	DIBENZO(A,H)ANTHRACENE
950U	BENZO(GHI)PERYLENE
30	PERCENT MOISTURE

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.
11/15/90

PESTICIDES/PCB'S DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50609 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SB-02 COLLECTION START: 09/19/90 1815 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W754 **
** **
*** ***

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
11U	ALPHA-BHC	110U	METHOXYCHLOR
11U	BETA-BHC	23U	ENDRIN KETONE
11U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
11U	GAMMA-BHC (LINDANE)	110U	GAMMA-CHLORDANE /2
11U	HEPTACHLOR	110U	ALPHA-CHLORDANE /2
11U	ALDRIN	230U	TOXAPHENE
11U	HEPTACHLOR EPOXIDE	110U	PCB-1016 (AROCLOR 1016)
11U	ENDOSULFAN I (ALPHA)	110U	PCB-1221 (AROCLOR 1221)
23U	DIELDRIN	110U	PCB-1232 (AROCLOR 1232)
23U	4,4'-DDE (P,P'-DDE)	110U	PCB-1242 (AROCLOR 1242)
23U	ENDRIN	110U	PCB-1248 (AROCLOR 1248)
23U	ENDOSULFAN II (BETA)	230U	PCB-1254 (AROCLOR 1254)
23U	4,4'-DDD (P,P'-DDD)	230U	PCB-1260 (AROCLOR 1260)
23U	ENDOSULFAN SULFATE	30	PERCENT MOISTURE
23U	4,4'-DDT (P,P'-DDT)		

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.

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1520 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W747

UG/KG	ANALYTICAL RESULTS
14U	CHLOROMETHANE
14U	BROMOMETHANE
14U	VINYL CHLORIDE
14U	CHLOROETHANE
20U	METHYLENE CHLORIDE
70U	ACETONE
21	CARBON DISULFIDE
7U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
7U	1,1-DICHLOROETHANE
7U	1,2-DICHLOROETHENE (TOTAL)
7U	CHLOROFORM
7U	1,2-DICHLOROETHANE
30U	METHYL ETHYL KETONE
7U	1,1,1-TRICHLOROETHANE
7U	CARBON TETRACHLORIDE
14U	VINYL ACETATE
7U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
7U	1,2-DICHLOROPROPANE
7U	CIS-1,3-DICHLOROPROPENE
7U	TRICHLOROETHENE(TRICHLOROETHYLENE)
7U	DIBROMOCHLOROMETHANE
7U	1,1,2-TRICHLOROETHANE
7U	BENZENE
7U	TRANS-1,3-DICHLOROPROPENE
7U	BROMOFORM
14U	METHYL ISOBUTYL KETONE
14U	METHYL BUTYL KETONE
8	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
7U	1,1,2,2-TETRACHLOROETHANE
4J	TOLUENE
7U	CHLOROBENZENE
7U	ETHYL BENZENE
7U	STYRENE
7U	TOTAL XYLENES
29	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1520 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W747

UG/KG	ANALYTICAL RESULTS
930U	PHENOL
930U	BIS(2-CHLOROETHYL) ETHER
930U	2-CHLOROPHENOL
930U	1,3-DICHLOROBENZENE
930U	1,4-DICHLOROBENZENE
930U	BENZYL ALCOHOL
930U	1,2-DICHLOROBENZENE
930U	2-METHYLPHENOL
930UR	BIS(2-CHLOROISOPROPYL) ETHER
930U	(3-AND/OR 4-)METHYLPHENOL
930U	N-NITROSODI-N-PROPYLAMINE
930U	HEXACHLOROETHANE
930UJ	NITROBENZENE
930U	ISOPHORONE
930UJ	2-NITROPHENOL
930UR	2,4-DIMETHYLPHENOL
4500U	BENZOIC ACID
930U	BIS(2-CHLOROETHOXY) METHANE
930U	2,4-DICHLOROPHENOL
930UR	1,2,4-TRICHLOROBENZENE
930U	NAPHTHALENE
930U	4-CHLOROANILINE
930U	HEXACHLOROBUTADIENE
930U	4-CHLORO-3-METHYLPHENOL
930U	2-METHYLNAPHTHALENE
930U	HEXACHLOROCYCLOPENTADIENE (HCCP)
930U	2,4,6-TRICHLOROPHENOL
4500U	2,4,5-TRICHLOROPHENOL
930UR	2-CHLORONAPHTHALENE
4500U	2-NITROANILINE
930U	DIMETHYL PHTHALATE
930U	ACENAPHTHYLENE
930U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
4500UR	3-NITROANILINE
930UJ	ACENAPHTHENE
4500U	2,4-DINITROPHENOL
4500U	4-NITROPHENOL
930U	DIBENZOFURAN
930U	2,4-DINITROTOLUENE
930U	DIETHYL PHTHALATE
930U	4-CHLOROPHENYL PHENYL ETHER
930U	FLUORENE
4500U	4-NITROANILINE
4500U	2-METHYL-4,6-DINITROPHENOL
930U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
930U	4-BROMOPHENYL PHENYL ETHER
930U	HEXACHLOROBENZENE (HCB)
4500U	PENTACHLOROPHENOL
930U	PHENANTHRENE
930U	ANTHRACENE
310J	DI-N-BUTYLPHTHALATE
930U	FLUORANTHENE
930U	PYRENE
930U	BENZYL BUTYL PHTHALATE
1900U	3,3'-DICHLOROBENZIDINE
930U	BENZO(A)ANTHRACENE
930U	CHRYSENE
930U	BIS(2-ETHYLHEXYL) PHTHALATE
930U	DI-N-OCTYLPHTHALATE
930U	BENZO(B AND/OR K)FLUORANTHENE
930U	BENZO-A-PYRENE
930U	INDENO (1,2,3-CD) PYRENE
930U	DIBENZO(A,H)ANTHRACENE
930U	BENZO(GHI)PERYLENE
29	PERCENT MOISTURE

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.

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**  PROJECT NO. 90-803   SAMPLE NO. 50600  SAMPLE TYPE: SEDIM     PROG ELEM: NSF   COLLECTED BY: L WARD              **
**  SOURCE: BERKELEY CO LF                                       CITY: OAKLEY                ST: SC                  **
**  STATION ID: SB-04                                            COLLECTION START: 09/19/90  1520   STOP: 00/00/00   **
**  CASE.NO.: 14889          SAS NO.:                            D. NO.: W747               MD NO: W747             **
**                                                                                                                   **
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ANALYTICAL RESULTS UG/KG

7000J   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.

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-04
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1520 STOP: 00/00/00
D. NUMBER: W747

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
11U	ALPHA-BHC	110U	METHOXYCHLOR
11U	BETA-BHC	22U	ENDRIN KETONE
11U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
11U	GAMMA-BHC (LINDANE)	110U	GAMMA-CHLORDANE /2
11U	HEPTACHLOR	110U	ALPHA-CHLORDANE /2
11U	ALDRIN	220U	TOXAPHENE
11U	HEPTACHLOR EPOXIDE	110U	PCB-1016 (AROCLOR 1016)
11U	ENDOSULFAN I (ALPHA)	110U	PCB-1221 (AROCLOR 1221)
22U	DIELDRIN	110U	PCB-1232 (AROCLOR 1232)
22U	4,4'-DDE (P,P'-DDE)	110U	PCB-1242 (AROCLOR 1242)
22U	ENDRIN	110U	PCB-1248 (AROCLOR 1248)
22U	ENDOSULFAN II (BETA)	220U	PCB-1254 (AROCLOR 1254)
22U	4,4'-DDD (P,P'-DDD)	220U	PCB-1260 (AROCLOR 1260)
22U	ENDOSULFAN SULFATE	29	PERCENT MOISTURE
22U	4,4'-DDT (P,P'-DDT)		

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.

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1515 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W750

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
20U	CHLOROMETHANE	10U	1,2-DICHLOROPROPANE
20U	BROMOMETHANE	10U	CIS-1,3-DICHLOROPROPENE
20U	VINYL CHLORIDE	10U	TRICHLOROETHENE(TRICHLOROETHYLENE)
20U	CHLOROETHANE	10U	DIBROMOCHLOROMETHANE
20U	METHYLENE CHLORIDE	10U	1,1,2-TRICHLOROETHANE
20U	ACETONE	10U	BENZENE
10U	CARBON DISULFIDE	10U	TRANS-1,3-DICHLOROPROPENE
10U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	10U	BROMOFORM
10U	1,1-DICHLOROETHANE	20U	METHYL ISOBUTYL KETONE
10U	1,2-DICHLOROETHENE (TOTAL)	20U	METHYL BUTYL KETONE
10U	CHLOROFORM	10U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	1,2-DICHLOROETHANE	10U	1,1,2,2-TETRACHLOROETHANE
20U	METHYL ETHYL KETONE	10U	TOLUENE
10U	1,1,1-TRICHLOROETHANE	21	CHLOROBENZENE
10U	CARBON TETRACHLORIDE	10U	ETHYL BENZENE
20U	VINYL ACETATE	10U	STYRENE
10U	BROMODICHLOROMETHANE	10U	TOTAL XYLENES
		50	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.

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1515 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W750

UG/KG	ANALYTICAL RESULTS
1300U	PHENOL
1300U	BIS(2-CHLOROETHYL) ETHER
1300U	2-CHLOROPHENOL
1300U	1,3-DICHLOROBENZENE
1300U	1,4-DICHLOROBENZENE
1300U	BENZYL ALCOHOL
1300U	1,2-DICHLOROBENZENE
1300U	2-METHYLPHENOL
1300UR	BIS(2-CHLOROISOPROPYL) ETHER
1300U	(3-AND/OR 4-)METHYLPHENOL
1300U	N-NITROSODI-N-PROPYLAMINE
1300U	HEXACHLOROETHANE
1300UJ	NITROBENZENE
1300U	ISOPHORONE
1300UJ	2-NITROPHENOL
1300UR	2,4-DIMETHYLPHENOL
6500U	BENZOIC ACID
1300U	BIS(2-CHLOROETHOXY) METHANE
1300U	2,4-DICHLOROPHENOL
1300UR	1,2,4-TRICHLOROBENZENE
1300U	NAPHTHALENE
1300U	4-CHLOROANILINE
1300U	HEXACHLOROBUTADIENE
1300U	4-CHLORO-3-METHYLPHENOL
1300U	2-METHYLNAPHTHALENE
1300U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1300U	2,4,6-TRICHLOROPHENOL
6500U	2,4,5-TRICHLOROPHENOL
1300UR	2-CHLORONAPHTHALENE
6500U	2-NITROANILINE
1300U	DIMETHYL PHTHALATE
1300U	ACENAPHTHYLENE
1300U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
6500UR	3-NITROANILINE
1300UJ	ACENAPHTHENE
6500U	2,4-DINITROPHENOL
6500U	4-NITROPHENOL
1300U	DIBENZOFURAN
1300U	2,4-DINITROTOLUENE
1300U	DIETHYL PHTHALATE
1300U	4-CHLOROPHENYL PHENYL ETHER
1300U	FLUORENE
6500U	4-NITROANILINE
6500U	2-METHYL-4,6-DINITROPHENOL
1300U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1300U	4-BROMOPHENYL PHENYL ETHER
1300U	HEXACHLOROBENZENE (HCB)
6500U	PENTACHLOROPHENOL
1300U	PHENANTHRENE
1300U	ANTHRACENE
1300U	DI-N-BUTYLPHTHALATE
1300U	FLUORANTHENE
1300U	PYRENE
1300U	BENZYL BUTYL PHTHALATE
2700U	3,3'-DICHLOROBENZIDINE
1300U	BENZO(A)ANTHRACENE
1300U	CHRYSENE
1300U	BIS(2-ETHYLHEXYL) PHTHALATE
1300U	DI-N-OCTYLPHTHALATE
1300U	BENZO(B AND/OR K)FLUORANTHENE
1300U	BENZO-A-PYRENE
1300U	INDENO (1,2,3-CD) PYRENE
1300U	DIBENZO(A,H)ANTHRACENE
1300U	BENZO(GHI)PERYLENE
50	PERCENT MOISTURE

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.

11/15/90

PESTICIDES/PCB'S DATA REPORT

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PROJECT NO. 90-803   SAMPLE NO. 50602   SAMPLE TYPE: SEDIM   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: SB-05   COLLECTION START: 09/19/90 1515   STOP: 00/00/00
CASE NUMBER: 14889   SAS NUMBER: D. NUMBER: W750

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
16U	ALPHA-BHC	160U	METHOXYCHLOR
16U	BETA-BHC	32U	ENDRIN KETONE
16U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
16U	GAMMA-BHC (LINDANE)	160U	GAMMA-CHLORDANE /2
16U	HEPTACHLOR	160U	ALPHA-CHLORDANE /2
16U	ALDRIN	320U	TOXAPHENE
16U	HEPTACHLOR EPOXIDE	160U	PCB-1016 (AROCLOR 1016)
16U	ENDOSULFAN I (ALPHA)	160U	PCB-1221 (AROCLOR 1221)
32U	DIELDRIN	160U	PCB-1232 (AROCLOR 1232)
32U	4,4'-DDE (P,P'-DDE)	160U	PCB-1242 (AROCLOR 1242)
32U	ENDRIN	160U	PCB-1248 (AROCLOR 1248)
32U	ENDOSULFAN II (BETA)	320U	PCB-1254 (AROCLOR 1254)
32U	4,4'-DDD (P,P'-DDD)	320U	PCB-1260 (AROCLOR 1260)
32U	ENDOSULFAN SULFATE	50	PERCENT MOISTURE
32U	4,4'-DDT (P,P'-DDT)		

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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50611 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: TB-01S

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 0700 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W736

UG/KG	ANALYTICAL RESULTS
11U	CHLOROMETHANE
11U	BROMOMETHANE
11U	VINYL CHLORIDE
11U	CHLOROETHANE
10U	METHYLENE CHLORIDE
50U	ACETONE
6U	CARBON DISULFIDE
6U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
6U	1,1-DICHLOROETHANE
6U	1,2-DICHLOROETHENE (TOTAL)
6U	CHLOROFORM
6U	1,2-DICHLOROETHANE
11U	METHYL ETHYL KETONE
6U	1,1,1-TRICHLOROETHANE
6U	CARBON TETRACHLORIDE
11U	VINYL ACETATE
6U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
6U	1,2-DICHLOROPROPANE
6U	CIS-1,3-DICHLOROPROPENE
6U	TRICHLOROETHENE(TRICHLOROETHYLENE)
6U	DIBROMOCHLOROMETHANE
6U	1,1,2-TRICHLOROETHANE
6U	BENZENE
6U	TRANS-1,3-DICHLOROPROPENE
6U	BROMOFORM
11U	METHYL ISOBUTYL KETONE
11U	METHYL BUTYL KETONE
6U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
6U	1,1,2,2-TETRACHLOROETHANE
6U	TOLUENE
6U	CHLOROBENZENE
6U	ETHYL BENZENE
6U	STYRENE
6U	TOTAL XYLENES
12	PERCENT MOISTURE

REMARKS

REMARKS

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

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1130 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W744

UG/KG	ANALYTICAL RESULTS
25U	CHLOROMETHANE
25U	BROMOMETHANE
25U	VINYL CHLORIDE
25U	CHLOROETHANE
30U	METHYLENE CHLORIDE
25U	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
25U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
25U	VINYL ACETATE
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
25U	METHYL ISOBUTYL KETONE
25U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
12U	TOLUENE
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
59	PERCENT MOISTURE

REMARKS

REMARKS

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

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1130 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W744

UG/KG	ANALYTICAL RESULTS
1600U	PHENOL
1600U	BIS(2-CHLOROETHYL) ETHER
1600U	2-CHLOROPHENOL
1600U	1,3-DICHLOROBENZENE
1600U	1,4-DICHLOROBENZENE
1600U	BENZYL ALCOHOL
1600U	1,2-DICHLOROBENZENE
1600U	2-METHYLPHENOL
1600UR	BIS(2-CHLOROISOPROPYL) ETHER
1600U	(3-AND/OR 4-)METHYLPHENOL
1600U	N-NITROSODI-N-PROPYLAMINE
1600U	HEXACHLOROETHANE
1600UJ	NITROBENZENE
1600U	ISOPHORONE
1600UJ	2-NITROPHENOL
1600UR	2,4-DIMETHYLPHENOL
7900U	BENZOIC ACID
1600U	BIS(2-CHLOROETHOXY) METHANE
1600U	2,4-DICHLOROPHENOL
1600UR	1,2,4-TRICHLOROBENZENE
1600U	NAPHTHALENE
1600U	4-CHLOROANILINE
1600U	HEXACHLOROBUTADIENE
1600U	4-CHLORO-3-METHYLPHENOL
1600U	2-METHYLNAPHTHALENE
1600U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1600U	2,4,6-TRICHLOROPHENOL
7900U	2,4,5-TRICHLOROPHENOL
1600UR	2-CHLORONAPHTHALENE
7900U	2-NITROANILINE
1600U	DIMETHYL PHTHALATE
1600U	ACENAPHTHYLENE
1600U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
7900UR	3-NITROANILINE
1600UJ	ACENAPHTHENE
7900U	2,4-DINITROPHENOL
7900U	4-NITROPHENOL
1600U	DIBENZOFURAN
1600U	2,4-DINITROTOLUENE
1600U	DIETHYL PHTHALATE
1600U	4-CHLOROPHENYL PHENYL ETHER
1600U	FLUORENE
7900U	4-NITROANILINE
7900U	2-METHYL-4,6-DINITROPHENOL
1600U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1600U	4-BROMOPHENYL PHENYL ETHER
1600U	HEXACHLOROBENZENE (HCB)
7900U	PENTACHLOROPHENOL
1600U	PHENANTHRENE
1600U	ANTHRACENE
1600U	DI-N-BUTYLPHTHALATE
1600U	FLUORANTHENE
1600U	PYRENE
1600U	BENZYL BUTYL PHTHALATE
3200U	3,3'-DICHLOROBENZIDINE
1600U	BENZO(A)ANTHRACENE
1600U	CHRYSENE
1600U	BIS(2-ETHYLHEXYL) PHTHALATE
1600U	DI-N-OCTYLPHTHALATE
1600U	BENZO(B AND/OR K)FLUORANTHENE
1600U	BENZO-A-PYRENE
1600U	INDENO (1,2,3-CD) PYRENE
1600U	DIBENZO(A,H)ANTHRACENE
1600U	BENZO(GHI)PERYLENE
59	PERCENT MOISTURE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50597   SAMPLE TYPE: SEDIM   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: SD-01   COLLECTION START: 09/19/90 1130   STOP: 00/00/00
CASE.NO.: 14889   SAS NO.:   D. NO.: W744   MD NO: W744

ANALYTICAL RESULTS UG/KG

30000J   12 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.   11/15/90

PESTICIDES/PCB'S DATA REPORT

** PROJECT NO. 90-803   SAMPLE NO. 50597   SAMPLE TYPE: SEDIM   PROG ELEM: NSF   COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC **
** STATION ID: SD-01   COLLECTION START: 09/19/90 1130   STOP: 00/00/00 **
** CASE NUMBER: 14889   SAS NUMBER: D. NUMBER: W744 **

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
19U	ALPHA-BHC	190U	METHOXYCHLOR
19U	BETA-BHC	39U	ENDRIN KETONE
19U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
19U	GAMMA-BHC (LINDANE)	190U	GAMMA-CHLORDANE /2
19U	HEPTACHLOR	190U	ALPHA-CHLORDANE /2
19U	ALDRIN	390U	TOXAPHENE
19U	HEPTACHLOR EPOXIDE	190U	PCB-1016 (AROCLOR 1016)
19U	ENDOSULFAN I (ALPHA)	190U	PCB-1221 (AROCLOR 1221)
39U	DIELDRIN	190U	PCB-1232 (AROCLOR 1232)
39U	4,4'-DDE (P,P'-DDE)	190U	PCB-1242 (AROCLOR 1242)
39U	ENDRIN	190U	PCB-1248 (AROCLOR 1248)
39U	ENDOSULFAN II (BETA)	390U	PCB-1254 (AROCLOR 1254)
39U	4,4'-DDD (P,P'-DDD)	390U	PCB-1260 (AROCLOR 1260)
39U	ENDOSULFAN SULFATE	59	PERCENT MOISTURE
39U	4,4'-DDT (P,P'-DDT)		

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 11/1

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1030 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W739

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
15U	CHLOROMETHANE	8U	1,2-DICHLOROPROPANE
15U	BROMOMETHANE	8U	CIS-1,3-DICHLOROPROPENE
15U	VINYL CHLORIDE	8U	TRICHLOROETHENE(TRICHLOROETHYLENE)
15U	CHLOROETHANE	8U	DIBROMOCHLOROMETHANE
20U	METHYLENE CHLORIDE	8U	1,1,2-TRICHLOROETHANE
15U	ACETONE	8U	BENZENE
8U	CARBON DISULFIDE	8U	TRANS-1,3-DICHLOROPROPENE
8U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	8U	BROMOFORM
8U	1,1-DICHLOROETHANE	15U	METHYL ISOBUTYL KETONE
8U	1,2-DICHLOROETHENE (TOTAL)	15U	METHYL BUTYL KETONE
8U	CHLOROFORM	8U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
8U	1,2-DICHLOROETHANE	8U	1,1,2,2-TETRACHLOROETHANE
15U	METHYL ETHYL KETONE	8U	TOLUENE
8U	1,1,1-TRICHLOROETHANE	8U	CHLOROBENZENE
8U	CARBON TETRACHLORIDE	8U	ETHYL BENZENE
15U	VINYL ACETATE	8U	STYRENE
8U	BROMODICHLOROMETHANE	8U	TOTAL XYLENES
		35	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.

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1030 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W739

UG/KG	ANALYTICAL RESULTS
1000U	PHENOL
1000U	BIS(2-CHLOROETHYL) ETHER
1000U	2-CHLOROPHENOL
1000U	1,3-DICHLOROBENZENE
1000U	1,4-DICHLOROBENZENE
1000U	BENZYL ALCOHOL
1000U	1,2-DICHLOROBENZENE
1000U	2-METHYLPHENOL
1000UR	BIS(2-CHLOROISOPROPYL) ETHER
1000U	(3-AND/OR 4-)METHYLPHENOL
1000U	N-NITROSODI-N-PROPYLAMINE
1000U	HEXACHLOROETHANE
1000UJ	NITROBENZENE
1000U	ISOPHORONE
1000UJ	2-NITROPHENOL
1000UR	2,4-DIMETHYLPHENOL
4900U	BENZOIC ACID
1000U	BIS(2-CHLOROETHOXY) METHANE
1000U	2,4-DICHLOROPHENOL
1000UR	1,2,4-TRICHLOROBENZENE
1000U	NAPHTHALENE
1000U	4-CHLOROANILINE
1000U	HEXACHLOROBUTADIENE
1000U	4-CHLORO-3-METHYLPHENOL
1000U	2-METHYLNAPHTHALENE
1000U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1000U	2,4,6-TRICHLOROPHENOL
4900U	2,4,5-TRICHLOROPHENOL
1000UR	2-CHLORONAPHTHALENE
4900U	2-NITROANILINE
1000U	DIMETHYL PHTHALATE
1000U	ACENAPHTHYLENE
1000U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
4900UR	3-NITROANILINE
1000UJ	ACENAPHTHENE
4900U	2,4-DINITROPHENOL
4900U	4-NITROPHENOL
1000U	DIBENZOFURAN
1000U	2,4-DINITROTOLUENE
1000U	DIETHYL PHTHALATE
1000U	4-CHLOROPHENYL PHENYL ETHER
1000U	FLUORENE
4900U	4-NITROANILINE
4900U	2-METHYL-4,6-DINITROPHENOL
1000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1000U	4-BROMOPHENYL PHENYL ETHER
1000U	HEXACHLOROBENZENE (HCB)
4900U	PENTACHLOROPHENOL
1000U	PHENANTHRENE
1000U	ANTHRACENE
1000U	DI-N-BUTYLPHTHALATE
1000U	FLUORANTHENE
1000U	PYRENE
1000U	BENZYL BUTYL PHTHALATE
2000U	3,3'-DICHLOROBENZIDINE
1000U	BENZO(A)ANTHRACENE
1000U	CHRYSENE
1000U	BIS(2-ETHYLHEXYL) PHTHALATE
1000U	DI-N-OCTYLPHTHALATE
1000U	BENZO(B AND/OR K)FLUORANTHENE
1000U	BENZO-A-PYRENE
1000U	INDENO (1,2,3-CD) PYRENE
1000U	DIBENZO(A,H)ANTHRACENE
1000U	BENZO(GHI)PERYLENE
35	PERCENT MOISTURE

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.

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SD-02 COLLECTION START: 09/19/90 1030 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W739 MD NO: W739 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

800J 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. 11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-02
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1030 STOP: 00/00/00
D. NUMBER: W739

UG/KG	ANALYTICAL RESULTS
12U	ALPHA-BHC
12U	BETA-BHC
12U	DELTA-BHC
12U	GAMMA-BHC (LINDANE)
12U	HEPTACHLOR
12U	ALDRIN
12U	HEPTACHLOR EPOXIDE
12U	ENDOSULFAN I (ALPHA)
24U	DIELDRIN
24U	4,4'-DDE (P,P'-DDE)
24U	ENDRIN
24U	ENDOSULFAN II (BETA)
24U	4,4'-DDD (P,P'-DDD)
24U	ENDOSULFAN SULFATE
24U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
120U	METHOXYCHLOR
24U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
120U	GAMMA-CHLORDANE /2
120U	ALPHA-CHLORDANE /2
240U	TOXAPHENE
120U	PCB-1016 (AROCLOR 1016)
120U	PCB-1221 (AROCLOR 1221)
120U	PCB-1232 (AROCLOR 1232)
120U	PCB-1242 (AROCLOR 1242)
120U	PCB-1248 (AROCLOR 1248)
240U	PCB-1254 (AROCLOR 1254)
240U	PCB-1260 (AROCLOR 1260)
35	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1125 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W743

UG/KG	ANALYTICAL RESULTS
19U	CHLOROMETHANE
19U	BROMOMETHANE
19U	VINYL CHLORIDE
19U	CHLOROETHANE
20U	METHYLENE CHLORIDE
19U	ACETONE
9U	CARBON DISULFIDE
9U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
9U	1,1-DICHLOROETHANE
9U	1,2-DICHLOROETHENE (TOTAL)
9U	CHLOROFORM
9U	1,2-DICHLOROETHANE
19U	METHYL ETHYL KETONE
9U	1,1,1-TRICHLOROETHANE
9U	CARBON TETRACHLORIDE
19U	VINYL ACETATE
9U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
9U	1,2-DICHLOROPROPANE
9U	CIS-1,3-DICHLOROPROPENE
9U	TRICHLOROETHENE(TRICHLOROETHYLENE)
9U	DIBROMOCHLOROMETHANE
9U	1,1,2-TRICHLOROETHANE
9U	BENZENE
9U	TRANS-1,3-DICHLOROPROPENE
9U	BROMOFORM
19U	METHYL ISOBUTYL KETONE
19U	METHYL BUTYL KETONE
9U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
9U	1,1,2,2-TETRACHLOROETHANE
6J	TOLUENE
9U	CHLOROBENZENE
9U	ETHYL BENZENE
9U	STYRENE
9U	TOTAL XYLENES
46	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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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1125 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W743

UG/KG	ANALYTICAL RESULTS
1200U	PHENOL
1200U	BIS(2-CHLOROETHYL) ETHER
1200U	2-CHLOROPHENOL
1200U	1,3-DICHLOROBENZENE
1200U	1,4-DICHLOROBENZENE
1200U	BENZYL ALCOHOL
1200U	1,2-DICHLOROBENZENE
1200U	2-METHYLPHENOL
1200UR	BIS(2-CHLOROISOPROPYL) ETHER
1200U	(3-AND/OR 4-)METHYLPHENOL
1200U	N-NITROSODI-N-PROPYLAMINE
1200U	HEXACHLOROETHANE
1200UJ	NITROBENZENE
1200U	ISOPHORONE
1200UJ	2-NITROPHENOL
1200UR	2,4-DIMETHYLPHENOL
5900U	BENZOIC ACID
1200U	BIS(2-CHLOROETHOXY) METHANE
1200U	2,4-DICHLOROPHENOL
1200UR	1,2,4-TRICHLOROBENZENE
1200U	NAPHTHALENE
1200U	4-CHLOROANILINE
1200U	HEXACHLOROBUTADIENE
1200U	4-CHLORO-3-METHYLPHENOL
1200U	2-METHYLNAPHTHALENE
1200U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1200U	2,4,6-TRICHLOROPHENOL
5900U	2,4,5-TRICHLOROPHENOL
1200UR	2-CHLORONAPHTHALENE
5900U	2-NITROANILINE
1200U	DIMETHYL PHTHALATE
1200U	ACENAPHTHYLENE
1200U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
5900UR	3-NITROANILINE
1200UJ	ACENAPHTHENE
5900U	2,4-DINITROPHENOL
5900U	4-NITROPHENOL
1200U	DIBENZOFURAN
1200U	2,4-DINITROTOLUENE
1200U	DIETHYL PHTHALATE
1200U	4-CHLOROPHENYL PHENYL ETHER
1200U	FLUORENE
5900U	4-NITROANILINE
5900U	2-METHYL-4,6-DINITROPHENOL
1200U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1200U	4-BROMOPHENYL PHENYL ETHER
1200U	HEXACHLOROBENZENE (HCB)
5900U	PENTACHLOROPHENOL
1200U	PHENANTHRENE
1200U	ANTHRACENE
1200U	DI-N-BUTYLPHTHALATE
1200U	FLUORANTHENE
1200U	PYRENE
1200U	BENZYL BUTYL PHTHALATE
2500U	3,3'-DICHLOROBENZIDINE
1200U	BENZO(A)ANTHRACENE
1200U	CHRYSENE
1200U	BIS(2-ETHYLHEXYL) PHTHALATE
1200U	DI-N-OCTYLPHTHALATE
1200U	BENZO(B AND/OR K)FLUORANTHENE
1200U	BENZO-A-PYRENE
1200U	INDENO (1,2,3-CD) PYRENE
1200U	DIBENZO(A,H)ANTHRACENE
1200U	BENZO(GHI)PERYLENE
46	PERCENT MOISTURE

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.

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 90-803   SAMPLE NO. 50596  SAMPLE TYPE: SEDIM      PROG ELEM: NSF   COLLECTED BY: L WARD                 **
**   SOURCE: BERKELEY CO LF                                         CITY: OAKLEY                ST: SC                    **
**   STATION ID: SD-04                                              COLLECTION START: 09/19/90  1125   STOP: 00/00/00     **
**   CASE.NO.: 14889          SAS NO.:                              D. NO.: W743                MD NO: W743               **
**                                                                                                                        **
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ANALYTICAL RESULTS UG/KG

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

11/15/90

PESTICIDES/PCB'S DATA REPORT

*** ***

** PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SD-04 COLLECTION START: 09/19/90 1125 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W743 **

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UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
15U	ALPHA-BHC	150U	METHOXYCHLOR
15U	BETA-BHC	30U	ENDRIN KETONE
15U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
15U	GAMMA-BHC (LINDANE)	150U	GAMMA-CHLORDANE /2
15U	HEPTACHLOR	150U	ALPHA-CHLORDANE /2
15U	ALDRIN	300U	TOXAPHENE
15U	HEPTACHLOR EPOXIDE	150U	PCB-1016 (AROCLOR 1016)
15U	ENDOSULFAN I (ALPHA)	150U	PCB-1221 (AROCLOR 1221)
30U	DIELDRIN	150U	PCB-1232 (AROCLOR 1232)
30U	4,4'-DDE (P,P'-DDE)	150U	PCB-1242 (AROCLOR 1242)
30U	ENDRIN	150U	PCB-1248 (AROCLOR 1248)
30U	ENDOSULFAN II (BETA)	300U	PCB-1254 (AROCLOR 1254)
30U	4,4'-DDD (P,P'-DDD)	300U	PCB-1260 (AROCLOR 1260)
30U	ENDOSULFAN SULFATE	46	PERCENT MOISTURE
30U	4,4'-DDT (P,P'-DDT)		

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

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1050 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W740

UG/KG	ANALYTICAL RESULTS
11U	CHLOROMETHANE
11U	BROMOMETHANE
11U	VINYL CHLORIDE
11U	CHLOROETHANE
20U	METHYLENE CHLORIDE
11U	ACETONE
5U	CARBON DISULFIDE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
5U	1,1-DICHLOROETHANE
5U	1,2-DICHLOROETHENE (TOTAL)
5U	CHLOROFORM
5U	1,2-DICHLOROETHANE
11U	METHYL ETHYL KETONE
5U	1,1,1-TRICHLOROETHANE
5U	CARBON TETRACHLORIDE
11U	VINYL ACETATE
5U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
5U	1,2-DICHLOROPROPANE
5U	CIS-1,3-DICHLOROPROPENE
5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5U	DIBROMOCHLOROMETHANE
5U	1,1,2-TRICHLOROETHANE
5U	BENZENE
5U	TRANS-1,3-DICHLOROPROPENE
5U	BROMOFORM
11U	METHYL ISOBUTYL KETONE
11U	METHYL BUTYL KETONE
26	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,1,2,2-TETRACHLOROETHANE
5U	TOLUENE
5U	CHLOROBENZENE
5U	ETHYL BENZENE
5U	STYRENE
5U	TOTAL XYLENES
7	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1050 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W740

UG/KG	ANALYTICAL RESULTS
710UJ	PHENOL
710UJ	BIS(2-CHLOROETHYL) ETHER
710UJ	2-CHLOROPHENOL
710UJ	1,3-DICHLOROBENZENE
710UJ	1,4-DICHLOROBENZENE
710UJ	BENZYL ALCOHOL
710UJ	1,2-DICHLOROBENZENE
710UJ	2-METHYLPHENOL
710UR	BIS(2-CHLOROISOPROPYL) ETHER
710UJ	(3-AND/OR 4-)METHYLPHENOL
710UJ	N-NITROSODI-N-PROPYLAMINE
710UJ	HEXACHLOROETHANE
710UJ	NITROBENZENE
710UJ	ISOPHORONE
710UJ	2-NITROPHENOL
710UR	2,4-DIMETHYLPHENOL
3400UJ	BENZOIC ACID
710UJ	BIS(2-CHLOROETHOXY) METHANE
710UJ	2,4-DICHLOROPHENOL
710UR	1,2,4-TRICHLOROBENZENE
710UJ	NAPHTHALENE
710UJ	4-CHLOROANILINE
710UJ	HEXACHLOROBUTADIENE
710UJ	4-CHLORO-3-METHYLPHENOL
710UJ	2-METHYLNAPHTHALENE
710UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)
710UJ	2,4,6-TRICHLOROPHENOL
3400UJ	2,4,5-TRICHLOROPHENOL
710UR	2-CHLORONAPHTHALENE
3400UJ	2-NITROANILINE
710UJ	DIMETHYL PHTHALATE
710UJ	ACENAPHTHYLENE
710UJ	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
3400UR	3-NITROANILINE
710UJ	ACENAPHTHENE
3400UJ	2,4-DINITROPHENOL
3400UJ	4-NITROPHENOL
710UJ	DIBENZOFURAN
710UJ	2,4-DINITROTOLUENE
710UJ	DIETHYL PHTHALATE
710UJ	4-CHLOROPHENYL PHENYL ETHER
710UJ	FLUORENE
3400UJ	4-NITROANILINE
3400UJ	2-METHYL-4,6-DINITROPHENOL
710UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
710UJ	4-BROMOPHENYL PHENYL ETHER
710UJ	HEXACHLOROBENZENE (HCB)
3400UJ	PENTACHLOROPHENOL
710UJ	PHENANTHRENE
710UJ	ANTHRACENE
710UJ	DI-N-BUTYLPHTHALATE
710UJ	FLUORANTHENE
710UJ	PYRENE
710UJ	BENZYL BUTYL PHTHALATE
1400UJ	3,3'-DICHLOROBENZIDINE
710UJ	BENZO(A)ANTHRACENE
710UJ	CHRYSENE
710UJ	BIS(2-ETHYLHEXYL) PHTHALATE
710UJ	DI-N-OCTYLPHTHALATE
710UJ	BENZO(B AND/OR K)FLUORANTHENE
710UJ	BENZO-A-PYRENE
710UJ	INDENO (1,2,3-CD) PYRENE
710UJ	DIBENZO(A,H)ANTHRACENE
710UJ	BENZO(GHI)PERYLENE
7	PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

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. 11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SD-05 COLLECTION START: 09/19/90 1050 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W740 MD NO: W740 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

6000J 5 UNIDENTIFIED COMPOUNDS

REMARKS ***REMARKS***
EXCESSIVE HOLDING TIME

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.

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SD-05 COLLECTION START: 09/19/90 1050 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W740

UG/KG	ANALYTICAL RESULTS
8.5U	ALPHA-BHC
8.5U	BETA-BHC
8.5U	DELTA-BHC
8.5U	GAMMA-BHC (LINDANE)
8.5U	HEPTACHLOR
8.5U	ALDRIN
8.5U	HEPTACHLOR EPOXIDE
8.5U	ENDOSULFAN I (ALPHA)
17U	DIELDRIN
17U	4,4'-DDE (P,P'-DDE)
17U	ENDRIN
17U	ENDOSULFAN II (BETA)
17U	4,4'-DDD (P,P'-DDD)
17U	ENDOSULFAN SULFATE
17U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
85U	METHOXYCHLOR
17U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
85U	GAMMA-CHLORDANE /2
85U	ALPHA-CHLORDANE /2
170U	TOXAPHENE
85U	PCB-1016 (AROCLOR 1016)
85U	PCB-1221 (AROCLOR 1221)
85U	PCB-1232 (AROCLOR 1232)
85U	PCB-1242 (AROCLOR 1242)
85U	PCB-1248 (AROCLOR 1248)
170U	PCB-1254 (AROCLOR 1254)
170U	PCB-1260 (AROCLOR 1260)
7	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.

11/15/90

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-06

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1110 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W742

UG/KG	ANALYTICAL RESULTS
15U	CHLOROMETHANE
15U	BROMOMETHANE
15U	VINYL CHLORIDE
15U	CHLOROETHANE
20U	METHYLENE CHLORIDE
15U	ACETONE
8U	CARBON DISULFIDE
8U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
8U	1,1-DICHLOROETHANE
8U	1,2-DICHLOROETHENE (TOTAL)
8U	CHLOROFORM
8U	1,2-DICHLOROETHANE
15U	METHYL ETHYL KETONE
8U	1,1,1-TRICHLOROETHANE
8U	CARBON TETRACHLORIDE
15U	VINYL ACETATE
8U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
8U	1,2-DICHLOROPROPANE
8U	CIS-1,3-DICHLOROPROPENE
8U	TRICHLOROETHENE(TRICHLOROETHYLENE)
8U	DIBROMOCHLOROMETHANE
8U	1,1,2-TRICHLOROETHANE
8U	BENZENE
8U	TRANS-1,3-DICHLOROPROPENE
8U	BROMOFORM
15U	METHYL ISOBUTYL KETONE
15U	METHYL BUTYL KETONE
8U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
8U	1,1,2,2-TETRACHLOROETHANE
8U	TOLUENE
8U	CHLOROBENZENE
8U	ETHYL BENZENE
8U	STYRENE
8U	TOTAL XYLENES
35	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-06

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1110 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W742

UG/KG	ANALYTICAL RESULTS
1000U	PHENOL
1000U	BIS(2-CHLOROETHYL) ETHER
1000U	2-CHLOROPHENOL
1000U	1,3-DICHLOROBENZENE
1000U	1,4-DICHLOROBENZENE
1000U	BENZYL ALCOHOL
1000U	1,2-DICHLOROBENZENE
1000U	2-METHYLPHENOL
1000UR	BIS(2-CHLOROISOPROPYL) ETHER
1000U	(3-AND/OR 4-)METHYLPHENOL
1000U	N-NITROSODI-N-PROPYLAMINE
1000U	HEXACHLOROETHANE
1000UJ	NITROBENZENE
1000U	ISOPHORONE
1000UJ	2-NITROPHENOL
1000UR	2,4-DIMETHYLPHENOL
4900U	BENZOIC ACID
1000U	BIS(2-CHLOROETHOXY) METHANE
1000U	2,4-DICHLOROPHENOL
1000UR	1,2,4-TRICHLOROBENZENE
1000U	NAPHTHALENE
1000U	4-CHLOROANILINE
1000U	HEXACHLOROBUTADIENE
1000U	4-CHLORO-3-METHYLPHENOL
1000U	2-METHYLNAPHTHALENE
1000U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1000U	2,4,6-TRICHLOROPHENOL
4900U	2,4,5-TRICHLOROPHENOL
1000UR	2-CHLORONAPHTHALENE
4900U	2-NITROANILINE
1000U	DIMETHYL PHTHALATE
1000U	ACENAPHTHYLENE
1000U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
4900UR	3-NITROANILINE
1000UJ	ACENAPHTHENE
4900U	2,4-DINITROPHENOL
4900U	4-NITROPHENOL
1000U	DIBENZOFURAN
1000U	2,4-DINITROTOLUENE
1000U	DIETHYL PHTHALATE
1000U	4-CHLOROPHENYL PHENYL ETHER
1000U	FLUORENE
4900U	4-NITROANILINE
4900U	2-METHYL-4,6-DINITROPHENOL
1000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1000U	4-BROMOPHENYL PHENYL ETHER
1000U	HEXACHLOROBENZENE (HCB)
4900U	PENTACHLOROPHENOL
1000U	PHENANTHRENE
1000U	ANTHRACENE
1000U	DI-N-BUTYLPHTHALATE
1000U	FLUORANTHENE
1000U	PYRENE
1000U	BENZYL BUTYL PHTHALATE
2000U	3,3'-DICHLOROBENZIDINE
1000U	BENZO(A)ANTHRACENE
1000U	CHRYSENE
1000U	BIS(2-ETHYLHEXYL) PHTHALATE
1000U	DI-N-OCTYLPHTHALATE
1000U	BENZO(B AND/OR K)FLUORANTHENE
1000U	BENZO-A-PYRENE
1000U	INDENO (1,2,3-CD) PYRENE
1000U	DIBENZO(A,H)ANTHRACENE
1000U	BENZO(GHI)PERYLENE
35	PERCENT MOISTURE

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.

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SD-06 COLLECTION START: 09/19/90 1110 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W742 MD NO: W742 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

20000J 10 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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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50595   SAMPLE TYPE: SEDIM   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: SD-06   COLLECTION START: 09/19/90 1110   STOP: 00/00/00
CASE NUMBER: 14889   SAS NUMBER: D. NUMBER: W742

UG/KG	ANALYTICAL RESULTS
12U	ALPHA-BHC
12U	BETA-BHC
12U	DELTA-BHC
12U	GAMMA-BHC (LINDANE)
12U	HEPTACHLOR
12U	ALDRIN
12U	HEPTACHLOR EPOXIDE
12U	ENDOSULFAN I (ALPHA)
25U	DIELDRIN
25U	4,4'-DDE (P,P'-DDE)
25U	ENDRIN
25U	ENDOSULFAN II (BETA)
25U	4,4'-DDD (P,P'-DDD)
25U	ENDOSULFAN SULFATE
25U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
120U	METHOXYCHLOR
25U	ENDRIN KETONE
---	CHLORDANE (TECH. MIXTURE) /1
120U	GAMMA-CHLORDANE /2
120U	ALPHA-CHLORDANE /2
250U	TOXAPHENE
120U	PCB-1016 (AROCLOR 1016)
120U	PCB-1221 (AROCLOR 1221)
120U	PCB-1232 (AROCLOR 1232)
120U	PCB-1242 (AROCLOR 1242)
120U	PCB-1248 (AROCLOR 1248)
250U	PCB-1254 (AROCLOR 1254)
250U	PCB-1260 (AROCLOR 1260)
35	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.

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-01 COLLECTION START: 09/19/90 1220 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W745

UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE
10U	BROMOMETHANE
10U	VINYL CHLORIDE
10U	CHLOROETHANE
5U	METHYLENE CHLORIDE
10U	ACETONE
5U	CARBON DISULFIDE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
5U	1,1-DICHLOROETHANE
5U	1,2-DICHLOROETHENE (TOTAL)
5U	CHLOROFORM
5U	1,2-DICHLOROETHANE
10UR	METHYL ETHYL KETONE
5U	1,1,1-TRICHLOROETHANE
5U	CARBON TETRACHLORIDE
10U	VINYL ACETATE
5U	BROMODICHLOROMETHANE

UG/L	ANALYTICAL RESULTS
5U	1,2-DICHLOROPROPANE
5U	CIS-1,3-DICHLOROPROPENE
5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5U	DIBROMOCHLOROMETHANE
5U	1,1,2-TRICHLOROETHANE
5U	BENZENE
5U	TRANS-1,3-DICHLOROPROPENE
5U	BROMOFORM
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
5U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,1,2,2-TETRACHLOROETHANE
5U	TOLUENE
5U	CHLOROBENZENE
5U	ETHYL BENZENE
5U	STYRENE
5U	TOTAL XYLENES

REMARKS

REMARKS

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

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA
SOURCE: BERKELEY CO LF
STATION ID: PW-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1220 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W745

UG/L	ANALYTICAL RESULTS
10U	PHENOL
10U	BIS(2-CHLOROETHYL) ETHER
10U	2-CHLOROPHENOL
10U	1,3-DICHLOROBENZENE
10U	1,4-DICHLOROBENZENE
10U	BENZYL ALCOHOL
10U	1,2-DICHLOROBENZENE
10U	2-METHYLPHENOL
10U	BIS(2-CHLOROISOPROPYL) ETHER
10U	(3-AND/OR 4-)METHYLPHENOL
10U	N-NITROSODI-N-PROPYLAMINE
10U	HEXACHLOROETHANE
10U	NITROBENZENE
10U	ISOPHORONE
10U	2-NITROPHENOL
10U	2,4-DIMETHYLPHENOL
50U	BENZOIC ACID
10U	BIS(2-CHLOROETHOXY) METHANE
10U	2,4-DICHLOROPHENOL
10U	1,2,4-TRICHLOROBENZENE
10U	NAPHTHALENE
10U	4-CHLOROANILINE
10U	HEXACHLOROBUTADIENE
10U	4-CHLORO-3-METHYLPHENOL
10U	2-METHYLNAPHTHALENE
10U	HEXACHLOROCYCLOPENTADIENE (HCCP)
10U	2,4,6-TRICHLOROPHENOL
50U	2,4,5-TRICHLOROPHENOL
10U	2-CHLORONAPHTHALENE
50U	2-NITROANILINE
10U	DIMETHYL PHTHALATE
10U	ACENAPHTHYLENE
10U	2,6-DINITROTOLUENE

UG/L	ANALYTICAL RESULTS
50UR	3-NITROANILINE
10U	ACENAPHTHENE
50U	2,4-DINITROPHENOL
50U	4-NITROPHENOL
10U	DIBENZOFURAN
10U	2,4-DINITROTOLUENE
10U	DIETHYL PHTHALATE
10U	4-CHLOROPHENYL PHENYL ETHER
10U	FLUORENE
50U	4-NITROANILINE
50U	2-METHYL-4,6-DINITROPHENOL
10U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	4-BROMOPHENYL PHENYL ETHER
10U	HEXACHLOROBENZENE (HCB)
50U	PENTACHLOROPHENOL
10U	PHENANTHRENE
10U	ANTHRACENE
10UR	DI-N-BUTYLPHTHALATE
10U	FLUORANTHENE
10U	PYRENE
10U	BENZYL BUTYL PHTHALATE
20U	3,3'-DICHLOROBENZIDINE
10U	BENZO(A)ANTHRACENE
10U	CHRYSENE
10U	BIS(2-ETHYLHEXYL) PHTHALATE
10U	DI-N-OCTYLPHTHALATE
10U	BENZO(B AND/OR K)FLUORANTHENE
10U	BENZO-A-PYRENE
10U	INDENO (1,2,3-CD) PYRENE
10U	DIBENZO(A,H)ANTHRACENE
10U	BENZO(GHI)PERYLENE

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.

11/15/90

PESTICIDES/PCB'S DATA REPORT

*** ***

** PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: PW-01 COLLECTION START: 09/19/90 1220 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W745 **
** **

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UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
0.05U	ALPHA-BHC	0.50U	METHOXYCHLOR
0.05U	BETA-BHC	0.10U	ENDRIN KETONE
0.05U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
0.05U	GAMMA-BHC (LINDANE)	0.50U	GAMMA-CHLORDANE /2
0.05U	HEPTACHLOR	0.50U	ALPHA-CHLORDANE /2
0.05U	ALDRIN	1.0U	TOXAPHENE
0.05U	HEPTACHLOR EPOXIDE	0.50U	PCB-1016 (AROCLOR 1016)
0.05U	ENDOSULFAN I (ALPHA)	0.50U	PCB-1221 (AROCLOR 1221)
0.10U	DIELDRIN	0.50U	PCB-1232 (AROCLOR 1232)
0.10U	4,4'-DDE (P,P'-DDE)	0.50U	PCB-1242 (AROCLOR 1242)
0.10U	ENDRIN	0.50U	PCB-1248 (AROCLOR 1248)
0.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1254 (AROCLOR 1254)
0.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1260 (AROCLOR 1260)
0.10U	ENDOSULFAN SULFATE		
0.10U	4,4'-DDT (P,P'-DDT)		

REMARKS

REMARKS

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

PURGEABLE ORGANICS DATA REPORT 11/15

PROJECT NO. 90-803 SAMPLE NO. 50594 SAMPLE TYPE: GROUNDWA
SOURCE: BERKELEY CO LF
STATION ID: TW-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1110 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W741

UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE
10U	BROMOMETHANE
10U	VINYL CHLORIDE
10U	CHLOROETHANE
5U	METHYLENE CHLORIDE
10U	ACETONE
5U	CARBON DISULFIDE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
5U	1,1-DICHLOROETHANE
5U	1,2-DICHLOROETHENE (TOTAL)
5U	CHLOROFORM
5U	1,2-DICHLOROETHANE
10UR	METHYL ETHYL KETONE
5U	1,1,1-TRICHLOROETHANE
5U	CARBON TETRACHLORIDE
10U	VINYL ACETATE
5U	BROMODICHLOROMETHANE

UG/L	ANALYTICAL RESULTS
5U	1,2-DICHLOROPROPANE
5U	CIS-1,3-DICHLOROPROPENE
5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5U	DIBROMOCHLOROMETHANE
5U	1,1,2-TRICHLOROETHANE
5U	BENZENE
5U	TRANS-1,3-DICHLOROPROPENE
5U	BROMOFORM
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
5U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,1,2,2-TETRACHLOROETHANE
5U	TOLUENE
5U	CHLOROBENZENE
5U	ETHYL BENZENE
5U	STYRENE
5U	TOTAL XYLENES

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.

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50594 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-01 COLLECTION START: 09/19/90 1110 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W741

UG/L	ANALYTICAL RESULTS
10U	PHENOL
10U	BIS(2-CHLOROETHYL) ETHER
10U	2-CHLOROPHENOL
10U	1,3-DICHLOROBENZENE
10U	1,4-DICHLOROBENZENE
10U	BENZYL ALCOHOL
10U	1,2-DICHLOROBENZENE
10U	2-METHYLPHENOL
10U	BIS(2-CHLOROISOPROPYL) ETHER
10U	(3-AND/OR 4-)METHYLPHENOL
10U	N-NITROSODI-N-PROPYLAMINE
10U	HEXACHLOROETHANE
10U	NITROBENZENE
10U	ISOPHORONE
10U	2-NITROPHENOL
10U	2,4-DIMETHYLPHENOL
50U	BENZOIC ACID
10U	BIS(2-CHLOROETHOXY) METHANE
10U	2,4-DICHLOROPHENOL
10U	1,2,4-TRICHLOROBENZENE
10U	NAPHTHALENE
10U	4-CHLOROANILINE
10U	HEXACHLOROBUTADIENE
10U	4-CHLORO-3-METHYLPHENOL
10U	2-METHYLNAPHTHALENE
10U	HEXACHLOROCYCLOPENTADIENE (HCCP)
10U	2,4,6-TRICHLOROPHENOL
50U	2,4,5-TRICHLOROPHENOL
10U	2-CHLORONAPHTHALENE
50U	2-NITROANILINE
10U	DIMETHYL PHTHALATE
10U	ACENAPHTHYLENE
10U	2,6-DINITROTOLUENE

UG/L	ANALYTICAL RESULTS
50UR	3-NITROANILINE
10U	ACENAPHTHENE
50U	2,4-DINITROPHENOL
50U	4-NITROPHENOL
10U	DIBENZOFURAN
10U	2,4-DINITROTOLUENE
10U	DIETHYL PHTHALATE
10U	4-CHLOROPHENYL PHENYL ETHER
10U	FLUORENE
50U	4-NITROANILINE
50U	2-METHYL-4,6-DINITROPHENOL
10U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	4-BROMOPHENYL PHENYL ETHER
10U	HEXACHLOROBENZENE (HCB)
50U	PENTACHLOROPHENOL
10U	PHENANTHRENE
10U	ANTHRACENE
10UR	DI-N-BUTYLPHTHALATE
10U	FLUORANTHENE
10U	PYRENE
10U	BENZYL BUTYL PHTHALATE
20U	3,3'-DICHLOROBENZIDINE
10U	BENZO(A)ANTHRACENE
10U	CHRYSENE
10U	BIS(2-ETHYLHEXYL) PHTHALATE
10U	DI-N-OCTYLPHTHALATE
10U	BENZO(B AND/OR K)FLUORANTHENE
10U	BENZO-A-PYRENE
10U	INDENO (1,2,3-CD) PYRENE
10U	DIBENZO(A,H)ANTHRACENE
10U	BENZO(GHI)PERYLENE

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.
11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50594 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-01 COLLECTION START: 09/19/90 1110 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W741

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
0.05U	ALPHA-BHC	0.50U	METHOXYCHLOR
0.05U	BETA-BHC	0.10U	ENDRIN KETONE
0.05U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
0.05U	GAMMA-BHC (LINDANE)	0.50U	GAMMA-CHLORDANE /2
0.05U	HEPTACHLOR	0.50U	ALPHA-CHLORDANE /2
0.05U	ALDRIN	1.0U	TOXAPHENE
0.05U	HEPTACHLOR EPOXIDE	0.50U	PCB-1016 (AROCLOR 1016)
0.05U	ENDOSULFAN I (ALPHA)	0.50U	PCB-1221 (AROCLOR 1221)
0.10U	DIELDRIN	0.50U	PCB-1232 (AROCLOR 1232)
0.10U	4,4'-DDE (P,P'-DDE)	0.50U	PCB-1242 (AROCLOR 1242)
0.10U	ENDRIN	0.50U	PCB-1248 (AROCLOR 1248)
0.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1254 (AROCLOR 1254)
0.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1260 (AROCLOR 1260)
0.10U	ENDOSULFAN SULFATE		
0.10U	4,4'-DDT (P,P'-DDT)		

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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-02 COLLECTION START: 09/19/90 1625 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W752

UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE
10U	BROMOMETHANE
10U	VINYL CHLORIDE
10U	CHLOROETHANE
5U	METHYLENE CHLORIDE
10U	ACETONE
5U	CARBON DISULFIDE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
5U	1,1-DICHLOROETHANE
5U	1,2-DICHLOROETHENE (TOTAL)
5U	CHLOROFORM
5U	1,2-DICHLOROETHANE
10UR	METHYL ETHYL KETONE
5U	1,1,1-TRICHLOROETHANE
5U	CARBON TETRACHLORIDE
10U	VINYL ACETATE
5U	BROMODICHLOROMETHANE

UG/L	ANALYTICAL RESULTS
5U	1,2-DICHLOROPROPANE
5U	CIS-1,3-DICHLOROPROPENE
5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5U	DIBROMOCHLOROMETHANE
5U	1,1,2-TRICHLOROETHANE
5U	BENZENE
5U	TRANS-1,3-DICHLOROPROPENE
5U	BROMOFORM
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
5U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,1,2,2-TETRACHLOROETHANE
5U	TOLUENE
5U	CHLOROBENZENE
5U	ETHYL BENZENE
5U	STYRENE
5U	TOTAL XYLENES

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.

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

** PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: PW-02 COLLECTION START: 09/19/90 1625 STOP: 00/00/00 **
**
** CASE NO.: 14889 SAS NO.: D. NO.: W752 **

UG/L	ANALYTICAL RESULTS
10UJ	PHENOL
10UJ	BIS(2-CHLOROETHYL) ETHER
10UJ	2-CHLOROPHENOL
10UJ	1,3-DICHLOROBENZENE
10UJ	1,4-DICHLOROBENZENE
10UJ	BENZYL ALCOHOL
10UJ	1,2-DICHLOROBENZENE
10UJ	2-METHYLPHENOL
10UJ	BIS(2-CHLOROISOPROPYL) ETHER
10UJ	(3-AND/OR 4-)METHYLPHENOL
10UJ	N-NITROSODI-N-PROPYLAMINE
10UJ	HEXACHLOROETHANE
10UJ	NITROBENZENE
10UJ	ISOPHORONE
10UJ	2-NITROPHENOL
10UJ	2,4-DIMETHYLPHENOL
50UJ	BENZOIC ACID
10UJ	BIS(2-CHLOROETHOXY) METHANE
10UJ	2,4-DICHLOROPHENOL
10UJ	1,2,4-TRICHLOROBENZENE
10UJ	NAPHTHALENE
10UJ	4-CHLOROANILINE
10UJ	HEXACHLOROBUTADIENE
10UJ	4-CHLORO-3-METHYLPHENOL
10UJ	2-METHYLNAPHTHALENE
10UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)
10UJ	2,4,6-TRICHLOROPHENOL
50UJ	2,4,5-TRICHLOROPHENOL
10UJ	2-CHLORONAPHTHALENE
50UJ	2-NITROANILINE
10UJ	DIMETHYL PHTHALATE
10UJ	ACENAPHTHYLENE
10UJ	2,6-DINITROTOLUENE

UG/L	ANALYTICAL RESULTS
50UR	3-NITROANILINE
10UJ	ACENAPHTHENE
50UJ	2,4-DINITROPHENOL
50UJ	4-NITROPHENOL
10UJ	DIBENZOFURAN
10UJ	2,4-DINITROTOLUENE
10UJ	DIETHYL PHTHALATE
10UJ	4-CHLOROPHENYL PHENYL ETHER
10UJ	FLUORENE
50UJ	4-NITROANILINE
50UJ	2-METHYL-4,6-DINITROPHENOL
10UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10UJ	4-BROMOPHENYL PHENYL ETHER
10UJ	HEXACHLOROBENZENE (HCB)
50UJ	PENTACHLOROPHENOL
10UJ	PHENANTHRENE
10UJ	ANTHRACENE
10UR	DI-N-BUTYLPHTHALATE
10UJ	FLUORANTHENE
10UJ	PYRENE
10UJ	BENZYL BUTYL PHTHALATE
20UJ	3,3'-DICHLOROBENZIDINE
10UJ	BENZO(A)ANTHRACENE
10UJ	CHRYSENE
10UJ	BIS(2-ETHYLHEXYL) PHTHALATE
10UJ	DI-N-OCTYLPHTHALATE
10UJ	BENZO(B AND/OR K)FLUORANTHENE
10UJ	BENZO-A-PYRENE
10UJ	INDENO (1,2,3-CD) PYRENE
10UJ	DIBENZO(A,H)ANTHRACENE
10UJ	BENZO(GHI)PERYLENE

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

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.   11/15/90

PESTICIDES/PCB'S DATA REPORT

** PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
** STATION ID: PW-02 COLLECTION START: 09/19/90 1625 STOP: 00/00/00
** CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W752

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
0.05U	ALPHA-BHC	0.50U	METHOXYCHLOR
0.05U	BETA-BHC	0.10U	ENDRIN KETONE
0.05U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
0.05U	GAMMA-BHC (LINDANE)	0.50U	GAMMA-CHLORDANE /2
0.05U	HEPTACHLOR	0.50U	ALPHA-CHLORDANE /2
0.05U	ALDRIN	1.0U	TOXAPHENE
0.05U	HEPTACHLOR EPOXIDE	0.50U	PCB-1016 (AROCLOR 1016)
0.05U	ENDOSULFAN I (ALPHA)	0.50U	PCB-1221 (AROCLOR 1221)
0.10U	DIELDRIN	0.50U	PCB-1232 (AROCLOR 1232)
0.10U	4,4'-DDE (P,P'-DDE)	0.50U	PCB-1242 (AROCLOR 1242)
0.10U	ENDRIN	0.50U	PCB-1248 (AROCLOR 1248)
0.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1254 (AROCLOR 1254)
0.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1260 (AROCLOR 1260)
0.10U	ENDOSULFAN SULFATE		
0.10U	4,4'-DDT (P,P'-DDT)		

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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W751

UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE
10U	BROMOMETHANE
1J	VINYL CHLORIDE
10U	CHLOROETHANE
5U	METHYLENE CHLORIDE
10U	ACETONE
5U	CARBON DISULFIDE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
5U	1,1-DICHLOROETHANE
5U	1,2-DICHLOROETHENE (TOTAL)
5U	CHLOROFORM
5U	1,2-DICHLOROETHANE
10UR	METHYL ETHYL KETONE
5U	1,1,1-TRICHLOROETHANE
5U	CARBON TETRACHLORIDE
10U	VINYL ACETATE
5U	BROMODICHLOROMETHANE

UG/L	ANALYTICAL RESULTS
5U	1,2-DICHLOROPROPANE
5U	CIS-1,3-DICHLOROPROPENE
5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5U	DIBROMOCHLOROMETHANE
5U	1,1,2-TRICHLOROETHANE
6	BENZENE
5U	TRANS-1,3-DICHLOROPROPENE
5U	BROMOFORM
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
5U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,1,2,2-TETRACHLOROETHANE
5U	TOLUENE
12O	CHLOROBENZENE
5U	ETHYL BENZENE
5U	STYRENE
5U	TOTAL XYLENES

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.

11/15/90

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

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**   PROJECT NO. 90-803    SAMPLE NO. 50603  SAMPLE TYPE: GROUNDWA     PROG ELEM: NSF    COLLECTED BY: L WARD                   **
**   SOURCE: BERKELEY CO LF                                            CITY: OAKLEY                 ST: SC                      **
**   STATION ID: TW-05                                                 COLLECTION START: 09/19/90  1550  STOP: 00/00/00         **
**   CASE.NO.: 14889          SAS NO.:                                 D. NO.: W751                 MD NO: W751                 **
**                                                                                                                              **
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ANALYTICAL RESULTS UG/L

10J   1 UNKNOWN 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
*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.

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W751

UG/L	ANALYTICAL RESULTS
10UR	PHENOL
10U	BIS(2-CHLOROETHYL) ETHER
10UR	2-CHLOROPHENOL
10U	1,3-DICHLOROBENZENE
10U	1,4-DICHLOROBENZENE
10U	BENZYL ALCOHOL
10U	1,2-DICHLOROBENZENE
10UR	2-METHYLPHENOL
10U	BIS(2-CHLOROISOPROPYL) ETHER
10UR	(3-AND/OR 4-)METHYLPHENOL
10U	N-NITROSODI-N-PROPYLAMINE
10U	HEXACHLOROETHANE
10U	NITROBENZENE
10U	ISOPHORONE
10UR	2-NITROPHENOL
10UR	2,4-DIMETHYLPHENOL
50UR	BENZOIC ACID
10U	BIS(2-CHLOROETHOXY) METHANE
10UR	2,4-DICHLOROPHENOL
10U	1,2,4-TRICHLOROBENZENE
10U	NAPHTHALENE
10U	4-CHLOROANILINE
10U	HEXACHLOROBUTADIENE
10UR	4-CHLORO-3-METHYLPHENOL
10U	2-METHYLNAPHTHALENE
10U	HEXACHLOROCYCLOPENTADIENE (HCCP)
10UR	2,4,6-TRICHLOROPHENOL
50UR	2,4,5-TRICHLOROPHENOL
10U	2-CHLORONAPHTHALENE
50U	2-NITROANILINE
10U	DIMETHYL PHTHALATE
10U	ACENAPHTHYLENE
10U	2,6-DINITROTOLUENE

UG/L	ANALYTICAL RESULTS
50UR	3-NITROANILINE
10U	ACENAPHTHENE
50UR	2,4-DINITROPHENOL
50UR	4-NITROPHENOL
10U	DIBENZOFURAN
10U	2,4-DINITROTOLUENE
10U	DIETHYL PHTHALATE
10U	4-CHLOROPHENYL PHENYL ETHER
10U	FLUORENE
50U	4-NITROANILINE
50UR	2-METHYL-4,6-DINITROPHENOL
10U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	4-BROMOPHENYL PHENYL ETHER
10U	HEXACHLOROBENZENE (HCB)
50UR	PENTACHLOROPHENOL
10U	PHENANTHRENE
10U	ANTHRACENE
10UR	DI-N-BUTYLPHTHALATE
10U	FLUORANTHENE
10U	PYRENE
10U	BENZYL BUTYL PHTHALATE
20U	3,3'-DICHLOROBENZIDINE
10U	BENZO(A)ANTHRACENE
10U	CHRYSENE
10U	BIS(2-ETHYLHEXYL) PHTHALATE
10U	DI-N-OCTYLPHTHALATE
10U	BENZO(B AND/OR K)FLUORANTHENE
10U	BENZO-A-PYRENE
10U	INDENO (1,2,3-CD) PYRENE
10U	DIBENZO(A,H)ANTHRACENE
10U	BENZO(GHI)PERYLENE

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.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W751 MD NO: W751

ANALYTICAL RESULTS UG/L

100J	6 UNIDENTIFIED COMPOUNDS
20JN	TETRAHYDRO PYRAN
10JN	DIETHYLMETHYLBENZAMIDE

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.
11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W751

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
0.05U	ALPHA-BHC	0.50U	METHOXYCHLOR
0.05U	BETA-BHC	0.10U	ENDRIN KETONE
0.05U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
0.05U	GAMMA-BHC (LINDANE)	0.50U	GAMMA-CHLORDANE /2
0.05U	HEPTACHLOR	0.50U	ALPHA-CHLORDANE /2
0.05U	ALDRIN	1.0U	TOXAPHENE
0.05U	HEPTACHLOR EPOXIDE	0.50U	PCB-1016 (AROCLOR 1016)
0.05U	ENDOSULFAN I (ALPHA)	0.50U	PCB-1221 (AROCLOR 1221)
0.10U	DIELDRIN	0.50U	PCB-1232 (AROCLOR 1232)
0.10U	4,4'-DDE (P,P'-DDE)	0.50U	PCB-1242 (AROCLOR 1242)
0.10U	ENDRIN	0.50U	PCB-1248 (AROCLOR 1248)
0.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1254 (AROCLOR 1254)
0.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1260 (AROCLOR 1260)
0.10U	ENDOSULFAN SULFATE		
0.10U	4,4'-DDT (P,P'-DDT)		

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.

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-01 COLLECTION START: 09/19/90 1010 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W737

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
2600	ALUMINUM	15	MANGANESE
5.6UR	ANTIMONY	0.10U	MERCURY
2J	ARSENIC	1.1U	NICKEL
21	BARIUM	60U	POTASSIUM
1U	BERYLLIUM	0.38UR	SELENIUM
0.56U	CADMIUM	0.94U	SILVER
1000	CALCIUM	30U	SODIUM
2U	CHROMIUM	0.38U	THALLIUM
1.3U	COBALT	NA	TIN
3U	COPPER	4.2	VANADIUM
1500	IRON	4U	ZINC
8.4J	LEAD	04	PERCENT MOISTURE
150	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY ST: SC
STATION ID: SS-01	COLLECTION START: 09/19/90 1010 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:	D. NO.: W737 MD NO: W737

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.

METALS DATA REPORT 11/07/90

** PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SS-02 COLLECTION START: 09/19/90 1745 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W753 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
17000	ALUMINUM	25	MANGANESE
8.3UR	ANTIMONY	0.14U	MERCURY
3.4	ARSENIC	5.5	NICKEL
120	BARIUM	1200	POTASSIUM
2.8	BERYLLIUM	1UJ	SELENIUM
0.83U	CADMIUM	1.4U	SILVER
5200	CALCIUM	250	SODIUM
25	CHROMIUM	0.53U	THALLIUM
2.7	COBALT	NA	TIN
6U	COPPER	36	VANADIUM
15000	IRON	20U	ZINC
18J	LEAD	30	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
*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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

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** PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SS-02 COLLECTION START: 09/19/90 1745 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W753 MD NO: W753 **
** **
*** ***

RESULTS	UNITS	PARAMETER
1.4U	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 11/07/90

** PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SS-04 COLLECTION START: 09/19/90 1455 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W746 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7600	ALUMINUM	84	MANGANESE
6.9UR	ANTIMONY	0.11U	MERCURY
3U	ARSENIC	2.7	NICKEL
27	BARIUM	260	POTASSIUM
1U	BERYLLIUM	0.45UR	SELENIUM
0.69U	CADMIUM	1.1U	SILVER
2700	CALCIUM	60U	SODIUM
10	CHROMIUM	0.45U	THALLIUM
2U	COBALT	NA	TIN
2U	COPPER	14	VANADIUM
8500	IRON	22	ZINC
11J	LEAD	15	PERCENT MOISTURE
300	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 90-803    SAMPLE NO. 50599  SAMPLE TYPE: SEDIM       PROG ELEM: NSF    COLLECTED BY: L WARD                     **
**   SOURCE: BERKELEY CO LF                                           CITY: OAKLEY                ST: SC                        **
**   STATION ID: SS-04                                                COLLECTION START: 09/19/90  1455   STOP: 00/00/00         **
**   CASE.NO.: 14889           SAS NO.:                               D. NO.: W746                MD NO: W746                   **
**                                                                                                                              **
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RESULTS	UNITS	PARAMETER
1.2U	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 11/07/90

** PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SS-05 COLLECTION START: 09/19/90 1450 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W749 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
6000	ALUMINUM	350	MANGANESE
7.4UR	ANTIMONY	0.13U	MERCURY
2U	ARSENIC	2.3	NICKEL
25	BARIUM	170	POTASSIUM
2U	BERYLLIUM	2.5UR	SELENIUM
0.74U	CADMIUM	1.2U	SILVER
3500	CALCIUM	60U	SODIUM
7.2	CHROMIUM	0.50U	THALLIUM
3.4	COBALT	NA	TIN
0.74U	COPPER	7.2	VANADIUM
5400	IRON	9U	ZINC
14J	LEAD	23	PERCENT MOISTURE
340	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 90-803    SAMPLE NO. 50601  SAMPLE TYPE: SEDIM      PROG ELEM: NSF   COLLECTED BY: L WARD                        **
**   SOURCE: BERKELEY CO LF                                          CITY: OAKLEY                ST: SC                            **
**   STATION ID: SS-05                                               COLLECTION START: 09/19/90  1450   STOP: 00/00/00            **
**   CASE.NO.: 14889          SAS NO.:                               D. NO.: W749                MD NO: W749                      **
**                                                                                                                                 **
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RESULTS	UNITS	PARAMETER
1.3U	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.

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-01
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1020 STOP: 00/00/00
MD NUMBER: W738

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
27000	ALUMINUM	3U	MANGANESE
6.6UR	ANTIMONY	0.11U	MERCURY
2U	ARSENIC	6.2	NICKEL
37	BARIUM	130U	POTASSIUM
0.22U	BERYLLIUM	2.1UR	SELENIUM
0.66U	CADMIUM	1.1U	SILVER
30U	CALCIUM	40U	SODIUM
9.1	CHROMIUM	0.42U	THALLIUM
1.5U	COBALT	NA	TIN
0.66U	COPPER	11	VANADIUM
2200	IRON	3U	ZINC
17J	LEAD	15	PERCENT MOISTURE
130	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY ST: SC
STATION ID: SB-01	COLLECTION START: 09/19/90 1020 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:	D. NO.: W738 MD NO: W738

RESULTS	UNITS	PARAMETER
1.2U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50609 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-02
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1815 STOP: 00/00/00
MD NUMBER: W754

ANALYTICAL RESULTS

MG/KG	
7500	ALUMINUM
8UR	ANTIMONY
2.8	ARSENIC
23	BARIUM
1U	BERYLLIUM
0.80U	CADMIUM
140000	CALCIUM
39	CHROMIUM
1.9U	COBALT
4U	COPPER
9000	IRON
4.7J	LEAD
3700	MAGNESIUM

ANALYTICAL RESULTS

MG/KG	
65	MANGANESE
0.14U	MERCURY
11	NICKEL
3400	POTASSIUM
1UJ	SELENIUM
1.3U	SILVER
670	SODIUM
0.54U	THALLIUM
NA	TIN
14	VANADIUM
40U	ZINC
28	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50609   SAMPLE TYPE: SEDIM   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: SB-02   COLLECTION START: 09/19/90 1815   STOP: 00/00/00
CASE.NO.: 14889   SAS NO.:   D. NO.: W754   MD NO: W754

RESULTS	UNITS	PARAMETER
1.4U	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 11/07/90

** PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SB-04 COLLECTION START: 09/19/90 1520 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W747 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7900	ALUMINUM	81	MANGANESE
9UJ	ANTIMONY	0.13U	MERCURY
6.5	ARSENIC	12	NICKEL
70	BARIUM	2800	POTASSIUM
1U	BERYLLIUM	0.52UR	SELENIUM
0.81U	CADMIUM	1.4U	SILVER
140000	CALCIUM	490	SODIUM
38	CHROMIUM	0.52U	THALLIUM
2U	COBALT	NA	TIN
3U	COPPER	13	VANADIUM
10000	IRON	40U	ZINC
4.3J	LEAD	28	PERCENT MOISTURE
5300	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

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** PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SB-04 COLLECTION START: 09/19/90 1520 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W747 MD NO: W747 **
** **

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RESULTS	UNITS	PARAMETER
1.4U	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.

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SB-05 COLLECTION START: 09/19/90 1515 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W750

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
18000	ALUMINUM	160	MANGANESE
20UR	ANTIMONY	0.20U	MERCURY
8.3	ARSENIC	17	NICKEL
87	BARIUM	3300	POTASSIUM
2U	BERYLLIUM	4.2UR	SELENIUM
3.9	CADMIUM	2.1U	SILVER
15000	CALCIUM	480	SODIUM
87	CHROMIUM	0.85U	THALLIUM
4	COBALT	NA	TIN
6U	COPPER	34	VANADIUM
17000	IRON	95	ZINC
7J	LEAD	53	PERCENT MOISTURE
4700	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SB-05 COLLECTION START: 09/19/90 1515 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W750 MD NO: W750 **
** **
*** ***

RESULTS	UNITS	PARAMETER
2.1U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-01
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1130 STOP: 00/00/00
MD NUMBER: W744

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7000	ALUMINUM	16	MANGANESE
20UR	ANTIMONY	0.21U	MERCURY
2U	ARSENIC	2.9	NICKEL
80	BARIUM	250	POTASSIUM
2U	BERYLLIUM	1UJ	SELENIUM
1.2U	CADMIUM	2.1U	SILVER
1800	CALCIUM	80U	SODIUM
4U	CHROMIUM	0.84U	THALLIUM
2.9U	COBALT	NA	TIN
1.2U	COPPER	8.5	VANADIUM
2200	IRON	8U	ZINC
38J	LEAD	54	PERCENT MOISTURE
320	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SD-01 COLLECTION START: 09/19/90 1130 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W744 MD NO: W744

RESULTS	UNITS	PARAMETER
2.1U	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.

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-02
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1030 STOP: 00/00/00
MD NUMBER: W739

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1600	ALUMINUM	4U	MANGANESE
7.6UR	ANTIMONY	0.14U	MERCURY
1U	ARSENIC	1.5U	NICKEL
10	BARIUM	40U	POTASSIUM
1U	BERYLLIUM	0.57UR	SELENIUM
0.76U	CADMIUM	1.3U	SILVER
240U	CALCIUM	30U	SODIUM
1.3U	CHROMIUM	0.57U	THALLIUM
1.8U	COBALT	NA	TIN
0.76U	COPPER	2.8	VANADIUM
590	IRON	2.3U	ZINC
5.3J	LEAD	33	PERCENT MOISTURE
46	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 90-803    SAMPLE NO. 50592  SAMPLE TYPE: SEDIM       PROG ELEM: NSF   COLLECTED BY: L WARD          **
**   SOURCE: BERKELEY CO LF                                           CITY: OAKLEY              ST: SC                 **
**   STATION ID: SD-02                                                COLLECTION START: 09/19/90  1030   STOP: 00/00/00 **
**   CASE.NO.: 14889          SAS NO.:                                D. NO.: W739              MD NO: W739            **
**                                                                                                                      **
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RESULTS	UNITS	PARAMETER
1.5U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-04
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1125 STOP: 00/00/00
MD NUMBER: W743

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
8100	ALUMINUM	21	MANGANESE
9.4UR	ANTIMONY	0.16U	MERCURY
3U	ARSENIC	3	NICKEL
24	BARIUM	440	POTASSIUM
2U	BERYLLIUM	0.67UR	SELENIUM
0.94U	CADMIUM	1.6U	SILVER
2600	CALCIUM	70U	SODIUM
8.1	CHROMIUM	0.67U	THALLIUM
3U	COBALT	NA	TIN
2U	COPPER	14	VANADIUM
11000	IRON	40U	ZINC
13J	LEAD	45	PERCENT MOISTURE
580	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SD-04 COLLECTION START: 09/19/90 1125 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W743 MD NO: W743

RESULTS	UNITS	PARAMETER
1.8U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-05
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1050 STOP: 00/00/00
MD NUMBER: W740

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
2200	ALUMINUM	6.7	MANGANESE
6UR	ANTIMONY	0.10U	MERCURY
1U	ARSENIC	1.2U	NICKEL
7U	BARIUM	50U	POTASSIUM
1U	BERYLLIUM	0.36UR	SELENIUM
0.60U	CADMIUM	1U	SILVER
480	CALCIUM	20U	SODIUM
2U	CHROMIUM	0.36U	THALLIUM
1.4U	COBALT	NA	TIN
0.60U	COPPER	5.1	VANADIUM
3300	IRON	4U	ZINC
7.4J	LEAD	06	PERCENT MOISTURE
60U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 90-803    SAMPLE NO. 50593  SAMPLE TYPE: SEDIM        PROG ELEM: NSF    COLLECTED BY: L WARD                    **
**   SOURCE: BERKELEY CO LF                                            CITY: OAKLEY                 ST: SC                       **
**   STATION ID: SD-05                                                 COLLECTION START: 09/19/90  1050   STOP: 00/00/00         **
**   CASE.NO.: 14889          SAS NO.:                                 D. NO.: W740               MD NO: W740                    **
**                                                                                                                               **
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RESULTS	UNITS	PARAMETER
1.1U	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 11/07/90

** PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SD-06 COLLECTION START: 09/19/90 1110 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W742 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1100	ALUMINUM	6.8	MANGANESE
7UR	ANTIMONY	0.13U	MERCURY
2U	ARSENIC	1.4U	NICKEL
7.8	BARIUM	50U	POTASSIUM
1U	BERYLLIUM	1UJ	SELENIUM
0.70U	CADMIUM	1.2U	SILVER
420	CALCIUM	40U	SODIUM
1.2U	CHROMIUM	0.49U	THALLIUM
1.6U	COBALT	NA	TIN
0.70U	COPPER	2.4	VANADIUM
790	IRON	4U	ZINC
2.6J	LEAD	28	PERCENT MOISTURE
70U	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.

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY ST: SC
STATION ID: SD-06	COLLECTION START: 09/19/90 1110 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:	D. NO.: W742 MD NO: W742

RESULTS	UNITS	PARAMETER
1.4U	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. 11/07/90

METALS DATA REPORT

** PROJECT NO. 90-803 SAMPLE NO. 50589 SAMPLE TYPE: SURFACEWA PROG ELEM: NSF COLLECTED BY: L WARD
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
** STATION ID: PB-01 COLLECTION START: 09/19/90 0700 STOP: 00/00/00
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W735

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
110J	ALUMINUM	2U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
2U	BARIUM	80U	POTASSIUM
1U	BERYLLIUM	3UJ	SELENIUM
3U	CADMIUM	5U	SILVER
230U	CALCIUM	130U	SODIUM
6U	CHROMIUM	2UJ	THALLIUM
4U	COBALT	NA	TIN
3U	COPPER	3U	VANADIUM
140UJ	IRON	20U	ZINC
2U	LEAD		
30U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50589   SAMPLE TYPE: SURFACEWA   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: PB-01   COLLECTION START: 09/19/90 0700   STOP: 00/00/00
CASE.NO.: 14889   SAS NO.:   D. NO.:   MD NO: W735

RESULTS	UNITS	PARAMETER
10U	UG/L	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50594 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-01 COLLECTION START: 09/19/90 1110 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W741

ANALYTICAL RESULTS

UG/L		UG/L	
7800J	ALUMINUM	5U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
75	BARIUM	990	POTASSIUM
1U	BERYLLIUM	3UJ	SELENIUM
3U	CADMIUM	5U	SILVER
850U	CALCIUM	23000	SODIUM
7U	CHROMIUM	2UJ	THALLIUM
5U	COBALT	NA	TIN
3U	COPPER	8	VANADIUM
2800J	IRON	40U	ZINC
5J	LEAD		
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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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50594   SAMPLE TYPE: GROUNDWA   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: TW-01   COLLECTION START: 09/19/90 1110   STOP: 00/00/00
CASE.NO.: 14889   SAS NO.:   D. NO.: W741   MD NO: W741

RESULTS	UNITS	PARAMETER
10U	UG/L	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA
SOURCE: BERKELEY CO LF
STATION ID: TW-05
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1550 STOP: 00/00/00
MD NUMBER: W751

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
1300J	ALUMINUM	3300	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
110J	ARSENIC	33	NICKEL
64	BARIUM	6100	POTASSIUM
1U	BERYLLIUM	3UJ	SELENIUM
3U	CADMIUM	5U	SILVER
150000	CALCIUM	57000	SODIUM
6U	CHROMIUM	10UJ	THALLIUM
65	COBALT	NA	TIN
5U	COPPER	8	VANADIUM
46000J	IRON	30U	ZINC
4UJ	LEAD		
12000	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W751 MD NO: W751

RESULTS	UNITS	PARAMETER
10U	UG/L	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 11/07/90

** PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: PW-01 COLLECTION START: 09/19/90 1220 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W745 **

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
110UJ	ALUMINUM	2U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
2U	BARIUM	9000	POTASSIUM
1U	BERYLLIUM	15UJ	SELENIUM
3U	CADMIUM	5U	SILVER
2900	CALCIUM	160000	SODIUM
6U	CHROMIUM	10UJ	THALLIUM
4U	COBALT	NA	TIN
5U	COPPER	4U	VANADIUM
90UJ	IRON	20U	ZINC
24J	LEAD		
1400	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-01 COLLECTION START: 09/19/90 1220 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W745 MD NO: W745

RESULTS	UNITS	PARAMETER
10U	UG/L	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 11/07/90

** PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: PW-02 COLLECTION START: 09/19/90 1625 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W752 **

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
40UJ	ALUMINUM	2U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
2U	BARIUM	9200	POTASSIUM
1U	BERYLLIUM	15UJ	SELENIUM
3U	CADMIUM	5U	SILVER
2700	CALCIUM	170000	SODIUM
6U	CHROMIUM	10UJ	THALLIUM
4U	COBALT	NA	TIN
5U	COPPER	3U	VANADIUM
60UJ	IRON	20U	ZINC
55J	LEAD		
1400	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: PW-02 COLLECTION START: 09/19/90 1625 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W752 MD NO: W752 **
** **
*** ***

RESULTS	UNITS	PARAMETER
10U	UG/L	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SB-01 COLLECTION START: 09/19/90 1020 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W738 MD NO: W738 **
** **
*** ***

RESULTS	UNITS	PARAMETER
1.2U	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.   11/07/90

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 90-803   SAMPLE NO. 50609   SAMPLE TYPE: SEDIM   PROG ELEM: NSF   COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC **
** STATION ID: SB-02   COLLECTION START: 09/19/90 1815   STOP: 00/00/00 **
** CASE.NO.: 14889   SAS NO.:   D. NO.: W754   MD NO: W754 **
** **
*** ***

RESULTS	UNITS	PARAMETER
1.4U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SB-04 COLLECTION START: 09/19/90 1520 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W747 MD NO: W747

RESULTS	UNITS	PARAMETER
1.4U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 90-803   SAMPLE NO. 50602  SAMPLE TYPE: SEDIM        PROG ELEM: NSF   COLLECTED BY: L WARD             **
**   SOURCE: BERKELEY CO LF                                           CITY: OAKLEY                 ST: SC               **
**   STATION ID: SB-05                                                COLLECTION START: 09/19/90  1515  STOP: 00/00/00  **
**   CASE.NO.: 14889          SAS NO.:                                D. NO.: W750                MD NO: W750           **
**                                                                                                                      **
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RESULTS	UNITS	PARAMETER
2.1U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-01
CASE.NO.: 14889 SAS NO.:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1130 STOP: 00/00/00
D. NO.: W744 MD NO: W744

RESULTS	UNITS	PARAMETER
2.1U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SD-02 COLLECTION START: 09/19/90 1030 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W739 MD NO: W739

RESULTS	UNITS	PARAMETER
1.5U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803	SAMPLE NO. 50596	SAMPLE TYPE: SEDIM	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF			CITY: OAKLEY ST: SC
STATION ID: SD-04			COLLECTION START: 09/19/90 1125 STOP: 00/00/00
CASE.NO.: 14889	SAS NO.:		D. NO.: W743 MD NO: W743

RESULTS	UNITS	PARAMETER
1.8U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY ST: SC
STATION ID: SD-05	COLLECTION START: 09/19/90 1050 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:	D. NO.: W740 MD NO: W740

RESULTS	UNITS	PARAMETER
1.1U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 90-803   SAMPLE NO. 50595  SAMPLE TYPE: SEDIM        PROG ELEM: NSF   COLLECTED BY: L WARD                          **
**   SOURCE: BERKELEY CO LF                                            CITY: OAKLEY                 ST: SC                              **
**   STATION ID: SD-06                                                 COLLECTION START: 09/19/90  1110   STOP: 00/00/00               **
**   CASE.NO.: 14889          SAS NO.:                                 D. NO.: W742                 MD NO: W742                        **
**                                                                                                                                      **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
1.4U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY ST: SC
STATION ID: SS-01	COLLECTION START: 09/19/90 1010 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:	D. NO.: W737 MD NO: W737

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.
11/07/90

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SS-02 COLLECTION START: 09/19/90 1745 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W753 MD NO: W753 **
** **
*** ***

RESULTS	UNITS	PARAMETER
1.4U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SS-04 COLLECTION START: 09/19/90 1455 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W746 MD NO: W746 **
** **
*** ***

RESULTS	UNITS	PARAMETER
1.2U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY ST: SC
STATION ID: SS-05	COLLECTION START: 09/19/90 1450 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:	D. NO.: W749 MD NO: W749

RESULTS	UNITS	PARAMETER
1.3U	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. 11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SB-01 COLLECTION START: 09/19/90 1020 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W738

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
27000	ALUMINUM	3U	MANGANESE
6.6UR	ANTIMONY	0.11U	MERCURY
2U	ARSENIC	6.2	NICKEL
37	BARIUM	130U	POTASSIUM
0.22U	BERYLLIUM	2.1UR	SELENIUM
0.66U	CADMIUM	1.1U	SILVER
30U	CALCIUM	40U	SODIUM
9.1	CHROMIUM	0.42U	THALLIUM
1.5U	COBALT	NA	TIN
0.66U	COPPER	11	VANADIUM
2200	IRON	3U	ZINC
17J	LEAD	15	PERCENT MOISTURE
130	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 11/07/90

** PROJECT NO. 90-803 SAMPLE NO. 50609 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SB-02 COLLECTION START: 09/19/90 1815 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W754 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7500	ALUMINUM	65	MANGANESE
8UR	ANTIMONY	0.14U	MERCURY
2.8	ARSENIC	11	NICKEL
23	BARIUM	3400	POTASSIUM
1U	BERYLLIUM	1UJ	SELENIUM
0.80U	CADMIUM	1.3U	SILVER
140000	CALCIUM	670	SODIUM
39	CHROMIUM	0.54U	THALLIUM
1.9U	COBALT	NA	TIN
4U	COPPER	14	VANADIUM
9000	IRON	40U	ZINC
4.7J	LEAD	28	PERCENT MOISTURE
3700	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-04
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1520 STOP: 00/00/00
MD NUMBER: W747

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7900	ALUMINUM	81	MANGANESE
9UJ	ANTIMONY	0.13U	MERCURY
6.5	ARSENIC	12	NICKEL
70	BARIUM	2800	POTASSIUM
1U	BERYLLIUM	0.52UR	SELENIUM
0.81U	CADMIUM	1.4U	SILVER
140000	CALCIUM	490	SODIUM
38	CHROMIUM	0.52U	THALLIUM
2U	COBALT	NA	TIN
3U	COPPER	13	VANADIUM
10000	IRON	40U	ZINC
4.3J	LEAD	28	PERCENT MOISTURE
5300	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.

11/07/90

METALS DATA REPORT

** PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SB-05 COLLECTION START: 09/19/90 1515 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W750 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
18000	ALUMINUM	160	MANGANESE
20UR	ANTIMONY	0.20U	MERCURY
8.3	ARSENIC	17	NICKEL
87	BARIUM	3300	POTASSIUM
2U	BERYLLIUM	4.2UR	SELENIUM
3.9	CADMIUM	2.1U	SILVER
15000	CALCIUM	480	SODIUM
87	CHROMIUM	0.85U	THALLIUM
4	COBALT	NA	TIN
6U	COPPER	34	VANADIUM
17000	IRON	95	ZINC
7J	LEAD	53	PERCENT MOISTURE
4700	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-01
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1130 STOP: 00/00/00
MD NUMBER: W744

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7000	ALUMINUM	16	MANGANESE
20UR	ANTIMONY	0.21U	MERCURY
2U	ARSENIC	2.9	NICKEL
80	BARIUM	250	POTASSIUM
2U	BERYLLIUM	1UJ	SELENIUM
1.2U	CADMIUM	2.1U	SILVER
1800	CALCIUM	80U	SODIUM
4U	CHROMIUM	0.84U	THALLIUM
2.9U	COBALT	NA	TIN
1.2U	COPPER	8.5	VANADIUM
2200	IRON	8U	ZINC
38J	LEAD	54	PERCENT MOISTURE
320	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.

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SD-02 COLLECTION START: 09/19/90 1030 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W739

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1600	ALUMINUM	4U	MANGANESE
7.6UR	ANTIMONY	0.14U	MERCURY
1U	ARSENIC	1.5U	NICKEL
10	BARIUM	40U	POTASSIUM
1U	BERYLLIUM	0.57UR	SELENIUM
0.76U	CADMIUM	1.3U	SILVER
240U	CALCIUM	30U	SODIUM
1.3U	CHROMIUM	0.57U	THALLIUM
1.8U	COBALT	NA	TIN
0.76U	COPPER	2.8	VANADIUM
590	IRON	2.3U	ZINC
5.3J	LEAD	33	PERCENT MOISTURE
46	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-04
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1125 STOP: 00/00/00
MD NUMBER: W743

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
8100	ALUMINUM	21	MANGANESE
9.4UR	ANTIMONY	0.16U	MERCURY
3U	ARSENIC	3	NICKEL
24	BARIUM	440	POTASSIUM
2U	BERYLLIUM	0.67UR	SELENIUM
0.94U	CADMIUM	1.6U	SILVER
2600	CALCIUM	70U	SODIUM
8.1	CHROMIUM	0.67U	THALLIUM
3U	COBALT	NA	TIN
2U	COPPER	14	VANADIUM
11000	IRON	40U	ZINC
13J	LEAD	45	PERCENT MOISTURE
580	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-05
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1050 STOP: 00/00/00
MD NUMBER: W740

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
2200	ALUMINUM	6.7	MANGANESE
6UR	ANTIMONY	0.10U	MERCURY
1U	ARSENIC	1.2U	NICKEL
7U	BARIUM	50U	POTASSIUM
1U	BERYLLIUM	0.36UR	SELENIUM
0.60U	CADMIUM	1U	SILVER
480	CALCIUM	20U	SODIUM
2U	CHROMIUM	0.36U	THALLIUM
1.4U	COBALT	NA	TIN
0.60U	COPPER	5.1	VANADIUM
3300	IRON	4U	ZINC
7.4J	LEAD	06	PERCENT MOISTURE
60U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-06
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1110 STOP: 00/00/00
MD NUMBER: W742

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1100	ALUMINUM	6.8	MANGANESE
7UR	ANTIMONY	0.13U	MERCURY
2U	ARSENIC	1.4U	NICKEL
7.8	BARIUM	50U	POTASSIUM
1U	BERYLLIUM	1UJ	SELENIUM
0.70U	CADMIUM	1.2U	SILVER
420	CALCIUM	40U	SODIUM
1.2U	CHROMIUM	0.49U	THALLIUM
1.6U	COBALT	NA	TIN
0.70U	COPPER	2.4	VANADIUM
790	IRON	4U	ZINC
2.6J	LEAD	28	PERCENT MOISTURE
70U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-01 COLLECTION START: 09/19/90 1010 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W737

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
2600	ALUMINUM	15	MANGANESE
5.6UR	ANTIMONY	0.10U	MERCURY
2J	ARSENIC	1.1U	NICKEL
21	BARIUM	60U	POTASSIUM
1U	BERYLLIUM	0.38UR	SELENIUM
0.56U	CADMIUM	0.94U	SILVER
1000	CALCIUM	30U	SODIUM
2U	CHROMIUM	0.38U	THALLIUM
1.3U	COBALT	NA	TIN
3U	COPPER	4.2	VANADIUM
1500	IRON	4U	ZINC
8.4J	LEAD	04	PERCENT MOISTURE
150	MAGNESIUM		

REMARKS ***REMARKS***

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-02
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1745 STOP: 00/00/00
MD NUMBER: W753

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
17000	ALUMINUM	25	MANGANESE
8.3UR	ANTIMONY	0.14U	MERCURY
3.4	ARSENIC	5.5	NICKEL
120	BARIUM	1200	POTASSIUM
2.8	BERYLLIUM	1UJ	SELENIUM
0.83U	CADMIUM	1.4U	SILVER
5200	CALCIUM	250	SODIUM
25	CHROMIUM	0.53U	THALLIUM
2.7	COBALT	NA	TIN
6U	COPPER	36	VANADIUM
15000	IRON	20U	ZINC
18J	LEAD	30	PERCENT MOISTURE
1600	MAGNESIUM		

REMARKS ***REMARKS***

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

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-04
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1455 STOP: 00/00/00
MD NUMBER: W746

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7600	ALUMINUM	84	MANGANESE
6.9UR	ANTIMONY	0.11U	MERCURY
3U	ARSENIC	2.7	NICKEL
27	BARIUM	260	POTASSIUM
1U	BERYLLIUM	0.45UR	SELENIUM
0.69U	CADMIUM	1.1U	SILVER
2700	CALCIUM	60U	SODIUM
10	CHROMIUM	0.45U	THALLIUM
2U	COBALT	NA	TIN
2U	COPPER	14	VANADIUM
8500	IRON	22	ZINC
11J	LEAD	15	PERCENT MOISTURE
300	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.   11/07/90

METALS DATA REPORT

*** ***
** PROJECT NO. 90-803   SAMPLE NO. 50601   SAMPLE TYPE: SEDIM   PROG ELEM: NSF   COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC **
** STATION ID: SS-05   COLLECTION START: 09/19/90 1450   STOP: 00/00/00 **
** CASE NUMBER: 14889   SAS NUMBER: MD NUMBER: W749 **
**   **
*** ***

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
6000	ALUMINUM	350	MANGANESE
7.4UR	ANTIMONY	0.13U	MERCURY
2U	ARSENIC	2.3	NICKEL
25	BARIUM	170	POTASSIUM
2U	BERYLLIUM	2.5UR	SELENIUM
0.74U	CADMIUM	1.2U	SILVER
3500	CALCIUM	60U	SODIUM
7.2	CHROMIUM	0.50U	THALLIUM
3.4	COBALT	NA	TIN
0.74U	COPPER	7.2	VANADIUM
5400	IRON	9U	ZINC
14J	LEAD	23	PERCENT MOISTURE
340	MAGNESIUM		

REMARKS   ***REMARKS***

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

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50598   SAMPLE TYPE: GROUNDWA   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: PW-01   COLLECTION START: 09/19/90 1220   STOP: 00/00/00
CASE.NO.: 14889   SAS NO.:   D. NO.: W745   MD NO: W745

RESULTS	UNITS	PARAMETER
10U	UG/L	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA
SOURCE: BERKELEY CO LF
STATION ID: PW-02
CASE.NO.: 14889 SAS NO.:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1625 STOP: 00/00/00
D. NO.: W752 MD NO: W752

RESULTS	UNITS	PARAMETER
10U	UG/L	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. 11/07/90

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50594 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: TW-01 COLLECTION START: 09/19/90 1110 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W741 MD NO: W741 **
** **
*** ***

RESULTS	UNITS	PARAMETER
10U	UG/L	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 90-803   SAMPLE NO. 50603   SAMPLE TYPE: GROUNDWA   PROG ELEM: NSF   COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC **
** STATION ID: TW-05   COLLECTION START: 09/19/90 1550   STOP: 00/00/00 **
** CASE.NO.: 14889   SAS NO.:   D. NO.: W751   MD NO: W751 **
** **
*** ***

RESULTS	UNITS	PARAMETER
10U	UG/L	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50589 SAMPLE TYPE: SURFACEWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PB-01 COLLECTION START: 09/19/90 0700 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: MD NO: W735

RESULTS	UNITS	PARAMETER
10U	UG/L	CYANIDE

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

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-01 COLLECTION START: 09/19/90 1220 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W745

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
110UJ	ALUMINUM	2U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
2U	BARIUM	9000	POTASSIUM
1U	BERYLLIUM	15UJ	SELENIUM
3U	CADMIUM	5U	SILVER
2900	CALCIUM	160000	SODIUM
6U	CHROMIUM	10UJ	THALLIUM
4U	COBALT	NA	TIN
5U	COPPER	4U	VANADIUM
90UJ	IRON	20U	ZINC
24J	LEAD		
1400	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-02 COLLECTION START: 09/19/90 1625 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W752

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
40UJ	ALUMINUM	2U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
2U	BARIUM	9200	POTASSIUM
1U	BERYLLIUM	15UJ	SELENIUM
3U	CADMIUM	5U	SILVER
2700	CALCIUM	170000	SODIUM
6U	CHROMIUM	10UJ	THALLIUM
4U	COBALT	NA	TIN
5U	COPPER	3U	VANADIUM
60UJ	IRON	20U	ZINC
55J	LEAD		
1400	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. 11/07/90

METALS DATA REPORT

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**   PROJECT NO. 90-803    SAMPLE NO. 50594  SAMPLE TYPE: GROUNDWA      PROG ELEM: NSF    COLLECTED BY: L WARD                    **
**   SOURCE: BERKELEY CO LF                                             CITY: OAKLEY                ST: SC                          **
**   STATION ID: TW-01                                                  COLLECTION START: 09/19/90  1110   STOP: 00/00/00       **
**   CASE NUMBER: 14889          SAS NUMBER:                             MD NUMBER: W741                                          **
**                                                                                                                                **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
7800J	ALUMINUM	5U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
75	BARIUM	990	POTASSIUM
1U	BERYLLIUM	3UJ	SELENIUM
3U	CADMIUM	5U	SILVER
850U	CALCIUM	23000	SODIUM
7U	CHROMIUM	2UJ	THALLIUM
5U	COBALT	NA	TIN
3U	COPPER	8	VANADIUM
2800J	IRON	40U	ZINC
5J	LEAD		
1600	MAGNESIUM		

REMARKS

REMARKS

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

METALS DATA REPORT 11/07/90

** PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W751 **

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
1300J	ALUMINUM	3300	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
110J	ARSENIC	33	NICKEL
64	BARIUM	6100	POTASSIUM
1U	BERYLLIUM	3UJ	SELENIUM
3U	CADMIUM	5U	SILVER
150000	CALCIUM	57000	SODIUM
6U	CHROMIUM	10UJ	THALLIUM
65	COBALT	NA	TIN
5U	COPPER	8	VANADIUM
46000J	IRON	30U	ZINC
4UJ	LEAD		
12000	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50589 SAMPLE TYPE: SURFACEWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PB-01 COLLECTION START: 09/19/90 0700 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W735

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
110J	ALUMINUM	2U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
2U	BARIUM	80U	POTASSIUM
1U	BERYLLIUM	3UJ	SELENIUM
3U	CADMIUM	5U	SILVER
230U	CALCIUM	130U	SODIUM
6U	CHROMIUM	2UJ	THALLIUM
4U	COBALT	NA	TIN
3U	COPPER	3U	VANADIUM
140UJ	IRON	20U	ZINC
2U	LEAD		
30U	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.

Site Inspection Report

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Berkeley County Landfill	Landfill Road

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Oakley	SC	29461	Berkeley	015	

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
33° 08' 38.1"	80° 02' 58.1"	☒ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION (MONTH DAY YEAR)	02 SITE STATUS	03 YEARS OF OPERATION (BEGINNING YEAR / ENDING YEAR)
9/19/90	☐ ACTIVE ☒ INACTIVE	1972 / 1977 ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☒ B. EPA CONTRACTOR NUS Corporation (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ___ (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR ___ (Name of firm) ☐ G. OTHER ___ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Lisa Ward	Chemist	NUS	(404) 938-7710

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Jack Kendall (1977)		State	( )
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Gene Neighbors	land owner	Rt. 2 Box 226 Moncks Corner, SC 29461	(803) 761-3951
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	began 815 9-19-90	Sunny, mild, no clouds, 74°F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
		( )

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE (MONTH DAY YEAR)
Lisa Ward	NUS		(404) 938-7710	12-10-90

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

X A. SOLID
B. POWDER, FINES
C. SLUDGE
X E. SLURRY
F. LIQUID
G. GAS
D. OTHER _____ (Specify)

02 WASTE QUANTITY AT SITE
(Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS _____
NO. OF DRUMS UNKNOWN

03 WASTE CHARACTERISTICS (Check all that apply)

X A. TOXIC
B. CORROSIVE
C. RADIOACTIVE
D. PERSISTENT
E. SOLUBLE
F. INFECTIOUS
G. FLAMMABLE
H. IGNITABLE
I. HIGHLY VOLATILE
J. EXPLOSIVE
K. REACTIVE
L. INCOMPATIBLE
M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			type of waste disposal
OLW	OILY WASTE			of on site is not
SOL	SOLVENTS			known.
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NUS, EPA, & state of South Carolina file information.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
SC	D981028895

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None was observated during the field investigation and none was noted in state file material.

01 ☐ K DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

None was observed during the field investigation and none was noted in state file material.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No serious potential exists (Streams in the area are intermittent and not fished on).

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: unknown — 04 NARRATIVE DESCRIPTION

File material is not available on specific wastes that were land-filled.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed during field investigation and none was noted in state file material

01 ☐ O CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A - there are no municipal sewers, storm drains, or WWTPs in site vicinity.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed, but landowner (& Neighbors) speculates that unauthorized dumping took place because the lock at the landfill entrance has been broken several times.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA, NUS, & state file material

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: SC | 02 SITE NUMBER: D981028095

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — X POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 4402
04 NARRATIVE DESCRIPTION
↳ population served by groundwater within 4-miles of the site.

01 ☐ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
None from water consumption or food chain.

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
No threat - landfill is covered & heavily vegetated.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
N/A

01 ☐ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
none - landfill is completely fenced

01 ☐ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres)
04 NARRATIVE DESCRIPTION
none - 2' of soil cover was layed over entire landfill upon closure. (Now it is also heavily overgrown).

01 ☐ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — X POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 4402
04 NARRATIVE DESCRIPTION

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
~~None~~ N/A - inactive landfill

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — X POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 4402
04 NARRATIVE DESCRIPTION
Residents within 4-miles of the site.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				Permit issued by the
☐ G. STATE (Specify)				S.C. State Board of
☐ H. LOCAL (Specify)				Health -- authorizing
☒ I. OTHER (Specify)	15	5-22-		the property to be used
☐ J. NONE				as a Sanitary Landfill.

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☒ F. LANDFILL	unknown	(~86 acres)
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER
- ☐ A. BUILDINGS ON SITE

06 AREA OF SITE: ~ 86 (Acres)

07 COMMENTS

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☒ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

no engineered liner

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

Facility is fenced.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

NUS, EPA, & State files.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE: SC | 02 SITE NUMBER: D981028095

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☒	B. ☐	C. ☐
D. ☒	E. ☐	F. ☐

03 DISTANCE TO SITE

A. 3 (mi)
B. <1 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING
☒ B. DRINKING (Other sources available)
COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)
☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available)
☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 4402 (within 4-miles)

03 DISTANCE TO NEAREST DRINKING WATER WELL <1 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
~10 (ft)	South & east	~300 (ft)	(gpd)	☐ YES ☒ NO

09 DESCRIPTION OF WELLS (including usage, depth, and location relative to population and buildings)

Approx. 3200 people with 4-miles of the site are using private wells that are cased at ~300' (may be as deep as 500' in some areas) The remained of the population ~~is~~ served by municipal (County) water, 3-of the municipal wells are within 3-miles of the site.

10 RECHARGE AREA: ☒ YES ☐ NO — COMMENTS (~200' bls) Between Santee Formation and the Black Mingo Formation (210-530' bls)

11 DISCHARGE AREA: ☐ YES ☐ NO — COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☐ A. RESERVOIR, RECREATION DRINKING WATER SOURCE
☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES
☐ C. COMMERCIAL, INDUSTRIAL
☒ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Molly Branch Creek	☐	<1 (mi)
Cooper River	☐	6.5 (mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 433 NO. OF PERSONS	B. 1705 NO. OF PERSONS	C. 1944 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION <1 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE: _____

04 DISTANCE TO NEAREST OFF-SITE BUILDING <1 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

Sparsely populated rural area - ~4402 residents within 4-miles of the landfill.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
- PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☒ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☒ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
_____ (ft)	6 (ft)	_____

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
5 (in)	3.5 (in)	1.4 %	Varies	1 %

09 FLOOD POTENTIAL

SITE IS IN _____ YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. NA (mi)

OTHER: B. ~2 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

unknown (mi)

ENDANGERED SPECIES: bald eagle, Bachman's Warbler, red-cockaded woodpecker.

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. 5 (mi)	B. — (mi)	C. — (mi)	D. <1 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Site area is relatively flat.
Drainage appears to be to the south, southeast.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NUS, EIA, & State file material.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
BC	D091028095

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	4	Organic Analyses:	12/90
SURFACE WATER		S-Cubed; San Diego, Calif.	
WASTE			
AIR			
RUNOFF		Inorganic Analyses:	12/90
SPILL		Skinner & Sherman;	
SOIL	13	Waltham, MA.	
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
pH	for groundwater
Conductivity	samples
Temperature	only

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☐ GROUND ☒ AERIAL

02 IN CUSTODY OF NUS Corporation (Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS NUS Corporation

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

NUS, EPA, & State File material.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
Gene Neighbors			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**11 SIC CODE**
Rt. 6 Box 226			
05 CITY / **06 STATE** / **07 ZIP CODE**		**12 CITY** / **13 STATE** / **14 ZIP CODE**	
Moncks Corners / SC / 29461			
01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	12 CITY / 13 STATE	14 ZIP CODE
01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	12 CITY / 13 STATE	14 ZIP CODE
01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	12 CITY / 13 STATE	14 ZIP CODE

PARENT COMPANY (If applicable)

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	05 CITY / 06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	05 CITY / 06 STATE	07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	05 CITY / 06 STATE	07 ZIP CODE

IV. REALTY OWNER(S) (If applicable; list most recent first)

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NUS field sheets (Chain of Custody), EPA, & State files

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

II. CURRENT OPERATOR *(Provide if different from owner)*

01 NAME	02 D+B NUMBER
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY *(If applicable)*

10 NAME	11 D+B NUMBER
12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE
14 CITY / 15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) *(List most recent first; provide only if different from owner)*

01 NAME	02 D+B NUMBER
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES *(If applicable)*

10 NAME	11 D+B NUMBER
12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE
14 CITY / 15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER
12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE
14 CITY / 15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER
12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE
14 CITY / 15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
GC	D981028095

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

II. PAST RESPONSE ACTIVITIES

N/A

01 ☐ A. WATER SUPPLY CLOSED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ D. SPILLED MATERIAL REMOVED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ F. WASTE REPACKAGED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ H. ON SITE BURIAL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ L. ENCAPSULATION 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ N. CUTOFF WALLS 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ O. EMERGENCY DIKING SURFACE WATER DIVERSION 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ P. CUTOFF TRENCHES/SUMP 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ Q. SUBSURFACE CUTOFF WALL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☒ S. CAPPING/COVERING — 02 DATE 1976 — 03 AGENCY _____
04 DESCRIPTION
2' soil cover upon closure of landfill

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
N/A

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA & State file material

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
SC	DAK028095

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY ENFORCEMENT ACTION YES X NO

02 DESCRIPTION OF FEDERAL STATE LOCAL REGULATORY ENFORCEMENT ACTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

APPENDIX

I. FEEDSTOCKS

CAS Number	Chemical Name
1. 7664-41-7	Ammonia
2. 7440-36-0	Antimony
3. 1309-64-4	Antimony Trioxide
4. 7440-38-2	Arsenic
5. 1327-53-3	Arsenic Trioxide
6. 21109-95-5	Barium Sulfide
7. 7726-95-6	Bromine
8. 106-99-0	Butadiene
9. 7440-43-9	Cadmium
10. 7782-50-5	Chlorine
11. 12737-27-8	Chromite
12. 7440-47-3	Chromium
13. 7440-48-4	Cobalt
14. 1317-38-0	Cupric Oxide
15. 7758-98-7	Cupric Sulfate
16. 1317-39-1	Cuprous Oxide
17. 74-85-1	Ethylene
18. 7647-01-0	Hydrochloric Acid
19. 7664-39-3	Hydrogen Fluoride
20. 1335-25-7	Lead Oxide
21. 7439-97-6	Mercury
22. 74-82-8	Methane
23. 91-20-3	Napthalene
24. 7440-02-0	Nickel
25. 7697-37-2	Nitric Acid
26. 7723-14-0	Phosphorus
27. 7778-50-9	Potassium Dichromate
28. 1310-58-3	Potassium Hydroxide
29. 115-07-1	Propylene
30. 10588-01-9	Sodium Dichromate
31. 1310-73-2	Sodium Hydroxide
32. 7646-78-8	Stannic Chloride
33. 7772-99-8	Stannous Chloride
34. 7664-93-9	Sulfuric Acid
35. 108-88-3	Toluene
36. 1330-20-7	Xylene
37. 7646-85-7	Zinc Chloride
38. 7733-02-0	Zinc Sulfate

II. HAZARDOUS SUBSTANCES

CAS Number	Chemical Name
1. 75-07-0	Acetaldehyde
2. 64-19-7	Acetic Acid
3. 108-24-7	Acetic Anhydride
4. 75-86-5	Acetone Cyanohydrin
5. 506-96-7	Acetyl Bromide
6. 75-36-5	Acetyl Chloride
7. 107-02-8	Acrolein
8. 107-13-1	Acrylonitrile
9. 124-04-9	Adipic Acid
10. 309-00-2	Aldrin
11. 10043-01-3	Aluminum Sulfate
12. 107-18-6	Allyl Alcohol
13. 107-05-1	Allyl Chloride
14. 7664-41-7	Ammonia
15. 631-61-8	Ammonium Acetate
16. 1863-63-4	Ammonium Benzoate
17. 1066-33-7	Ammonium Bicarbonate
18. 7789-09-5	Ammonium Bichromate
19. 1341-49-7	Ammonium Bifluoride
20. 10192-30-0	Ammonium Bisulfite
21. 1111-78-0	Ammonium Carbamate
22. 12125-02-9	Ammonium Chloride
23. 7788-98-9	Ammonium Chromate
24. 3012-65-5	Ammonium Citrate, Dibasic
25. 13826-83-0	Ammonium Fluoborate
26. 12125-01-8	Ammonium Fluoride
27. 1336-21-6	Ammonium Hydroxide
28. 6009-70-7	Ammonium Oxalate
29. 16919-19-0	Ammonium Silicofluoride
30. 7773-06-0	Ammonium Sulfamate
31. 12135-76-1	Ammonium Sulfide
32. 10196-04-0	Ammonium Sulfite
33. 14307-43-8	Ammonium Tartrate
34. 1762-95-4	Ammonium Thiocyanate
35. 7783-18-8	Ammonium Thiosulfate
36. 628-63-7	Amyl Acetate
37. 62-53-3	Aniline
38. 7647-18-9	Antimony Pentachloride
39. 7789-61-9	Antimony Tribromide
40. 10025-91-9	Antimony Trichloride
41. 7783-56-4	Antimony Trifluoride
42. 1309-64-4	Antimony Trioxide
43. 1303-32-8	Arsenic Disulfide
44. 1303-28-2	Arsenic Pentoxide
45. 7784-34-1	Arsenic Trichloride
46. 1327-53-3	Arsenic Trioxide
47. 1303-33-9	Arsenic Trisulfide
48. 542-62-1	Barium Cyanide
49. 71-43-2	Benzene
50. 65-85-0	Benzoic Acid
51. 100-47-0	Benzonitrile
52. 98-88-4	Benzoyl Chloride
53. 100-44-7	Benzyl Chloride
54. 7440-41-7	Beryllium
55. 7787-47-5	Beryllium Chloride
56. 7787-49-7	Beryllium Fluoride
57. 13597-99-4	Beryllium Nitrate
58. 123-86-4	Butyl Acetate
59. 84-74-2	n-Butyl Phthalate
60. 109-73-9	Butylamine
61. 107-92-6	Butyric Acid
62. 543-90-8	Cadimium Acetate
63. 7789-42-6	Cadmium Bromide
64. 10108-64-2	Cadmium Chloride
65. 7778-44-1	Calcium Arsenate
66. 52740-16-6	Calcium Arsenite
67. 75-20-7	Calcium Carbide
68. 13765-19-0	Calcium Chromate
69. 592-01-8	Calcium Cyanide
70. 26264-06-2	Calcium Dodecylbenzene Sulfonate
71. 7778-54-3	Calcium Hypochlorite
72. 133-06-2	Captan
73. 63-25-2	Carbaryl
74. 1563-66-2	Carbofuran
75. 75-15-0	Carbon Disulfide
76. 56-23-5	Carbon Tetrachloride
77. 57-74-9	Chlordane
78. 7782-50-5	Chlorine
79. 108-90-7	Chlorobenzene
80. 67-66-3	Chloroform
81. 7790-94-5	Chlorosulfonic Acid
82. 2921-88-2	Chlorpyrifos
83. 1066-30-4	Chromic Acetate
84. 7738-94-5	Chromic Acid
85. 10101-53-8	Chromic Sulfate
86. 10049-05-5	Chromous Chloride
87. 544-18-3	Cobaltous Formate
88. 14017-41-5	Cobaltous Sulfamate
89. 56-72-4	Coumaphos
90. 1319-77-3	Cresol
91. 4170-30-3	Crotonaldehyde
92. 142-71-2	Cupric Acetate
93. 12002-03-8	Cupric Acetoarsenite
94. 7447-39-4	Cupric Chloride
95. 3251-23-8	Cupric Nitrate
96. 5893-66-3	Cupric Oxalate
97. 7758-98-7	Cupric Sulfate
98. 10380-29-7	Cupric Sulfate Ammoniated
99. 815-82-7	Cupric Tartrate
100. 506-77-4	Cyanogen Chloride
101. 110-82-7	Cyclohexane
102. 94-75-7	2,4-D Acid
103. 94-11-1	2,4-D Esters
104. 50-29-3	DDT
105. 333-41-5	Diazinon
106. 1918-00-9	Dicamba
107. 1194-65-6	Dichlobenil
108. 117-80-6	Dichlone
109. 25321-22-6	Dichlorobenzene (all isomers)
110. 266-38-19-7	Dichloropropane (all isomers)
111. 26952-23-8	Dichloropropene (all isomers)
112. 8003-19-8	Dichloropropene-Dichloropropane Mixture
113. 75-99-0	2-2-Dichloropropionic Acid
114. 62-73-7	Dichlorvos
115. 60-57-1	Dieldrin
116. 109-89-7	Diethylamine
117. 124-40-3	Dimethylamine
118. 25154-54-5	Dinitrobenzene (all isomers)
119. 51-28-5	Dinitrophenol
120. 25321-14-6	Dinitrotoluene (all isomers)
121. 85-00-7	Diquat
122. 298-04-4	Disulfoton
123. 330-54-1	Diuron
124. 27176-87-0	Dodecylbenzenesulfonic Acid
125. 115-29-7	Endosulfan (all isomers)
126. 72-20-8	Endrin and Metabolites
127. 106-89-8	Epichlorohydrin
128. 563-12-2	Ethion
129. 100-41-4	Ethyl Benzene
130. 107-15-3	Ethylenediamine
131. 106-93-4	Ethylene Dibromide
132. 107-06-2	Ethylene Dichloride
133. 60-00-4	EDTA
134. 1185-57-5	Ferric Ammonium Citrate
135. 2944-67-4	Ferric Ammonium Oxalate
136. 7705-08-0	Ferric Chloride

II. HAZARDOUS SUBSTANCES

CAS Number	Chemical Name
137. 7783-50-8	Ferric Fluoride
138. 10421-48-4	Ferric Nitrate
139. 10028-22-5	Ferric Sulfate
140. 10045-89-3	Ferrous Ammonium Sulfate
141. 7758-94-3	Ferrous Chloride
142. 7720-78-7	Ferrous Sulfate
143. 206-44-0	Fluoranthene
144. 50-00-0	Formaldehyde
145. 64-18-6	Formic Acid
146. 110-17-8	Fumaric Acid
147. 98-01-1	Furfural
148. 86-50-0	Guthion
149. 76-44-8	Heptachlor
150. 118-74-1	Hexachlorobenzene
151. 87-68-3	Hexachlorobutadiene
152. 67-72-1	Hexachloroethane
153. 70-30-4	Hexachlorophene
154. 77-47-4	Hexachlorocyclopentadiene
155. 7647-01-0	Hydrochloric Acid (Hydrogen Chloride)
156. 7664-39-3	Hydrofluoric Acid (Hydrogen Fluoride)
157. 74-90-8	Hydrogen Cyanide
158. 7783-06-4	Hydrogen Sulfide
159. 78-79-5	Isoprene
160. 42504-46-1	Isopropanolamine Dodecylbenzenesulfonate
161. 115-32-2	Kelthane
162. 143-50-0	Kepone
163. 301-04-2	Lead Acetate
164. 3687-31-8	Lead Arsenate
165. 7758-95-4	Lead Chloride
166. 13814-96-5	Lead Fluoborate
167. 7783-46-2	Lead Fluoride
168. 10101-63-0	Lead Iodide
169. 18256-98-9	Lead Nitrate
170. 7428-48-0	Lead Stearate
171. 15739-80-7	Lead Sulfate
172. 1314-87-0	Lead Sulfide
173. 592-87-0	Lead Thiocyanate
174. 58-89-9	Lindane
175. 14307-35-8	Lithium Chromate
176. 121-75-5	Malthion
177. 110-16-7	Maleic Acid
178. 108-31-6	Maleic Anhydride
179. 2032-65-7	Mercaptodimethur
180. 592-04-1	Mercuric Cyanide
181. 10045-94-0	Mercuric Nitrate
182. 7783-35-9	Mercuric Sulfate
183. 592-85-8	Mercuric Thiocyanate
184. 10415-75-5	Mercurous Nitrate
185. 72-43-5	Methoxychlor
186. 74-93-1	Methyl Mercaptan
187. 80-62-6	Methyl Methacrylate
188. 298-00-0	Methyl Parathion
189. 7786-34-7	Mevinphos
190. 315-18-4	Mexacarbate
191. 75-04-7	Monoethylamine
192. 74-89-5	Monomethylamine
193. 300-76-5	Naled
194. 91-20-3	Naphthalene
195. 1338-24-5	Naphthenic Acid
196. 7440-02-0	Nickel
197. 15699-18-0	Nickel Ammonium Sulfate
198. 37211-05-5	Nickel Chloride
199. 12054-48-7	Nickel Hydroxide
200. 14216-75-2	Nickel Nitrate
201. 7786-81-4	Nickel Sulfate
202. 7697-37-2	Nitric Acid
203. 98-95-3	Nitrobenzene
204. 10102-44-0	Nitrogen Dioxide
205. 25154-55-6	Nitrophenol (all isomers)
206. 1321-12-6	Nitrotoluene
207. 30525-89-4	Paraformaldehyde
208. 56-38-2	Parathion
209. 608-93-5	Pentachlorobenzene
210. 87-86-5	Pentachlorophenol
211. 85-01-8	Phenanthrene
212. 108-95-2	Phenol
213. 75-44-5	Phosgene
214. 7664-38-2	Phosphoric Acid
215. 7723-14-0	Phosphorus
216. 10025-87-3	Phosphorus Oxychloride
217. 1314-80-3	Phosphorus Pentasulfide
218. 7719-12-2	Phosphorus Trichloride
219. 7784-41-0	Potassium Arsenate
220. 10124-50-2	Potassium Arsenite
221. 7778-50-9	Potassium Bichromate
222. 7789-00-6	Potassium Chromate
223. 7722-64-7	Potassium Permanganate
224. 2312-35-8	Propargite
225. 79-09-4	Propionic Acid
226. 123-62-6	Propionic Anhydride
227. 1336-36-3	Polychlorinated Biphenyls
228. 151-50-8	Potassium Cyanide
229. 1310-58-3	Potassium Hydroxide
230. 75-56-9	Propylene Oxide
231. 121-29-9	Pyrethrins
232. 91-22-5	Quinoline
233. 108-46-3	Resorcinol
234. 7446-08-4	Selenium Oxide
235. 7761-88-8	Silver Nitrate
236. 7631-89-2	Sodium Arsenate
237. 7784-46-5	Sodium Arsenite
238. 10588-01-9	Sodium Bichromate
239. 1333-83-1	Sodium Bifluoride
240. 7631-90-5	Sodium Bisulfite
241. 7775-11-3	Sodium Chromate
242. 143-33-9	Sodium Cyanide
243. 25155-30-0	Sodium Dodecylbenzene Sulfonate
244. 7681-49-4	Sodium Fluoride
245. 16721-80-5	Sodium Hydrosulfide
246. 1310-73-2	Sodium Hydroxide
247. 7681-52-9	Sodium Hypochlorite
248. 124-41-4	Sodium Methylate
249. 7632-00-0	Sodium Nitrate
250. 7558-79-4	Sodium Phosphate, Dibasic
251. 7601-54-9	Sodium Phosphate, Tribasic
252. 10102-18-8	Sodium Selenite
253. 7789-06-2	Strontium Chromate
254. 57-24-9	Strychnine and Salts
255. 100-420-5	Styrene
256. 12771-08-3	Sulfur Monochloride
257. 7664-93-9	Sulfuric Acid
258. 93-76-5	2,4,5-T Acid
259. 2008-46-0	2,4,5-T Amines
260. 93-79-8	2,4,5-T Esters
261. 13560-99-1	2,4,5-T Salts
262. 93-72-1	2,4,5-TP Acid
263. 32534-95-5	2,4,5-TP Acid Esters
264. 72-54-8	TDE
265. 95-94-3	Tetrachlorobenzene
266. 127-18-4	Tetrachloroethane
267. 78-00-2	Tetraethyl Lead
268. 107-49-3	Tetraethyl Pyrophosphate
269. 7446-18-6	Thallium (I) Sulfate
270. 108-88-3	Toluene
271. 8001-35-2	Toxaphene
272. 12002-48-1	Trichlorobenzene (all isomers)
273. 52-68-6	Trichlorfon
274. 25323-89-1	Trichloroethane (all isomers)
275. 79-01-6	Trichloroethylene
276. 25167-82-2	Trichlorophenol (all isomers)
277. 27323-41-7	Triethanolamine Dodecylbenzenesulfonate
278. 121-44-8	Triethylamine
279. 75-50-3	Trimethylamine
280. 541-09-3	Uranyl Acetate
281. 10102-06-4	Uranyl Nitrate
282. 1314-62-1	Vanadium Pentoxide
283. 27774-13-6	Vanadyl Sulfate
284. 108-05-4	Vinyl Acetate
285. 75-35-4	Vinylidene Chloride
286. 1300-71-6	Xylenol
287. 557-34-6	Zinc Acetate
288. 52628-25-8	Zinc Ammonium Chloride
289. 1332-07-6	Zinc Borate
290. 7699-45-8	Zinc Bromide
291. 3486-35-9	Zinc Carbonate
292. 7646-85-7	Zinc Chloride
293. 557-21-1	Zinc Cyanide
294. 7783-49-3	Zinc Fluoride
295. 557-41-5	Zinc Formate
296. 7779-86-4	Zinc Hydrosulfite
297. 7779-88-6	Zinc Nitrate
298. 127-82-2	Zinc Phenolsulfonate
299. 1314-84-7	Zinc Phosphide
300. 16871-71-9	Zinc Silicofluoride
301. 7733-02-0	Zinc Sulfate
302. 13746-89-9	Zirconium Nitrate
303. 16923-95-8	Zirconium Potassium Fluoride
304. 14644-61-2	Zirconium Sulfate
305. 10026-11-6	Zirconium Tetrachloride

NUS CORPORATION
1927 LAKESIDE PARKWAY
SUITE 614
TUCKER, GEORGIA 30084
404-938-7710

C-586-9-0-18

September 4, 1990

Mr. William Bokey
Environmental Protection Agency
College Station Road
Athens, Georgia 30613

SEPT 0 5 90
HAZARDOUS W...

Subject: Study Plan
Revision 0
Berkeley County Landfill
Oakley, Berkeley County, South Carolina
EPA ID No. SCD981028095
TDD No. F4-9007-16

Dear Mr. Bokey:

Enclosed please find two (2) copies of the Study Plan for the Berkeley County Landfill in Oakley, South Carolina.

If you have any questions or comments, please call me at NUS Corporation.

Very truly yours,

Lisa Ward

Lisa Ward
Project Manager

Approved:

Greg Schank

LW/dwf

Enclosures (2)

SEP 06 1990

R-586-8-0-31

STUDY PLAN
SCREENING SITE INSPECTION, PHASE II
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA
EPA ID #: SCD981028095

Prepared Under
TDD No. F4-9007-16
CONTRACT NO. 68-01-7346

Revision 0

FOR THE

WASTE MANAGEMENT DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

SEPTEMBER 3, 1990

NUS CORPORATION
SUPERFUND DIVISION

Prepared By	Reviewed By	Approved By
Lisa Ward	Donnie McCurry for	Greg Schank for
Lisa Ward Project Manager	Roger Franklin Assistant Regional Project Manager	Phil Blackwell Regional Project Manager

NOTICE

The information in this document has been funded wholly by the United States Environmental Protection Agency (EPA) under Contract Number 68-01-7346 and is considered proprietary to the EPA.

This information is not to be released to third parties without the expressed or written consent of the EPA.

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STUDY PLAN

SCREENING SITE INSPECTION, PHASE II

BERKELEY COUNTY LANDFILL

OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

EPA ID #SCD981028095

TDD NO. F4-9007-16

1.0 INTRODUCTION

The NUS Corporation Region 4 Field Investigation Team (FIT) has been tasked by the U.S. Environmental Protection Agency (EPA), Waste Management Division to conduct a Screening Site Inspection (SSI) at the Berkely County Landfill facility in Berkeley County, South Carolina. 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). Tasks will be performed to satisfy the requirements stated in Phase II of Technical Directive Document (TDD) number F4-9007-16.

1.1 Objectives

The objectives of this Phase II 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
- Evaluate target populations associated with the groundwater, surface water, air and onsite exposure pathways
- Develop a site sketch
- Conduct a geophysical screening of site to determine whether buried drums may be present, and to characterize the landfill's boundaries.
- Collect environmental samples

1.3 Schedule

September 17, 1990

1.4 Personnel

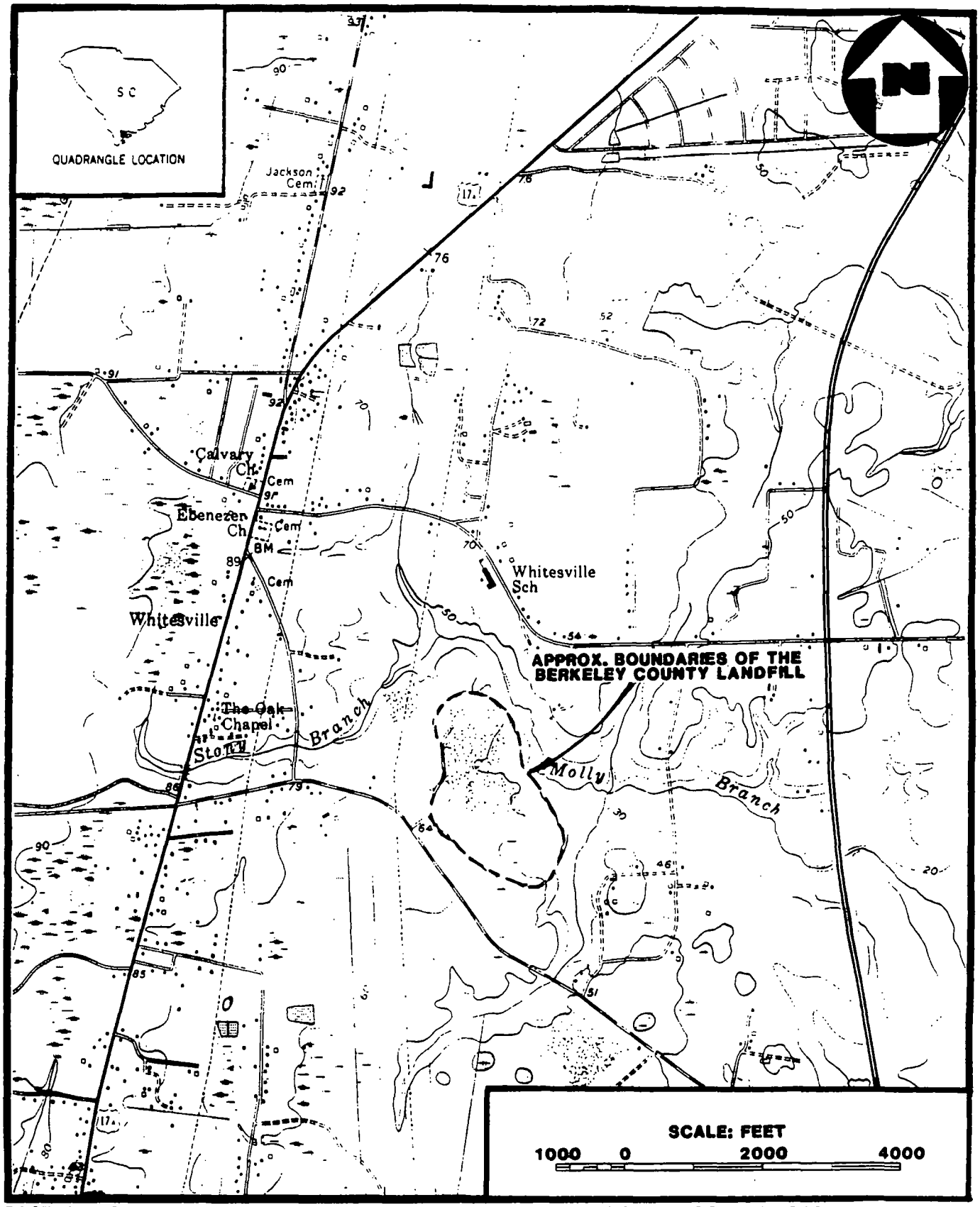
Project Manager - Lisa Ward
Other personnel as required

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 Berkeley County Landfill is located three miles west of Oakley, South Carolina. The landfill was used from 1972 to 1977 and received primarily domestic waste, but also commercial, agricultural, and industrial waste. This landfill is estimated to be 6 feet deep and 280 acres (Ref. 1; 2, p. 1; Figure 1).



BASE MAP IS A PORTION OF THE USGS 7.5 MINUTE QUADRANGLE, MONCKS CORNER 1979.

SITE LOCATION MAP
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

FIGURE 1

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Little information is available on specific wastes that were disposed of in this landfill. However, a new county landfill site (DWP021) was located upon closure of the landfill being investigated. The wastes disposed of here include plastics, waste oil, titanium dioxide, sludge from textile operations, bark sludge, epoxy resins, chemical containers, scrap metal, and miscellaneous trash-all from area industries. Although none of the materials disposed of in the new landfill are known to be in the old site, it is possible that some or all of these may have been placed in this old site prior to 1976 (Ref. 2).

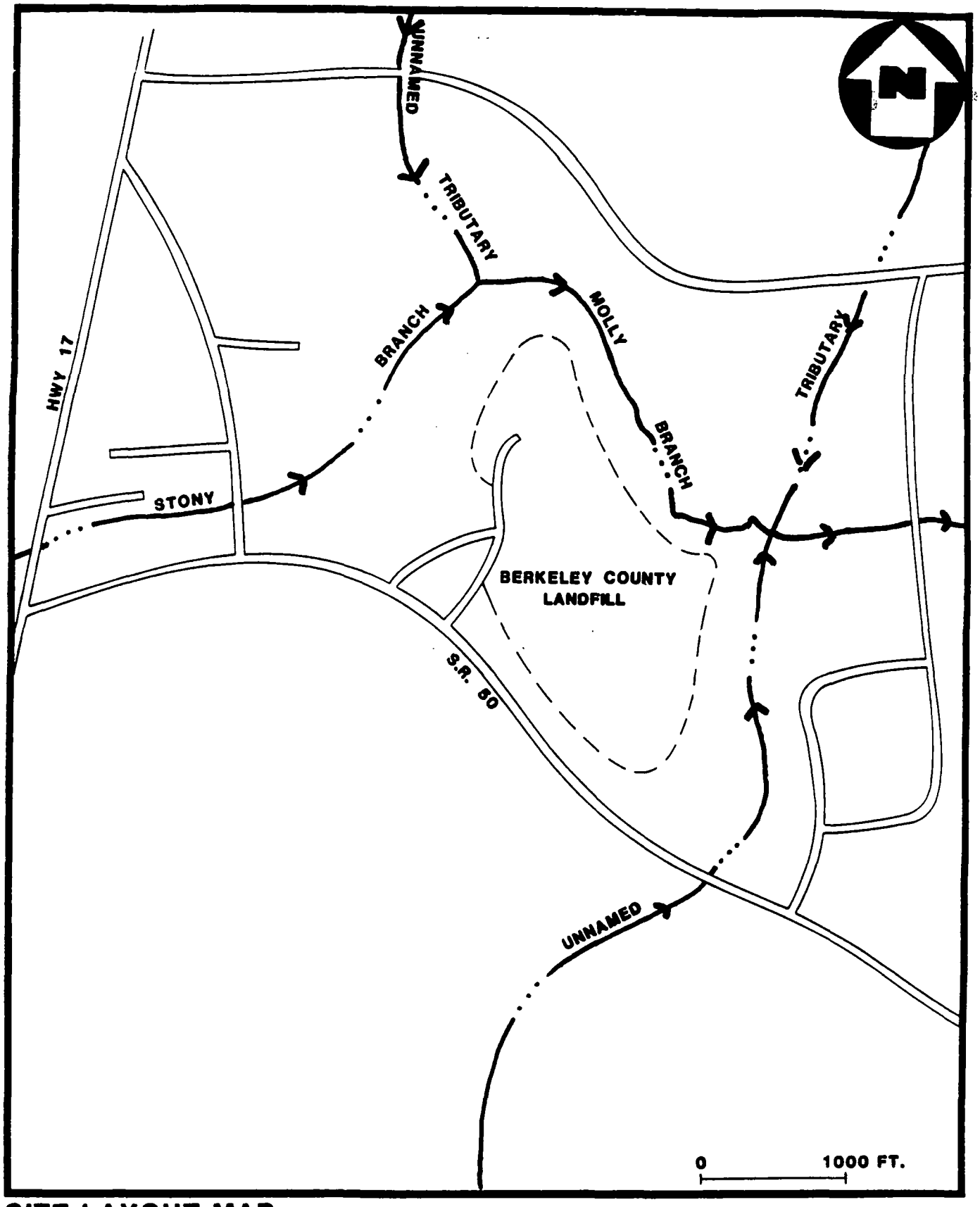
The land adjacent to the landfill is pine forested and underdeveloped except for a few homes (Ref. 1, p. 3). The site layout is shown in Figure 2.

1.7 Regional Hydrogeology

The Berkeley County Landfill is located in the Atlantic Coastal Plain Physiographic Province and the Atlantic and Gulf Coastal Plain hydrogeologic setting (Ref. 3, plate 28; 2, pp. 270, 271). The climate of the area is characterized by moderate temperatures and humid days (Ref. 5, p. 7). The net annual precipitation is 5 inches and the maximum 1-year, 24-hour rainfall is 3.5 inches (Ref. 6, pp. 43, 63; 7).

The landfill is underlain by surficial soils that consists of discontinuous layers of sand and clay with minor amounts of shell and limestone extending to a depth of 30 feet below land surface (bls) (Ref. 5, pp. 12, 13, 41). These surficial soils and underlying recent unconsolidated materials comprise the shallow aquifer, which occur under water table conditions. Water levels vary between 3 to 15 feet bls and reflect variations in the local topography and geographic position (Ref. 5, p. 41). Transmissivities of the shallow aquifer are generally less than 770 square feet per day (ft/day) (Ref. 5, p. 143). The hydraulic conductivity for sediment similar to these is 1.0 x 10 cm/s (Ref. 8, p. 29).

The Cooper Formation occurs beneath the surficial soils and is an impermeable sandy limestone that acts as a confining zone between the shallow aquifer and the lower Santee Limestone aquifer (Ref. 5, p. 41). The Cooper Formation is approximately 125 feet thick in the landfill area (Ref. 5, p. 13). Formations that underlie the Cooper Formation, in descending order are: the Santee Limestone, the Black Mingo Formation, the Peedee Formation, the Black Creek Formation, and the Middendorf Formation (Ref. 5, p. 13). The Santee Limestone is a fossiliferous, slightly glauconitic limestone approximately 65 feet thick in the (Ref. 5, pp. 13, 18). The zone dips southward at 8 feet per mile and increases the thickness toward the south (Ref. 5, p. 18). The Black Mingo Formation consists of sand and limestone in the upper portion of the stratigraphic column and its lower half (Ref. 5, p. 13). The Peedee Formation is represented by calcareous clays and silty sands that are approximately 320 feet thick (Ref. 5, pp. 13, 17). The Middendorf Formation is composed of clays in the lower half with silty



SITE LAYOUT MAP
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

FIGURE 2

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sand in the upper. It is encountered at a depth of 1560 feet bls in the landfill area (Ref. 5, pp. 11, 13, 17).

2.0 SCREENING

2.1 Geophysical Screening

A geophysical screening will be conducted at the site for the purpose of delineating the landfill area. Since the exact boundaries of the landfill are unknown, it is felt that geophysical techniques provide the most viable alternative for locating subsurface waste materials. The most suitable geophysical techniques applicable in this geologic setting are believed to be electromagnetics and/or magnetics. If proper subsurface conditions exist at the site, these techniques will provide the necessary data needed to accurately define any subsurface waste material. The results will then be used in determining optimum sampling locations in the area.

Instruments to be used will include a non-contacting ground conductivity meter (Geonics-EM-31) and a proton precision magnetometer (Geometrics-G-856). A summary of geophysical methods is provided in Appendix A.

2.2 Field Analytical Screening

A soil gas survey will be performed at Berkeley County Landfill using Field Analytical Support Project (FASP) protocols. In addition to geophysical screening, soil gas screening will aid in delineating the landfill. This information, in addition to file material, transport gradients, observations, etc., will be used to assist in determining CLP sample locations.

FASP soil gas monitoring will provide low cost, quick-turn-around screening for indication of organic vapors in soil gas. Soil gas will be tested with a direct-reading organic vapor analyzer (HNu HW-101, Photovac Tip II, and/or Foxboro OVA 128). Once geophysical methods characterize the boundaries, soil gas probes will be placed around the landfill area. Placement and number will depend on site conditions. In order to assure a quick turn-around time, limited, tentative results may be reported with appropriate QA/QC qualifiers.

Data generated from the screening survey are not intended to support listing or enforcement action. The primary purpose is to aid in direction of CLP sampling activities. With the support of CLP results. Screening data may be used to characterize areal extent of contamination. The data can be used to support health and safety decisions regarding use of personal protective equipment.

3.0 SAMPLING INVESTIGATION

The sampling investigation will include the collection of surface soil, subsurface soil, sediment, surface water and groundwater samples. One of each sample type will be collected from an area not impacted by the site to establish background conditions. Samples will be analyzed for extractable and purgeable organic compounds, pesticides, PCBs, cyanides, and metals included in the USEPA Target Compound. Analyses will be performed under the Contract Laboratory Program (CLP).

3.1 Soil Sampling

A total of 5 surface and 9 subsurface soil samples will be collected during the investigation. One of the sample stations will serve as a background. Four of the surface and subsurface soils will be collected from the perimeter of the landfill. The remaining 4 subsurface soil samples will be collected from the landfill itself. Due to lack of information available, the exact locations of the sampling stations will be determined in the field. Sample codes and descriptions are present in Table 1 and sample locations are shown on Figure 3.

3.2 Surface Water and Sediment Sampling

Surface water and sediment samples will be collected from 6 stations along Molly Branch and its tributaries. The sample stations will be located upstream, downstream, and adjacent to the landfill. Sample codes and descriptions are presented in Table 1 and sample locations are shown on Figure 3.

3.3 Groundwater Sampling

Six groundwater samples will be collected during the investigation. One of the samples will be collected from the closest private potable well. The remaining 5 samples will all be collected from temporary monitoring wells. These will be installed by advancing each of the boreholes drilled for the collection of the perimeter subsurface soil samples described in section 3.1. Sample descriptions are presented in Table 1 and sample locations are shown on Figure 3.

TABLE 1

SAMPLE LOCATIONS AND RATIONALE
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

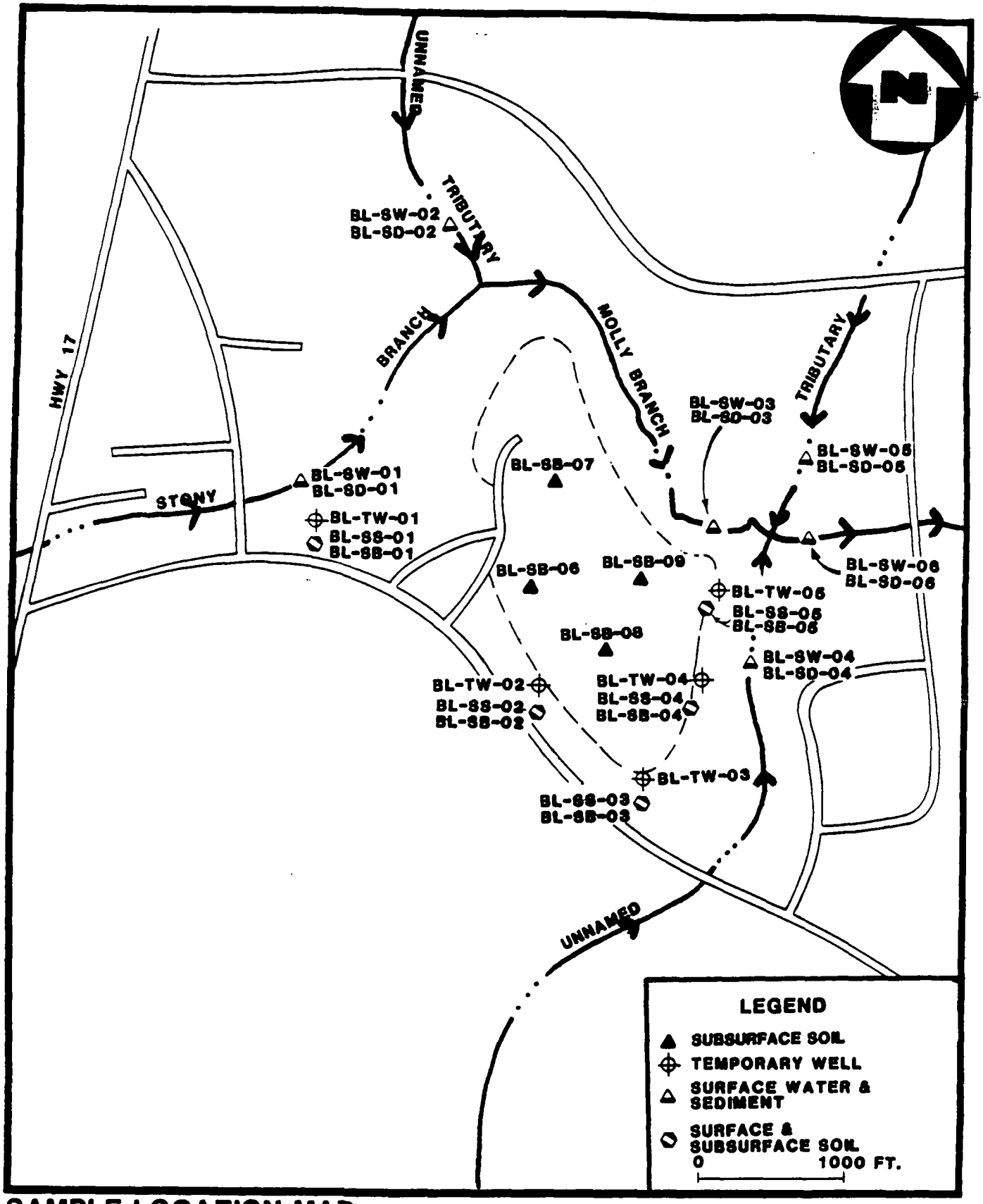
Sample Code	Sample Type	Location	Rationale
BL-SW-01 BL-SD-01	Surface Water Sediment	Upstream, west of site on Molly Branch	Establish background conditons
BL-SW-02 BL-SD-02	Surface Water Sediment	Northwest of site on an unnamed tributary of Molly Branch	Determine presence or absence of contamination
BL-SW-03 BL-SD-03	Surface Water Sediment	West of intersection of Molly Branch and unnamed tributary east of site	Determine presence or absence of contamination
BL-SW-04 BL-SD-04	Surface Water Sediment	South of intersection of Molly Branch and unnamed tributary east of site	Determine presence or absence of contamination
BL-SW-05 BL-SD-05	Surface Water Sediment	North intersection of Molly Branch and unnamed tributary east of site	Determine presence or absence of contamination
BL-SW-06 BL-SD-06	Surface Water Sediment	East of intersection of Molly Branch and unnamed tributaries	Determine presence or absence of contamination
BL-SS-01 BL-SB-01 BL-TW-01	Surface Soil Subsurface Soil Temporary Well	Upgradient, west of site, just south of Molly Branch	Establish background conditions
BL-SS-02 BL-SB-02 BL-TW-02	Surface Soil Subsurface Soil Temporary Well	Southwest edge of landfill	Determine presence or absence of contamination
BL-SS-03 BL-SB-03 BL-TW-03	Surface Soil Subsurface Soil Temporary Well	South edge of landfill	Determine presence or absence of contamination
BL-SS-04 BL-SB-04 BL-TW-04	Surface Soil Subsurface Soil Temporary Well	Southeast edge of landfill	Determine presence or absence of contamination
BL-SS-05 BL-SB-05 BL-TW-05	Surface Soil Subsurface Soil Temporary Well	East edge of landfill	Determine presence or absence of contamination

BL - Berkeley County Landfill
SW - surface water
SD - sediment
SS - surface soil
SB - subsurface soil
TW - temporary well
PW - private well

TABLE 1

SAMPLE LOCATIONS AND RATIONALE
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

Sample Code	Sample Type	Location	Rationale
BL-SB-06	Subsurface Soil	West section of landfill	Determine presence or absence of contamination
BL-SB-07	Subsurface Soil	North central section of landfill	Determine presence or absence of contamination
BL-SB-08	Subsurface Soil	South central section of landfill	Determine presence or absence of contamination
BL-SB-09	Subsurface Soil	East section of landfill	Determine presence or absence of contamination
BL-PW-01	Private Well	Nearest private well	Determine presence or absence of contamination



SAMPLE LOCATION MAP
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

FIGURE 3

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3.4 Analytical and Container Requirements

Sample containers used will be in accordance with the requirements specified in the Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division, April 1, 1986. 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	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	4 oz., glass*	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.

3.5 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 Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual; United States Environmental Protection Agency, Region IV, Environmental Services Division, April 1, 1986.

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; United States Environmental Protection Agency, Region IV, Environmental Services Division; revised June 1, 1985 or as specified by the existing United

States Environmental Protection Agency standard procedures and protocols for the contract analytical laboratory program.

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APPENDIX A

SUMMARY OF GEOPHYSICAL METHODS

The following sections are from "Geophysical Techniques for Sensing Buried Wastes and Waste Migration" by Glaccum, R. A., and M. R. Noel, August, 1983, Technos, Inc., for Environmental Monitoring Systems Laboratory, ORD., USEPA, Las Vegas, Nevada.

ELECTROMAGNETICS (EM)*

The electromagnetic (EM) method provides a means of measuring the electrical conductivity of subsurface soil, rock, and ground water. Electrical conductivity is a function of the type of soil and rock, its porosity, its permeability, and the fluids which fill the pore space. In most cases the conductivity (specific conductance) of the pore fluids will dominate the measurement. Accordingly, the EM method is applicable both to assessment of natural geohydrologic conditions and to mapping of many types of contaminant plumes. Additionally, trench boundaries, buried wastes and drums, as well as metallic utility lines can be located with EM techniques.

Natural variations in subsurface conductivity may be caused by changes in soil moisture content, ground water specific conductance, depth of soil cover over rock, and thickness of soil and rock layers. Changes in basic soil or rock types, and structural features such as fractures or voids may also produce changes in conductivity. Localized deposits of natural organic, clay, sand, gravel, or saltrich zones will also affect subsurface conductivity.

---

*The term electromagnetic has been used in contemporary literature as a descriptive term for other geophysical methods, including GPR and metal detectors which are based on electromagnetic principles. However, this document will use electromagnetic (EM) to specifically imply the measurement of subsurface conductivities by low-frequency electromagnetic induction. This is in keeping with the traditional use of the term in the geophysical industry from which the EM methods originated. While the authors recognize that there are many electromagnetic systems and manufacturers, the discussion in this section is based solely on instruments which are calibrated to read in electrical conductivity units and which have been effectively and extensively used at hazardous waste sites. There is only one manufacturer of such instruments at the time of this writing.

Many contaminants will produce an increase in free ion concentration when introduced into the soil or ground water systems. This increase over background conductivity enables detection and mapping of contaminated soil and ground water at Hazardous Waste Sites (HWS), landfills, and impoundments. Large amounts of organic fluids such as diesel fuel can displace the normal soil moisture, causing a decrease in conductivity which may also be mapped, although this is not commonly done. The mapping of a plume will usually define the local flow direction of

contaminants. Contaminant migration rates can be established by comparing measurements taken at different times.

The absolute values of conductivity for geologic materials (and contaminants) are not necessarily diagnostic in themselves, but the variations in conductivity, laterally and with depth, are significant. It is these variations which enable the investigator to rapidly find anomalous conditions.

Since the EM method does not require ground contact, measurements may be made quite rapidly. Lateral variations in conductivity can be detected and mapped by a field technique called profiling. Profiling measurements may be made to depths ranging from 0.75 to 60 meters. The data is recorded using strip chart and magnetic tape recorders. This continuous measurement allows increased rates of data acquisition and improved resolution for mapping small geohydrologic features. Further, recorded data enhanced by computer processing has proved invaluable in the evaluation of complex hazardous waste sites. The excellent lateral resolution obtained from EM profiling data has been used to advantage in efforts to outline closely-spaced burial pits, to reveal the migration of contaminants into the surrounding soil, and to delineate fracture patterns.

Vertical variations in conductivity can also be detected by the EM method. A station measurement technique called sounding is employed for this purpose. Data can be acquired from depths by combining results from a variety of EM instruments, each requiring different field application techniques. Other EM systems are capable of sounding to depth of one-thousand feet or more, but have not yet been used at HWS and are not adaptable to continuous measurements.

Profiling is the most cost-effective use of the EM method. Continuous profiling can be used in many applications to increase resolution, data density, and permit total site coverage at critical sites.

At HWS, applications of EM can provide:

- Assessment of natural geohydrologic conditions;
- Locating and mapping of burial trenches and pits containing drums and/or bulk wastes;
- Determination of flow direction in both unsaturated and saturated zones;
- Rate of plume movement by comparing measurement taken at different times;
- Locating and mapping of utility pipes and cables which may affect other geophysical measurements, or whose trench may provide a permeable pathway for contaminant flow.

Although there is available a wide variety of EM equipment, most of it is intended for geophysical exploration of mineral deposits. These units have not been used at HWS and do not provide a simple conductivity reading. This document discusses only those instruments which are designed and calibrated to read directly in units of conductivity.

Conductance is measured with electronic instrumentation consisting of a transmitter coil and receiver coil. The transmitter coil radiates an electromagnetic field which induces eddy currents in the earth below the instrument. Each of these eddy current loops, in turn, generates a secondary electromagnetic field which is proportional to the magnitude of the current flowing within that loop. A part of the secondary magnetic field from each loop is intercepted by the receiver coil and produces an output voltage which (within limits) is linearly related to subsurface conductivity. This reading is a bulk measurement of conductivity, e.g., the cumulative response to subsurface conditions ranging all the way from the surface to the effective depth of the instrument.

The sampling depth of EM equipment is related to the instrument's coil spacing. Instruments with coil spacings of one, four, ten, twenty, and forty meters are commercially available. The nominal sampling depth of an EM system is taken to be approximately 1.5 times the coil spacing.

The EM sounding method can rarely identify more than two or three layers with reasonable confidence. The greater the contrast in the conductivity values of each layer, the better the results. Often, the more detailed resistivity sounding method is used to complement EM profiling data.

The results of sounding analysis are usually presented as a vertical section, in which the conductivity layers are identified as a function of depth. The analyst may be able to correlate these layers to geohydrologic units believed to exist at the site.

Although the EM technique can be used for profiling or sounding, profiling is the most effective use of the EM method. Profiling makes possible the rapid mapping of subsurface conductivity changes, and the location, delineation, and assessment of spatial variables resulting from changes in the natural setting or from many contaminants.

EM is a very effective reconnaissance tool. The use of qualitative non-recorded data can provide initial interpretation in the field. If site conditions are complex, the use of a high-density survey grid, continuously-recording instruments, and computer processing may be necessary, in order to properly evaluate subsurface conditions. When continuously-recording instruments are used, total site coverage is feasible. More quantitative information can be obtained by using conductivity data from different depth ranges. At present, three different systems must be used to acquire data from 0.75 to 60 meters. Very often, however, data from two standard depths, e.g. six and fifteen meters, is adequate to furnish depth information.

Capabilities

- The EM profile method permits rapid data acquisition, resulting in high-density and high-resolution surveys.
- Profiling data may be acquired from various discrete depths, ranging from 0.75 meters to 60 meters.
- Continuously-recording instruments (to fifteen meter depth) can increase survey speed, density, and resolution permitting total site coverage, if required.
- EM reads directly in conductivity units (mm/m) permitting use of raw data in the field, and correlation to specific conductance of ground water samples.
- EM can map local and general changes in the natural geohydrologic setting.
- EM can detect and measure the boundaries of a conductivity plume.
- Direction of plume flow can be determined from an EM conductivity map.
- EM measurements taken at different times can provide the means to compute movement rates of conservative contaminants.
- EM can detect and map burial pits and trenches of both bulk and drummed wastes.
- EM can detect and map the location of buried metallic utility lines.

Limitations

- EM has less sounding (vertical) resolution than the resistivity method due to its limited number of depth intervals.
- The acquisition of data from depths of 0.75 to 60 meters requires the use of three different EM systems.
- Continuous data can be obtained only to depths up to approximately fifteen meters.
- An EM measurement is influenced by the shallower materials more than the deeper ones; this must be considered when evaluating the data.
- EM measurements become non-linear in zones of very high conductivity.
- The EM method is susceptible to noise from a number of sources, including natural atmospheric noise, powerlines, radio transmitters, buried metallic trash, pipes, cables, nearby fences, vehicles, and buildings.

MAGNETOMETER

Magnetic measurements are commonly used to map regional geologic structure and to explore for minerals. They are also used to locate pipes and survey stakes or to map archeological sites. They are commonly used at HWS to locate buried drums and trenches.

A magnetometer measures the intensity of the earth's magnetic field. The presence of ferrous metals creates variations in the local strength of that field, permitting their detection. A magnetometer's response is proportional to the mass of the ferrous target. Typically, a single drum can be detected at distances up to six meters, while massive piles of drums can be detected at distances up to twenty meters or more.

Some magnetometers require the operator to stop and take discrete measurements; other instruments permit the acquisition of continuous data as the magnetometer is moved across the site. This continuous coverage is much more suitable for high resolution requirements and the mapping of extensive areas.

The effectiveness of a magnetometer can be reduced or totally inhibited by noise or interference from time-variable changes in the earth's field and spatial variations caused by magnetic minerals in the soil, or iron and steel debris, ferrous pipes, fences, buildings, and vehicles. Many of these problems can be avoided by careful selection of instruments and field techniques.

At HWS, magnetometers may be used to:

- Locate buried steel containers, such as 55-gallon drums;
- Define boundaries of trenches filled with ferrous containers;
- Locate ferrous underground utilities, such as iron piles or tanks, and the permeable pathways often associated with them;
- Select drilling locations that are clear of buried drums, underground utilities, and other obstructions.

A magnetometer measures the intensity of the earth's magnetic field. Variations in this field may be caused by the natural distribution of iron oxides within the soil and rock or by the presence of buried iron or steel objects. (The magnetometer does not respond to nonferrous metals such as aluminum, copper, tin, and brass).

The earth's magnetic field behaves much as if there were a large bar magnet embedded in the earth. Although the earth's field intensity varies considerably throughout the United States, its average value is approximately 50,000 gammas.* The angle of the magnetic field with respect to the earth's surface also varies. In the U.S., this angle of inclination ranges approximately sixty to seventy-five degrees from the horizontal.

The intensity of the earth's magnetic field changes daily with sunspots and ionospheric conditions which can cause large and sometimes rapid variations. With time, these variations produce unwanted signals (noise) and can substantially affect magnetic measurements.

If the magnetic properties of the soil and rock were perfectly uniform, there would be no local magnetic anomalies; however, a concentration of natural iron minerals, or a buried iron object, will cause a local magnetic anomaly which can be detected at the surface.

Typical magnetic anomalies at HWS will range from one to hundreds of gammas for small discrete targets, depending on their depth. Massive piles of buried drums will result in anomalies of from one-hundred to one-thousand gammas or more.

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*The unit of magnetic measurement is the gamma. Recently, the gamma unit has been renamed the Nano Tesla. At this time, most instruments are still labeled in gammas, as are specification sheets, existing literature, and field data; hence all references to magnetic data in this document are expressed in gammas.

While several factors influence the response of a magnetometer, the mass of a buried target and its depth are the most important. A magnetometer's response is directly proportional to the mass of ferrous metal present and varies by one over the distance cubed ($1/d^3$) for total measurements. If a gradiometer is used, the response falls off even faster, as one over the distance to the fourth power ($1d^4$). With sensors of equal sensitivity, the total field system provides the greater working range. Typically a single drum can be detected at distances up to six meters or more. There is a wide variety of magnetometers available commercially; specific performance is highly dependent upon the type of magnetometer and the field conditions. Theoretically, the number of drums may be calculated, however, such results should be considered only approximations because of the number of variables associated with targets, site conditions, and calculations. Actual results may vary considerably.

A magnetometer with continuous recording capabilities can be used to produce a strip chart of the field data, which is helpful in assessing signal-to-noise ratio, anomaly shape, target location, and provides a means of exercising quality control over field data. This continuous coverage is much more suitable for high-resolution requirements and the mapping of extensive areas.

The effectiveness of a magnetometer can be reduced or totally inhibited by noise or interference from time-variable changes in the earth's field and spatial variations caused by magnetic minerals in the soil, or iron and steel debris, ferrous pipes, fences, buildings, and vehicles. Many of these problems can be avoided by careful selection of instruments and field techniques.

Capabilities

- Magnetometers respond to ferrous metals (iron or steel) only.
- Individual drums can be detected at depths up to six meters.
- Large masses of drums can be detected at depths of six to twenty meters.
- Magnetometers can provide a greater depth range than metal detectors.
- Interpretation of their data may be used to provide estimates of the number and depth of buried drums.
- They can provide a continuous response along a traverse line.
- They may be mounted on vehicles for coverage of a large site.

Limitations

- In general, magnetometers are susceptible to noise from many different sources, including steel fences, vehicles, buildings, iron debris, natural soil minerals, and underground utilities.
- Low cost units are limited in depth range (but their limitations make them insensitive to many of the above sources of noise).
- Total field instruments are also sensitive to fluctuations in the earth's magnetic field which can seriously affect data.
- Data is of limited use in determining the number and depth of targets.
- Complex site conditions may require the use of highly skilled operators, special equipment, and the recording and processing of data, along with skilled interpretation.

ACCESS INFORMATION SHEET

Site Name: Berkeley County Landfill
Site Address: Route 6 Box 226 Moncks Corners, S.C. 29461
EPA ID #: SC D981028095

FIT Project Manager: Lisa Ward
FIT State Coordinator: John Jenkins
EPA Contact: Earl Bozeman
Field Date: 9-17-90
TDD Number: F4-9007-16

	File Information	Verification
Facility Owner/Operator **Address** **Phone No.** **Principal Contact**	Berkely County Public Works P.O. Box 936 Moncks Corner, S.C. 29461 (803) 761-8250 Johnny Ohlandt	verified by Dept. of Public Works (803) 761-8250
Landowner **Address** **Phone No.** **Principal Contact (if different from above)**	Bertha Neighbors ~~and others~~ Route 6, Box 226 Moncks Corner S.C. 29461 (803) 761-3951	verified by Dept. of Public Works and tax assessor's office (803) 761-8250 (tax map # 180000 5031)
Date of Information	5-6-86	7-23-90

Date Access Required (3 weeks prior to field date)	8/27/90	**Date Information Submitted to EPA**	7-30-90

Comments:

SISB/SAS
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EPA - REGION IV
ATLANTA, GA.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

*****MEMORANDUM******

DATE: 11/16/90

SUBJECT: Results of Pesticide/PCB Analysis;
90-803 BERKELEY CO LF
OAKLEY SC
CASE NO: 14889

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: PHIL BLACKWELL

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

ORGANIC DATA QUALIFIER REPORT

Case Number 14889 Project Number 90-803 SAS Number

Site I.D. Berkeley Co. LF, Oakley, S.C

Affected Samples	Compound or Fraction	Flag Used	Reason
VOA			
DW743, 747	toluene	J	<Quant limit
DW737, 746, 749	tetrachloroethene	J	internal standard recovery low
all water	2-butanone	R	low response factor
Extractables			
All water	di-n-butylphthalate	R	unacceptable recovery in QC spike
	3-nitroaniline	R	unacceptable recovery in QC spike
All soil	3-nitroaniline	R	unacceptable recovery in QC spike
	bis(2-chloroisopropyl)ether	R	unacceptable recovery in QC spike
	1,2,4-trichlorobenzene	R	unacceptable recovery in QC spike
	2-chloronapthylene	R	unacceptable recovery in QC spike
	2,4-dinitrophenol	R	unacceptable recovery in QC spike
	nitrobenzene	J	unacceptable recovery in QC spike
	2-nitrophenol	J	low recovery in QC spike
	acenaphthene	J	low recovery in QC spike
DW752	all other extractables	J	exceeded 40CFR136 holding time
DW751	all acids	R	surrogates unacceptable
DW740	all other extractables	J	excessive holding time
Pesticide			
DW738	all pesticides	R	unacceptable recovery of MS/MSD

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA. 11/15/90

PESTICIDES/PCB'S DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SS-01 COLLECTION START: 09/19/90 1010 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W737 **
** **
*** ***

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
8.4U	ALPHA-BHC	84U	METHOXYCHLOR
8.4U	BETA-BHC	17U	ENDRIN KETONE
8.4U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
8.4U	GAMMA-BHC (LINDANE)	84U	GAMMA-CHLORDANE /2
8.4U	HEPTACHLOR	84U	ALPHA-CHLORDANE /2
8.4U	ALDRIN	170U	TOXAPHENE
8.4U	HEPTACHLOR EPOXIDE	84U	PCB-1016 (AROCLOR 1016)
8.4U	ENDOSULFAN I (ALPHA)	84U	PCB-1221 (AROCLOR 1221)
17U	DIELDRIN	84U	PCB-1232 (AROCLOR 1232)
17U	4,4'-DDE (P,P'-DDE)	84U	PCB-1242 (AROCLOR 1242)
17U	ENDRIN	84U	PCB-1248 (AROCLOR 1248)
17U	ENDOSULFAN II (BETA)	170U	PCB-1254 (AROCLOR 1254)
17U	4,4'-DDD (P,P'-DDD)	170U	PCB-1260 (AROCLOR 1260)
17U	ENDOSULFAN SULFATE	5	PERCENT MOISTURE
17U	4,4'-DDT (P,P'-DDT)		

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. 11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-01
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1020 STOP: 00/00/00
D. NUMBER: W738

UG/KG	ANALYTICAL RESULTS
9.7UR	ALPHA-BHC
9.7UR	BETA-BHC
9.7UR	DELTA-BHC
9.7UR	GAMMA-BHC (LINDANE)
9.7UR	HEPTACHLOR
9.7UR	ALDRIN
9.7UR	HEPTACHLOR EPOXIDE
9.7UR	ENDOSULFAN I (ALPHA)
19UR	DIELDRIN
19UR	4,4'-DDE (P,P'-DDE)
19UR	ENDRIN
19UR	ENDOSULFAN II (BETA)
19UR	4,4'-DDD (P,P'-DDD)
19UR	ENDOSULFAN SULFATE
19UR	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
97UR	METHOXYCHLOR
19UR	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
97UR	GAMMA-CHLORDANE /2
97UR	ALPHA-CHLORDANE /2
190UR	TOXAPHENE
97UR	PCB-1016 (AROCLOR 1016)
97UR	PCB-1221 (AROCLOR 1221)
97UR	PCB-1232 (AROCLOR 1232)
97UR	PCB-1242 (AROCLOR 1242)
97UR	PCB-1248 (AROCLOR 1248)
190UR	PCB-1254 (AROCLOR 1254)
190UR	PCB-1260 (AROCLOR 1260)
17	PERCENT MOISTURE

REMARKS

REMARKS

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

PESTICIDES/PCB'S DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-02
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1030 STOP: 00/00/00
D. NUMBER: W739

UG/KG	ANALYTICAL RESULTS
12U	ALPHA-BHC
12U	BETA-BHC
12U	DELTA-BHC
12U	GAMMA-BHC (LINDANE)
12U	HEPTACHLOR
12U	ALDRIN
12U	HEPTACHLOR EPOXIDE
12U	ENDOSULFAN I (ALPHA)
24U	DIELDRIN
24U	4,4'-DDE (P,P'-DDE)
24U	ENDRIN
24U	ENDOSULFAN II (BETA)
24U	4,4'-DDD (P,P'-DDD)
24U	ENDOSULFAN SULFATE
24U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
120U	METHOXYCHLOR
24U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
120U	GAMMA-CHLORDANE /2
120U	ALPHA-CHLORDANE /2
240U	TOXAPHENE
120U	PCB-1016 (AROCLOR 1016)
120U	PCB-1221 (AROCLOR 1221)
120U	PCB-1232 (AROCLOR 1232)
120U	PCB-1242 (AROCLOR 1242)
120U	PCB-1248 (AROCLOR 1248)
240U	PCB-1254 (AROCLOR 1254)
240U	PCB-1260 (AROCLOR 1260)
35	PERCENT MOISTURE

REMARKS

REMARKS

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA. 11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SD-05 COLLECTION START: 09/19/90 1050 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W740

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
8.5U	ALPHA-BHC	85U	METHOXYCHLOR
8.5U	BETA-BHC	17U	ENDRIN KETONE
8.5U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
8.5U	GAMMA-BHC (LINDANE)	85U	GAMMA-CHLORDANE /2
8.5U	HEPTACHLOR	85U	ALPHA-CHLORDANE /2
8.5U	ALDRIN	170U	TOXAPHENE
8.5U	HEPTACHLOR EPOXIDE	85U	PCB-1016 (AROCLOR 1016)
8.5U	ENDOSULFAN I (ALPHA)	85U	PCB-1221 (AROCLOR 1221)
17U	DIELDRIN	85U	PCB-1232 (AROCLOR 1232)
17U	4,4'-DDE (P,P'-DDE)	85U	PCB-1242 (AROCLOR 1242)
17U	ENDRIN	85U	PCB-1248 (AROCLOR 1248)
17U	ENDOSULFAN II (BETA)	170U	PCB-1254 (AROCLOR 1254)
17U	4,4'-DDD (P,P'-DDD)	170U	PCB-1260 (AROCLOR 1260)
17U	ENDOSULFAN SULFATE	7	PERCENT MOISTURE
17U	4,4'-DDT (P,P'-DDT)		

REMARKS ***REMARKS***

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.
11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50594 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-01 COLLECTION START: 09/19/90 1110 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W741

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
0.05U	ALPHA-BHC	0.50U	METHOXYCHLOR
0.05U	BETA-BHC	0.10U	ENDRIN KETONE
0.05U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
0.05U	GAMMA-BHC (LINDANE)	0.50U	GAMMA-CHLORDANE /2
0.05U	HEPTACHLOR	0.50U	ALPHA-CHLORDANE /2
0.05U	ALDRIN	1.0U	TOXAPHENE
0.05U	HEPTACHLOR EPOXIDE	0.50U	PCB-1016 (AROCLOR 1016)
0.05U	ENDOSULFAN I (ALPHA)	0.50U	PCB-1221 (AROCLOR 1221)
0.10U	DIELDRIN	0.50U	PCB-1232 (AROCLOR 1232)
0.10U	4,4'-DDE (P,P'-DDE)	0.50U	PCB-1242 (AROCLOR 1242)
0.10U	ENDRIN	0.50U	PCB-1248 (AROCLOR 1248)
0.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1254 (AROCLOR 1254)
0.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1260 (AROCLOR 1260)
0.10U	ENDOSULFAN SULFATE		
0.10U	4,4'-DDT (P,P'-DDT)		

REMARKS ***REMARKS***

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

PESTICIDES/PCB'S DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-06
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1110 STOP: 00/00/00
D. NUMBER: W742

UG/KG	ANALYTICAL RESULTS
12U	ALPHA-BHC
12U	BETA-BHC
12U	DELTA-BHC
12U	GAMMA-BHC (LINDANE)
12U	HEPTACHLOR
12U	ALDRIN
12U	HEPTACHLOR EPOXIDE
12U	ENDOSULFAN I (ALPHA)
25U	DIELDRIN
25U	4,4'-DDE (P,P'-DDE)
25U	ENDRIN
25U	ENDOSULFAN II (BETA)
25U	4,4'-DDD (P,P'-DDD)
25U	ENDOSULFAN SULFATE
25U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
120U	METHOXYCHLOR
25U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
120U	GAMMA-CHLORDANE /2
120U	ALPHA-CHLORDANE /2
250U	TOXAPHENE
120U	PCB-1016 (AROCLOR 1016)
120U	PCB-1221 (AROCLOR 1221)
120U	PCB-1232 (AROCLOR 1232)
120U	PCB-1242 (AROCLOR 1242)
120U	PCB-1248 (AROCLOR 1248)
250U	PCB-1254 (AROCLOR 1254)
250U	PCB-1260 (AROCLOR 1260)
35	PERCENT MOISTURE

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA. 11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SD-04 COLLECTION START: 09/19/90 1125 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W743

UG/KG	ANALYTICAL RESULTS
15U	ALPHA-BHC
15U	BETA-BHC
15U	DELTA-BHC
15U	GAMMA-BHC (LINDANE)
15U	HEPTACHLOR
15U	ALDRIN
15U	HEPTACHLOR EPOXIDE
15U	ENDOSULFAN I (ALPHA)
30U	DIELDRIN
30U	4,4'-DDE (P,P'-DDE)
30U	ENDRIN
30U	ENDOSULFAN II (BETA)
30U	4,4'-DDD (P,P'-DDD)
30U	ENDOSULFAN SULFATE
30U	4,4'-DDT (P,P'-DDT)
150U	METHOXYCHLOR
30U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
150U	GAMMA-CHLORDANE /2
150U	ALPHA-CHLORDANE /2
300U	TOXAPHENE
150U	PCB-1016 (AROCLOR 1016)
150U	PCB-1221 (AROCLOR 1221)
150U	PCB-1232 (AROCLOR 1232)
150U	PCB-1242 (AROCLOR 1242)
150U	PCB-1248 (AROCLOR 1248)
300U	PCB-1254 (AROCLOR 1254)
300U	PCB-1260 (AROCLOR 1260)
46	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.

PESTICIDES/PCB'S DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-01
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1130 STOP: 00/00/00
D. NUMBER: W744

UG/KG	ANALYTICAL RESULTS
19U	ALPHA-BHC
19U	BETA-BHC
19U	DELTA-BHC
19U	GAMMA-BHC (LINDANE)
19U	HEPTACHLOR
19U	ALDRIN
19U	HEPTACHLOR EPOXIDE
19U	ENDOSULFAN I (ALPHA)
39U	DIELDRIN
39U	4,4'-DDE (P,P'-DDE)
39U	ENDRIN
39U	ENDOSULFAN II (BETA)
39U	4,4'-DDD (P,P'-DDD)
39U	ENDOSULFAN SULFATE
39U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
190U	METHOXYCHLOR
39U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
190U	GAMMA-CHLORDANE /2
190U	ALPHA-CHLORDANE /2
390U	TOXAPHENE
190U	PCB-1016 (AROCLOR 1016)
190U	PCB-1221 (AROCLOR 1221)
190U	PCB-1232 (AROCLOR 1232)
190U	PCB-1242 (AROCLOR 1242)
190U	PCB-1248 (AROCLOR 1248)
390U	PCB-1254 (AROCLOR 1254)
390U	PCB-1260 (AROCLOR 1260)
59	PERCENT MOISTURE

REMARKS

REMARKS

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

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-01 COLLECTION START: 09/19/90 1220 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W745

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
0.05U	ALPHA-BHC	0.50U	METHOXYCHLOR
0.05U	BETA-BHC	0.10U	ENDRIN KETONE
0.05U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
0.05U	GAMMA-BHC (LINDANE)	0.50U	GAMMA-CHLORDANE /2
0.05U	HEPTACHLOR	0.50U	ALPHA-CHLORDANE /2
0.05U	ALDRIN	1.0U	TOXAPHENE
0.05U	HEPTACHLOR EPOXIDE	0.50U	PCB-1016 (AROCLOR 1016)
0.05U	ENDOSULFAN I (ALPHA)	0.50U	PCB-1221 (AROCLOR 1221)
0.10U	DIELDRIN	0.50U	PCB-1232 (AROCLOR 1232)
0.10U	4,4'-DDE (P,P'-DDE)	0.50U	PCB-1242 (AROCLOR 1242)
0.10U	ENDRIN	0.50U	PCB-1248 (AROCLOR 1248)
0.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1254 (AROCLOR 1254)
0.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1260 (AROCLOR 1260)
0.10U	ENDOSULFAN SULFATE		
0.10U	4,4'-DDT (P,P'-DDT)		

REMARKS ***REMARKS***

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

PESTICIDES/PCB'S DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-04
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1455 STOP: 00/00/00
D. NUMBER: W746

UG/KG	ANALYTICAL RESULTS
9.4U	ALPHA-BHC
9.4U	BETA-BHC
9.4U	DELTA-BHC
9.4U	GAMMA-BHC (LINDANE)
9.4U	HEPTACHLOR
9.4U	ALDRIN
9.4U	HEPTACHLOR EPOXIDE
9.4U	ENDOSULFAN I (ALPHA)
19U	DIELDRIN
19U	4,4'-DDE (P,P'-DDE)
19U	ENDRIN
19U	ENDOSULFAN II (BETA)
19U	4,4'-DDD (P,P'-DDD)
19U	ENDOSULFAN SULFATE
19U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
94U	METHOXYCHLOR
19U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
94U	GAMMA-CHLORDANE /2
94U	ALPHA-CHLORDANE /2
190U	TOXAPHENE
94U	PCB-1016 (AROCLOR 1016)
94U	PCB-1221 (AROCLOR 1221)
94U	PCB-1232 (AROCLOR 1232)
94U	PCB-1242 (AROCLOR 1242)
94U	PCB-1248 (AROCLOR 1248)
190U	PCB-1254 (AROCLOR 1254)
190U	PCB-1260 (AROCLOR 1260)
15	PERCENT MOISTURE

REMARKS

REMARKS

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

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SB-04 COLLECTION START: 09/19/90 1520 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W747

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
11U	ALPHA-BHC	110U	METHOXYCHLOR
11U	BETA-BHC	22U	ENDRIN KETONE
11U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
11U	GAMMA-BHC (LINDANE)	110U	GAMMA-CHLORDANE /2
11U	HEPTACHLOR	110U	ALPHA-CHLORDANE /2
11U	ALDRIN	220U	TOXAPHENE
11U	HEPTACHLOR EPOXIDE	110U	PCB-1016 (AROCLOR 1016)
11U	ENDOSULFAN I (ALPHA)	110U	PCB-1221 (AROCLOR 1221)
22U	DIELDRIN	110U	PCB-1232 (AROCLOR 1232)
22U	4,4'-DDE (P,P'-DDE)	110U	PCB-1242 (AROCLOR 1242)
22U	ENDRIN	110U	PCB-1248 (AROCLOR 1248)
22U	ENDOSULFAN II (BETA)	220U	PCB-1254 (AROCLOR 1254)
22U	4,4'-DDD (P,P'-DDD)	220U	PCB-1260 (AROCLOR 1260)
22U	ENDOSULFAN SULFATE	29	PERCENT MOISTURE
22U	4,4'-DDT (P,P'-DDT)		

REMARKS

REMARKS

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

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50601   SAMPLE TYPE: SEDIM   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: SS-05   COLLECTION START: 09/19/90 1450   STOP: 00/00/00
CASE NUMBER: 14889   SAS NUMBER: D. NUMBER: W749

UG/KG	ANALYTICAL RESULTS
11U	ALPHA-BHC
11U	BETA-BHC
11U	DELTA-BHC
11U	GAMMA-BHC (LINDANE)
11U	HEPTACHLOR
11U	ALDRIN
11U	HEPTACHLOR EPOXIDE
11U	ENDOSULFAN I (ALPHA)
21U	DIELDRIN
21U	4,4'-DDE (P,P'-DDE)
21U	ENDRIN
21U	ENDOSULFAN II (BETA)
21U	4,4'-DDD (P,P'-DDD)
21U	ENDOSULFAN SULFATE
21U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
110U	METHOXYCHLOR
21U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
110U	GAMMA-CHLORDANE /2
110U	ALPHA-CHLORDANE /2
210U	TOXAPHENE
110U	PCB-1016 (AROCLOR 1016)
110U	PCB-1221 (AROCLOR 1221)
110U	PCB-1232 (AROCLOR 1232)
110U	PCB-1242 (AROCLOR 1242)
110U	PCB-1248 (AROCLOR 1248)
210U	PCB-1254 (AROCLOR 1254)
210U	PCB-1260 (AROCLOR 1260)
25	PERCENT MOISTURE

REMARKS

REMARKS

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

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM
PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF
CITY: OAKLEY ST: SC
STATION ID: SB-05
COLLECTION START: 09/19/90 1515 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER:
D. NUMBER: W750

UG/KG	ANALYTICAL RESULTS
16U	ALPHA-BHC
16U	BETA-BHC
16U	DELTA-BHC
16U	GAMMA-BHC (LINDANE)
16U	HEPTACHLOR
16U	ALDRIN
16U	HEPTACHLOR EPOXIDE
16U	ENDOSULFAN I (ALPHA)
32U	DIELDRIN
32U	4,4'-DDE (P,P'-DDE)
32U	ENDRIN
32U	ENDOSULFAN II (BETA)
32U	4,4'-DDD (P,P'-DDD)
32U	ENDOSULFAN SULFATE
32U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
160U	METHOXYCHLOR
32U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
160U	GAMMA-CHLORDANE /2
160U	ALPHA-CHLORDANE /2
320U	TOXAPHENE
160U	PCB-1016 (AROCLOR 1016)
160U	PCB-1221 (AROCLOR 1221)
160U	PCB-1232 (AROCLOR 1232)
160U	PCB-1242 (AROCLOR 1242)
160U	PCB-1248 (AROCLOR 1248)
320U	PCB-1254 (AROCLOR 1254)
320U	PCB-1260 (AROCLOR 1260)
50	PERCENT MOISTURE

REMARKS

REMARKS

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

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W751

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
0.05U	ALPHA-BHC	0.50U	METHOXYCHLOR
0.05U	BETA-BHC	0.10U	ENDRIN KETONE
0.05U	DELTA-BHC	—	CHLORDANE (TECH. MIXTURE) /1
0.05U	GAMMA-BHC (LINDANE)	0.50U	GAMMA-CHLORDANE /2
0.05U	HEPTACHLOR	0.50U	ALPHA-CHLORDANE /2
0.05U	ALDRIN	1.0U	TOXAPHENE
0.05U	HEPTACHLOR EPOXIDE	0.50U	PCB-1016 (AROCLOR 1016)
0.05U	ENDOSULFAN I (ALPHA)	0.50U	PCB-1221 (AROCLOR 1221)
0.10U	DIELDRIN	0.50U	PCB-1232 (AROCLOR 1232)
0.10U	4,4'-DDE (P,P'-DDE)	0.50U	PCB-1242 (AROCLOR 1242)
0.10U	ENDRIN	0.50U	PCB-1248 (AROCLOR 1248)
0.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1254 (AROCLOR 1254)
0.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1260 (AROCLOR 1260)
0.10U	ENDOSULFAN SULFATE		
0.10U	4,4'-DDT (P,P'-DDT)		

REMARKS

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

PESTICIDES/PCB'S DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA
SOURCE: BERKELEY CO LF
STATION ID: PW-02
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1625 STOP: 00/00/00
D. NUMBER: W752

UG/L	ANALYTICAL RESULTS
0.05U	ALPHA-BHC
0.05U	BETA-BHC
0.05U	DELTA-BHC
0.05U	GAMMA-BHC (LINDANE)
0.05U	HEPTACHLOR
0.05U	ALDRIN
0.05U	HEPTACHLOR EPOXIDE
0.05U	ENDOSULFAN I (ALPHA)
0.10U	DIELDRIN
0.10U	4,4'-DDE (P,P'-DDE)
0.10U	ENDRIN
0.10U	ENDOSULFAN II (BETA)
0.10U	4,4'-DDD (P,P'-DDD)
0.10U	ENDOSULFAN SULFATE
0.10U	4,4'-DDT (P,P'-DDT)

UG/L	ANALYTICAL RESULTS
0.50U	METHOXYCHLOR
0.10U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
0.50U	GAMMA-CHLORDANE /2
0.50U	ALPHA-CHLORDANE /2
1.0U	TOXAPHENE
0.50U	PCB-1016 (AROCLOR 1016)
0.50U	PCB-1221 (AROCLOR 1221)
0.50U	PCB-1232 (AROCLOR 1232)
0.50U	PCB-1242 (AROCLOR 1242)
0.50U	PCB-1248 (AROCLOR 1248)
1.0U	PCB-1254 (AROCLOR 1254)
1.0U	PCB-1260 (AROCLOR 1260)

REMARKS

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

PESTICIDES/PCB'S DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-02
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1745 STOP: 00/00/00
D. NUMBER: W753

UG/KG	ANALYTICAL RESULTS
12U	ALPHA-BHC
12U	BETA-BHC
12U	DELTA-BHC
12U	GAMMA-BHC (LINDANE)
12U	HEPTACHLOR
12U	ALDRIN
12U	HEPTACHLOR EPOXIDE
12U	ENDOSULFAN I (ALPHA)
24U	DIELDRIN
24U	4,4'-DDE (P,P'-DDE)
24U	ENDRIN
24U	ENDOSULFAN II (BETA)
24U	4,4'-DDD (P,P'-DDD)
24U	ENDOSULFAN SULFATE
24U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
120U	METHOXYCHLOR
24U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
120U	GAMMA-CHLORDANE /2
120U	ALPHA-CHLORDANE /2
240U	TOXAPHENE
120U	PCB-1016 (AROCLOR 1016)
120U	PCB-1221 (AROCLOR 1221)
120U	PCB-1232 (AROCLOR 1232)
120U	PCB-1242 (AROCLOR 1242)
120U	PCB-1248 (AROCLOR 1248)
240U	PCB-1254 (AROCLOR 1254)
240U	PCB-1260 (AROCLOR 1260)
34	PERCENT MOISTURE

REMARKS

REMARKS

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

PESTICIDES/PCB'S DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50609 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-02
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1815 STOP: 00/00/00
D. NUMBER: W754

UG/KG	ANALYTICAL RESULTS
11U	ALPHA-BHC
11U	BETA-BHC
11U	DELTA-BHC
11U	GAMMA-BHC (LINDANE)
11U	HEPTACHLOR
11U	ALDRIN
11U	HEPTACHLOR EPOXIDE
11U	ENDOSULFAN I (ALPHA)
23U	DIELDRIN
23U	4,4'-DDE (P,P'-DDE)
23U	ENDRIN
23U	ENDOSULFAN II (BETA)
23U	4,4'-DDD (P,P'-DDD)
23U	ENDOSULFAN SULFATE
23U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
110U	METHOXYCHLOR
23U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
110U	GAMMA-CHLORDANE /2
110U	ALPHA-CHLORDANE /2
230U	TOXAPHENE
110U	PCB-1016 (AROCLOR 1016)
110U	PCB-1221 (AROCLOR 1221)
110U	PCB-1232 (AROCLOR 1232)
110U	PCB-1242 (AROCLOR 1242)
110U	PCB-1248 (AROCLOR 1248)
230U	PCB-1254 (AROCLOR 1254)
230U	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
*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.

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50610 SAMPLE TYPE: SURFACEWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TB-01W COLLECTION START: 09/19/90 0700 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W735

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
0.05U	ALPHA-BHC	0.50U	METHOXYCHLOR
0.05U	BETA-BHC	0.10U	ENDRIN KETONE
0.05U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
0.05U	GAMMA-BHC (LINDANE)	0.50U	GAMMA-CHLORDANE /2
0.05U	HEPTACHLOR	0.50U	ALPHA-CHLORDANE /2
0.05U	ALDRIN	1.0U	TOXAPHENE
0.05U	HEPTACHLOR EPOXIDE	0.50U	PCB-1016 (AROCLOR 1016)
0.05U	ENDOSULFAN I (ALPHA)	0.50U	PCB-1221 (AROCLOR 1221)
0.10U	DIELDRIN	0.50U	PCB-1232 (AROCLOR 1232)
0.10U	4,4'-DDE (P,P'-DDE)	0.50U	PCB-1242 (AROCLOR 1242)
0.10U	ENDRIN	0.50U	PCB-1248 (AROCLOR 1248)
0.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1254 (AROCLOR 1254)
0.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1260 (AROCLOR 1260)
0.10U	ENDOSULFAN SULFATE		
0.10U	4,4'-DDT (P,P'-DDT)		

REMARKS ***REMARKS***

FOOTNOTES
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SISB/SAS
RECEIVED
NOV 27 1990
EPA - REGION IV
ATLANTA, GA.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

*****MEMORANDUM******

DATE: 11/16/90

SUBJECT: Results of Extractable Organic Analysis;
90-803 BERKELEY CO LF
OAKLEY SC
CASE NO: 14889

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: PHIL BLACKWELL

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

ORGANIC DATA QUALIFIER REPORT

Case Number 14889 Project Number 90-803 SAS Number

Site I.D. Berkeley Co. LF, Oakley, S.C

Affected Samples	Compound or Fraction	Flag Used	Reason
VOA			
DW743, 747	toluene	J	<Quant limit
DW737, 746, 749	tetrachloroethene	J	internal standard recovery low
all water	2-butanone	R	low response factor
Extractables			
All water	di-n-butylphthalate	R	unacceptable recovery in QC spike
	3-nitroaniline	R	unacceptable recovery in QC spike
All soil	3-nitroaniline	R	unacceptable recovery in QC spike
	bis(2-chloroisopropyl)ether	R	unacceptable recovery in QC spike
	1,2,4-trichlorobenzene	R	unacceptable recovery in QC spike
	2-chloronapthylene	R	unacceptable recovery in QC spike
	2,4-dinitrophenol	R	unacceptable recovery in QC spike
	nitrobenzene	J	unacceptable recovery in QC spike
	2-nitrophenol	J	low recovery in QC spike
	acenaphthene	J	low recovery in QC spike
DW752	all other extractables	J	exceeded 40CFR136 holding time
DW751	all acids	R	surrogates unacceptable
DW740	all other extractables	J	excessive holding time
Pesticide			
DW738	all pesticides	R	unacceptable recovery of MS/MSD

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

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-01 COLLECTION START: 09/19/90 1010 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W737

UG/KG	ANALYTICAL RESULTS
690U	PHENOL
690U	BIS(2-CHLOROETHYL) ETHER
690U	2-CHLOROPHENOL
690U	1,3-DICHLOROBENZENE
690U	1,4-DICHLOROBENZENE
690U	BENZYL ALCOHOL
690U	1,2-DICHLOROBENZENE
690U	2-METHYLPHENOL
690UR	BIS(2-CHLOROISOPROPYL) ETHER
690U	(3-AND/OR 4-)METHYLPHENOL
690U	N-NITROSODI-N-PROPYLAMINE
690U	HEXACHLOROETHANE
690UJ	NITROBENZENE
690U	ISOPHORONE
690UJ	2-NITROPHENOL
690UR	2,4-DIMETHYLPHENOL
3400U	BENZOIC ACID
690U	BIS(2-CHLOROETHOXY) METHANE
690U	2,4-DICHLOROPHENOL
690UR	1,2,4-TRICHLOROBENZENE
690U	NAPHTHALENE
690U	4-CHLOROANILINE
690U	HEXACHLOROBUTADIENE
690U	4-CHLORO-3-METHYLPHENOL
690U	2-METHYLNAPHTHALENE
690U	HEXACHLOROCYCLOPENTADIENE (HCCP)
690U	2,4,6-TRICHLOROPHENOL
3400U	2,4,5-TRICHLOROPHENOL
690UR	2-CHLORONAPHTHALENE
3400U	2-NITROANILINE
690U	DIMETHYL PHTHALATE
690U	ACENAPHTHYLENE
690U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
3400UR	3-NITROANILINE
690UJ	ACENAPHTHENE
3400U	2,4-DINITROPHENOL
3400U	4-NITROPHENOL
690U	DIBENZOFURAN
690U	2,4-DINITROTOLUENE
690U	DIETHYL PHTHALATE
690U	4-CHLOROPHENYL PHENYL ETHER
690U	FLUORENE
3400U	4-NITROANILINE
3400U	2-METHYL-4,6-DINITROPHENOL
690U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
690U	4-BROMOPHENYL PHENYL ETHER
690U	HEXACHLOROBENZENE (HCB)
3400U	PENTACHLOROPHENOL
690U	PHENANTHRENE
690U	ANTHRACENE
690U	DI-N-BUTYLPHTHALATE
690U	FLUORANTHENE
690U	PYRENE
690U	BENZYL BUTYL PHTHALATE
1400U	3,3'-DICHLOROBENZIDINE
690U	BENZO(A)ANTHRACENE
690U	CHRYSENE
690U	BIS(2-ETHYLHEXYL) PHTHALATE
690U	DI-N-OCTYLPHTHALATE
690U	BENZO(B AND/OR K)FLUORANTHENE
690U	BENZO-A-PYRENE
690U	INDENO (1,2,3-CD) PYRENE
690U	DIBENZO(A,H)ANTHRACENE
690U	BENZO(GHI)PERYLENE
5	PERCENT MOISTURE

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

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1020 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W738

UG/KG	ANALYTICAL RESULTS
790U	PHENOL
790U	BIS(2-CHLOROETHYL) ETHER
790U	2-CHLOROPHENOL
790U	1,3-DICHLOROBENZENE
790U	1,4-DICHLOROBENZENE
790U	BENZYL ALCOHOL
790U	1,2-DICHLOROBENZENE
790U	2-METHYLPHENOL
790UR	BIS(2-CHLOROISOPROPYL) ETHER
790U	(3-AND/OR 4-)METHYLPHENOL
790U	N-NITROSODI-N-PROPYLAMINE
790U	HEXACHLOROETHANE
790UJ	NITROBENZENE
790U	ISOPHORONE
790UJ	2-NITROPHENOL
790UR	2,4-DIMETHYLPHENOL
3800U	BENZOIC ACID
790U	BIS(2-CHLOROETHOXY) METHANE
790U	2,4-DICHLOROPHENOL
790UR	1,2,4-TRICHLOROBENZENE
790U	NAPHTHALENE
790U	4-CHLOROANILINE
790U	HEXACHLOROBUTADIENE
790U	4-CHLORO-3-METHYLPHENOL
790U	2-METHYLNAPHTHALENE
790U	HEXACHLOROCYCLOPENTADIENE (HCCP)
790U	2,4,6-TRICHLOROPHENOL
3800U	2,4,5-TRICHLOROPHENOL
790UR	2-CHLORONAPHTHALENE
3800U	2-NITROANILINE
790U	DIMETHYL PHTHALATE
790U	ACENAPHTHYLENE
790U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
3800UR	3-NITROANILINE
790UJ	ACENAPHTHENE
3800U	2,4-DINITROPHENOL
3800U	4-NITROPHENOL
790U	DIBENZOFURAN
790U	2,4-DINITROTOLUENE
790U	DIETHYL PHTHALATE
790U	4-CHLOROPHENYL PHENYL ETHER
790U	FLUORENE
3800U	4-NITROANILINE
3800U	2-METHYL-4,6-DINITROPHENOL
790U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
790U	4-BROMOPHENYL PHENYL ETHER
790U	HEXACHLOROBENZENE (HCB)
3800U	PENTACHLOROPHENOL
790U	PHENANTHRENE
790U	ANTHRACENE
790U	DI-N-BUTYLPHTHALATE
790U	FLUORANTHENE
790U	PYRENE
790U	BENZYL BUTYL PHTHALATE
1600U	3,3'-DICHLOROBENZIDINE
790U	BENZO(A)ANTHRACENE
790U	CHRYSENE
790U	BIS(2-ETHYLHEXYL) PHTHALATE
790U	DI-N-OCTYLPHTHALATE
790U	BENZO(B AND/OR K)FLUORANTHENE
790U	BENZO-A-PYRENE
790U	INDENO (1,2,3-CD) PYRENE
790U	DIBENZO(A,H)ANTHRACENE
790U	BENZO(GHI)PERYLENE
17	PERCENT MOISTURE

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.

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SD-02 COLLECTION START: 09/19/90 1030 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W739

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
1000U	PHENOL	4900UR	3-NITROANILINE
1000U	BIS(2-CHLOROETHYL) ETHER	1000UJ	ACENAPHTHENE
1000U	2-CHLOROPHENOL	4900U	2,4-DINITROPHENOL
1000U	1,3-DICHLOROBENZENE	4900U	4-NITROPHENOL
1000U	1,4-DICHLOROBENZENE	1000U	DIBENZOFURAN
1000U	BENZYL ALCOHOL	1000U	2,4-DINITROTOLUENE
1000U	1,2-DICHLOROBENZENE	1000U	DIETHYL PHTHALATE
1000U	2-METHYLPHENOL	1000U	4-CHLOROPHENYL PHENYL ETHER
1000UR	BIS(2-CHLOROISOPROPYL) ETHER	1000U	FLUORENE
1000U	(3-AND/OR 4-)METHYLPHENOL	4900U	4-NITROANILINE
1000U	N-NITROSODI-N-PROPYLAMINE	4900U	2-METHYL-4,6-DINITROPHENOL
1000U	HEXACHLOROETHANE	1000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1000UJ	NITROBENZENE	1000U	4-BROMOPHENYL PHENYL ETHER
1000U	ISOPHORONE	1000U	HEXACHLOROBENZENE (HCB)
1000UJ	2-NITROPHENOL	4900U	PENTACHLOROPHENOL
1000UR	2,4-DIMETHYLPHENOL	1000U	PHENANTHRENE
4900U	BENZOIC ACID	1000U	ANTHRACENE
1000U	BIS(2-CHLOROETHOXY) METHANE	1000U	DI-N-BUTYLPHTHALATE
1000U	2,4-DICHLOROPHENOL	1000U	FLUORANTHENE
1000UR	1,2,4-TRICHLOROBENZENE	1000U	PYRENE
1000U	NAPHTHALENE	1000U	BENZYL BUTYL PHTHALATE
1000U	4-CHLOROANILINE	2000U	3,3'-DICHLOROBENZIDINE
1000U	HEXACHLOROBUTADIENE	1000U	BENZO(A)ANTHRACENE
1000U	4-CHLORO-3-METHYLPHENOL	1000U	CHRYSENE
1000U	2-METHYLNAPHTHALENE	1000U	BIS(2-ETHYLHEXYL) PHTHALATE
1000U	HEXACHLOROCYCLOPENTADIENE (HCCP)	1000U	DI-N-OCTYLPHTHALATE
1000U	2,4,6-TRICHLOROPHENOL	1000U	BENZO(B AND/OR K)FLUORANTHENE
4900U	2,4,5-TRICHLOROPHENOL	1000U	BENZO-A-PYRENE
1000UR	2-CHLORONAPHTHALENE	1000U	INDENO (1,2,3-CD) PYRENE
4900U	2-NITROANILINE	1000U	DIBENZO(A,H)ANTHRACENE
1000U	DIMETHYL PHTHALATE	1000U	BENZO(GHI)PERYLENE
1000U	ACENAPHTHYLENE	35	PERCENT MOISTURE
1000U	2,6-DINITROTOLUENE		

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

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1050 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W740

UG/KG	ANALYTICAL RESULTS
710UJ	PHENOL
710UJ	BIS(2-CHLOROETHYL) ETHER
710UJ	2-CHLOROPHENOL
710UJ	1,3-DICHLOROBENZENE
710UJ	1,4-DICHLOROBENZENE
710UJ	BENZYL ALCOHOL
710UJ	1,2-DICHLOROBENZENE
710UJ	2-METHYLPHENOL
710UR	BIS(2-CHLOROISOPROPYL) ETHER
710UJ	(3-AND/OR 4-)METHYLPHENOL
710UJ	N-NITROSODI-N-PROPYLAMINE
710UJ	HEXACHLOROETHANE
710UJ	NITROBENZENE
710UJ	ISOPHORONE
710UJ	2-NITROPHENOL
710UR	2,4-DIMETHYLPHENOL
3400UJ	BENZOIC ACID
710UJ	BIS(2-CHLOROETHOXY) METHANE
710UJ	2,4-DICHLOROPHENOL
710UR	1,2,4-TRICHLOROBENZENE
710UJ	NAPHTHALENE
710UJ	4-CHLOROANILINE
710UJ	HEXACHLOROBUTADIENE
710UJ	4-CHLORO-3-METHYLPHENOL
710UJ	2-METHYLNAPHTHALENE
710UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)
710UJ	2,4,6-TRICHLOROPHENOL
3400UJ	2,4,5-TRICHLOROPHENOL
710UR	2-CHLORONAPHTHALENE
3400UJ	2-NITROANILINE
710UJ	DIMETHYL PHTHALATE
710UJ	ACENAPHTHYLENE
710UJ	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
3400UR	3-NITROANILINE
710UJ	ACENAPHTHENE
3400UJ	2,4-DINITROPHENOL
3400UJ	4-NITROPHENOL
710UJ	DIBENZOFURAN
710UJ	2,4-DINITROTOLUENE
710UJ	DIETHYL PHTHALATE
710UJ	4-CHLOROPHENYL PHENYL ETHER
710UJ	FLUORENE
3400UJ	4-NITROANILINE
3400UJ	2-METHYL-4,6-DINITROPHENOL
710UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
710UJ	4-BROMOPHENYL PHENYL ETHER
710UJ	HEXACHLOROBENZENE (HCB)
3400UJ	PENTACHLOROPHENOL
710UJ	PHENANTHRENE
710UJ	ANTHRACENE
710UJ	DI-N-BUTYLPHTHALATE
710UJ	FLUORANTHENE
710UJ	PYRENE
710UJ	BENZYL BUTYL PHTHALATE
1400UJ	3,3'-DICHLOROBENZIDINE
710UJ	BENZO(A)ANTHRACENE
710UJ	CHRYSENE
710UJ	BIS(2-ETHYLHEXYL) PHTHALATE
710UJ	DI-N-OCTYLPHTHALATE
710UJ	BENZO(B AND/OR K)FLUORANTHENE
710UJ	BENZO-A-PYRENE
710UJ	INDENO (1,2,3-CD) PYRENE
710UJ	DIBENZO(A,H)ANTHRACENE
710UJ	BENZO(GHI)PERYLENE
7	PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

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

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50594   SAMPLE TYPE: GROUNDWA   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: TW-01   COLLECTION START: 09/19/90 1110   STOP: 00/00/00

CASE NO.: 14889   SAS NO.:   D. NO.: W741

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	PHENOL	50UR	3-NITROANILINE
10U	BIS(2-CHLOROETHYL) ETHER	10U	ACENAPHTHENE
10U	2-CHLOROPHENOL	50U	2,4-DINITROPHENOL
10U	1,3-DICHLOROBENZENE	50U	4-NITROPHENOL
10U	1,4-DICHLOROBENZENE	10U	DIBENZOFURAN
10U	BENZYL ALCOHOL	10U	2,4-DINITROTOLUENE
10U	1,2-DICHLOROBENZENE	10U	DIETHYL PHTHALATE
10U	2-METHYLPHENOL	10U	4-CHLOROPHENYL PHENYL ETHER
10U	BIS(2-CHLOROISOPROPYL) ETHER	10U	FLUORENE
10U	(3-AND/OR 4-)METHYLPHENOL	50U	4-NITROANILINE
10U	N-NITROSODI-N-PROPYLAMINE	50U	2-METHYL-4,6-DINITROPHENOL
10U	HEXACHLOROETHANE	10U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	NITROBENZENE	10U	4-BROMOPHENYL PHENYL ETHER
10U	ISOPHORONE	10U	HEXACHLOROBENZENE (HCB)
10U	2-NITROPHENOL	50U	PENTACHLOROPHENOL
10U	2,4-DIMETHYLPHENOL	10U	PHENANTHRENE
50U	BENZOIC ACID	10U	ANTHRACENE
10U	BIS(2-CHLOROETHOXY) METHANE	10UR	DI-N-BUTYLPHTHALATE
10U	2,4-DICHLOROPHENOL	10U	FLUORANTHENE
10U	1,2,4-TRICHLOROBENZENE	10U	PYRENE
10U	NAPHTHALENE	10U	BENZYL BUTYL PHTHALATE
10U	4-CHLOROANILINE	20U	3,3'-DICHLOROBENZIDINE
10U	HEXACHLOROBUTADIENE	10U	BENZO(A)ANTHRACENE
10U	4-CHLORO-3-METHYLPHENOL	10U	CHRYSENE
10U	2-METHYLNAPHTHALENE	10U	BIS(2-ETHYLHEXYL) PHTHALATE
10U	HEXACHLOROCYCLOPENTADIENE (HCCP)	10U	DI-N-OCTYLPHTHALATE
10U	2,4,6-TRICHLOROPHENOL	10U	BENZO(B AND/OR K)FLUORANTHENE
50U	2,4,5-TRICHLOROPHENOL	10U	BENZO-A-PYRENE
10U	2-CHLORONAPHTHALENE	10U	INDENO (1,2,3-CD) PYRENE
50U	2-NITROANILINE	10U	DIBENZO(A,H)ANTHRACENE
10U	DIMETHYL PHTHALATE	10U	BENZO(GHI)PERYLENE
10U	ACENAPHTHYLENE		
10U	2,6-DINITROTOLUENE		

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.

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-06

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1110 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W742

UG/KG	ANALYTICAL RESULTS
1000U	PHENOL
1000U	BIS(2-CHLOROETHYL) ETHER
1000U	2-CHLOROPHENOL
1000U	1,3-DICHLOROBENZENE
1000U	1,4-DICHLOROBENZENE
1000U	BENZYL ALCOHOL
1000U	1,2-DICHLOROBENZENE
1000U	2-METHYLPHENOL
1000UR	BIS(2-CHLOROISOPROPYL) ETHER
1000U	(3-AND/OR 4-)METHYLPHENOL
1000U	N-NITROSODI-N-PROPYLAMINE
1000U	HEXACHLOROETHANE
1000UJ	NITROBENZENE
1000U	ISOPHORONE
1000UJ	2-NITROPHENOL
1000UR	2,4-DIMETHYLPHENOL
4900U	BENZOIC ACID
1000U	BIS(2-CHLOROETHOXY) METHANE
1000U	2,4-DICHLOROPHENOL
1000UR	1,2,4-TRICHLOROBENZENE
1000U	NAPHTHALENE
1000U	4-CHLOROANILINE
1000U	HEXACHLOROBUTADIENE
1000U	4-CHLORO-3-METHYLPHENOL
1000U	2-METHYLNAPHTHALENE
1000U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1000U	2,4,6-TRICHLOROPHENOL
4900U	2,4,5-TRICHLOROPHENOL
1000UR	2-CHLORONAPHTHALENE
4900U	2-NITROANILINE
1000U	DIMETHYL PHTHALATE
1000U	ACENAPHTHYLENE
1000U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
4900UR	3-NITROANILINE
1000UJ	ACENAPHTHENE
4900U	2,4-DINITROPHENOL
4900U	4-NITROPHENOL
1000U	DIBENZOFURAN
1000U	2,4-DINITROTOLUENE
1000U	DIETHYL PHTHALATE
1000U	4-CHLOROPHENYL PHENYL ETHER
1000U	FLUORENE
4900U	4-NITROANILINE
4900U	2-METHYL-4,6-DINITROPHENOL
1000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1000U	4-BROMOPHENYL PHENYL ETHER
1000U	HEXACHLOROBENZENE (HCB)
4900U	PENTACHLOROPHENOL
1000U	PHENANTHRENE
1000U	ANTHRACENE
1000U	DI-N-BUTYLPHTHALATE
1000U	FLUORANTHENE
1000U	PYRENE
1000U	BENZYL BUTYL PHTHALATE
2000U	3,3'-DICHLOROBENZIDINE
1000U	BENZO(A)ANTHRACENE
1000U	CHRYSENE
1000U	BIS(2-ETHYLHEXYL) PHTHALATE
1000U	DI-N-OCTYLPHTHALATE
1000U	BENZO(B AND/OR K)FLUORANTHENE
1000U	BENZO-A-PYRENE
1000U	INDENO (1,2,3-CD) PYRENE
1000U	DIBENZO(A,H)ANTHRACENE
1000U	BENZO(GHI)PERYLENE
35	PERCENT MOISTURE

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.

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1125 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W743

UG/KG	ANALYTICAL RESULTS
1200U	PHENOL
1200U	BIS(2-CHLOROETHYL) ETHER
1200U	2-CHLOROPHENOL
1200U	1,3-DICHLOROBENZENE
1200U	1,4-DICHLOROBENZENE
1200U	BENZYL ALCOHOL
1200U	1,2-DICHLOROBENZENE
1200U	2-METHYLPHENOL
1200UR	BIS(2-CHLOROISOPROPYL) ETHER
1200U	(3-AND/OR 4-)METHYLPHENOL
1200U	N-NITROSODI-N-PROPYLAMINE
1200U	HEXACHLOROETHANE
1200UJ	NITROBENZENE
1200U	ISOPHORONE
1200UJ	2-NITROPHENOL
1200UR	2,4-DIMETHYLPHENOL
5900U	BENZOIC ACID
1200U	BIS(2-CHLOROETHOXY) METHANE
1200U	2,4-DICHLOROPHENOL
1200UR	1,2,4-TRICHLOROBENZENE
1200U	NAPHTHALENE
1200U	4-CHLOROANILINE
1200U	HEXACHLOROBUTADIENE
1200U	4-CHLORO-3-METHYLPHENOL
1200U	2-METHYLNAPHTHALENE
1200U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1200U	2,4,6-TRICHLOROPHENOL
5900U	2,4,5-TRICHLOROPHENOL
1200UR	2-CHLORONAPHTHALENE
5900U	2-NITROANILINE
1200U	DIMETHYL PHTHALATE
1200U	ACENAPHTHYLENE
1200U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
5900UR	3-NITROANILINE
1200UJ	ACENAPHTHENE
5900U	2,4-DINITROPHENOL
5900U	4-NITROPHENOL
1200U	DIBENZOFURAN
1200U	2,4-DINITROTOLUENE
1200U	DIETHYL PHTHALATE
1200U	4-CHLOROPHENYL PHENYL ETHER
1200U	FLUORENE
5900U	4-NITROANILINE
5900U	2-METHYL-4,6-DINITROPHENOL
1200U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1200U	4-BROMOPHENYL PHENYL ETHER
1200U	HEXACHLOROBENZENE (HCB)
5900U	PENTACHLOROPHENOL
1200U	PHENANTHRENE
1200U	ANTHRACENE
1200U	DI-N-BUTYLPHTHALATE
1200U	FLUORANTHENE
1200U	PYRENE
1200U	BENZYL BUTYL PHTHALATE
2500U	3,3'-DICHLOROBENZIDINE
1200U	BENZO(A)ANTHRACENE
1200U	CHRYSENE
1200U	BIS(2-ETHYLHEXYL) PHTHALATE
1200U	DI-N-OCTYLPHTHALATE
1200U	BENZO(B AND/OR K)FLUORANTHENE
1200U	BENZO-A-PYRENE
1200U	INDENO (1,2,3-CD) PYRENE
1200U	DIBENZO(A,H)ANTHRACENE
1200U	BENZO(GHI)PERYLENE
46	PERCENT MOISTURE

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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1130 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W744

UG/KG	ANALYTICAL RESULTS
1600U	PHENOL
1600U	BIS(2-CHLOROETHYL) ETHER
1600U	2-CHLOROPHENOL
1600U	1,3-DICHLOROBENZENE
1600U	1,4-DICHLOROBENZENE
1600U	BENZYL ALCOHOL
1600U	1,2-DICHLOROBENZENE
1600U	2-METHYLPHENOL
1600UR	BIS(2-CHLOROISOPROPYL) ETHER
1600U	(3-AND/OR 4-)METHYLPHENOL
1600U	N-NITROSODI-N-PROPYLAMINE
1600U	HEXACHLOROETHANE
1600UJ	NITROBENZENE
1600U	ISOPHORONE
1600UJ	2-NITROPHENOL
1600UR	2,4-DIMETHYLPHENOL
7900U	BENZOIC ACID
1600U	BIS(2-CHLOROETHOXY) METHANE
1600U	2,4-DICHLOROPHENOL
1600UR	1,2,4-TRICHLOROBENZENE
1600U	NAPHTHALENE
1600U	4-CHLOROANILINE
1600U	HEXACHLOROBUTADIENE
1600U	4-CHLORO-3-METHYLPHENOL
1600U	2-METHYLNAPHTHALENE
1600U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1600U	2,4,6-TRICHLOROPHENOL
7900U	2,4,5-TRICHLOROPHENOL
1600UR	2-CHLORONAPHTHALENE
7900U	2-NITROANILINE
1600U	DIMETHYL PHTHALATE
1600U	ACENAPHTHYLENE
1600U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
7900UR	3-NITROANILINE
1600UJ	ACENAPHTHENE
7900U	2,4-DINITROPHENOL
7900U	4-NITROPHENOL
1600U	DIBENZOFURAN
1600U	2,4-DINITROTOLUENE
1600U	DIETHYL PHTHALATE
1600U	4-CHLOROPHENYL PHENYL ETHER
1600U	FLUORENE
7900U	4-NITROANILINE
7900U	2-METHYL-4,6-DINITROPHENOL
1600U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1600U	4-BROMOPHENYL PHENYL ETHER
1600U	HEXACHLOROBENZENE (HCB)
7900U	PENTACHLOROPHENOL
1600U	PHENANTHRENE
1600U	ANTHRACENE
1600U	DI-N-BUTYLPHTHALATE
1600U	FLUORANTHENE
1600U	PYRENE
1600U	BENZYL BUTYL PHTHALATE
3200U	3,3'-DICHLOROBENZIDINE
1600U	BENZO(A)ANTHRACENE
1600U	CHRYSENE
1600U	BIS(2-ETHYLHEXYL) PHTHALATE
1600U	DI-N-OCTYLPHTHALATE
1600U	BENZO(B AND/OR K)FLUORANTHENE
1600U	BENZO-A-PYRENE
1600U	INDENO (1,2,3-CD) PYRENE
1600U	DIBENZO(A,H)ANTHRACENE
1600U	BENZO(GHI)PERYLENE
59	PERCENT MOISTURE

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

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA
SOURCE: BERKELEY CO LF
STATION ID: PW-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1220 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W745

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	PHENOL	50UR	3-NITROANILINE
10U	BIS(2-CHLOROETHYL) ETHER	10U	ACENAPHTHENE
10U	2-CHLOROPHENOL	50U	2,4-DINITROPHENOL
10U	1,3-DICHLOROBENZENE	50U	4-NITROPHENOL
10U	1,4-DICHLOROBENZENE	10U	DIBENZOFURAN
10U	BENZYL ALCOHOL	10U	2,4-DINITROTOLUENE
10U	1,2-DICHLOROBENZENE	10U	DIETHYL PHTHALATE
10U	2-METHYLPHENOL	10U	4-CHLOROPHENYL PHENYL ETHER
10U	BIS(2-CHLOROISOPROPYL) ETHER	10U	FLUORENE
10U	(3-AND/OR 4-)METHYLPHENOL	50U	4-NITROANILINE
10U	N-NITROSODI-N-PROPYLAMINE	50U	2-METHYL-4,6-DINITROPHENOL
10U	HEXACHLOROETHANE	10U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	NITROBENZENE	10U	4-BROMOPHENYL PHENYL ETHER
10U	ISOPHORONE	10U	HEXACHLOROBENZENE (HCB)
10U	2-NITROPHENOL	50U	PENTACHLOROPHENOL
10U	2,4-DIMETHYLPHENOL	10U	PHENANTHRENE
50U	BENZOIC ACID	10U	ANTHRACENE
10U	BIS(2-CHLOROETHOXY) METHANE	10UR	DI-N-BUTYLPHTHALATE
10U	2,4-DICHLOROPHENOL	10U	FLUORANTHENE
10U	1,2,4-TRICHLOROBENZENE	10U	PYRENE
10U	NAPHTHALENE	10U	BENZYL BUTYL PHTHALATE
10U	4-CHLOROANILINE	20U	3,3'-DICHLOROBENZIDINE
10U	HEXACHLOROBUTADIENE	10U	BENZO(A)ANTHRACENE
10U	4-CHLORO-3-METHYLPHENOL	10U	CHRYSENE
10U	2-METHYLNAPHTHALENE	10U	BIS(2-ETHYLHEXYL) PHTHALATE
10U	HEXACHLOROCYCLOPENTADIENE (HCCP)	10U	DI-N-OCTYLPHTHALATE
10U	2,4,6-TRICHLOROPHENOL	10U	BENZO(B AND/OR K)FLUORANTHENE
50U	2,4,5-TRICHLOROPHENOL	10U	BENZO-A-PYRENE
10U	2-CHLORONAPHTHALENE	10U	INDENO (1,2,3-CD) PYRENE
50U	2-NITROANILINE	10U	DIBENZO(A,H)ANTHRACENE
10U	DIMETHYL PHTHALATE	10U	BENZO(GHI)PERYLENE
10U	ACENAPHTHYLENE		
10U	2,6-DINITROTOLUENE		

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

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1455 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W746

UG/KG	ANALYTICAL RESULTS
780U	PHENOL
780U	BIS(2-CHLOROETHYL) ETHER
780U	2-CHLOROPHENOL
780U	1,3-DICHLOROBENZENE
780U	1,4-DICHLOROBENZENE
780U	BENZYL ALCOHOL
780U	1,2-DICHLOROBENZENE
780U	2-METHYLPHENOL
780UR	BIS(2-CHLOROISOPROPYL) ETHER
780U	(3-AND/OR 4-)METHYLPHENOL
780U	N-NITROSODI-N-PROPYLAMINE
780U	HEXACHLOROETHANE
780UJ	NITROBENZENE
780U	ISOPHORONE
780UJ	2-NITROPHENOL
780UR	2,4-DIMETHYLPHENOL
3800U	BENZOIC ACID
780U	BIS(2-CHLOROETHOXY) METHANE
780U	2,4-DICHLOROPHENOL
780UR	1,2,4-TRICHLOROBENZENE
780U	NAPHTHALENE
780U	4-CHLOROANILINE
780U	HEXACHLOROBUTADIENE
780U	4-CHLORO-3-METHYLPHENOL
780U	2-METHYLNAPHTHALENE
780U	HEXACHLOROCYCLOPENTADIENE (HCCP)
780U	2,4,6-TRICHLOROPHENOL
3800U	2,4,5-TRICHLOROPHENOL
780UR	2-CHLORONAPHTHALENE
3800U	2-NITROANILINE
780U	DIMETHYL PHTHALATE
780U	ACENAPHTHYLENE
780U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
3800UR	3-NITROANILINE
780UJ	ACENAPHTHENE
3800U	2,4-DINITROPHENOL
3800U	4-NITROPHENOL
780U	DIBENZOFURAN
780U	2,4-DINITROTOLUENE
780U	DIETHYL PHTHALATE
780U	4-CHLOROPHENYL PHENYL ETHER
780U	FLUORENE
3800U	4-NITROANILINE
3800U	2-METHYL-4,6-DINITROPHENOL
780U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
780U	4-BROMOPHENYL PHENYL ETHER
780U	HEXACHLOROBENZENE (HCB)
3800U	PENTACHLOROPHENOL
780U	PHENANTHRENE
780U	ANTHRACENE
780U	DI-N-BUTYLPHTHALATE
780U	FLUORANTHENE
780U	PYRENE
780U	BENZYL BUTYL PHTHALATE
1600U	3,3'-DICHLOROBENZIDINE
780U	BENZO(A)ANTHRACENE
780U	CHRYSENE
780U	BIS(2-ETHYLHEXYL) PHTHALATE
780U	DI-N-OCTYLPHTHALATE
780U	BENZO(B AND/OR K)FLUORANTHENE
780U	BENZO-A-PYRENE
780U	INDENO (1,2,3-CD) PYRENE
780U	DIBENZO(A,H)ANTHRACENE
780U	BENZO(GHI)PERYLENE
15	PERCENT MOISTURE

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

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SB-04 COLLECTION START: 09/19/90 1520 STOP: 00/00/00
CASE NO.: 14889 SAS NO.: D. NO.: W747

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
930U	PHENOL	4500UR	3-NITROANILINE
930U	BIS(2-CHLOROETHYL) ETHER	930UJ	ACENAPHTHENE
930U	2-CHLOROPHENOL	4500U	2,4-DINITROPHENOL
930U	1,3-DICHLOROBENZENE	4500U	4-NITROPHENOL
930U	1,4-DICHLOROBENZENE	930U	DIBENZOFURAN
930U	BENZYL ALCOHOL	930U	2,4-DINITROTOLUENE
930U	1,2-DICHLOROBENZENE	930U	DIETHYL PHTHALATE
930U	2-METHYLPHENOL	930U	4-CHLOROPHENYL PHENYL ETHER
930UR	BIS(2-CHLOROISOPROPYL) ETHER	930U	FLUORENE
930U	(3-AND/OR 4-)METHYLPHENOL	4500U	4-NITROANILINE
930U	N-NITROSODI-N-PROPYLAMINE	4500U	2-METHYL-4,6-DINITROPHENOL
930U	HEXACHLOROETHANE	930U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
930UJ	NITROBENZENE	930U	4-BROMOPHENYL PHENYL ETHER
930U	ISOPHORONE	930U	HEXACHLOROBENZENE (HCB)
930UJ	2-NITROPHENOL	4500U	PENTACHLOROPHENOL
930UR	2,4-DIMETHYLPHENOL	930U	PHENANTHRENE
4500U	BENZOIC ACID	930U	ANTHRACENE
930U	BIS(2-CHLOROETHOXY) METHANE	310J	DI-N-BUTYLPHTHALATE
930U	2,4-DICHLOROPHENOL	930U	FLUORANTHENE
930UR	1,2,4-TRICHLOROBENZENE	930U	PYRENE
930U	NAPHTHALENE	930U	BENZYL BUTYL PHTHALATE
930U	4-CHLOROANILINE	1900U	3,3'-DICHLOROBENZIDINE
930U	HEXACHLOROBUTADIENE	930U	BENZO(A)ANTHRACENE
930U	4-CHLORO-3-METHYLPHENOL	930U	CHRYSENE
930U	2-METHYLNAPHTHALENE	930U	BIS(2-ETHYLHEXYL) PHTHALATE
930U	HEXACHLOROCYCLOPENTADIENE (HCCP)	930U	DI-N-OCTYLPHTHALATE
930U	2,4,6-TRICHLOROPHENOL	930U	BENZO(B AND/OR K)FLUORANTHENE
4500U	2,4,5-TRICHLOROPHENOL	930U	BENZO-A-PYRENE
930UR	2-CHLORONAPHTHALENE	930U	INDENO (1,2,3-CD) PYRENE
4500U	2-NITROANILINE	930U	DIBENZO(A,H)ANTHRACENE
930U	DIMETHYL PHTHALATE	930U	BENZO(GHI)PERYLENE
930U	ACENAPHTHYLENE	29	PERCENT MOISTURE
930U	2,6-DINITROTOLUENE		

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.

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1450 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W749

UG/KG	ANALYTICAL RESULTS
880U	PHENOL
880U	BIS(2-CHLOROETHYL) ETHER
880U	2-CHLOROPHENOL
880U	1,3-DICHLOROBENZENE
880U	1,4-DICHLOROBENZENE
880U	BENZYL ALCOHOL
880U	1,2-DICHLOROBENZENE
880U	2-METHYLPHENOL
880UR	BIS(2-CHLOROISOPROPYL) ETHER
880U	(3-AND/OR 4-)METHYLPHENOL
880U	N-NITROSODI-N-PROPYLAMINE
880U	HEXACHLOROETHANE
880UJ	NITROBENZENE
880U	ISOPHORONE
880UJ	2-NITROPHENOL
880UR	2,4-DIMETHYLPHENOL
4300U	BENZOIC ACID
880U	BIS(2-CHLOROETHOXY) METHANE
880U	2,4-DICHLOROPHENOL
880UR	1,2,4-TRICHLOROBENZENE
880U	NAPHTHALENE
880U	4-CHLOROANILINE
880U	HEXACHLOROBUTADIENE
880U	4-CHLORO-3-METHYLPHENOL
880U	2-METHYLNAPHTHALENE
880U	HEXACHLOROCYCLOPENTADIENE (HCCP)
880U	2,4,6-TRICHLOROPHENOL
4300U	2,4,5-TRICHLOROPHENOL
880UR	2-CHLORONAPHTHALENE
4300U	2-NITROANILINE
880U	DIMETHYL PHTHALATE
880U	ACENAPHTHYLENE
880U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
4300UR	3-NITROANILINE
880UJ	ACENAPHTHENE
4300U	2,4-DINITROPHENOL
4300U	4-NITROPHENOL
880U	DIBENZOFURAN
880U	2,4-DINITROTOLUENE
880U	DIETHYL PHTHALATE
880U	4-CHLOROPHENYL PHENYL ETHER
880U	FLUORENE
4300U	4-NITROANILINE
4300U	2-METHYL-4,6-DINITROPHENOL
880U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
880U	4-BROMOPHENYL PHENYL ETHER
880U	HEXACHLOROBENZENE (HCB)
4300U	PENTACHLOROPHENOL
880U	PHENANTHRENE
880U	ANTHRACENE
880U	DI-N-BUTYLPHTHALATE
880U	FLUORANTHENE
880U	PYRENE
880U	BENZYL BUTYL PHTHALATE
1800U	3,3'-DICHLOROBENZIDINE
880U	BENZO(A)ANTHRACENE
880U	CHRYSENE
880U	BIS(2-ETHYLHEXYL) PHTHALATE
880U	DI-N-OCTYLPHTHALATE
880U	BENZO(B AND/OR K)FLUORANTHENE
880U	BENZO-A-PYRENE
880U	INDENO (1,2,3-CD) PYRENE
880U	DIBENZO(A,H)ANTHRACENE
880U	BENZO(GHI)PERYLENE
25	PERCENT MOISTURE

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.

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1515 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W750

UG/KG	ANALYTICAL RESULTS
1300U	PHENOL
1300U	BIS(2-CHLOROETHYL) ETHER
1300U	2-CHLOROPHENOL
1300U	1,3-DICHLOROBENZENE
1300U	1,4-DICHLOROBENZENE
1300U	BENZYL ALCOHOL
1300U	1,2-DICHLOROBENZENE
1300U	2-METHYLPHENOL
1300UR	BIS(2-CHLOROISOPROPYL) ETHER
1300U	(3-AND/OR 4-)METHYLPHENOL
1300U	N-NITROSODI-N-PROPYLAMINE
1300U	HEXACHLOROETHANE
1300UJ	NITROBENZENE
1300U	ISOPHORONE
1300UJ	2-NITROPHENOL
1300UR	2,4-DIMETHYLPHENOL
6500U	BENZOIC ACID
1300U	BIS(2-CHLOROETHOXY) METHANE
1300U	2,4-DICHLOROPHENOL
1300UR	1,2,4-TRICHLOROBENZENE
1300U	NAPHTHALENE
1300U	4-CHLOROANILINE
1300U	HEXACHLOROBUTADIENE
1300U	4-CHLORO-3-METHYLPHENOL
1300U	2-METHYLNAPHTHALENE
1300U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1300U	2,4,6-TRICHLOROPHENOL
6500U	2,4,5-TRICHLOROPHENOL
1300UR	2-CHLORONAPHTHALENE
6500U	2-NITROANILINE
1300U	DIMETHYL PHTHALATE
1300U	ACENAPHTHYLENE
1300U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
6500UR	3-NITROANILINE
1300UJ	ACENAPHTHENE
6500U	2,4-DINITROPHENOL
6500U	4-NITROPHENOL
1300U	DIBENZOFURAN
1300U	2,4-DINITROTOLUENE
1300U	DIETHYL PHTHALATE
1300U	4-CHLOROPHENYL PHENYL ETHER
1300U	FLUORENE
6500U	4-NITROANILINE
6500U	2-METHYL-4,6-DINITROPHENOL
1300U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1300U	4-BROMOPHENYL PHENYL ETHER
1300U	HEXACHLOROBENZENE (HCB)
6500U	PENTACHLOROPHENOL
1300U	PHENANTHRENE
1300U	ANTHRACENE
1300U	DI-N-BUTYLPHTHALATE
1300U	FLUORANTHENE
1300U	PYRENE
1300U	BENZYL BUTYL PHTHALATE
2700U	3,3'-DICHLOROBENZIDINE
1300U	BENZO(A)ANTHRACENE
1300U	CHRYSENE
1300U	BIS(2-ETHYLHEXYL) PHTHALATE
1300U	DI-N-OCTYLPHTHALATE
1300U	BENZO(B AND/OR K)FLUORANTHENE
1300U	BENZO-A-PYRENE
1300U	INDENO (1,2,3-CD) PYRENE
1300U	DIBENZO(A,H)ANTHRACENE
1300U	BENZO(GHI)PERYLENE
50	PERCENT MOISTURE

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.

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA
SOURCE: BERKELEY CO LF
STATION ID: TW-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1550 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W751

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10UR	PHENOL	50UR	3-NITROANILINE
10U	BIS(2-CHLOROETHYL) ETHER	10U	ACENAPHTHENE
10UR	2-CHLOROPHENOL	50UR	2,4-DINITROPHENOL
10U	1,3-DICHLOROBENZENE	50UR	4-NITROPHENOL
10U	1,4-DICHLOROBENZENE	10U	DIBENZOFURAN
10U	BENZYL ALCOHOL	10U	2,4-DINITROTOLUENE
10U	1,2-DICHLOROBENZENE	10U	DIETHYL PHTHALATE
10UR	2-METHYLPHENOL	10U	4-CHLOROPHENYL PHENYL ETHER
10U	BIS(2-CHLOROISOPROPYL) ETHER	10U	FLUORENE
10UR	(3-AND/OR 4-)METHYLPHENOL	50U	4-NITROANILINE
10U	N-NITROSODI-N-PROPYLAMINE	50UR	2-METHYL-4,6-DINITROPHENOL
10U	HEXACHLOROETHANE	10U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	NITROBENZENE	10U	4-BROMOPHENYL PHENYL ETHER
10U	ISOPHORONE	10U	HEXACHLOROBENZENE (HCB)
10UR	2-NITROPHENOL	50UR	PENTACHLOROPHENOL
10UR	2,4-DIMETHYLPHENOL	10U	PHENANTHRENE
50UR	BENZOIC ACID	10U	ANTHRACENE
10U	BIS(2-CHLOROETHOXY) METHANE	10UR	DI-N-BUTYLPHTHALATE
10UR	2,4-DICHLOROPHENOL	10U	FLUORANTHENE
10U	1,2,4-TRICHLOROBENZENE	10U	PYRENE
10U	NAPHTHALENE	10U	BENZYL BUTYL PHTHALATE
10U	4-CHLOROANILINE	20U	3,3'-DICHLOROBENZIDINE
10U	HEXACHLOROBUTADIENE	10U	BENZO(A)ANTHRACENE
10UR	4-CHLORO-3-METHYLPHENOL	10U	CHRYSENE
10U	2-METHYLNAPHTHALENE	10U	BIS(2-ETHYLHEXYL) PHTHALATE
10U	HEXACHLOROCYCLOPENTADIENE (HCCP)	10U	DI-N-OCTYLPHTHALATE
10UR	2,4,6-TRICHLOROPHENOL	10U	BENZO(B AND/OR K)FLUORANTHENE
50UR	2,4,5-TRICHLOROPHENOL	10U	BENZO-A-PYRENE
10U	2-CHLORONAPHTHALENE	10U	INDENO (1,2,3-CD) PYRENE
50U	2-NITROANILINE	10U	DIBENZO(A,H)ANTHRACENE
10U	DIMETHYL PHTHALATE	10U	BENZO(GHI)PERYLENE
10U	ACENAPHTHYLENE		
10U	2,6-DINITROTOLUENE		

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.

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA
SOURCE: BERKELEY CO LF
STATION ID: PW-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1625 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W752

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10UJ	PHENOL	50UR	3-NITROANILINE
10UJ	BIS(2-CHLOROETHYL) ETHER	10UJ	ACENAPHTHENE
10UJ	2-CHLOROPHENOL	50UJ	2,4-DINITROPHENOL
10UJ	1,3-DICHLOROBENZENE	50UJ	4-NITROPHENOL
10UJ	1,4-DICHLOROBENZENE	10UJ	DIBENZOFURAN
10UJ	BENZYL ALCOHOL	10UJ	2,4-DINITROTOLUENE
10UJ	1,2-DICHLOROBENZENE	10UJ	DIETHYL PHTHALATE
10UJ	2-METHYLPHENOL	10UJ	4-CHLOROPHENYL PHENYL ETHER
10UJ	BIS(2-CHLOROISOPROPYL) ETHER	10UJ	FLUORENE
10UJ	(3-AND/OR 4-)METHYLPHENOL	50UJ	4-NITROANILINE
10UJ	N-NITROSODI-N-PROPYLAMINE	50UJ	2-METHYL-4,6-DINITROPHENOL
10UJ	HEXACHLOROETHANE	10UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10UJ	NITROBENZENE	10UJ	4-BROMOPHENYL PHENYL ETHER
10UJ	ISOPHORONE	10UJ	HEXACHLOROBENZENE (HCB)
10UJ	2-NITROPHENOL	50UJ	PENTACHLOROPHENOL
10UJ	2,4-DIMETHYLPHENOL	10UJ	PHENANTHRENE
50UJ	BENZOIC ACID	10UJ	ANTHRACENE
10UJ	BIS(2-CHLOROETHOXY) METHANE	10UR	DI-N-BUTYLPHTHALATE
10UJ	2,4-DICHLOROPHENOL	10UJ	FLUORANTHENE
10UJ	1,2,4-TRICHLOROBENZENE	10UJ	PYRENE
10UJ	NAPHTHALENE	10UJ	BENZYL BUTYL PHTHALATE
10UJ	4-CHLOROANILINE	20UJ	3,3'-DICHLOROBENZIDINE
10UJ	HEXACHLOROBUTADIENE	10UJ	BENZO(A)ANTHRACENE
10UJ	4-CHLORO-3-METHYLPHENOL	10UJ	CHRYSENE
10UJ	2-METHYLNAPHTHALENE	10UJ	BIS(2-ETHYLHEXYL) PHTHALATE
10UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)	10UJ	DI-N-OCTYLPHTHALATE
10UJ	2,4,6-TRICHLOROPHENOL	10UJ	BENZO(B AND/OR K)FLUORANTHENE
50UJ	2,4,5-TRICHLOROPHENOL	10UJ	BENZO-A-PYRENE
10UJ	2-CHLORONAPHTHALENE	10UJ	INDENO (1,2,3-CD) PYRENE
50UJ	2-NITROANILINE	10UJ	DIBENZO(A,H)ANTHRACENE
10UJ	DIMETHYL PHTHALATE	10UJ	BENZO(GHI)PERYLENE,
10UJ	ACENAPHTHYLENE		
10UJ	2,6-DINITROTOLUENE		

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1745 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W753

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
990U	PHENOL	4800UR	3-NITROANILINE
990U	BIS(2-CHLOROETHYL) ETHER	990UJ	ACENAPHTHENE
990U	2-CHLOROPHENOL	4800U	2,4-DINITROPHENOL
990U	1,3-DICHLOROBENZENE	4800U	4-NITROPHENOL
990U	1,4-DICHLOROBENZENE	990U	DIBENZOFURAN
990U	BENZYL ALCOHOL	990U	2,4-DINITROTOLUENE
990U	1,2-DICHLOROBENZENE	990U	DIETHYL PHTHALATE
990U	2-METHYLPHENOL	990U	4-CHLOROPHENYL PHENYL ETHER
990UR	BIS(2-CHLOROISOPROPYL) ETHER	990U	FLUORENE
990U	(3-AND/OR 4-)METHYLPHENOL	4800U	4-NITROANILINE
990U	N-NITROSODI-N-PROPYLAMINE	4800U	2-METHYL-4,6-DINITROPHENOL
990U	HEXACHLOROETHANE	990U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
990UJ	NITROBENZENE	990U	4-BROMOPHENYL PHENYL ETHER
990U	ISOPHORONE	990U	HEXACHLOROBENZENE (HCB)
990UJ	2-NITROPHENOL	4800U	PENTACHLOROPHENOL
990UR	2,4-DIMETHYLPHENOL	990U	PHENANTHRENE
4800U	BENZOIC ACID	990U	ANTHRACENE
990U	BIS(2-CHLOROETHOXY) METHANE	990U	DI-N-BUTYLPHTHALATE
990U	2,4-DICHLOROPHENOL	990U	FLUORANTHENE
990UR	1,2,4-TRICHLOROBENZENE	990U	PYRENE
990U	NAPHTHALENE	990U	BENZYL BUTYL PHTHALATE
990U	4-CHLOROANILINE	2000U	3,3'-DICHLOROBENZIDINE
990U	HEXACHLOROBUTADIENE	990U	BENZO(A)ANTHRACENE
990U	4-CHLORO-3-METHYLPHENOL	990U	CHRYSENE
990U	2-METHYLNAPHTHALENE	990U	BIS(2-ETHYLHEXYL) PHTHALATE
990U	HEXACHLOROCYCLOPENTADIENE (HCCP)	990U	DI-N-OCTYLPHTHALATE
990U	2,4,6-TRICHLOROPHENOL	990U	BENZO(B AND/OR K)FLUORANTHENE
4800U	2,4,5-TRICHLOROPHENOL	990U	BENZO-A-PYRENE
990UR	2-CHLORONAPHTHALENE	990U	INDENO (1,2,3-CD) PYRENE
4800U	2-NITROANILINE	990U	DIBENZO(A,H)ANTHRACENE
990U	DIMETHYL PHTHALATE	990U	BENZO(GHI)PERYLENE
990U	ACENAPHTHYLENE	34	PERCENT MOISTURE
990U	2,6-DINITROTOLUENE		

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

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50609 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1815 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W754

UG/KG	ANALYTICAL RESULTS
950U	PHENOL
950U	BIS(2-CHLOROETHYL) ETHER
950U	2-CHLOROPHENOL
950U	1,3-DICHLOROBENZENE
950U	1,4-DICHLOROBENZENE
950U	BENZYL ALCOHOL
950U	1,2-DICHLOROBENZENE
950U	2-METHYLPHENOL
950UR	BIS(2-CHLOROISOPROPYL) ETHER
950U	(3-AND/OR 4-)METHYLPHENOL
950U	N-NITROSODI-N-PROPYLAMINE
950U	HEXACHLOROETHANE
950UJ	NITROBENZENE
950U	ISOPHORONE
950UJ	2-NITROPHENOL
950UR	2,4-DIMETHYLPHENOL
4600U	BENZOIC ACID
950U	BIS(2-CHLOROETHOXY) METHANE
950U	2,4-DICHLOROPHENOL
950UR	1,2,4-TRICHLOROBENZENE
950U	NAPHTHALENE
950U	4-CHLOROANILINE
950U	HEXACHLOROBUTADIENE
950U	4-CHLORO-3-METHYLPHENOL
950U	2-METHYLNAPHTHALENE
950U	HEXACHLOROCYCLOPENTADIENE (HCCP)
950U	2,4,6-TRICHLOROPHENOL
4600U	2,4,5-TRICHLOROPHENOL
950UR	2-CHLORONAPHTHALENE
4600U	2-NITROANILINE
950U	DIMETHYL PHTHALATE
950U	ACENAPHTHYLENE
950U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
4600UR	3-NITROANILINE
950UJ	ACENAPHTHENE
4600U	2,4-DINITROPHENOL
4600U	4-NITROPHENOL
950U	DIBENZOFURAN
950U	2,4-DINITROTOLUENE
950U	DIETHYL PHTHALATE
950U	4-CHLOROPHENYL PHENYL ETHER
950U	FLUORENE
4600U	4-NITROANILINE
4600U	2-METHYL-4,6-DINITROPHENOL
950U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
950U	4-BROMOPHENYL PHENYL ETHER
950U	HEXACHLOROBENZENE (HCB)
4600U	PENTACHLOROPHENOL
950U	PHENANTHRENE
950U	ANTHRACENE
950U	DI-N-BUTYLPHTHALATE
950U	FLUORANTHENE
950U	PYRENE
950U	BENZYL BUTYL PHTHALATE
1900U	3,3'-DICHLOROBENZIDINE
950U	BENZO(A)ANTHRACENE
950U	CHRYSENE
950U	BIS(2-ETHYLHEXYL) PHTHALATE
950U	DI-N-OCTYLPHTHALATE
950U	BENZO(B AND/OR K)FLUORANTHENE
950U	BENZO-A-PYRENE
950U	INDENO (1,2,3-CD) PYRENE
950U	DIBENZO(A,H)ANTHRACENE
950U	BENZO(GHI)PERYLENE
30	PERCENT MOISTURE

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.   11/15/90

EXTRACTABLE ORGANICS DATA REPORT

*** ***
** PROJECT NO. 90-803   SAMPLE NO. 50610   SAMPLE TYPE: SURFACEWA   PROG ELEM: NSF   COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC **
** STATION ID: TB-01W   COLLECTION START: 09/19/90 0700   STOP: 00/00/00 **
**
** CASE NO.: 14889   SAS NO.:   D. NO.: W735 **
*** ***

UG/L	ANALYTICAL RESULTS
10U	PHENOL
10U	BIS(2-CHLOROETHYL) ETHER
10U	2-CHLOROPHENOL
10U	1,3-DICHLOROBENZENE
10U	1,4-DICHLOROBENZENE
10U	BENZYL ALCOHOL
10U	1,2-DICHLOROBENZENE
10U	2-METHYLPHENOL
10U	BIS(2-CHLOROISOPROPYL) ETHER
10U	(3-AND/OR 4-)METHYLPHENOL
10U	N-NITROSODI-N-PROPYLAMINE
10U	HEXACHLOROETHANE
10U	NITROBENZENE
10U	ISOPHORONE
10U	2-NITROPHENOL
10U	2,4-DIMETHYLPHENOL
50U	BENZOIC ACID
10U	BIS(2-CHLOROETHOXY) METHANE
10U	2,4-DICHLOROPHENOL
10U	1,2,4-TRICHLOROBENZENE
10U	NAPHTHALENE
10U	4-CHLOROANILINE
10U	HEXACHLOROBUTADIENE
10U	4-CHLORO-3-METHYLPHENOL
10U	2-METHYLNAPHTHALENE
10U	HEXACHLOROCYCLOPENTADIENE (HCCP)
10U	2,4,6-TRICHLOROPHENOL
50U	2,4,5-TRICHLOROPHENOL
10U	2-CHLORONAPHTHALENE
50U	2-NITROANILINE
10U	DIMETHYL PHTHALATE
10U	ACENAPHTHYLENE
10U	2,6-DINITROTOLUENE
50UR	3-NITROANILINE
10U	ACENAPHTHENE
50U	2,4-DINITROPHENOL
50U	4-NITROPHENOL
10U	DIBENZOFURAN
10U	2,4-DINITROTOLUENE
10U	DIETHYL PHTHALATE
10U	4-CHLOROPHENYL PHENYL ETHER
10U	FLUORENE
50U	4-NITROANILINE
50U	2-METHYL-4,6-DINITROPHENOL
10U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	4-BROMOPHENYL PHENYL ETHER
10U	HEXACHLOROBENZENE (HCB)
50U	PENTACHLOROPHENOL
10U	PHENANTHRENE
10U	ANTHRACENE
10UR	DI-N-BUTYLPHTHALATE
10U	FLUORANTHENE
10U	PYRENE
10U	BENZYL BUTYL PHTHALATE
20U	3,3'-DICHLOROBENZIDINE
10U	BENZO(A)ANTHRACENE
10U	CHRYSENE
10U	BIS(2-ETHYLHEXYL) PHTHALATE
10U	DI-N-OCTYLPHTHALATE
10U	BENZO(B AND/OR K)FLUORANTHENE
10U	BENZO-A-PYRENE
10U	INDENO (1,2,3-CD) PYRENE
10U	DIBENZO(A,H)ANTHRACENE
10U	BENZO(GHI)PERYLENE

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.

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SS-01 COLLECTION START: 09/19/90 1010 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W737 MD NO: W737 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

4000J 4 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.

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 90-803    SAMPLE NO. 50591  SAMPLE TYPE: SEDIM       PROG ELEM: NSF   COLLECTED BY: L WARD                  **
**   SOURCE: BERKELEY CO LF                                           CITY: OAKLEY                ST: SC                     **
**   STATION ID: SB-01                                                COLLECTION START: 09/19/90  1020   STOP: 00/00/00      **
**   CASE.NO.: 14889         SAS NO.:                                 D. NO.: W738               MD NO: W738                 **
**                                                                                                                           **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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ANALYTICAL RESULTS UG/KG

400J   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
*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.

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-02
CASE.NO.: 14889 SAS NO.:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1030 STOP: 00/00/00
D. NO.: W739 MD NO: W739

ANALYTICAL RESULTS UG/KG

800J 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.

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 90-803   SAMPLE NO. 50593  SAMPLE TYPE: SEDIM       PROG ELEM: NSF   COLLECTED BY: L WARD               **
**   SOURCE: BERKELEY CO LF                                          CITY: OAKLEY                ST: SC                 **
**   STATION ID: SD-05                                               COLLECTION START: 09/19/90  1050   STOP: 00/00/00   **
**   CASE.NO.: 14889          SAS NO.:                               D. NO.: W740               MD NO: W740             **
**                                                                                                                       **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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ANALYTICAL RESULTS UG/KG

6000J   5 UNIDENTIFIED COMPOUNDS

REMARKS
EXCESSIVE HOLDING TIME

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.

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY ST: SC
STATION ID: SD-06	COLLECTION START: 09/19/90 1110 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:	D. NO.: W742 MD NO: W742

ANALYTICAL RESULTS UG/KG

20000J 10 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.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**  PROJECT NO. 90-803   SAMPLE NO. 50596  SAMPLE TYPE: SEDIM      PROG ELEM: NSF   COLLECTED BY: L WARD                **
**  SOURCE: BERKELEY CO LF                                         CITY: OAKLEY              ST: SC                    **
**  STATION ID: SD-04                                              COLLECTION START: 09/19/90  1125   STOP: 00/00/00   **
**  CASE.NO.: 14889          SAS NO.:                              D. NO.: W743              MD NO: W743               **
**                                                                                                                     **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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ANALYTICAL RESULTS UG/KG

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.
*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. 11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 90-803   SAMPLE NO. 50597  SAMPLE TYPE: SEDIM      PROG ELEM: NSF   COLLECTED BY: L WARD              **
**   SOURCE: BERKELEY CO LF                                         CITY: OAKLEY                ST: SC                 **
**   STATION ID: SD-01                                              COLLECTION START: 09/19/90  1130  STOP: 00/00/00   **
**   CASE.NO.: 14889          SAS NO.:                              D. NO.: W744                MD NO: W744            **
**                                                                                                                     **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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ANALYTICAL RESULTS UG/KG

30000J   12 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.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY ST: SC
STATION ID: SS-04	COLLECTION START: 09/19/90 1455 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:	D. NO.: W746 MD NO: W746

ANALYTICAL RESULTS UG/KG

3000J 4 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. 11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
**   PROJECT NO. 90-803    SAMPLE NO. 50600   SAMPLE TYPE: SEDIM       PROG ELEM: NSF    COLLECTED BY: L WARD                          **
**   SOURCE: BERKELEY CO LF                                            CITY: OAKLEY                   ST: SC                            **
**   STATION ID: SB-04                                                 COLLECTION START: 09/19/90  1520   STOP: 00/00/00                **
**   CASE.NO.: 14889          SAS NO.:                                 D. NO.: W747                  MD NO: W747                        **
**                                                                                                                                      **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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ANALYTICAL RESULTS UG/KG

7000J 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
*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.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-05 COLLECTION START: 09/19/90 1450 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W749 MD NO: W749

ANALYTICAL RESULTS UG/KG

20000J 12 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.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W751 MD NO: W751

ANALYTICAL RESULTS UG/L

100J	6 UNIDENTIFIED COMPOUNDS
20JN	TETRAHYDRO PYRAN
10JN	DIETHYLMETHYLBENZAMIDE

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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MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM
PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF
CITY: OAKLEY ST: SC
STATION ID: SS-02
COLLECTION START: 09/19/90 1745 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:
D. NO.: W753 MD NO: W753

ANALYTICAL RESULTS UG/KG

5000J 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.

RECEIVED
NOV 27 1990
REGION IV

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

*****MEMORANDUM******

DATE: 11/16/90

SUBJECT: Results of Purgeable Organic Analysis;
90-803 BERKELEY CO LF
OAKLEY SC
CASE NO: 14889

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: PHIL BLACKWELL

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:

ORGANIC DATA QUALIFIER REPORT

Case Number 14889 Project Number 90-803 SAS Number

Site I.D. Berkeley Co. LF, Oakley, S.C

Affected Samples	Compound or Fraction	Flag Used	Reason
VOA			
DW743, 747	toluene	J	<Quant limit
DW737, 746, 749	tetrachloroethene	J	internal standard recovery low
all water	2-butanone	R	low response factor
Extractables			
All water	di-n-butylphthalate	R	unacceptable recovery in QC spike
	3-nitroaniline	R	unacceptable recovery in QC spike
All soil	3-nitroaniline	R	unacceptable recovery in QC spike
	bis(2-chloroisopropyl)ether	R	unacceptable recovery in QC spike
	1,2,4-trichlorobenzene	R	unacceptable recovery in QC spike
	2-chloronapthylene	R	unacceptable recovery in QC spike
	2,4-dinitrophenol	R	unacceptable recovery in QC spike
	nitrobenzene	J	unacceptable recovery in QC spike
	2-nitrophenol	J	low recovery in QC spike
	acenaphthene	J	low recovery in QC spike
DW752	all other extractables	J	exceeded 40CFR136 holding time
DW751	all acids	R	surrogates unacceptable
DW740	all other extractables	J	excessive holding time
Pesticide			
DW738	all pesticides	R	unacceptable recovery of MS/MSD

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

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1010 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W737

UG/KG	ANALYTICAL RESULTS
10U	CHLOROMETHANE
10U	BROMOMETHANE
10U	VINYL CHLORIDE
10U	CHLOROETHANE
20U	METHYLENE CHLORIDE
10U	ACETONE
5U	CARBON DISULFIDE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
5U	1,1-DICHLOROETHANE
5U	1,2-DICHLOROETHENE (TOTAL)
5U	CHLOROFORM
5U	1,2-DICHLOROETHANE
15	METHYL ETHYL KETONE
5U	1,1,1-TRICHLOROETHANE
5U	CARBON TETRACHLORIDE
10U	VINYL ACETATE
5U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
5U	1,2-DICHLOROPROPANE
5U	CIS-1,3-DICHLOROPROPENE
5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5U	DIBROMOCHLOROMETHANE
5U	1,1,2-TRICHLOROETHANE
5U	BENZENE
5U	TRANS-1,3-DICHLOROPROPENE
5U	BROMOFORM
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
17J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,1,2,2-TETRACHLOROETHANE
5U	TOLUENE
5U	CHLOROBENZENE
5U	ETHYL BENZENE
5U	STYRENE
5U	TOTAL XYLENES
5	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1020 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W738

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
10U	METHYLENE CHLORIDE
50U	ACETONE
6U	CARBON DISULFIDE
6U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
6U	1,1-DICHLOROETHANE
6U	1,2-DICHLOROETHENE (TOTAL)
6U	CHLOROFORM
6U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
6U	1,1,1-TRICHLOROETHANE
6U	CARBON TETRACHLORIDE
12U	VINYL ACETATE
6U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
6U	1,2-DICHLOROPROPANE
6U	CIS-1,3-DICHLOROPROPENE
6U	TRICHLOROETHENE(TRICHLOROETHYLENE)
6U	DIBROMOCHLOROMETHANE
6U	1,1,2-TRICHLOROETHANE
6U	BENZENE
6U	TRANS-1,3-DICHLOROPROPENE
6U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
6U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
6U	1,1,2,2-TETRACHLOROETHANE
6U	TOLUENE
6U	CHLOROBENZENE
6U	ETHYL BENZENE
6U	STYRENE
6U	TOTAL XYLENES
17	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.
11/15/90

PURGEABLE ORGANICS DATA REPORT

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** PROJECT NO. 90-803   SAMPLE NO. 50592   SAMPLE TYPE: SEDIM   PROG ELEM: NSF   COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC **
** STATION ID: SD-02   COLLECTION START: 09/19/90 1030   STOP: 00/00/00 **
**
** CASE NO.: 14889   SAS NO.:   D. NO.: W739 **

*** ***

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
15U	CHLOROMETHANE	8U	1,2-DICHLOROPROPANE
15U	BROMOMETHANE	8U	CIS-1,3-DICHLOROPROPENE
15U	VINYL CHLORIDE	8U	TRICHLOROETHENE(TRICHLOROETHYLENE)
15U	CHLOROETHANE	8U	DIBROMOCHLOROMETHANE
20U	METHYLENE CHLORIDE	8U	1,1,2-TRICHLOROETHANE
15U	ACETONE	8U	BENZENE
8U	CARBON DISULFIDE	8U	TRANS-1,3-DICHLOROPROPENE
8U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	8U	BROMOFORM
8U	1,1-DICHLOROETHANE	15U	METHYL ISOBUTYL KETONE
8U	1,2-DICHLOROETHENE (TOTAL)	15U	METHYL BUTYL KETONE
8U	CHLOROFORM	8U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
8U	1,2-DICHLOROETHANE	8U	1,1,2,2-TETRACHLOROETHANE
15U	METHYL ETHYL KETONE	8U	TOLUENE
8U	1,1,1-TRICHLOROETHANE	8U	CHLOROBENZENE
8U	CARBON TETRACHLORIDE	8U	ETHYL BENZENE
15U	VINYL ACETATE	8U	STYRENE
8U	BROMODICHLOROMETHANE	8U	TOTAL XYLENES
		35	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1050 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W740

UG/KG	ANALYTICAL RESULTS
11U	CHLOROMETHANE
11U	BROMOMETHANE
11U	VINYL CHLORIDE
11U	CHLOROETHANE
20U	METHYLENE CHLORIDE
11U	ACETONE
5U	CARBON DISULFIDE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
5U	1,1-DICHLOROETHANE
5U	1,2-DICHLOROETHENE (TOTAL)
5U	CHLOROFORM
5U	1,2-DICHLOROETHANE
11U	METHYL ETHYL KETONE
5U	1,1,1-TRICHLOROETHANE
5U	CARBON TETRACHLORIDE
11U	VINYL ACETATE
5U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
5U	1,2-DICHLOROPROPANE
5U	CIS-1,3-DICHLOROPROPENE
5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5U	DIBROMOCHLOROMETHANE
5U	1,1,2-TRICHLOROETHANE
5U	BENZENE
5U	TRANS-1,3-DICHLOROPROPENE
5U	BROMOFORM
11U	METHYL ISOBUTYL KETONE
11U	METHYL BUTYL KETONE
26	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,1,2,2-TETRACHLOROETHANE
5U	TOLUENE
5U	CHLOROBENZENE
5U	ETHYL BENZENE
5U	STYRENE
5U	TOTAL XYLENES
7	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50594 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-01 COLLECTION START: 09/19/90 1110 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W741

UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE
10U	BROMOMETHANE
10U	VINYL CHLORIDE
10U	CHLOROETHANE
5U	METHYLENE CHLORIDE
10U	ACETONE
5U	CARBON DISULFIDE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
5U	1,1-DICHLOROETHANE
5U	1,2-DICHLOROETHENE (TOTAL)
5U	CHLOROFORM
5U	1,2-DICHLOROETHANE
10UR	METHYL ETHYL KETONE
5U	1,1,1-TRICHLOROETHANE
5U	CARBON TETRACHLORIDE
10U	VINYL ACETATE
5U	BROMODICHLOROMETHANE

UG/L	ANALYTICAL RESULTS
5U	1,2-DICHLOROPROPANE
5U	CIS-1,3-DICHLOROPROPENE
5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5U	DIBROMOCHLOROMETHANE
5U	1,1,2-TRICHLOROETHANE
5U	BENZENE
5U	TRANS-1,3-DICHLOROPROPENE
5U	BROMOFORM
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
5U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,1,2,2-TETRACHLOROETHANE
5U	TOLUENE
5U	CHLOROBENZENE
5U	ETHYL BENZENE
5U	STYRENE
5U	TOTAL XYLENES

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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-06

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1110 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W742

UG/KG	ANALYTICAL RESULTS
15U	CHLOROMETHANE
15U	BROMOMETHANE
15U	VINYL CHLORIDE
15U	CHLOROETHANE
20U	METHYLENE CHLORIDE
15U	ACETONE
8U	CARBON DISULFIDE
8U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
8U	1,1-DICHLOROETHANE
8U	1,2-DICHLOROETHENE (TOTAL)
8U	CHLOROFORM
8U	1,2-DICHLOROETHANE
15U	METHYL ETHYL KETONE
8U	1,1,1-TRICHLOROETHANE
8U	CARBON TETRACHLORIDE
15U	VINYL ACETATE
8U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
8U	1,2-DICHLOROPROPANE
8U	CIS-1,3-DICHLOROPROPENE
8U	TRICHLOROETHENE(TRICHLOROETHYLENE)
8U	DIBROMOCHLOROMETHANE
8U	1,1,2-TRICHLOROETHANE
8U	BENZENE
8U	TRANS-1,3-DICHLOROPROPENE
8U	BROMOFORM
15U	METHYL ISOBUTYL KETONE
15U	METHYL BUTYL KETONE
8U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
8U	1,1,2,2-TETRACHLOROETHANE
8U	TOLUENE
8U	CHLOROBENZENE
8U	ETHYL BENZENE
8U	STYRENE
8U	TOTAL XYLENES
35	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1125 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W743

UG/KG	ANALYTICAL RESULTS
19U	CHLOROMETHANE
19U	BROMOMETHANE
19U	VINYL CHLORIDE
19U	CHLOROETHANE
20U	METHYLENE CHLORIDE
19U	ACETONE
9U	CARBON DISULFIDE
9U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
9U	1,1-DICHLOROETHANE
9U	1,2-DICHLOROETHENE (TOTAL)
9U	CHLOROFORM
9U	1,2-DICHLOROETHANE
19U	METHYL ETHYL KETONE
9U	1,1,1-TRICHLOROETHANE
9U	CARBON TETRACHLORIDE
19U	VINYL ACETATE
9U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
9U	1,2-DICHLOROPROPANE
9U	CIS-1,3-DICHLOROPROPENE
9U	TRICHLOROETHENE(TRICHLOROETHYLENE)
9U	DIBROMOCHLOROMETHANE
9U	1,1,2-TRICHLOROETHANE
9U	BENZENE
9U	TRANS-1,3-DICHLOROPROPENE
9U	BROMOFORM
19U	METHYL ISOBUTYL KETONE
19U	METHYL BUTYL KETONE
9U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
9U	1,1,2,2-TETRACHLOROETHANE
6J	TOLUENE
9U	CHLOROBENZENE
9U	ETHYL BENZENE
9U	STYRENE
9U	TOTAL XYLENES
46	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1130 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W744

UG/KG	ANALYTICAL RESULTS
25U	CHLOROMETHANE
25U	BROMOMETHANE
25U	VINYL CHLORIDE
25U	CHLOROETHANE
30U	METHYLENE CHLORIDE
25U	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
25U	METHYL ETHYL KETONE
12U	1,1,1-TRICHLOROETHANE
12U	CARBON TETRACHLORIDE
25U	VINYL ACETATE
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
25U	METHYL ISOBUTYL KETONE
25U	METHYL BUTYL KETONE
12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,1,2,2-TETRACHLOROETHANE
12U	TOLUENE
12U	CHLOROBENZENE
12U	ETHYL BENZENE
12U	STYRENE
12U	TOTAL XYLENES
59	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.

11/15/90

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-01 COLLECTION START: 09/19/90 1220 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W745

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE	5U	1,2-DICHLOROPROPANE
10U	BROMOMETHANE	5U	CIS-1,3-DICHLOROPROPENE
10U	VINYL CHLORIDE	5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	CHLOROETHANE	5U	DIBROMOCHLOROMETHANE
5U	METHYLENE CHLORIDE	5U	1,1,2-TRICHLOROETHANE
10U	ACETONE	5U	BENZENE
5U	CARBON DISULFIDE	5U	TRANS-1,3-DICHLOROPROPENE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	5U	BROMOFORM
5U	1,1-DICHLOROETHANE	10U	METHYL ISOBUTYL KETONE
5U	1,2-DICHLOROETHENE (TOTAL)	10U	METHYL BUTYL KETONE
5U	CHLOROFORM	5U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,2-DICHLOROETHANE	5U	1,1,2,2-TETRACHLOROETHANE
10UR	METHYL ETHYL KETONE	5U	TOLUENE
5U	1,1,1-TRICHLOROETHANE	5U	CHLOROBENZENE
5U	CARBON TETRACHLORIDE	5U	ETHYL BENZENE
10U	VINYL ACETATE	5U	STYRENE
5U	BROMODICHLOROMETHANE	5U	TOTAL XYLENES

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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1455 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W746

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
30U	METHYLENE CHLORIDE
12U	ACETONE
6U	CARBON DISULFIDE
6U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
6U	1,1-DICHLOROETHANE
6U	1,2-DICHLOROETHENE (TOTAL)
6U	CHLOROFORM
6U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
6U	1,1,1-TRICHLOROETHANE
6U	CARBON TETRACHLORIDE
12U	VINYL ACETATE
6U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
6U	1,2-DICHLOROPROPANE
6U	CIS-1,3-DICHLOROPROPENE
6U	TRICHLOROETHENE(TRICHLOROETHYLENE)
6U	DIBROMOCHLOROMETHANE
6U	1,1,2-TRICHLOROETHANE
6U	BENZENE
6U	TRANS-1,3-DICHLOROPROPENE
6U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
68J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
6U	1,1,2,2-TETRACHLOROETHANE
6U	TOLUENE
6U	CHLOROBENZENE
6U	ETHYL BENZENE
6U	STYRENE
6U	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1520 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W747

UG/KG	ANALYTICAL RESULTS
14U	CHLOROMETHANE
14U	BROMOMETHANE
14U	VINYL CHLORIDE
14U	CHLOROETHANE
20U	METHYLENE CHLORIDE
70U	ACETONE
21	CARBON DISULFIDE
7U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
7U	1,1-DICHLOROETHANE
7U	1,2-DICHLOROETHENE (TOTAL)
7U	CHLOROFORM
7U	1,2-DICHLOROETHANE
30U	METHYL ETHYL KETONE
7U	1,1,1-TRICHLOROETHANE
7U	CARBON TETRACHLORIDE
14U	VINYL ACETATE
7U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
7U	1,2-DICHLOROPROPANE
7U	CIS-1,3-DICHLOROPROPENE
7U	TRICHLOROETHENE(TRICHLOROETHYLENE)
7U	DIBROMOCHLOROMETHANE
7U	1,1,2-TRICHLOROETHANE
7U	BENZENE
7U	TRANS-1,3-DICHLOROPROPENE
7U	BROMOFORM
14U	METHYL ISOBUTYL KETONE
14U	METHYL BUTYL KETONE
8	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
7U	1,1,2,2-TETRACHLOROETHANE
4J	TOLUENE
7U	CHLOROBENZENE
7U	ETHYL BENZENE
7U	STYRENE
7U	TOTAL XYLENES
29	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.

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1450 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W749

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
13U	CHLOROMETHANE	7U	1,2-DICHLOROPROPANE
13U	BROMOMETHANE	7U	CIS-1,3-DICHLOROPROPENE
13U	VINYL CHLORIDE	7U	TRICHLOROETHENE(TRICHLOROETHYLENE)
13U	CHLOROETHANE	7U	DIBROMOCHLOROMETHANE
20U	METHYLENE CHLORIDE	7U	1,1,2-TRICHLOROETHANE
13U	ACETONE	7U	BENZENE
7U	CARBON DISULFIDE	7U	TRANS-1,3-DICHLOROPROPENE
7U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	7U	BROMOFORM
7U	1,1-DICHLOROETHANE	13U	METHYL ISOBUTYL KETONE
7U	1,2-DICHLOROETHENE (TOTAL)	13U	METHYL BUTYL KETONE
7U	CHLOROFORM	41J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
7U	1,2-DICHLOROETHANE	7U	1,1,2,2-TETRACHLOROETHANE
13U	METHYL ETHYL KETONE	7U	TOLUENE
7U	1,1,1-TRICHLOROETHANE	7U	CHLOROBENZENE
7U	CARBON TETRACHLORIDE	7U	ETHYL BENZENE
13U	VINYL ACETATE	7U	STYRENE
7U	BROMODICHLOROMETHANE	7U	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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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1515 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W750

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
20U	CHLOROMETHANE	10U	1,2-DICHLOROPROPANE
20U	BROMOMETHANE	10U	CIS-1,3-DICHLOROPROPENE
20U	VINYL CHLORIDE	10U	TRICHLOROETHENE(TRICHLOROETHYLENE)
20U	CHLOROETHANE	10U	DIBROMOCHLOROMETHANE
20U	METHYLENE CHLORIDE	10U	1,1,2-TRICHLOROETHANE
20U	ACETONE	10U	BENZENE
10U	CARBON DISULFIDE	10U	TRANS-1,3-DICHLOROPROPENE
10U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	10U	BROMOFORM
10U	1,1-DICHLOROETHANE	20U	METHYL ISOBUTYL KETONE
10U	1,2-DICHLOROETHENE (TOTAL)	20U	METHYL BUTYL KETONE
10U	CHLOROFORM	10U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	1,2-DICHLOROETHANE	10U	1,1,2,2-TETRACHLOROETHANE
20U	METHYL ETHYL KETONE	10U	TOLUENE
10U	1,1,1-TRICHLOROETHANE	21	CHLOROBENZENE
10U	CARBON TETRACHLORIDE	10U	ETHYL BENZENE
20U	VINYL ACETATE	10U	STYRENE
10U	BROMODICHLOROMETHANE	10U	TOTAL XYLENES
		50	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.

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA
SOURCE: BERKELEY CO LF
STATION ID: TW-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1550 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W751

UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE
10U	BROMOMETHANE
1J	VINYL CHLORIDE
10U	CHLOROETHANE
5U	METHYLENE CHLORIDE
10U	ACETONE
5U	CARBON DISULFIDE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
5U	1,1-DICHLOROETHANE
5U	1,2-DICHLOROETHENE (TOTAL)
5U	CHLOROFORM
5U	1,2-DICHLOROETHANE
10UR	METHYL ETHYL KETONE
5U	1,1,1-TRICHLOROETHANE
5U	CARBON TETRACHLORIDE
10U	VINYL ACETATE
5U	BROMODICHLOROMETHANE

UG/L	ANALYTICAL RESULTS
5U	1,2-DICHLOROPROPANE
5U	CIS-1,3-DICHLOROPROPENE
5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5U	DIBROMOCHLOROMETHANE
5U	1,1,2-TRICHLOROETHANE
6	BENZENE
5U	TRANS-1,3-DICHLOROPROPENE
5U	BROMOFORM
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
5U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,1,2,2-TETRACHLOROETHANE
5U	TOLUENE
12O	CHLOROBENZENE
5U	ETHYL BENZENE
5U	STYRENE
5U	TOTAL XYLENES

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.

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-02 COLLECTION START: 09/19/90 1625 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W752

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE	5U	1,2-DICHLOROPROPANE
10U	BROMOMETHANE	5U	CIS-1,3-DICHLOROPROPENE
10U	VINYL CHLORIDE	5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	CHLOROETHANE	5U	DIBROMOCHLOROMETHANE
5U	METHYLENE CHLORIDE	5U	1,1,2-TRICHLOROETHANE
10U	ACETONE	5U	BENZENE
5U	CARBON DISULFIDE	5U	TRANS-1,3-DICHLOROPROPENE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	5U	BROMOFORM
5U	1,1-DICHLOROETHANE	10U	METHYL ISOBUTYL KETONE
5U	1,2-DICHLOROETHENE (TOTAL)	10U	METHYL BUTYL KETONE
5U	CHLOROFORM	5U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,2-DICHLOROETHANE	5U	1,1,2,2-TETRACHLOROETHANE
10UR	METHYL ETHYL KETONE	5U	TOLUENE
5U	1,1,1-TRICHLOROETHANE	5U	CHLOROBENZENE
5U	CARBON TETRACHLORIDE	5U	ETHYL BENZENE
10U	VINYL ACETATE	5U	STYRENE
5U	BROMODICHLOROMETHANE	5U	TOTAL XYLENES

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.

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1745 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W753

UG/KG	ANALYTICAL RESULTS
15U	CHLOROMETHANE
15U	BROMOMETHANE
15U	VINYL CHLORIDE
15U	CHLOROETHANE
20U	METHYLENE CHLORIDE
15U	ACETONE
8U	CARBON DISULFIDE
8U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
8U	1,1-DICHLOROETHANE
8U	1,2-DICHLOROETHENE (TOTAL)
8U	CHLOROFORM
8U	1,2-DICHLOROETHANE
15U	METHYL ETHYL KETONE
8U	1,1,1-TRICHLOROETHANE
8U	CARBON TETRACHLORIDE
15U	VINYL ACETATE
8U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
8U	1,2-DICHLOROPROPANE
8U	CIS-1,3-DICHLOROPROPENE
8U	TRICHLOROETHENE(TRICHLOROETHYLENE)
8U	DIBROMOCHLOROMETHANE
8U	1,1,2-TRICHLOROETHANE
8U	BENZENE
8U	TRANS-1,3-DICHLOROPROPENE
8U	BROMOFORM
15U	METHYL ISOBUTYL KETONE
15U	METHYL BUTYL KETONE
8U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
8U	1,1,2,2-TETRACHLOROETHANE
8U	TOLUENE
8U	CHLOROBENZENE
8U	ETHYL BENZENE
8U	STYRENE
8U	TOTAL XYLENES
34	PERCENT MOISTURE

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.

PURGEABLE ORGANICS DATA REPORT 11/15/90

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** PROJECT NO. 90-803   SAMPLE NO. 50609  SAMPLE TYPE: SEDIM      PROG ELEM: NSF   COLLECTED BY: L WARD          **
** SOURCE: BERKELEY CO LF                                         CITY: OAKLEY              ST: SC              **
** STATION ID: SB-02                                              COLLECTION START: 09/19/90  1815   STOP: 00/00/00 **
**                                                                                                              **
** CASE NO.: 14889                        SAS NO.:                D. NO.: W754                                  **
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UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
14U	CHLOROMETHANE	7U	1,2-DICHLOROPROPANE
14U	BROMOMETHANE	7U	CIS-1,3-DICHLOROPROPENE
14U	VINYL CHLORIDE	7U	TRICHLOROETHENE(TRICHLOROETHYLENE)
14U	CHLOROETHANE	7U	DIBROMOCHLOROMETHANE
20U	METHYLENE CHLORIDE	7U	1,1,2-TRICHLOROETHANE
40U	ACETONE	7U	BENZENE
7U	CARBON DISULFIDE	7U	TRANS-1,3-DICHLOROPROPENE
7U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	7U	BROMOFORM
7U	1,1-DICHLOROETHANE	14U	METHYL ISOBUTYL KETONE
7U	1,2-DICHLOROETHENE (TOTAL)	14U	METHYL BUTYL KETONE
7U	CHLOROFORM	10	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
7U	1,2-DICHLOROETHANE	7U	1,1,2,2-TETRACHLOROETHANE
14U	METHYL ETHYL KETONE	7	TOLUENE
7U	1,1,1-TRICHLOROETHANE	7U	CHLOROBENZENE
7U	CARBON TETRACHLORIDE	7U	ETHYL BENZENE
14U	VINYL ACETATE	7U	STYRENE
7U	BROMODICHLOROMETHANE	7U	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50610 SAMPLE TYPE: SURFACEWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TB-01W COLLECTION START: 09/19/90 0700 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W735

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE	5U	1,2-DICHLOROPROPANE
10U	BROMOMETHANE	5U	CIS-1,3-DICHLOROPROPENE
10U	VINYL CHLORIDE	5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	CHLOROETHANE	5U	DIBROMOCHLOROMETHANE
5U	METHYLENE CHLORIDE	5U	1,1,2-TRICHLOROETHANE
10U	ACETONE	5U	BENZENE
5U	CARBON DISULFIDE	5U	TRANS-1,3-DICHLOROPROPENE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	5U	BROMOFORM
5U	1,1-DICHLOROETHANE	10U	METHYL ISOBUTYL KETONE
5U	1,2-DICHLOROETHENE (TOTAL)	10U	METHYL BUTYL KETONE
5U	CHLOROFORM	5U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,2-DICHLOROETHANE	5U	1,1,2,2-TETRACHLOROETHANE
10UR	METHYL ETHYL KETONE	5U	TOLUENE
5U	1,1,1-TRICHLOROETHANE	5U	CHLOROBENZENE
5U	CARBON TETRACHLORIDE	5U	ETHYL BENZENE
10U	VINYL ACETATE	5U	STYRENE
5U	BROMODICHLOROMETHANE	5U	TOTAL XYLENES

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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50611 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: TB-01S

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 0700 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W736

UG/KG	ANALYTICAL RESULTS
11U	CHLOROMETHANE
11U	BROMOMETHANE
11U	VINYL CHLORIDE
11U	CHLOROETHANE
10U	METHYLENE CHLORIDE
50U	ACETONE
6U	CARBON DISULFIDE
6U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
6U	1,1-DICHLOROETHANE
6U	1,2-DICHLOROETHENE (TOTAL)
6U	CHLOROFORM
6U	1,2-DICHLOROETHANE
11U	METHYL ETHYL KETONE
6U	1,1,1-TRICHLOROETHANE
6U	CARBON TETRACHLORIDE
11U	VINYL ACETATE
6U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
6U	1,2-DICHLOROPROPANE
6U	CIS-1,3-DICHLOROPROPENE
6U	TRICHLOROETHENE(TRICHLOROETHYLENE)
6U	DIBROMOCHLOROMETHANE
6U	1,1,2-TRICHLOROETHANE
6U	BENZENE
6U	TRANS-1,3-DICHLOROPROPENE
6U	BROMOFORM
11U	METHYL ISOBUTYL KETONE
11U	METHYL BUTYL KETONE
6U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
6U	1,1,2,2-TETRACHLOROETHANE
6U	TOLUENE
6U	CHLOROBENZENE
6U	ETHYL BENZENE
6U	STYRENE
6U	TOTAL XYLENES
12	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.

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W751 MD NO: W751

ANALYTICAL RESULTS UG/L

10J 1 UNKNOWN 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
*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

SISB/SAS
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ATLANTA, GA.

*****MEMORANDUM******

DATE: 11/08/90

SUBJECT: Results of Specified Analysis;
90-803 BERKELEY CO LF
OAKLEY SC
CASE NO: 14889

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: PHIL BLACKWELL

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: 14889
Project Number: 90-803
Site: Berkeley Co Landfill, Oakley, SC

	Element	Flag	Samples Affected	Reason
Water				
	Be, Cr, Cu, Mn	U	All positives >IDL but <CRDL	Baseline instability
	Al, Ba, Ca, Fe, Mg, K, Na, Zn	U	All positives)IDL but <10X contaminant level	Positives in Blanks
	Al	J	All positives	Matrix spike recovery = 158.3%
	As	J	All	Matrix spike recovery = 63.7%
	Fe	J	All positives	Matrix spike recovery = 129.2%
	Pb	J	All positives	Matrix spike recovery = 135.2%
	Se	J	All	Matrix spike recovery = 67.4%
	Tl	J	All	Matrix spike recovery = 54.3%
	Pb	J	MDW752	Duplicate MSA r <.995
	Sb	JN	All positives with Al or Fe concentrations in solution <200,000 ug/L	Suspected positive interference as noted in the contractor ICS
Soil				
	Be, Cr, Cu, Mn	U	All positives >IDL but <CRDL	Baseline instability
	Al, Ba, Ca, Fe, Mg, K, Na, Zn	U	All positives)IDL but <10X contaminant level	Positives in Blanks
	Sb	J R	All positives All negatives	Matrix spike recovery = 28.1%
	Pb	J	All	Matrix spike recovery = 46%
	Se	J R	All positives All negatives	Matrix spike recovery = 0% Matrix duplicate RPD = 82.7%
	As	J	MDW737	Duplicate MSA r <.995
	Sb	JN	All positives with Al or Fe concentrations in solution <200,000 ug/L	Suspected positive interference as noted in the contractor ICS

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

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803	SAMPLE NO. 50589	SAMPLE TYPE: SURFACEWA	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF			CITY: OAKLEY ST: SC
STATION ID: PB-01			COLLECTION START: 09/19/90 0700 STOP: 00/00/00
CASE.NO.: 14889	SAS NO.:		D. NO.: MD NO: W735

RESULTS	UNITS	PARAMETER
10U	UG/L	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 90-803    SAMPLE NO. 50590  SAMPLE TYPE: SEDIM       PROG ELEM: NSF    COLLECTED BY: L WARD                    **
**   SOURCE: BERKELEY CO LF                                           CITY: OAKLEY                ST: SC                          **
**   STATION ID: SS-01                                                COLLECTION START: 09/19/90  1010   STOP: 00/00/00           **
**   CASE.NO.: 14889          SAS NO.:                                D. NO.: W737                MD NO: W737                     **
**                                                                                                                                 **
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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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SD-02 COLLECTION START: 09/19/90 1030 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W739 MD NO: W739

RESULTS	UNITS	PARAMETER
1.5U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY ST: SC
STATION ID: SD-05	COLLECTION START: 09/19/90 1050 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:	D. NO.: W740 MD NO: W740

RESULTS	UNITS	PARAMETER
1.1U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50594 SAMPLE TYPE: GROUNDWA	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY ST: SC
STATION ID: TW-01	COLLECTION START: 09/19/90 1110 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:	D. NO.: W741 MD NO: W741

RESULTS	UNITS	PARAMETER
10U	UG/L	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM	PROG ELEM: NSF	COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY	ST: SC
STATION ID: SD-06	COLLECTION START: 09/19/90 1110	STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:	D. NO.: W742	MD NO: W742

RESULTS	UNITS	PARAMETER
1.4U	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.

SPECIFIED ANALYSIS DATA REPORT

** PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SD-04 COLLECTION START: 09/19/90 1125 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W743 MD NO: W743 **

RESULTS	UNITS	PARAMETER
1.8U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SD-01 COLLECTION START: 09/19/90 1130 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W744 MD NO: W744

RESULTS	UNITS	PARAMETER
2.1U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 90-803   SAMPLE NO. 50598  SAMPLE TYPE: GROUNDWA    PROG ELEM: NSF   COLLECTED BY: L WARD            **
**   SOURCE: BERKELEY CO LF                                          CITY: OAKLEY                ST: SC               **
**   STATION ID: PW-01                                               COLLECTION START: 09/19/90  1220   STOP: 00/00/00 **
**   CASE.NO.: 14889          SAS NO.:                               D. NO.: W745               MD NO: W745           **
**                                                                                                                    **
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RESULTS	UNITS	PARAMETER
10U	UG/L	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM
PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF
CITY: OAKLEY ST: SC
STATION ID: SS-04
COLLECTION START: 09/19/90 1455 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:
D. NO.: W746 MD NO: W746

RESULTS	UNITS	PARAMETER
1.2U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SB-04 COLLECTION START: 09/19/90 1520 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W747 MD NO: W747

RESULTS	UNITS	PARAMETER
1.4U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SS-05 COLLECTION START: 09/19/90 1450 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W749 MD NO: W749 **
** **
*** ***

RESULTS	UNITS	PARAMETER
1.3U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 90-803   SAMPLE NO. 50602  SAMPLE TYPE: SEDIM       PROG ELEM: NSF   COLLECTED BY: L WARD                      **
**   SOURCE: BERKELEY CO LF                                          CITY: OAKLEY                ST: SC                          **
**   STATION ID: SB-05                                               COLLECTION START: 09/19/90  1515   STOP: 00/00/00           **
**   CASE.NO.: 14889          SAS NO.:                               D. NO.: W750               MD NO: W750                      **
**                                                                                                                               **
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RESULTS	UNITS	PARAMETER
2.1U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W751 MD NO: W751 **
** **
*** ***

RESULTS	UNITS	PARAMETER
10U	UG/L	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 90-803   SAMPLE NO. 50607  SAMPLE TYPE: GROUNDWA    PROG ELEM: NSF   COLLECTED BY: L WARD          **
**   SOURCE: BERKELEY CO LF                                          CITY: OAKLEY                ST: SC             **
**   STATION ID: PW-02                                               COLLECTION START: 09/19/90  1625   STOP: 00/00/00 **
**   CASE.NO.: 14889          SAS NO.:                               D. NO.: W752                MD NO: W752        **
**                                                                                                                  **
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RESULTS	UNITS	PARAMETER
10U	UG/L	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.

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-02 COLLECTION START: 09/19/90 1745 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W753 MD NO: W753

RESULTS	UNITS	PARAMETER
1.4U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 90-803   SAMPLE NO. 50609  SAMPLE TYPE: SEDIM       PROG ELEM: NSF   COLLECTED BY: L WARD               **
**   SOURCE: BERKELEY CO LF                                          CITY: OAKLEY                ST: SC                  **
**   STATION ID: SB-02                                               COLLECTION START: 09/19/90  1815   STOP: 00/00/00   **
**   CASE.NO.: 14889         SAS NO.:                                D. NO.: W754                MD NO: W754             **
**                                                                                                                       **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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RESULTS	UNITS	PARAMETER
1.4U	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.

SITE BERKELEY CO. LF (FORMER) (FIT) STATE SC MANAGER ROGER FRANKLIN (NUS)
PROJECT # 90-803 SHIPWEEK 09/17/90

SOILVOA BOOKED	21	DATA RECEIVED	11/27/90	FOR	14	SAMPLES
H2OVOA BOOKED	13	DATA RECEIVED	11/27/90	FOR	5	SAMPLES
SOILEXT BOOKED	20	DATA RECEIVED	11/27/90	FOR	13	SAMPLES
H2OEXT BOOKED	13	DATA RECEIVED	11/27/90	FOR	5	SAMPLES
SOILPEST BOOKED	20	DATA RECEIVED	11/27/90	FOR	13	SAMPLES
H2OPEST BOOKED	13	DATA RECEIVED	11/27/90	FOR	5	SAMPLES
SOILMET BOOKED	20	DATA RECEIVED	11/19/90	FOR	13	SAMPLES
H2OMET BOOKED	13	DATA RECEIVED	11/19/90	FOR	5	SAMPLES
SOILCN BOOKED	20	DATA RECEIVED	11/19/90	FOR	13	SAMPLES
H2OCN BOOKED	13	DATA RECEIVED	11/19/90	FOR	5	SAMPLES
SOILOTH1 BOOKED	0	DATA RECEIVED	/ /	FOR		SAMPLES
SOILOTH2 BOOKED	0	DATA RECEIVED	/ /	FOR		SAMPLES
H2OOTH1 BOOKED	0	DATA RECEIVED	/ /	FOR		SAMPLES
H2OOTH2 BOOKED	0	DATA RECEIVED	/ /	FOR		SAMPLES
OTHER1 BOOKED	0	DATA RECEIVED	/ /	FOR		SAMPLES
OTHER2 BOOKED	0	DATA RECEIVED	/ /	FOR		SAMPLES

OV REQUESTED? N

LAB(CLP/ESD) CLP

SISB/SAS
RECEIVED
NOV 27 1990
EPA - REGION IV
ATLANTA, GA.

SITE BERKELEY CO. LF (FORMER) (FIT) STATE SC MANAGER ROGER FRANKLIN (NUS)
PROJECT # 90-803 SHIPWEEK 09/17/90

SOILVOA BOOKED	21	DATA RECEIVED	/ /	FOR		SAMPLES
H2OVOA BOOKED	13	DATA RECEIVED	/ /	FOR		SAMPLES
SOILEXT BOOKED	20	DATA RECEIVED	/ /	FOR		SAMPLES
H2OEXT BOOKED	13	DATA RECEIVED	/ /	FOR		SAMPLES
SOILPEST BOOKED	20	DATA RECEIVED	/ /	FOR		SAMPLES
H2OPEST BOOKED	13	DATA RECEIVED	/ /	FOR		SAMPLES
SOILMET BOOKED	20	DATA RECEIVED	11/19/90	FOR	13	SAMPLES
H2OMET BOOKED	13	DATA RECEIVED	11/19/90	FOR	5	SAMPLES
SOILCN BOOKED	20	DATA RECEIVED	11/19/90	FOR	13	SAMPLES
H2OCN BOOKED	13	DATA RECEIVED	11/19/90	FOR	5	SAMPLES
SOILOTH1 BOOKED	0	DATA RECEIVED	/ /	FOR		SAMPLES
SOILOTH2 BOOKED	0	DATA RECEIVED	/ /	FOR		SAMPLES
H2OOTH1 BOOKED	0	DATA RECEIVED	/ /	FOR		SAMPLES
H2OOTH2 BOOKED	0	DATA RECEIVED	/ /	FOR		SAMPLES
OTHER1 BOOKED	0	DATA RECEIVED	/ /	FOR		SAMPLES
OTHER2 BOOKED	0	DATA RECEIVED	/ /	FOR		SAMPLES

OV REQUESTED? N

LAB(CLP/ESD) CLP

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV
Environmental Services Division
College Station Road, Athens, Ga. 30613

SISB/SAS
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EPA - REGION IV
ATLANTA, GA

*****MEMORANDUM******

DATE: 11/08/90

SUBJECT: Results of Metals Analysis;
90-803 BERKELEY CO LF
OAKLEY SC
CASE NO: 14889

FROM: Robert W. Knight
Chief, Laboratory Evaluation/Quality Assurance Section

TO: PHIL BLACKWELL

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: 14889
Project Number: 90-803
Site: Berkeley Co Landfill, Oakley, SC

Element	Flag	Samples Affected	Reason
Water			
Be, Cr, Cu, Mn	U	All positives >IDL but <CRDL	Baseline instability
Al, Ba, Ca, Fe, Mg, K, Na, Zn	U	All positives)IDL but <10X contaminant level	Positives in Blanks
Al	J	All positives	Matrix spike recovery = 158.3%
As	J	All	Matrix spike recovery = 63.7%
Fe	J	All positives	Matrix spike recovery = 129.2%
Pb	J	All positives	Matrix spike recovery = 135.2%
Se	J	All	Matrix spike recovery = 67.4%
Tl	J	All	Matrix spike recovery = 54.3%
Pb	J	MDW752	Duplicate MSA r <.995
Sb	JN	All positives with Al or Fe concentrations in solution <200,000 ug/L	Suspected positive interference as noted in the contractor ICS
Soil			
Be, Cr, Cu, Mn	U	All positives >IDL but <CRDL	Baseline instability
Al, Ba, Ca, Fe, Mg, K, Na, Zn	U	All positives)IDL but <10X contaminant level	Positives in Blanks
Sb	J R	All positives All negatives	Matrix spike recovery = 28.1%
Pb	J	All	Matrix spike recovery = 46%
Se	J R	All positives All negatives	Matrix spike recovery = 0% Matrix duplicate RPD = 82.7%
As	J	MDW737	Duplicate MSA r <.995
Sb	JN	All positives with Al or Fe concentrations in solution <200,000 ug/L	Suspected positive interference as noted in the contractor ICS

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

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50589 SAMPLE TYPE: SURFACEWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PB-01 COLLECTION START: 09/19/90 0700 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W735

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
110J	ALUMINUM	2U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
2U	BARIUM	80U	POTASSIUM
1U	BERYLLIUM	3UJ	SELENIUM
3U	CADMIUM	5U	SILVER
230U	CALCIUM	130U	SODIUM
6U	CHROMIUM	2UJ	THALLIUM
4U	COBALT	NA	TIN
3U	COPPER	3U	VANADIUM
140UJ	IRON	20U	ZINC
2U	LEAD		
30U	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.

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-01 COLLECTION START: 09/19/90 1010 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W737

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
2600	ALUMINUM	15	MANGANESE
5.6UR	ANTIMONY	0.10U	MERCURY
2J	ARSENIC	1.1U	NICKEL
21	BARIUM	60U	POTASSIUM
1U	BERYLLIUM	0.38UR	SELENIUM
0.56U	CADMIUM	0.94U	SILVER
1000	CALCIUM	30U	SODIUM
2U	CHROMIUM	0.38U	THALLIUM
1.3U	COBALT	NA	TIN
3U	COPPER	4.2	VANADIUM
1500	IRON	4U	ZINC
8.4J	LEAD	04	PERCENT MOISTURE
150	MAGNESIUM		

REMARKS

REMARKS

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

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SB-01 COLLECTION START: 09/19/90 1020 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W738

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
27000	ALUMINUM	3U	MANGANESE
6.6UR	ANTIMONY	0.11U	MERCURY
2U	ARSENIC	6.2	NICKEL
37	BARIUM	130U	POTASSIUM
0.22U	BERYLLIUM	2.1UR	SELENIUM
0.66U	CADMIUM	1.1U	SILVER
30U	CALCIUM	40U	SODIUM
9.1	CHROMIUM	0.42U	THALLIUM
1.5U	COBALT	NA	TIN
0.66U	COPPER	11	VANADIUM
2200	IRON	3U	ZINC
17J	LEAD	15	PERCENT MOISTURE
130	MAGNESIUM		

REMARKS

REMARKS

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

METALS DATA REPORT 11/07/90

** PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SD-02 COLLECTION START: 09/19/90 1030 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W739 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1600	ALUMINUM	4U	MANGANESE
7.6UR	ANTIMONY	0.14U	MERCURY
1U	ARSENIC	1.5U	NICKEL
10	BARIUM	40U	POTASSIUM
1U	BERYLLIUM	0.57UR	SELENIUM
0.76U	CADMIUM	1.3U	SILVER
240U	CALCIUM	30U	SODIUM
1.3U	CHROMIUM	0.57U	THALLIUM
1.8U	COBALT	NA	TIN
0.76U	COPPER	2.8	VANADIUM
590	IRON	2.3U	ZINC
5.3J	LEAD	33	PERCENT MOISTURE
46	MAGNESIUM		

REMARKS ***REMARKS***

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

METALS DATA REPORT 11/07/90

** PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SD-05 COLLECTION START: 09/19/90 1050 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W740 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
2200	ALUMINUM	6.7	MANGANESE
6UR	ANTIMONY	0.10U	MERCURY
1U	ARSENIC	1.2U	NICKEL
7U	BARIUM	50U	POTASSIUM
1U	BERYLLIUM	0.36UR	SELENIUM
0.60U	CADMIUM	1U	SILVER
480	CALCIUM	20U	SODIUM
2U	CHROMIUM	0.36U	THALLIUM
1.4U	COBALT	NA	TIN
0.60U	COPPER	5.1	VANADIUM
3300	IRON	4U	ZINC
7.4J	LEAD	06	PERCENT MOISTURE
60U	MAGNESIUM		

REMARKS ***REMARKS***

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

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50594 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-01 COLLECTION START: 09/19/90 1110 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W741

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
7800J	ALUMINUM	5U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
75	BARIUM	990	POTASSIUM
1U	BERYLLIUM	3UJ	SELENIUM
3U	CADMIUM	5U	SILVER
850U	CALCIUM	23000	SODIUM
7U	CHROMIUM	2UJ	THALLIUM
5U	COBALT	NA	TIN
3U	COPPER	8	VANADIUM
2800J	IRON	40U	ZINC
5J	LEAD		
1600	MAGNESIUM		

REMARKS

REMARKS

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

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM
PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF
CITY: OAKLEY ST: SC
STATION ID: SD-06
COLLECTION START: 09/19/90 1110 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER:
MD NUMBER: W742

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1100	ALUMINUM	6.8	MANGANESE
7UR	ANTIMONY	0.13U	MERCURY
2U	ARSENIC	1.4U	NICKEL
7.8	BARIUM	50U	POTASSIUM
1U	BERYLLIUM	1UJ	SELENIUM
0.70U	CADMIUM	1.2U	SILVER
420	CALCIUM	40U	SODIUM
1.2U	CHROMIUM	0.49U	THALLIUM
1.6U	COBALT	NA	TIN
0.70U	COPPER	2.4	VANADIUM
790	IRON	4U	ZINC
2.6J	LEAD	28	PERCENT MOISTURE
70U	MAGNESIUM		

REMARKS

REMARKS

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-04
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1125 STOP: 00/00/00
MD NUMBER: W743

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
8100	ALUMINUM	21	MANGANESE
9.4UR	ANTIMONY	0.16U	MERCURY
3U	ARSENIC	3	NICKEL
24	BARIUM	440	POTASSIUM
2U	BERYLLIUM	0.67UR	SELENIUM
0.94U	CADMIUM	1.6U	SILVER
2600	CALCIUM	70U	SODIUM
8.1	CHROMIUM	0.67U	THALLIUM
3U	COBALT	NA	TIN
2U	COPPER	14	VANADIUM
11000	IRON	40U	ZINC
13J	LEAD	45	PERCENT MOISTURE
580	MAGNESIUM		

REMARKS ***REMARKS***

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-01
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1130 STOP: 00/00/00
MD NUMBER: W744

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7000	ALUMINUM	16	MANGANESE
20UR	ANTIMONY	0.21U	MERCURY
2U	ARSENIC	2.9	NICKEL
80	BARIUM	250	POTASSIUM
2U	BERYLLIUM	1UJ	SELENIUM
1.2U	CADMIUM	2.1U	SILVER
1800	CALCIUM	80U	SODIUM
4U	CHROMIUM	0.84U	THALLIUM
2.9U	COBALT	NA	TIN
1.2U	COPPER	8.5	VANADIUM
2200	IRON	8U	ZINC
38J	LEAD	54	PERCENT MOISTURE
320	MAGNESIUM		

REMARKS ***REMARKS***

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

11/07/90

METALS DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: PW-01 COLLECTION START: 09/19/90 1220 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W745 **
*** ***

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
110UJ	ALUMINUM	2U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
2U	BARIUM	9000	POTASSIUM
1U	BERYLLIUM	15UJ	SELENIUM
3U	CADMIUM	5U	SILVER
2900	CALCIUM	160000	SODIUM
6U	CHROMIUM	10UJ	THALLIUM
4U	COBALT	NA	TIN
5U	COPPER	4U	VANADIUM
90UJ	IRON	20U	ZINC
24J	LEAD		
1400	MAGNESIUM		

REMARKS

REMARKS

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

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50599   SAMPLE TYPE: SEDIM   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: SS-04   COLLECTION START: 09/19/90 1455   STOP: 00/00/00
CASE NUMBER: 14889   SAS NUMBER: MD NUMBER: W746

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7600	ALUMINUM	84	MANGANESE
6.9UR	ANTIMONY	0.11U	MERCURY
3U	ARSENIC	2.7	NICKEL
27	BARIUM	260	POTASSIUM
1U	BERYLLIUM	0.45UR	SELENIUM
0.69U	CADMIUM	1.1U	SILVER
2700	CALCIUM	60U	SODIUM
10	CHROMIUM	0.45U	THALLIUM
2U	COBALT	NA	TIN
2U	COPPER	14	VANADIUM
8500	IRON	22	ZINC
11J	LEAD	15	PERCENT MOISTURE
300	MAGNESIUM		

REMARKS

REMARKS

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

11/07/90

METALS DATA REPORT

*** ***

** PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SB-04 COLLECTION START: 09/19/90 1520 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W747 **

*** ***

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7900	ALUMINUM	81	MANGANESE
9UJ	ANTIMONY	0.13U	MERCURY
6.5	ARSENIC	12	NICKEL
70	BARIUM	2800	POTASSIUM
1U	BERYLLIUM	0.52UR	SELENIUM
0.81U	CADMIUM	1.4U	SILVER
140000	CALCIUM	490	SODIUM
38	CHROMIUM	0.52U	THALLIUM
2U	COBALT	NA	TIN
3U	COPPER	13	VANADIUM
10000	IRON	40U	ZINC
4.3J	LEAD	28	PERCENT MOISTURE
5300	MAGNESIUM		

REMARKS ***REMARKS***

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

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-05 COLLECTION START: 09/19/90 1450 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W749

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
6000	ALUMINUM	350	MANGANESE
7.4UR	ANTIMONY	0.13U	MERCURY
2U	ARSENIC	2.3	NICKEL
25	BARIUM	170	POTASSIUM
2U	BERYLLIUM	2.5UR	SELENIUM
0.74U	CADMIUM	1.2U	SILVER
3500	CALCIUM	60U	SODIUM
7.2	CHROMIUM	0.50U	THALLIUM
3.4	COBALT	NA	TIN
0.74U	COPPER	7.2	VANADIUM
5400	IRON	9U	ZINC
14J	LEAD	23	PERCENT MOISTURE
340	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.

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SB-05 COLLECTION START: 09/19/90 1515 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W750

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
18000	ALUMINUM	160	MANGANESE
20UR	ANTIMONY	0.20U	MERCURY
8.3	ARSENIC	17	NICKEL
87	BARIUM	3300	POTASSIUM
2U	BERYLLIUM	4.2UR	SELENIUM
3.9	CADMIUM	2.1U	SILVER
15000	CALCIUM	480	SODIUM
87	CHROMIUM	0.85U	THALLIUM
4	COBALT	NA	TIN
6U	COPPER	34	VANADIUM
17000	IRON	95	ZINC
7J	LEAD	53	PERCENT MOISTURE
4700	MAGNESIUM		

REMARKS ***REMARKS***

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W751

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
1300J	ALUMINUM	3300	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
110J	ARSENIC	33	NICKEL
64	BARIUM	6100	POTASSIUM
1U	BERYLLIUM	3UJ	SELENIUM
3U	CADMIUM	5U	SILVER
150000	CALCIUM	57000	SODIUM
6U	CHROMIUM	10UJ	THALLIUM
65	COBALT	NA	TIN
5U	COPPER	8	VANADIUM
46000J	IRON	30U	ZINC
4UJ	LEAD		
12000	MAGNESIUM		

REMARKS ***REMARKS***

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-02 COLLECTION START: 09/19/90 1625 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W752

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
40UJ	ALUMINUM	2U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
2U	BARIUM	9200	POTASSIUM
1U	BERYLLIUM	15UJ	SELENIUM
3U	CADMIUM	5U	SILVER
2700	CALCIUM	170000	SODIUM
6U	CHROMIUM	10UJ	THALLIUM
4U	COBALT	NA	TIN
5U	COPPER	3U	VANADIUM
60UJ	IRON	20U	ZINC
55J	LEAD		
1400	MAGNESIUM		

REMARKS ***REMARKS***

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

11/07/90

METALS DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SS-02 COLLECTION START: 09/19/90 1745 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W753 **
** **
*** ***

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
17000	ALUMINUM	25	MANGANESE
8.3UR	ANTIMONY	0.14U	MERCURY
3.4	ARSENIC	5.5	NICKEL
120	BARIUM	1200	POTASSIUM
2.8	BERYLLIUM	1UJ	SELENIUM
0.83U	CADMIUM	1.4U	SILVER
5200	CALCIUM	250	SODIUM
25	CHROMIUM	0.53U	THALLIUM
2.7	COBALT	NA	TIN
6U	COPPER	36	VANADIUM
15000	IRON	20U	ZINC
18J	LEAD	30	PERCENT MOISTURE
1600	MAGNESIUM		

REMARKS

REMARKS

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50609 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-02
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1815 STOP: 00/00/00
MD NUMBER: W754

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7500	ALUMINUM	65	MANGANESE
8UR	ANTIMONY	0.14U	MERCURY
2.8	ARSENIC	11	NICKEL
23	BARIUM	3400	POTASSIUM
1U	BERYLLIUM	1UJ	SELENIUM
0.80U	CADMIUM	1.3U	SILVER
140000	CALCIUM	670	SODIUM
39	CHROMIUM	0.54U	THALLIUM
1.9U	COBALT	NA	TIN
4U	COPPER	14	VANADIUM
9000	IRON	40U	ZINC
4.7J	LEAD	28	PERCENT MOISTURE
3700	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
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received
DEC 27 1988

South Carolina Department of Health and Environmental Control

2600 Bull Street
Columbia, S.C. 29201

Commissioner
Michael D. Jarrett

Board
Harry M. Hallman, Jr., Chairman
Toney Graham, Jr. M.D., Vice-Chairman
John B. Pate, M.D., Secretary
Oren L. Brady, Jr.
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Euta M. Colvin, M.D.
Henry S. Jordan, M.D.

Updated Preliminary Assessment
Berkeley County Landfill
SCD 981 028 095
Oakley, South Carolina - Berkeley County

medium priority
For SSI
BLH 12/30/88

Completed by: Ernie Ayers
Date Completed: November 7, 1988

I. Introduction/Executive Summary

Berkeley County Landfill (DWP015) Site is located three miles west of Oakley, South Carolina Berkeley County. The landfill was used from 1972 to 1977 and received primarily domestic waste, but also commercial, agricultural, and industrial wastes. This landfill is estimated to be about 6 feet deep and 280 acres.

The specific types of wastes that went into the fill are largely unknown due to the fact that little documentation was made of these wastes. The owner and past operator of the site remembers at least dye wastes and containers from agricultural industries being disposed of at the site.

The major source of drinking water in the area is withdrawn from wells. There are two aquifers hydraulically separated by the Cooper Formation. Most groundwater is obtained from below this barrier, though it is estimated that eight percent of private domestic wells withdraw from the upper aquifer which serves about 182 people within 3 miles of the site. These people would be particularly vulnerable to contaminants from the site. There are wetlands 2.5 miles to the east and the Cooper River is about 3 miles farther east of the site.

This site is recommended for a Site Screening Investigation under a medium priority. The investigation should be used to determine the nature and quantity of the underlying wastes. An evaluation of groundwater and surface water quality should be made as well.

II. Site Background and History

A. Ownership History

Present Owner and Past Operator:
W.N. Neighbors Estate
Route 6, Box 226
Oakley, SC 29461

Leased to:
Berkeley County Public Works
P.O. Box 936
Moncks Corner, SC 29461

Site operations: 1972 to 1977

Contact: W.N. Neighbors, Owner (803) 761-3951
Johnny Ohlandt, SCDHEC District Consultant (803) 554-5533

B. Site Location

The Berkeley County Landfill (DWP015) site is located approximately 0.75 miles east of the intersection of U.S. Hwy 17A and Secondary Road 50. The site is about 1000 feet to the north of Secondary Road 50 and is about 3 miles west of Oakley, South Carolina in Berkeley County. The geographical

coordinates are 33 degrees, 08 minutes, 32.4 seconds north latitude and 80 degrees, 02 minutes, and 59.4 seconds west longitude.

C. Regulatory History/RCRA Summary

The SC State Board of Health issued a permit (DWP015) May 22, 1972, to Berkeley County for the operation of a sanitary landfill at this site (Ref. 1, pp. 1-2). The site was closed in 1977 (Ref. 1, p. 7). No RCRA management has been undertaken at this site.

D. Process and Waste Disposal History

Very little information is available on specific wastes which were placed in this landfill. The permit application submitted by Berkeley County cites the types of wastes to be placed there as household, commercial industrial and agricultural wastes (Ref. 1, p. 1). Based on the topographic map the old fill is estimated to be about 280 acres in size (Ref. 2). The fill was shallow - estimated to be about 6 feet deep (Ref. 3).

Johnny Ohlandt, SCDHEC Trident District Consultant, was familiar with the site during its operation and performed several site inspections. He believes that very little industrial waste went into the fill, but primarily municipal and some commericial wastes. Very little documentation was kept on the site contents as this was before hazardous waste management regulations were enacted. He says the site was well operated and was closed properly (Ref. 3).

Disposal at this site ceased in June, 1976 when the new landfill site (DWP021) began operating (Ref. 1, p. 3). It was covered with two feet of soil, graded, and seeded (Ref. 1, p. 7).

A letter from Albert McMeekin, SCDHEC Environmental Engineer to Johnny Ohlandt dated December 28, 1979, lists industrial wastes being disposed of at the newer Berkeley County Landfill (DWP021). None of these materials are known to be in the old DWP015 site, however, since it was intended to receive industrial wastes, it is possible that some or all of these may have been placed in this old site prior to 1976. These wastes included plastics, waste oils, titanium dixoide, sludge from textile operations, bark sludge, epoxy resins, chemical containers, scrap metal, and miscellaneous trash - all from area industries. Dupont began disposing of biological sludge, dimethly terephthalate, and terephthalic acid in 1976. These materials most likely went entirely to the new site through some have gone into the old landfill, if they were disposed prior to June 1976 (Ref. 1, pp. 8-9).

W.N. Neighbors, owner and past operator of the site, said that Mobay, which produces "farm chemicals", disposed of empty containers on site and some dye wastes were placed there by Verona. Otherwise, the wastes were primarly household (Ref. 4.).

Larry Windam of Berkeley County Public Works was working for the county at about the time the landfill was being closed. He is not aware of

specific substances that were placed in the fill. He only knew of household garbage.

E. Demography/Regional Setting

The land adjacent to the landfill is pine forested and undeveloped except for a few homes. The town of Moncks Corner is about 4 miles to the northeast of the site.

II. Ground Water Pathway

A. Regional Hydrogeology

The Berkeley County Landfill is located in the Coastal Plain Physiographic Region. Directly underlying the site is a thin veneer of surficial sand (Ref. 5, p. 1). This constitutes a shallow water table aquifer which is underlain by the Cooper Formation, a clay hydraulic barrier (permeability of 10^{-5} to 10^{-7} cm/sec) (Ref. 5, p. 4). This layer constitutes an essentially impermiable layer. These surficial sands are about 30 feet deep at the site and the Cooper Formation is 100 feet thick in the vicinity of this site (Ref. 5, p. 5). The shallow water table aquifer has been determined to be the aquifer of concern.

Permeability of the unsaturated zone is 10^{-3} to 10^{-5} centimeters per second. Depth to groundwater ranges from three to fifteen feet below grade. The direction of groundwater flow in the shallow water table aquifer is generally south-southeasterly (Ref. 5, p. 5).

B. Groundwater Use

The shallow water table is not commonly used for groundwater withdrawls because yields are both low and unreliable (Ref. 5, p. 5). Most groundwater in the area is obtained from beneath the Cooper Formation and is thus protected from potential contaminants in the shallow water table aquifer.

A well survey in the site vicinity conducted by the SCDHEC Division of Hydrogeology revealed three of thirty-seven (eight percent) of domestic wells to obtain water from the aquifer of concern (Ref. 5, p. 5). It is estimated from a topographic map that there are 606 homes within three miles of the site (1156 homes within four miles) that have no access to public supply lines (Ref. 2). If it is assumed that 8% of these withdraw from the aquifer of concern, as suggested by the well survey, then 48 wells serving an estimated 182 people (92 wells serving 350 people within four miles) are susceptibe to potential contaminants from the landfill which may leach into the shallow water table aquifer. The nearest well to the site which withdraws from the shallow aquifer is one mile to the southeast of the site (Ref. 5, p. 5).

Ninety-two percent of the domestic wells in the area are estimated to be screened beneath the Cooper Formation. Thus, within 3 miles, 558 wells screened in the lower aquifers are estimated to serve 2120 people (1064

wells serve 4043 people within 4 miles of the site) (Ref. 2). Three public wells owned by Berkeley County Water and Sewer, which serve approximately 600 people, are completed below the Cooper Formation (Ref. 5, p. 4). They are located about 2 miles north and east of the landfill. The nearest deep domestic well is 700 feet to the northeast (Ref. 5, p. 8).

C. Groundwater Impact

At this time, there is no data available addressing the quality of the groundwater underlying this site.

IV. Surface Water Pathway

A. Regional Characteristics

The Berkeley County Landfill Site is located approximately 200 feet west of Molly Branch. This creek flows about 2.5 miles to the east to drain into a marsh associated with the Cooper River. This marsh is about one mile wide. Molly Branch reforms on the eastern side of the marsh and flows into the Cooper River (Ref. 2).

B. Surface Water Use

Surface water use of Molly Branch has not been determined at this time. The Cooper River is known to be used for recreational boating and fishing.

C. Surface Water Impact

There is no data presently available to quantitatively assess possible impacts on surface water due to this landfill site. Ponding has been reported on the site in early 1977 as were leachate running into adjacent swamplands. Prior to the landfill closing raw garbage was left uncovered and erosion was seen (Ref. 1, pp. 3-5).

V. Recommendations and Justifications

The Berkeley County Landfill Site is recommended for a Screening Site Investigation (SSI) under a medium priority. Evidence indicates that this site received industrial wastes as well as household garbage. Containers from agricultural products and dye wastes were indicated as wastes which could consist of relatively toxic and persistent substances.

Groundwater is shallow in this area and likely to be in contact with wastes. There are known to be groundwater wells completed in the shallow aquifer and it is estimated that as many as 182 people could be depending on this water for domestic purposes including drinking. There is some potential for surface water impacts in the area as well.

As no information is available on groundwater quality in the site vicinity at this time, an SSI is needed for this purpose. Core samples

should be taken to determine the nature of the waste material which underlies the site and to estimate waste volumes. Studies of Molly Branch and downstream surface waters should be conducted to evaluate possible impacts.

VI. References

1. SCDHEC - Bureau of Solid and Hazardous Waste Management - Archive County Files.

2. U.S. Geological Survey - Moncks Corner (1979), Cordesville (1979), Mount Holly (1979), Kittredge (1979), South Carolina Quadrangles.

3. Communication with Johnny Ohlandt, SCDHEC Trident District Consultant - October 25, 1988.

4. Communication with W.N. Neighbors, owner of landfill property - October 25, 1988.

5. SCDHEC - Bureau of Solid and Hazardous Waste Management - Division of Hydrogeology Report - January 12, 1988.

Updated Preliminary Assessment
HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

Site Name: Berkeley County Landfill
EPA ID Number: SCD 981 028 095
Address: Secondary Road 50
City, State: Oakley, South Carolina 29416

EPA REGION IV

SCORE STATUS: IN PREPARATION

SCORED BY: Ernie Ayers
Bureau of Solid and Hazardous Waste Management
South Carolina Department of Health and Environmental Control

DATE OF THIS REPORT: November 7, 1988

GROUND WATER ROUTE SCORE	:	47.62
SURFACE WATER ROUTE SCORE	:	Not Scored
AIR ROUTE SCORE	:	Not Scored
MIGRATION SCORE	:	27.53

Berkeley County Landfill
SCD 981 028 095

HRS GROUND WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
I. OBSERVED RELEASE	NO	0	0
Comments: If observed release is assumed, then Sgw = 51.02			
II. ROUTE CHARACTERISTICS			
A. Depth to Aquifer of Concern			
1. Depth to Water Table	3 feet		
Comments:			
2. Depth to Bottom of Waste	6 feet		
Comments:			
3. Depth to Aquifer of Concern	0 feet	3 (x2)	6
B. Net Precipitation			
1. Precipitation	48 inches		
2. Evaporation (Score 1-2=3)	43 inches		
3. Net Precipitation	5 inches	2	2
C. Permeability	10^{-5} to 10^{-3} cm/sec	3	3
Comments: Waste area in contact with the aquifer of concern.			
D. Physical State		3	3
Comments: Wastes unknown: assume contamination with liquid residues from containers.			
TOTAL ROUTE CHARACTERISTICS SCORE:			14
III. CONTAINMENT		3	3
Comments: Landfill site - no containment			

Berkeley County Landfill
SCD 981 028 095

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE

IV. WASTE CHARACTERISTICS

A. Toxicity/Persistence Matrix Value: 8 8
Comments: Assume contamination with heavy metals from dye wastes and possible pesticide contamination from the disposal of agricultural chemical containers.

B. Waste Quantity - Unknown: Assume worst case situation.

1. Cubic Yds _____
2. Drums _____
3. Gallons _____
4. Tons _____

(Convert Drums, Gallons, Tons to Cubic Yards)
(1 + 2 + 3 + 4 = Total)
5. Total _____ Cu.yds. 8 8

TOTAL WASTE CHARACTERISTICS SCORE: 26

V. TARGETS

A. Ground Water Use (three mile radius) 3 (x3) 9
Comments: Groundwater used for drinking with no readily available alternatives with 3 miles.

B. Distance to Nearest Well/Population Served

1. Distance to Nearest Well 5280 feet

2. Population Served 182 Targets (3 mile radius)
a. No. of Houses 48
b. No. of Persons _____
c. No. of Connections _____
d. No. of Irrigated Acres _____

3. Matrix Value: 16 16

TOTAL TARGETS SCORE: 25

VI. SCORING

A. If line 1 is 45, multiply 1 x 4 x 5.
If line 1 is 0, multiply 2 x 3 x 4 x 5.

B. Divide A by 57,330 and multiply by 100 = Sgw.

GROUND WATER ROUTE SCORE (Sgw) = 47.62

HAZARDOUS RANKING SYSTEM SCORING CALCULATIONS

Ground Water Route Score

Observed Release	No
Route Characteristics	14
Containment	3
Waste Characteristics	26
Targets	25

=27300/57,330 x 100 = 47.62 Sgw

Surface Water Route Score - Not scored due to high Sgw

Observed Release	_____
Route Characteristics	_____
Containment	_____
Waste Characteristics	_____
Targets	_____

= _____ /64,350 x 100 = _____ Ssw

Air Route Score - Not scored due to high Sgw

Observed Release	_____
Waste Characteristics	_____
Targets	_____

= _____ /35,100 x 100 = _____ Sa

Summary of Migration Score Calculations

	S	S^2
Groundwater Route Score (S_{gw})	47.62	2267.66
Surface Water Route Score (S_{sw})	0	0
Air Route Score (S_a)	0	0
$S^2_{gw} + S^2_{sw} + S^2_a$		2267.66
$\sqrt{S^2_{gw} + S^2_{sw} + S^2_a}$		47.62
$\sqrt{S^2_{gw} + S^2_{sw} + S^2_a}$ /1.73 = S_m		27.53

Reference 1

①

SOUTH CAROLINA STATE BOARD OF HEALTH

COLUMBIA, SOUTH CAROLINA

APPLICATION FOR PERMIT TO CONSTRUCT

SOLID WASTE MANAGEMENT SYSTEM

Name of Project (Location and description) Berkeley County Sanitary Landfill; 5 mi. east of Route 17 A on S. C. Route No. 50

Type(s) of Solid Waste Household wastes, commercial, industrial, and agricultural wastes

County Berkeley Design Capacity 60 (~~yd~~s. or tons/day)

Water Table 2.7 (ft.) Drainage Basin Cooper River 6 miles (~~ft~~.)

Nearest Stream Molly Branch Distance to Stream 700 (ft.)

Planned land use on completion of Project ~~pasture land~~

This application is being made in behalf of ~~Berkeley County~~ (~~xxxx~~) (leased)

whose address is ~~David D. Page, County Engineer, P. O. Box 936, Moncks Corner, S. C~~

Plans, specifications, and an engineering report are herewith submitted and made a part of this application.

Date of Application 4/13/72 Signed _____
City, Corporation, or Other Official Name

Designing Engineer

David D. Page By _____
Official Directly Responsible

Application No. _____ Director, Solid Waste Division
Official Title

File in Duplicate

(2)

STATE OF SOUTH CAROLINA

STATE BOARD OF HEALTH

COLUMBIA, S. C.

Permit

BERKELEY COUNTY *is hereby issued a permit to operate a Sanitary Landfill known as* BERKELEY COUNTY SANITARY LANDFILL *located at* Approx. .5 mi. east of route 17 A on S. C. Route No. 50, *in accordance with State laws, rules and regulations of the State Board of Health.*

E. Kenneth Ayers, M.D.
State Health Officer

Dated this 22nd day of May, 19 72

William E. Stilwell, Jr., Director
Solid Waste Division

Permit No. 15

Authorized Signature — Title

THIS CERTIFICATE IS THE PROPERTY OF THE STATE BOARD OF HEALTH AND MUST BE SURRENDERED ON DEMAND. KEEP POSTED AT ALL TIMES IN A CONSPICUOUS PLACE ON THE PREMISES.

SBH-SWP-1

Charleston County Health Department
334 Calhoun Street
Charleston, South Carolina 29401

October 22, 1976

T → Mark
MCD

Mr. Clyde Umphlett
County Supervisors Office
P. O. Box 817
Moncks Corner, S. C. 29461

Dear Mr. Umphlett:

I am sure you are aware that Berkeley County has been using their new landfill site for over five months and the old site has been closed for the same amount of time. There is a serious problem existing with the old site in that it has never been properly covered with the two feet of final cover and graded as required by the solid waste regulations. Due to this failure we have raw uncovered garbage exposed, also serious leachate and erosion problems. The regulations require that the final cover be applied within one week of completion therefore I am sure that you would agree with me that five months is more than enough time to have completed and closed this site.

In speaking with Mr. Page during these past months it seems that the lack of hauling trucks was the main factor in not completing the site. I would request that you look into this matter immediately and take the necessary action to complete this site and have the permit terminated.

I respectfully request that you let me know when this can be accomplished. I feel that thirty days should be adequate to accomplish this if a conscientious effort is made.

Please contact me if there are any questions concerning this matter and I will be most happy to help in any way.

Sincerely,

J. D. Ohlandt
Regional Solid Waste Consultant

JDO/bji
cc: Mr. David Page, Berkeley County
Mr. Hartsell Truesdale, S.C. DHEC
Mr. J. Donovan Dukes, EQC Office
File

(4)

February 10, 1977

Mr. Clyde D. Umphlett
County Supervisor
P. O. Box 817
Moncks Corner, SC 29461

RE: Closing out of the old Berkeley County Landfill
Domestic Waste Permit #15

Dear Mr. Umphlett:

Reference is made to Mr. John Ohlandt's letter of 22 October 1976 and recent inspection reports of the Berkeley County Landfill. The above indicate that no attempt has been made to close out the old Berkeley County Landfill - DWP #15 in accordance with the conditions of the permit.

A serious problem exists at the old site in that it has never been properly covered with two (2) feet of final cover and graded as required by State solid waste regulations. Raw uncovered garbage, erosion, and leachate running from the landfill into the adjacent swamp are some of the major problems resulting from a lack of sufficient cover.

Efforts must be initiated immediately to begin final closure of the old Berkeley County Sanitary Landfill (DWP-15) and within sixty (60) days of this letter, the site must be closed as required in Section V.F.2.g. and h. of the enclosed regulation (SBH-SW Reg. 1).

Please let me know if there are any questions. I may be reached at 758-5681 in Columbia, South Carolina.

Sincerely,

Hartsill W. Truesdale, Acting Director
Solid Waste Management Division

HWT:dht

cc: David Page
John Ohlandt
Donnie Dukes

WHITE-CENTRAL OFFICE CA[illegible]Y-CENTRAL OFFICE PINK-INSP[illegible]OR GOLDENROD-OPERATOR

(5)

old Site

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
SOLID WASTE DISPOSAL SITE INSPECTION SHEET

TRANSACTION CODE(__)
(A=Add, C=Change, D=Delete)

RECORD ID SC/BWP0151770217
(State Code, Permit #, Inspection Date)

02-158
03 FACILITY Berkley County Landfill

04 ADDRESS County Supervisors Office

05 CITY Pobox 817 Moncks Corner SC 29641

14 OPER. METHOD T 15 OPER. TYPE INAP 16 FILL DEPTH MAX. FT. 0000 WORKING FACE (FT) 17 L 0000 18 W 0000

MARK EACH ITEM WHERE PROBLEM EXISTS

19 OPERATIONAL CONTROL (__)
20 ALL WEATHER ACCESS ROADS (__)
21 CONTROLLED ACCESS (__)
22 EQUIPMENT (__)
23 DAILY & INTERIM COVER (X)
24 SURFACE DRAINAGE (X)
25 WORKING FACE (__)
26 OPEN BURNING PROHIBITED (__)
27 LEACHATE CONTROL (X)
28 STREAM QUALITY CONTROL (__)
29 UNAUTHORIZED WASTE PROHIBITED (__)
30 SCAVENGING PROHIBITED (__)
31 VECTOR CONTROL (__)
32 FINAL COVER, GRADING (X)
33 STABILIZATION (X)
34 BULKY OBJECT HANDLING (__)
35 MONITOR WELLS (__)
36 ODOR CONTROL (__)
37 DUST CONTROL (__)
38 FIRE PROTECTION (__)
39 STRAY ANIMALS PROHIBITED (__)
40 BLOWING LITTER CONTROL (__)
41 AFTER HOURS CONT. MAINT. (__)
42 UNLOADING CONTROLLER (__)
43 EMPLOYEE FACILITIES (__)
44 DAILY RECORDS (__)
45 APPROVED PLANS (__)

RECOMMENDATIONS AND COMMENTS (COMMENTS ON ALL UNSATISFACTORY ITEMS - SHOW DATA ELEMENT #)

#23 uncovered waste in last area #24 Ponding on Surface
#27 ditch in Center of Site #32 inadequate
#33 Some erosion

The signature at the bottom of this report certifies that the inspector has personally checked each item and has answered according to the true condition existing at time of contract.

REVOLUTIONISHED
MAR 1 1977
CONTROL AUTHORITY

John D Ohlandt S.W.C.
INSPECTOR'S SIGNATURE TITLE

Date 2/17/77 Time 1:00 (AM/PM)

I certify that the inspector has given me a copy of this report and has explained any deficiencies noted.

Alvin J. Knight
OWNER OR OPERATOR SIGNATURE TITLE

Ck dlt 2-28

(6)

WHITE-CENTRAL OFFICE CA[illegible]Y-CENTRAL OFFICE PINK-INSP[illegible]OR GOLDENROD-OPERATOR

old Site

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
SOLID WASTE DISPOSAL SITE INSPECTION SHEET

TRANSACTION CODE(__)
(A=Add, C=Change, D=Delete)

RECORD ID SC/ ~~DWP~~ DWP 0151 770725
(State Code, Permit #, Inspection Date)

02--158

03 FACILITY Berkley County Landfill

04 ADDRESS County Supervisor Office

05 CITY P. O. Box 817 Monks Corner SC. 2944

14 OPER. METHOD T 15 OPER. TYPE INAD 16 FILL DEPTH MAX. FT. 0000 WORKING FACE (FT) 17 L 0000 18 W 0000

MARK EACH ITEM WHERE PROBLEM EXISTS

19 OPERATIONAL CONTROL (__)
20 ALL WEATHER ACCESS ROADS (__)
21 CONTROLLED ACCESS (__)
22 EQUIPMENT (__)
23 DAILY & INTERIM COVER (__)
24 SURFACE DRAINAGE (__)
25 WORKING FACE (__)
26 OPEN BURNING PROHIBITED (__)
27 LEACHATE CONTROL (__)
28 STREAM QUALITY CONTROL (__)
29 UNAUTHORIZED WASTE PROHIBITED (__)
30 SCAVENGING PROHIBITED (__)
31 VECTOR CONTROL (__)

Closed

32 FINAL COVER, GRADING (__)
33 STABILIZATION (__)
34 BULKY OBJECT HANDLING (__)
35 MONITOR WELLS (__)
36 ODOR CONTROL (__)
37 DUST CONTROL (__)
38 FIRE PROTECTION (__)
39 STRAY ANIMALS PROHIBITED (__)
40 BLOWING LITTER CONTROL (__)
41 AFTER HOURS CONT. MAINT. (__)
42 UNLOADING CONTROLLER (__)
43 EMPLOYEE FACILITIES (__)
44 DAILY RECORDS (__)
45 APPROVED PLANS (__)

RECOMMENDATIONS AND COMMENTS (COMMENTS ON ALL UNSATISFACTORY ITEMS - SHOW DATA ELEMENT #)

Permit closed out. ~~[illegible]~~ Site completed.
Will make inspections in the future to see if
any erosion occurs

KEYPUNCHED

SEP 7 1977

S. C. POLLUTION
CONTROL AUTHORITY

The signature at the bottom of this report certifies that the inspector has personally checked each item and has answered according to the true condition existing at time of contract.

[signature] [signature]
INSPECTOR'S SIGNATURE TITLE

Date 7/25/77 Time 11 (AM/~~PM~~)

I certify that the inspector has given me a copy of this report and has explained any deficiencies noted.

[signature]
OWNER OR OPERATOR SIGNATURE TITLE

August 9, 1977

MEMORANDUM

TO: Jack Kendall, P.E., Manager
Domestic Waste Section

FROM: Mark Attaway
Environmental Engineer

RE: Old Berkeley County Landfill

On 2 August 1977, Don Riley and the writer visited the old Berkeley County Landfill (DWP#15) to check the final cover over the site. All areas had ample cover, greater than two (2) feet, except for one area and this area had approximately fifteen (15) inches of cover.

The site still has some depressions that are capable of holding water. These should be filled and graded to conform with the surrounding area.

The drainage ditch that existed in the middle of the landfill has been filled with earth. At the time of our inspection some erosion was already taking place at the end of the ditch, therefore, terraces should be constructed to prevent any further erosion in this area.

If the above items are completed then the site will be properly closed because grass has already been sown.

MCA:mmj

Enclosure

COPY

South Carolina Department of Health and Environmental Control

BOARD
William M. Wilson, Chairman
J. Lorin Mason, Jr., M.D., Vice-Chairman
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COMMISSIONER
Robert S. Jackson, M.D.
2600 Bull Street
Columbia, S. C. 29201

(8)

December 28, 1979

Mr. John Ohlandt
Solid Waste Consultant
Charleston County Health Dept.
334 Calhoun Street
Charleston, South Carolina 29401

Dear Mr. Ohlandt:

Here is a list of all the materials being disposed of at the Berkeley County Landfill from the industries in the county.

Dupont - as stated on the permit - polymer chunks, lubricating oil, cutting oil, hydraulic oil, titanium dioxide, garbage, scrap metal, paper, and glass -in 1976, temporary approval was given to Dupont for disposal of a maximum of 500 gallons/day of biological sludge. -in 1976, Dupont was granted permission to dispose of dimethyl terephthalate (DMT) and terephthalic acid (TPA) both are insoluble solids of low toxicity -in 1977, Dupont was granted permission to dispose of fly ash provided a satisfactory method of dust control could be worked out. -Dupont can't dispose of industrial sludge (20% TEG), phosphoric acid, sodium hydroxide, ethyl glycol, chloroform, carbon tetrachloride because they would require special handling (being encased in steel drums)

Consolidated Enterprises - bark sludge from Westvaco.

General Dynamics - construction debris, paper.

William Heller, Inc. - fibers, cardboard, cardboard combs, paper, plastic bags, metal and plastic banding, scrap metal, canteen and office wastes.

Reliable Electric Co. - paper, cardboard, plastic, epoxy resins.

Santee River Wool Combing Co. - paper, metal, cardboard, canteen, sludge, wool cleanings.

St. Stephens Knitwear - cloth ends, vending wastes, office waste, miscellaneous waste from building addition.

Verona - trash, scrap metal, wood pallets, paper, cardboard, chemical containers, office waste, canteen waste, metal cans and drums, plastic packing and containers. -Verona can't dispose of any dyestuffs at the Berkeley County Landfill.

Sincerely,

Albert H. McMeekin

Albert H. McMeekin
Environmental Engineer
Domestic Waste Section
Solid Waste Management Division

AHM/kk

Reference 3

RECORD OF COMMUNICATION

___x Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO: Berkeley County Landfill file FROM: Ernie Ayers EA

DATE: October 25, 1988 TIME: 9:45 a.m.

SUBJECT: Conversation with Johnny Ohlandt, DHEC Trident District Consultant.

SUMMARY OF COMMUNICATION

W.N. Neighbors owns and has owned this land since it was used as a landfill. He leased it to Berkeley County and he was the landfill operator. Mr. Ohlandt says that next to nothing of an industrial nature placed in the fill, primarily municipal wastes and some commercial wastes (e.g. from supermarkets). The site was well managed and was properly closed. It was a shallow fill - 6 feet would be a good estimate. It is now used as pasture land. Mr. Ohlandt dows not know why the site was placed on CERCLIS. It is difficult to know precisely what materials were placed in the site since it was operated before hazardous waste laws were enacted. He does not know if the December 28, 1979 letter to himself from SCDHEC Engineer Albert McMeekin cites wastes that would be representative of what went into the old Neighbors landfill as opposed to the newer landfills.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES
TO:

Reference 4

RECORD OF COMMUNICATION

___x Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO: Berkeley County Landfill file FROM: Ernie Ayers EA

DATE: October 25, 1988 TIME: 11:40 a.m.

SUBJECT: Conversation with W.N. Neighbors, owner and past operator of landfill.

SUMMARY OF COMMUNICATION

Primarily domestic garbage was placed in the fill. MOBAY Corp., which produces "farm chemicals," disposed of some containers at the site. Verona disposed of some dye wastes at this site.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES
TO:

Reference 5

South Carolina Department of Health and Environmental Control

Please file

2600 Bull Street
Columbia, S.C. 29201

Commissioner
Michael D. Jarrett

Board
Moses H. Clarkson, Jr., Chairman
Oren L. Brady, Jr., Vice-Chairman
Euta M. Colvin, M.D., Secretary
Harry M. Hallman, Jr.
Henry S. Jordan, M.D.
Toney Graham, Jr. M.D.

MEMORANDUM

TO: John Cresswell, Manager
Site Screening Section
Division of Site Engineering & Screening

FROM: Marianna DePratter, EQM
Superfund and Solid Waste Section
Division of Hydrogeology

DATE: January 12, 1988

RE: Berkeley County Landfill(BCL)
CERCLA Site SCD 981 028 095

Abstract

The shallow water table aquifer, a thin veneer of sand and sandy clay, is the aquifer of concern at BCL. It is separated from underlying aquifers by a hydraulic barrier, the Cooper Formation. The aquifer of concern is infrequently used in the area.

BCL has been hydrogeologically evaluated using the Hazard Ranking System to determine, in part, its eligibility for placement on the National Priorities List. This hydrogeologic review of the area is based primarily on South Carolina Water Resources Commission (SCWRC) and United States Geologic Survey (USGS) well tabulations and geophysical logs. Domestic well records submitted to the Groundwater Protection Division were consulted and a review of Department of Health & Environmental Control files conducted. In addition, the site was visited on December 4, 1987. Surficial sediments adjacent to the site were augered for soil description (see figure 1) and a brief field survey was conducted to confirm domestic well depths in the area.

BCL lies within the South Carolina Coastal Plain physiographic region approximately 3.6 miles south-southwest of the town of Moncks Corner. The landfill is situated on a ridge trending northwest and southeast (see figure 2). The land adjacent to BCL is forested in pine and, except for a few rural homes, is undeveloped at present.

Locally, the site is bounded to the north by Molly Branch. Two unnamed tributaries to Molly Branch drain the area south and southeast. Surface drainage from the landfill area flows toward and eventually discharges to the Cooper River. Directly underlying the site is a thin veneer of surficial sand, thought to be Pleistocene terrace deposits (Cooke, 1936). These sands comprise a shallow water table aquifer susceptible to contamination by landfill effluent. This unconfined aquifer is the aquifer of concern.

The oldest sedimentary units underlying the site were deposited in continental to inner shelf marine environments and are Late Cretaceous in age. The Cretaceous section overlies Triassic basement and is approximately two thousand feet thick. Depositional units are, in ascending order, the Middendorf, Black Creek and Peedee Formations.

The Middendorf has been completely penetrated at Kiawah Island (SCWRC #20GG-v1) and at Clubhouse Crossroads in lower Dorchester County (SCWRC #23CC-i1). It has an approximate thickness of 600 feet and dips southwest at thirty-six feet per mile. Based on the Clubhouse Crossroads corehole, the lower two hundred feet of the Middendorf consists of an interbedded red, brown or olive gray clay, silty clay and greenish gray, muddy, locally feldspathic sand (Gohn et. al., 1977). The upper part of the formation consists of a cyclical sequence of red to reddish-brown and gray-green mottled clay, clayey silt and silty clay. Based on limited static water levels measured in wells penetrating the Middendorf, its regional potentiometric surface slopes to the east or possibly to the east-northeast (Park, 1985).

Berkeley County Water & Sewer (BCWSA) owns one well, SCWRC #19Y-w3, drilled in the upper Middendorf. This well, located approximately two miles north-northeast of the site, was drilled as an exploratory well and is unused. The well has not been fully developed, but water quality analyses indicate water from the Middendorf to be a soft, alkaline, sodium bicarbonate type. Total dissolved solids in the well were 870 mg/l, chloride was 68 mg/l and fluoride was 3.8 mg/l (Meadows, 1987). Aquifers in the overlying formations are less expensive to develop and contain water of equal or better chemical quality.

The Black Creek Formation is composed of abundantly fossiliferous silty clay, muddy sand and clean sand alternating with thinly interbedded sand and clay and some shelly limestone. Based on SCWRC #19Y-w3, the Black Creek is approximately 650 feet thick in the vicinity of the site. Its surface dips toward the southeast at about thirty feet per mile (Park, 1985). Black Creek sands are capable of yielding large amounts of water. Wells at Mt. Pleasant in Charleston County, twenty-five miles south-southeast of the site, have been tested at over a thousand gallons per minute and have specific capacities of seven gallons per minute per foot of drawdown. Yields seem to be lower in the Jamestown area, twenty miles northeast of the site, where five hundred gallons per minute would be considered maximum (Meadows, 1987).

Water from the Black Creek Aquifer is a soft, sodium bicarbonate type and becomes more mineralized toward the coast. For example, total dissolved solids range from a low of 350 mg/l in SCWRC well #15X-15 at Jamestown to a high of 1000 mg/l in well #17DD-m5 at Mt. Pleasant. Chloride shows a similar trend with 4.0 mg/l occurring in Jamestown and 135 mg/l in Mt. Pleasant. Fluoride concentrations are about 2.0 mg/l in Jamestown and 4.4 mg/l in Mt. Pleasant (Meadows, 1987). In the study area, total dissolved solids, chloride and fluoride would probably lie between Jamestown and Mt. Pleasant values. Although the unit is utilized in Berkeley County for water supply, it is undeveloped in the study area. Regionally, static water levels measured in Black Creek wells indicate ground-water flow to the east (Park, 1985).

The Peedee Formation, approximately 330 feet thick, is predominately composed of olive to medium gray, fossiliferous, muddy sand containing small amounts of glauconite, phosphate and mica. The upper Peedee is composed of olive to medium gray silty and sandy calcareous clay. The surface of the unit dips south westwardly at approximately twenty-five feet per mile (Park, 1985). Locally, only one well (SCWRC #19Y-s1) has been completed in the Peedee. This well is located four miles north-northwest of the landfill and is owned by the town of Moncks Corner. The well flowed ten gallons per minute and produced 200 gallons per minute with 240 feet of drawdown for a specific capacity of less than one gallon per minute per foot of drawdown (Meadows, 1987). This is typical of wells completed in the Peedee Formation near the coast, hence it is seldom used for water supply (Park, 1985). Well SCWRC #19Y-s1 yielded a soft sodium bicarbonate water with total dissolved solids measuring 920 mg/l, chloride measuring 59 mg/l and fluoride measuring 1.5 mg/l.

Above the Peedee Formation lie, in ascending order, the Black Mingo Formation, the Santee Limestone and the Cooper Formation. These sediments are Tertiary in age and were deposited in marginal marine to outer shelf environments. Sand, silt and clay dominate the lithology in the lower part of the section, and pure to very impure limestone dominate the upper part of the section.

The Black Mingo Formation, Paleocene to Lower Eocene in age, is a heterogeneous, fossiliferous sequence of white to pale gray limestone, green to gray argillaceous sand, carbonate and silica cemented sandstone and dark gray to black clay. Based on SCWRC well #19Y-w3, the unit is approximately 305 feet thick in the BCL area. The Black Mingo crops out north of Moncks Corner and its surface dips south-southwest beneath the Santee Limestone at approximately seventeen feet per mile (Park, 1985).

The Santee Limestone, Eocene in age, is a creamy white to gray fossiliferous and slightly glauconitic limestone. It has a total thickness of approximately sixty-five feet in the stuffy area. The unit dips southward at approximately eight feet per mile (Park, 1985). Two members have been recognized within the Santee Limestone, the lower Moultrie Member and the upper Cross Member.

The overlying Cross Member has a higher clay content, consists of a less soluble calcite and is, therefore, much less permeable (Park, 1985).

The Santee and Black Mingo formations supply most ground water in the area. Within a four mile radius of the landfill, only thirty-seven domestic wells of known depth have been identified. Many more domestic wells exist within this area, but well depths could not be documented. Of this limited sample, thirty-four (ninty-two percent) penetrate the Santee or the combined Santee/Black Mingo aquifer. These wells yield an average of seventy-five gallons per minute although yields range between thirty and a hundred gallons per minute. Well yield and specific capacity is dependent upon well construction, permeability enhancement within the Santee Limestone and the amount of Black Mingo penetration. BCWSA maintains three public supply wells approximately two miles north-northeast of the landfill. These wells serve approximately six hundred people and yield about 275 gallons per minute each (Howard Henry, BCWRC, pers. comm., Dec. 9, 1985). Wells are usually constructed as open holes with casings typically seated in the overlying Cooper Formation.

Ground water withdrawal in the Santee comes primarily from the lower Moultrie Member; withdrawal from the Black Mingo comes primarily from sand and limestone beds in the upper part of the unit. Examination of USGS geophysical logs from our four public supply wells (19Z-j1, 19Y-w1, 19Y-b1, 19Y-w3)and two irrigation wells(19Z-b3, 19Z-b5) located within the area indicate no hydraulic barrier between these two units. Water from the Black Mingo Formation is of low quality because of high mineral content (Park, 1985). The quality of water from wells open to the Santee and Black Mingo aquifers degrades with the degree of Black Mingo penetration.

The Santee and Black Mingo aquifers are recharged to the northwest at outcrop areas in Orangeburg and Clarendon counties. They are also recharged north-northeast in Berkeley and Charleston counties where they crop out along a belt ten to fifteen miles wide paralleling the Santee River. Regional static water levels measured in wells penetrating the Santee Limestone and the upper Black Mingo aquifers are less than ten feet above mean sea level in the BCL area. Lake Moultrie, located only four miles north of BCL, probably affects regional ground water flow toward the southeast. Because the water surface at the lake is maintained at seventy-five feet above mean sea level, it is possible that Lake Moultrie also serves as a recharge source.

Overlying the Santee Limestone is a sandy, phosphatic, dark greenish-gray marl called the Cooper Formation. A calcareous clay, the Cooper Formation has low intrinsic permeability. The Cooper Formation is Eocene to Oligocene in age. It is uniform in color, texture and generally has no obvious signs of bedding. The homogenous nature of the Cooper Formation inhibits the development of secondary porosity. Clays of this type typically have a permeability of only 10^{-5} to 10^{-7} centimeters per second (Freeze and Cherry, 1979).

Due to its impermeable nature, the Cooper acts as a confining unit to the underlying aquifers. It is approximately a hundred feet thick in the vicinity of BCL and crops out to the north below Lake Moultrie. It dips at approximately eight feet per mile towards the south-southeast (Park, 1985).

The Cooper Formation is overlain with a thin veneer of sand and sandy clay. Thickness varies from about fifty feet on ridges to zero in valleys where erosion has exposed the underlying Cooper Formation (Taber, 1939). Surficial sands are only about thirty feet thick on site.

Reported water levels within this surficial sand aquifer are also variable with values from three to fifteen feet below grade (Meadows, 1987). This variation is due to seasonal fluctuations in the amount of rainfall and to the effect of local topography. Permeability is 10^{-3} to 10^{-5} centimeters per second in unconsolidated sands (Freeze and Cherry, 1979). Regionally, the direction of ground water flow in the shallow water table aquifer is south-southeasterly, however local topography has strong influence.

Of the thirty-seven domestic wells of known depth in the area only three (eight percent) obtain water from the shallow aquifer of concern. These wells yield an average of only four gallons per minute. The shallow water table aquifer is not commonly used because yields are both low and unreliable (J. D. Sanders, Well Driller, pers. comm., Dec. 10, 1987). The closest known domestic well utilizing the aquifer of concern is located one mile southwest of BCL.

MD:hlg

References Cited

Cooke, C. W., 1936, Geology of the coastal Plain of South Carolina: U.S. Geological Survey Bulletin No. 867, 195 p.

Freeze, A. R., and Cherry, J. A., 1979, Groundwater: Englewood Cliffs, New Jersey; Prentice-Hall.

Gohn, G. S., Higgins, B. R., Smith, C. C., and Owens, J. P., 1977, Lithostratigraphy of the deep corehole (Clubhouse Crossroads Corehole 1) near Charleston: in Rankin, D. W., editor, Studies related to the Charleston, South Carolina, earthquake of 1886 - a preliminary report: U. S. Geological Survey Professional Paper 1028, p. 59-70.

Meadows, J. K., 1987, Ground water conditions in the Santee Limestone and Black Mingo Formation near Moncks Corner, Berkeley County South Carolina: South Carolina Water Resources Commission Report No. 156, 38 p.

Park, A. D., 1985, The ground-water resources of Charleston, Berkeley, and Dorchester Counties, South Carolina Water Resources Commission Report No. 139, 145 p.

Taber, Stephen, 1939, Geology of the Santee-Cooper Project: South Carolina Public Service Authority, 21 p.

SOIL BORING LOG

Location: Berkeley County Landfill **Date:** 12-4-87

CERCLA Site SCD 981 028 095

County: Berkeley **Latitude:** 33°08.37 **Longitude:** 80°03.00

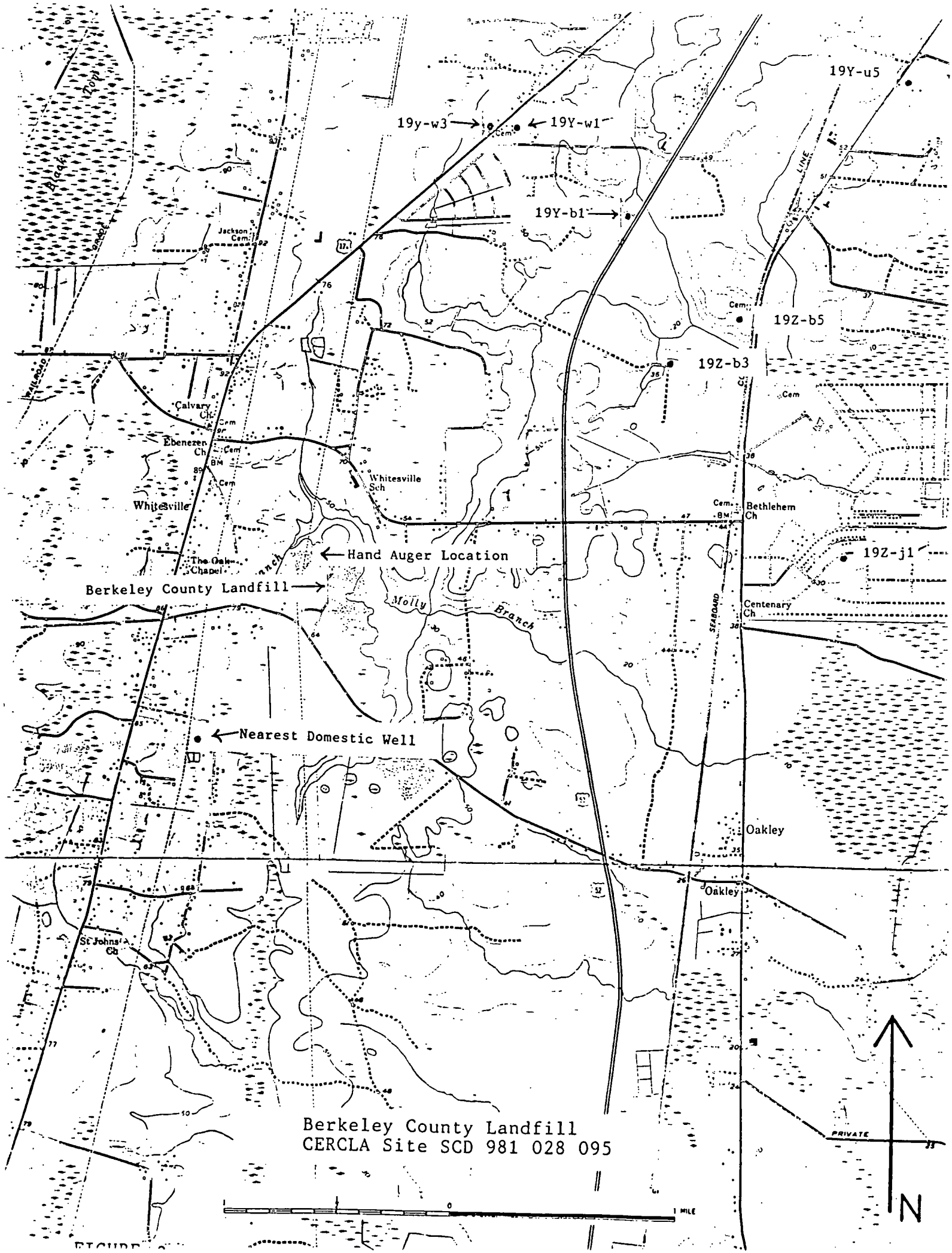
Elevation: 60 ft msl **Total depth:** _____ **Water table:** _____

Logged by: M. DePratter and J. L. Canova

Seasonal high water table (estimate): 4 feet below grade

Depth cm	Depth ft	Description
		Tan medium to coarse sand
60	2	
		Orange clayey fine to medium sand, poorly cemented with iron oxide.
120	4	
		White clay
180	6	
		Orange clayey medium grained sand
240	8	
300	10	
		Orange sandy clay grading into clay
	bottom	

Figure 1



Berkeley County Landfill
CERCLA Site SCD 981 028 095

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: S.C. | 02 SITE NUMBER:

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check all that apply)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☐
NON-COMMUNITY	C. ☐	D. ☑

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☐
D. ☑	E. ☐	F. ☐

03 DISTANCE TO SITE
A. _____ (mi)
B. 1.0 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)
☑ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING (Other sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other source available) ☐ D. NOT USED, UNUSEABLE

COMMERCIAL, INDUSTRIAL, IRRIGATION (No other or far better source available)

02 POPULATION SERVED BY GROUND WATER _____ | 03 DISTANCE TO NEAREST DRINKING WATER WELL 1.0 (mi)

04 DEPTH TO GROUNDWATER: 7 (ft) | 05 DIRECTION OF GROUNDWATER FLOW: SE | 06 DEPTH TO AQUIFER OF CONCERN: 14 (ft) | 07 POTENTIAL YIELD OF AQUIFER: 5,800 (gpd) | 08 SOLE SOURCE AQUIFER ☐ YES ☐ NO

09 DESCRIPTION OF WELLS (including storage, depth, and distance relative to population and buildings)
Three shallow wells (< 65 feet deep) located within a four mile radius of the landfill.

10 RECHARGE AREA ☐ YES ☐ NO COMMENTS: Water table aquifer is recharged by rainfall.

11 DISCHARGE AREA ☑ YES ☐ NO COMMENTS: Into streams

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)
☐ A. 10^{-6} – 10^{-8} cm/sec ☐ B. 10^{-4} – 10^{-6} cm/sec ☑ C. 10^{-4} – 10^{-3} cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)
☑ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE (10^{-4} – 10^{-6} cm/sec) ☐ C. RELATIVELY PERMEABLE (10^{-2} – 10^{-4} cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK: 900 (ft) | 04 DEPTH OF CONTAMINATED SOIL ZONE: 0 to 50 (ft) X | 05 SOIL pH: _____

Although everyone in the area is served by ground water, most domestic wells in the area draw water from below the aquifer of concern. This water is protected from contamination by landfill effluent by the Cooper Formation.

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern: The thin veneer of sand and sandy clay overlying the Cooper Marl comprise the aquifer of concern. These sands were probably deposited as Pleistocene terrace deposits

Depth(s) from the ground surface to the highest seasonal level of the saturated zone (water table(s)) of the aquifer(s) of concern:

Depth to water has been reported at 3 feet below grade.

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Sand, clayey sand & sandy clay

Permeability associated with soil type:

10^{-3} cm/sec

Ground Water Use

Use(s) of aquifer(s) of concern within a 4-mile radius of the facility:

Small domestic wells, although the deeper Santee/Black Mingo aquifer system is more commonly used. This deeper aquifer is protected

Population Served by Ground Water Wells Within a 3-Mile Radius

Identify water-supply wells(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

Amsac nurseries irrigate from shallow ponds that may be impacted by the landfill.

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre):

Total population served by ground water within a 3-mile radius:

M.2 - SITE MAINTENANCE FORM

* ACTION: _ *

EPA ID : SCD981028095

SITE NAME: BERKELEY CO. LANDFILL SOURCE: R

STREET : JCT US 52 & CTNY RD. 50 CONG DIST: 01

CITY : OAKLEY ZIP: 29466

CNTY NAME: BERKELEY CNTY CODE : 015

LATITUDE : 33/07/18.0 LONGITUDE : 080/00/54.0

LL-SOURCE: R LL-ACCURACY:

SMSA : 1440 HYDRO UNIT: 03050201

INVENTORY IND: Y REMEDIAL IND: Y REMOVAL IND: N FED FAC IND: N

NPL IND: N NPL LISTING DATE: NPL DELISTING DATE:

SITE/SPILL IDS:

RPM NAME: RAY WILKERSON RPM PHONE: 404-881-2234

SITE CLASSIFICATION: SITE APPROACH:

DIOXIN TIER: REG FLD1: REG FLD2:

RESP TERM: PENDING ( ) NO FURTHER ACTION ( ) * PENDING (_) NO FURTHER ACTION (_)

ENF DISP: NO VIABLE RESP PARTY ( ) VOLUNTARY RESPONSE ( )
ENFORCED RESPONSE ( ) COST RECOVERY ( )

SITE DESCRIPTION:

M.2 - PROGRAM MAINTENANCE FORM

ACTION: _

SITE: BERKELEY CO. LANDFILL

EPA ID: SCD981028095 PROGRAM CODE: H01 PROGRAM TYPE: _

PROGRAM QUALIFIER: ALIAS LINK :

PROGRAM NAME: SITE EVALUATION

DESCRIPTION:

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: BERKELEY CO. LANDFILL
PROGRAM: SITE EVALUATION

EPA ID: SCD981028095 PROGRAM CODE: H01 EVENT TYPE: DS1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: S * _ ___ _ *

EVENT NAME: DISCOVERY STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START:	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP : 08/13/85	__/__/__	__/__/__	__/__/__

HQ COMMENT:

* _____ *

RG COMMENT:

* _____ *

COOP AGR #	AMENDMENT #	STATUS	STATE %				
			0	_____	_____	__	___

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: BERKELEY CO. LANDFILL
PROGRAM: SITE EVALUATION

EPA ID: SCD981028095 PROGRAM CODE: H01 EVENT TYPE: PA1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: S * _ ___ _ *

EVENT NAME: PRELIMINARY ASSESSMENT STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START:	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP :	__/__/__	__/__/__	__/__/__

HQ COMMENT:

* _____ *

RG COMMENT:

* _____ *

COOP AGR #	AMENDMENT #	STATUS	STATE %
			0

* _____ _____ __ ___ *

M.2 - COMMENT MAINTENANCE FORM

SITE: BERKELEY CO. LANDFILL

EPA ID: SCD981028095

COM NO	COMMENT	ACTION
001	FROM INTERSECTION OF US HWY 52 & CN	_
	TY RD 50. LANDFILL IS 1 MILE ON	
002	LEFT SIDE OF ROAD ON CNTY RD. 50.	_

M.2 - REGIONAL UTILITY MAINTENANCE FORM

SITE: BERKELEY CO. LANDFILL

EPA ID: SCD981028095

REG CODE: HSCM-01 * ACTION: _ *
DESCRIPTION: MIXED MUNICIPAL * _____ *
* _____ *
DATE1: * __/__/__ *
DATE2: * __/__/__ *
DATE3: * __/__/__ *
FREE FIELD: * _____ *

REG CODE: OSIL-01 * ACTION: _ *
DESCRIPTION: LANDFILL * _____ *
* _____ *
DATE1: * __/__/__ *
DATE2: * __/__/__ *
DATE3: * __/__/__ *
FREE FIELD: * _____ *

REG CODE: 4HRN-01 * ACTION: _ *
DESCRIPTION: HRS. NEEDED * _____ *
* _____ *
DATE1: * __/__/__ *
DATE2: * __/__/__ *
DATE3: * __/__/__ *
FREE FIELD: * _____ *

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Berkeley County Landfill #1	1 Mile East of Int. of U.S. 17A & S. Rd. 50

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Oakley	S.C.	29461	Berkeley	015	

09 COORDINATES LATITUDE	LONGITUDE
33°08 36.6 N	80 03 00 .2 W

10 DIRECTIONS TO SITE (Starting from nearest public road)
From Moncks Corner, S.C. at the intersection of State Hwy 5 & U.S. Hwy 17A, take U.S. Hwy 17A South for approximately 5 miles to Secondary Rd. #50, turn left (east) onto S. Rd. 50 and landfill is located approx. 1 mile on left side across from the H.F. Thomas Estate.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
W.N. Neighbors Estate	Route 6, Box 226

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
Oakley	S.C.	29461	(803) 761-3951

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
Berkeley County Public Works	P.O. Box 936

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
Moncks Corner	S.C.	29461	(803) 761-8250

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 ☐ NO DATE 04 / 11 / 77 (MONTH DAY YEAR)
Jack Kendall

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): _____

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

03 YEARS OF OPERATION
1972 (BEGINNING YEAR) | 1977 (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Waste types disposed at this inactive landfill (DWP015) include household wastes, commercial industrial, and agricultural solid waste. Industrial wastes from various industries include resins, oils and other unknowns.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Residents within the immediate vicinity of the site rely on private and public drinking water wells. Shallow wells in this area could potentially be affected by leachate from the landfill, as well as a high water table within the area.

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
Johnny Ohlandt	SCDHEC Trident District	(803) 554-5533

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Jeffrey M. Williams	EQC	SCDHEC	(803) 758-5681	05 / 06 / 86 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028055

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [X] A. SOLID
- [ ] B. POWDER, FINES
- [X] C. SLUDGE
- [ ] D. OTHER _____ (Specify)
- [ ] E. SLURRY
- [ ] F. LIQUID
- [ ] G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS unknown

CUBIC YARDS _____

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- [ ] A. TOXIC
- [ ] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [ ] D. PERSISTENT
- [ ] E. SOLUBLE
- [ ] F. INFECTIOUS
- [ ] G. FLAMMABLE
- [ ] H. IGNITABLE
- [ ] I. HIGHLY VOLATILE
- [ ] J. EXPLOSIVE
- [ ] K. REACTIVE
- [ ] L. INCOMPATIBLE
- [ ] M. NOT APPLICABLE

Unknown

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	unknown	-	Waste types present at this
OLW	OILY WASTE			site consist of epoxy resins,
SOL	SOLVENTS			paper, metal, construction
PSD	PESTICIDES			debris, lubricating oils,
OCC	OTHER ORGANIC CHEMICALS			dimethyl terephthalate and
IOC	INORGANIC CHEMICALS			terephthalic acid. See
ACD	ACIDS			December 28, 1979 letter to
BAS	BASES			Johnny Ohlandt.
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
ACD	Dimethylphthalate	131-11-3	Landfill	Unknown	
ACD	Terephthalic Acid	000100210	Landfill	Unknown	

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

December 28, 1979 letter to John Ohlandt from Albert McMeekin
SCDHEC CERCLA Files
Johnny Ohlandt and Wayne Fanning - SCDHEC Trident Hazardous Waste Consultants

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
SC	D981028095

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 2500 — 04 NARRATIVE DESCRIPTION

Approximately 16 wells, some private and some public trailer parks within a 3 mile radius of the site may be affected by leachate percolating into the shallow groundwater.

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Unknown — 04 NARRATIVE DESCRIPTION

Nearby Molly Branch Creek is approximately 700' from the landfill. Previous inspections have noticed leachate leaving the site and entering the swamp.

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Unknown at this time.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Unknown at this time.

01 ☐ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Unknown at this time.

01 ☒ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) — 04 NARRATIVE DESCRIPTION

Likely due to previous landfilling practices.

01 ☒ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 2500 — 04 NARRATIVE DESCRIPTION

All residents within 3 miles of the site rely on private or public drinking water wells for their sources.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Unknown at this time.

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Unknown at this time.

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: SC | 02 SITE NUMBER: D981028095

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Unknown at this time.

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION *(Include name(s) of species)*

Unknown at this time.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Unknown at this time.

01 XX M. UNSTABLE CONTAINMENT OF WASTES *(Spills/runoff/standing liquids/leaking drums)* — 02 ☐ OBSERVED (DATE: April 11, 1977) ☑ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: unknown
04 NARRATIVE DESCRIPTION
Jack Kendall on site visit noticed leachate leaving landfill. See pictures taken in 1977.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Unknown at this time.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Unknown at this time.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Unknown at this time.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
It is not known, but leachate from this closed out landfill could potentially affect drinking water in this area.

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

V. SOURCES OF INFORMATION *(Cite specific references, e. g., state files, sample analysis, reports)*

SCDHEC CERCLA Files
SCDHEC Trident District Files

GENERAL HIGHWAY MAP
BERKELEY COUNTY
SOUTH CAROLINA

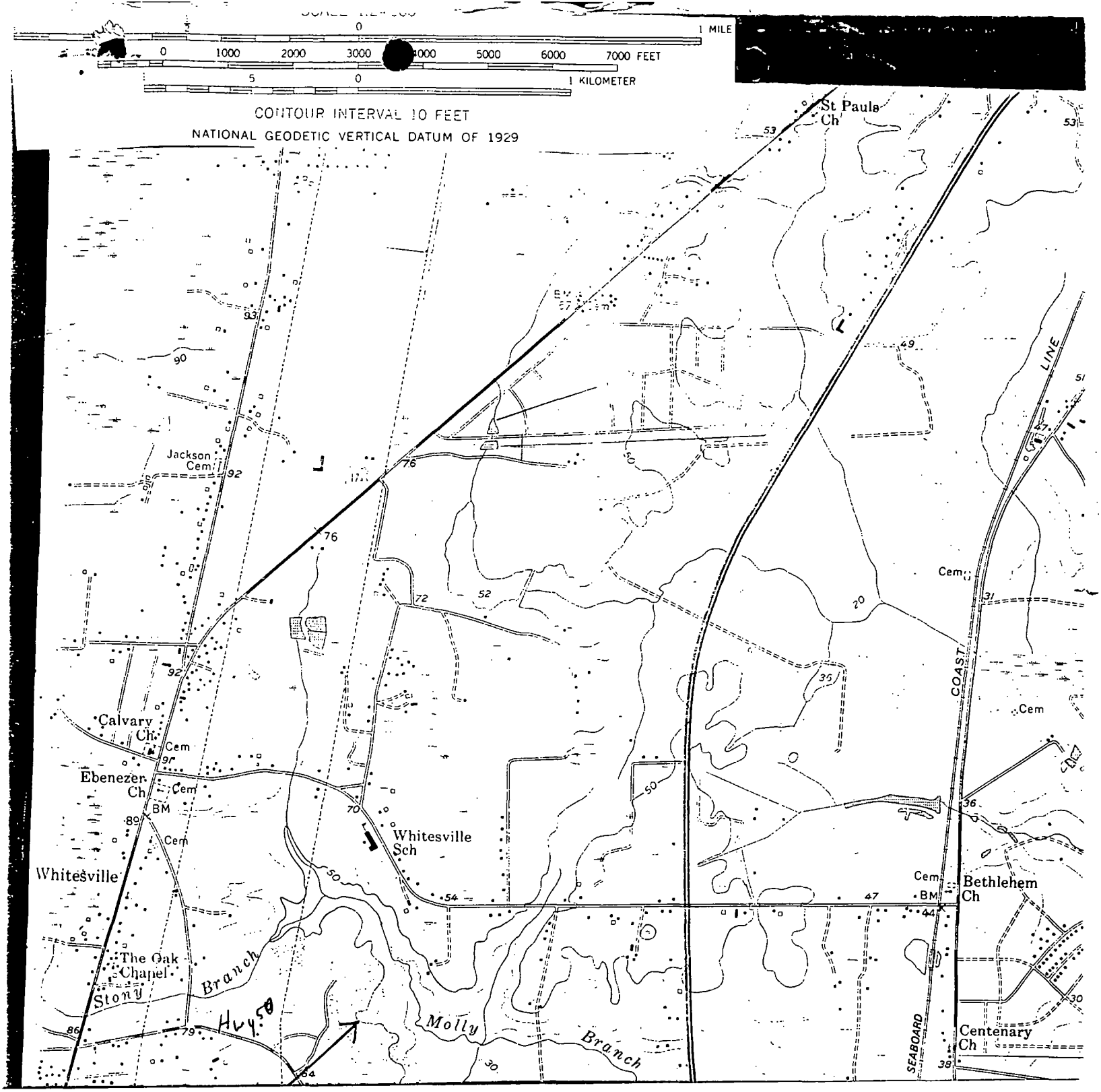
PREPARED BY THE

SOUTH CAROLINA STATE HIGHWAY DEPARTMENT

IN COOPERATION WITH THE

U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION


1 MILE
0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER
CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
St Pauls Ch
Jackson Cem
Calvary Ch
Cem
Ebenezer Ch
BM
Whitesville
Whitesville Sch
The Oak Chapel
Stony Branch
Molly Branch
Hwy 50
COAST LINE
SEABOARD
Bethlehem Ch
Centenary Ch

SITE DATA
****

EPA ID NO.: *_____* SHEET *__*

(ACTION : *__* - FOR DATA ENTRY USE ONLY)

SF ID: *__* *__* *__* SITE NAME: *[redacted]* SOURCE: *__*

__ *__* STREET: *_____* CONG. DIST: *__*

NATL PRIORITY: *__* CITY: *Oakley* ST: *SC* ZIP: *29461*

HRS: *____.__* CNTY NAME: *Berkeley* CNTY CODE: *___*

HRS DATE (YY/MM): *__/__* LATITUDE: *__/__/__.__* LONGITUDE: *__/__/__.__*

RESPONSE TERMINATION (CHECK ONE IF APPLICABLE): PENDING *__* NO FURTHER ACTION *__*

ENF. DISP. (CHECK ANY THAT APPLY): NO VIABLE RESP. PARTY *__* VOL. RESP. *__* ENF. RESP. *__* COST RECOV. *__*

RSPO NAME: *_____* RSPO PHONE: *___-___-____* FED. FAC. (Y/N): *__* NON-SITE: *__*

SMSA: *____* USGS HYDRO. UNIT: *_____* REG. FLD1: *_____* REG. FLD2: *__*

SITE DESCRIPTION: *_____*
_____
_____
_____

EVENTS
******

	(ACTION - FOR DATA ENTRY USE ONLY)	EVENT TYPE	DATE (YY/MM) STARTED	DATE (YY/MM) COMPLETED	CONDUCTED BY EPA	STATE	RESP/PARTY	OTHER	COUNTS
RESPONSE EVENTS	*__*	SITE DISCOVERY (SD)		85/05/29					
	__	PRELIMINARY ASSESSMENT (PA)	81/08/03	85/05/29	*__*	*X*			
	__	SITE INVESTIGATION (SI)	*__/__*	*__/__*	*__*	*__*			
	__	REMEDIAL ACTION (RD)	*__/__*	*__/__*	*__*	*__*	*__*	*__*	*___*
	__	REMOVAL ACTION (RV)	*__/__*	*__/__*	*__*	*__*	*__*	*__*	*___*
ENFORCE. EVENTS	*__*	ENFORCEMENT INVESTIGATION (EI)	*__/__*	*__/__*	*__*	*__*		*__*	
	__	ADMINISTRATIVE ORDER (AO)	*__/__*	*__/__*	*__*	*__*		*__*	
	__	JUDICIAL ACTION (JA)	*__/__*	*__/__*	*__*	*__*		*__*	

EPA

POTENTIAL HAZARDOUS WASTE SITE
TENTATIVE DISPOSITION

REGION	SITE NUMBER
4	SC000000890

File this form in the regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET	
Berkeley County L.F.		
C. CITY	D. STATE	E. ZIP CODE

II. TENTATIVE DISPOSITION

Indicate the recommended action(s) and agency(ies) that should be involved by marking 'X' in the appropriate boxes.

RECOMMENDATION	MARK 'X'	ACTION AGENCY: EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED -- NO HAZARD	X				
B. INVESTIGATIVE ACTION(S) NEEDED *(If yes, complete Section III.)*					
C. REMEDIAL ACTION NEEDED *(If yes, complete Section IV.)*					
D. ENFORCEMENT ACTION NEEDED *(if yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)*					

E. RATIONALE FOR DISPOSITION

P.A. by the State.

F. INDICATE THE ESTIMATED DATE OF FINAL DISPOSITION *(mo., day, & yr.)*	G. IF A CASE DEVELOPMENT PLAN IS NECESSARY, INDICATE THE ESTIMATED DATE ON WHICH THE PLAN WILL BE DEVELOPED *(mo., day, & yr.)*

H. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE *(mo., day, & yr.)*
Ron W. Jorgen	257-2234	8/3/81

III. INVESTIGATIVE ACTIVITY NEEDED

A. IDENTIFY ADDITIONAL INFORMATION NEEDED TO ACHIEVE A FINAL DISPOSITION.

B. PROPOSED INVESTIGATIVE ACTIVITY *(Detailed Information)*

1. METHOD FOR OBTAINING NEEDED ADDITIONAL INFO.	2. SCHEDULED DATE OF ACTION *(mo, day, & yr)*	3. TO BE PERFORMED BY *(EPA, Contractor, State, etc.)*	4. ESTIMATED MANHOURS	5. REMARKS
a. TYPE OF SITE INSPECTION				
(1)				
(2)				
(3)				
b. TYPE OF MONITORING				
(1)				
(2)				
c. TYPE OF SAMPLING				
(1)				
(2)				

Continue On Reverse

Continued From Front

III. INVESTIGATIVE ACTIVITY NEEDED and PART B - PROPOSED INVESTIGATIVE ACTIVITY *(Continued)*

d. TYPE OF LAB ANALYSIS (1)				
(2)				
e. OTHER *(specify)* (1)				
(2)				

C. ELABORATE ON ANY OF THE INFORMATION PROVIDED IN PART B *(on front & above)* AS NEEDED TO IDENTIFY ADDITIONAL INVESTIGATIVE WORK.

D. ESTIMATED MANHOURS BY ACTION AGENCY

1. ACTION AGENCY	2. TOTAL ESTIMATED MANHOURS FOR INVESTIGATIVE ACTIVITIES	1. ACTION AGENCY	2. TOTAL ESTIMATED MANHOURS FOR INVESTIGATIVE ACTIVITIES
a. EPA		b. STATE	
c. EPA CONTRACTOR		d. OTHER *(specify)*	

IV. REMEDIAL ACTIONS

A. SHORT TERM/EMERGENCY STRATEGY *(On Site & Off-Site)*: List all emergency actions needed to bring site under immediate control, e.g., restrict access, provide alternate water supply, etc. See instructions for a list of Key Words for each of the actions to be used in the space below.

1. ACTION	2. EST. START DATE *(mo,day,&yr)*	3. EST. END DATE *(mo,day,&yr)*	4. ACTION AGENCY *(EPA, State, Private Party)*	5. ESTIMATED COST	6. SPECIFY 311 OR OTHER ACTION; INDICATE THE MAGNITUDE OF THE WORK REQUIRED
				$	
				$	
				$	
				$	
				$	
				$	

B. LONG TERM STRATEGY *(On Site & Off-Site)*: List all long term solutions, e.g., excavation, removal, ground water monitoring wells, etc. See instructions for a list of Key Words for each of the actions to be used in the spaces below.

1. ACTION	2. EST. START DATE *(mo,day,&yr)*	3. EST. END DATE *(mo,day,&yr)*	4. ACTION AGENCY *(EPA, State Private Party)*	5. ESTIMATED COST	6. SPECIFY 311 OR OTHER ACTION; INDICATE THE MAGNITUDE OF THE WORK REQUIRED
				$	
				$	
				$	
				$	
				$	
				$	

C. ESTIMATED MANHOURS AND COST BY ACTION AGENCY

1. ACTION AGENCY	2. TOTAL EST. MANHOURS FOR REMEDIAL ACTIVITIES	3. TOTAL EST. COST FOR REMEDIAL ACTIVITIES	1. ACTION AGENCY	2. TOTAL EST. MANHOURS FOR REMEDIAL ACTIVITIES	3. TOTAL EST. COST FOR REMEDIAL ACTIVITIES
a. EPA			b. STATE		
c. PRIVATE PARTIES			d. OTHER *(specify)*		

EPA	POTENTIAL HAZARDOUS WASTE SITE FINAL STRATEGY DETERMINATION	REGION IV	SITE NUMBER SC000000890

File this form in the regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET	
Berkeley County Landfill		
C. CITY	**D. STATE**	**E. ZIP CODE**
Oakley	S.C.	

II. FINAL DETERMINATION

Indicate the recommended action*(s)* and agency*(ies)* that should be involved by marking 'X' in the appropriate boxes.

RECOMMENDATION	MARK 'X'	ACTION AGENCY: EPA	STATE	LOCAL	PRIVATE
A. NO ACTION NEEDED	X				
B. REMEDIAL ACTION NEEDED, BUT NO RESOURCES AVAILABLE *(If yes, complete Section III.)*					
C. REMEDIAL ACTION *(If yes, complete Section IV.)*					
D. ENFORCEMENT ACTION *(If yes, specify in Part E whether the case will be primarily managed by the EPA or the State and what type of enforcement action is anticipated.)*					

E. RATIONALE FOR FINAL STRATEGY DETERMINATION

Preliminary Assessment prepared by S.C. stating that no hazard exists at this site.

F. IF A CASE DEVELOPMENT PLAN HAS BEEN PREPARED, SPECIFY THE DATE PREPARED *(mo., day, & yr.)*	G. IF AN ENFORCEMENT CASE HAS BEEN FILED, SPECIFY THE DATE FILED *(mo., day, & yr.)*

H. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE *(mo., day, & yr.)*
Ron W. Jagner	FTS 257-2234	8/3/81

III. REMEDIAL ACTIONS TO BE TAKEN WHEN RESOURCES BECOME AVAILABLE

List all remedial actions, such as excavation, removal, etc. to be taken as soon as resources become available. See instructions for a list of Key Words for each of the actions to be used in the spaces below. Provide an estimate of the approximate cost of the remedy.

A. REMEDIAL ACTION	B. ESTIMATED COST	C. REMARKS
	$	
	$	
	$	
	$	
	$	
	$	
	$	
	$	
D. TOTAL ESTIMATED COST	$	

Continue On Reverse

Continued From Front

IV. REMEDIAL ACTIONS

A. SHORT TERM/EMERGENCY ACTIONS *(On Site and Off-Site)*: List all emergency actions taken or planned to bring the site under immediate control, e.g., restrict access, provide alternate water supply, etc. See instructions for a list of Key Words for each of the actions to be used in the spaces below.

1. ACTION	2. ACTION START DATE *(mo,day,&yr)*	3. ACTION END DATE *(mo,day,&yr)*	4. ACTION AGENCY *(EPA, State, Private Party)*	5. COST	6. SPECIFY 311 OR OTHER ACTION; INDICATE THE MAGNITUDE OF THE WORK REQUIRED.
				$	
				$	
				$	
				$	
				$	
				$	

B. LONG TERM STRATEGY *(On Site and Off-Site)*: List all long term solutions, e.g., excavation, removal, ground water monitoring wells, etc. See instructions for a list of Key Words for each of the actions to be used in the spaces below.

1. ACTION	2. ACTION START DATE *(mo,day,&yr)*	3. ACTION END DATE *(mo,day,&yr)*	4. ACTION AGENCY *(EPA, State Private Party)*	5. COST	6. SPECIFY 311 OR OTHER ACTION; INDICATE THE MAGNITUDE OF THE WORK REQUIRED.
				$	
				$	
				$	
				$	
				$	
				$	

C. MANHOURS AND COST BY ACTION AGENCY

1. ACTION AGENCY	2. TOTAL MAN-HOURS FOR REMEDIAL ACTIVITIES	3. TOTAL COST FOR REMEDIAL ACTIVITIES
a. EPA		$
b. STATE		$
c. PRIVATE PARTIES		$
d. OTHER *(specify)*:		$

POTENTIAL HAZARDOUS WASTE SITE
IDENTIFICATION AND PRELIMINARY ASSESSMENT

REGION	SITE NUMBER (to be assigned by HQ)
	SC0000800890

NOTE: This form is completed for each potential hazardous waste site to help set priorities for site inspection. The information submitted on this form is based on available records and may be updated on subsequent forms as a result of additional inquiries and specific inspections.

GENERAL INSTRUCTIONS: Complete Sections I and III through X as completely as possible before Section II (*Preliminary Assessment*). File this form in the Regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (*EN-335*); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME: BERKELEY COUNTY LANDFILL

B. STREET (*or other identifier*):

C. CITY: OAKLEY

D. STATE: SC

E. ZIP CODE: 29461

F. COUNTY NAME: BERKELEY

G. OWNER/OPERATOR (*if known*)
1. NAME:
2. TELEPHONE NUMBER:

H. TYPE OF OWNERSHIP
☐ 1. FEDERAL ☐ 2. STATE ☒ 3. COUNTY ☐ 4. MUNICIPAL ☐ 5. PRIVATE ☐ 6. UNKNOWN

I. SITE DESCRIPTION:

J. HOW IDENTIFIED (*i.e., citizen's complaints, OSHA citations, etc.*):

K. DATE IDENTIFIED (*mo., day, & yr.*):

L. PRINCIPAL STATE CONTACT
1. NAME:
2. TELEPHONE NUMBER:

II. PRELIMINARY ASSESSMENT (*complete this section last*)

A. APPARENT SERIOUSNESS OF PROBLEM
☐ 1. HIGH ☐ 2. MEDIUM ☐ 3. LOW ☒ 4. NONE ☐ 5. UNKNOWN

B. RECOMMENDATION
☒ 1. NO ACTION NEEDED (*no hazard*)
☐ 2. IMMEDIATE SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:
b. WILL BE PERFORMED BY:
☐ 3. SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:
b. WILL BE PERFORMED BY:
☐ 4. SITE INSPECTION NEEDED (*low priority*)

C. PREPARER INFORMATION
1. NAME: HARTSILL W. TRUESDALE
2. TELEPHONE NUMBER: (803) 758-5681
3. DATE (*mo., day, & yr.*):

III. SITE INFORMATION

A. SITE STATUS
☒ 1. ACTIVE (*Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.*)
☐ 2. INACTIVE (*Those sites which no longer receive wastes.*)
☐ 3. OTHER (*specify*): (*Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.*)

B. IS GENERATOR ON SITE?
☐ 1. NO ☐ 2. YES (*specify generator's four-digit SIC Code*):

C. AREA OF SITE (*in acres*):

D. IF APPARENT SERIOUSNESS OF SITE IS HIGH, SPECIFY COORDINATES
1. LATITUDE (*deg.–min.–sec.*):
2. LONGITUDE (*deg.–min.–sec.*):

E. ARE THERE BUILDINGS ON THE SITE?
☐ 1. NO ☐ 2. YES (*specify*):

Continue On Reverse

Continued From Front

IV. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

'X'	A. TRANSPORTER	'X'	B. STORER	'X'	C. TREATER	'X'	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION	X	1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS. TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		

E. SPECIFY DETAILS OF SITE ACTIVITIES AS NEEDED

V. WASTE RELATED INFORMATION

A. WASTE TYPE

☐ 1 UNKNOWN ☐ 2 LIQUID ☐ 3. SOLID ☐ 4. SLUDGE ☐ 5. GAS

B. WASTE CHARACTERISTICS

☐ 1 UNKNOWN ☐ 2. CORROSIVE ☐ 3. IGNITABLE ☐ 4 RADIOACTIVE ☐ 5 HIGHLY VOLATILE
☐ 6. TOXIC ☐ 7 REACTIVE ☐ 8 INERT ☐ 9 FLAMMABLE.

☐ 10 OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE
'X' (1) PAINT, PIGMENTS	'X' (1) OILY WASTES	'X' (1) HALOGENATED SOLVENTS	'X' (1) ACIDS	'X' (1) FLYASH	'X' (1) LABORATORY PHARMACEUT.
(2) METALS SLUDGES	(2) OTHER (specify):	(2) NON-HALOGNTD. SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER (specify):	(3) CAUSTICS	(3) MILLING/ MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMLTG. WASTES	(4) MUNICIPAL
(5) OTHER (specify):			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER (specify):
			(6) CYANIDE	(6) OTHER (specify):	
			(7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			(11) OTHER (specify)		

Continue On Page 3

Continued From Page 2

WASTE RELATED INFORMATION (continued)

3. LIST SUBSTANCES OF GREATEST CONCERN WHICH MAY BE ON THE SITE *(place in descending order of hazard)*.

4. ADDITIONAL COMMENTS OR NARRATIVE DESCRIPTION OF SITUATION KNOWN OR REPORTED TO EXIST AT THE SITE.

VI. HAZARD DESCRIPTION

A. TYPE OF HAZARD	B. POTENTIAL HAZARD *(mark 'X')*	C. ALLEGED INCIDENT *(mark 'X')*	D. DATE OF INCIDENT *(mo., day, yr.)*	E. REMARKS
1. NO HAZARD				
2. HUMAN HEALTH				
3. NON-WORKER INJURY/EXPOSURE				
4. WORKER INJURY				
5. CONTAMINATION OF WATER SUPPLY				
6. CONTAMINATION OF FOOD CHAIN				
7. CONTAMINATION OF GROUND WATER				
8. CONTAMINATION OF SURFACE WATER				
9. DAMAGE TO FLORA/FAUNA				
10. FISH KILL				
11. CONTAMINATION OF AIR				
12. NOTICEABLE ODORS				
13. CONTAMINATION OF SOIL				
14. PROPERTY DAMAGE				
15. FIRE OR EXPLOSION				
16. SPILLS/LEAKING CONTAINERS/ RUNOFF/STANDING LIQUIDS				
17. SEWER, STORM DRAIN PROBLEMS				
18. EROSION PROBLEMS				
19. INADEQUATE SECURITY				
20. INCOMPATIBLE WASTES				
21. MIDNIGHT DUMPING				
22. OTHER *(specify)*:				

 Continue On Reverse

Continued From Front

VII. PERMIT INFORMATION

A. INDICATE ALL APPLICABLE PERMITS HELD BY THE SITE.

- [ ] 1. NPDES PERMIT
- [ ] 2. SPCC PLAN
- [ ] 3. STATE PERMIT (specify): _____
- [ ] 4. AIR PERMITS
- [ ] 5. LOCAL PERMIT
- [ ] 6. RCRA TRANSPORTER
- [ ] 7. RCRA STORER
- [ ] 8. RCRA TREATER
- [ ] 9 RCRA DISPOSER
- [ ] 10. OTHER (specify): _____

B. IN COMPLIANCE?

- [ ] 1. YES
- [ ] 2. NO
- [ ] 3. UNKNOWN
- 4. WITH RESPECT TO (list regulation name & number): _____

VIII. PAST REGULATORY ACTIONS

- [ ] A. NONE
- [ ] B. YES (summarize below)

IX. INSPECTION ACTIVITY (past or on-going)

- [ ] A NONE
- [X] B. YES (complete items 1,2,3, & 4 below)

1. TYPE OF ACTIVITY	2 DATE OF PAST ACTION (mo., day, & yr.)	3 PERFORMED BY: (EPA/State)	4. DESCRIPTION
MONTHLY INSPECTIONS		STATE	

X. REMEDIAL ACTIVITY (past or on-going)

- [ ] A. NONE
- [ ] B. YES (complete items 1, 2, 3, & 4 below)

1. TYPE OF ACTIVITY	2. DATE OF PAST ACTION (mo., day, & yr.)	3. PERFORMED BY: (EPA/State)	4. DESCRIPTION

NOTE: Based on the information in Sections III through X, fill out the Preliminary Assessment (*Section II*) information on the first page of this form.

U.S. EPA REGION IV

SDMS

Unscannable Material Target Sheet

DocID: 10079038 Site ID: SCD 981028095

Site Name: BERKELEY CO. LANDFILL

Nature of Material:

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

Other (describe):

Amount of material: #1

Please contact the appropriate Records Center to view the material.

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

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1010 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W737

UG/KG	ANALYTICAL RESULTS
10U	CHLOROMETHANE
10U	BROMOMETHANE
10U	VINYL CHLORIDE
10U	CHLOROETHANE
20U	METHYLENE CHLORIDE
10U	ACETONE
5U	CARBON DISULFIDE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
5U	1,1-DICHLOROETHANE
5U	1,2-DICHLOROETHENE (TOTAL)
5U	CHLOROFORM
5U	1,2-DICHLOROETHANE
15	METHYL ETHYL KETONE
5U	1,1,1-TRICHLOROETHANE
5U	CARBON TETRACHLORIDE
10U	VINYL ACETATE
5U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
5U	1,2-DICHLOROPROPANE
5U	CIS-1,3-DICHLOROPROPENE
5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5U	DIBROMOCHLOROMETHANE
5U	1,1,2-TRICHLOROETHANE
5U	BENZENE
5U	TRANS-1,3-DICHLOROPROPENE
5U	BROMOFORM
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
17J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,1,2,2-TETRACHLOROETHANE
5U	TOLUENE
5U	CHLOROBENZENE
5U	ETHYL BENZENE
5U	STYRENE
5U	TOTAL XYLENES
5	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.

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1010 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W737

UG/KG	ANALYTICAL RESULTS
690U	PHENOL
690U	BIS(2-CHLOROETHYL) ETHER
690U	2-CHLOROPHENOL
690U	1,3-DICHLOROBENZENE
690U	1,4-DICHLOROBENZENE
690U	BENZYL ALCOHOL
690U	1,2-DICHLOROBENZENE
690U	2-METHYLPHENOL
690UR	BIS(2-CHLOROISOPROPYL) ETHER
690U	(3-AND/OR 4-)METHYLPHENOL
690U	N-NITROSODI-N-PROPYLAMINE
690U	HEXACHLOROETHANE
690UJ	NITROBENZENE
690U	ISOPHORONE
690UJ	2-NITROPHENOL
690UR	2,4-DIMETHYLPHENOL
3400U	BENZOIC ACID
690U	BIS(2-CHLOROETHOXY) METHANE
690U	2,4-DICHLOROPHENOL
690UR	1,2,4-TRICHLOROBENZENE
690U	NAPHTHALENE
690U	4-CHLOROANILINE
690U	HEXACHLOROBUTADIENE
690U	4-CHLORO-3-METHYLPHENOL
690U	2-METHYLNAPHTHALENE
690U	HEXACHLOROCYCLOPENTADIENE (HCCP)
690U	2,4,6-TRICHLOROPHENOL
3400U	2,4,5-TRICHLOROPHENOL
690UR	2-CHLORONAPHTHALENE
3400U	2-NITROANILINE
690U	DIMETHYL PHTHALATE
690U	ACENAPHTHYLENE
690U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
3400UR	3-NITROANILINE
690UJ	ACENAPHTHENE
3400U	2,4-DINITROPHENOL
3400U	4-NITROPHENOL
690U	DIBENZOFURAN
690U	2,4-DINITROTOLUENE
690U	DIETHYL PHTHALATE
690U	4-CHLOROPHENYL PHENYL ETHER
690U	FLUORENE
3400U	4-NITROANILINE
3400U	2-METHYL-4,6-DINITROPHENOL
690U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
690U	4-BROMOPHENYL PHENYL ETHER
690U	HEXACHLOROBENZENE (HCB)
3400U	PENTACHLOROPHENOL
690U	PHENANTHRENE
690U	ANTHRACENE
690U	DI-N-BUTYLPHTHALATE
690U	FLUORANTHENE
690U	PYRENE
690U	BENZYL BUTYL PHTHALATE
1400U	3,3'-DICHLOROBENZIDINE
690U	BENZO(A)ANTHRACENE
690U	CHRYSENE
690U	BIS(2-ETHYLHEXYL) PHTHALATE
690U	DI-N-OCTYLPHTHALATE
690U	BENZO(B AND/OR K)FLUORANTHENE
690U	BENZO-A-PYRENE
690U	INDENO (1,2,3-CD) PYRENE
690U	DIBENZO(A,H)ANTHRACENE
690U	BENZO(GHI)PERYLENE
5	PERCENT MOISTURE

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.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
**  PROJECT NO. 90-803   SAMPLE NO. 50590  SAMPLE TYPE: SEDIM      PROG ELEM: NSF   COLLECTED BY: L WARD            **
**  SOURCE: BERKELEY CO LF                                        CITY: OAKLEY             ST: SC                  **
**  STATION ID: SS-01                                             COLLECTION START: 09/19/90  1010  STOP: 00/00/00  **
**  CASE.NO.: 14889          SAS NO.:                             D. NO.: W737             MD NO: W737             **
**                                                                                                                  **
*** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * ***
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ANALYTICAL RESULTS UG/KG

4000J   4 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.
11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-01
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1010 STOP: 00/00/00
D. NUMBER: W737

UG/KG	ANALYTICAL RESULTS
8.4U	ALPHA-BHC
8.4U	BETA-BHC
8.4U	DELTA-BHC
8.4U	GAMMA-BHC (LINDANE)
8.4U	HEPTACHLOR
8.4U	ALDRIN
8.4U	HEPTACHLOR EPOXIDE
8.4U	ENDOSULFAN I (ALPHA)
17U	DIELDRIN
17U	4,4'-DDE (P,P'-DDE)
17U	ENDRIN
17U	ENDOSULFAN II (BETA)
17U	4,4'-DDD (P,P'-DDD)
17U	ENDOSULFAN SULFATE
17U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
84U	METHOXYCHLOR
17U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
84U	GAMMA-CHLORDANE /2
84U	ALPHA-CHLORDANE /2
170U	TOXAPHENE
84U	PCB-1016 (AROCLOR 1016)
84U	PCB-1221 (AROCLOR 1221)
84U	PCB-1232 (AROCLOR 1232)
84U	PCB-1242 (AROCLOR 1242)
84U	PCB-1248 (AROCLOR 1248)
170U	PCB-1254 (AROCLOR 1254)
170U	PCB-1260 (AROCLOR 1260)
5	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1745 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W753

UG/KG	ANALYTICAL RESULTS
15U	CHLOROMETHANE
15U	BROMOMETHANE
15U	VINYL CHLORIDE
15U	CHLOROETHANE
20U	METHYLENE CHLORIDE
15U	ACETONE
8U	CARBON DISULFIDE
8U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
8U	1,1-DICHLOROETHANE
8U	1,2-DICHLOROETHENE (TOTAL)
8U	CHLOROFORM
8U	1,2-DICHLOROETHANE
15U	METHYL ETHYL KETONE
8U	1,1,1-TRICHLOROETHANE
8U	CARBON TETRACHLORIDE
15U	VINYL ACETATE
8U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
8U	1,2-DICHLOROPROPANE
8U	CIS-1,3-DICHLOROPROPENE
8U	TRICHLOROETHENE(TRICHLOROETHYLENE)
8U	DIBROMOCHLOROMETHANE
8U	1,1,2-TRICHLOROETHANE
8U	BENZENE
8U	TRANS-1,3-DICHLOROPROPENE
8U	BROMOFORM
15U	METHYL ISOBUTYL KETONE
15U	METHYL BUTYL KETONE
8U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
8U	1,1,2,2-TETRACHLOROETHANE
8U	TOLUENE
8U	CHLOROBENZENE
8U	ETHYL BENZENE
8U	STYRENE
8U	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.

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1745 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W753

UG/KG	ANALYTICAL RESULTS
990U	PHENOL
990U	BIS(2-CHLOROETHYL) ETHER
990U	2-CHLOROPHENOL
990U	1,3-DICHLOROBENZENE
990U	1,4-DICHLOROBENZENE
990U	BENZYL ALCOHOL
990U	1,2-DICHLOROBENZENE
990U	2-METHYLPHENOL
990UR	BIS(2-CHLOROISOPROPYL) ETHER
990U	(3-AND/OR 4-)METHYLPHENOL
990U	N-NITROSODI-N-PROPYLAMINE
990U	HEXACHLOROETHANE
990UJ	NITROBENZENE
990U	ISOPHORONE
990UJ	2-NITROPHENOL
990UR	2,4-DIMETHYLPHENOL
4800U	BENZOIC ACID
990U	BIS(2-CHLOROETHOXY) METHANE
990U	2,4-DICHLOROPHENOL
990UR	1,2,4-TRICHLOROBENZENE
990U	NAPHTHALENE
990U	4-CHLOROANILINE
990U	HEXACHLOROBUTADIENE
990U	4-CHLORO-3-METHYLPHENOL
990U	2-METHYLNAPHTHALENE
990U	HEXACHLOROCYCLOPENTADIENE (HCCP)
990U	2,4,6-TRICHLOROPHENOL
4800U	2,4,5-TRICHLOROPHENOL
990UR	2-CHLORONAPHTHALENE
4800U	2-NITROANILINE
990U	DIMETHYL PHTHALATE
990U	ACENAPHTHYLENE
990U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
4800UR	3-NITROANILINE
990UJ	ACENAPHTHENE
4800U	2,4-DINITROPHENOL
4800U	4-NITROPHENOL
990U	DIBENZOFURAN
990U	2,4-DINITROTOLUENE
990U	DIETHYL PHTHALATE
990U	4-CHLOROPHENYL PHENYL ETHER
990U	FLUORENE
4800U	4-NITROANILINE
4800U	2-METHYL-4,6-DINITROPHENOL
990U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
990U	4-BROMOPHENYL PHENYL ETHER
990U	HEXACHLOROBENZENE (HCB)
4800U	PENTACHLOROPHENOL
990U	PHENANTHRENE
990U	ANTHRACENE
990U	DI-N-BUTYLPHTHALATE
990U	FLUORANTHENE
990U	PYRENE
990U	BENZYL BUTYL PHTHALATE
2000U	3,3'-DICHLOROBENZIDINE
990U	BENZO(A)ANTHRACENE
990U	CHRYSENE
990U	BIS(2-ETHYLHEXYL) PHTHALATE
990U	DI-N-OCTYLPHTHALATE
990U	BENZO(B AND/OR K)FLUORANTHENE
990U	BENZO-A-PYRENE
990U	INDENO (1,2,3-CD) PYRENE
990U	DIBENZO(A,H)ANTHRACENE
990U	BENZO(GHI)PERYLENE
34	PERCENT MOISTURE

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.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-02 COLLECTION START: 09/19/90 1745 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W753 MD NO: W753

ANALYTICAL RESULTS UG/KG

5000J 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.

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-02 COLLECTION START: 09/19/90 1745 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W753

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
12U	ALPHA-BHC	120U	METHOXYCHLOR
12U	BETA-BHC	24U	ENDRIN KETONE
12U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
12U	GAMMA-BHC (LINDANE)	120U	GAMMA-CHLORDANE /2
12U	HEPTACHLOR	120U	ALPHA-CHLORDANE /2
12U	ALDRIN	240U	TOXAPHENE
12U	HEPTACHLOR EPOXIDE	120U	PCB-1016 (AROCLOR 1016)
12U	ENDOSULFAN I (ALPHA)	120U	PCB-1221 (AROCLOR 1221)
24U	DIELDRIN	120U	PCB-1232 (AROCLOR 1232)
24U	4,4'-DDE (P,P'-DDE)	120U	PCB-1242 (AROCLOR 1242)
24U	ENDRIN	120U	PCB-1248 (AROCLOR 1248)
24U	ENDOSULFAN II (BETA)	240U	PCB-1254 (AROCLOR 1254)
24U	4,4'-DDD (P,P'-DDD)	240U	PCB-1260 (AROCLOR 1260)
24U	ENDOSULFAN SULFATE	34	PERCENT MOISTURE
24U	4,4'-DDT (P,P'-DDT)		

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.

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1455 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W746

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
30U	METHYLENE CHLORIDE
12U	ACETONE
6U	CARBON DISULFIDE
6U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
6U	1,1-DICHLOROETHANE
6U	1,2-DICHLOROETHENE (TOTAL)
6U	CHLOROFORM
6U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
6U	1,1,1-TRICHLOROETHANE
6U	CARBON TETRACHLORIDE
12U	VINYL ACETATE
6U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
6U	1,2-DICHLOROPROPANE
6U	CIS-1,3-DICHLOROPROPENE
6U	TRICHLOROETHENE(TRICHLOROETHYLENE)
6U	DIBROMOCHLOROMETHANE
6U	1,1,2-TRICHLOROETHANE
6U	BENZENE
6U	TRANS-1,3-DICHLOROPROPENE
6U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
68J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
6U	1,1,2,2-TETRACHLOROETHANE
6U	TOLUENE
6U	CHLOROBENZENE
6U	ETHYL BENZENE
6U	STYRENE
6U	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.
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1455 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W746

UG/KG	ANALYTICAL RESULTS
780U	PHENOL
780U	BIS(2-CHLOROETHYL) ETHER
780U	2-CHLOROPHENOL
780U	1,3-DICHLOROBENZENE
780U	1,4-DICHLOROBENZENE
780U	BENZYL ALCOHOL
780U	1,2-DICHLOROBENZENE
780U	2-METHYLPHENOL
780UR	BIS(2-CHLOROISOPROPYL) ETHER
780U	(3-AND/OR 4-)METHYLPHENOL
780U	N-NITROSODI-N-PROPYLAMINE
780U	HEXACHLOROETHANE
780UJ	NITROBENZENE
780U	ISOPHORONE
780UJ	2-NITROPHENOL
780UR	2,4-DIMETHYLPHENOL
3800U	BENZOIC ACID
780U	BIS(2-CHLOROETHOXY) METHANE
780U	2,4-DICHLOROPHENOL
780UR	1,2,4-TRICHLOROBENZENE
780U	NAPHTHALENE
780U	4-CHLOROANILINE
780U	HEXACHLOROBUTADIENE
780U	4-CHLORO-3-METHYLPHENOL
780U	2-METHYLNAPHTHALENE
780U	HEXACHLOROCYCLOPENTADIENE (HCCP)
780U	2,4,6-TRICHLOROPHENOL
3800U	2,4,5-TRICHLOROPHENOL
780UR	2-CHLORONAPHTHALENE
3800U	2-NITROANILINE
780U	DIMETHYL PHTHALATE
780U	ACENAPHTHYLENE
780U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
3800UR	3-NITROANILINE
780UJ	ACENAPHTHENE
3800U	2,4-DINITROPHENOL
3800U	4-NITROPHENOL
780U	DIBENZOFURAN
780U	2,4-DINITROTOLUENE
780U	DIETHYL PHTHALATE
780U	4-CHLOROPHENYL PHENYL ETHER
780U	FLUORENE
3800U	4-NITROANILINE
3800U	2-METHYL-4,6-DINITROPHENOL
780U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
780U	4-BROMOPHENYL PHENYL ETHER
780U	HEXACHLOROBENZENE (HCB)
3800U	PENTACHLOROPHENOL
780U	PHENANTHRENE
780U	ANTHRACENE
780U	DI-N-BUTYLPHTHALATE
780U	FLUORANTHENE
780U	PYRENE
780U	BENZYL BUTYL PHTHALATE
1600U	3,3'-DICHLOROBENZIDINE
780U	BENZO(A)ANTHRACENE
780U	CHRYSENE
780U	BIS(2-ETHYLHEXYL) PHTHALATE
780U	DI-N-OCTYLPHTHALATE
780U	BENZO(B AND/OR K)FLUORANTHENE
780U	BENZO-A-PYRENE
780U	INDENO (1,2,3-CD) PYRENE
780U	DIBENZO(A,H)ANTHRACENE
780U	BENZO(GHI)PERYLENE
15	PERCENT MOISTURE

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. 11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY ST: SC
STATION ID: SS-04	COLLECTION START: 09/19/90 1455 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:	D. NO.: W746 MD NO: W746

ANALYTICAL RESULTS UG/KG

3000J 4 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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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/15/90

PESTICIDES/PCB'S DATA REPORT

*** ***

** PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SS-04 COLLECTION START: 09/19/90 1455 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W746 **

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UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
9.4U	ALPHA-BHC	94U	METHOXYCHLOR
9.4U	BETA-BHC	19U	ENDRIN KETONE
9.4U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
9.4U	GAMMA-BHC (LINDANE)	94U	GAMMA-CHLORDANE /2
9.4U	HEPTACHLOR	94U	ALPHA-CHLORDANE /2
9.4U	ALDRIN	190U	TOXAPHENE
9.4U	HEPTACHLOR EPOXIDE	94U	PCB-1016 (AROCLOR 1016)
9.4U	ENDOSULFAN I (ALPHA)	94U	PCB-1221 (AROCLOR 1221)
19U	DIELDRIN	94U	PCB-1232 (AROCLOR 1232)
19U	4,4'-DDE (P,P'-DDE)	94U	PCB-1242 (AROCLOR 1242)
19U	ENDRIN	94U	PCB-1248 (AROCLOR 1248)
19U	ENDOSULFAN II (BETA)	190U	PCB-1254 (AROCLOR 1254)
19U	4,4'-DDD (P,P'-DDD)	190U	PCB-1260 (AROCLOR 1260)
19U	ENDOSULFAN SULFATE	15	PERCENT MOISTURE
19U	4,4'-DDT (P,P'-DDT)		

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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1450 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W749

UG/KG	ANALYTICAL RESULTS
13U	CHLOROMETHANE
13U	BROMOMETHANE
13U	VINYL CHLORIDE
13U	CHLOROETHANE
20U	METHYLENE CHLORIDE
13U	ACETONE
7U	CARBON DISULFIDE
7U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
7U	1,1-DICHLOROETHANE
7U	1,2-DICHLOROETHENE (TOTAL)
7U	CHLOROFORM
7U	1,2-DICHLOROETHANE
13U	METHYL ETHYL KETONE
7U	1,1,1-TRICHLOROETHANE
7U	CARBON TETRACHLORIDE
13U	VINYL ACETATE
7U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
7U	1,2-DICHLOROPROPANE
7U	CIS-1,3-DICHLOROPROPENE
7U	TRICHLOROETHENE(TRICHLOROETHYLENE)
7U	DIBROMOCHLOROMETHANE
7U	1,1,2-TRICHLOROETHANE
7U	BENZENE
7U	TRANS-1,3-DICHLOROPROPENE
7U	BROMOFORM
13U	METHYL ISOBUTYL KETONE
13U	METHYL BUTYL KETONE
41J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
7U	1,1,2,2-TETRACHLOROETHANE
7U	TOLUENE
7U	CHLOROBENZENE
7U	ETHYL BENZENE
7U	STYRENE
7U	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.

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1450 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W749

UG/KG	ANALYTICAL RESULTS
880U	PHENOL
880U	BIS(2-CHLOROETHYL) ETHER
880U	2-CHLOROPHENOL
880U	1,3-DICHLOROBENZENE
880U	1,4-DICHLOROBENZENE
880U	BENZYL ALCOHOL
880U	1,2-DICHLOROBENZENE
880U	2-METHYLPHENOL
880UR	BIS(2-CHLOROISOPROPYL) ETHER
880U	(3-AND/OR 4-)METHYLPHENOL
880U	N-NITROSODI-N-PROPYLAMINE
880U	HEXACHLOROETHANE
880UJ	NITROBENZENE
880U	ISOPHORONE
880UJ	2-NITROPHENOL
880UR	2,4-DIMETHYLPHENOL
4300U	BENZOIC ACID
880U	BIS(2-CHLOROETHOXY) METHANE
880U	2,4-DICHLOROPHENOL
880UR	1,2,4-TRICHLOROBENZENE
880U	NAPHTHALENE
880U	4-CHLOROANILINE
880U	HEXACHLOROBUTADIENE
880U	4-CHLORO-3-METHYLPHENOL
880U	2-METHYLNAPHTHALENE
880U	HEXACHLOROCYCLOPENTADIENE (HCCP)
880U	2,4,6-TRICHLOROPHENOL
4300U	2,4,5-TRICHLOROPHENOL
880UR	2-CHLORONAPHTHALENE
4300U	2-NITROANILINE
880U	DIMETHYL PHTHALATE
880U	ACENAPHTHYLENE
880U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
4300UR	3-NITROANILINE
880UJ	ACENAPHTHENE
4300U	2,4-DINITROPHENOL
4300U	4-NITROPHENOL
880U	DIBENZOFURAN
880U	2,4-DINITROTOLUENE
880U	DIETHYL PHTHALATE
880U	4-CHLOROPHENYL PHENYL ETHER
880U	FLUORENE
4300U	4-NITROANILINE
4300U	2-METHYL-4,6-DINITROPHENOL
880U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
880U	4-BROMOPHENYL PHENYL ETHER
880U	HEXACHLOROBENZENE (HCB)
4300U	PENTACHLOROPHENOL
880U	PHENANTHRENE
880U	ANTHRACENE
880U	DI-N-BUTYLPHTHALATE
880U	FLUORANTHENE
880U	PYRENE
880U	BENZYL BUTYL PHTHALATE
1800U	3,3'-DICHLOROBENZIDINE
880U	BENZO(A)ANTHRACENE
880U	CHRYSENE
880U	BIS(2-ETHYLHEXYL) PHTHALATE
880U	DI-N-OCTYLPHTHALATE
880U	BENZO(B AND/OR K)FLUORANTHENE
880U	BENZO-A-PYRENE
880U	INDENO (1,2,3-CD) PYRENE
880U	DIBENZO(A,H)ANTHRACENE
880U	BENZO(GHI)PERYLENE
25	PERCENT MOISTURE

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.

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SS-05 COLLECTION START: 09/19/90 1450 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W749 MD NO: W749 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

20000J 12 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.

PESTICIDES/PCB'S DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-05
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1450 STOP: 00/00/00
D. NUMBER: W749

UG/KG	ANALYTICAL RESULTS
11U	ALPHA-BHC
11U	BETA-BHC
11U	DELTA-BHC
11U	GAMMA-BHC (LINDANE)
11U	HEPTACHLOR
11U	ALDRIN
11U	HEPTACHLOR EPOXIDE
11U	ENDOSULFAN I (ALPHA)
21U	DIELDRIN
21U	4,4'-DDE (P,P'-DDE)
21U	ENDRIN
21U	ENDOSULFAN II (BETA)
21U	4,4'-DDD (P,P'-DDD)
21U	ENDOSULFAN SULFATE
21U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
110U	METHOXYCHLOR
21U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
110U	GAMMA-CHLORDANE /2
110U	ALPHA-CHLORDANE /2
210U	TOXAPHENE
110U	PCB-1016 (AROCLOR 1016)
110U	PCB-1221 (AROCLOR 1221)
110U	PCB-1232 (AROCLOR 1232)
110U	PCB-1242 (AROCLOR 1242)
110U	PCB-1248 (AROCLOR 1248)
210U	PCB-1254 (AROCLOR 1254)
210U	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1020 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W738

UG/KG	ANALYTICAL RESULTS
12U	CHLOROMETHANE
12U	BROMOMETHANE
12U	VINYL CHLORIDE
12U	CHLOROETHANE
10U	METHYLENE CHLORIDE
50U	ACETONE
6U	CARBON DISULFIDE
6U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
6U	1,1-DICHLOROETHANE
6U	1,2-DICHLOROETHENE (TOTAL)
6U	CHLOROFORM
6U	1,2-DICHLOROETHANE
12U	METHYL ETHYL KETONE
6U	1,1,1-TRICHLOROETHANE
6U	CARBON TETRACHLORIDE
12U	VINYL ACETATE
6U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
6U	1,2-DICHLOROPROPANE
6U	CIS-1,3-DICHLOROPROPENE
6U	TRICHLOROETHENE(TRICHLOROETHYLENE)
6U	DIBROMOCHLOROMETHANE
6U	1,1,2-TRICHLOROETHANE
6U	BENZENE
6U	TRANS-1,3-DICHLOROPROPENE
6U	BROMOFORM
12U	METHYL ISOBUTYL KETONE
12U	METHYL BUTYL KETONE
6U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
6U	1,1,2,2-TETRACHLOROETHANE
6U	TOLUENE
6U	CHLOROBENZENE
6U	ETHYL BENZENE
6U	STYRENE
6U	TOTAL XYLENES
17	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1020 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W738

UG/KG	ANALYTICAL RESULTS
790U	PHENOL
790U	BIS(2-CHLOROETHYL) ETHER
790U	2-CHLOROPHENOL
790U	1,3-DICHLOROBENZENE
790U	1,4-DICHLOROBENZENE
790U	BENZYL ALCOHOL
790U	1,2-DICHLOROBENZENE
790U	2-METHYLPHENOL
790UR	BIS(2-CHLOROISOPROPYL) ETHER
790U	(3-AND/OR 4-)METHYLPHENOL
790U	N-NITROSODI-N-PROPYLAMINE
790U	HEXACHLOROETHANE
790UJ	NITROBENZENE
790U	ISOPHORONE
790UJ	2-NITROPHENOL
790UR	2,4-DIMETHYLPHENOL
3800U	BENZOIC ACID
790U	BIS(2-CHLOROETHOXY) METHANE
790U	2,4-DICHLOROPHENOL
790UR	1,2,4-TRICHLOROBENZENE
790U	NAPHTHALENE
790U	4-CHLOROANILINE
790U	HEXACHLOROBUTADIENE
790U	4-CHLORO-3-METHYLPHENOL
790U	2-METHYLNAPHTHALENE
790U	HEXACHLOROCYCLOPENTADIENE (HCCP)
790U	2,4,6-TRICHLOROPHENOL
3800U	2,4,5-TRICHLOROPHENOL
790UR	2-CHLORONAPHTHALENE
3800U	2-NITROANILINE
790U	DIMETHYL PHTHALATE
790U	ACENAPHTHYLENE
790U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
3800UR	3-NITROANILINE
790UJ	ACENAPHTHENE
3800U	2,4-DINITROPHENOL
3800U	4-NITROPHENOL
790U	DIBENZOFURAN
790U	2,4-DINITROTOLUENE
790U	DIETHYL PHTHALATE
790U	4-CHLOROPHENYL PHENYL ETHER
790U	FLUORENE
3800U	4-NITROANILINE
3800U	2-METHYL-4,6-DINITROPHENOL
790U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
790U	4-BROMOPHENYL PHENYL ETHER
790U	HEXACHLOROBENZENE (HCB)
3800U	PENTACHLOROPHENOL
790U	PHENANTHRENE
790U	ANTHRACENE
790U	DI-N-BUTYLPHTHALATE
790U	FLUORANTHENE
790U	PYRENE
790U	BENZYL BUTYL PHTHALATE
1600U	3,3'-DICHLOROBENZIDINE
790U	BENZO(A)ANTHRACENE
790U	CHRYSENE
790U	BIS(2-ETHYLHEXYL) PHTHALATE
790U	DI-N-OCTYLPHTHALATE
790U	BENZO(B AND/OR K)FLUORANTHENE
790U	BENZO-A-PYRENE
790U	INDENO (1,2,3-CD) PYRENE
790U	DIBENZO(A,H)ANTHRACENE
790U	BENZO(GHI)PERYLENE
17	PERCENT MOISTURE

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.

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SB-01 COLLECTION START: 09/19/90 1020 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W738 MD NO: W738 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

400J 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.

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-01
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1020 STOP: 00/00/00
D. NUMBER: W738

UG/KG	ANALYTICAL RESULTS
9.7UR	ALPHA-BHC
9.7UR	BETA-BHC
9.7UR	DELTA-BHC
9.7UR	GAMMA-BHC (LINDANE)
9.7UR	HEPTACHLOR
9.7UR	ALDRIN
9.7UR	HEPTACHLOR EPOXIDE
9.7UR	ENDOSULFAN I (ALPHA)
19UR	DIELDRIN
19UR	4,4'-DDE (P,P'-DDE)
19UR	ENDRIN
19UR	ENDOSULFAN II (BETA)
19UR	4,4'-DDD (P,P'-DDD)
19UR	ENDOSULFAN SULFATE
19UR	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
97UR	METHOXYCHLOR
19UR	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
97UR	GAMMA-CHLORDANE /2
97UR	ALPHA-CHLORDANE /2
190UR	TOXAPHENE
97UR	PCB-1016 (AROCLOR 1016)
97UR	PCB-1221 (AROCLOR 1221)
97UR	PCB-1232 (AROCLOR 1232)
97UR	PCB-1242 (AROCLOR 1242)
97UR	PCB-1248 (AROCLOR 1248)
190UR	PCB-1254 (AROCLOR 1254)
190UR	PCB-1260 (AROCLOR 1260)
17	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50609 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1815 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W754

UG/KG	ANALYTICAL RESULTS
14U	CHLOROMETHANE
14U	BROMOMETHANE
14U	VINYL CHLORIDE
14U	CHLOROETHANE
20U	METHYLENE CHLORIDE
40U	ACETONE
7U	CARBON DISULFIDE
7U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
7U	1,1-DICHLOROETHANE
7U	1,2-DICHLOROETHENE (TOTAL)
7U	CHLOROFORM
7U	1,2-DICHLOROETHANE
14U	METHYL ETHYL KETONE
7U	1,1,1-TRICHLOROETHANE
7U	CARBON TETRACHLORIDE
14U	VINYL ACETATE
7U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
7U	1,2-DICHLOROPROPANE
7U	CIS-1,3-DICHLOROPROPENE
7U	TRICHLOROETHENE(TRICHLOROETHYLENE)
7U	DIBROMOCHLOROMETHANE
7U	1,1,2-TRICHLOROETHANE
7U	BENZENE
7U	TRANS-1,3-DICHLOROPROPENE
7U	BROMOFORM
14U	METHYL ISOBUTYL KETONE
14U	METHYL BUTYL KETONE
10	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
7U	1,1,2,2-TETRACHLOROETHANE
7	TOLUENE
7U	CHLOROBENZENE
7U	ETHYL BENZENE
7U	STYRENE
7U	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.

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50609 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1815 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W754

UG/KG	ANALYTICAL RESULTS
950U	PHENOL
950U	BIS(2-CHLOROETHYL) ETHER
950U	2-CHLOROPHENOL
950U	1,3-DICHLOROBENZENE
950U	1,4-DICHLOROBENZENE
950U	BENZYL ALCOHOL
950U	1,2-DICHLOROBENZENE
950U	2-METHYLPHENOL
950UR	BIS(2-CHLOROISOPROPYL) ETHER
950U	(3-AND/OR 4-)METHYLPHENOL
950U	N-NITROSODI-N-PROPYLAMINE
950U	HEXACHLOROETHANE
950UJ	NITROBENZENE
950U	ISOPHORONE
950UJ	2-NITROPHENOL
950UR	2,4-DIMETHYLPHENOL
4600U	BENZOIC ACID
950U	BIS(2-CHLOROETHOXY) METHANE
950U	2,4-DICHLOROPHENOL
950UR	1,2,4-TRICHLOROBENZENE
950U	NAPHTHALENE
950U	4-CHLOROANILINE
950U	HEXACHLOROBUTADIENE
950U	4-CHLORO-3-METHYLPHENOL
950U	2-METHYLNAPHTHALENE
950U	HEXACHLOROCYCLOPENTADIENE (HCCP)
950U	2,4,6-TRICHLOROPHENOL
4600U	2,4,5-TRICHLOROPHENOL
950UR	2-CHLORONAPHTHALENE
4600U	2-NITROANILINE
950U	DIMETHYL PHTHALATE
950U	ACENAPHTHYLENE
950U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
4600UR	3-NITROANILINE
950UJ	ACENAPHTHENE
4600U	2,4-DINITROPHENOL
4600U	4-NITROPHENOL
950U	DIBENZOFURAN
950U	2,4-DINITROTOLUENE
950U	DIETHYL PHTHALATE
950U	4-CHLOROPHENYL PHENYL ETHER
950U	FLUORENE
4600U	4-NITROANILINE
4600U	2-METHYL-4,6-DINITROPHENOL
950U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
950U	4-BROMOPHENYL PHENYL ETHER
950U	HEXACHLOROBENZENE (HCB)
4600U	PENTACHLOROPHENOL
950U	PHENANTHRENE
950U	ANTHRACENE
950U	DI-N-BUTYLPHTHALATE
950U	FLUORANTHENE
950U	PYRENE
950U	BENZYL BUTYL PHTHALATE
1900U	3,3'-DICHLOROBENZIDINE
950U	BENZO(A)ANTHRACENE
950U	CHRYSENE
950U	BIS(2-ETHYLHEXYL) PHTHALATE
950U	DI-N-OCTYLPHTHALATE
950U	BENZO(B AND/OR K)FLUORANTHENE
950U	BENZO-A-PYRENE
950U	INDENO (1,2,3-CD) PYRENE
950U	DIBENZO(A,H)ANTHRACENE
950U	BENZO(GHI)PERYLENE
30	PERCENT MOISTURE

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.

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50609   SAMPLE TYPE: SEDIM   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: SB-02   COLLECTION START: 09/19/90 1815   STOP: 00/00/00
CASE NUMBER: 14889   SAS NUMBER: D. NUMBER: W754

UG/KG	ANALYTICAL RESULTS
11U	ALPHA-BHC
11U	BETA-BHC
11U	DELTA-BHC
11U	GAMMA-BHC (LINDANE)
11U	HEPTACHLOR
11U	ALDRIN
11U	HEPTACHLOR EPOXIDE
11U	ENDOSULFAN I (ALPHA)
23U	DIELDRIN
23U	4,4'-DDE (P,P'-DDE)
23U	ENDRIN
23U	ENDOSULFAN II (BETA)
23U	4,4'-DDD (P,P'-DDD)
23U	ENDOSULFAN SULFATE
23U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
110U	METHOXYCHLOR
23U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
110U	GAMMA-CHLORDANE /2
110U	ALPHA-CHLORDANE /2
230U	TOXAPHENE
110U	PCB-1016 (AROCLOR 1016)
110U	PCB-1221 (AROCLOR 1221)
110U	PCB-1232 (AROCLOR 1232)
110U	PCB-1242 (AROCLOR 1242)
110U	PCB-1248 (AROCLOR 1248)
230U	PCB-1254 (AROCLOR 1254)
230U	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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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1520 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W747

UG/KG	ANALYTICAL RESULTS
14U	CHLOROMETHANE
14U	BROMOMETHANE
14U	VINYL CHLORIDE
14U	CHLOROETHANE
20U	METHYLENE CHLORIDE
70U	ACETONE
21	CARBON DISULFIDE
7U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
7U	1,1-DICHLOROETHANE
7U	1,2-DICHLOROETHENE (TOTAL)
7U	CHLOROFORM
7U	1,2-DICHLOROETHANE
30U	METHYL ETHYL KETONE
7U	1,1,1-TRICHLOROETHANE
7U	CARBON TETRACHLORIDE
14U	VINYL ACETATE
7U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
7U	1,2-DICHLOROPROPANE
7U	CIS-1,3-DICHLOROPROPENE
7U	TRICHLOROETHENE(TRICHLOROETHYLENE)
7U	DIBROMOCHLOROMETHANE
7U	1,1,2-TRICHLOROETHANE
7U	BENZENE
7U	TRANS-1,3-DICHLOROPROPENE
7U	BROMOFORM
14U	METHYL ISOBUTYL KETONE
14U	METHYL BUTYL KETONE
8	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
7U	1,1,2,2-TETRACHLOROETHANE
4J	TOLUENE
7U	CHLOROBENZENE
7U	ETHYL BENZENE
7U	STYRENE
7U	TOTAL XYLENES
29	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.

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1520 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W747

UG/KG	ANALYTICAL RESULTS
930U	PHENOL
930U	BIS(2-CHLOROETHYL) ETHER
930U	2-CHLOROPHENOL
930U	1,3-DICHLOROBENZENE
930U	1,4-DICHLOROBENZENE
930U	BENZYL ALCOHOL
930U	1,2-DICHLOROBENZENE
930U	2-METHYLPHENOL
930UR	BIS(2-CHLOROISOPROPYL) ETHER
930U	(3-AND/OR 4-)METHYLPHENOL
930U	N-NITROSODI-N-PROPYLAMINE
930U	HEXACHLOROETHANE
930UJ	NITROBENZENE
930U	ISOPHORONE
930UJ	2-NITROPHENOL
930UR	2,4-DIMETHYLPHENOL
4500U	BENZOIC ACID
930U	BIS(2-CHLOROETHOXY) METHANE
930U	2,4-DICHLOROPHENOL
930UR	1,2,4-TRICHLOROBENZENE
930U	NAPHTHALENE
930U	4-CHLOROANILINE
930U	HEXACHLOROBUTADIENE
930U	4-CHLORO-3-METHYLPHENOL
930U	2-METHYLNAPHTHALENE
930U	HEXACHLOROCYCLOPENTADIENE (HCCP)
930U	2,4,6-TRICHLOROPHENOL
4500U	2,4,5-TRICHLOROPHENOL
930UR	2-CHLORONAPHTHALENE
4500U	2-NITROANILINE
930U	DIMETHYL PHTHALATE
930U	ACENAPHTHYLENE
930U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
4500UR	3-NITROANILINE
930UJ	ACENAPHTHENE
4500U	2,4-DINITROPHENOL
4500U	4-NITROPHENOL
930U	DIBENZOFURAN
930U	2,4-DINITROTOLUENE
930U	DIETHYL PHTHALATE
930U	4-CHLOROPHENYL PHENYL ETHER
930U	FLUORENE
4500U	4-NITROANILINE
4500U	2-METHYL-4,6-DINITROPHENOL
930U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
930U	4-BROMOPHENYL PHENYL ETHER
930U	HEXACHLOROBENZENE (HCB)
4500U	PENTACHLOROPHENOL
930U	PHENANTHRENE
930U	ANTHRACENE
310J	DI-N-BUTYLPHTHALATE
930U	FLUORANTHENE
930U	PYRENE
930U	BENZYL BUTYL PHTHALATE
1900U	3,3'-DICHLOROBENZIDINE
930U	BENZO(A)ANTHRACENE
930U	CHRYSENE
930U	BIS(2-ETHYLHEXYL) PHTHALATE
930U	DI-N-OCTYLPHTHALATE
930U	BENZO(B AND/OR K)FLUORANTHENE
930U	BENZO-A-PYRENE
930U	INDENO (1,2,3-CD) PYRENE
930U	DIBENZO(A,H)ANTHRACENE
930U	BENZO(GHI)PERYLENE
29	PERCENT MOISTURE

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.

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50600   SAMPLE TYPE: SEDIM   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: SB-04   COLLECTION START: 09/19/90 1520   STOP: 00/00/00
CASE.NO.: 14889   SAS NO.:   D. NO.: W747   MD NO: W747

ANALYTICAL RESULTS UG/KG

7000J   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
*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.

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-04
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1520 STOP: 00/00/00
D. NUMBER: W747

UG/KG	ANALYTICAL RESULTS
11U	ALPHA-BHC
11U	BETA-BHC
11U	DELTA-BHC
11U	GAMMA-BHC (LINDANE)
11U	HEPTACHLOR
11U	ALDRIN
11U	HEPTACHLOR EPOXIDE
11U	ENDOSULFAN I (ALPHA)
22U	DIELDRIN
22U	4,4'-DDE (P,P'-DDE)
22U	ENDRIN
22U	ENDOSULFAN II (BETA)
22U	4,4'-DDD (P,P'-DDD)
22U	ENDOSULFAN SULFATE
22U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
110U	METHOXYCHLOR
22U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
110U	GAMMA-CHLORDANE /2
110U	ALPHA-CHLORDANE /2
220U	TOXAPHENE
110U	PCB-1016 (AROCLOR 1016)
110U	PCB-1221 (AROCLOR 1221)
110U	PCB-1232 (AROCLOR 1232)
110U	PCB-1242 (AROCLOR 1242)
110U	PCB-1248 (AROCLOR 1248)
220U	PCB-1254 (AROCLOR 1254)
220U	PCB-1260 (AROCLOR 1260)
29	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.

11/15/90

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1515 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W750

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
20U	CHLOROMETHANE	10U	1,2-DICHLOROPROPANE
20U	BROMOMETHANE	10U	CIS-1,3-DICHLOROPROPENE
20U	VINYL CHLORIDE	10U	TRICHLOROETHENE(TRICHLOROETHYLENE)
20U	CHLOROETHANE	10U	DIBROMOCHLOROMETHANE
20U	METHYLENE CHLORIDE	10U	1,1,2-TRICHLOROETHANE
20U	ACETONE	10U	BENZENE
10U	CARBON DISULFIDE	10U	TRANS-1,3-DICHLOROPROPENE
10U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	10U	BROMOFORM
10U	1,1-DICHLOROETHANE	20U	METHYL ISOBUTYL KETONE
10U	1,2-DICHLOROETHENE (TOTAL)	20U	METHYL BUTYL KETONE
10U	CHLOROFORM	10U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	1,2-DICHLOROETHANE	10U	1,1,2,2-TETRACHLOROETHANE
20U	METHYL ETHYL KETONE	10U	TOLUENE
10U	1,1,1-TRICHLOROETHANE	21	CHLOROBENZENE
10U	CARBON TETRACHLORIDE	10U	ETHYL BENZENE
20U	VINYL ACETATE	10U	STYRENE
10U	BROMODICHLOROMETHANE	10U	TOTAL XYLENES
		50	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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1515 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W750

UG/KG	ANALYTICAL RESULTS
1300U	PHENOL
1300U	BIS(2-CHLOROETHYL) ETHER
1300U	2-CHLOROPHENOL
1300U	1,3-DICHLOROBENZENE
1300U	1,4-DICHLOROBENZENE
1300U	BENZYL ALCOHOL
1300U	1,2-DICHLOROBENZENE
1300U	2-METHYLPHENOL
1300UR	BIS(2-CHLOROISOPROPYL) ETHER
1300U	(3-AND/OR 4-)METHYLPHENOL
1300U	N-NITROSODI-N-PROPYLAMINE
1300U	HEXACHLOROETHANE
1300UJ	NITROBENZENE
1300U	ISOPHORONE
1300UJ	2-NITROPHENOL
1300UR	2,4-DIMETHYLPHENOL
6500U	BENZOIC ACID
1300U	BIS(2-CHLOROETHOXY) METHANE
1300U	2,4-DICHLOROPHENOL
1300UR	1,2,4-TRICHLOROBENZENE
1300U	NAPHTHALENE
1300U	4-CHLOROANILINE
1300U	HEXACHLOROBUTADIENE
1300U	4-CHLORO-3-METHYLPHENOL
1300U	2-METHYLNAPHTHALENE
1300U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1300U	2,4,6-TRICHLOROPHENOL
6500U	2,4,5-TRICHLOROPHENOL
1300UR	2-CHLORONAPHTHALENE
6500U	2-NITROANILINE
1300U	DIMETHYL PHTHALATE
1300U	ACENAPHTHYLENE
1300U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
6500UR	3-NITROANILINE
1300UJ	ACENAPHTHENE
6500U	2,4-DINITROPHENOL
6500U	4-NITROPHENOL
1300U	DIBENZOFURAN
1300U	2,4-DINITROTOLUENE
1300U	DIETHYL PHTHALATE
1300U	4-CHLOROPHENYL PHENYL ETHER
1300U	FLUORENE
6500U	4-NITROANILINE
6500U	2-METHYL-4,6-DINITROPHENOL
1300U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1300U	4-BROMOPHENYL PHENYL ETHER
1300U	HEXACHLOROBENZENE (HCB)
6500U	PENTACHLOROPHENOL
1300U	PHENANTHRENE
1300U	ANTHRACENE
1300U	DI-N-BUTYLPHTHALATE
1300U	FLUORANTHENE
1300U	PYRENE
1300U	BENZYL BUTYL PHTHALATE
2700U	3,3'-DICHLOROBENZIDINE
1300U	BENZO(A)ANTHRACENE
1300U	CHRYSENE
1300U	BIS(2-ETHYLHEXYL) PHTHALATE
1300U	DI-N-OCTYLPHTHALATE
1300U	BENZO(B AND/OR K)FLUORANTHENE
1300U	BENZO-A-PYRENE
1300U	INDENO (1,2,3-CD) PYRENE
1300U	DIBENZO(A,H)ANTHRACENE
1300U	BENZO(GHI)PERYLENE
50	PERCENT MOISTURE

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

PESTICIDES/PCB'S DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-05
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1515 STOP: 00/00/00
D. NUMBER: W750

UG/KG	ANALYTICAL RESULTS
16U	ALPHA-BHC
16U	BETA-BHC
16U	DELTA-BHC
16U	GAMMA-BHC (LINDANE)
16U	HEPTACHLOR
16U	ALDRIN
16U	HEPTACHLOR EPOXIDE
16U	ENDOSULFAN I (ALPHA)
32U	DIELDRIN
32U	4,4'-DDE (P,P'-DDE)
32U	ENDRIN
32U	ENDOSULFAN II (BETA)
32U	4,4'-DDD (P,P'-DDD)
32U	ENDOSULFAN SULFATE
32U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
160U	METHOXYCHLOR
32U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
160U	GAMMA-CHLORDANE /2
160U	ALPHA-CHLORDANE /2
320U	TOXAPHENE
160U	PCB-1016 (AROCLOR 1016)
160U	PCB-1221 (AROCLOR 1221)
160U	PCB-1232 (AROCLOR 1232)
160U	PCB-1242 (AROCLOR 1242)
160U	PCB-1248 (AROCLOR 1248)
320U	PCB-1254 (AROCLOR 1254)
320U	PCB-1260 (AROCLOR 1260)
50	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.

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50611 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: TB-01S

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 0700 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W736

UG/KG	ANALYTICAL RESULTS
11U	CHLOROMETHANE
11U	BROMOMETHANE
11U	VINYL CHLORIDE
11U	CHLOROETHANE
10U	METHYLENE CHLORIDE
50U	ACETONE
6U	CARBON DISULFIDE
6U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
6U	1,1-DICHLOROETHANE
6U	1,2-DICHLOROETHENE (TOTAL)
6U	CHLOROFORM
6U	1,2-DICHLOROETHANE
11U	METHYL ETHYL KETONE
6U	1,1,1-TRICHLOROETHANE
6U	CARBON TETRACHLORIDE
11U	VINYL ACETATE
6U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
6U	1,2-DICHLOROPROPANE
6U	CIS-1,3-DICHLOROPROPENE
6U	TRICHLOROETHENE(TRICHLOROETHYLENE)
6U	DIBROMOCHLOROMETHANE
6U	1,1,2-TRICHLOROETHANE
6U	BENZENE
6U	TRANS-1,3-DICHLOROPROPENE
6U	BROMOFORM
11U	METHYL ISOBUTYL KETONE
11U	METHYL BUTYL KETONE
6U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
6U	1,1,2,2-TETRACHLOROETHANE
6U	TOLUENE
6U	CHLOROBENZENE
6U	ETHYL BENZENE
6U	STYRENE
6U	TOTAL XYLENES
12	PERCENT MOISTURE

REMARKS

REMARKS

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

11/15/90

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1130 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W744

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
25U	CHLOROMETHANE	12U	1,2-DICHLOROPROPANE
25U	BROMOMETHANE	12U	CIS-1,3-DICHLOROPROPENE
25U	VINYL CHLORIDE	12U	TRICHLOROETHENE(TRICHLOROETHYLENE)
25U	CHLOROETHANE	12U	DIBROMOCHLOROMETHANE
30U	METHYLENE CHLORIDE	12U	1,1,2-TRICHLOROETHANE
25U	ACETONE	12U	BENZENE
12U	CARBON DISULFIDE	12U	TRANS-1,3-DICHLOROPROPENE
12U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	12U	BROMOFORM
12U	1,1-DICHLOROETHANE	25U	METHYL ISOBUTYL KETONE
12U	1,2-DICHLOROETHENE (TOTAL)	25U	METHYL BUTYL KETONE
12U	CHLOROFORM	12U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
12U	1,2-DICHLOROETHANE	12U	1,1,2,2-TETRACHLOROETHANE
25U	METHYL ETHYL KETONE	12U	TOLUENE
12U	1,1,1-TRICHLOROETHANE	12U	CHLOROBENZENE
12U	CARBON TETRACHLORIDE	12U	ETHYL BENZENE
25U	VINYL ACETATE	12U	STYRENE
12U	BROMODICHLOROMETHANE	12U	TOTAL XYLENES
		59	PERCENT MOISTURE

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

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1130 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W744

UG/KG	ANALYTICAL RESULTS
1600U	PHENOL
1600U	BIS(2-CHLOROETHYL) ETHER
1600U	2-CHLOROPHENOL
1600U	1,3-DICHLOROBENZENE
1600U	1,4-DICHLOROBENZENE
1600U	BENZYL ALCOHOL
1600U	1,2-DICHLOROBENZENE
1600U	2-METHYLPHENOL
1600UR	BIS(2-CHLOROISOPROPYL) ETHER
1600U	(3-AND/OR 4-)METHYLPHENOL
1600U	N-NITROSODI-N-PROPYLAMINE
1600U	HEXACHLOROETHANE
1600UJ	NITROBENZENE
1600U	ISOPHORONE
1600UJ	2-NITROPHENOL
1600UR	2,4-DIMETHYLPHENOL
7900U	BENZOIC ACID
1600U	BIS(2-CHLOROETHOXY) METHANE
1600U	2,4-DICHLOROPHENOL
1600UR	1,2,4-TRICHLOROBENZENE
1600U	NAPHTHALENE
1600U	4-CHLOROANILINE
1600U	HEXACHLOROBUTADIENE
1600U	4-CHLORO-3-METHYLPHENOL
1600U	2-METHYLNAPHTHALENE
1600U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1600U	2,4,6-TRICHLOROPHENOL
7900U	2,4,5-TRICHLOROPHENOL
1600UR	2-CHLORONAPHTHALENE
7900U	2-NITROANILINE
1600U	DIMETHYL PHTHALATE
1600U	ACENAPHTHYLENE
1600U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
7900UR	3-NITROANILINE
1600UJ	ACENAPHTHENE
7900U	2,4-DINITROPHENOL
7900U	4-NITROPHENOL
1600U	DIBENZOFURAN
1600U	2,4-DINITROTOLUENE
1600U	DIETHYL PHTHALATE
1600U	4-CHLOROPHENYL PHENYL ETHER
1600U	FLUORENE
7900U	4-NITROANILINE
7900U	2-METHYL-4,6-DINITROPHENOL
1600U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1600U	4-BROMOPHENYL PHENYL ETHER
1600U	HEXACHLOROBENZENE (HCB)
7900U	PENTACHLOROPHENOL
1600U	PHENANTHRENE
1600U	ANTHRACENE
1600U	DI-N-BUTYLPHTHALATE
1600U	FLUORANTHENE
1600U	PYRENE
1600U	BENZYL BUTYL PHTHALATE
3200U	3,3'-DICHLOROBENZIDINE
1600U	BENZO(A)ANTHRACENE
1600U	CHRYSENE
1600U	BIS(2-ETHYLHEXYL) PHTHALATE
1600U	DI-N-OCTYLPHTHALATE
1600U	BENZO(B AND/OR K)FLUORANTHENE
1600U	BENZO-A-PYRENE
1600U	INDENO (1,2,3-CD) PYRENE
1600U	DIBENZO(A,H)ANTHRACENE
1600U	BENZO(GHI)PERYLENE
59	PERCENT MOISTURE

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.

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF
CITY: OAKLEY ST: SC
STATION ID: SD-01
COLLECTION START: 09/19/90 1130 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:
D. NO.: W744 MD NO: W744

ANALYTICAL RESULTS UG/KG

30000J 12 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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-01
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1130 STOP: 00/00/00
D. NUMBER: W744

UG/KG	ANALYTICAL RESULTS
19U	ALPHA-BHC
19U	BETA-BHC
19U	DELTA-BHC
19U	GAMMA-BHC (LINDANE)
19U	HEPTACHLOR
19U	ALDRIN
19U	HEPTACHLOR EPOXIDE
19U	ENDOSULFAN I (ALPHA)
39U	DIELDRIN
39U	4,4'-DDE (P,P'-DDE)
39U	ENDRIN
39U	ENDOSULFAN II (BETA)
39U	4,4'-DDD (P,P'-DDD)
39U	ENDOSULFAN SULFATE
39U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
190U	METHOXYCHLOR
39U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
190U	GAMMA-CHLORDANE /2
190U	ALPHA-CHLORDANE /2
390U	TOXAPHENE
190U	PCB-1016 (AROCLOR 1016)
190U	PCB-1221 (AROCLOR 1221)
190U	PCB-1232 (AROCLOR 1232)
190U	PCB-1242 (AROCLOR 1242)
190U	PCB-1248 (AROCLOR 1248)
390U	PCB-1254 (AROCLOR 1254)
390U	PCB-1260 (AROCLOR 1260)
59	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

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1030 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W739

UG/KG	ANALYTICAL RESULTS
15U	CHLOROMETHANE
15U	BROMOMETHANE
15U	VINYL CHLORIDE
15U	CHLOROETHANE
20U	METHYLENE CHLORIDE
15U	ACETONE
8U	CARBON DISULFIDE
8U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
8U	1,1-DICHLOROETHANE
8U	1,2-DICHLOROETHENE (TOTAL)
8U	CHLOROFORM
8U	1,2-DICHLOROETHANE
15U	METHYL ETHYL KETONE
8U	1,1,1-TRICHLOROETHANE
8U	CARBON TETRACHLORIDE
15U	VINYL ACETATE
8U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
8U	1,2-DICHLOROPROPANE
8U	CIS-1,3-DICHLOROPROPENE
8U	TRICHLOROETHENE(TRICHLOROETHYLENE)
8U	DIBROMOCHLOROMETHANE
8U	1,1,2-TRICHLOROETHANE
8U	BENZENE
8U	TRANS-1,3-DICHLOROPROPENE
8U	BROMOFORM
15U	METHYL ISOBUTYL KETONE
15U	METHYL BUTYL KETONE
8U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
8U	1,1,2,2-TETRACHLOROETHANE
8U	TOLUENE
8U	CHLOROBENZENE
8U	ETHYL BENZENE
8U	STYRENE
8U	TOTAL XYLENES
35	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.

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-02

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1030 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W739

UG/KG	ANALYTICAL RESULTS
1000U	PHENOL
1000U	BIS(2-CHLOROETHYL) ETHER
1000U	2-CHLOROPHENOL
1000U	1,3-DICHLOROBENZENE
1000U	1,4-DICHLOROBENZENE
1000U	BENZYL ALCOHOL
1000U	1,2-DICHLOROBENZENE
1000U	2-METHYLPHENOL
1000UR	BIS(2-CHLOROISOPROPYL) ETHER
1000U	(3-AND/OR 4-)METHYLPHENOL
1000U	N-NITROSODI-N-PROPYLAMINE
1000U	HEXACHLOROETHANE
1000UJ	NITROBENZENE
1000U	ISOPHORONE
1000UJ	2-NITROPHENOL
1000UR	2,4-DIMETHYLPHENOL
4900U	BENZOIC ACID
1000U	BIS(2-CHLOROETHOXY) METHANE
1000U	2,4-DICHLOROPHENOL
1000UR	1,2,4-TRICHLOROBENZENE
1000U	NAPHTHALENE
1000U	4-CHLOROANILINE
1000U	HEXACHLOROBUTADIENE
1000U	4-CHLORO-3-METHYLPHENOL
1000U	2-METHYLNAPHTHALENE
1000U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1000U	2,4,6-TRICHLOROPHENOL
4900U	2,4,5-TRICHLOROPHENOL
1000UR	2-CHLORONAPHTHALENE
4900U	2-NITROANILINE
1000U	DIMETHYL PHTHALATE
1000U	ACENAPHTHYLENE
1000U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
4900UR	3-NITROANILINE
1000UJ	ACENAPHTHENE
4900U	2,4-DINITROPHENOL
4900U	4-NITROPHENOL
1000U	DIBENZOFURAN
1000U	2,4-DINITROTOLUENE
1000U	DIETHYL PHTHALATE
1000U	4-CHLOROPHENYL PHENYL ETHER
1000U	FLUORENE
4900U	4-NITROANILINE
4900U	2-METHYL-4,6-DINITROPHENOL
1000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1000U	4-BROMOPHENYL PHENYL ETHER
1000U	HEXACHLOROBENZENE (HCB)
4900U	PENTACHLOROPHENOL
1000U	PHENANTHRENE
1000U	ANTHRACENE
1000U	DI-N-BUTYLPHTHALATE
1000U	FLUORANTHENE
1000U	PYRENE
1000U	BENZYL BUTYL PHTHALATE
2000U	3,3'-DICHLOROBENZIDINE
1000U	BENZO(A)ANTHRACENE
1000U	CHRYSENE
1000U	BIS(2-ETHYLHEXYL) PHTHALATE
1000U	DI-N-OCTYLPHTHALATE
1000U	BENZO(B AND/OR K)FLUORANTHENE
1000U	BENZO-A-PYRENE
1000U	INDENO (1,2,3-CD) PYRENE
1000U	DIBENZO(A,H)ANTHRACENE
1000U	BENZO(GHI)PERYLENE
35	PERCENT MOISTURE

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.

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

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**   PROJECT NO. 90-803   SAMPLE NO. 50592  SAMPLE TYPE: SEDIM       PROG ELEM: NSF   COLLECTED BY: L WARD                              **
**   SOURCE: BERKELEY CO LF                                          CITY: OAKLEY                  ST: SC                               **
**   STATION ID: SD-02                                               COLLECTION START: 09/19/90  1030   STOP: 00/00/00              **
**   CASE.NO.: 14889          SAS NO.:                               D. NO.: W739                MD NO: W739                        **
**                                                                                                                                  **
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ANALYTICAL RESULTS UG/KG

800J 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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-02
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1030 STOP: 00/00/00
D. NUMBER: W739

UG/KG	ANALYTICAL RESULTS
12U	ALPHA-BHC
12U	BETA-BHC
12U	DELTA-BHC
12U	GAMMA-BHC (LINDANE)
12U	HEPTACHLOR
12U	ALDRIN
12U	HEPTACHLOR EPOXIDE
12U	ENDOSULFAN I (ALPHA)
24U	DIELDRIN
24U	4,4'-DDE (P,P'-DDE)
24U	ENDRIN
24U	ENDOSULFAN II (BETA)
24U	4,4'-DDD (P,P'-DDD)
24U	ENDOSULFAN SULFATE
24U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
120U	METHOXYCHLOR
24U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
120U	GAMMA-CHLORDANE /2
120U	ALPHA-CHLORDANE /2
240U	TOXAPHENE
120U	PCB-1016 (AROCLOR 1016)
120U	PCB-1221 (AROCLOR 1221)
120U	PCB-1232 (AROCLOR 1232)
120U	PCB-1242 (AROCLOR 1242)
120U	PCB-1248 (AROCLOR 1248)
240U	PCB-1254 (AROCLOR 1254)
240U	PCB-1260 (AROCLOR 1260)
35	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.

11/15/90

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-04

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1125 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W743

UG/KG	ANALYTICAL RESULTS
19U	CHLOROMETHANE
19U	BROMOMETHANE
19U	VINYL CHLORIDE
19U	CHLOROETHANE
20U	METHYLENE CHLORIDE
19U	ACETONE
9U	CARBON DISULFIDE
9U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
9U	1,1-DICHLOROETHANE
9U	1,2-DICHLOROETHENE (TOTAL)
9U	CHLOROFORM
9U	1,2-DICHLOROETHANE
19U	METHYL ETHYL KETONE
9U	1,1,1-TRICHLOROETHANE
9U	CARBON TETRACHLORIDE
19U	VINYL ACETATE
9U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
9U	1,2-DICHLOROPROPANE
9U	CIS-1,3-DICHLOROPROPENE
9U	TRICHLOROETHENE(TRICHLOROETHYLENE)
9U	DIBROMOCHLOROMETHANE
9U	1,1,2-TRICHLOROETHANE
9U	BENZENE
9U	TRANS-1,3-DICHLOROPROPENE
9U	BROMOFORM
19U	METHYL ISOBUTYL KETONE
19U	METHYL BUTYL KETONE
9U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
9U	1,1,2,2-TETRACHLOROETHANE
6J	TOLUENE
9U	CHLOROBENZENE
9U	ETHYL BENZENE
9U	STYRENE
9U	TOTAL XYLENES
46	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.

11/15/90

EXTRACTABLE ORGANICS DATA REPORT

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** PROJECT NO. 90-803    SAMPLE NO. 50596  SAMPLE TYPE: SEDIM      PROG ELEM: NSF   COLLECTED BY: L WARD                **
**   SOURCE: BERKELEY CO LF                                        CITY: OAKLEY                ST: SC                 **
**   STATION ID: SD-04                                             COLLECTION START: 09/19/90  1125   STOP: 00/00/00   **
**                                                                                                                     **
** CASE NO.: 14889                          SAS NO.:               D. NO.: W743                                       **
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UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
1200U	PHENOL	5900UR	3-NITROANILINE
1200U	BIS(2-CHLOROETHYL) ETHER	1200UJ	ACENAPHTHENE
1200U	2-CHLOROPHENOL	5900U	2,4-DINITROPHENOL
1200U	1,3-DICHLOROBENZENE	5900U	4-NITROPHENOL
1200U	1,4-DICHLOROBENZENE	1200U	DIBENZOFURAN
1200U	BENZYL ALCOHOL	1200U	2,4-DINITROTOLUENE
1200U	1,2-DICHLOROBENZENE	1200U	DIETHYL PHTHALATE
1200U	2-METHYLPHENOL	1200U	4-CHLOROPHENYL PHENYL ETHER
1200UR	BIS(2-CHLOROISOPROPYL) ETHER	1200U	FLUORENE
1200U	(3-AND/OR 4-)METHYLPHENOL	5900U	4-NITROANILINE
1200U	N-NITROSODI-N-PROPYLAMINE	5900U	2-METHYL-4,6-DINITROPHENOL
1200U	HEXACHLOROETHANE	1200U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1200UJ	NITROBENZENE	1200U	4-BROMOPHENYL PHENYL ETHER
1200U	ISOPHORONE	1200U	HEXACHLOROBENZENE (HCB)
1200UJ	2-NITROPHENOL	5900U	PENTACHLOROPHENOL
1200UR	2,4-DIMETHYLPHENOL	1200U	PHENANTHRENE
5900U	BENZOIC ACID	1200U	ANTHRACENE
1200U	BIS(2-CHLOROETHOXY) METHANE	1200U	DI-N-BUTYLPHTHALATE
1200U	2,4-DICHLOROPHENOL	1200U	FLUORANTHENE
1200UR	1,2,4-TRICHLOROBENZENE	1200U	PYRENE
1200U	NAPHTHALENE	1200U	BENZYL BUTYL PHTHALATE
1200U	4-CHLOROANILINE	2500U	3,3'-DICHLOROBENZIDINE
1200U	HEXACHLOROBUTADIENE	1200U	BENZO(A)ANTHRACENE
1200U	4-CHLORO-3-METHYLPHENOL	1200U	CHRYSENE
1200U	2-METHYLNAPHTHALENE	1200U	BIS(2-ETHYLHEXYL) PHTHALATE
1200U	HEXACHLOROCYCLOPENTADIENE (HCCP)	1200U	DI-N-OCTYLPHTHALATE
1200U	2,4,6-TRICHLOROPHENOL	1200U	BENZO(B AND/OR K)FLUORANTHENE
5900U	2,4,5-TRICHLOROPHENOL	1200U	BENZO-A-PYRENE
1200UR	2-CHLORONAPHTHALENE	1200U	INDENO (1,2,3-CD) PYRENE
5900U	2-NITROANILINE	1200U	DIBENZO(A,H)ANTHRACENE
1200U	DIMETHYL PHTHALATE	1200U	BENZO(GHI)PERYLENE
1200U	ACENAPHTHYLENE	46	PERCENT MOISTURE
1200U	2,6-DINITROTOLUENE		

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.

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY ST: SC
STATION ID: SD-04	COLLECTION START: 09/19/90 1125 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:	D. NO.: W743 MD NO: W743

ANALYTICAL RESULTS UG/KG

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.
*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.

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50596   SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-04
CASE NUMBER: 14889   SAS NUMBER:

PROG ELEM: NSF   COLLECTED BY: L WARD
CITY: OAKLEY   ST: SC
COLLECTION START: 09/19/90 1125   STOP: 00/00/00
D. NUMBER: W743

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
15U	ALPHA-BHC	150U	METHOXYCHLOR
15U	BETA-BHC	30U	ENDRIN KETONE
15U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
15U	GAMMA-BHC (LINDANE)	150U	GAMMA-CHLORDANE /2
15U	HEPTACHLOR	150U	ALPHA-CHLORDANE /2
15U	ALDRIN	300U	TOXAPHENE
15U	HEPTACHLOR EPOXIDE	150U	PCB-1016 (AROCLOR 1016)
15U	ENDOSULFAN I (ALPHA)	150U	PCB-1221 (AROCLOR 1221)
30U	DIELDRIN	150U	PCB-1232 (AROCLOR 1232)
30U	4,4'-DDE (P,P'-DDE)	150U	PCB-1242 (AROCLOR 1242)
30U	ENDRIN	150U	PCB-1248 (AROCLOR 1248)
30U	ENDOSULFAN II (BETA)	300U	PCB-1254 (AROCLOR 1254)
30U	4,4'-DDD (P,P'-DDD)	300U	PCB-1260 (AROCLOR 1260)
30U	ENDOSULFAN SULFATE	46	PERCENT MOISTURE
30U	4,4'-DDT (P,P'-DDT)		

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.

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1050 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W740

UG/KG	ANALYTICAL RESULTS
11U	CHLOROMETHANE
11U	BROMOMETHANE
11U	VINYL CHLORIDE
11U	CHLOROETHANE
20U	METHYLENE CHLORIDE
11U	ACETONE
5U	CARBON DISULFIDE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
5U	1,1-DICHLOROETHANE
5U	1,2-DICHLOROETHENE (TOTAL)
5U	CHLOROFORM
5U	1,2-DICHLOROETHANE
11U	METHYL ETHYL KETONE
5U	1,1,1-TRICHLOROETHANE
5U	CARBON TETRACHLORIDE
11U	VINYL ACETATE
5U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
5U	1,2-DICHLOROPROPANE
5U	CIS-1,3-DICHLOROPROPENE
5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5U	DIBROMOCHLOROMETHANE
5U	1,1,2-TRICHLOROETHANE
5U	BENZENE
5U	TRANS-1,3-DICHLOROPROPENE
5U	BROMOFORM
11U	METHYL ISOBUTYL KETONE
11U	METHYL BUTYL KETONE
26	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,1,2,2-TETRACHLOROETHANE
5U	TOLUENE
5U	CHLOROBENZENE
5U	ETHYL BENZENE
5U	STYRENE
5U	TOTAL XYLENES
7	PERCENT MOISTURE

REMARKS

REMARKS

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

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1050 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W740

UG/KG	ANALYTICAL RESULTS
710UJ	PHENOL
710UJ	BIS(2-CHLOROETHYL) ETHER
710UJ	2-CHLOROPHENOL
710UJ	1,3-DICHLOROBENZENE
710UJ	1,4-DICHLOROBENZENE
710UJ	BENZYL ALCOHOL
710UJ	1,2-DICHLOROBENZENE
710UJ	2-METHYLPHENOL
710UR	BIS(2-CHLOROISOPROPYL) ETHER
710UJ	(3-AND/OR 4-)METHYLPHENOL
710UJ	N-NITROSODI-N-PROPYLAMINE
710UJ	HEXACHLOROETHANE
710UJ	NITROBENZENE
710UJ	ISOPHORONE
710UJ	2-NITROPHENOL
710UR	2,4-DIMETHYLPHENOL
3400UJ	BENZOIC ACID
710UJ	BIS(2-CHLOROETHOXY) METHANE
710UJ	2,4-DICHLOROPHENOL
710UR	1,2,4-TRICHLOROBENZENE
710UJ	NAPHTHALENE
710UJ	4-CHLOROANILINE
710UJ	HEXACHLOROBUTADIENE
710UJ	4-CHLORO-3-METHYLPHENOL
710UJ	2-METHYLNAPHTHALENE
710UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)
710UJ	2,4,6-TRICHLOROPHENOL
3400UJ	2,4,5-TRICHLOROPHENOL
710UR	2-CHLORONAPHTHALENE
3400UJ	2-NITROANILINE
710UJ	DIMETHYL PHTHALATE
710UJ	ACENAPHTHYLENE
710UJ	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
3400UR	3-NITROANILINE
710UJ	ACENAPHTHENE
3400UJ	2,4-DINITROPHENOL
3400UJ	4-NITROPHENOL
710UJ	DIBENZOFURAN
710UJ	2,4-DINITROTOLUENE
710UJ	DIETHYL PHTHALATE
710UJ	4-CHLOROPHENYL PHENYL ETHER
710UJ	FLUORENE
3400UJ	4-NITROANILINE
3400UJ	2-METHYL-4,6-DINITROPHENOL
710UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
710UJ	4-BROMOPHENYL PHENYL ETHER
710UJ	HEXACHLOROBENZENE (HCB)
3400UJ	PENTACHLOROPHENOL
710UJ	PHENANTHRENE
710UJ	ANTHRACENE
710UJ	DI-N-BUTYLPHTHALATE
710UJ	FLUORANTHENE
710UJ	PYRENE
710UJ	BENZYL BUTYL PHTHALATE
1400UJ	3,3'-DICHLOROBENZIDINE
710UJ	BENZO(A)ANTHRACENE
710UJ	CHRYSENE
710UJ	BIS(2-ETHYLHEXYL) PHTHALATE
710UJ	DI-N-OCTYLPHTHALATE
710UJ	BENZO(B AND/OR K)FLUORANTHENE
710UJ	BENZO-A-PYRENE
710UJ	INDENO (1,2,3-CD) PYRENE
710UJ	DIBENZO(A,H)ANTHRACENE
710UJ	BENZO(GHI)PERYLENE
7	PERCENT MOISTURE

REMARKS
EXCESSIVE HOLDING TIME

REMARKS

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

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

*** ***
** PROJECT NO. 90-803   SAMPLE NO. 50593   SAMPLE TYPE: SEDIM   PROG ELEM: NSF   COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC **
** STATION ID: SD-05   COLLECTION START: 09/19/90 1050   STOP: 00/00/00 **
** CASE.NO.: 14889   SAS NO.:   D. NO.: W740   MD NO: W740 **
** **
*** ***

ANALYTICAL RESULTS UG/KG

6000J   5 UNIDENTIFIED COMPOUNDS

REMARKS
EXCESSIVE HOLDING TIME

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.
11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM
PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF
CITY: OAKLEY ST: SC
STATION ID: SD-05
COLLECTION START: 09/19/90 1050 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER:
D. NUMBER: W740

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
8.5U	ALPHA-BHC	85U	METHOXYCHLOR
8.5U	BETA-BHC	17U	ENDRIN KETONE
8.5U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
8.5U	GAMMA-BHC (LINDANE)	85U	GAMMA-CHLORDANE /2
8.5U	HEPTACHLOR	85U	ALPHA-CHLORDANE /2
8.5U	ALDRIN	170U	TOXAPHENE
8.5U	HEPTACHLOR EPOXIDE	85U	PCB-1016 (AROCLOR 1016)
8.5U	ENDOSULFAN I (ALPHA)	85U	PCB-1221 (AROCLOR 1221)
17U	DIELDRIN	85U	PCB-1232 (AROCLOR 1232)
17U	4,4'-DDE (P,P'-DDE)	85U	PCB-1242 (AROCLOR 1242)
17U	ENDRIN	85U	PCB-1248 (AROCLOR 1248)
17U	ENDOSULFAN II (BETA)	170U	PCB-1254 (AROCLOR 1254)
17U	4,4'-DDD (P,P'-DDD)	170U	PCB-1260 (AROCLOR 1260)
17U	ENDOSULFAN SULFATE	7	PERCENT MOISTURE
17U	4,4'-DDT (P,P'-DDT)		

REMARKS

REMARKS

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

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-06

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1110 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W742

UG/KG	ANALYTICAL RESULTS
15U	CHLOROMETHANE
15U	BROMOMETHANE
15U	VINYL CHLORIDE
15U	CHLOROETHANE
20U	METHYLENE CHLORIDE
15U	ACETONE
8U	CARBON DISULFIDE
8U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
8U	1,1-DICHLOROETHANE
8U	1,2-DICHLOROETHENE (TOTAL)
8U	CHLOROFORM
8U	1,2-DICHLOROETHANE
15U	METHYL ETHYL KETONE
8U	1,1,1-TRICHLOROETHANE
8U	CARBON TETRACHLORIDE
15U	VINYL ACETATE
8U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
8U	1,2-DICHLOROPROPANE
8U	CIS-1,3-DICHLOROPROPENE
8U	TRICHLOROETHENE(TRICHLOROETHYLENE)
8U	DIBROMOCHLOROMETHANE
8U	1,1,2-TRICHLOROETHANE
8U	BENZENE
8U	TRANS-1,3-DICHLOROPROPENE
8U	BROMOFORM
15U	METHYL ISOBUTYL KETONE
15U	METHYL BUTYL KETONE
8U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
8U	1,1,2,2-TETRACHLOROETHANE
8U	TOLUENE
8U	CHLOROBENZENE
8U	ETHYL BENZENE
8U	STYRENE
8U	TOTAL XYLENES
35	PERCENT MOISTURE

REMARKS

REMARKS

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

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-06

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1110 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W742

UG/KG	ANALYTICAL RESULTS
1000U	PHENOL
1000U	BIS(2-CHLOROETHYL) ETHER
1000U	2-CHLOROPHENOL
1000U	1,3-DICHLOROBENZENE
1000U	1,4-DICHLOROBENZENE
1000U	BENZYL ALCOHOL
1000U	1,2-DICHLOROBENZENE
1000U	2-METHYLPHENOL
1000UR	BIS(2-CHLOROISOPROPYL) ETHER
1000U	(3-AND/OR 4-)METHYLPHENOL
1000U	N-NITROSODI-N-PROPYLAMINE
1000U	HEXACHLOROETHANE
1000UJ	NITROBENZENE
1000U	ISOPHORONE
1000UJ	2-NITROPHENOL
1000UR	2,4-DIMETHYLPHENOL
4900U	BENZOIC ACID
1000U	BIS(2-CHLOROETHOXY) METHANE
1000U	2,4-DICHLOROPHENOL
1000UR	1,2,4-TRICHLOROBENZENE
1000U	NAPHTHALENE
1000U	4-CHLOROANILINE
1000U	HEXACHLOROBUTADIENE
1000U	4-CHLORO-3-METHYLPHENOL
1000U	2-METHYLNAPHTHALENE
1000U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1000U	2,4,6-TRICHLOROPHENOL
4900U	2,4,5-TRICHLOROPHENOL
1000UR	2-CHLORONAPHTHALENE
4900U	2-NITROANILINE
1000U	DIMETHYL PHTHALATE
1000U	ACENAPHTHYLENE
1000U	2,6-DINITROTOLUENE

UG/KG	ANALYTICAL RESULTS
4900UR	3-NITROANILINE
1000UJ	ACENAPHTHENE
4900U	2,4-DINITROPHENOL
4900U	4-NITROPHENOL
1000U	DIBENZOFURAN
1000U	2,4-DINITROTOLUENE
1000U	DIETHYL PHTHALATE
1000U	4-CHLOROPHENYL PHENYL ETHER
1000U	FLUORENE
4900U	4-NITROANILINE
4900U	2-METHYL-4,6-DINITROPHENOL
1000U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1000U	4-BROMOPHENYL PHENYL ETHER
1000U	HEXACHLOROBENZENE (HCB)
4900U	PENTACHLOROPHENOL
1000U	PHENANTHRENE
1000U	ANTHRACENE
1000U	DI-N-BUTYLPHTHALATE
1000U	FLUORANTHENE
1000U	PYRENE
1000U	BENZYL BUTYL PHTHALATE
2000U	3,3'-DICHLOROBENZIDINE
1000U	BENZO(A)ANTHRACENE
1000U	CHRYSENE
1000U	BIS(2-ETHYLHEXYL) PHTHALATE
1000U	DI-N-OCTYLPHTHALATE
1000U	BENZO(B AND/OR K)FLUORANTHENE
1000U	BENZO-A-PYRENE
1000U	INDENO (1,2,3-CD) PYRENE
1000U	DIBENZO(A,H)ANTHRACENE
1000U	BENZO(GHI)PERYLENE
35	PERCENT MOISTURE

FOOTNOTES
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MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SD-06 COLLECTION START: 09/19/90 1110 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W742 MD NO: W742

ANALYTICAL RESULTS UG/KG

20000J 10 UNIDENTIFIED COMPOUNDS

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

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-06
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1110 STOP: 00/00/00
D. NUMBER: W742

UG/KG	ANALYTICAL RESULTS
12U	ALPHA-BHC
12U	BETA-BHC
12U	DELTA-BHC
12U	GAMMA-BHC (LINDANE)
12U	HEPTACHLOR
12U	ALDRIN
12U	HEPTACHLOR EPOXIDE
12U	ENDOSULFAN I (ALPHA)
25U	DIELDRIN
25U	4,4'-DDE (P,P'-DDE)
25U	ENDRIN
25U	ENDOSULFAN II (BETA)
25U	4,4'-DDD (P,P'-DDD)
25U	ENDOSULFAN SULFATE
25U	4,4'-DDT (P,P'-DDT)

UG/KG	ANALYTICAL RESULTS
120U	METHOXYCHLOR
25U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
120U	GAMMA-CHLORDANE /2
120U	ALPHA-CHLORDANE /2
250U	TOXAPHENE
120U	PCB-1016 (AROCLOR 1016)
120U	PCB-1221 (AROCLOR 1221)
120U	PCB-1232 (AROCLOR 1232)
120U	PCB-1242 (AROCLOR 1242)
120U	PCB-1248 (AROCLOR 1248)
250U	PCB-1254 (AROCLOR 1254)
250U	PCB-1260 (AROCLOR 1260)
35	PERCENT MOISTURE

REMARKS

REMARKS

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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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-01 COLLECTION START: 09/19/90 1220 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W745

UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE
10U	BROMOMETHANE
10U	VINYL CHLORIDE
10U	CHLOROETHANE
5U	METHYLENE CHLORIDE
10U	ACETONE
5U	CARBON DISULFIDE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
5U	1,1-DICHLOROETHANE
5U	1,2-DICHLOROETHENE (TOTAL)
5U	CHLOROFORM
5U	1,2-DICHLOROETHANE
10UR	METHYL ETHYL KETONE
5U	1,1,1-TRICHLOROETHANE
5U	CARBON TETRACHLORIDE
10U	VINYL ACETATE
5U	BROMODICHLOROMETHANE

UG/L	ANALYTICAL RESULTS
5U	1,2-DICHLOROPROPANE
5U	CIS-1,3-DICHLOROPROPENE
5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5U	DIBROMOCHLOROMETHANE
5U	1,1,2-TRICHLOROETHANE
5U	BENZENE
5U	TRANS-1,3-DICHLOROPROPENE
5U	BROMOFORM
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
5U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,1,2,2-TETRACHLOROETHANE
5U	TOLUENE
5U	CHLOROBENZENE
5U	ETHYL BENZENE
5U	STYRENE
5U	TOTAL XYLENES

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.

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA
SOURCE: BERKELEY CO LF
STATION ID: PW-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1220 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W745

UG/L	ANALYTICAL RESULTS
10U	PHENOL
10U	BIS(2-CHLOROETHYL) ETHER
10U	2-CHLOROPHENOL
10U	1,3-DICHLOROBENZENE
10U	1,4-DICHLOROBENZENE
10U	BENZYL ALCOHOL
10U	1,2-DICHLOROBENZENE
10U	2-METHYLPHENOL
10U	BIS(2-CHLOROISOPROPYL) ETHER
10U	(3-AND/OR 4-)METHYLPHENOL
10U	N-NITROSODI-N-PROPYLAMINE
10U	HEXACHLOROETHANE
10U	NITROBENZENE
10U	ISOPHORONE
10U	2-NITROPHENOL
10U	2,4-DIMETHYLPHENOL
50U	BENZOIC ACID
10U	BIS(2-CHLOROETHOXY) METHANE
10U	2,4-DICHLOROPHENOL
10U	1,2,4-TRICHLOROBENZENE
10U	NAPHTHALENE
10U	4-CHLOROANILINE
10U	HEXACHLOROBUTADIENE
10U	4-CHLORO-3-METHYLPHENOL
10U	2-METHYLNAPHTHALENE
10U	HEXACHLOROCYCLOPENTADIENE (HCCP)
10U	2,4,6-TRICHLOROPHENOL
50U	2,4,5-TRICHLOROPHENOL
10U	2-CHLORONAPHTHALENE
50U	2-NITROANILINE
10U	DIMETHYL PHTHALATE
10U	ACENAPHTHYLENE
10U	2,6-DINITROTOLUENE

UG/L	ANALYTICAL RESULTS
50UR	3-NITROANILINE
10U	ACENAPHTHENE
50U	2,4-DINITROPHENOL
50U	4-NITROPHENOL
10U	DIBENZOFURAN
10U	2,4-DINITROTOLUENE
10U	DIETHYL PHTHALATE
10U	4-CHLOROPHENYL PHENYL ETHER
10U	FLUORENE
50U	4-NITROANILINE
50U	2-METHYL-4,6-DINITROPHENOL
10U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	4-BROMOPHENYL PHENYL ETHER
10U	HEXACHLOROBENZENE (HCB)
50U	PENTACHLOROPHENOL
10U	PHENANTHRENE
10U	ANTHRACENE
10UR	DI-N-BUTYLPHTHALATE
10U	FLUORANTHENE
10U	PYRENE
10U	BENZYL BUTYL PHTHALATE
20U	3,3'-DICHLOROBENZIDINE
10U	BENZO(A)ANTHRACENE
10U	CHRYSENE
10U	BIS(2-ETHYLHEXYL) PHTHALATE
10U	DI-N-OCTYLPHTHALATE
10U	BENZO(B AND/OR K)FLUORANTHENE
10U	BENZO-A-PYRENE
10U	INDENO (1,2,3-CD) PYRENE
10U	DIBENZO(A,H)ANTHRACENE
10U	BENZO(GHI)PERYLENE

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.

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA
SOURCE: BERKELEY CO LF
STATION ID: PW-01
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1220 STOP: 00/00/00
D. NUMBER: W745

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
0.05U	ALPHA-BHC	0.50U	METHOXYCHLOR
0.05U	BETA-BHC	0.10U	ENDRIN KETONE
0.05U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
0.05U	GAMMA-BHC (LINDANE)	0.50U	GAMMA-CHLORDANE /2
0.05U	HEPTACHLOR	0.50U	ALPHA-CHLORDANE /2
0.05U	ALDRIN	1.0U	TOXAPHENE
0.05U	HEPTACHLOR EPOXIDE	0.50U	PCB-1016 (AROCLOR 1016)
0.05U	ENDOSULFAN I (ALPHA)	0.50U	PCB-1221 (AROCLOR 1221)
0.10U	DIELDRIN	0.50U	PCB-1232 (AROCLOR 1232)
0.10U	4,4'-DDE (P,P'-DDE)	0.50U	PCB-1242 (AROCLOR 1242)
0.10U	ENDRIN	0.50U	PCB-1248 (AROCLOR 1248)
0.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1254 (AROCLOR 1254)
0.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1260 (AROCLOR 1260)
0.10U	ENDOSULFAN SULFATE		
0.10U	4,4'-DDT (P,P'-DDT)		

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.

PURGEABLE ORGANICS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50594 SAMPLE TYPE: GROUNDWA
SOURCE: BERKELEY CO LF
STATION ID: TW-01

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1110 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W741

UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE
10U	BROMOMETHANE
10U	VINYL CHLORIDE
10U	CHLOROETHANE
5U	METHYLENE CHLORIDE
10U	ACETONE
5U	CARBON DISULFIDE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
5U	1,1-DICHLOROETHANE
5U	1,2-DICHLOROETHENE (TOTAL)
5U	CHLOROFORM
5U	1,2-DICHLOROETHANE
10UR	METHYL ETHYL KETONE
5U	1,1,1-TRICHLOROETHANE
5U	CARBON TETRACHLORIDE
10U	VINYL ACETATE
5U	BROMODICHLOROMETHANE

UG/L	ANALYTICAL RESULTS
5U	1,2-DICHLOROPROPANE
5U	CIS-1,3-DICHLOROPROPENE
5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5U	DIBROMOCHLOROMETHANE
5U	1,1,2-TRICHLOROETHANE
5U	BENZENE
5U	TRANS-1,3-DICHLOROPROPENE
5U	BROMOFORM
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
5U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,1,2,2-TETRACHLOROETHANE
5U	TOLUENE
5U	CHLOROBENZENE
5U	ETHYL BENZENE
5U	STYRENE
5U	TOTAL XYLENES

REMARKS

REMARKS

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

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50594 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-01 COLLECTION START: 09/19/90 1110 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W741

UG/L	ANALYTICAL RESULTS
10U	PHENOL
10U	BIS(2-CHLOROETHYL) ETHER
10U	2-CHLOROPHENOL
10U	1,3-DICHLOROBENZENE
10U	1,4-DICHLOROBENZENE
10U	BENZYL ALCOHOL
10U	1,2-DICHLOROBENZENE
10U	2-METHYLPHENOL
10U	BIS(2-CHLOROISOPROPYL) ETHER
10U	(3-AND/OR 4-)METHYLPHENOL
10U	N-NITROSODI-N-PROPYLAMINE
10U	HEXACHLOROETHANE
10U	NITROBENZENE
10U	ISOPHORONE
10U	2-NITROPHENOL
10U	2,4-DIMETHYLPHENOL
50U	BENZOIC ACID
10U	BIS(2-CHLOROETHOXY) METHANE
10U	2,4-DICHLOROPHENOL
10U	1,2,4-TRICHLOROBENZENE
10U	NAPHTHALENE
10U	4-CHLOROANILINE
10U	HEXACHLOROBUTADIENE
10U	4-CHLORO-3-METHYLPHENOL
10U	2-METHYLNAPHTHALENE
10U	HEXACHLOROCYCLOPENTADIENE (HCCP)
10U	2,4,6-TRICHLOROPHENOL
50U	2,4,5-TRICHLOROPHENOL
10U	2-CHLORONAPHTHALENE
50U	2-NITROANILINE
10U	DIMETHYL PHTHALATE
10U	ACENAPHTHYLENE
10U	2,6-DINITROTOLUENE

UG/L	ANALYTICAL RESULTS
50UR	3-NITROANILINE
10U	ACENAPHTHENE
50U	2,4-DINITROPHENOL
50U	4-NITROPHENOL
10U	DIBENZOFURAN
10U	2,4-DINITROTOLUENE
10U	DIETHYL PHTHALATE
10U	4-CHLOROPHENYL PHENYL ETHER
10U	FLUORENE
50U	4-NITROANILINE
50U	2-METHYL-4,6-DINITROPHENOL
10U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	4-BROMOPHENYL PHENYL ETHER
10U	HEXACHLOROBENZENE (HCB)
50U	PENTACHLOROPHENOL
10U	PHENANTHRENE
10U	ANTHRACENE
10UR	DI-N-BUTYLPHTHALATE
10U	FLUORANTHENE
10U	PYRENE
10U	BENZYL BUTYL PHTHALATE
20U	3,3'-DICHLOROBENZIDINE
10U	BENZO(A)ANTHRACENE
10U	CHRYSENE
10U	BIS(2-ETHYLHEXYL) PHTHALATE
10U	DI-N-OCTYLPHTHALATE
10U	BENZO(B AND/OR K)FLUORANTHENE
10U	BENZO-A-PYRENE
10U	INDENO (1,2,3-CD) PYRENE
10U	DIBENZO(A,H)ANTHRACENE
10U	BENZO(GHI)PERYLENE

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.

11/15/90

PESTICIDES/PCB'S DATA REPORT

*** ***

** PROJECT NO. 90-803 SAMPLE NO. 50594 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: TW-01 COLLECTION START: 09/19/90 1110 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W741 **

*** ***

UG/L	ANALYTICAL RESULTS
0.05U	ALPHA-BHC
0.05U	BETA-BHC
0.05U	DELTA-BHC
0.05U	GAMMA-BHC (LINDANE)
0.05U	HEPTACHLOR
0.05U	ALDRIN
0.05U	HEPTACHLOR EPOXIDE
0.05U	ENDOSULFAN I (ALPHA)
0.10U	DIELDRIN
0.10U	4,4'-DDE (P,P'-DDE)
0.10U	ENDRIN
0.10U	ENDOSULFAN II (BETA)
0.10U	4,4'-DDD (P,P'-DDD)
0.10U	ENDOSULFAN SULFATE
0.10U	4,4'-DDT (P,P'-DDT)

UG/L	ANALYTICAL RESULTS
0.50U	METHOXYCHLOR
0.10U	ENDRIN KETONE
--	CHLORDANE (TECH. MIXTURE) /1
0.50U	GAMMA-CHLORDANE /2
0.50U	ALPHA-CHLORDANE /2
1.0U	TOXAPHENE
0.50U	PCB-1016 (AROCLOR 1016)
0.50U	PCB-1221 (AROCLOR 1221)
0.50U	PCB-1232 (AROCLOR 1232)
0.50U	PCB-1242 (AROCLOR 1242)
0.50U	PCB-1248 (AROCLOR 1248)
1.0U	PCB-1254 (AROCLOR 1254)
1.0U	PCB-1260 (AROCLOR 1260)

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.

PURGEABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-02 COLLECTION START: 09/19/90 1625 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W752

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE	5U	1,2-DICHLOROPROPANE
10U	BROMOMETHANE	5U	CIS-1,3-DICHLOROPROPENE
10U	VINYL CHLORIDE	5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	CHLOROETHANE	5U	DIBROMOCHLOROMETHANE
5U	METHYLENE CHLORIDE	5U	1,1,2-TRICHLOROETHANE
10U	ACETONE	5U	BENZENE
5U	CARBON DISULFIDE	5U	TRANS-1,3-DICHLOROPROPENE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	5U	BROMOFORM
5U	1,1-DICHLOROETHANE	10U	METHYL ISOBUTYL KETONE
5U	1,2-DICHLOROETHENE (TOTAL)	10U	METHYL BUTYL KETONE
5U	CHLOROFORM	5U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,2-DICHLOROETHANE	5U	1,1,2,2-TETRACHLOROETHANE
10UR	METHYL ETHYL KETONE	5U	TOLUENE
5U	1,1,1-TRICHLOROETHANE	5U	CHLOROBENZENE
5U	CARBON TETRACHLORIDE	5U	ETHYL BENZENE
10U	VINYL ACETATE	5U	STYRENE
5U	BROMODICHLOROMETHANE	5U	TOTAL XYLENES

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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-02 COLLECTION START: 09/19/90 1625 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W752

UG/L	ANALYTICAL RESULTS
10UJ	PHENOL
10UJ	BIS(2-CHLOROETHYL) ETHER
10UJ	2-CHLOROPHENOL
10UJ	1,3-DICHLOROBENZENE
10UJ	1,4-DICHLOROBENZENE
10UJ	BENZYL ALCOHOL
10UJ	1,2-DICHLOROBENZENE
10UJ	2-METHYLPHENOL
10UJ	BIS(2-CHLOROISOPROPYL) ETHER
10UJ	(3-AND/OR 4-)METHYLPHENOL
10UJ	N-NITROSODI-N-PROPYLAMINE
10UJ	HEXACHLOROETHANE
10UJ	NITROBENZENE
10UJ	ISOPHORONE
10UJ	2-NITROPHENOL
10UJ	2,4-DIMETHYLPHENOL
50UJ	BENZOIC ACID
10UJ	BIS(2-CHLOROETHOXY) METHANE
10UJ	2,4-DICHLOROPHENOL
10UJ	1,2,4-TRICHLOROBENZENE
10UJ	NAPHTHALENE
10UJ	4-CHLOROANILINE
10UJ	HEXACHLOROBUTADIENE
10UJ	4-CHLORO-3-METHYLPHENOL
10UJ	2-METHYLNAPHTHALENE
10UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)
10UJ	2,4,6-TRICHLOROPHENOL
50UJ	2,4,5-TRICHLOROPHENOL
10UJ	2-CHLORONAPHTHALENE
50UJ	2-NITROANILINE
10UJ	DIMETHYL PHTHALATE
10UJ	ACENAPHTHYLENE
10UJ	2,6-DINITROTOLUENE

UG/L	ANALYTICAL RESULTS
50UR	3-NITROANILINE
10UJ	ACENAPHTHENE
50UJ	2,4-DINITROPHENOL
50UJ	4-NITROPHENOL
10UJ	DIBENZOFURAN
10UJ	2,4-DINITROTOLUENE
10UJ	DIETHYL PHTHALATE
10UJ	4-CHLOROPHENYL PHENYL ETHER
10UJ	FLUORENE
50UJ	4-NITROANILINE
50UJ	2-METHYL-4,6-DINITROPHENOL
10UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10UJ	4-BROMOPHENYL PHENYL ETHER
10UJ	HEXACHLOROBENZENE (HCB)
50UJ	PENTACHLOROPHENOL
10UJ	PHENANTHRENE
10UJ	ANTHRACENE
10UR	DI-N-BUTYLPHTHALATE
10UJ	FLUORANTHENE
10UJ	PYRENE
10UJ	BENZYL BUTYL PHTHALATE
20UJ	3,3'-DICHLOROBENZIDINE
10UJ	BENZO(A)ANTHRACENE
10UJ	CHRYSENE
10UJ	BIS(2-ETHYLHEXYL) PHTHALATE
10UJ	DI-N-OCTYLPHTHALATE
10UJ	BENZO(B AND/OR K)FLUORANTHENE
10UJ	BENZO-A-PYRENE
10UJ	INDENO (1,2,3-CD) PYRENE
10UJ	DIBENZO(A,H)ANTHRACENE
10UJ	BENZO(GHI)PERYLENE

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

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.

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-02 COLLECTION START: 09/19/90 1625 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W752

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
0.05U	ALPHA-BHC	0.50U	METHOXYCHLOR
0.05U	BETA-BHC	0.10U	ENDRIN KETONE
0.05U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
0.05U	GAMMA-BHC (LINDANE)	0.50U	GAMMA-CHLORDANE /2
0.05U	HEPTACHLOR	0.50U	ALPHA-CHLORDANE /2
0.05U	ALDRIN	1.0U	TOXAPHENE
0.05U	HEPTACHLOR EPOXIDE	0.50U	PCB-1016 (AROCLOR 1016)
0.05U	ENDOSULFAN I (ALPHA)	0.50U	PCB-1221 (AROCLOR 1221)
0.10U	DIELDRIN	0.50U	PCB-1232 (AROCLOR 1232)
0.10U	4,4'-DDE (P,P'-DDE)	0.50U	PCB-1242 (AROCLOR 1242)
0.10U	ENDRIN	0.50U	PCB-1248 (AROCLOR 1248)
0.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1254 (AROCLOR 1254)
0.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1260 (AROCLOR 1260)
0.10U	ENDOSULFAN SULFATE		
0.10U	4,4'-DDT (P,P'-DDT)		

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 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA
SOURCE: BERKELEY CO LF
STATION ID: TW-05

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1550 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W751

UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE
10U	BROMOMETHANE
1J	VINYL CHLORIDE
10U	CHLOROETHANE
5U	METHYLENE CHLORIDE
10U	ACETONE
5U	CARBON DISULFIDE
5U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
5U	1,1-DICHLOROETHANE
5U	1,2-DICHLOROETHENE (TOTAL)
5U	CHLOROFORM
5U	1,2-DICHLOROETHANE
10UR	METHYL ETHYL KETONE
5U	1,1,1-TRICHLOROETHANE
5U	CARBON TETRACHLORIDE
10U	VINYL ACETATE
5U	BROMODICHLOROMETHANE

UG/L	ANALYTICAL RESULTS
5U	1,2-DICHLOROPROPANE
5U	CIS-1,3-DICHLOROPROPENE
5U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5U	DIBROMOCHLOROMETHANE
5U	1,1,2-TRICHLOROETHANE
6	BENZENE
5U	TRANS-1,3-DICHLOROPROPENE
5U	BROMOFORM
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
5U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5U	1,1,2,2-TETRACHLOROETHANE
5U	TOLUENE
120	CHLOROBENZENE
5U	ETHYL BENZENE
5U	STYRENE
5U	TOTAL XYLENES

REMARKS

REMARKS

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.   11/15/90

MISCELLANEOUS PURGEABLE ORGANICS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY ST: SC
STATION ID: TW-05	COLLECTION START: 09/19/90 1550 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:	D. NO.: W751 MD NO: W751

ANALYTICAL RESULTS UG/L

10J 1 UNKNOWN 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.

EXTRACTABLE ORGANICS DATA REPORT 11/15/90

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00

CASE NO.: 14889 SAS NO.: D. NO.: W751

UG/L	ANALYTICAL RESULTS
10UR	PHENOL
10U	BIS(2-CHLOROETHYL) ETHER
10UR	2-CHLOROPHENOL
10U	1,3-DICHLOROBENZENE
10U	1,4-DICHLOROBENZENE
10U	BENZYL ALCOHOL
10U	1,2-DICHLOROBENZENE
10UR	2-METHYLPHENOL
10U	BIS(2-CHLOROISOPROPYL) ETHER
10UR	(3-AND/OR 4-)METHYLPHENOL
10U	N-NITROSODI-N-PROPYLAMINE
10U	HEXACHLOROETHANE
10U	NITROBENZENE
10U	ISOPHORONE
10UR	2-NITROPHENOL
10UR	2,4-DIMETHYLPHENOL
50UR	BENZOIC ACID
10U	BIS(2-CHLOROETHOXY) METHANE
10UR	2,4-DICHLOROPHENOL
10U	1,2,4-TRICHLOROBENZENE
10U	NAPHTHALENE
10U	4-CHLOROANILINE
10U	HEXACHLOROBUTADIENE
10UR	4-CHLORO-3-METHYLPHENOL
10U	2-METHYLNAPHTHALENE
10U	HEXACHLOROCYCLOPENTADIENE (HCCP)
10UR	2,4,6-TRICHLOROPHENOL
50UR	2,4,5-TRICHLOROPHENOL
10U	2-CHLORONAPHTHALENE
50U	2-NITROANILINE
10U	DIMETHYL PHTHALATE
10U	ACENAPHTHYLENE
10U	2,6-DINITROTOLUENE

UG/L	ANALYTICAL RESULTS
50UR	3-NITROANILINE
10U	ACENAPHTHENE
50UR	2,4-DINITROPHENOL
50UR	4-NITROPHENOL
10U	DIBENZOFURAN
10U	2,4-DINITROTOLUENE
10U	DIETHYL PHTHALATE
10U	4-CHLOROPHENYL PHENYL ETHER
10U	FLUORENE
50U	4-NITROANILINE
50UR	2-METHYL-4,6-DINITROPHENOL
10U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
10U	4-BROMOPHENYL PHENYL ETHER
10U	HEXACHLOROBENZENE (HCB)
50UR	PENTACHLOROPHENOL
10U	PHENANTHRENE
10U	ANTHRACENE
10UR	DI-N-BUTYLPHTHALATE
10U	FLUORANTHENE
10U	PYRENE
10U	BENZYL BUTYL PHTHALATE
20U	3,3'-DICHLOROBENZIDINE
10U	BENZO(A)ANTHRACENE
10U	CHRYSENE
10U	BIS(2-ETHYLHEXYL) PHTHALATE
10U	DI-N-OCTYLPHTHALATE
10U	BENZO(B AND/OR K)FLUORANTHENE
10U	BENZO-A-PYRENE
10U	INDENO (1,2,3-CD) PYRENE
10U	DIBENZO(A,H)ANTHRACENE
10U	BENZO(GHI)PERYLENE

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.

11/15/90

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W751 MD NO: W751

ANALYTICAL RESULTS UG/L

100J	6 UNIDENTIFIED COMPOUNDS
20JN	TETRAHYDRO PYRAN
10JN	DIETHYLMETHYLBENZAMIDE

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

11/15/90

PESTICIDES/PCB'S DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: D. NUMBER: W751

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
0.05U	ALPHA-BHC	0.50U	METHOXYCHLOR
0.05U	BETA-BHC	0.10U	ENDRIN KETONE
0.05U	DELTA-BHC	--	CHLORDANE (TECH. MIXTURE) /1
0.05U	GAMMA-BHC (LINDANE)	0.50U	GAMMA-CHLORDANE /2
0.05U	HEPTACHLOR	0.50U	ALPHA-CHLORDANE /2
0.05U	ALDRIN	1.0U	TOXAPHENE
0.05U	HEPTACHLOR EPOXIDE	0.50U	PCB-1016 (AROCLOR 1016)
0.05U	ENDOSULFAN I (ALPHA)	0.50U	PCB-1221 (AROCLOR 1221)
0.10U	DIELDRIN	0.50U	PCB-1232 (AROCLOR 1232)
0.10U	4,4'-DDE (P,P'-DDE)	0.50U	PCB-1242 (AROCLOR 1242)
0.10U	ENDRIN	0.50U	PCB-1248 (AROCLOR 1248)
0.10U	ENDOSULFAN II (BETA)	1.0U	PCB-1254 (AROCLOR 1254)
0.10U	4,4'-DDD (P,P'-DDD)	1.0U	PCB-1260 (AROCLOR 1260)
0.10U	ENDOSULFAN SULFATE		
0.10U	4,4'-DDT (P,P'-DDT)		

REMARKS ***REMARKS***

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-01
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1010 STOP: 00/00/00
MD NUMBER: W737

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
2600	ALUMINUM	15	MANGANESE
5.6UR	ANTIMONY	0.10U	MERCURY
2J	ARSENIC	1.1U	NICKEL
21	BARIUM	60U	POTASSIUM
1U	BERYLLIUM	0.38UR	SELENIUM
0.56U	CADMIUM	0.94U	SILVER
1000	CALCIUM	30U	SODIUM
2U	CHROMIUM	0.38U	THALLIUM
1.3U	COBALT	NA	TIN
3U	COPPER	4.2	VANADIUM
1500	IRON	4U	ZINC
8.4J	LEAD	04	PERCENT MOISTURE
150	MAGNESIUM		

REMARKS ***REMARKS***

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

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50590 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-01 COLLECTION START: 09/19/90 1010 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W737 MD NO: W737

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-02
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1745 STOP: 00/00/00
MD NUMBER: W753

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
17000	ALUMINUM	25	MANGANESE
8.3UR	ANTIMONY	0.14U	MERCURY
3.4	ARSENIC	5.5	NICKEL
120	BARIUM	1200	POTASSIUM
2.8	BERYLLIUM	1UJ	SELENIUM
0.83U	CADMIUM	1.4U	SILVER
5200	CALCIUM	250	SODIUM
25	CHROMIUM	0.53U	THALLIUM
2.7	COBALT	NA	TIN
6U	COPPER	36	VANADIUM
15000	IRON	20U	ZINC
18J	LEAD	30	PERCENT MOISTURE
1600	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
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SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-02 COLLECTION START: 09/19/90 1745 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W753 MD NO: W753

RESULTS	UNITS	PARAMETER
1.4U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-04
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1455 STOP: 00/00/00
MD NUMBER: W746

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7600	ALUMINUM	84	MANGANESE
6.9UR	ANTIMONY	0.11U	MERCURY
3U	ARSENIC	2.7	NICKEL
27	BARIUM	260	POTASSIUM
1U	BERYLLIUM	0.45UR	SELENIUM
0.69U	CADMIUM	1.1U	SILVER
2700	CALCIUM	60U	SODIUM
10	CHROMIUM	0.45U	THALLIUM
2U	COBALT	NA	TIN
2U	COPPER	14	VANADIUM
8500	IRON	22	ZINC
11J	LEAD	15	PERCENT MOISTURE
300	MAGNESIUM		

REMARKS ***REMARKS***

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

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-04 COLLECTION START: 09/19/90 1455 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W746 MD NO: W746

RESULTS	UNITS	PARAMETER
1.2U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-05
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1450 STOP: 00/00/00
MD NUMBER: W749

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
6000	ALUMINUM	350	MANGANESE
7.4UR	ANTIMONY	0.13U	MERCURY
2U	ARSENIC	2.3	NICKEL
25	BARIUM	170	POTASSIUM
2U	BERYLLIUM	2.5UR	SELENIUM
0.74U	CADMIUM	1.2U	SILVER
3500	CALCIUM	60U	SODIUM
7.2	CHROMIUM	0.50U	THALLIUM
3.4	COBALT	NA	TIN
0.74U	COPPER	7.2	VANADIUM
5400	IRON	9U	ZINC
14J	LEAD	23	PERCENT MOISTURE
340	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-05 COLLECTION START: 09/19/90 1450 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W749 MD NO: W749

RESULTS	UNITS	PARAMETER
1.3U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-01
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1020 STOP: 00/00/00
MD NUMBER: W738

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
27000	ALUMINUM	3U	MANGANESE
6.6UR	ANTIMONY	0.11U	MERCURY
2U	ARSENIC	6.2	NICKEL
37	BARIUM	130U	POTASSIUM
0.22U	BERYLLIUM	2.1UR	SELENIUM
0.66U	CADMIUM	1.1U	SILVER
30U	CALCIUM	40U	SODIUM
9.1	CHROMIUM	0.42U	THALLIUM
1.5U	COBALT	NA	TIN
0.66U	COPPER	11	VANADIUM
2200	IRON	3U	ZINC
17J	LEAD	15	PERCENT MOISTURE
130	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SB-01 COLLECTION START: 09/19/90 1020 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W738 MD NO: W738

RESULTS	UNITS	PARAMETER
1.2U	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.
11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50609 SAMPLE TYPE: SEDIM
PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF
CITY: OAKLEY ST: SC
STATION ID: SB-02
COLLECTION START: 09/19/90 1815 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER:
MD NUMBER: W754

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7500	ALUMINUM	65	MANGANESE
8UR	ANTIMONY	0.14U	MERCURY
2.8	ARSENIC	11	NICKEL
23	BARIUM	3400	POTASSIUM
1U	BERYLLIUM	1UJ	SELENIUM
0.80U	CADMIUM	1.3U	SILVER
140000	CALCIUM	670	SODIUM
39	CHROMIUM	0.54U	THALLIUM
1.9U	COBALT	NA	TIN
4U	COPPER	14	VANADIUM
9000	IRON	40U	ZINC
4.7J	LEAD	28	PERCENT MOISTURE
3700	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50609 SAMPLE TYPE: SEDIM
PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF
CITY: OAKLEY ST: SC
STATION ID: SB-02
COLLECTION START: 09/19/90 1815 STOP: 00/00/00
CASE NO.: 14889 SAS NO.:
D. NO.: W754 MD NO: W754

RESULTS	UNITS	PARAMETER
1.4U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-04
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1520 STOP: 00/00/00
MD NUMBER: W747

ANALYTICAL RESULTS

MG/KG	
7900	ALUMINUM
9UJ	ANTIMONY
6.5	ARSENIC
70	BARIUM
1U	BERYLLIUM
0.81U	CADMIUM
140000	CALCIUM
38	CHROMIUM
2U	COBALT
3U	COPPER
10000	IRON
4.3J	LEAD
5300	MAGNESIUM
81	MANGANESE
0.13U	MERCURY
12	NICKEL
2800	POTASSIUM
0.52UR	SELENIUM
1.4U	SILVER
490	SODIUM
0.52U	THALLIUM
NA	TIN
13	VANADIUM
40U	ZINC
28	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SB-04 COLLECTION START: 09/19/90 1520 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W747 MD NO: W747

RESULTS	UNITS	PARAMETER
1.4U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-05
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1515 STOP: 00/00/00
MD NUMBER: W750

ANALYTICAL RESULTS

MG/KG	
18000	ALUMINUM
20UR	ANTIMONY
8.3	ARSENIC
87	BARIUM
2U	BERYLLIUM
3.9	CADMIUM
15000	CALCIUM
87	CHROMIUM
4	COBALT
6U	COPPER
17000	IRON
7J	LEAD
4700	MAGNESIUM

ANALYTICAL RESULTS

MG/KG	
160	MANGANESE
0.20U	MERCURY
17	NICKEL
3300	POTASSIUM
4.2UR	SELENIUM
2.1U	SILVER
480	SODIUM
0.85U	THALLIUM
NA	TIN
34	VANADIUM
95	ZINC
53	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-05
CASE.NO.: 14889 SAS NO.:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1515 STOP: 00/00/00
D. NO.: W750 MD NO: W750

RESULTS	UNITS	PARAMETER
2.1U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-01
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1130 STOP: 00/00/00
MD NUMBER: W744

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7000	ALUMINUM	16	MANGANESE
20UR	ANTIMONY	0.21U	MERCURY
2U	ARSENIC	2.9	NICKEL
80	BARIUM	250	POTASSIUM
2U	BERYLLIUM	1UJ	SELENIUM
1.2U	CADMIUM	2.1U	SILVER
1800	CALCIUM	80U	SODIUM
4U	CHROMIUM	0.84U	THALLIUM
2.9U	COBALT	NA	TIN
1.2U	COPPER	8.5	VANADIUM
2200	IRON	8U	ZINC
38J	LEAD	54	PERCENT MOISTURE
320	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-01
CASE.NO.: 14889 SAS NO.:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1130 STOP: 00/00/00
D. NO.: W744 MD NO: W744

RESULTS	UNITS	PARAMETER
2.1U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-02
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1030 STOP: 00/00/00
MD NUMBER: W739

ANALYTICAL RESULTS

MG/KG		MG/KG	
1600	ALUMINUM	4U	MANGANESE
7.6UR	ANTIMONY	0.14U	MERCURY
1U	ARSENIC	1.5U	NICKEL
10	BARIUM	40U	POTASSIUM
1U	BERYLLIUM	0.57UR	SELENIUM
0.76U	CADMIUM	1.3U	SILVER
240U	CALCIUM	30U	SODIUM
1.3U	CHROMIUM	0.57U	THALLIUM
1.8U	COBALT	NA	TIN
0.76U	COPPER	2.8	VANADIUM
590	IRON	2.3U	ZINC
5.3J	LEAD	33	PERCENT MOISTURE
46	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY ST: SC
STATION ID: SD-02	COLLECTION START: 09/19/90 1030 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:	D. NO.: W739 MD NO: W739

RESULTS	UNITS	PARAMETER
1.5U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-04
CASE NUMBER: 14889 SAS NUMBER:
PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1125 STOP: 00/00/00
MD NUMBER: W743

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
8100	ALUMINUM	21	MANGANESE
9.4UR	ANTIMONY	0.16U	MERCURY
3U	ARSENIC	3	NICKEL
24	BARIUM	440	POTASSIUM
2U	BERYLLIUM	0.67UR	SELENIUM
0.94U	CADMIUM	1.6U	SILVER
2600	CALCIUM	70U	SODIUM
8.1	CHROMIUM	0.67U	THALLIUM
3U	COBALT	NA	TIN
2U	COPPER	14	VANADIUM
11000	IRON	40U	ZINC
13J	LEAD	45	PERCENT MOISTURE
580	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803	SAMPLE NO. 50596 SAMPLE TYPE: SEDIM	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF		CITY: OAKLEY ST: SC
STATION ID: SD-04		COLLECTION START: 09/19/90 1125 STOP: 00/00/00
CASE.NO.: 14889	SAS NO.:	D. NO.: W743 MD NO: W743

RESULTS	UNITS	PARAMETER
1.8U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-05
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1050 STOP: 00/00/00
MD NUMBER: W740

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
2200	ALUMINUM	6.7	MANGANESE
6UR	ANTIMONY	0.10U	MERCURY
1U	ARSENIC	1.2U	NICKEL
7U	BARIUM	50U	POTASSIUM
1U	BERYLLIUM	0.36UR	SELENIUM
0.60U	CADMIUM	1U	SILVER
480	CALCIUM	20U	SODIUM
2U	CHROMIUM	0.36U	THALLIUM
1.4U	COBALT	NA	TIN
0.60U	COPPER	5.1	VANADIUM
3300	IRON	4U	ZINC
7.4J	LEAD	06	PERCENT MOISTURE
60U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SD-05 COLLECTION START: 09/19/90 1050 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W740 MD NO: W740

RESULTS	UNITS	PARAMETER
1.1U	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
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-06
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1110 STOP: 00/00/00
MD NUMBER: W742

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1100	ALUMINUM	6.8	MANGANESE
7UR	ANTIMONY	0.13U	MERCURY
2U	ARSENIC	1.4U	NICKEL
7.8	BARIUM	50U	POTASSIUM
1U	BERYLLIUM	1UJ	SELENIUM
0.70U	CADMIUM	1.2U	SILVER
420	CALCIUM	40U	SODIUM
1.2U	CHROMIUM	0.49U	THALLIUM
1.6U	COBALT	NA	TIN
0.70U	COPPER	2.4	VANADIUM
790	IRON	4U	ZINC
2.6J	LEAD	28	PERCENT MOISTURE
70U	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.

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM
PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF
CITY: OAKLEY ST: SC
STATION ID: SD-06
COLLECTION START: 09/19/90 1110 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:
D. NO.: W742 MD NO: W742

RESULTS	UNITS	PARAMETER
1.4U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50589 SAMPLE TYPE: SURFACEWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PB-01 COLLECTION START: 09/19/90 0700 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W735

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
110J	ALUMINUM	2U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
2U	BARIUM	80U	POTASSIUM
1U	BERYLLIUM	3UJ	SELENIUM
3U	CADMIUM	5U	SILVER
230U	CALCIUM	130U	SODIUM
6U	CHROMIUM	2UJ	THALLIUM
4U	COBALT	NA	TIN
3U	COPPER	3U	VANADIUM
140UJ	IRON	20U	ZINC
2U	LEAD		
30U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50589 SAMPLE TYPE: SURFACEWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PB-01 COLLECTION START: 09/19/90 0700 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: MD NO: W735

RESULTS	UNITS	PARAMETER
10U	UG/L	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.

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50594 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-01 COLLECTION START: 09/19/90 1110 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W741

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
7800J	ALUMINUM	5U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
75	BARIUM	990	POTASSIUM
1U	BERYLLIUM	3UJ	SELENIUM
3U	CADMIUM	5U	SILVER
850U	CALCIUM	23000	SODIUM
7U	CHROMIUM	2UJ	THALLIUM
5U	COBALT	NA	TIN
3U	COPPER	8	VANADIUM
2800J	IRON	40U	ZINC
5J	LEAD		
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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*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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50594   SAMPLE TYPE: GROUNDWA   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: TW-01   COLLECTION START: 09/19/90 1110   STOP: 00/00/00
CASE.NO.: 14889   SAS NO.:   D. NO.: W741   MD NO: W741

RESULTS	UNITS	PARAMETER
10U	UG/L	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W751

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
1300J	ALUMINUM	3300	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
110J	ARSENIC	33	NICKEL
64	BARIUM	6100	POTASSIUM
1U	BERYLLIUM	3UJ	SELENIUM
3U	CADMIUM	5U	SILVER
150000	CALCIUM	57000	SODIUM
6U	CHROMIUM	10UJ	THALLIUM
65	COBALT	NA	TIN
5U	COPPER	8	VANADIUM
46000J	IRON	30U	ZINC
4UJ	LEAD		
12000	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W751 MD NO: W751

RESULTS	UNITS	PARAMETER
10U	UG/L	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-01 COLLECTION START: 09/19/90 1220 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W745

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
110UJ	ALUMINUM	2U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
2U	BARIUM	9000	POTASSIUM
1U	BERYLLIUM	15UJ	SELENIUM
3U	CADMIUM	5U	SILVER
2900	CALCIUM	160000	SODIUM
6U	CHROMIUM	10UJ	THALLIUM
4U	COBALT	NA	TIN
5U	COPPER	4U	VANADIUM
90UJ	IRON	20U	ZINC
24J	LEAD		
1400	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-01 COLLECTION START: 09/19/90 1220 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W745 MD NO: W745

RESULTS	UNITS	PARAMETER
10U	UG/L	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-02 COLLECTION START: 09/19/90 1625 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W752

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
40UJ	ALUMINUM	2U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
2U	BARIUM	9200	POTASSIUM
1U	BERYLLIUM	15UJ	SELENIUM
3U	CADMIUM	5U	SILVER
2700	CALCIUM	170000	SODIUM
6U	CHROMIUM	10UJ	THALLIUM
4U	COBALT	NA	TIN
5U	COPPER	3U	VANADIUM
60UJ	IRON	20U	ZINC
55J	LEAD		
1400	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA
SOURCE: BERKELEY CO LF
STATION ID: PW-02
CASE.NO.: 14889 SAS NO.:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1625 STOP: 00/00/00
D. NO.: W752 MD NO: W752

RESULTS	UNITS	PARAMETER
10U	UG/L	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50591   SAMPLE TYPE: SEDIM   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: SB-01   COLLECTION START: 09/19/90 1020   STOP: 00/00/00
CASE.NO.: 14889   SAS NO.:   D. NO.: W738   MD NO: W738

RESULTS	UNITS	PARAMETER
1.2U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50609 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SB-02 COLLECTION START: 09/19/90 1815 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W754 MD NO: W754

RESULTS	UNITS	PARAMETER
1.4U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-04
CASE.NO.: 14889 SAS NO.:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1520 STOP: 00/00/00
D. NO.: W747 MD NO: W747

RESULTS	UNITS	PARAMETER
1.4U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SB-05 COLLECTION START: 09/19/90 1515 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W750 MD NO: W750

RESULTS	UNITS	PARAMETER
2.1U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

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** PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SD-01 COLLECTION START: 09/19/90 1130 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W744 MD NO: W744 **
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*** ***

RESULTS	UNITS	PARAMETER
2.1U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SD-02 COLLECTION START: 09/19/90 1030 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W739 MD NO: W739

RESULTS	UNITS	PARAMETER
1.5U	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. 11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SD-04 COLLECTION START: 09/19/90 1125 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W743 MD NO: W743

RESULTS	UNITS	PARAMETER
1.8U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

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**   PROJECT NO. 90-803    SAMPLE NO. 50593  SAMPLE TYPE: SEDIM        PROG ELEM: NSF    COLLECTED BY: L WARD               **
**   SOURCE: BERKELEY CO LF                                            CITY: OAKLEY                ST: SC                       **
**   STATION ID: SD-05                                                 COLLECTION START: 09/19/90  1050   STOP: 00/00/00        **
**   CASE.NO.: 14889          SAS NO.:                                 D. NO.: W740                MD NO: W740                  **
**                                                                                                                               **
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RESULTS	UNITS	PARAMETER
1.1U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SD-06 COLLECTION START: 09/19/90 1110 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W742 MD NO: W742

RESULTS	UNITS	PARAMETER
1.4U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803	SAMPLE NO. 50590	SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF		
STATION ID: SS-01		
CASE.NO.: 14889	SAS NO.:	

PROG ELEM: NSF	COLLECTED BY: L WARD	
CITY: OAKLEY	ST: SC	
COLLECTION START: 09/19/90 1010		STOP: 00/00/00
D. NO.: W737	MD NO: W737	

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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803	SAMPLE NO. 50608	SAMPLE TYPE: SEDIM	PROG ELEM: NSF	COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF			CITY: OAKLEY	ST: SC
STATION ID: SS-02			COLLECTION START: 09/19/90 1745	STOP: 00/00/00
CASE.NO.: 14889	SAS NO.:		D. NO.: W753	MD NO: W753

RESULTS	UNITS	PARAMETER
1.4U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM
PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF
CITY: OAKLEY ST: SC
STATION ID: SS-04
COLLECTION START: 09/19/90 1455 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.:
D. NO.: W746 MD NO: W746

RESULTS	UNITS	PARAMETER
1.2U	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-05 COLLECTION START: 09/19/90 1450 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W749 MD NO: W749

RESULTS	UNITS	PARAMETER
1.3U	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50591 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-01
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1020 STOP: 00/00/00
MD NUMBER: W738

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
27000	ALUMINUM	3U	MANGANESE
6.6UR	ANTIMONY	0.11U	MERCURY
2U	ARSENIC	6.2	NICKEL
37	BARIUM	130U	POTASSIUM
0.22U	BERYLLIUM	2.1UR	SELENIUM
0.66U	CADMIUM	1.1U	SILVER
30U	CALCIUM	40U	SODIUM
9.1	CHROMIUM	0.42U	THALLIUM
1.5U	COBALT	NA	TIN
0.66U	COPPER	11	VANADIUM
2200	IRON	3U	ZINC
17J	LEAD	15	PERCENT MOISTURE
130	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.

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50609 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-02
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1815 STOP: 00/00/00
MD NUMBER: W754

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7500	ALUMINUM	65	MANGANESE
8UR	ANTIMONY	0.14U	MERCURY
2.8	ARSENIC	11	NICKEL
23	BARIUM	3400	POTASSIUM
1U	BERYLLIUM	1UJ	SELENIUM
0.80U	CADMIUM	1.3U	SILVER
140000	CALCIUM	670	SODIUM
39	CHROMIUM	0.54U	THALLIUM
1.9U	COBALT	NA	TIN
4U	COPPER	14	VANADIUM
9000	IRON	40U	ZINC
4.7J	LEAD	28	PERCENT MOISTURE
3700	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 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50600 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SB-04
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1520 STOP: 00/00/00
MD NUMBER: W747

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7900	ALUMINUM	81	MANGANESE
9UJ	ANTIMONY	0.13U	MERCURY
6.5	ARSENIC	12	NICKEL
70	BARIUM	2800	POTASSIUM
1U	BERYLLIUM	0.52UR	SELENIUM
0.81U	CADMIUM	1.4U	SILVER
140000	CALCIUM	490	SODIUM
38	CHROMIUM	0.52U	THALLIUM
2U	COBALT	NA	TIN
3U	COPPER	13	VANADIUM
10000	IRON	40U	ZINC
4.3J	LEAD	28	PERCENT MOISTURE
5300	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 11/07/90

** PROJECT NO. 90-803 SAMPLE NO. 50602 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SB-05 COLLECTION START: 09/19/90 1515 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W750 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
18000	ALUMINUM	160	MANGANESE
20UR	ANTIMONY	0.20U	MERCURY
8.3	ARSENIC	17	NICKEL
87	BARIUM	3300	POTASSIUM
2U	BERYLLIUM	4.2UR	SELENIUM
3.9	CADMIUM	2.1U	SILVER
15000	CALCIUM	480	SODIUM
87	CHROMIUM	0.85U	THALLIUM
4	COBALT	NA	TIN
6U	COPPER	34	VANADIUM
17000	IRON	95	ZINC
7J	LEAD	53	PERCENT MOISTURE
4700	MAGNESIUM		

REMARKS ***REMARKS***

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50597 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-01
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1130 STOP: 00/00/00
MD NUMBER: W744

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7000	ALUMINUM	16	MANGANESE
20UR	ANTIMONY	0.21U	MERCURY
2U	ARSENIC	2.9	NICKEL
80	BARIUM	250	POTASSIUM
2U	BERYLLIUM	1UJ	SELENIUM
1.2U	CADMIUM	2.1U	SILVER
1800	CALCIUM	80U	SODIUM
4U	CHROMIUM	0.84U	THALLIUM
2.9U	COBALT	NA	TIN
1.2U	COPPER	8.5	VANADIUM
2200	IRON	8U	ZINC
38J	LEAD	54	PERCENT MOISTURE
320	MAGNESIUM		

REMARKS ***REMARKS***

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

11/07/90

METALS DATA REPORT

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** PROJECT NO. 90-803 SAMPLE NO. 50592 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: SD-02 COLLECTION START: 09/19/90 1030 STOP: 00/00/00 **
** CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W739 **

*** ***

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1600	ALUMINUM	4U	MANGANESE
7.6UR	ANTIMONY	0.14U	MERCURY
1U	ARSENIC	1.5U	NICKEL
10	BARIUM	40U	POTASSIUM
1U	BERYLLIUM	0.57UR	SELENIUM
0.76U	CADMIUM	1.3U	SILVER
240U	CALCIUM	30U	SODIUM
1.3U	CHROMIUM	0.57U	THALLIUM
1.8U	COBALT	NA	TIN
0.76U	COPPER	2.8	VANADIUM
590	IRON	2.3U	ZINC
5.3J	LEAD	33	PERCENT MOISTURE
46	MAGNESIUM		

REMARKS

REMARKS

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50596 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-04
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1125 STOP: 00/00/00
MD NUMBER: W743

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
8100	ALUMINUM	21	MANGANESE
9.4UR	ANTIMONY	0.16U	MERCURY
3U	ARSENIC	3	NICKEL
24	BARIUM	440	POTASSIUM
2U	BERYLLIUM	0.67UR	SELENIUM
0.94U	CADMIUM	1.6U	SILVER
2600	CALCIUM	70U	SODIUM
8.1	CHROMIUM	0.67U	THALLIUM
3U	COBALT	NA	TIN
2U	COPPER	14	VANADIUM
11000	IRON	40U	ZINC
13J	LEAD	45	PERCENT MOISTURE
580	MAGNESIUM		

REMARKS ***REMARKS***

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50593 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-05
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1050 STOP: 00/00/00
MD NUMBER: W740

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
2200	ALUMINUM	6.7	MANGANESE
6UR	ANTIMONY	0.10U	MERCURY
1U	ARSENIC	1.2U	NICKEL
7U	BARIUM	50U	POTASSIUM
1U	BERYLLIUM	0.36UR	SELENIUM
0.60U	CADMIUM	1U	SILVER
480	CALCIUM	20U	SODIUM
2U	CHROMIUM	0.36U	THALLIUM
1.4U	COBALT	NA	TIN
0.60U	COPPER	5.1	VANADIUM
3300	IRON	4U	ZINC
7.4J	LEAD	06	PERCENT MOISTURE
60U	MAGNESIUM		

REMARKS ***REMARKS***

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50595 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SD-06
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1110 STOP: 00/00/00
MD NUMBER: W742

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1100	ALUMINUM	6.8	MANGANESE
7UR	ANTIMONY	0.13U	MERCURY
2U	ARSENIC	1.4U	NICKEL
7.8	BARIUM	50U	POTASSIUM
1U	BERYLLIUM	1UJ	SELENIUM
0.70U	CADMIUM	1.2U	SILVER
420	CALCIUM	40U	SODIUM
1.2U	CHROMIUM	0.49U	THALLIUM
1.6U	COBALT	NA	TIN
0.70U	COPPER	2.4	VANADIUM
790	IRON	4U	ZINC
2.6J	LEAD	28	PERCENT MOISTURE
70U	MAGNESIUM		

REMARKS ***REMARKS***

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

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50590   SAMPLE TYPE: SEDIM   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: SS-01   COLLECTION START: 09/19/90 1010   STOP: 00/00/00
CASE NUMBER: 14889   SAS NUMBER: MD NUMBER: W737

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
2600	ALUMINUM	15	MANGANESE
5.6UR	ANTIMONY	0.10U	MERCURY
2J	ARSENIC	1.1U	NICKEL
21	BARIUM	60U	POTASSIUM
1U	BERYLLIUM	0.38UR	SELENIUM
0.56U	CADMIUM	0.94U	SILVER
1000	CALCIUM	30U	SODIUM
2U	CHROMIUM	0.38U	THALLIUM
1.3U	COBALT	NA	TIN
3U	COPPER	4.2	VANADIUM
1500	IRON	4U	ZINC
8.4J	LEAD	04	PERCENT MOISTURE
150	MAGNESIUM		

REMARKS

REMARKS

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50608 SAMPLE TYPE: SEDIM
SOURCE: BERKELEY CO LF
STATION ID: SS-02
CASE NUMBER: 14889 SAS NUMBER:

PROG ELEM: NSF COLLECTED BY: L WARD
CITY: OAKLEY ST: SC
COLLECTION START: 09/19/90 1745 STOP: 00/00/00
MD NUMBER: W753

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
17000	ALUMINUM	25	MANGANESE
8.3UR	ANTIMONY	0.14U	MERCURY
3.4	ARSENIC	5.5	NICKEL
120	BARIUM	1200	POTASSIUM
2.8	BERYLLIUM	1UJ	SELENIUM
0.83U	CADMIUM	1.4U	SILVER
5200	CALCIUM	250	SODIUM
25	CHROMIUM	0.53U	THALLIUM
2.7	COBALT	NA	TIN
6U	COPPER	36	VANADIUM
15000	IRON	20U	ZINC
18J	LEAD	30	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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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50599 SAMPLE TYPE: SEDIM PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: SS-04 COLLECTION START: 09/19/90 1455 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W746

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
7600	ALUMINUM	84	MANGANESE
6.9UR	ANTIMONY	0.11U	MERCURY
3U	ARSENIC	2.7	NICKEL
27	BARIUM	260	POTASSIUM
1U	BERYLLIUM	0.45UR	SELENIUM
0.69U	CADMIUM	1.1U	SILVER
2700	CALCIUM	60U	SODIUM
10	CHROMIUM	0.45U	THALLIUM
2U	COBALT	NA	TIN
2U	COPPER	14	VANADIUM
8500	IRON	22	ZINC
11J	LEAD	15	PERCENT MOISTURE
300	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.
11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50601 SAMPLE TYPE: SEDIM	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF	CITY: OAKLEY ST: SC
STATION ID: SS-05	COLLECTION START: 09/19/90 1450 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER:	MD NUMBER: W749

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
6000	ALUMINUM	350	MANGANESE
7.4UR	ANTIMONY	0.13U	MERCURY
2U	ARSENIC	2.3	NICKEL
25	BARIUM	170	POTASSIUM
2U	BERYLLIUM	2.5UR	SELENIUM
0.74U	CADMIUM	1.2U	SILVER
3500	CALCIUM	60U	SODIUM
7.2	CHROMIUM	0.50U	THALLIUM
3.4	COBALT	NA	TIN
0.74U	COPPER	7.2	VANADIUM
5400	IRON	9U	ZINC
14J	LEAD	23	PERCENT MOISTURE
340	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-01 COLLECTION START: 09/19/90 1220 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W745 MD NO: W745

RESULTS	UNITS	PARAMETER
10U	UG/L	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-02 COLLECTION START: 09/19/90 1625 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W752 MD NO: W752

RESULTS	UNITS	PARAMETER
10U	UG/L	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50594 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-01 COLLECTION START: 09/19/90 1110 STOP: 00/00/00
CASE.NO.: 14889 SAS NO.: D. NO.: W741 MD NO: W741

RESULTS	UNITS	PARAMETER
10U	UG/L	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

*** ***
** PROJECT NO. 90-803 SAMPLE NO. 50603 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD **
** SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC **
** STATION ID: TW-05 COLLECTION START: 09/19/90 1550 STOP: 00/00/00 **
** CASE.NO.: 14889 SAS NO.: D. NO.: W751 MD NO: W751 **
** **
*** ***

RESULTS	UNITS	PARAMETER
10U	UG/L	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.

11/07/90

SPECIFIED ANALYSIS DATA REPORT

PROJECT NO. 90-803	SAMPLE NO. 50589 SAMPLE TYPE: SURFACEWA	PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF		CITY: OAKLEY ST: SC
STATION ID: PB-01		COLLECTION START: 09/19/90 0700 STOP: 00/00/00
CASE.NO.: 14889	SAS NO.:	D. NO.: MD NO: W735

RESULTS	UNITS	PARAMETER
10U	UG/L	CYANIDE

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50598 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-01 COLLECTION START: 09/19/90 1220 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W745

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
110UJ	ALUMINUM	2U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
2U	BARIUM	9000	POTASSIUM
1U	BERYLLIUM	15UJ	SELENIUM
3U	CADMIUM	5U	SILVER
2900	CALCIUM	160000	SODIUM
6U	CHROMIUM	10UJ	THALLIUM
4U	COBALT	NA	TIN
5U	COPPER	4U	VANADIUM
90UJ	IRON	20U	ZINC
24J	LEAD		
1400	MAGNESIUM		

REMARKS ***REMARKS***

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50607 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PW-02 COLLECTION START: 09/19/90 1625 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W752

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
40UJ	ALUMINUM	2U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
2U	BARIUM	9200	POTASSIUM
1U	BERYLLIUM	15UJ	SELENIUM
3U	CADMIUM	5U	SILVER
2700	CALCIUM	170000	SODIUM
6U	CHROMIUM	10UJ	THALLIUM
4U	COBALT	NA	TIN
5U	COPPER	3U	VANADIUM
60UJ	IRON	20U	ZINC
55J	LEAD		
1400	MAGNESIUM		

REMARKS ***REMARKS***

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

METALS DATA REPORT 11/07/90

PROJECT NO. 90-803 SAMPLE NO. 50594 SAMPLE TYPE: GROUNDWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: TW-01 COLLECTION START: 09/19/90 1110 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W741

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
7800J	ALUMINUM	5U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
75	BARIUM	990	POTASSIUM
1U	BERYLLIUM	3UJ	SELENIUM
3U	CADMIUM	5U	SILVER
850U	CALCIUM	23000	SODIUM
7U	CHROMIUM	2UJ	THALLIUM
5U	COBALT	NA	TIN
3U	COPPER	8	VANADIUM
2800J	IRON	40U	ZINC
5J	LEAD		
1600	MAGNESIUM		

REMARKS ***REMARKS***

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.
11/07/90

METALS DATA REPORT

PROJECT NO. 90-803   SAMPLE NO. 50603   SAMPLE TYPE: GROUNDWA   PROG ELEM: NSF   COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF   CITY: OAKLEY   ST: SC
STATION ID: TW-05   COLLECTION START: 09/19/90 1550   STOP: 00/00/00
CASE NUMBER: 14889   SAS NUMBER: MD NUMBER: W751

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
1300J	ALUMINUM	3300	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
110J	ARSENIC	33	NICKEL
64	BARIUM	6100	POTASSIUM
1U	BERYLLIUM	3UJ	SELENIUM
3U	CADMIUM	5U	SILVER
150000	CALCIUM	57000	SODIUM
6U	CHROMIUM	10UJ	THALLIUM
65	COBALT	NA	TIN
5U	COPPER	8	VANADIUM
46000J	IRON	30U	ZINC
4UJ	LEAD		
12000	MAGNESIUM		

REMARKS

REMARKS

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

11/07/90

METALS DATA REPORT

PROJECT NO. 90-803 SAMPLE NO. 50589 SAMPLE TYPE: SURFACEWA PROG ELEM: NSF COLLECTED BY: L WARD
SOURCE: BERKELEY CO LF CITY: OAKLEY ST: SC
STATION ID: PB-01 COLLECTION START: 09/19/90 0700 STOP: 00/00/00
CASE NUMBER: 14889 SAS NUMBER: MD NUMBER: W735

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
110J	ALUMINUM	2U	MANGANESE
24U	ANTIMONY	0.20U	MERCURY
2UJ	ARSENIC	6U	NICKEL
2U	BARIUM	80U	POTASSIUM
1U	BERYLLIUM	3UJ	SELENIUM
3U	CADMIUM	5U	SILVER
230U	CALCIUM	130U	SODIUM
6U	CHROMIUM	2UJ	THALLIUM
4U	COBALT	NA	TIN
3U	COPPER	3U	VANADIUM
140UJ	IRON	20U	ZINC
2U	LEAD		
30U	MAGNESIUM		

REMARKS

REMARKS

FOOTNOTES
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Site Inspection Report

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Berkeley County Landfill	Landfill Road

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Oakley	SC	29461	Berkeley	015	

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
33° 08' 38.1"	80° 02' 58.1"	☒ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION (MONTH DAY YEAR)	02 SITE STATUS	03 YEARS OF OPERATION (BEGINNING YEAR, ENDING YEAR)
9 19 90	☐ ACTIVE ☒ INACTIVE	1972 1977 ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☒ B. EPA CONTRACTOR NUS Corporation (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ___ (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR ___ (Name of firm) ☐ G. OTHER ___ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO
Lisa Ward	Chemist	NUS	(404) 938-7710

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Jack Kendall (1977)		State	( )
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Gene Neighbors	land owner	Rt. 2 Box 226 Moncks Corner, SC 29461	(803) 761-3951
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	began 815 9-19-90	Sunny, mild, no clouds, 74°F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO
		( )

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE (MONTH DAY YEAR)
Lisa Ward	NUS		(404) 938-7710	12-10-90

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

X A. SOLID
B. POWDER, FINES
C. SLUDGE
D. OTHER _____ (Specify)
X E. SLURRY
X F. LIQUID
G. GAS

02 WASTE QUANTITY AT SITE
(Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS _____
NO. OF DRUMS _____
UNKNOWN

03 WASTE CHARACTERISTICS (Check all that apply)

X A. TOXIC
B. CORROSIVE
C. RADIOACTIVE
D. PERSISTENT
E. SOLUBLE
F. INFECTIOUS
G. FLAMMABLE
H. IGNITABLE
I. HIGHLY VOLATILE
J. EXPLOSIVE
K. REACTIVE
L. INCOMPATIBLE
M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			type of waste disposed
OLW	OILY WASTE			of on site is not
SOL	SOLVENTS			known.
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NUS, EPA, & state of South Carolina file information.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

II. HAZARDOUS CONDITIONS AND INCIDENTS (continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None was observated during the field investigation and none was noted in state file material.

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

None was observed during the field investigation and none was noted in State file material.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No serious potential exists (Streams in the area are intermittent and not fished on).

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills, Runoff, Standing liquids, Leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: unknown — 04 NARRATIVE DESCRIPTION

File material is not available on specific wastes that were land-filled.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed during field investigation and none was noted in state file material

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A - there are no municipal sewers, storm drains, or WWTPs in site vicinity.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None observed, but landowner (G. Neighbors) speculates that unauthorized dumping took place because the lock at the landfill enterance has been broken several times.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA, NUS, & state file material

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
SC	D981028095

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 4402
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
↳ population served by groundwater within 4-miles of the site.

01 ☐ B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None from water consumption or food chain.

01 ☐ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
No threat - landfill is covered & heavily vegetated.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

01 ☐ E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
none - landfill is completely fenced

01 ☐ F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: _____ (Acres)
02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
none - 2' of soil cover was layed over entire landfill upon closure. (Now it is also heavily overgrown).

01 ☐ G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 4402
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ H. WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
~~None~~ N/A - inactive landfill

01 ☐ I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: 4402
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Residents within 4-miles of the site.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				Permit issued by the
☐ G. STATE (Specify)				S.C. State Board of
☐ H. LOCAL (Specify)				Health -- authorizing
☒ I. OTHER (Specify)	15	5-22-		the property to be used
☐ J. NONE				as a Sanitary Landfill.

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☒ F. LANDFILL	unknown	(~86 acres)
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER
- ☐ A. BUILDINGS ON SITE

06 AREA OF SITE: ~ 86 (Acres)

07 COMMENTS

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☒ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

no engineered liner

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

Facility is fenced.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

NUS, EPA, & State files.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☒	B. ☐	C. ☐
D. ☒	E. ☐	F. ☐

03 DISTANCE TO SITE

A. 3 (mi)
B. <1 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING ☒ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 4402 (within 4-miles) 03 DISTANCE TO NEAREST DRINKING WATER WELL <1 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
~10 (ft)	South & east	~300 (ft)	(gpd)	☐ YES ☒ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

Approx. 3200 people with 4-miles of the site are using private wells that are cased at ~300' (may be as deep as 500' in some areas) The remained of the population is served by municipal (county) water, 3 of the municipal wells are within 3-miles of the site.

10 RECHARGE AREA		11 DISCHARGE AREA	
☒ YES ☐ NO	COMMENTS Between Sinattee Formation (~200' bls) and the Black Mingo Formation (210-530' bls)	☐ YES ☐ NO	COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☐ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☒ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Molly Branch Creek	☐	<1 (mi)
Cooper River	☐	6.5 (mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 433 NO. OF PERSONS	B. 1705 NO. OF PERSONS	C. 1944 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION <1 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE _____

04 DISTANCE TO NEAREST OFF-SITE BUILDING <1 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

Sparsely populated rural area - ~4402 residents within 4-miles of the landfill.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028045

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☒ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☒ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
_____ (ft)	6 (ft)	_____

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
5 (in)	3.5 (in)	1.4 %	varies	1 %

09 FLOOD POTENTIAL

SITE IS IN _____ YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE A. [illegible] (mi) OTHER B. ~2 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

unknown (mi)

ENDANGERED SPECIES: bald eagle, Bachmans warbler, red-cockaded woodpecker.

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. 5 (mi)	B. — (mi)	C. — (mi)	D. <1 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Site area is relatively flat.
Drainage appears to be to the south, southeast.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NUS, EPA, & State file material.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
BC	D991028095

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	4	Organic Analyses:	12/90
SURFACE WATER		S-Cubed; San Diego, Calif.	
WASTE			
AIR			
RUNOFF		Inorganic Analyses:	12/90
SPILL		Skinner & Sherman;	
SOIL	13	Waltham, MA.	
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
pH	for groundwater
Conductivity	samples
Temperature	only

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☐ GROUND ☒ AERIAL

02 IN CUSTODY OF NUS Corporation
Name of organization or individual

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS NUS Corporation

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION Cite specific references, e.g. state files, sample analysis, records

NUS, EPA, & State File material.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

II. CURRENT OWNER(S) / **PARENT COMPANY** (If applicable)

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
Gene Neighbors			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
Rt. 6 Box 226			

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
Moncks Corners	SC	29461			

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first) / **IV. REALTY OWNER(S)** (If applicable, list most recent first)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NUS field sheets (Chain of Custody), EPA, & State files

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
SC	D981028095

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
GC	D981028095

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
SC	D981025095

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED 04 DESCRIPTION N/A	02 DATE _____	03 AGENCY _____
01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ D. SPILLED MATERIAL REMOVED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ F. WASTE REPACKAGED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ H. ON SITE BURIAL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ L. ENCAPSULATION 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ N. CUTOFF WALLS 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ O. EMERGENCY DIKING SURFACE WATER DIVERSION 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ P. CUTOFF TRENCHES/SUMP 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ Q. SUBSURFACE CUTOFF WALL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION
01 STATE: SC | 02 SITE NUMBER: D981028095

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION: N/A

01 ☒ S. CAPPING/COVERING — 02 DATE 1976 — 03 AGENCY ____
04 DESCRIPTION: 2' soil cover upon closure of landfill

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION: N/A

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION

III. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

EPA & State file material

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
SC	DAR028095

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY ENFORCEMENT ACTION YES X NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY ENFORCEMENT ACTION

III. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

APPENDIX

I. FEEDSTOCKS

CAS Number	Chemical Name
1. 7664-41-7	Ammonia
2. 7440-36-0	Antimony
3. 1309-64-4	Antimony Trioxide
4. 7440-38-2	Arsenic
5. 1327-53-3	Arsenic Trioxide
6. 21109-95-5	Barium Sulfide
7. 7726-95-6	Bromine
8. 106-99-0	Butadiene
9. 7440-43-9	Cadmium
10. 7782-50-5	Chlorine
11. 12737-27-8	Chromite
12. 7440-47-3	Chromium
13. 7440-48-4	Cobalt
14. 1317-38-0	Cupric Oxide
15. 7758-98-7	Cupric Sulfate
16. 1317-39-1	Cuprous Oxide
17. 74-85-1	Ethylene
18. 7647-01-0	Hydrochloric Acid
19. 7664-39-3	Hydrogen Fluoride
20. 1335-25-7	Lead Oxide
21. 7439-97-6	Mercury
22. 74-82-8	Methane
23. 91-20-3	Napthalene
24. 7440-02-0	Nickel
25. 7697-37-2	Nitric Acid
26. 7723-14-0	Phosphorus
27. 7778-50-9	Potassium Dichromate
28. 1310-58-3	Potassium Hydroxide
29. 115-07-1	Propylene
30. 10588-01-9	Sodium Dichromate
31. 1310-73-2	Sodium Hydroxide
32. 7646-78-8	Stannic Chloride
33. 7772-99-8	Stannous Chloride
34. 7664-93-9	Sulfuric Acid
35. 108-88-3	Toluene
36. 1330-20-7	Xylene
37. 7646-85-7	Zinc Chloride
38. 7733-02-0	Zinc Sulfate

II. HAZARDOUS SUBSTANCES

CAS Number	Chemical Name
1. 75-07-0	Acetaldehyde
2. 64-19-7	Acetic Acid
3. 108-24-7	Acetic Anhydride
4. 75-86-5	Acetone Cyanohydrin
5. 506-96-7	Acetyl Bromide
6. 75-36-5	Acetyl Chloride
7. 107-02-8	Acrolein
8. 107-13-1	Acrylonitrile
9. 124-04-9	Adipic Acid
10. 309-00-2	Aldrin
11. 10043-01-3	Aluminum Sulfate
12. 107-18-6	Allyl Alcohol
13. 107-05-1	Allyl Chloride
14. 7664-41-7	Ammonia
15. 631-61-8	Ammonium Acetate
16. 1863-63-4	Ammonium Benzoate
17. 1066-33-7	Ammonium Bicarbonate
18. 7789-09-5	Ammonium Bichromate
19. 1341-49-7	Ammonium Bifluoride
20. 10192-30-0	Ammonium Bisulfite
21. 1111-78-0	Ammonium Carbamate
22. 12125-02-9	Ammonium Chloride
23. 7788-98-9	Ammonium Chromate
24. 3012-65-5	Ammonium Citrate, Dibasic
25. 13826-83-0	Ammonium Fluoborate
26. 12125-01-8	Ammonium Fluoride
27. 1336-21-6	Ammonium Hydroxide
28. 6009-70-7	Ammonium Oxalate
29. 16919-19-0	Ammonium Silicofluoride
30. 7773-06-0	Ammonium Sulfamate
31. 12135-76-1	Ammonium Sulfide
32. 10196-04-0	Ammonium Sulfite
33. 14307-43-8	Ammonium Tartrate
34. 1762-95-4	Ammonium Thiocyanate
35. 7783-18-8	Ammonium Thiosulfate
36. 628-63-7	Amyl Acetate
37. 62-53-3	Aniline
38. 7647-18-9	Antimony Pentachloride
39. 7789-61-9	Antimony Tribromide
40. 10025-91-9	Antimony Trichloride
41. 7783-56-4	Antimony Trifluoride
42. 1309-64-4	Antimony Trioxide
43. 1303-32-8	Arsenic Disulfide
44. 1303-28-2	Arsenic Pentoxide
45. 7784-34-1	Arsenic Trichloride
46. 1327-53-3	Arsenic Trioxide
47. 1303-33-9	Arsenic Trisulfide
48. 542-62-1	Barium Cyanide
49. 71-43-2	Benzene
50. 65-85-0	Benzoic Acid
51. 100-47-0	Benzonitrile
52. 98-88-4	Benzoyl Chloride
53. 100-44-7	Benzyl Chloride
54. 7440-41-7	Beryllium
55. 7787-47-5	Beryllium Chloride
56. 7787-49-7	Beryllium Fluoride
57. 13597-99-4	Beryllium Nitrate
58. 123-86-4	Butyl Acetate
59. 84-74-2	n-Butyl Phthalate
60. 109-73-9	Butylamine
61. 107-92-6	Butyric Acid
62. 543-90-8	Cadimium Acetate
63. 7789-42-6	Cadmium Bromide
64. 10108-64-2	Cadmium Chloride
65. 7778-44-1	Calcium Arsenate
66. 52740-16-6	Calcium Arsenite
67. 75-20-7	Calcium Carbide
68. 13765-19-0	Calcium Chromate
69. 592-01-8	Calcium Cyanide
70. 26264-06-2	Calcium Dodecylbenzene Sulfonate
71. 7778-54-3	Calcium Hypochlorite
72. 133-06-2	Captan
73. 63-25-2	Carbaryl
74. 1563-66-2	Carbofuran
75. 75-15-0	Carbon Disulfide
76. 56-23-5	Carbon Tetrachloride
77. 57-74-9	Chlordane
78. 7782-50-5	Chlorine
79. 108-90-7	Chlorobenzene
80. 67-66-3	Chloroform
81. 7790-94-5	Chlorosulfonic Acid
82. 2921-88-2	Chlorpyrifos
83. 1066-30-4	Chromic Acetate
84. 7738-94-5	Chromic Acid
85. 10101-53-8	Chromic Sulfate
86. 10049-05-5	Chromous Chloride
87. 544-18-3	Cobaltous Formate
88. 14017-41-5	Cobaltous Sulfamate
89. 56-72-4	Coumaphos
90. 1319-77-3	Cresol
91. 4170-30-3	Crotonaldehyde
92. 142-71-2	Cupric Acetate
93. 12002-03-8	Cupric Acetoarsenite
94. 7447-39-4	Cupric Chloride
95. 3251-23-8	Cupric Nitrate
96. 5893-66-3	Cupric Oxalate
97. 7758-98-7	Cupric Sulfate
98. 10380-29-7	Cupric Sulfate Ammoniated
99. 815-82-7	Cupric Tartrate
100. 506-77-4	Cyanogen Chloride
101. 110-82-7	Cyclohexane
102. 94-75-7	2,4-D Acid
103. 94-11-1	2,4-D Esters
104. 50-29-3	DDT
105. 333-41-5	Diazinon
106. 1918-00-9	Dicamba
107. 1194-65-6	Dichlobenil
108. 117-80-6	Dichlone
109. 25321-22-6	Dichlorobenzene (all isomers)
110. 266-38-19-7	Dichloropropane (all isomers)
111. 26952-23-8	Dichloropropene (all isomers)
112. 8003-19-8	Dichloropropene-Dichloropropane Mixture
113. 75-99-0	2-2-Dichloropropionic Acid
114. 62-73-7	Dichlorvos
115. 60-57-1	Dieldrin
116. 109-89-7	Diethylamine
117. 124-40-3	Dimethylamine
118. 25154-54-5	Dinitrobenzene (all isomers)
119. 51-28-5	Dinitrophenol
120. 25321-14-6	Dinitrotoluene (all isomers)
121. 85-00-7	Diquat
122. 298-04-4	Disulfoton
123. 330-54-1	Diuron
124. 27176-87-0	Dodecylbenzenesulfonic Acid
125. 115-29-7	Endosulfan (all isomers)
126. 72-20-8	Endrin and Metabolites
127. 106-89-8	Epichlorohydrin
128. 563-12-2	Ethion
129. 100-41-4	Ethyl Benzene
130. 107-15-3	Ethylenediamine
131. 106-93-4	Ethylene Dibromide
132. 107-06-2	Ethylene Dichloride
133. 60-00-4	EDTA
134. 1185-57-5	Ferric Ammonium Citrate
135. 2944-67-4	Ferric Ammonium Oxalate
136. 7705-08-0	Ferric Chloride

II. HAZARDOUS SUBSTANCES

CAS Number	Chemical Name
137. 7783-50-8	Ferric Fluoride
138. 10421-48-4	Ferric Nitrate
139. 10028-22-5	Ferric Sulfate
140. 10045-89-3	Ferrous Ammonium Sulfate
141. 7758-94-3	Ferrous Chloride
142. 7720-78-7	Ferrous Sulfate
143. 206-44-0	Fluoranthene
144. 50-00-0	Formaldehyde
145. 64-18-6	Formic Acid
146. 110-17-8	Fumaric Acid
147. 98-01-1	Furfural
148. 86-50-0	Guthion
149. 76-44-8	Heptachlor
150. 118-74-1	Hexachlorobenzene
151. 87-68-3	Hexachlorobutadiene
152. 67-72-1	Hexachloroethane
153. 70-30-4	Hexachlorophene
154. 77-47-4	Hexachlorocyclopentadiene
155. 7647-01-0	Hydrochloric Acid (Hydrogen Chloride)
156. 7664-39-3	Hydrofluoric Acid (Hydrogen Fluoride)
157. 74-90-8	Hydrogen Cyanide
158. 7783-06-4	Hydrogen Sulfide
159. 78-79-5	Isoprene
160. 42504-46-1	Isopropanolamine Dodecylbenzenesulfonate
161. 115-32-2	Kelthane
162. 143-50-0	Kepone
163. 301-04-2	Lead Acetate
164. 3687-31-8	Lead Arsenate
165. 7758-95-4	Lead Chloride
166. 13814-96-5	Lead Fluoborate
167. 7783-46-2	Lead Fluoride
168. 10101-63-0	Lead Iodide
169. 18256-98-9	Lead Nitrate
170. 7428-48-0	Lead Stearate
171. 15739-80-7	Lead Sulfate
172. 1314-87-0	Lead Sulfide
173. 592-87-0	Lead Thiocyanate
174. 58-89-9	Lindane
175. 14307-35-8	Lithium Chromate
176. 121-75-5	Malthion
177. 110-16-7	Maleic Acid
178. 108-31-6	Maleic Anhydride
179. 2032-65-7	Mercaptodimethur
180. 592-04-1	Mercuric Cyanide
181. 10045-94-0	Mercuric Nitrate
182. 7783-35-9	Mercuric Sulfate
183. 592-85-8	Mercuric Thiocyanate
184. 10415-75-5	Mercurous Nitrate
185. 72-43-5	Methoxychlor
186. 74-93-1	Methyl Mercaptan
187. 80-62-6	Methyl Methacrylate
188. 298-00-0	Methyl Parathion
189. 7786-34-7	Mevinphos
190. 315-18-4	Mexacarbate
191. 75-04-7	Monoethylamine
192. 74-89-5	Monomethylamine
193. 300-76-5	Naled
194. 91-20-3	Naphthalene
195. 1338-24-5	Naphthenic Acid
196. 7440-02-0	Nickel
197. 15699-18-0	Nickel Ammonium Sulfate
198. 37211-05-5	Nickel Chloride
199. 12054-48-7	Nickel Hydroxide
200. 14216-75-2	Nickel Nitrate
201. 7786-81-4	Nickel Sulfate
202. 7697-37-2	Nitric Acid
203. 98-95-3	Nitrobenzene
204. 10102-44-0	Nitrogen Dioxide
205. 25154-55-6	Nitrophenol (all isomers)
206. 1321-12-6	Nitrotoluene
207. 30525-89-4	Paraformaldehyde
208. 56-38-2	Parathion
209. 608-93-5	Pentachlorobenzene
210. 87-86-5	Pentachlorophenol
211. 85-01-8	Phenanthrene
212. 108-95-2	Phenol
213. 75-44-5	Phosgene
214. 7664-38-2	Phosphoric Acid
215. 7723-14-0	Phosphorus
216. 10025-87-3	Phosphorus Oxychloride
217. 1314-80-3	Phosphorus Pentasulfide
218. 7719-12-2	Phosphorus Trichloride
219. 7784-41-0	Potassium Arsenate
220. 10124-50-2	Potassium Arsenite
221. 7778-50-9	Potassium Bichromate
222. 7789-00-6	Potassium Chromate
223. 7722-64-7	Potassium Permanganate
224. 2312-35-8	Propargite
225. 79-09-4	Propionic Acid
226. 123-62-6	Propionic Anhydride
227. 1336-36-3	Polychlorinated Biphenyls
228. 151-50-8	Potassium Cyanide
229. 1310-58-3	Potassium Hydroxide
230. 75-56-9	Propylene Oxide
231. 121-29-9	Pyrethrins
232. 91-22-5	Quinoline
233. 108-46-3	Resorcinol
234. 7446-08-4	Selenium Oxide
235. 7761-88-8	Silver Nitrate
236. 7631-89-2	Sodium Arsenate
237. 7784-46-5	Sodium Arsenite
238. 10588-01-9	Sodium Bichromate
239. 1333-83-1	Sodium Bifluoride
240. 7631-90-5	Sodium Bisulfite
241. 7775-11-3	Sodium Chromate
242. 143-33-9	Sodium Cyanide
243. 25155-30-0	Sodium Dodecylbenzene Sulfonate
244. 7681-49-4	Sodium Fluoride
245. 16721-80-5	Sodium Hydrosulfide
246. 1310-73-2	Sodium Hydroxide
247. 7681-52-9	Sodium Hypochlorite
248. 124-41-4	Sodium Methylate
249. 7632-00-0	Sodium Nitrate
250. 7558-79-4	Sodium Phosphate, Dibasic
251. 7601-54-9	Sodium Phosphate, Tribasic
252. 10102-18-8	Sodium Selenite
253. 7789-06-2	Strontium Chromate
254. 57-24-9	Strychnine and Salts
255. 100-420-5	Styrene
256. 12771-08-3	Sulfur Monochloride
257. 7664-93-9	Sulfuric Acid
258. 93-76-5	2,4,5-T Acid
259. 2008-46-0	2,4,5-T Amines
260. 93-79-8	2,4,5-T Esters
261. 13560-99-1	2,4,5-T Salts
262. 93-72-1	2,4,5-TP Acid
263. 32534-95-5	2,4,5-TP Acid Esters
264. 72-54-8	TDE
265. 95-94-3	Tetrachlorobenzene
266. 127-18-4	Tetrachloroethane
267. 78-00-2	Tetraethyl Lead
268. 107-49-3	Tetraethyl Pyrophosphate
269. 7446-18-6	Thallium (I) Sulfate
270. 108-88-3	Toluene
271. 8001-35-2	Toxaphene
272. 12002-48-1	Trichlorobenzene (all isomers)
273. 52-68-6	Trichlorfon
274. 25323-89-1	Trichloroethane (all isomers)
275. 79-01-6	Trichloroethylene
276. 25167-82-2	Trichlorophenol (all isomers)
277. 27323-41-7	Triethanolamine Dodecylbenzenesulfonate
278. 121-44-8	Triethylamine
279. 75-50-3	Trimethylamine
280. 541-09-3	Uranyl Acetate
281. 10102-06-4	Uranyl Nitrate
282. 1314-62-1	Vanadium Pentoxide
283. 27774-13-6	Vanadyl Sulfate
284. 108-05-4	Vinyl Acetate
285. 75-35-4	Vinylidene Chloride
286. 1300-71-6	Xylenol
287. 557-34-6	Zinc Acetate
288. 52628-25-8	Zinc Ammonium Chloride
289. 1332-07-6	Zinc Borate
290. 7699-45-8	Zinc Bromide
291. 3486-35-9	Zinc Carbonate
292. 7646-85-7	Zinc Chloride
293. 557-21-1	Zinc Cyanide
294. 7783-49-3	Zinc Fluoride
295. 557-41-5	Zinc Formate
296. 7779-86-4	Zinc Hydrosulfite
297. 7779-88-6	Zinc Nitrate
298. 127-82-2	Zinc Phenolsulfonate
299. 1314-84-7	Zinc Phosphide
300. 16871-71-9	Zinc Silicofluoride
301. 7733-02-0	Zinc Sulfate
302. 13746-89-9	Zirconium Nitrate
303. 16923-95-8	Zirconium Potassium Fluoride
304. 14644-61-2	Zirconium Sulfate
305. 10026-11-6	Zirconium Tetrachloride

Ref. 2

RECORD OF COMMUNICATION

__X__ Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO:	Berkeley County Landfill File SCD 981 028 095	FROM:	Harvey S. Daniel Site Screening Section
DATE:	June 18, 1992	TIME:	2:00 PM

SUBJECT: Conversation with Marvin E. Waddey, Director of Solid Waste, Berkeley County Water and Sanitation Authority. (803) 761-8106

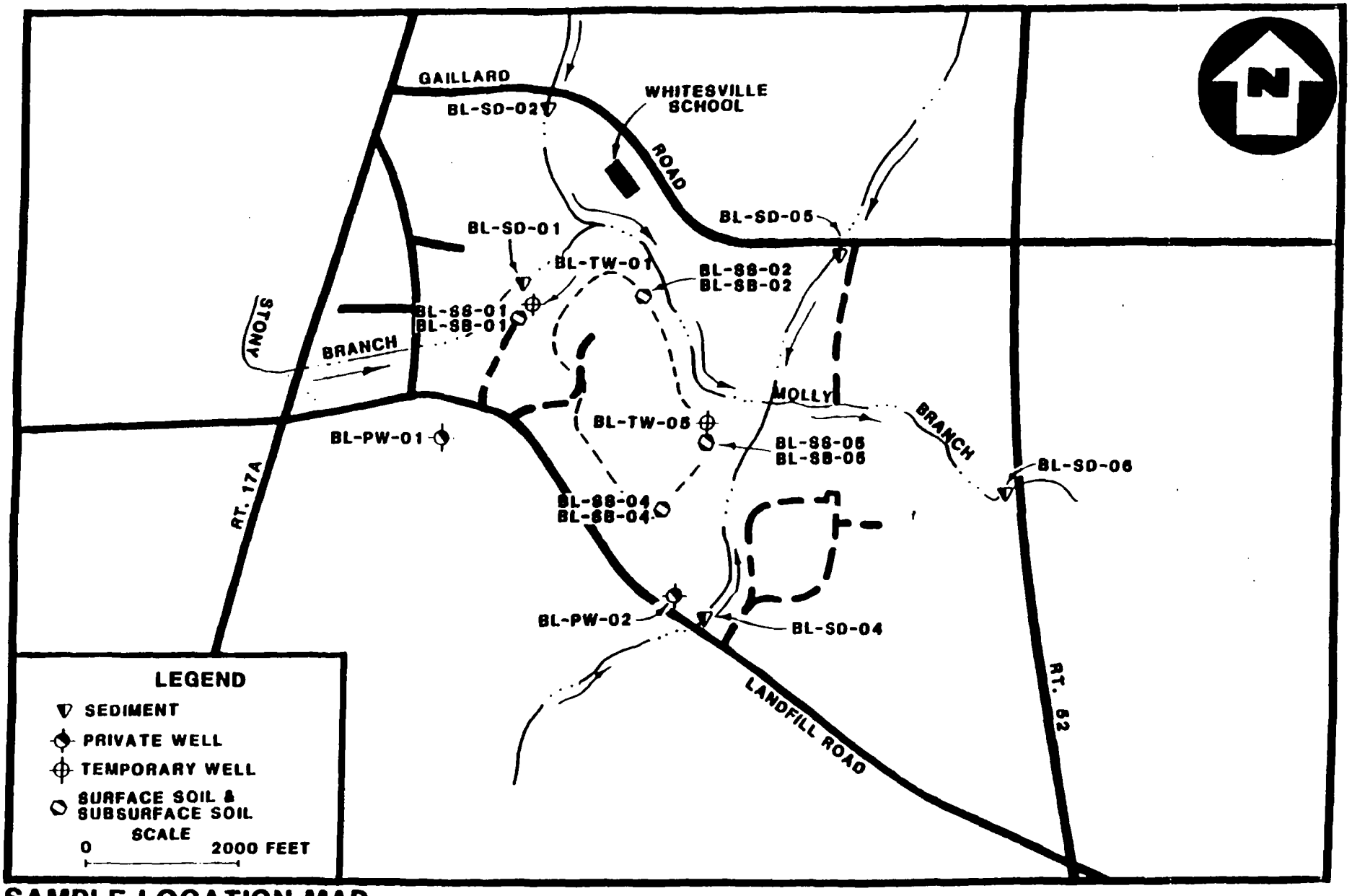
SUMMARY OF COMMUNICATION

I informed Mr. Waddey that in 1991, the NUS Corporation conducted a Site Screening Investigation on the Berkeley County Landfill for Region IV, U.S. EPA, and during the field investigations had found Molly Branch to be dry. I explained that I wanted to confirm that Molly Branch was in fact an intermittent stream. Mr. Waddey stated that he was out at the landfill just last week. He confirmed that the branch does run dry several times each year. Mr. Waddey also explained that when the landfill was operational, it was operated by Berkeley County Public Works. The landfill is unlined. About two years ago, a Department of Solid Waste was created within Berkeley County Public Works. Landfills are operated by the Solid Waste Department. About two months ago, Berkeley County Public Works became Berkeley County Water and Sanitation Authority. Mr. Waddey's address is:

Marvin E. Waddey, Director
Division of Solid Waste
P.O. Box 1090
Berkeley County Water and Sanitation Authority
Goose Creek, South Carolina 29445

INFORMATION COPIES TO:

Ref. 4



SAMPLE LOCATION MAP
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

FIGURE 3

NUS CORPORATION

-11-

Ref. 5

TABLE 4

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (mg/kg)	Background BL-SS-01	Northwest Corner of Landfill BL-SS-02*	Southeast Corner of Landfill BL-SS-04	Northeast Corner of Landfill BL-SS-05
ALUMINUM	2600	17,000	7600	6000
ARSENIC	2J	3.4	-	-
BARIUM	21	120	27	25
BERYLLIUM	1U	2.8	-	-
CALCIUM	1000	5200	2700	3500
CHROMIUM	2U	25	10	7.2
COBALT	1.3U	2.7	-	3.4
IRON	1500	15,000	8500	5400
LEAD	8.4J	18J	11J	14J
MAGNESIUM	150	1600	300	340
MANGANESE	15	25	84	350
NICKEL	1.1U	5.5	2.7	2.3
POTASSIUM	60U	1200	260	170
SODIUM	30U	250	-	-
VANADIUM	4.2	36	14	7.2
ZINC	4U	-	22	-

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
U Material was analyzed for but not detected. The number given is the MQL.
*Note: Sample BL-SS-03 was not collected, because the sample location was inaccessible.

Ref. 6

TABLE 6

SUMMARY OF INORGANIC ANALYTICAL RESULTS
SUBSURFACE SOIL SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (mg/kg)	Background BL-SB-01	Northwest Corner of Landfill BL-SB-02*	Southeast Corner of Landfill BL-SB-04	Northeast Corner of Landfill BL-SB-05
ALUMINUM	27,000	7500	7900	18,000
ARSENIC	2U	2.8	6.5	8.3
BARIUM	37	23	70	87
CADMIUM	0.66U	-	-	3.9
CALCIUM	30U	140,000	140,000	15,000
CHROMIUM	9.1	39	38	87
COBALT	1.5U	-	-	4
IRON	2200	9000	10,000	17,000
LEAD	17J	4.7J	4.3J	7J
MAGNESIUM	130	3700	5300	4700
MANGANESE	3U	65	81	160
NICKEL	6.2	11	12	17
POTASSIUM	130U	3400	2800	3300
SODIUM	40U	670	490	480
VANADIUM	11	14	13	34
ZINC	3U	-	-	95

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
U Material was analyzed for but not detected. The number given is the MQL.
*Note: Sample BL-SB-03 was not collected, because the sample location was inaccessible.

Samples BL-SB-06, 07, 08, and 09 were not collected due to a decision not to collect any samples on the actual landfill surface.

Pg. 1

TABLE 3

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SURFACE SOIL SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (ug/kg)	Background BL-SS-01	Northwest Corner of Landfill BL-SS-02*	Southeast Corner of Landfill BL-SS-04	Northeast Corner of Landfill BL-SS-05
PURGEABLE COMPOUNDS				
METHYL ETHYL KETONE	15	-	-	-
TETRACHLOROETHENE	17J	-	68J	41J
EXTRACTABLE COMPOUNDS				
UNIDENFIED COMPOUND/NO (1)	4000J/4	5000J/7	3000J/4	20,000J/12

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
*Note: Sample BL-SS-03 was not collected, because the sample location was inaccessible.
(1) Tentatively identified and unidentified compounds. This compound is not on Target Compound List and is reported only as detected in individual samples; MQL not determined.

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TABLE 5

SUMMARY OF ORGANIC ANALYTICAL RESULTS
SUBSURFACE SOIL SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (ug/kg)	Background BL-SB-01	Northwest Corner of Landfill BL-SB-02*	Southeast Corner of Landfill BL-SB-04	Northeast Corner of Landfill BL-SB-05
PURGEABLE COMPOUNDS				
CARBON DISULFIDE	6U	-	21	-
METHYL ETHYL KETONE	12U	-	-	-
TETRACHLOROETHENE	6U	10	8	-
TOLUENE	6U	7	4J	-
CHLOROBENZENE	6U	-	-	21
EXTRACTABLE COMPOUNDS				
DI-N-BUTYLPHTHALATE	790U	-	310J	-
UNIDENFIED COMPOUND/NO (1)	400J/1		7000J/1	

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
U Material was analyzed for but not detected. The number given is the MQL.
(1) Tentatively identified and unidentified compounds. This compound is not on Target Compound List and is reported only as detected in individual samples; MQL not determined
*Note: Sample BL-SB-03 was not collected, because the sample location was inaccessible.

Samples BL-SB-06, 07, 08, and 09 were not collected due to a decision not to collect any samples on the actual landfill surface.

~~Reference~~

Ref. 9

RECORD OF COMMUNICATION

____x Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO: Berkeley County Landfill file FROM: Ernie Ayers

DATE: October 25, 1988 TIME: 9:45 a.m.

SUBJECT: Conversation with Johnny Ohlandt, DHEC Trident District Consultant.

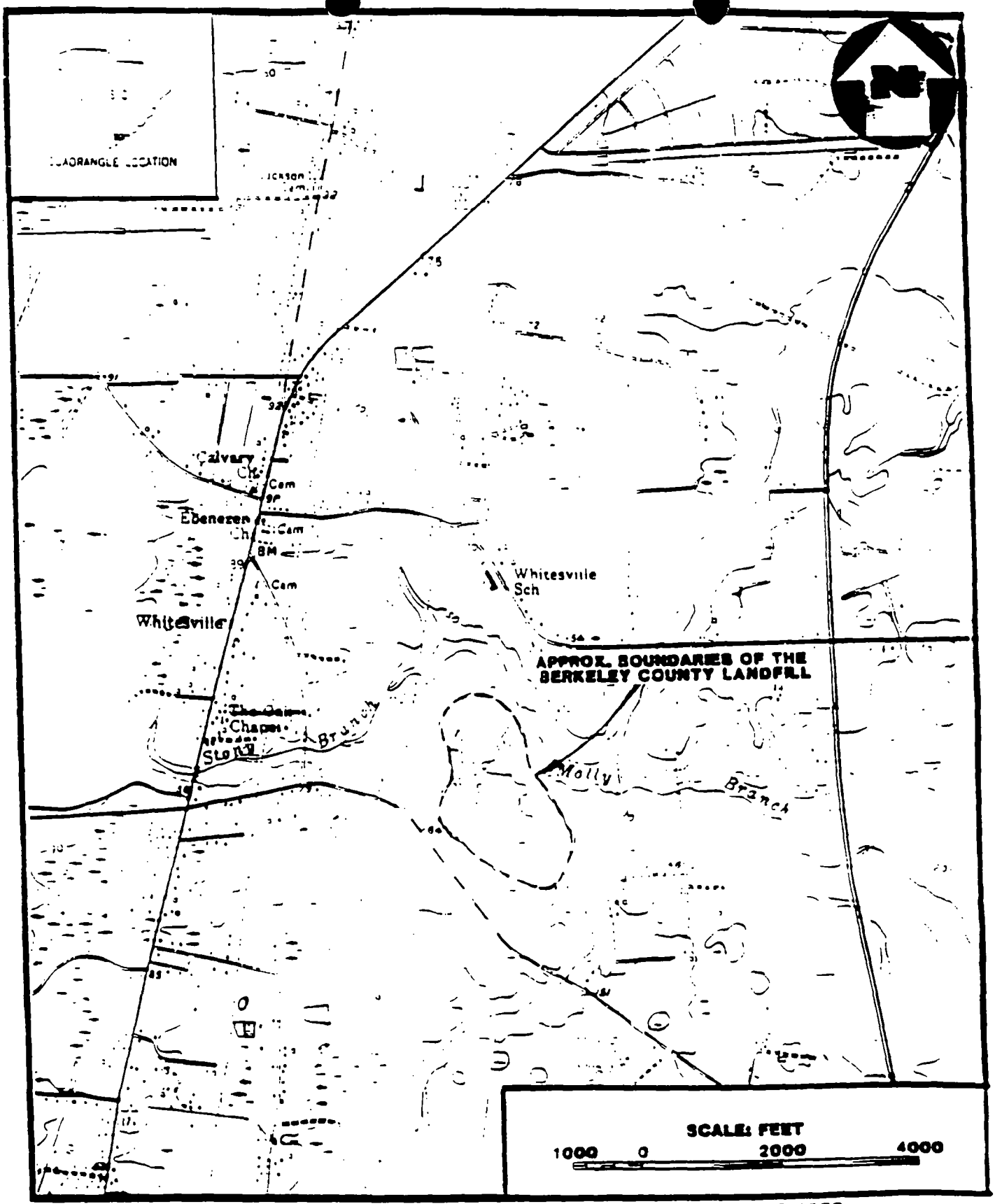
SUMMARY OF COMMUNICATION

W.N. Neighbors owns and has owned this land since it was used as a landfill. He leased it to Berkeley County and he was the landfill operator. Mr. Ohlandt says that next to nothing of an industrial nature placed in the fill, primarily municipal wastes and some commercial wastes (e.g. from supermarkets). The site was well managed and was properly closed. It was a shallow fill - 6 feet would be a good estimate. It is now used as pasture land. Mr. Ohlandt dows not know why the site was placed on CERCLIS. It is difficult to know precisely what materials were placed in the site since it was operated before hazardous waste laws were enacted. He does not know if the December 28, 1979 letter to himself from SCDHEC Engineer Albert McMeekin cites wastes that would be representative of what went into the old Neighbors landfill as opposed to the newer landfills.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES
TO:

Ref. 11



BASE MAP IS A PORTION OF THE USGS 7.5 MINUTE QUADRANGLE, MONCKS CORNER 1979.

SITE LOCATION MAP
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

FIGURE 1

NUS CORPORATION

~~Reference~~

Ref. 13

South Carolina Department of Health and Environmental Control

Please file

2600 Bull Street
Columbia, S.C. 29201

Commissioner
Michael D. Jarrett

Board
Moses H. Clarkson, Jr., Chairman
Oren L. Brady, Jr., Vice-Chairman
Euta M. Colvin, M.D., Secretary
Harry M. Hallman, Jr.
Henry S. Jordan, M.D.
Toney Graham, Jr. M.D.

MEMORANDUM

TO: John Cresswell, Manager
Site Screening Section
Division of Site Engineering & Screening

FROM: Marianna DePratter, EQM
Superfund and Solid Waste Section
Division of Hydrogeology

DATE: January 12, 1988

RE: Berkeley County Landfill(BCL)
CERCLA Site SCD 981 028 095

Abstract

The shallow water table aquifer, a thin veneer of sand and sandy clay, is the aquifer of concern at BCL. It is separated from underlying aquifers by a hydraulic barrier, the Cooper Formation. The aquifer of concern is infrequently used in the area.

BCL has been hydrogeologically evaluated using the Hazard Ranking System to determine, in part, its eligibility for placement on the National Priorities List. This hydrogeologic review of the area is based primarily on South Carolina Water Resources Commission (SCWRC) and United States Geologic Survey (USGS) well tabulations and geophysical logs. Domestic well records submitted to the Groundwater Protection Division were consulted and a review of Department of Health & Environmental Control files conducted. In addition, the site was visited on December 4, 1987. Surficial sediments adjacent to the site were augered for soil description (see figure 1) and a brief field survey was conducted to confirm domestic well depths in the area.

BCL lies within the South Carolina Coastal Plain physiographic region approximately 3.6 miles south-southwest of the town of Moncks Corner. The landfill is situated on a ridge trending northwest and southeast (see figure 2). The land adjacent to BCL is forested in pine and, except for a few rural homes, is undeveloped at present.

Locally, the site is bounded to the north by Molly Branch. Two unnamed tributaries to Molly Branch drain the area south and southeast. Surface drainage from the landfill area flows toward and eventually discharges to the Cooper River. Directly underlying the site is a thin veneer of surficial sand, thought to be Pleistocene terrace deposits (Cooke, 1936). These sands comprise a shallow water table aquifer susceptible to contamination by landfill effluent. This unconfined aquifer is the aquifer of concern.

The oldest sedimentary units underlying the site were deposited in continental to inner shelf marine environments and are Late Cretaceous in age. The Cretaceous section overlies Triassic basement and is approximately two thousand feet thick. Depositional units are, in ascending order, the Middendorf, Black Creek and Peedee Formations.

The Middendorf has been completely penetrated at Kiawah Island (SCWRC #20GG-v1) and at Clubhouse Crossroads in lower Dorchester County (SCWRC #23CC-i1). It has an approximate thickness of 600 feet and dips southwest at thirty-six feet per mile. Based on the Clubhouse Crossroads corehole, the lower two hundred feet of the Middendorf consists of an interbedded red, brown or olive gray clay, silty clay and greenish gray, muddy, locally feldspathic sand (Gohn et. al., 1977). The upper part of the formation consists of a cyclical sequence of red to reddish-brown and gray-green mottled clay, clayey silt and silty clay. Based on limited static water levels measured in wells penetrating the Middendorf, its regional potentiometric surface slopes to the east or possibly to the east-northeast (Park, 1985).

Berkeley County Water & Sewer (BCWSA) owns one well, SCWRC #19Y-w3, drilled in the upper Middendorf. This well, located approximately two miles north-northeast of the site, was drilled as an exploratory well and is unused. The well has not been fully developed, but water quality analyses indicate water from the Middendorf to be a soft, alkaline, sodium bicarbonate type. Total dissolved solids in the well were 870 mg/l, chloride was 68 mg/l and fluoride was 3.8 mg/l (Meadows, 1987). Aquifers in the overlying formations are less expensive to develop and contain water of equal or better chemical quality.

The Black Creek Formation is composed of abundantly fossiliferous silty clay, muddy sand and clean sand alternating with thinly interbedded sand and clay and some shelly limestone. Based on SCWRC #19Y-w3, the Black Creek is approximately 650 feet thick in the vicinity of the site. Its surface dips toward the southeast at about thirty feet per mile (Park, 1985). Black Creek sands are capable of yielding large amounts of water. Wells at Mt. Pleasant in Charleston County, twenty-five miles south-southeast of the site, have been tested at over a thousand gallons per minute and have specific capacities of seven gallons per minute per foot of drawdown. Yields seem to be lower in the Jamestown area, twenty miles northeast of the site, where five hundred gallons per minute would be considered maximum (Meadows, 1987).

Water from the Black Creek Aquifer is a soft, sodium bicarbonate type and becomes more mineralized toward the coast. For example, total dissolved solids range from a low of 350 mg/l in SCWRC well #15X-15 at Jamestown to a high of 1000 mg/l in well #17DD-m5 at Mt. Pleasant. Chloride shows a similar trend with 4.0 mg/l occurring in Jamestown and 135 mg/l in Mt. Pleasant. Fluoride concentrations are about 2.0 mg/l in Jamestown and 4.4 mg/l in Mt. Pleasant (Meadows, 1987). In the study area, total dissolved solids, chloride and fluoride would probably lie between Jamestown and Mt. Pleasant values. Although the unit is utilized in Berkeley County for water supply, it is undeveloped in the study area. Regionally, static water levels measured in Black Creek wells indicate ground-water flow to the east (Park, 1985).

The Peedee Formation, approximately 330 feet thick, is predominately composed of olive to medium gray, fossiliferous, muddy sand containing small amounts of glauconite, phosphate and mica. The upper Peedee is composed of olive to medium gray silty and sandy calcareous clay. The surface of the unit dips south westwardly at approximately twenty-five feet per mile (Park, 1985). Locally, only one well (SCWRC #19Y-s1) has been completed in the Peedee. This well is located four miles north-northwest of the landfill and is owned by the town of Moncks Corner. The well flowed ten gallons per minute and produced 200 gallons per minute with 240 feet of drawdown for a specific capacity of less than one gallon per minute per foot of drawdown (Meadows, 1987). This is typical of wells completed in the Peedee Formation near the coast, hence it is seldom used for water supply (Park, 1985). Well SCWRC #19Y-s1 yielded a soft sodium bicarbonate water with total dissolved solids measuring 920 mg/l, chloride measuring 59 mg/l and fluoride measuring 1.5 mg/l.

Above the Peedee Formation lie, in ascending order, the Black Mingo Formation, the Santee Limestone and the Cooper Formation. These sediments are Tertiary in age and were deposited in marginal marine to outer shelf environments. Sand, silt and clay dominate the lithology in the lower part of the section, and pure to very impure limestone dominate the upper part of the section.

The Black Mingo Formation, Paleocene to Lower Eocene in age, is a heterogeneous, fossiliferous sequence of white to pale gray limestone, green to gray argillaceous sand, carbonate and silica cemented sandstone and dark gray to black clay. Based on SCWRC well #19Y-w3, the unit is approximately 305 feet thick in the BCL area. The Black Mingo crops out north of Moncks Corner and its surface dips south-southwest beneath the Santee Limestone at approximately seventeen feet per mile (Park, 1985).

The Santee Limestone, Eocene in age, is a creamy white to gray fossiliferous and slightly glauconitic limestone. It has a total thickness of approximately sixty-five feet in the stuffy area. The unit dips southward at approximately eight feet per mile (Park, 1985). Two members have been recognized within the Santee Limestone, the lower Moultrie Member and the upper Cross Member.

The overlying Cross Member has a higher clay content, consists of a less soluble calcite and is, therefore, much less permeable (Park, 1985).

The Santee and Black Mingo formations supply most ground water in the area. Within a four mile radius of the landfill, only thirty-seven domestic wells of known depth have been identified. Many more domestic wells exist within this area, but well depths could not be documented. Of this limited sample, thirty-four (ninty-two percent) penetrate the Santee or the combined Santee/Black Mingo aquifer. These wells yield an average of seventy-five gallons per minute although yields range between thirty and a hundred gallons per minute. Well yield and specific capacity is dependent upon well construction, permeability enhancement within the Santee Limestone and the amount of Black Mingo penetration. BCWSA maintains three public supply wells approximately two miles north-northeast of the landfill. These wells serve approximately six hundred people and yield about 275 gallons per minute each (Howard Henry, BCWRC, pers. comm., Dec. 9, 1985). Wells are usually constructed as open holes with casings typically seated in the overlying Cooper Formation.

Ground water withdrawal in the Santee comes primarily from the lower Moultrie Member; withdrawal from the Black Mingo comes primarily from sand and limestone beds in the upper part of the unit. Examination of USGS geophysical logs from our four public supply wells (19Z-j1, 19Y-w1, 19Y-b1, 19Y-w3)and two irrigation wells(19Z-b3, 19Z-b5) located within the area indicate no hydraulic barrier between these two units. Water from the Black Mingo Formation is of low quality because of high mineral content (Park, 1985). The quality of water from wells open to the Santee and Black Mingo aquifers degrades with the degree of Black Mingo penetration.

The Santee and Black Mingo aquifers are recharged to the northwest at outcrop areas in Orangeburg and Clarendon counties. They are also recharged north-northeast in Berkeley and Charleston counties where they crop out along a belt ten to fifteen miles wide paralleling the Santee River. Regional static water levels measured in wells penetrating the Santee Limestone and the upper Black Mingo aquifers are less than ten feet above mean sea level in the BCL area. Lake Moultrie, located only four miles north of BCL, probably affects regional ground water flow toward the southeast. Because the water surface at the lake is maintained at seventy-five feet above mean sea level, it is possible that Lake Moultrie also serves as a recharge source.

Overlying the Santee Limestone is a sandy, phosphatic, dark greenish-gray marl called the Cooper Formation. A calcareous clay, the Cooper Formation has low intrinsic permeability. The Cooper Formation is Eocene to Oligocene in age. It is uniform in color, texture and generally has no obvious signs of bedding. The homogenous nature of the Cooper Formation inhibits the development of secondary porosity. Clays of this type typically have a permeability of only 10^{-5} to 10^{-7} centimeters per second (Freeze and Cherry, 1979).

Due to its impermeable nature, the Cooper acts as a confining unit to the underlying aquifers. It is approximately a hundred feet thick in the vicinity of BCL and crops out to the north below Lake Moultrie. It dips at approximately eight feet per mile towards the south-southeast (Park, 1985).

The Cooper Formation is overlain with a thin veneer of sand and sandy clay. Thickness varies from about fifty feet on ridges to zero in valleys where erosion has exposed the underlying Cooper Formation (Taber, 1939). Surficial sands are only about thirty feet thick on site.

Reported water levels within this surficial sand aquifer are also variable with values from three to fifteen feet below grade (Meadows, 1987). This variation is due to seasonal fluctuations in the amount of rainfall and to the effect of local topography. Permeability is 10^{-3} to 10^{-5} centimeters per second in unconsolidated sands (Freeze and Cherry, 1979). Regionally, the direction of ground water flow in the shallow water table aquifer is south-southeasterly, however local topography has strong influence.

Of the thirty-seven domestic wells of known depth in the area only three (eight percent) obtain water from the shallow aquifer of concern. These wells yield an average of only four gallons per minute. The shallow water table aquifer is not commonly used because yields are both low and unreliable (J. D. Sanders, Well Driller, pers. comm., Dec. 10, 1987). The closest known domestic well utilizing the aquifer of concern is located one mile southwest of BCL.

MD:hlg

References Cited

Cooke, C. W., 1936, Geology of the coastal Plain of South Carolina: U.S. Geological Survey Bulletin No. 867, 195 p.

Freeze, A. R., and Cherry, J. A., 1979, Groundwater: Englewood Cliffs, New Jersey; Prentice-Hall.

Gohn, G. S., Higgins, B. R., Smith, C. C., and Owens, J. P., 1977, Lithostratigraphy of the deep corehole (Clubhouse Crossroads Corehole 1) near Charleston: in Rankin, D. W., editor, Studies related to the Charleston, South Carolina, earthquake of 1886 - a preliminary report: U. S. Geological Survey Professional Paper 1028, p. 59-70.

Meadows, J. K., 1987, Ground water conditions in the Santee Limestone and Black Mingo Formation near Moncks Corner, Berkeley County South Carolina: South Carolina Water Resources Commission Report No. 156, 38 p.

Park, A. D., 1985, The ground-water resources of Charleston, Berkeley, and Dorchester Counties, South Carolina Water Resources Commission Report No. 139, 145 p.

Taber, Stephen, 1939, Geology of the Santee-Cooper Project: South Carolina Public Service Authority, 21 p.

SOIL BORING LOG

Location: Berkeley County Landfill **Date:** 12-4-87

CERCLA Site SCD 981 028 095

County: Berkeley **Latitude:** 33°08.37 **Longitude:** 80°03.00

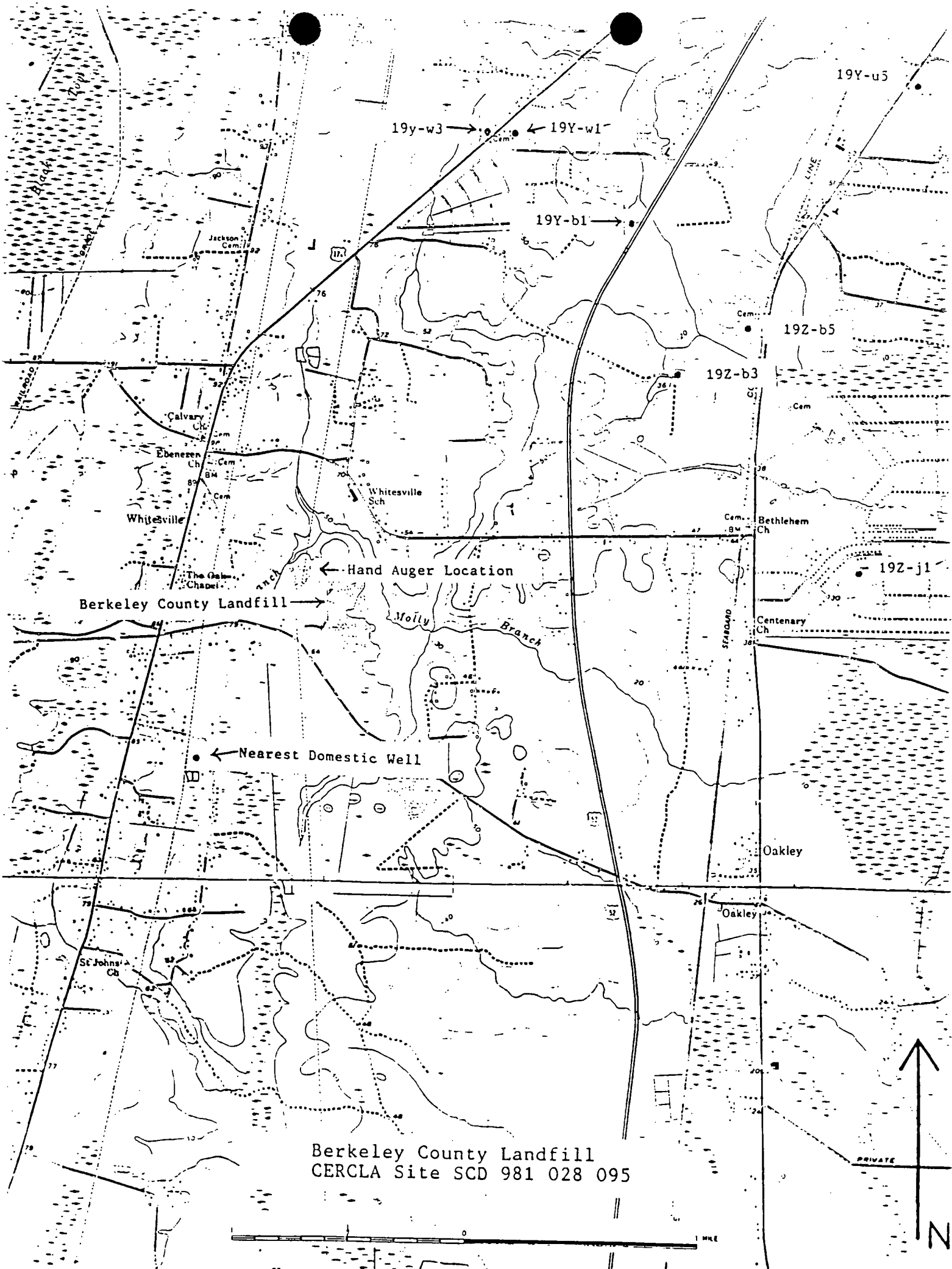
Elevation: 60 ft msl **Total depth:** _____ **Water table:** _____

Logged by: M. DePratter and J. L. Canova

Seasonal high water table (estimate): 4 feet below grade

Depth cm	Depth ft	Description
		Tan medium to coarse sand
60	2	
		Orange clayey fine to medium sand, poorly cemented with iron oxide.
120	4	
		White clay
180	6	
		Orange clayey medium grained sand
240	8	
300	10	
		Orange sandy clay grading into clay
	bottom	

Figure 1



Berkeley County Landfill
CERCLA Site SCD 981 028 095

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION: S.C.

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY	SURFACE	WELL	02 STATUS: ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. ☐	B. ☐	A. ☐	B. ☐	C. ☐	A. ____ (mi)
NON-COMMUNITY	C. ☐	D. ☑	D. ☑	E. ☐	F. ☐	B. 1.0 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY: ☑ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION ☐ D. NOT USED, UNUSEABLE

COMMERCIAL, INDUSTRIAL, IRRIGATION

02 POPULATION SERVED BY GROUND WATER ____ 03 DISTANCE TO NEAREST DRINKING WATER WELL 1.0 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
7 (ft)	SE	7 (ft)	5,800 (gpd)	☐ YES ☐ NO

09 DESCRIPTION OF WELLS: Three shallow wells (<65 feet deep) located within a four mile radius of the landfill.

10 RECHARGE AREA		11 DISCHARGE AREA	
☐ YES ☐ NO	COMMENTS: Water table aquifer is recharged by rainfall	☑ YES ☐ NO	COMMENTS: Into streams

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE: ☐ A. 10^{-6} – 10^{-8} cm/sec ☐ B. 10^{-4} – 10^{-6} cm/sec ☑ C. 10^{-4} – 10^{-3} cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK: ☑ A. IMPERMEABLE ☐ B. RELATIVELY IMPERMEABLE ☐ C. RELATIVELY PERMEABLE ☐ D. VERY PERMEABLE

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
200 (ft)	0 to 50 (ft) X	____

Although everyone in the area is served by ground water, most domestic wells in the area draw water from below the aquifer of concern. This water is protected from contamination by the landfill effluent by the Cooper Formation.

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern: The thin veneer of sand and sandy clay overlying the Cooper Marl comprise the aquifer of concern. These sands were probably deposited as terrace deposits.

Depth(s) from the ground surface to the highest seasonal level of the saturated zone (water table(s)) of the aquifer(s) of concern:

Depth to water has been reported at 3 feet below grade.

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Sand, clayey sand & sandy clay

Permeability associated with soil type:

10^{-3} cm/sec

Ground Water Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

Small domestic wells, although the deeper Santee/Black Mingo aquifer system is more commonly used. The deeper aquifer is protected.

Population Served by Ground Water Wells Within a 3-Mile Radius

Identify water-supply wells(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

Amount used to irrigate from shallow ponds that may be impacted by the landfill

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre):

Total population served by ground water within a 3-mile radius:

Ref. 14

South Carolina
DHEC
Department of Health and Environmental Control

MEMORANDUM

TO: Harvey Daniels
Site Screening Section
Division of Site Engineering and Screening
Bureau of Solid and Hazardous Waste Management

FROM: Marion Feagin, Hydrologist M.F.
Superfund and Solid Waste Section
Division of Hydrology
Bureau of Solid and Hazardous Waste Management

DATE: June 29, 1992

RE: Berkeley County Landfill
SCD 981 028 095
Berkeley County
Site Inspection Prioritization

A review of the existing hydrogeologic data for the referenced site has been conducted to assist in completing a Site Inspection Prioritization (SIP). The purpose of the review is to re-evaluate and update information regarding the migration route for potential contaminants.

According to Park (1985), the Cooper Formation underlies the site at a depth of approximately 25 feet and extends downward to a depth of approximately 175 feet. The Cooper Formation is a confining unit that likely restricts contaminants potentially present within the shallow water-table aquifer from migrating into deeper drinking-water aquifers. Park also indicates that the Cooper Formation is laterally extensive within the four-mile site radius.

The site is not located in an area of karst topography.

Reference Cited:

Park, A. Drennan, 1985, The Groundwater Resources of Charleston, Berkeley, and Dorchester Counties, South Carolina, SC Water Resources Commission Report #139.

Ref. 15

TABLE 9

SUMMARY OF ORGANIC ANALYTICAL RESULTS
GROUNDWATER SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (ug/l)	Background		Private Well East of Site	Northeast Corner of Landfill
	BL-PW-01	BL-TW-01	BL-PW-02	BL-TW-05
PURGEABLE COMPOUNDS				
VINYL CHLORIDE	10U	10U	-	11
CHLOROBENZENE	5U	5U	-	120
BENZENE	5U	5U	-	6
UNKNOWN COMPOUND/NO (1)				10J/1
EXTRACTABLE COMPOUNDS				
UNIDENTIFIED COMPOUND/NO (1)				100J/6
TETRAHYDRO PYRAN(1)				20JN
DIETHYLMETHYLBENZAMIDE(1)				10JN

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
N Presumptive evidence of presence of material.
U Material was analyzed for but not detected The number given is the MQL.
(1) Tentatively identified and unidentified compounds. This compound is not on Target Compound List and is reported only as detected in individual samples; MQL not determined.

Note: Samples BL-TW-02 and BL-TW-04 were not collected, because groundwater could not be reached.
Sample BL-TW-03 was not collected, because the sample location was inaccessible.

Pg. 16

TABLE 10

SUMMARY OF INORGANIC ANALYTICAL RESULTS
GROUNDWATER SAMPLES
BERKELEY COUNTY LANDFILL
OAKLEY, BERKELEY COUNTY, SOUTH CAROLINA

PARAMETERS (ug/l)	Preservative Blank	Background		Private Well East of Site	Northeast Corner of Landfill
	BL-PB-01	BL-PW-01	BL-TW-01	BL-PW-02	BL-TW-05
ALUMINUM	110J	110UJ	7800J	-	1300J
ARSENIC	-	2UJ	2UJ	-	110J
BARIUM	-	2U	75	-	64
CALCIUM	-	2900	850U	2700	150,000
COBALT	-	4U	5U	-	65
IRON	-	90UJ	2800J	-	46,000J
LEAD	-	24J	5J	55J	-
MAGNESIUM	-	1400	1600	1400	12,000
MANGANESE	-	2U	5U	-	3300
NICKEL	-	6U	6U	-	33
POTASSIUM	-	9000	990	9200	6100
SODIUM	-	160,000	23,000	170,000	57,000
VANADIUM	-	4U	8	-	8

- Material analyzed for but not detected above minimum quantitation limit (MQL).
J Estimated value.
U Material was analyzed for but not detected. The number given is the MQL.
Note: Samples BL-TW-02 and BL-TW-04 were not collected, because groundwater could not be reached.
Sample BL-TW-03 was not collected, because the sample location was inaccessible.

Ref. 17

South Carolina
DHEC
Department of Health and Environmental Control
2600 Bull Street, Columbia, SC 29201

Commissioner: Michael D. Jarrett

Board: William E. Applegate, III, Chairman
John H. Burriss, Vice Chairman
Richard E. Jabbour, DDS, Secretary
Toney Graham, Jr., MD
Sandra J. Molander
John B. Pate, MD
Robert J. Stripling, Jr.

Promoting Health, Protecting the Environment

MEMORANDUM

TO: Berkeley County Landfill File
SCD 981 028 095

FROM: Harvey S. Daniel
Site Screening Section

SUBJECT: The Cooper Formation, and Surficial Aquifer Use in the Vicinity of the Berkely County Landfill

DATE: June 24, 1992

According to South Carolina Water Resources Commission Report Number 139 (The Ground-Water Resources of Charleston, Berkeley, and Dorchester Counties South Carolina, 1985), the Cooper Formation underlie the surficial aquifer, acts as a confining layer, and is approximately 125 feet thick in the area of the Berkeley County Landfill. Marion Feagin, Division of Hydrogeology, reports in a June 29, 1992, memorandum to Harvey Daniel, Site Screening Section, that the Cooper Formation is continuous throughout the four-mile Berkeley County Landfill site radius.

Marianna DePratter, Division of Hydrogeology, in her January 12, 1988 memorandum to John Cresswell, Site Screening Section, reported that of the thirty-seven domestic wells of known depth in the area of the Berkeley County Landfill, only three (eight percent) obtain water from the surficial aquifer. The Bureau of Solid & Hazardous Waste's June 19, 1992 printout of groundwater supplies within four miles of the Berkeley County Landfill shows that of the fifty-seven wells with given depths, only two (four percent) are completed in the surficial aquifer. Conservatively, it is assumed that eight percent of the wells within four miles of the Berkeley County Landfill are completed in the surficial aquifer.

recycled paper

Date: 06/19/92

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Juliet Simms
CONTACT: PHONE:
ADDRESS:
REMARKS: bLSD SWL -7.4' bMSL;
COUNTY:
LONGITUDE: 80-01-01
LATITUDE: 33-10-57
DISTANCE: 3.37 MILES NNE
AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 61.00
LOCATION: Moncks Corner, SC

COMPANY: H.G. Jones
CONTACT: PHONE:
ADDRESS: Rt 2 Box 350
Moncks Corner, SC 29461
REMARKS: File in Columbia
COUNTY:
LONGITUDE: 79-59-51
LATITUDE: 33-08-54
DISTANCE: 3.05 MILES ENE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 10.00
LOCATION: Moncks Corner

COMPANY: Oakley Voc. School
CONTACT: PHONE:
ADDRESS: Old US-52
Oakley, SC
REMARKS:
COUNTY:
LONGITUDE: 80-01-07
LATITUDE: 33-06-43
DISTANCE: 2.75 MILES SSE
AQUIFER:
COMP. DEPTH: 252
DRILL DEPTH: 252
ELEV: 21.00
LOCATION: Oakley

COMPANY: W W Truck & Tractor
CONTACT: Johnny Ward PHONE: 803-761-8220
ADDRESS: PO Box 98
Moncks Corner, SC 29461
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-00-51
LATITUDE: 33-10-37
DISTANCE: 3.16 MILES NNE
AQUIFER:
COMP. DEPTH: 300
DRILL DEPTH: 300
ELEV: 50.00
LOCATION: Moncks Corner

COMPANY: Murry B. Ayers
CONTACT: PHONE:
ADDRESS: Rt 6, Box 549
Moncks Corner, SC 29461
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-03-14
LATITUDE: 33-10-39
DISTANCE: 2.46 MILES NNW
AQUIFER:
COMP. DEPTH: 245
DRILL DEPTH: 245
ELEV: 94.00
LOCATION: Moncks Corner

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
LATITUDES OR LONGITUDES ENDING IN 91 ARE ONLY ACCURATE TO WITHIN 1 MINUTE.

Exh. 18

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Berkeley Ctry Club
CONTACT: Bubba Hightower PHONE:
ADDRESS: PO Box 397
Moncks Corner, SC 29461
REMARKS: Irrigates golf coarse in summertime.
COUNTY:
LONGITUDE: 80-00-50
LATITUDE: 33-09-14
DISTANCE: 2.22 MILES ENE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 40.00
LOCATION: Berkeley Country Club

COMPANY: Lemar Mullinax
CONTACT: PHONE: 803-761-6509
ADDRESS: Rt 2, Box 257
Moncks Corner, SC 29461
REMARKS: Water level reading may be off.
COUNTY:
LONGITUDE: 80-03-23
LATITUDE: 33-09-09
DISTANCE: 0.82 MILES NNW
AQUIFER:
COMP. DEPTH: 250
DRILL DEPTH: 250
ELEV: 80.00
LOCATION: Moncks Corner

COMPANY: Carolina Nurseries
CONTACT: Jay Guy PHONE: 803-889-6868
ADDRESS: Rt 6 Box 208
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-01-14
LATITUDE: 33-09-03
DISTANCE: 1.79 MILES ENE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 43.00
LOCATION: Moncks Corner

COMPANY: RJ Muller & JB Hood
CONTACT: PHONE: 803-761-7771
ADDRESS: 2612 S Live Oak Dr-Hwy17A
Moncks Corner, SC 29461
REMARKS: Small business.
COUNTY:
LONGITUDE: 80-04-26
LATITUDE: 33-06-25
DISTANCE: 2.81 MILES SSW
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 79.00
LOCATION: Moncks Corner

COMPANY: R.C. Dennis
CONTACT: PHONE:
ADDRESS: Lewisfield Pltn
,
REMARKS:
COUNTY:
LONGITUDE: 79-59-38
LATITUDE: 33-09-36
DISTANCE: 3.46 MILES ENE
AQUIFER:
COMP. DEPTH: 165
DRILL DEPTH: 165
ELEV: 11.00
LOCATION: Lewisfield Plantation

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
LATITUDES OR LONGITUDES ENDING IN 91 ARE ONLY ACCURATE TO WITHIN 1 MINUTE.

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Mulberry Pltn
CONTACT: PHONE:
ADDRESS:
Oakley, SC
REMARKS: also used for LS.
COUNTY:
LONGITUDE: 79-59-19
LATITUDE: 33-08-28
DISTANCE: 3.54 MILES ESE
AQUIFER:
COMP. DEPTH: 227
DRILL DEPTH: 227
ELEV: 20.00
LOCATION: Mulberry Plantation

COMPANY: Dodge Engineering
CONTACT: PHONE:
ADDRESS:
Moncks Corner, SC
REMARKS: top of well is below LSD.
COUNTY:
LONGITUDE: 80-02-08
LATITUDE: 33-12-08
DISTANCE: 4.23 MILES NNE
AQUIFER:
COMP. DEPTH: 261
DRILL DEPTH: 261
ELEV: 77.00
LOCATION:

COMPANY: Janie Wright
CONTACT: PHONE:
ADDRESS: Rt 1 Box 572
Moncks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-02-52
LATITUDE: 33-12-12
DISTANCE: 4.23 MILES NNE
AQUIFER:
COMP. DEPTH: 6
DRILL DEPTH: 6
ELEV: 86.00
LOCATION: Moncks Corner

COMPANY: Peter Grimes
CONTACT: PHONE:
ADDRESS: Box 1133
Moncks Corner, SC 29461
REMARKS: no pump
COUNTY:
LONGITUDE: 80-02-55
LATITUDE: 33-12-07
DISTANCE: 4.13 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 91.00
LOCATION: Moncks Corner

COMPANY: J.P. Strickland
CONTACT: PHONE:
ADDRESS: Rt 1 Hwy 16
Moncks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-04-22
LATITUDE: 33-11-30
DISTANCE: 3.68 MILES NNW
AQUIFER:
COMP. DEPTH: 200
DRILL DEPTH: -1
ELEV: 80.00
LOCATION: Hwy 16

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
LATITUDES OR LONGITUDES ENDING IN 91 ARE ONLY ACCURATE TO WITHIN 1 MINUTE.

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Leonard Piemows
CONTACT: PHONE:
ADDRESS: SC 16,Rt 1
Moncks Corner, SC
REMARKS: no file
COUNTY:
LONGITUDE: 80-04-24
LATITUDE: 33-11-29
DISTANCE: 3.67 MILES NNW
AQUIFER:
COMP. DEPTH: 200
DRILL DEPTH: 200
ELEV: 79.00
LOCATION: Moncks Hwy 16

COMPANY: Todd
CONTACT: PHONE:
ADDRESS:
,
REMARKS:
COUNTY:
LONGITUDE: 80-04-06
LATITUDE: 33-11-41
DISTANCE: 3.79 MILES NNW
AQUIFER:
COMP. DEPTH: 172
DRILL DEPTH: 200
ELEV: 75.00
LOCATION:

COMPANY: Ware Bros Const
CONTACT: PHONE:
ADDRESS:
Moncks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-03-03
LATITUDE: 33-11-44
DISTANCE: 3.69 MILES NNW
AQUIFER:
COMP. DEPTH: 133
DRILL DEPTH: 380
ELEV: 90.00
LOCATION: SC Hwy 16 #6

COMPANY: Berkley schools
CONTACT: PHONE:
ADDRESS: State Dept Educ.
Moncks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-02-09
LATITUDE: 33-11-19
DISTANCE: 3.95 MILES NNE
AQUIFER:
COMP. DEPTH: 220
ELEV: 55.00
LOCATION: US. 17A & SC 6

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
LATITUDES OR LONGITUDES ENDING IN 91 ARE ONLY ACCURATE TO WITHIN 1 MINUTE.

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Town of Moncks Cornr
CONTACT: PHONE:
ADDRESS: Airport
Moncks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-01-53
LATITUDE: 33-11-33
DISTANCE: 3.63 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: -1.00
LOCATION: Moncks Corner Airport

COMPANY: Town of Moncks Cornr
CONTACT: Carl Reuger PHONE: 803-761-8041
ADDRESS:
,
REMARKS:
COUNTY:
LONGITUDE: 80-01-02
LATITUDE: 33-11-29
DISTANCE: 3.88 MILES NNE
AQUIFER:
COMP. DEPTH: 261
DRILL DEPTH: 295
ELEV: 58.00
LOCATION: Hwy 17A & SC 6

COMPANY: Ralph Ford
CONTACT: PHONE:
ADDRESS: Rt 6, Box 9
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-01-24
LATITUDE: 33-11-03
DISTANCE: 3.28 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 47.00
LOCATION: US 17 & S-8-274

COMPANY: H W Rueger, Sr.
CONTACT: PHONE:
ADDRESS:
,
REMARKS:
COUNTY:
LONGITUDE: 80-00-53
LATITUDE: 33-11-41
DISTANCE: 4.16 MILES NNE
AQUIFER:
COMP. DEPTH: 186
DRILL DEPTH: 186
ELEV: 55.00
LOCATION:

COMPANY: Joseph A. Brown
CONTACT: PHONE: 803-899-4811
ADDRESS: PO Box 141
Moncks Corner, SC 29461
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-00-45
LATITUDE: 33-10-59
DISTANCE: 3.55 MILES NNE
AQUIFER:
COMP. DEPTH: 166
DRILL DEPTH: -1
ELEV: 50.00
LOCATION: Moncks Corner

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
LATITUDES OR LONGITUDES ENDING IN 91 ARE ONLY ACCURATE TO WITHIN 1 MINUTE.

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Ricky Koster
CONTACT: PHONE:
ADDRESS: Gippy Pltn
,
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-00-11
LATITUDE: 33-10-33
DISTANCE: 3.57 MILES ENE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: 221
ELEV: 25.00
LOCATION: Gippy Plantation

COMPANY: C.W. Umphlett
CONTACT: PHONE:
ADDRESS: Rte 2 Box 286
Moncks Corner, SC 29461
REMARKS: File in Columbia. Also used fof LS.
COUNTY:
LONGITUDE: 80-00-17
LATITUDE: 33-10-18
DISTANCE: 3.31 MILES ENE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 27.00
LOCATION:

COMPANY: Mary K. Center
CONTACT: PHONE: 803-761-4083
ADDRESS: PO Box 425
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-00-33
LATITUDE: 33-10-31
DISTANCE: 3.28 MILES ENE
AQUIFER:
COMP. DEPTH: 238
DRILL DEPTH: -1
ELEV: 45.00
LOCATION: Moncks Corner

COMPANY: D J's Mobl Hm Sales
CONTACT: Don Jett PHONE: 803-565-3727
ADDRESS:
,
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-01-25
LATITUDE: 33-10-18
DISTANCE: 2.54 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 50.00
LOCATION:

COMPANY: Berk Chrch of Christ
CONTACT: Jack McNeil,pastor PHONE: 803-761-8546
ADDRESS:
,
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-01-28
LATITUDE: 33-10-18
DISTANCE: 2.51 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 50.00
LOCATION:

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S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Dorothy Frasier
CONTACT: PHONE:
ADDRESS:
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-01-27
LATITUDE: 33-10-24
DISTANCE: 2.61 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 53.00
LOCATION:

COMPANY: Julian Selvy
CONTACT: PHONE: 803-761-5198
ADDRESS: PO Box 934
Moncks Corner, SC 29461
REMARKS: Drilled Fall '84. File in Columbia.
COUNTY:
LONGITUDE: 80-01-29
LATITUDE: 33-10-22
DISTANCE: 2.56 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 51.00
LOCATION: Moncks Corner

COMPANY: G. Garnet
CONTACT: PHONE: 803-899-4869
ADDRESS: Rt 5 Box 845
Moncks Corner, SC 29461
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-01-37
LATITUDE: 33-10-30
DISTANCE: 2.62 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 40.00
LOCATION: Moncks Corner

COMPANY: Rod Reid
CONTACT: PHONE:
ADDRESS: Rt 5 Box 851
Moncks Corner, SC 29461
REMARKS: File in Columbia. Intake depth: 135-140'.
COUNTY:
LONGITUDE: 80-01-29
LATITUDE: 33-10-19
DISTANCE: 2.51 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: 260
ELEV: 52.00
LOCATION: Moncks Corner

COMPANY: Brk Water & Swr Auth
CONTACT: Howard Henry PHONE: 803-572-4400
ADDRESS:
Summerville, SC
REMARKS: Poor pumping test data.
COUNTY:
LONGITUDE: 80-01-40
LATITUDE: 33-10-02
DISTANCE: 2.14 MILES NNE
AQUIFER:
COMP. DEPTH: 251
DRILL DEPTH: 317
ELEV: 40.00
LOCATION: Conifer Hall SID

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S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Bill Harrelson
CONTACT: PHONE:
ADDRESS: Rt 6 Box 15
Moncks Corner, SC 29461
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-01-58
LATITUDE: 33-10-39
DISTANCE: 2.63 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 51.00
LOCATION: Moncks Corner

COMPANY: Juliet Simms
CONTACT: PHONE:
ADDRESS: Rt 5 Box 880
Moncks Corner, SC 29461
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-01-01
LATITUDE: 33-10-57
DISTANCE: 3.37 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: 300
ELEV: 61.00
LOCATION: Moncks Corner

COMPANY: Tom Bilton
CONTACT: PHONE: 803-761-8284
ADDRESS: Hwy 52, PO Box 788
Moncks Corner, SC 29461
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-01-32
LATITUDE: 33-10-21
DISTANCE: 2.52 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: 385
ELEV: 50.00
LOCATION: Bilton Ford

COMPANY: Brk Water & Swr Auth
CONTACT: PHONE: 803-871-2876
ADDRESS:
Moncks Corner, SC
REMARKS: Inside pumphouse at end of Resinwood Rd. (Road 997).
COUNTY:
LONGITUDE: 80-02-15
LATITUDE: 33-10-22
DISTANCE: 2.23 MILES NNE
AQUIFER:
COMP. DEPTH: 315
DRILL DEPTH: 315
ELEV: 50.00
LOCATION: Conifer Hall

COMPANY: A D Hare Waterworks
CONTACT: PHONE: 803-899-2984
ADDRESS: PO Box 4645
Pinopolis, SC 29469
REMARKS: At Huntington Place Subdivision.
COUNTY:
LONGITUDE: 80-03-14
LATITUDE: 33-10-48
DISTANCE: 2.63 MILES NNW
AQUIFER:
COMP. DEPTH: 312
DRILL DEPTH: 312
ELEV: 94.00
LOCATION: Pinopolis

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BUREAU OF SOLID & HAZARDOUS WASTE
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COMPANY:
CONTACT: PHONE:
ADDRESS:
REMARKS: File in Columbia.
COUNTY:
LONGITUDE: 80-03-16
LATITUDE: 33-10-02
DISTANCE: 1.76 MILES NNW
LOCATION:
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 88.00

COMPANY: Berk CC Golf Course
CONTACT: PHONE:
ADDRESS: PO Box 397
Moncks Corner, SC 29461
REMARKS: Located at golf course (?).
COUNTY:
LONGITUDE: 80-00-51
LATITUDE: 33-09-15
DISTANCE: 2.22 MILES ENE
LOCATION: Berkeley CC
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: 172
ELEV: 40.00

COMPANY: AMFAC(Carolina) Nurs
CONTACT: Jay Guy PHONE: 803-899-6868
ADDRESS: Rt 6 Box 208
Moncks Corner, SC 29461
REMARKS: Also used for irrigation.
COUNTY:
LONGITUDE: 80-01-40
LATITUDE: 33-09-04
DISTANCE: 1.41 MILES ENE
LOCATION: AMFAC Nurseries
AQUIFER:
COMP. DEPTH: 222
DRILL DEPTH: -1
ELEV: 41.00

COMPANY: AMFAC(Carolina) Nurs
CONTACT: Jay Guy PHONE: 803-899-6868
ADDRESS: Rt 6 Box 208
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-01-30
LATITUDE: 33-09-27
DISTANCE: 1.78 MILES ENE
LOCATION: AMFAC Nurseries
AQUIFER:
COMP. DEPTH: 635
DRILL DEPTH: -1
ELEV: 40.00

COMPANY: Brk Water & Swr Auth
CONTACT: PHONE:
ADDRESS:
Moncks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-02-15
LATITUDE: 33-10-22
DISTANCE: 2.23 MILES NNE
LOCATION: Conifer Hall
AQUIFER:
COMP. DEPTH: 1607
DRILL DEPTH: 1704
ELEV: 65.00

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BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
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COMPANY: Brk Water & Swr Auth COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-02-15 COMP. DEPTH: -1
ADDRESS: LATITUDE: 33-10-22 DRILL DEPTH: 1720
Moncks Corner, SC DISTANCE: 2.23 MILES NNE ELEV: 65.00
REMARKS: Well not completed. Log TD: 1320'. LOCATION: Conifer Hall

COMPANY: Derrell Fennell COUNTY: AQUIFER:
CONTACT: PHONE: 803-761-3590 LONGITUDE: 80-04-44 COMP. DEPTH: 425
ADDRESS: Rt 4, Box 434 Wenwood LATITUDE: 33-06-12 DRILL DEPTH: 425
Moncks Corner, SC DISTANCE: 3.17 MILES SSW ELEV: 75.00
REMARKS: Owner notes black sediment collects in filters. LOCATION: Moncks Corner

COMPANY: James Little COUNTY: AQUIFER:
CONTACT: PHONE: 803-761-3038 LONGITUDE: 80-04-16 COMP. DEPTH: 282
ADDRESS: LATITUDE: 33-07-04 DRILL DEPTH: 282
, DISTANCE: 2.09 MILES SSW ELEV: 80.00
REMARKS: Consent given to let scwrc to use well for obs and pump test LOCATION: Whitesville area

COMPANY: B F Burns COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-04-16 COMP. DEPTH: 290
ADDRESS: LATITUDE: 33-07-04 DRILL DEPTH: 290
, DISTANCE: 2.09 MILES SSW ELEV: 77.00
REMARKS: Unable to measure through vent hole in TOC. LOCATION: Whitesville area

COMPANY: B F Burns COUNTY: AQUIFER:
CONTACT: Joseph Burns PHONE: 803-899-7470 LONGITUDE: 80-04-16 COMP. DEPTH: -1
ADDRESS: LATITUDE: 33-07-04 DRILL DEPTH: -1
, DISTANCE: 2.09 MILES SSW ELEV: 77.00
REMARKS: or P A Burns 553-0251 LOCATION: Whitesville area

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BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
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COMPANY: Pleasant Valley TrPk COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-03-59 COMP. DEPTH: -1
ADDRESS: LATITUDE: 33-07-31 DRILL DEPTH: -1
DISTANCE: 1.52 MILES SSW ELEV: 82.00
REMARKS: LOCATION: Pleasant Valley Trail

COMPANY: Pete Burbage COUNTY: AQUIFER:
CONTACT: PHONE: 803-761-2239 LONGITUDE: 80-03-53 COMP. DEPTH: 280
ADDRESS: Rt 4 Box 337 LATITUDE: 33-07-30 DRILL DEPTH: 280
Moncks Corner, SC DISTANCE: 1.47 MILES SSW ELEV: 65.00
REMARKS: Private system services 10 homes. Ltd by DHEC due to high F. LOCATION:

COMPANY: H B James, Jr COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-01-09 COMP. DEPTH: -1
ADDRESS: LATITUDE: 33-07-45 DRILL DEPTH: -1
Oakley, SC 29466 DISTANCE: 1.98 MILES ESE ELEV: 18.00
REMARKS: LOCATION:

COMPANY: Brkly Cty Water&Sewr COUNTY: AQUIFER:
CONTACT: Howard Henry PHONE: 803-572-4400 LONGITUDE: 80-00-45 COMP. DEPTH: 368
ADDRESS: LATITUDE: 33-08-43 DRILL DEPTH: -1
Summerville, SC DISTANCE: 2.16 MILES ENE ELEV: 33.00
REMARKS: LOCATION: Moncks Corner

COMPANY: AMFAC-Carolina Nurs COUNTY: AQUIFER:
CONTACT: PHONE: 803-889-6868 LONGITUDE: 80-01-45 COMP. DEPTH: -1
ADDRESS: Rt 2 Box 454 LATITUDE: 33-09-47 DRILL DEPTH: -1
Moncks Corner, SC 29461 DISTANCE: 1.87 MILES NNE ELEV: 48.00
REMARKS: LOCATION: AMFAC Nurseries nr Mo

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
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S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Earl Wenningham
CONTACT: PHONE: 803-899-5980
ADDRESS: Rt 6 Box 198
Moncks Corner, SC 29461
REMARKS: 160 is rept depth.
COUNTY:
LONGITUDE: 80-01-14
LATITUDE: 33-08-51
DISTANCE: 1.72 MILES ENE
AQUIFER:
COMP. DEPTH: 160
DRILL DEPTH: 160
ELEV: 43.00
LOCATION:

COMPANY: Joseph W Owens
CONTACT: PHONE: 803-761-2056
ADDRESS: Rt 6 PO Box 280W2
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-02-40
LATITUDE: 33-08-04
DISTANCE: 0.60 MILES SSE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 50.00
LOCATION: Moncks Corner

COMPANY: Unknown
CONTACT: PHONE:
ADDRESS:
,
REMARKS:
COUNTY:
LONGITUDE: 80-02-01
LATITUDE: 33-08-50
DISTANCE: 0.99 MILES ENE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 52.00
LOCATION: US 52 & S-8-357

COMPANY: Bethel Tempest Chrch
CONTACT: Ernest Liferidge,J PHONE:
ADDRESS:
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-02-49
LATITUDE: 33-08-55
DISTANCE: 0.47 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 60.00
LOCATION: Moncks Corner

COMPANY: Edward Beavers
CONTACT: PHONE:
ADDRESS: Rt 6 Box 280E
Moncks Corner, SC 29461
REMARKS: 280 is rept depth.
COUNTY:
LONGITUDE: 80-02-58
LATITUDE: 33-08-17
DISTANCE: 0.28 MILES SSE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: 280
ELEV: 60.00
LOCATION: Moncks Corner

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BUREAU OF SOLID & HAZARDOUS WASTE
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COMPANY: Sharon Gethers
CONTACT: PHONE:
ADDRESS: Rt6 Box 215
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-02-08
LATITUDE: 33-08-39
DISTANCE: 0.82 MILES ENE
LOCATION:
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 51.00

COMPANY: Dr. Woodrow Ayers Sr
CONTACT: PHONE: 803-899-3437
ADDRESS: PO Box 81
Moncks Corner, SC
REMARKS: Supplies 10 homes
COUNTY:
LONGITUDE: 80-03-35
LATITUDE: 33-09-20
DISTANCE: 1.10 MILES NNW
LOCATION: Palmetto Meat Pkg. Co
AQUIFER:
COMP. DEPTH: 436
DRILL DEPTH: -1
ELEV: 21.00

COMPANY: AMFAC Nurseries
CONTACT: Jay Guy (Pres.) PHONE: 803-889-6868
ADDRESS: Rt 6 Box 208
Moncks Corner, SC 29461
REMARKS: Well tab book claims SWL 92.4
COUNTY:
LONGITUDE: 80-01-14
LATITUDE: 33-09-03
DISTANCE: 1.79 MILES ENE
LOCATION: AMFAC Nurseries
AQUIFER: Black Mingo
COMP. DEPTH: 320
DRILL DEPTH: -1
ELEV: 40.00

COMPANY: AMFAC Nurseries
CONTACT: Jay Guy (Pres.) PHONE: 803-761-8181
ADDRESS: Rt 6 Box 208
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-01-10
LATITUDE: 33-09-38
DISTANCE: 2.16 MILES ENE
LOCATION: AFMAC Nurseries
AQUIFER:
COMP. DEPTH: 315
DRILL DEPTH: 360
ELEV: 35.00

COMPANY: Church of God
CONTACT: PHONE:
ADDRESS:
Whitesville, SC
REMARKS:
COUNTY:
LONGITUDE: 80-03-45
LATITUDE: 33-08-25
DISTANCE: 0.77 MILES WSW
LOCATION: US 17 & S-8-50
AQUIFER:
COMP. DEPTH: 450
DRILL DEPTH: 450
ELEV: 85.00

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COMPANY: Brkly Ctry Club Est. COUNTY: AQUIFER:
CONTACT: Howard Henry PHONE: 803-572-4400 LONGITUDE: 80-00-45 COMP. DEPTH: 203
ADDRESS: Brkly Water & Sewer Auth. LATITUDE: 33-08-43 DRILL DEPTH: -1
Summerville, SC DISTANCE: 2.16 MILES ENE ELEV: 33.00
REMARKS: Measured depth of 191' - solid tail pipe from 198-203 LOCATION: Berkeley Country Club

COMPANY: John M Dangerfield COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-03-38 COMP. DEPTH: 320
ADDRESS: Rt 6 Box 288 LATITUDE: 33-08-28 DRILL DEPTH: 320
Moncks Corner, SC 29461 DISTANCE: 0.65 MILES WSW ELEV: 84.00
REMARKS: 320 is rept. depth. LOCATION: Moncks Corner

COMPANY: Lillian Martin COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-03-48 COMP. DEPTH: 8
ADDRESS: Rt4 Box 265 LATITUDE: 33-08-37 DRILL DEPTH: 8
Moncks Corner, SC DISTANCE: 0.81 MILES WNW ELEV: 87.00
REMARKS: LOCATION:

COMPANY: Robert Marino COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-03-27 COMP. DEPTH: -1
ADDRESS: Rt 4 Box 27 LATITUDE: 33-09-29 DRILL DEPTH: -1
Moncks Corner, SC 29461 DISTANCE: 1.20 MILES NNW ELEV: 90.00
REMARKS: Supplies home & restaraunt. DHEC monitors water quality. LOCATION: US 17A & S-8-34

COMPANY: AMFAC Nurseries COUNTY: AQUIFER:
CONTACT: Jay Guy(President) PHONE: 803-889-6868 LONGITUDE: 80-01-30 COMP. DEPTH: 220
ADDRESS: Carolina Nurs. Rt6 Box208 LATITUDE: 33-09-27 DRILL DEPTH: 220
Moncks Corner, SC DISTANCE: 1.78 MILES ENE ELEV: 41.00
REMARKS: No pump. LOCATION: AMFAC Nurseries

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COMPANY: Leroy Ferguson
CONTACT: PHONE: 803-899-4860
ADDRESS: Rt 6 Box 231
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-02-19
LATITUDE: 33-09-20
DISTANCE: 1.12 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 52.00
LOCATION:

COMPANY: VFW Post 9509
CONTACT: PHONE:
ADDRESS:
Moncks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-02-56
LATITUDE: 33-09-57
DISTANCE: 1.64 MILES NNE
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 75.00
LOCATION:

COMPANY: Nathaniel Kinloch
CONTACT: PHONE:
ADDRESS: Rt 6 Box 229-C
Moncks Corner, SC 29461
REMARKS: 217 is rept. depth.
COUNTY:
LONGITUDE: 80-02-22
LATITUDE: 33-09-12
DISTANCE: 0.97 MILES NNE
AQUIFER:
COMP. DEPTH: 217
DRILL DEPTH: 217
ELEV: 51.00
LOCATION:

COMPANY: Mulberry Plantation
CONTACT: Mrs Brawley PHONE:
ADDRESS:
Oakley, SC
REMARKS:
COUNTY:
LONGITUDE: 80-01-08
LATITUDE: 33-08-28
DISTANCE: 1.78 MILES ESE
AQUIFER:
COMP. DEPTH: 225
DRILL DEPTH: 225
ELEV: 38.00
LOCATION: Mulberry Plantation

COMPANY: Tri-county concrete
CONTACT: PHONE:
ADDRESS:
,
REMARKS: Industrial & Domestic use
COUNTY:
LONGITUDE: 80-01-50
LATITUDE: 33-05-24
DISTANCE: 3.76 MILES SSE
AQUIFER:
COMP. DEPTH: 280
DRILL DEPTH: 280
ELEV: 30.00
LOCATION: Mount Holly

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
LATITUDES OR LONGITUDES ENDING IN 91 ARE ONLY ACCURATE TO WITHIN 1 MINUTE.

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Equipment rental
CONTACT: PHONE:
ADDRESS: Hwy 17A
Moncks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-04-25
LATITUDE: 33-06-24
DISTANCE: 2.82 MILES SSW
AQUIFER:
COMP. DEPTH: 275
DRILL DEPTH: -1
ELEV: 78.00
LOCATION: Moncks Corner

COMPANY: SC. Forestry Comm
CONTACT: PHONE:
ADDRESS:
Kingstree, SC
REMARKS:
COUNTY:
LONGITUDE: 80-01-10
LATITUDE: 33-06-03
DISTANCE: 3.34 MILES SSE
AQUIFER:
COMP. DEPTH: 235
DRILL DEPTH: 235
ELEV: 25.00
LOCATION: Mount Holly

COMPANY: Unknown
CONTACT: PHONE:
ADDRESS: Trailer Park on 17-A
,
REMARKS: Water use-WS?
COUNTY:
LONGITUDE: 80-04-30
LATITUDE: 33-05-51
DISTANCE: 3.41 MILES SSW
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 68.00
LOCATION: Trailer Park on 17A

COMPANY: Tri County Concrete
CONTACT: PHONE:
ADDRESS: Whitesville Plant
,
REMARKS: Well reworked Aug '71. DO use also.
COUNTY:
LONGITUDE: 80-04-38
LATITUDE: 33-05-50
DISTANCE: 3.49 MILES SSW
AQUIFER:
COMP. DEPTH: 353
DRILL DEPTH: 353
ELEV: 77.00
LOCATION: Whitesville

COMPANY: Unknown
CONTACT: PHONE:
ADDRESS:
,
REMARKS: No p[ump as of 12-12-85.
COUNTY:
LONGITUDE: 80-03-36
LATITUDE: 33-05-19
DISTANCE: 3.74 MILES SSW
AQUIFER:
COMP. DEPTH: 262
DRILL DEPTH: 262
ELEV: 51.00
LOCATION: Near Moncks Corner

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
LATITUDES OR LONGITUDES ENDING IN 91 ARE ONLY ACCURATE TO WITHIN 1 MINUTE.

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Mike Kendall
CONTACT: PHONE:
ADDRESS: Rt 2 Box 519
Moncks Corner, SC 29461
REMARKS: 360 is reported depth.
COUNTY:
LONGITUDE: 80-03-28
LATITUDE: 33-05-10
DISTANCE: 3.89 MILES SSW
LOCATION:
AQUIFER:
COMP. DEPTH: 360
DRILL DEPTH: 360
ELEV: 46.00

COMPANY: Mike Kendall
CONTACT: PHONE:
ADDRESS: Rt 2 Box 519
Moncks Corner, SC 29461
REMARKS: Next to 19Z--x04
COUNTY:
LONGITUDE: 80-03-28
LATITUDE: 33-05-10
DISTANCE: 3.89 MILES SSW
LOCATION: near Moncks Corner
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 46.00

COMPANY: David Welch
CONTACT: PHONE:
ADDRESS: Rt 2 Box 514
Moncks Corner, SC 29461
REMARKS:
COUNTY:
LONGITUDE: 80-03-29
LATITUDE: 33-05-10
DISTANCE: 3.89 MILES SSW
LOCATION: near Moncks Corner
AQUIFER:
COMP. DEPTH: -1
DRILL DEPTH: -1
ELEV: 47.00

COMPANY: Home Telephone Co
CONTACT: H C Steer & Co PHONE: 803-899-2101
ADDRESS: Pimplico off 17A
,
REMARKS: 100gpm with air compressor.
COUNTY:
LONGITUDE: 80-03-37
LATITUDE: 33-05-10
DISTANCE: 3.91 MILES SSW
LOCATION:
AQUIFER:
COMP. DEPTH: 205
DRILL DEPTH: 205
ELEV: 55.00

COMPANY: American-Std Warehs
CONTACT: Mr. Murry PHONE: 803-797-9368
ADDRESS: Rt 2, Box 528
Monks Corner, SC
REMARKS:
COUNTY:
LONGITUDE: 80-01-91
LATITUDE: 33-05-91
DISTANCE: 0.00 MILES UNK
LOCATION:
AQUIFER:
COMP. DEPTH: 265
DRILL DEPTH: 287
ELEV: 30.00

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
LATITUDES OR LONGITUDES ENDING IN 91 ARE ONLY ACCURATE TO WITHIN 1 MINUTE.

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Tri-County Concrete COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-01-44 COMP. DEPTH: 248
ADDRESS: LATITUDE: 33-05-21 DRILL DEPTH: 296
, DISTANCE: 3.84 MILES SSE ELEV: 30.00
REMARKS: Hole filled with sand 248-296. Also used as DO. LOCATION: Mount Holly

COMPANY: WG Plymale COUNTY: AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-06-23 COMP. DEPTH: -1
ADDRESS: LATITUDE: 33-09-17 DRILL DEPTH: 240
Goose Creek, SC DISTANCE: 3.42 MILES WNW ELEV: 82.00
REMARKS: logged TD:237' LOCATION: Goose Creek

COMPANY: William A Murray COUNTY: AQUIFER:
CONTACT: PHONE: 803-899-3058 LONGITUDE: 80-05-21 COMP. DEPTH: -1
ADDRESS: Rt 1, Box 658 LATITUDE: 33-11-02 DRILL DEPTH: 181
Moncks Corner, SC 29481 DISTANCE: 3.69 MILES NNW ELEV: 75.00
REMARKS: borders 03050201. Suspended particles in water LOCATION: Moncks Corner

COMPANY: Carolina Nurseries COUNTY: Berkeley AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-01-30 COMP. DEPTH: 0
ADDRESS: 739 Gaillard Road LATITUDE: 33-09-27 DRILL DEPTH: 0
Moncks Corner, SC 29461 DISTANCE: 1.78 MILES ENE ELEV: 0.00
REMARKS: LOCATION:

COMPANY: Carolina Nurseries COUNTY: Berkeley AQUIFER:
CONTACT: PHONE: LONGITUDE: 80-01-14 COMP. DEPTH: 0
ADDRESS: 739 Gaillard Road LATITUDE: 33-09-03 DRILL DEPTH: 0
Moncks Corner, SC 29461 DISTANCE: 1.79 MILES ENE ELEV: 0.00
REMARKS: LOCATION:

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
LATITUDES OR LONGITUDES ENDING IN 91 ARE ONLY ACCURATE TO WITHIN 1 MINUTE.

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Carolina Nurseries
CONTACT: PHONE:
ADDRESS: 739 Gaillard Road
Moncks Corner, SC 29461
REMARKS:
COUNTY: Berkeley
LONGITUDE: 80-01-10
LATITUDE: 33-09-38
DISTANCE: 2.16 MILES ENE
LOCATION:
AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 0.00

COMPANY: Carolina Nurseries
CONTACT: PHONE:
ADDRESS: 739 Gaillard Road
Moncks Corner, SC 29461
REMARKS:
COUNTY: Berkeley
LONGITUDE: 80-01-17
LATITUDE: 33-09-22
DISTANCE: 1.90 MILES ENE
LOCATION:
AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 0.00

COMPANY: Moncks Corner Water Works
CONTACT: PHONE:
ADDRESS: Post Office Box 266
Moncks Corner, SC 29461
REMARKS:
COUNTY: Berkeley
LONGITUDE: 80-01-05
LATITUDE: 33-11-32
DISTANCE: 3.91 MILES NNE
LOCATION:
AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 0.00

COMPANY: Moncks Corner Water Works
CONTACT: PHONE:
ADDRESS: Post Office Box 266
Moncks Corner, SC 29461
REMARKS:
COUNTY: Berkeley
LONGITUDE: 80-01-53
LATITUDE: 33-11-33
DISTANCE: 3.63 MILES NNE
LOCATION:
AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 0.00

COMPANY: Moncks Corner Water Works
CONTACT: PHONE:
ADDRESS: Post Office Box 266
Moncks Corner, SC 29461
REMARKS:
COUNTY: Berkeley
LONGITUDE: 80-01-02
LATITUDE: 33-11-29
DISTANCE: 3.88 MILES NNE
LOCATION:
AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 0.00

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
LATITUDES OR LONGITUDES ENDING IN 91 ARE ONLY ACCURATE TO WITHIN 1 MINUTE.

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE GROUNDWATER SUPPLIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. WATER RESOURCES COMMISSION (02/92)

COMPANY: Berkeley County Water & S
CONTACT: PHONE:
ADDRESS: Post Office Box 1090
Goose Creek, SC 29445
REMARKS:

COUNTY: Berkeley
LONGITUDE: 80-02-15
LATITUDE: 33-10-22
DISTANCE: 2.23 MILES NNE
LOCATION:

AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 0.00

COMPANY: Berkeley County Water & S
CONTACT: PHONE:
ADDRESS: Post Office Box 1090
Goose Creek, SC 29445
REMARKS:

COUNTY: Berkeley
LONGITUDE: 80-01-54
LATITUDE: 33-09-44
DISTANCE: 1.73 MILES NNE
LOCATION:

AQUIFER:
COMP. DEPTH: 0
DRILL DEPTH: 0
ELEV: 0.00

NOTE: LATITUDES OR LONGITUDES ENDING IN 95 ARE ONLY ACCURATE TO WITHIN 5 MINUTES.
LATITUDES OR LONGITUDES ENDING IN 91 ARE ONLY ACCURATE TO WITHIN 1 MINUTE.

Ref. 19

HOUSING UNITS BY OCCUPANCY STATUS, TOTAL POPULATION
AND PERSONS PER HOUSEHOLD

NAME	HOUSING UNITS	VACANT HU	OCCUPIED HU	TOTAL POP	GROUP QUARTERS	NON GQ POP	PERSONS PER HOUSEHOLD
SOUTH CAROLINA	1,424,155	166,111	1,258,044	3,486,703	116,543	3,370,160	2.68
ABBEVILLE COUNTY	9,846	1,066	8,780	23,862	646	23,216	2.64
AIKEN COUNTY	49,266	4,383	44,883	120,940	1,690	119,250	2.66
ALLENDALE COUNTY	4,242	451	3,791	11,722	1,076	10,646	2.81
ANDERSON COUNTY	60,745	5,264	55,481	145,196	1,638	143,558	2.59
BAMBERG COUNTY	6,408	821	5,587	16,902	1,011	15,891	2.84
BARNWELL COUNTY	7,854	754	7,100	20,293	297	19,996	2.82
BEAUFORT COUNTY	45,981	15,269	30,712	86,425	6,791	79,634	2.59
BERKELEY COUNTY	45,697	3,311	42,386	128,776	1,120	127,656	3.01
CALHOUN COUNTY	5,225	738	4,487	12,753	108	12,645	2.82
CHARLESTON COUNTY	123,550	16,481	107,069	295,039	16,119	278,920	2.61
CHEROKEE COUNTY	17,610	1,154	16,456	44,506	497	44,009	2.67
CHESTER COUNTY	12,293	845	11,448	32,170	118	32,052	2.80
CHESTERFIELD COUNTY	15,101	1,054	14,047	38,577	380	38,197	2.72
CLARENDON COUNTY	12,101	2,557	9,544	28,450	238	28,212	2.96
COLLETON COUNTY	14,926	2,886	12,040	34,377	282	34,095	2.83
DARLINGTON COUNTY	23,601	1,602	21,999	61,851	1,054	60,797	2.76
DILLON COUNTY	10,590	703	9,887	29,114	295	28,819	2.91
DORCHESTER COUNTY	30,632	2,419	28,213	83,060	2,092	80,968	2.87
EDGEFIELD COUNTY	7,290	866	6,424	18,375	268	18,107	2.82
FAIRFIELD COUNTY	8,730	1,263	7,467	22,295	435	21,860	2.93
FLORENCE COUNTY	43,209	2,992	40,217	114,344	2,699	111,645	2.78
GEORGETOWN COUNTY	21,134	4,859	16,275	46,302	205	46,097	2.83
GREENVILLE COUNTY	131,645	8,767	122,878	320,167	8,216	311,951	2.54
GREENWOOD COUNTY	24,735	2,005	22,730	59,567	1,630	57,937	2.55
HAMPTON COUNTY	7,058	736	6,322	18,191	66	18,125	2.87
HORRY COUNTY	89,960	34,196	55,764	144,053	3,563	140,490	2.52
JASPER COUNTY	6,070	772	5,298	15,487	266	15,221	2.87
KERSHAW COUNTY	17,479	1,669	15,810	43,599	409	43,190	2.73
LANCASTER COUNTY	20,929	1,151	19,778	54,516	399	54,117	2.74
LAURENS COUNTY	23,201	2,541	20,660	58,092	2,669	55,423	2.68
LEE COUNTY	6,537	483	6,054	18,437	153	18,284	3.02
LEXINGTON COUNTY	67,556	5,923	61,633	167,611	1,389	166,222	2.70
MCCORMICK COUNTY	3,347	616	2,731	8,868	1,367	7,501	2.75
MARION COUNTY	12,777	1,011	11,766	33,899	265	33,634	2.86
MARLBORO COUNTY	10,955	792	10,163	29,361	684	28,677	2.82
NEWBERRY COUNTY	14,455	2,141	12,314	33,172	766	32,406	2.63
OCONEE COUNTY	25,983	3,625	22,358	57,494	444	57,050	2.55
ORANGEBURG COUNTY	32,340	3,431	28,909	84,803	3,670	81,133	2.81
PICKENS COUNTY	35,865	2,443	33,422	93,894	7,506	86,388	2.58
RICHLAND COUNTY	109,564	7,974	101,590	285,720	26,091	259,629	2.56
SALUDA COUNTY	6,792	968	5,824	16,357	311	16,046	2.76
SPARTANBURG COUNTY	89,927	5,424	84,503	226,800	6,061	220,739	2.61
SUMTER COUNTY	35,016	2,293	32,723	102,637	7,574	95,063	2.91
UNION COUNTY	12,230	823	11,407	30,337	228	30,109	2.64
WILLIAMSBURG COUNTY	13,265	1,157	12,108	36,815	155	36,660	3.03
YORK COUNTY	50,438	3,432	47,006	131,497	3,602	127,895	2.72

POP. COUNTS ARE SUBJECT TO POSSIBLE CORRECTION FOR UNDERCOUNT OR OVERCOUNT.
U.S. DEPT. OF COMMERCE IS CONSIDERING WHETHER TO CORRECT THESE COUNTS, IF ANY, NO LATER THAN 7/15/91.

Ref. 22

RECORD OF COMMUNICATION

__X__ Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO:	Berkeley County Landfill File SCD 981 028 095	FROM:	Harvey S. Daniel Site Screening Section
DATE:	June 24, 1992	TIME:	8:25 AM

SUBJECT: Conversation with Carl Rueger, Superintendent of the Moncks Corner Water Company. (803) 761-8041

SUMMARY OF COMMUNICATION

Mr. Rueger confirmed that the Town of Moncks Corner has wells within four miles of the Berkeley County Landfill. However, the wells are cased and screened between 200 and 700 feet.

INFORMATION COPIES
TO:

Ref 23

RECORD OF COMMUNICATION

__X__ Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO:	Berkeley County Landfill File SCD 981 028 095	FROM:	Harvey S. Daniel Site Screening Section
DATE:	July 7, 1992	TIME:	11:15 AM

SUBJECT: Conversation with Bobby Wall, Assistant Superintendent, Moncks Corner Water Company. (803) 761-8041

SUMMARY OF COMMUNICATION

The Moncks Corner Water Company is supplied by seven groundwater wells. Referring to a city map of Moncks Corner, Mr. Wall pointed out that three of the wells are located north of S.C. State Route 6 [located outside the four mile radius of the Berkeley County Landfill site]. A fourth well is located at the intersection of U.S. Route 52 and Heatley Street [located approximately 4.2 miles northeast of the site]. Two well are located at the bend in Winter Street [located approximately 3.75 miles north-northeast of the site]. And, the seventh well is located at the intersection of Whiteville Road and Center Street [located approximately 3.4 miles north-northeast of the site]. The Water Company supplies approximately 2100 taps.

INFORMATION COPIES
TO:

Ref. 25

RECORD OF COMMUNICATION

__X__ Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO:	Berkeley County Landfill File SCD 981 028 095	FROM:	Harvey S. Daniel Site Screening Section
DATE:	June 23, 1992	TIME:	2:55 PM

SUBJECT: Conversation with Howard Henry, Superintendent of the Berkeley County Water Company. (803) 761-8817

SUMMARY OF COMMUNICATION

Mr. Henry confirmed that the water company has three wells within four miles of the Berkeley County Landfill as he indicated on the waterline map for the Site Screening Investigation conducted by the NUS Corporation. The wells are within 275 to 300 feet deep, and are screened below the Cooper Formation. The three well are part of a seven well system that serves approximately 5000 taps. Fifty percent of the water in the system is obtained from the City of Charleston.

INFORMATION COPIES
TO:

Ref. 27

RECORD OF COMMUNICATION

__X__ Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO:	Berkeley County Landfill File SCD 981 028 095	FROM:	Harvey S. Daniel Site Screening Section
DATE:	July 10, 1992	TIME:	9:15 AM

SUBJECT: Conversation with Dan Hare, A.D. Hare Waterworks.
Office phone: (803) 761-8444.
Mobile Phone: (803) 729-5650

SUMMARY OF COMMUNICATION

A.D. Hare Waterworks is served by eight wells. The majority of the wells are located on the Pinopolis Peninsula. Referring to a USGS topographical map, Mr. Hare pointed out that two of the wells are located less than one-quarter mile south of the intersection of Airport Road (the road on which the airport is located) and Whitesville Road (the road leading to the small community of Whitesville) [these two wells located between two and three miles north of the Berkeley County Landfill site are the only two well in the system that are located within four miles of the site]. The water in the system is mixed, and the wells are screened around 300 feet (below the Cooper Formation). A.D. Hare Waterworks serves 470 taps.

INFORMATION COPIES
TO:

Ref. 31

SOIL SURVEY OF

Berkeley County, South Carolina

United States Department of Agriculture
Soil Conservation Service and Forest Service

In cooperation with

South Carolina Land Resources Conservation Commission
and
South Carolina Agricultural Experiment Station

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Issued January 1980

B1—7 to 15 inches, light yellowish brown (2.5Y 6/4) very fine sandy loam; common medium faint light brownish gray (2.5Y 6/2) mottles and few fine faint yellowish brown mottles; weak fine subangular blocky structure; friable; few fine roots; strongly acid, pH 5.2; clear smooth boundary.

B21tg—15 to 22 inches, light brownish gray (2.5Y 6/2) clay loam; common medium distinct yellowish brown (10YR 5/6) mottles and few fine distinct brownish yellow mottles; weak fine angular blocky structure; firm; patchy distinct clay films on faces of peds; few fine roots; very strongly acid, pH 4.8; clear wavy boundary.

[illegible] gray (10YR 6/1) clay; common fine distinct strong brown (7.5YR 5/6) mottles and common medium prominent red (2.5YR 4/8) mottles; weak medium subangular blocky structure; firm; patchy faint clay films on faces of peds; few fine roots; very strongly acid, pH 4.8; clear smooth boundary.

B23tg—42 to 52 inches, gray (10YR 6/1) clay; common medium distinct yellowish brown (10YR 5/6) mottles and common coarse prominent dark red (2.5YR 3/6) mottles; weak medium subangular blocky structure; firm; patchy faint clay films on faces of peds; few fine roots; very strongly acid, pH 4.6; clear smooth boundary.

B24tg—52 to 65 inches, gray (10YR 6/1) clay loam; few fine faint light brownish gray mottles, common coarse distinct strong brown (7.5YR 5/6) mottles, few fine distinct light yellowish brown mottles, and few fine prominent greenish gray mottles; weak medium subangular blocky structure; firm; few fine roots; very strongly acid, pH 4.6; clear smooth boundary.

B3g—65 to 80 inches, gray (10YR 6/1) clay loam; few fine distinct strong brown and light yellowish brown mottles and few fine prominent greenish gray mottles; weak coarse subangular blocky structure; firm; few fine roots; very strongly acid, pH 4.6.

The solum is 60 inches or more in thickness. The profile is strongly acid or very strongly acid throughout.

The A horizon is 5 to 11 inches thick. The A1 or Ap horizon is 2 to 7 inches thick. It is gray, dark gray, very dark gray, or black. The A2 horizon, where present, is 6 to 8 inches thick. It is pale olive.

The B1 horizon, where present, is 3 to 8 inches thick. It is light brownish gray, pale brown, brown, or light yellowish brown very fine [illegible] clay loam. The B2t horizon is 31 inches to more than 60 inches thick. It is sandy clay, clay loam, or clay. The B2t horizon commonly is mottled throughout in various shades of brown, red, gray, olive, and yellow. A chroma of 3 or more is commonly dominant in the upper few inches of the B2t horizon, and gray is the dominant color in the lower part. The B3 horizon, where present, is 10 to 22 inches thick. It has dominantly gray colors and common to many mottles in various shades of yellow, brown, and red. It is clay, clay loam, or sandy clay.

Le—Lenoir fine sandy loam. This soil occurs on broad low flats.

Included with this soil in mapping are small ares of Bethera, Coxville, Rains, Lynchburg, Wahee, Craven, Duplin, and Goldsboro soils and some areas of soils that have a loamy fine sand, very fine sandy loam, and loam surface layer. Also included are a few areas of soils that are sandy clay loam in the upper part of the subsoil.

Most of the acreage of this soil is in woodland. The remainder is in pasture and a few acres of row crops. The principal crops are corn, soybeans, small grain, and bahiagrass.

[illegible] surface drains, or both, are used to drain this soil. Row crops can be grown each year. Growing and turning under a cover crop every year helps to [illegible] matter content and improve tilth and yields. Capability unit IIIw-3; woodland group 2w8.

Leon series

The soils of the Leon series are nearly level and poorly drained. They formed in sandy Coastal Plain sediment.

In a typical profile the surface layer is black fine sand about 7 inches thick. The subsurface layer is about 8 inches of gray fine sand. The next layer is dark reddish brown, weakly cemented fine sand about 18 inches thick. The underlying material extends to a depth of 70 inches or more; the upper 5 inches is brown loamy sand, the next 20 inches is light brownish gray fine sandy loam, and the lower 12 inches is light gray loamy and sandy material.

Leon soils occur with Chipley, Echaw, Pamlico, Pickney, Rains, Seagate, and Witherbee soils. Leon soils are more poorly drained than Chipley, Echaw, Seagate, and Witherbee soils. Leon soils are better drained than Pamlico and Pickney soils. Leon soils have a Bh horizon, which Rains soils do not have.

Leon soils have rapid permeability in the surface layer and subsurface layer and moderate or moderately rapid permeability in the organic hardpan and lower layers. Surface runoff is slow, and available water capacity is low.

Typical profile of Leon fine sand; from U. S. Highway 17-A and State Secondary Road 50, 4.5 miles south of Moncks Corner, 0.7 mile east on State Secondary Road 50; 465 feet south of road:

Ap—0 to 7 inches, black (10YR 2/1) fine sand; weak fine granular structure; very friable; common fine roots; medium acid, pH 6.0; clear smooth boundary.

A2—7 to 15 inches, gray (10YR 6/1) fine sand, single grained; loose; few fine roots; medium acid, pH 6.0; clear smooth boundary.

Bh—15 to 33 inches, dark reddish brown (5YR 2/2) fine sand; massive parting to weak medium subangular blocky structure; friable; weakly cemented; very strongly acid, pH 5.0; clear smooth boundary.

C1—33 to 38 inches, brown (10YR 5/3) loamy sand, single grained, loose; strongly acid, pH 5.3; abrupt wavy boundary.

C2—38 to 58 inches, light brownish gray (10YR 6/2) fine sandy loam; common medium distinct dark grayish brown (10YR 4/2) mottles; weak fine subangular blocky structure; friable; very strongly acid, pH 4.8; clear wavy boundary.

C3—58 to 70 inches; light gray (10YR 7/1) stratified loamy and sandy material; structureless; friable; strongly acid, pH 5.2.

The profile is extremely acid to strongly acid in each horizon unless limed.

The A horizon is 7 to 17 inches thick. The A1 or Ap horizon is 4 to 8 inches thick. It is black or very dark gray. The A2 horizon is 2 to 9 inches thick. It is grayish brown, light brownish gray, gray, light gray, or white.

The Bh horizon is 10 to 20 inches thick. It is black, dark reddish brown, or dark brown.

The C1 horizon is 5 to 13 inches thick. It is light gray, gray, light brownish gray, grayish brown, dark grayish brown, or brown fine sand, loamy fine sand, or loamy sand. The C2 horizon is 12 to 32 inches thick. It is light gray, gray, or light brownish gray sandy loam or fine sandy loam. The C3 horizon is light gray or gray loamy sand, sandy loam, fine sandy loam, sandy clay loam, or loamy fine sand.

Leon soils in Berkeley County have a slightly finer texture below the Bh horizon than is defined in the range for the series, and they lack an A2 horizon in about 40 percent

of the area. These differences, however, do not affect use and management.

Lo—Leon fine sand. This soil is in slightly depressional areas.

Included in this soil in mapping are small areas of Pamlico, Pickney, Rains, Seagate, and Witherbee soils. Also included are some areas of soils that have an organic hardpan directly beneath the surface layer.

Most of the acreage of this soil is in woodland. The remainder is in cropland, pasture, or urban uses. The principal crops are soybeans, small grain, and leafy vegetables.

Extensive drainage systems are necessary when this soil is used for crops or pasture. The organic hardpan limits root development and water movement. Capability units IVw-4, drained, and VIw-4, undrained; woodland group 4w2.

Lucy series

The soils of the Lucy series are nearly level to gently sloping, deep, and well drained. They formed in loamy Coastal Plain sediment.

In a typical profile the surface layer is loamy sand about 6 inches thick. The upper 3 inches is very dark grayish brown, and the lower 3 inches is brown. The subsurface layer is yellowish brown loamy sand about 19 inches thick. The next layer is yellowish red and extends to a depth of more than 60 inches. The upper 12 inches is friable sandy loam, and the lower 23 inches is friable sandy clay loam.

Lucy soils occur with Bonneau, Ocilla, Goldsboro, Norfolk, Caroline, and Cainhoy soils. Lucy soils have a redder subsoil than Bonneau soils. Lucy soils are better drained than Ocilla and Goldsboro soils. Lucy soils have a thicker surface layer than Goldsboro, Norfolk, and Caroline soils. Lucy soils have a coarser textured subsoil than Caroline soils and a finer textured subsoil than Cainhoy soils.

Lucy soils have rapid permeability in the surface layer and subsurface layer and moderate permeability in the subsoil. Surface runoff is slow, and available water capacity is low.

Typical profile of Lucy loamy sand, 0 to 6 percent slopes; from intersection of S. C. Highway 41 and S. C. Highway 402, 1.0 mile south on S. C. Highway 41 and 1.3 miles east on State Secondary Highway 598; 90 feet northeast of highway:

A11—0 to 3 inches, very dark grayish brown (10YR 3/2) loamy sand; weak fine granular structure; very friable; common fine roots; strongly acid, pH 5.1; clear smooth boundary.

A12—3 to 6 inches, brown (10YR 4/3) loamy sand; weak fine granular structure; very friable; common fine roots; strongly acid, pH 5.2; clear smooth boundary.

A2—6 to 25 inches, yellowish brown (10YR 5/4) loamy sand; few medium distinct strong brown (7.5YR 5/8) mottles; weak fine granular structure; very friable; common fine roots; strongly acid, pH 5.2; clear wavy boundary.

B21t—25 to 37 inches, yellowish red (5YR 5/8) sandy loam; weak fine subangular blocky structure; friable; sand grains coated and bridged; few fine roots; strongly acid, pH 5.2; gradual irregular boundary.

B22t—37 to 48 inches, yellowish red (5YR 5/8) sandy clay loam; weak fine subangular blocky structure; friable; sand grains coated and bridged; few fine roots; strongly acid, pH 5.2; clear wavy boundary.

B23t—48 to 60 inches, yellowish red (5YR 5/8) sandy clay loam; few medium distinct strong brown (7.5YR 5/6) mottles; moderate fine subangular blocky structure; friable; sand grains coated and bridged; few fine roots; very strongly acid, pH 4.8.

The solum ranges from 60 inches to more than 80 inches in thickness. The profile is strongly acid in the A horizon and strongly acid or very strongly acid in the B horizon.

The A horizon is 23 to 29 inches thick. The A1 horizon, where present, is 3 to 6 inches thick. The A1 or Ap horizon is very dark grayish brown, dark gray, or brown. The A2 horizon is 19 to 26 inches thick. It is pale brown, light yellowish brown, yellowish brown, brownish yellow, or very pale brown loamy sand or loamy fine sand.

The B2t horizon is 31 inches to more than 50 inches thick. It is yellowish red or red sandy loam or sandy clay loam. In places the B2t horizon has few to many mottles in various hues of brown, yellow, and red.

LuB—Lucy loamy sand, 0 to 6 percent slopes. This nearly level to gently sloping soil is on broad ridges and narrow slopes parallel to streams and drainageways.

Included with this soil in mapping are small areas of Bonneau, Ocilla, Norfolk, and Goldsboro soils; small wet areas, which are shown on the map by wet spot symbols; and a few small areas where slopes are more than 6 percent. Also included are areas of soils that have a loamy fine sand surface layer; a few areas of soils that have a sandy surface layer and subsurface layer more than 40 inches thick combined; and a few areas of soils that are strong brown in the upper part of the subsoil.

Most of the acreage of this soil is in woodland. The remainder is in row crops and pasture. Principal crops are soybeans, corn, and small grain. Yields of shallow rooted crops are reduced because of inadequate moisture in the sandy surface layer and subsurface layer.

Soil blowing is a hazard and maintaining organic matter content is a concern when this soil is used for row crops. Stripcropping, windbreaks, cover crops, and crop rotation are some practices needed to control erosion and replenish organic matter. This soil leaches rapidly. Lime and fertilizer should be applied frequently but in smaller amounts. Capability unit IIs-1; woodland group 3s2.

Lynchburg series

The soils of the Lynchburg series are nearly level, deep, and somewhat poorly drained. They formed in loamy Coastal Plain sediment.

In a typical profile the surface layer is black fine sandy loam about 4 inches thick. The subsurface layer is light yellowish brown fine sandy loam about 3 inches thick. The next layer is about 58 inches thick; the upper 5 inches is yellowish brown, friable fine sandy loam and the lower 53 inches is mottled gray, friable sandy clay loam. The underlying material to a depth of about 80 inches is mottled gray clay that has pockets of sandy clay and sandy clay loam.

Lynchburg soils occur with Goldsboro, Duplin, Lenoir, Coxville, Rains, Wahee, and Ocilla soils. Lynchburg soils

Ref. 32

South Carolina

STATE WATER ASSESSMENT

Report No. 140

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September 1983

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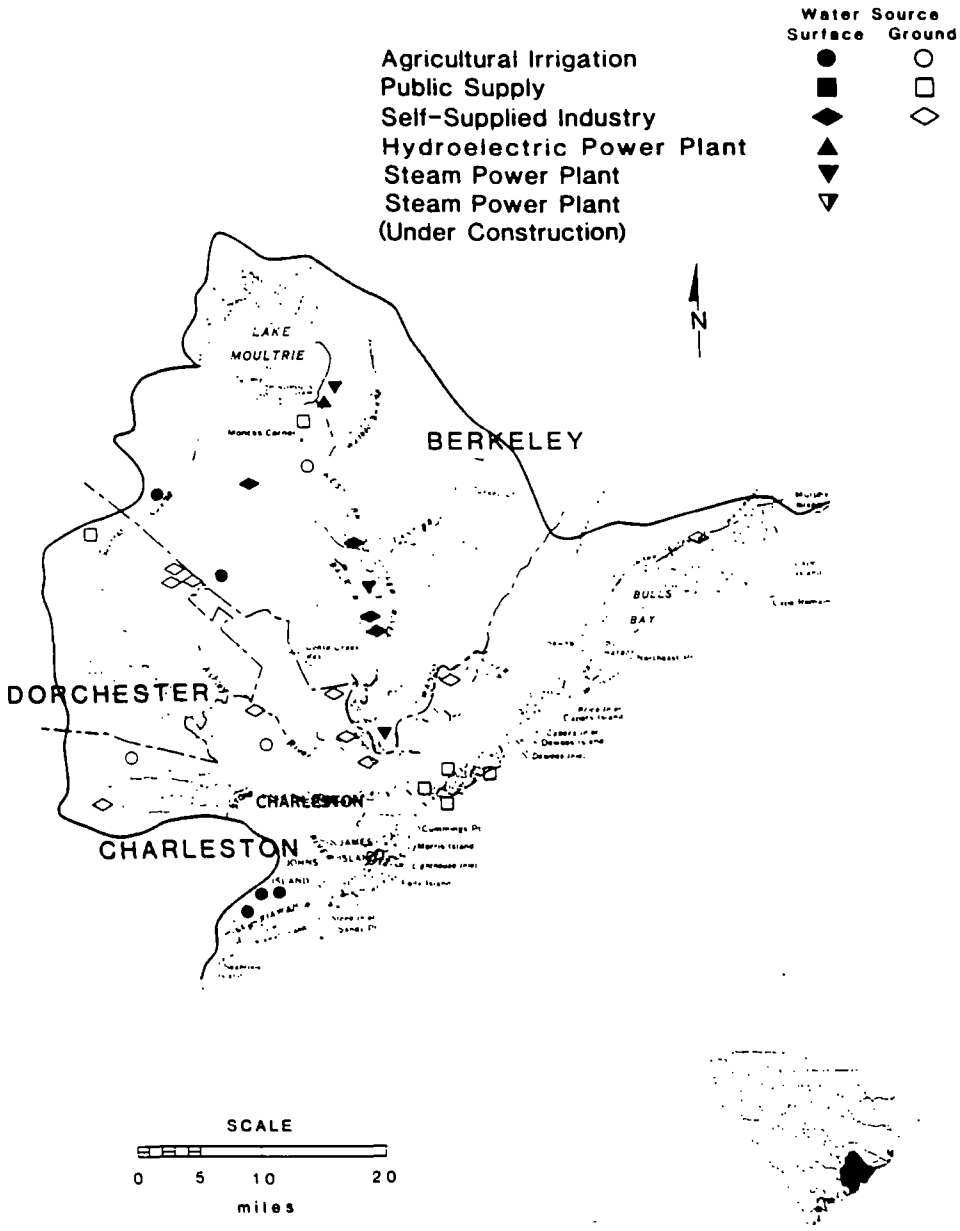

Figure 119.
Location, type, and supply source of water users in the Ashley-Cooper River Sub-basin, South Carolina.

Ref. 53

RECORD OF COMMUNICATION

__X__ Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO:	Berkeley County Landfill File SCD 981 028 095	FROM:	Harvey S. Daniel Site Screening Section
DATE:	June 23, 1992	TIME:	2:30 PM

SUBJECT: Conversation with Miller White, Fisheries Biologist, District V, South Carolina Wildlife & Marine Resources Department. (803) 825-3387

SUMMARY OF COMMUNICATION

The West Branch Cooper River has an average flow of 4500 cubic feet per second between Pinopolis Dam and the Atlantic Ocean. Mr. White estimates that Molly Branch has a flow betweem 10 and 100 cubic feet per second as it flows into the West Branch Cooper River.

INFORMATION COPIES
TO:

Ref 37

Charleston County Health Department

334 Calhoun Street
Charleston, South Carolina 29401

October 22, 1976

Mr. Clyde Umphlett
County Supervisors Office
P. O. Box 817
Moncks Corner, S. C. 29461

Dear Mr. Umphlett:

I am sure you are aware that Berkeley County has been using their new landfill site for over five months and the old site has been closed for the same amount of time. There is a serious problem existing with the old site in that it has never been properly covered with the two feet of final cover and graded as required by the solid waste regulations. Due to this failure we have raw uncovered garbage exposed, also serious leachate and erosion problems. The regulations require that the final cover be applied within one week of completion therefore I am sure that you would agree with me that five months is more than enough time to have completed and closed this site.

In speaking with Mr. Page during these past months it seems that the lack of hauling trucks was the main factor in not completing the site. I would request that you look into this matter immediately and take the necessary action to complete this site and have the permit terminated.

I respectfully request that you let me know when this can be accomplished. I feel that thirty days should be adequate to accomplish this if a conscientious effort is made.

Please contact me if there are any questions concerning this matter and I will be most happy to help in any way.

Sincerely,

J. D. Ohlandt
Regional Solid Waste Consultant

JDO/bji
cc: Mr. David Page, Berkeley County
Mr. Hartsell Truesdale, S.C. DHEC
Mr. J. Donovan Dukes, EQC Office
File

Ref. 38

RECORD OF COMMUNICATION

__X__ Phone Call
_____ Discussion
_____ Field Trip
_____ Conference
_____ Other (Specify)

TO:	Berkeley County Landfill File SCD 981 028 095	FROM:	Harvey S. Daniel Site Screening Section
DATE:	June 26, 1992	TIME:	8:15 AM

SUBJECT: Conversation with Barbara Chapman, Secretary, Whitesville Elementary School. (803) 761-8322

SUMMARY OF COMMUNICATION

The Whitesville Elementary School [located approximately 0.3 miles north of the Berkeley County Landfill site] has a student population of approximately 650 students, and a staff population of approximately 60 people.

INFORMATION COPIES
TO:

Date: 06/22/92

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE ENDANGERED SPECIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. HERITAGE TRUST FOUNDATION (01/92).

COMMON NAME SCIENTIFIC NAME	STATUS	LONGITUDE LATITUDE	DISTANCE FROM SITE	GRANK SRANK	DATE ADDED	TOPO MAP / COUNTY WHERE THE SPECIES IS LOCATED
SHADOW-WITCH PONTHIEVA RACEMOSA	UN	80-00-13 33-10-53	3.80 Miles NNE	G4G5 S?	10/01/72	MONCKS Berkeley
OSPREY PANDION HALIAETUS	SC	79-59-22 33-09-46	3.77 Miles ENE	G5 S4	03/01/80	CORDESVILLE Berkeley
RECLINED MEADOW-RUE THALICTRUM SUBROTUNDUM	CU	80-04-46 33-05-42	3.68 Miles SSW	G1G2 S?	08/11/39	MOUNT Berkeley
VIRGINIA BUNCHFLOWER MELANTHIUM VIRGINICUM	UN	80-04-46 33-05-42	3.68 Miles SSW	G5 S?	08/11/39	MOUNT Berkeley
SHADOW-WITCH PONTHIEVA RACEMOSA	UN	80-00-44 33-10-14	2.92 Miles ENE	G4G5 S?	09/01/66	MONCKS Berkeley
OSPREY PANDION HALIAETUS	SC	80-01-00 33-06-43	2.82 Miles SSE	G5 S4	03/01/80	MOUNT Berkeley

GRANK/SRANK - Nature Conservancy rating:

G1 - Critically imperiled globally because of extreme rarity or because of some factor(s) making it especially vulnerable to extinction.
G2 - Imperiled globally because of rarity or factor(s) making it vulnerable.
G3 - Either very rare throughout its range or found locally in a restricted range, or having factors making it vulnerable.
G4 - Apparently secure globally, though it may be rare in parts of its range.
G5 - Demonstrably secure globally, though it may be rare in parts of its range.
S1 - Critically imperiled state-wide because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation.
S2 - Imperiled state-wide because of rarity or factor(s) making it vulnerable.
S3 - Rare or uncommon in state.
S4 - Apparently secure in state.

STATUS - Legal status:

FE - Federal Endangered
FT - Federal Threatened
NC - Of Concern, National (plants)
RC - Of Concern, Regional (plants)
SE - State Endangered (animals)
ST - State Threatened (animals)
SC - Of Concern, State (animals)
SL - Of Concern, State (plants)
SX - State Extirpated
CU - Candidate (Federal review)
UN - Undetermined

App. 3b

S.C. DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
BUREAU OF SOLID & HAZARDOUS WASTE
SITE BEING EVALUATED BERKELEY COUNTY LANDFILL, 330831.5 LATITUDE 800258.2 LONGITUDE
THE ENDANGERED SPECIES FOUND WITHIN 4 MILES
THIS REPORT IS BASED UPON DATA PROVIDED BY THE S.C. HERITAGE TRUST FOUNDATION (01/92).

COMMON NAME SCIENTIFIC NAME	STATUS	LONGITUDE LATITUDE	DISTANCE FROM SITE	GRANK SRANK	DATE ADDED	TOPO MAP / COUNTY WHERE THE SPECIES IS LOCATED

S5 - Demonstrably secure in state.