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Hazardous Waste Groundwater Task Force
Groundwater Monitoring Evaluation
Chemical Waste Management
Emelle, Alabama
Update

From September 15-25, 1986 the Hazardous Waste Groundwater Task Force conducted an investigation at the Chemical Waste Management (CWM),Emelle Alabama facility. One main objective of the Groundwater Task Force is to determine compliance with interim status groundwater monitoring requirements of 40 CFR Part 265 as promulgated under RCRA or the state program. The CWM-Emelle groundwater system is unique from other facility's in that the chalk monitoring well system has a waiver from 265 requirements.

A consent agreement between EPA and CWM was signed December 19, 1984. It includes a waiver of the groundwater monitoring requirements set out in 40 CFR §265.91 (a)(2). The basis for the waiver is the low potential for migration of hazardous wastes or constituents from the CWM-Emelle facility via the uppermost aquifer to water supply wells or surface waters. The waiver states that the time of travel for waste constituents to reach the Eutaw Formation or the nearest surface waters exceeds one thousand years.

This update chronicles compliance activities that have taken place since the time of the Groundwater Task Force Investigation at Chemical Waste Management - Emelle (CWM).

On January 28, 1987 EPA conducted a Comprehensive Evaluation Inspection at CWM. No class I violations resulted.

*From May 4-6, 1987 ADEM conducted a sampling inspection of 32 shallow monitoring wells. Analysis revealed that all parameters were less than 10 micrograms per liter. This sampling is to be included with the comprehensive groundwater inspection done by ADEM earlier this year.

On May 14, 1987 ADEM issued CWM a warning letter for late certification of closure of trenches #8 through #18 and trench #20.

From May 27-28, 1987 ADEM conducted a sampling inspection of nine additional shallow monitoring wells in the independent study area. Significant results are as follows:

Well #	Constituent	Contamination
SM-19	1,2 - Dichloropropane	40.7 - 56.4 micrograms/L
SM-21	1,2 - Dichloropropane	18.8 - 22.1 micrograms/L
SM-22	1,1 - Dichloroethane	14.4 - 20.5 micrograms/L

ADEM intends to resample SM-19, SM-21 and SM-22, and additional assessment activities are in process.

On May 20, 1987 ADEM reported problems with CWM's 4th quarter sampling in a letter from ADEM to CWM.

1. When sampling well #5a CWM only showed volatile compounds and field parameters in their results. ADEM requested a more complete set of results.

2. Barium was found in all wells. CWM stated that this is due to the fact that barium is found in the chalk. ADEM stated that the barium was also found in the field blanks. ADEM asked CWM for an explanation.

On July 8, 1987 ADEM issued an NOV for inadequate Waste Analysis, Closure Plan and Cost Estimate for Closure.

On July 14, 1987 CWM certified closure of trenches #8 through #18 and trench #20.

On July 28, 1987 EPA conducted a Comprehensive Evaluation Investigation at CWM. No class I violations were discovered.

Subsequent sampling done by ADEM since the time of the Task Force investigation included the sampling of SM 2, SM 5, and SM 8. ADEM did not detect any of the compounds sampled for during the task force investigation. Well SM 8 showed 15 microgram/L of methyl butyl-ketone during the Groundwater Task Force investigation

CWM's Sampling and Analysis procedures have been addressed by EPA's permit. The permit states that organic and total metal samples will not be filtered. The Task Force recommends the use of gloves while sampling. This issue has not been addressed in the permit.

Groundwater sampling took place at CWM-Emelle on July 20-23 1987. The sampling was conducted by ADEM. They split samples with CWM. They received results September 9, 1987. All the shallow wells around trenches 8 through 18 and 20 were sampled. All the shallow wells around trenches 1 through 7 (the old study area) were sampled. They sampled for pH, specific conductivity and volatiles. Methylene chloride was found in some of the wells. The old study area showed 1,2 dichloropropane in SM 19, SM 21, and SM 22. The wells were resampled in August 1987. They were sampled again during the week of October 26-30, 1987. CWM feels that contamination is from some contaminated soil in this area. Follow up studies are going on right now.

The final permit for CWM - Emelle was issued on May 27, 1987. The permit was to be effective July 11, 1987. Prior to this date petitions against the permit were filed for review with the EPA administrator. EPA Region IV Response To Petitions For Review was completed on September 11, 1987. A copy of this response can be obtained by contacting the Region IV Public Affairs Office. Because of the petition for review the permit has not become effective yet.

* Sampled for the following parameters:

Methylene Chloride
Trichlorofluoro-Methane
1,1 Dichloro-Ethene
1,1 Dichloro-Ethane
Trans - 1,2 Dichloro-Ethene
Chloroform
1,2 Dichloro-Ethane
1,1,1 Trichloro-Ethane
Carbon Tetrachloride
Bromodichloro-Methane
1,2 Dichloro Propane
Trichloroethylene
Benzene
Dibromochloro - Methane
1,1,2 Trichloro-Ethane
2 Chloroethyl vinyl etherl
Bromoform
1,1,2,2 Tetrachloro-Ethane
Tetrachloro-Ethylene
Toulene
Chlorobenzene
Ethyl Benzene

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS WASTE GROUND-WATER TASK FORCE

GROUND-WATER MONITORING EVALUATION

CHEMICAL WASTE MANAGEMENT, INC.
Emelle, Alabama

November 1987

Donald Hunter
Project Coordinator
Region IV, USEPA, Environmental Services Division
Athens, Georgia

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INTRODUCTION

Concerns have recently been raised about whether commercial hazardous waste treatment, storage and disposal facilities (TSDFs) are complying with the ground-water monitoring requirements promulgated under the Resource Conservation and Recovery Act (RCRA). In question is the ability of existing or proposed ground-water monitoring systems to detect contaminant releases from waste management units. To evaluate these systems and determine the current compliance status, the Administrator of the Environmental Protection Agency (EPA) established a Hazardous Waste Ground-Water Task Force (Task Force). The Task Force comprises personnel from the EPA Office of Solid Waste and Emergency Response (OSWER), National Enforcement Investigations Center (NEIC), Regional Offices and State regulatory agencies. The Task Force is conducting in-depth on-site investigations of commercial TSDF's with the following objectives:

- Determine compliance with interim status ground-water monitoring requirements of 40 CFR Part 265 as promulgated under RCRA or the State equivalent (where the State has received RCRA authorization).

- Evaluate the ground-water monitoring program described in the facility's RCRA Part B permit application for compliance with 40 CFR Part 270.14(c).

- Determine if the ground water at the facility contains hazardous waste constituents.

- Provide information to assist the Agency in determining if the TSDF meets EPA ground-water monitoring requirements for waste management facilities receiving waste from response actions conducted under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, Public Law 91-510).

To address these objectives, each Task Force investigation will determine if:

- The facility has developed and is following an adequate ground-water sampling and analysis plan;

- Designated RCRA and/or State required monitoring wells are properly located and constructed;

- Required analyses have been conducted on samples from the designated RCRA monitoring wells; and

- The ground-water quality assessment program outline (or plan, as appropriate) is adequate.

During September 15 - 25, 1986, a Task Force team conducted an evaluation at the Chemical Waste Management Incorporated (CWM) facility (EPA I.D. No. ALD000622464) at Emelle, Alabama (Figure 1). The inspection was coordinated by US-EPA Region IV Environmental Services Division (ESD) and consisted of personnel from ESD as well as US-EPA Headquarters, the US-EPA Region IV

Residuals Management Branch, the Alabama Department of Environmental Management (ADEM), and GCA Corporation, who was the sampling contractor for this evaluation. In general the inspection involved review of state, federal, and facility records, facility inspection, laboratory evaluation and ground-water and landfill leachate sampling and analyses.

BACKGROUND

Based primarily on geological criteria, a group of investors, known as Resource Industries of Alabama (RIA) acquired a tract of land which would become the Chemical Waste Management, Inc. facility at Emelle, Alabama. Under the authority of the Alabama Solid Waste Disposal Act No. 771, Regular Session, 1969, the Director of the Division of Solid Waste and Vector Control (Environmental Health Administration) issued a permit to RIA for construction and operation of a hazardous waste disposal facility on May 4, 1977. Permitted waste types were solids and liquids categorized as potentially hazardous or toxic, except radioactive wastes and normal domestic and commercial waste. After meeting the conditions of the permit, RIA was given final approval for operation of a landfill on August 24, 1977. Immediately thereafter, the site began receiving waste.

Effective February 23, 1978, the RIA site was repermitted as Waste Management of Alabama, a subsidiary of Waste Management, Inc. They then filed a formal application with US-EPA dated March 10, 1978, for a landfill disposal permit for polychlorinated biphenyls (PCBs). This application was approved and accordingly issued by US-EPA on June 28, 1978, and modified in October, 1979 to allow disposal of liquid PCBs.

Hazardous waste permit responsibilities reverted to US-EPA on November 19, 1980 when federal regulations under the Resource Conservation and Recovery Act of 1976 became effective. On November 14, 1980, Chemical Waste Management Inc. obtained Interim Status under RCRA by filing a complete Part A application form prior to November 19, 1980.

US-EPA Region IV requested the Emelle facility's Part B application on February 8, 1983. In response, Chemical Waste Management made their original submission on September 9, 1983, and final revisions were accomplished in August 1986. The application was deemed complete in July, 1986, and at the time of the Task Force evaluation, a draft permit was on public notice.

SUMMARY OF SIGNIFICANT COMPLIANCE ACTIONS

The following is a list of administrative orders and consent agreements, as well as significant actions related to interim status landfill closure, the Hazardous Waste Ground-Water Task Force inspection, permitting, and ground-water monitoring at the facility. This summary was prepared by ADEM staff.

Administrative Orders/Consent Agreements

March 1983 - (#002-LP) Pertaining to leachate collection in Trench 17

December 1984 - (TSCA #84-H-03) Pertaining to PCB storage greater than one year

December 1985 - (#86-02-HW) Pertaining to an August 1985 spill

February 1986 - (#86-19-R) Pertaining to LOIS action on Truck Wash Impoundment

July 1987 - (#87-054-HW) Pertaining to waste analysis

Interim Status Closure of Landfill

September 1984 - CWM submits closure plan for Trenches 8 through 18 and 20

February 1986 - EPA/ADEM approve closure plan for Trenches 8 through 18 and 20

April 1986 through March 1987 - CWM conducts closure of Trenches 8 through 18 and 20

May 1987 - CWM certifies closure of Trenches 8 - 18 and 20

Hazardous Waste Ground-Water Task Force

September 1986 - HWGWTF conducts evaluation at the Emelle, Alabama CWM facility

Permitting

May 1977 - RIA Solid Waste Disposal Site permit issued

August 1977 - RIA Solid Waste Disposal Site permit effective

February 1978 - WMI of Alabama acquires RIA

June 1978 - WMI of Alabama obtains PCB disposal permit

November 1980 - CWM files for interim status at Emelle facility

February 1983 - Part B called for CWM, Emelle facility

September 1983 - CWM Emelle submits initial Part B application

September 1985 - CWM Emelle submits second Part B application

July 1986 - CWM Emelle facility Part B deemed complete

September 1986 - Draft Permit issued for CWM Emelle

September through December 1986 - Draft permit comment period

November 1986 - Public hearing on draft permit

May 1987 - EPA RCRA permit issued

Pending - ADEM RCRA permit

Ground-Water Monitoring

1960 through 1978 - Wells 1 through 4 are established

November 1982 - CWM proposes addition of well 5

January 1983 - Well 5 is installed

April 1983 - CWM proposes wells 6, 7, and 8

Spring 1983 - Wells 6, 7, and 8 are installed

June 1984 - ADEM requests a ground-water assessment plan

June 1984 - CWM submits a ground-water assessment plan for wells 1 through 8

January 1985 - CWM submits ground-water monitoring waiver request to EPA

August 1985 - Ground-water assessment is concluded

August 1985 - ADEM approves results of ground-water assessment

September 1985 - EPA approves results of ground-water assessment

Winter 1985/86 - CWM installs shallow (Consent Agreement) monitoring wells

February 1986 - CWM plugs wells 2 and 3

April 1986 - First Quarterly sampling of shallow wells

April 1986 - Begin assessment of 1,1-dichloroethane in well SM-5

October 1986 - Conclude assessment of 1,1-dichloroethane in well SM-5

SUMMARY OF FINDINGS AND CONCLUSIONS

COMPLIANCE WITH THE INTERIM STATUS STANDARDS (40 CFR PART 265, SUBPART F)

The Task Force investigated the interim status ground-water monitoring program implemented by CWM at the Emelle, Alabama facility. The consensus opinion of the Task Force is that the program, with the exceptions and inadequacies noted below, substantively complies with the standards at 40 CFR Part 265, Subpart F and the State's counterpart regulations, Rule 335-14-6-.06, ADEM Administrative Code of Rules.

This investigation revealed that a hydrogeological characterization of the site had been prepared which is very thorough and generally adequate with respect to the applicable standards, although additional work is recommended to describe in further detail shallow ground-water flow patterns in the chalk.

This investigation also revealed that there are currently three ground-water monitoring systems in operation at the facility, two RCRA systems and one

TSCA system. Pursuant to the 1984 consent agreement CWM; 1) installed a system of shallow ground-water monitoring wells in the chalk along the periphery of the interim status disposal trenches; 2) conducted a workover re-screening of Eutaw Well 5 to provide a screened interval consistent with the other wells in the Eutaw; and 3) produced a ground-water monitoring waiver demonstration consistent with the requirements at 40 CFR Part 265.90(c). The wells comprising the interim status RCRA ground-water monitoring system do not comply, with respect to the adequacy of their numbers nor their locations relative to waste management areas, to the standards described at 40 CFR Part 265.91.

Several inadequacies were noted regarding the ground-water sampling and analysis plan used by CWM. Although these problems are not necessarily regulatory deficiencies, they involve sampling practices which need to be changed to improve their program.

Sampling of the RCRA and Consent Agreement ground-water monitoring systems have on two different occasions indicated the presence of hazardous waste or hazardous constituents in ground water. Thorough assessments, conducted by CWM, and overseen by ADEM and EPA, indicated that the sources of these compounds were related to well construction and were not the result of operations at the facility.

The investigation included audits of the on-site and off-site laboratories. Problems were identified with sample filtration, field preservation QC procedures, exceeded holding times for extractable and volatile organic samples at the off-site laboratory, analytical methods with higher than acceptable detection limits, improper phenol analyses, and out-of-date sample preservation and holding times in the WMI Manual for Ground Water Sampling.

Ground-water samples from the deep RCRA wells indicated that operations at the facility have not affected the Eutaw formation. Samples from the shallow, chalk wells indicate the possibility that some migration from the trenches through near surface fracture networks may be occurring. Additional work will have to be done to resolve this issue.

The following is a more detailed summary of the inspection findings and conclusions.

Hydrogeological Characterization - 40 CFR Part 265.91

The hydrogeological characterization submitted by CWM for in support of its ground-water monitoring system is generally adequate. It describes the Selma Chalk and underlying Eutaw Formation (the uppermost aquifer) in sufficient detail to support the design and, with respect to ground-water flow direction, the location of the facility's RCRA monitoring wells.

Even though the chalk is not considered an aquifer, it is, because of its saturated condition throughout much of its thickness, considered a hydrogeologically significant unit at the site. The characterization, while adequate for the Eutaw well system, does not define ground-water flow patterns in the saturated chalk in sufficient detail to fully support the well construction criteria used in developing the system of shallow wells around the perimeter of the interim status and permitted landfill trenches. Lacking detailed

information of this type to aid in screen location and depth determinations, the chalk wells were installed at a depth of twenty-five feet below the base of the adjacent trench, as specified by the Agency.

Since these wells are being used in lieu of the Eutaw wells, more detailed flow information, i.e., detailed flow nets, needs to be developed to define the optimum screened interval for wells located at each trench. If detailed flow nets for any existing areas indicate improper screening, new wells should be installed which are appropriately screened.

Monitoring System - 40 CFR Part 265.91

The RCRA interim status ground-water monitoring system has evolved since the effective date of the referenced regulations (November 19, 1981). The original system did not consist of any wells which were installed specifically as ground-water monitoring wells. All wells were water supply wells and construction details are unknown for three of the four wells. In November, 1982, a new well, Well 5, was installed in the Eutaw Formation and later, in April, 1983, after new information indicated that ground-water flow in the Eutaw was in a different direction than suspected, additional wells, Wells 6, 7, and 8, were installed. This resulted in a completely different system than originally implemented. Well 8 was designated the upgradient well and Wells 5, 6, and 7 were designated the downgradient wells. After it was determined that Well 5 was screened lower than the other wells, it was reworked, relegated to use as a piezometer, and was replaced in the system by a new well, Well 9. All wells are four-inch carbon steel casing, with two-inch diameter stainless steel screen. The annular space in each well was sealed with a low shrink cement grout and protective covers were installed at the surface. The construction of these wells is acceptable.

The number of wells and their location, do not meet the "immediate detection" standard for a detection monitoring system. However, Region IV EPA and ADEM have long been concerned with installing any wells that penetrate the Eutaw Formation in the immediate area of the trenches. This issue was addressed as a result of the December 1984 Consent Agreement, which, in part, resulted in the installation of the shallow, chalk ground-water monitoring system.

Inadequate Sampling and Analysis Plan (SAP) - 40 CFR Part 265.92

Although the SAP used by CWM is acceptable with respect to several major areas (i.e., sample preservation and shipment, analytical procedures, and chain-of-custody control), one area, sample collection, was found to be inadequate or in need of improvement, with regard to several procedures used during sampling activities.

1. CWM filters all samples except for those collected for purgeable organic (VOA) and total organic halogen (TOX) analyses. The only condition under which filtration is normally acceptable is when samples are excessively turbid, and then only the metals samples should be filtered. Occasionally, turbidity will interfere with the equipment used for some organic analyses and filtration, usually in the laboratory, can be performed to mitigate the problem. CWM should modify their SAP to specify that filtration will only be

performed under approved conditions, such as those described in this paragraph.

2. CWM should verify with the laboratory providing radiological analytical services that the one liter samples are adequate for the analyses being performed, if indeed, these analyses are still part of the monitoring program. EPA guidance indicates that one liter is not enough for the extremely low levels expected.

3. CWM personnel do not wear gloves during sampling. While this is not a regulatory deficiency, gloves, such as latex or vinyl physician's examination gloves (preferably without powder), have been proven effective in preventing cross-contamination of samples during handling. Although washing hands with distilled or de-ionized water may provide short term protection, gloves, particularly when changed frequently, offer added assurance that perspiration, etc., does not carry contamination to the hands then to the sample. EPA strongly recommends that the CWM SAP be modified to include the use of gloves when sampling.

Ground-Water Quality Assessment - 40 CFR Part 265.93

After the first semi-annual sampling occurred for the original system (Wells 1-4) in May, 1983, there was a significant difference in the indicator parameter data from these wells. However, instead of submitting an assessment plan and, subsequently, conducting an assessment, CWM officials attributed the difference to lack of quality control in sampling procedures. Also, because of the general lack of construction information for Wells 1, 3, and 4, it is not valid to statistically compare data from these wells.

Partly because of the problems noted in the previous paragraph, the new system (Wells 5-8) was installed. The first semi-annual samples from this system (as well as the old one) occurred in July, 1984. Once again, a significant difference, in pH and specific conductance, was noted at Well 4. This time, CWM officials questioned the validity and appropriateness of the required statistical test and concluded that the "hits" were false positives. ADEM responded by requiring CWM to conduct Appendix VIII analyses on all wells in the old and new systems.

After negotiating an acceptable analytical protocol, this assessment began. It consisted of an iterative series of events which identified several problems with well installations and sampling procedures. The result, confirmed by EPA and ADEM joint participation, was that no hazardous waste constituents had migrated to the Eutaw as a result of operations at the facility.

Laboratory Evaluation

Both the on-site laboratory/field analytical and off-site laboratory capabilities were evaluated for this report. The on-site capabilities were reviewed while on site. The off-site laboratory was audited by NEIC and Region V EPA during a previous Task Force evaluation. The findings of the audit are summarized below.

1. Procedures for obtaining field measurements (calibration, operation, documentation, and reporting) were acceptable.

2. CWM routinely filters all samples except for purgeable organic compounds, total organic halogens (TOX), and field parameters. This is inappropriate (see discussion of the SAP).

3. CWM does not verify that appropriate pH levels have been reached after preserving samples. They need to institute QC procedures for this.

4. The laboratory does not routinely meet holding times for some types of samples. The paper work trail for three sampling events was pulled during the audit. In two out of the three events, the holding times for extractable organics had been exceeded. Holding times for volatile organic samples were also exceeded on several occasions.

5. The laboratory needs to implement analytical methods which have lower detection limits for pesticides, PCB's, cadmium, chromium, and lead.

6. The laboratory had not been readjusting the sample aliquot pH during analyses for phenols. All of these analyses are suspect.

7. The sample preservation and holding times listed in the WMI Manual for Ground-Water Sampling are out of date.

Monitoring Data Analysis

Ground-water samples were collected from monitoring systems installed in the Eutaw Formation and in the Selma Chalk. The wells in the Eutaw Formation constitute the RCRA interim status monitoring system. The wells in the chalk were installed as part of a consent agreement and as conditions of approval for disposal of PCB's.

Samples collected from the Eutaw wells contained no indication of contamination by operations at the facility. This can't be said with the same degree of confidence for the samples collected from the Consent Agreement wells. Trace to low concentrations of purgeable organic compounds, arsenic, cobalt, and selenium were detected in samples collected from chalk wells. Although these compounds were detected in both deep and fracture chalk wells, the abundance and concentrations of these compounds is greater in the fracture wells, indicating that fractures associated with certain trenches may be active pathways for migration of leachate. The Task Force recommends that additional sampling and geochemical studies of the chalk and chalk ground water, and a detailed review of all data from these wells be conducted to resolve this issue.

COMPLIANCE WITH 40 CFR PART 270 AND POTENTIAL COMPLIANCE WITH 40 CFR PART 264

Upon issuance of the Part 264 permit, Region IV EPA will no longer require CWM to monitor ground-water quality of the Eutaw formation. This will be accomplished via a waiver from the ground-water monitoring requirements at 40 CFR Part 264. In lieu of a Part 264 monitoring program, the facility will be required to monitor the wells installed in response to the December 1984 Consent Agreement. The permit will specify the elements of this monitoring

program, i.e., the parameters, frequencies, permit maximum concentration limits, and specific sampling and analytical do's and don'ts.

CWM Emelle is in substantive compliance with the applicable standards and requirements at 40 CFR Part 270.14 (c). Some additional work, as previously described (see Summary of Findings and Conclusions, Compliance with Interim Status Standards, Hydrogeological Characterization) is needed to fine-tune the understanding of flow in the shallow saturated chalk, particularly with respect to flow in fractures.

TASK FORCE RECOMMENDATIONS

Based on the above findings and conclusions, the Task Force has the following recommendations. In making these recommendations, the Task Force understands that the RCRA permit will already have been issued by Region IV. As such, some issues prompting those recommendations may have been resolved. Where they have not, certain limitations may exist with respect to mechanisms for obtaining additional information, etc.

1. CWM should more fully characterize the hydrogeology and geochemistry of the site with respect to permeability and flow in the shallow chalk ground-water system. This characterization should include detailed flow nets through the portion of the site currently monitored using the Consent Agreement well system. These flow nets should be of sufficient number and orientation to provide the information needed to determine the appropriateness of the screened intervals at each of the Consent Agreement wells or well clusters.

2. A part of this characterization should also include an evaluation of recharge in the chalk wells. This evaluation should attempt, where the information is available, to evaluate differences in recharge rates with respect to the presence or absence of fractures.

3. Because wells in the chalk recover so slowly, there is some doubt regarding true static water levels in the chalk. The Task Force recommends that several dedicated piezometers be installed across the site to be used strictly for obtaining water levels for the chalk water table so that accurate potentiometric maps for this surface can be established.

4. The Task Force also recommends that CWM use water from existing on-site wells which are completed in the Eutaw for construction of any future ground-water monitoring wells at the facility. This should prevent any problems, such as those experienced with using the Livingston city water supply, in the future.

5. To aid in identifying when a monitoring well is ready to sample, i.e., when adequate water has recovered after evacuation to make up the sample, the Task Force suggests that CWM establish recovery times for individual wells. After each sampling event, for at least several quarters, the wells should be evacuated to dryness after samples are collected. The recovery of the wells should be monitored to determine how long it takes for a full sample volume to recover. This information is necessary, given the large number of wells to be sampled and their generally slow recovery times, to create a sampling schedule which would increase the likelihood that wells do

not await sampling an inordinate amount of time after recovery, jeopardizing the integrity of samples collected for purgeable organic analyses. Wells which are determined to have extremely long recovery times may have to be sampled in stages, so that the samples collected for purgeable organic analyses do not remain in the well long enough to allow outgassing of these compounds, if they are present.

6. The Task Force recommends that CWM Emelle amend its ground water sampling and analysis plan. Specifically two items need to be addressed. The most critical item is that of sample filtering. CWM should avoid filtering any samples. The plan should provide only for filtering metals samples, only when samples are extremely turbid. No samples collected for organic analyses should be filtered. The other item is the use of gloves. We recommend that CWM require their personnel wear disposable gloves, such as physician's examination gloves, whenever sampling.

7. The Task Force recommends that, using existing local and regional geological publications, as well as logs of boring investigations, the feasibility of using the Arcola Limestone as a zone to monitor for vertical migration of contaminants in the chalk be evaluated.

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INVESTIGATION METHODS

The Task Force investigation of the CWM Emelle, Alabama, facility consisted of:

- o Reviewing and evaluating records and documents from EPA Region IV, the Alabama Department of Environmental Management (ADEM) and CWM
- o Conducting an on-site facility inspection September 15-25, 1986;
- o Evaluating on-site and off-site analytical laboratories;
- o Sampling and analyzing data from selected ground-water monitoring wells and leachate collection sumps.

Records/Documents Review

Records and documents from EPA Region IV and the ADEM offices, compiled by PRC, an EPA contractor, were reviewed prior to and during the on-site inspection. Additional ADEM records were copied and reviewed by Task Force personnel concurrently with the on-site inspection. On-site facility records were reviewed to verify information currently in Government files and supplement Government information where necessary. Records were reviewed to obtain information on facility operations, construction details of waste management units, and the ground-water monitoring program.

Specific documents and records that were reviewed included the ground-water sampling and analysis plan(s), outline of the facility ground-water quality assessment program, analytical results from past ground-water sampling, monitoring well construction data and logs, site geologic reports, site operations plans, facility permits, waste management unit design and operation reports, selected personnel position descriptions and qualifications (those related to the required ground-water monitoring program) and operating records showing the general types, quantities and locations of wastes disposed of at the facility.

Facility Inspection

The facility inspection conducted in September, 1986 included identifying waste management units (past and present), waste management operations, and verifying the location of ground-water monitoring wells and leachate collection sumps.

Company representatives were interviewed to identify records and documents of interest, discuss the contents of the documents, and explain (1) facility operations (past and present), (2) site hydrogeology, (3) the ground-water monitoring system, (4) the ground-water sampling and analysis plan, and (5) laboratory procedures for obtaining data on ground-water quality. (Because ground-water samples were analyzed by off-site laboratories, personnel from these facilities were also interviewed regarding sample handling, analysis and document control.

Laboratory Evaluation

The on-site and off-site laboratory facilities handling ground-water samples were evaluated regarding their respective responsibilities under the CWM ground-water sampling and analysis plan. Analytical equipment and methods, quality assurance procedures and records were examined for adequacy. Laboratory records were inspected for completeness, accuracy and compliance with State and Federal requirements. The ability of each laboratory to produce quality data for the required analyses was also evaluated.

Ground-Water and Leachate Sampling and Analysis

During the inspection, Task Force personnel collected samples for analysis from sixteen ground-water monitoring wells and two leachate collection sumps. Table 1 contains a summary of sampling data including date sampled, location of the well or sump, and a list of the sample bottles submitted for analyses at each well or sump. The field data sheets for each station, completed by GCA, are found in Appendix A. The wells that were selected are a mix of deep RCRA Eutaw Formation monitoring wells and shallow TSCA and Consent Agreement chalk monitoring wells. Several of the shallow, chalk wells were selected for sampling based on data from recent sampling which indicated the presence, at low levels, of several purgeable organic compounds. Additional wells were selected which would provide up- and downgradient water quality in the Selma chalk surrounding and within the past and current landfill areas. Leachate sumps were selected to provide leachate data from both an older and a more recent trench. CWM was offered and accepted sequential duplicate splits of all ground-water samples, declining the offer for leachate sample splits.

Ground-Water Sampling

The shallow wells are equipped with dedicated Well Wizard R bladder pumps. The deep wells are equipped with a double pump system consisting of an upper, high rate pump (Grunfos R) for purging and a Well Wizard R for sampling.

At each well CWM personnel operated the control equipment and GCA personnel collected the samples. The following protocol describes the procedures used at each well:

1. CWM determined the depth to water in each well. GCA concurrently performed well head air monitoring (i.e., Hnu, geiger counter).

2. Using the measured water level and recorded total depths for each well, Task Force personnel calculated three water column volumes for each well. Total depths could not be verified because of the close fit of the pumps in the shallow wells and because the depth of the deep wells exceeded the capability of all available measuring devices.

3. The pumps were activated. The shallow, chalk wells were quickly evacuated to "dryness" (water level at pump intake). The deep wells were purged a minimum of three water column volumes. Field measurements of in-situ parameters were periodically recorded during purging at the deep wells to

monitor purge adequacy. At the shallow wells, single sets of these measurements were recorded during sampling as measurements of record for the well.

4. The deep wells were sampled immediately after purging. The shallow wells were not sampled for several days because of the slow rate of recovery for these wells. This waiting period exceeds the 24 hour maximum waiting period recommended in the HWGWTF Protocol. However, because of the relatively large volumes of water required for the minimum two-way split for all parameters and the known slow recovery times for the chalk wells, a decision was made to evacuate the wells on a schedule that would allow a one-time visit for sampling at each well during the first several days of the second week of the evaluation. To have broken down the sampling into several periods of recovery and sampling could potentially have resulted in numerous logistical problems with regard to all of the required paper work, sample tracking, and shipping.

One concern raised during discussions about this approach was the effect of the waiting period on the detectability of any purgeable organic compounds that might be present. Because water moves through the screen and up the casing in these wells during recovery, the freshest water is always at the screen, which is where pump intakes are located. Assuming, based on facility records, that the wells had either just finished or had recently, i.e. within 24 hours, finished recovery, the first sample collected could potentially meet the less than 24 hour requirement in the HWGWTF Protocol.

5. GCA collected all sample sets.

6. Samples were placed on ice in coolers immediately after they were collected.

7. Samples were transported back to the GCA truck where turbidity was measured and appropriate samples were preserved (Table 2).

8. Sample splits were transferred to CWM.

Leachate Sampling -

1. GCA and CWM personnel donned Level B protection while collecting leachate samples.

2. All samples were bailed from the sump using CWM's dedicated PVC bailers.

3. Samples were transferred directly from the bailer to the sample bottles, which were placed on ice.

4. Samples were transferred to the GCA truck for processing.

At the end of the day, samples were packaged for shipment to the two EPA contract laboratories and the ESD laboratory in accordance with applicable Department of Transportation (DOT) regulations (40 CFR Parts 171-177). Aqueous samples from monitoring wells were considered "environmental" and those from

leachate collection system sumps were considered "hazardous" for shipping purpose. In no case were samples held beyond the following afternoon's Federal Express pickup.

Each day of sampling, the EPA contractor prepared field blanks for each analytical parameter group (e.g., volatiles, organics, metals) in an area near the days sampling events by pouring J. T. Baker HPLC (High Performance Liquid Chromatography) water into sample containers. Equipment blanks were not needed since no equipment beyond that dedicated at the wells was used. One set of trip blanks for each parameter group was also prepared and submitted during the inspection. The blanks were submitted with no distinguishing labeling or markings.

Samples were analyzed by the EPA contractor laboratories for the parameter groups shown in Appendix B.

WASTE MANAGEMENT UNITS AND OPERATIONS/WASTE CHARACTERISTICS AND TRACKING

Primary Waste Management Processes

The Emelle facility employs a minimum of eight waste handling processes and utilizes numerous regulated units in the course of treating, storing and disposing of hazardous wastes. Separate processes and units are used for PCB management with the notable exception of commingling of PCB waste and hazardous wastes in the landfill trenches, where approved.

Listed below by US-EPA handling code are the primary processes employed and a brief description of each process. This is followed by a discussion of other waste management processes or units which are not directly regulated activities. The locations of these waste process areas can be found on Figure 2 for all areas except landfill trenches. The trench locations can be found on Figure 8.

Storage in containers (S01) - Container storage of hazardous waste is permitted in Buildings 700, 702, and 604. PCB's are stored in containers in Building 604 and 600.

Storage in tanks (S02) - Tank storage of hazardous wastes is permitted in the decant tank farm adjacent to Building 700, the stabilization tanks adjacent to Building 1100, the leachate tanks associated with the synthetically lined trenches 19 and 21, solvent storage tanks associated with PCB transformer flushing, and the solvent recovery tanks adjacent to the thin film evaporator. Tank storage of PCB's is allowed in Tank Farm #1, Tank Farm #2, and formerly in Buildings 602, 603, and 604.

Storage in surface impoundments (S04) - Hazardous wastes are stored in two separate impoundments designated as Lagoon 3 and the Truckwash impoundment. Lagoon 3 is excavated into the native chalk with a recompacted chalk dike above grade. This impoundment stores and neutralizes inorganic acids and bases. The Truckwash impoundment stores rinsate collected primarily from the tire washing of waste hauling vehicles which entered the active trench. Storage occurs prior to solidification and landfilling.

Solidification/Stabilization (T21) - Bulk liquids with an organic content of less than 10% are stabilized in either the liquids stablilization unit (Building 1100) or the semi-solids stabilization unit (Building 1200) using cement kiln dust.

Neutralization (T31) - Inorganic acids and bases are neutralized in Lagoon 3 under controlled conditions.

Decanting (T38) - In association with container storage in Buildings 700 and 702, liquids are decanted out of and into containers to facilitate solidification of free-standing liquids and elimination of void spaces in containers prior to landfilling.

Landfilling (D81) - The final disposition of the majority of the waste stored or treated at the facility is landfilling. This applies to hazardous wastes and PCB wastes which are not subject to any regulatory bans (i.e., liquids in landfills, PCB's greater than 500 ppm, etc.). A notable exception to this generality is the solvent-type wastes which are suitable for the fuels program discussed below. The historical and present landfilling operations are discussed more fully later in this section.

Other waste processes/units which are not directly regulated - Numerous site related support buildings exist on the facility which are not regulated units. Examples are the heavy equipment repair shop and office building. Other processes exist which are not hazardous waste treatment, storage or disposal processes but are part of the waste management scheme at the facility. They include solvent recovery, fuels blending for off-site burning, solidification in containers through the use of absorbents, and draining and flushing of PCB containing transformers.

Background and Past Landfilling Activity

This section reviews landfill disposal practices at the CWM Emelle facility for trenches 1 through 20. These practices are no longer in use at the Emelle facility and are described here only to present a comprehensive review of the history of landfill operations at the facility.

At the time of the Task Force evaluation, the facility was operating in Trench 21 and had previously filled twenty-one other trenches. A list of these trenches, their number designations, and sizes are provided in Table 3.

Six of these trenches, referred to collectively as the Old Study Area, and Trenches 8 and 9, were operated before November 19, 1980, and are not considered to be land disposal units subject to interim status standards. The other 14 trenches--trenches T-10 through T-21--received hazardous wastes after November 19, 1980. Trenches T-10 through T--20 are considered to be interim status land disposal units subject to the applicable requirements of 40 CFR Part 265 and are equipped with leachate collection and removal systems, and have been or are being closed.

Current and Proposed Landfilling Practices

This section describes both the types of waste disposed at the facility and the method that CWM is currently using and will be using in the future, for the landfill disposal of wastes at the facility. This method employs double-lined landfill cells as opposed to the deep, unlined trenches used in the past.

Types and Quantities of Wastes

Many types of industrial and site clean-up wastes, including virtually all listed hazardous wastes from 40 CFR Part 261, are landfilled at the facility. Table 4 presents a list of the major waste codes disposed in the landfill. The following exceptions are the only wastes which are not landfilled:

1. Radioactive wastes;

2. Extremely hazardous wastes (as determined by the General Manager);

3. Infectious wastes; and

4. Reactive wastes.

In 1985, approximately 350,375 tons of hazardous wastes were landfilled at the facility. It is expected that the quantity of hazardous wastes received and landfilled will increase to 598,000 tons per year in the future. The quantity of wastes actually landfilled is larger because some wastes are stabilized (which doubles the volume of waste), and because residues from treated wastes are also landfilled. The landfill designs for Trenches 22, 23, and 24 developed for the 10-year permit allow for disposal of 16,000,000 cubic yards over 10 years. This does not include the capacity of Trench 21.

The chemical properties of the wastes landfilled at the facility vary considerably. These properties are determined by pre-acceptance and incoming load analyses before disposal, and a record thereof is maintained in the facility operating record. In particular, those chemical properties critical to the proper landfilling of wastes are determined. The chemical properties of wastes landfilled at the facility are limited as follows:

1. They are nonreactive with respect to the definition of reactive in 40 CFR Part 261.23.

2. All wastes disposed in the landfill are compatible, or are made compatible by stabilization, with respect to Appendix V of 40 CFR Part 264.

With respect to the physical properties, all of the wastes landfilled at the facility are solid materials. Liquid wastes and wastes containing free-liquids are stabilized with kiln dust prior to being landfilled. (1)

Landfill Cell Design

Landfill cells are laid out in continuous trenches, each cell measuring from 500 to 800 feet by 800 to 1,100 feet at the ground surface. Appendix C contains design drawings depicting this construction, as described further. As currently planned, each cell will have side slopes of 2.5 horizontal:1 vertical on three sides, and a low berm (about 10 to 20 feet high) on the fourth side. Cell construction within any trench will be phased such that as waste is disposed in one cell, the adjacent cell is being excavated, lined, and prepared for waste placement. Thus, as each cell is filled and closed, another is ready to receive wastes. The progression continues until several cells in a trench are filled, at which point final closure of the cells is commenced.

Each landfill will be lined with a composite double liner system consisting, of a primary leachate collection and removal system, a top membrane liner, a secondary leachate collection system, and a bottom liner consisting of a membrane liner and a low permeability soil liner. (1)

Waste Characterization and Tracking

Waste characterization before receipt at a TSDF and tracking after receipt are required under both RCRA and State interim status regulations. These are important in determining the constituents that could potentially be released from waste handling units. To determine whether CWM, Emelle (1) sufficiently characterizes waste it receives and (2) records the disposal location of these wastes, a review of preacceptance and tracking records for twenty waste loads was conducted.

The twenty waste loads, from random dates, were selected from the manifests kept on site. These manifests represented different waste categories, including bulk liquids, drummed liquids, bulk solids and drummed solids. Final selection was based on whether the wastes should have required a detailed waste analysis during preacceptance testing.

This records review indicates that tracking procedures used by CWM, Emelle, are sufficient to identify hazardous waste constituents in the wastes received.

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GEOLOGY/GROUND WATER

Stratigraphy

Geologic formations of interest include the Selma Group and the Eutaw Formation. The CWM facility is located in the Selma Group of geologic formations, which is subdivided geologically into the Prairie Bluff Chalk, Ripley Formation, Demopolis Chalk, and the Mooreville Chalk. The Eutaw Formation is stratigraphically below the Selma Group. These formations are of the Cretaceous Period and deposition is thought to have occurred from approximately 63 to 135 million years ago (2).

The CWM facility is developed in the Demopolis Chalk. This formation has a thickness at the site ranging from 335 feet at the northern end to 500 feet at the southern end (1). Monroe mapped two members of the Demopolis Chalk in the Epes Quadrangle, an area located two miles east of the CWM facility. The lower member consists of 270 feet of compact chalk described as blue-gray, where fresh, and glaringly white where slightly weathered. This member was described as being composed predominantly of finely divided particles of calcium carbonate, as well as residual clay, very fine sand and silt, and abundant pyrite concretions. Monroe also mapped within the lower member a distinctive marker bed 8 inches thick containing abundant biotite flakes and scattered pyroclastic minerals. This bed is believed to be volcanic ash deposited with the chalk. (3)

The upper member of the Demopolis chalk, is a very clayey chalk at the base and a calcareous sandy clay at the top. The base of the upper member is conformable with the lower member, but an abrupt change occurs from massive chalk in the lower to a clayey chalk in the upper member. Monroe stated "the top of the upper member is sandy and grades imperceptibly into the overlying Ripley Formation." The Mooreville Chalk lies below the Demopolis Chalk. The Arcola Limestone member separates these two formations. The Arcola, in its outcrop area, is a dense solutionized limestone. It ranges from 5 to 15 feet in thickness and could possibly be used for a domestic water supply in the area. The total thickness of the Selma Group at the site is about 650 feet. (1)(4)

The Eutaw Formation is approximately 400 feet in thickness and consists of light gray to yellowish-brown fine to medium-grained glauconitic sand and light gray to green micaceous laminated clay and shale. The upper part of the Eutaw Formation is composed of a massive bed of very fine to medium grained glauconitic sand containing fossil shells and local thin beds of light gray glauconitic sandstone and sandy chalk. Thin to massive beds of fine- to coarse-grained glauconitic sand interbedded with layers of light gray to gray laminated clay and shale comprise the lower part of the Eutaw Formation. This is mapped locally as the McShan Formation. Sand beds are thin or absent in the middle of this formation. (5)

Structural Geology

The rocks mapped in the Epps Quandrangle strike generally north 60° west and dip 30 feet to the mile to the southwest. Monroe mapped dips as steep as 5° in the Demopolis Chalk. These features were interpreted to be associated

with minor normal faulting. He indicated that this faulting, mapped in the Epes Quanrangle, occurred after deposition of massive chalk on sands and clays of the underlying formations. Displacements of less than 10 feet to 30 feet can be observed at Jones Bluff on the Tombigbee River at Epes. At this location the faults are separate, alternate blocks of chalk, and the fault traces are commonly curved.

A major zone of reverse faulting trending north 60° west was mapped by Monroe (3) north of Livingston, Alabama. The area having the largest displacement is along a fault just south of the middle of Section 3, T.19N, R.2W. Monroe indicates that 90 feet of displacement occurs at this location. He states further that this "belt" of faulting represents an anticline that grew during deposition of the Ripley and later collapsed. This resulted in strata showing medium angle reverse faults, possibly accompanied at depth by normal faults not observed in the surface. Monroe also hypothesizes that this structural feature could have been caused by salt bed flows. Monroe further indicates that faulting occurred after deposition and partial consolidation of the Prairie Bluff Chalk.

It should be noted that the discussion presented above is for the area several miles east and southeast of the CWM facility. It is important, however, because fractures and joints having similar strike have been mapped in the exposed trench highwalls and at surface outcroppings at the CWM facility. These structures probably have similar origins. They are also ground-water migration pathways, as evidenced by observed low volume seepages and wet spots in trenches at CWM. As a part of their permit, ADEM is requiring the mapping of all fracture and joint systems in the highwalls of new trenches. This will allow for the locating and drilling of chalk and fracture monitoring wells if the leachate collection system fails.

Ground Water

Ground water exists in the Selma Group as a zone of saturation, or a zone where the chalk pore space is filled with ground water. The water content in of the chalk has been measured to be from 15% to 25%. This formation cannot, however, be classified as an aquifer because it lacks permeability or the capacity for transmitting water. The permeability of the Demopolis Chalk has been measured to range from $1x10^{-6}$ cm/sec. to $1x10^{-8}$ cm./sec. (6). The Selma Group has therefore been recognized by the U. S. Geological Survey and the Alabama Geological Survey as a confining unit and not an aquifer. (5) (7)

There have been some reports of shallow dug wells in the chalk that are used for residential supply (8). Further evaluation of these wells was conducted on January 27 and 28, 1987, by ADEM, EPA, and USGS. None of the wells or cisterns identified were completed in the Demopolis Chalk Formation. All were completed above the Demopolis, in the Prairie Bluff Formation, the Ripley Formation or alluvium associated with terrace deposits.

The most significant ground-water discharge from the chalk has been associated with localized fractures and joint systems, some of which flow in response to precipitation. These fractures and joints are not developed sufficiently to store the volumes of ground water necessary to be of use as a supply. These features could, however, provide pathways of migration from old

closed trenches. These joints have therefore been cored and wells installed to monitor these potential migration pathways.

The Eutaw Formation contains interlayered sands, silts, and clays. These sediments contain ground water which is used for supply on many farms surrounding the CWM facility. The Eutaw Formation therefore is recognized by the U. S. Geological Survey and the Geological Survey of Alabama as being an aquifer (5) (7). Artesian conditions occur as a result of pressure within the Eutaw Formation. The pressure is sufficient to cause ground water to rise above the level at which it is encountered by a tightly cased well. Ground water does not always rise to or above the surface of the ground to cause a flowing well. Wells in the Bodka Creek floodplain, however, will flow if they are open to the surface.

At the CWM facility the water levels measured in the Eutaw monitoring wells are below the level of the chalk saturated zone. This results in a vertical downward gradient. As you move away from the CWM site toward Bodka Creek, the ground-water gradient is vertical upward. This is the result of a decrease in topographic elevation and associated saturated zone elevation to below the Eutaw Aquifer piezometric surface of approximately 140 feet mean sea level. This upward gradient also occurs in the Tombigbee River Valley.

Additional information on the regional ground-water flow is documented by Gardner (9) and, more recently, by Williams, et. al. (7). Site ground-water flow characterization is contained in the CWM Part B permit application, and a recently completed report by Golder and Associates which used a computer model to construct flow nets within the Selma Group. Figure 3 and 4 show ground-water elevations and associated contours at the CWM site. Figure 3 is a saturated chalk potentiometric map and was constructed from data collected by the EPA Ground-Water Task Force. Data collected for this map included ground-water levels in both the deep and fracture chalk wells. Figure 4 is a potentiometric map of the Eutaw Formation based on data collected by ADEM during October, 1985.

ADEQUACY OF HYDROGEOLOGICAL CHARACTERIZATION/GEOLOGIC AND GEOTECHNICAL EVALUATION

Since the site's inception as a waste disposal facility, several firms have been employed by Chemical Waste Management and its predecessor companies to evaluate various aspects of the geology and hydrogeology of the region and site. In April 1982, Golder Associates was retained by CWM as their geotechnical consultant. Among their primary duties was the preparation of the hydrogeological characterization for the facility RCRA Part B. This material, as well as supplementary information presented to the Task Force during the inspection, represents the extent of hydrogeological data that had been developed at the time of the evaluation.

The hydrogeological characterization developed by Golder Associates utilizes data and information presented in several major papers, as well as reports detailing on-site geotechnical studies performed by themselves and predecessor consultants. The following is a summary of the contribution by each source to the characterization.

Published Literature

The characterization cites and utilizes portions of two publications, "Water Availability and Geology of Sumter County, Alabama" by M. E. Davis, et al (5) and "Model of the Ground Water Flow System of the Gordo and Eutaw Aquifers in West-Central Alabama" by R. A. Gardner (9). The report by Davis, et al, was useful in supplying general characteristics, including stratigraphy and ground-water yield of the primary aquifer beneath the site, variation of ground-water quality across the county and a generalized water budget for the county. The Gardner report includes an assessment of the manner in which the Gordo and Eutaw aquifers react with one another, as well as with the overlying Selma Chalk and surface water, it includes estimate of net precipitation infiltration into the Selma chalk and presents a potentiometric surface for the Eutaw aquifer in the vicinity of the site.

Previous Site Investigations

Tuscaloosa Testing Laboratory (TTL) performed several site investigations during 1977-1979. These efforts included soil borings, monitoring wells and laboratory tests on samples of Selma Chalk and resulted in the following pertinent hydrogeological data:

1. The numerous soil borings verified the existence of the Selma chalk throughout the Emelle site and gave indications of the thickness of overburden.

2. Water levels were observed in some of the boreholes after a period of 24 hours. It was unclear whether these water levels were measuring a water table in the underlying chalk or were due to perched water in the overburden.

3. The hydraulic conductivity (coefficient of permeability) of recompacted chalk is approximately 1.0×10^{-8} cm./sec.

Following the work of TTL, Woodward-Clyde Consultants (WCC) was retained during 1979-1980 to conduct studies to provide additional site specific data.

The conclusions of these studies incorporated into the hydrogeologic characterization are:

1. In the majority of packer permeability tests conducted in borings, no measurable flow was observed. In those tests where measurable flow was observed, the reported values of hydraulic conductivity ranged from 5.5×10^{-7} cm./sec. to 4×10^{-8} cm./sec.

2. Discontinuities observed near the surface of the Selma chalk and in cores obtained by WCC have a hydraulic conductivity which is very low, and is no higher than the massive chalk itself.

3. Laboratory tests performed on undisturbed chalk cores and recompacted samples of chalk cuttings produced a hydraulic conductivity of about 1.2×10^{-8} cm./sec. for both materials.

4. A lineament study located several linear features in the vicinity of the Emelle site but backhoe excavation showed no joints or faults in the chalk, indicating that the Livingston Fault Zone does not pass through the Emelle site.

Golder Associates

Golder Associates consolidated all the previous work, extracted the pertinent data presented in the preceding paragraphs and conducted additional field investigations to verify previous data and generate additional geotechnical data in the next area of trench development (60 acres south of Trench 16).

The additional work conducted by Golder Associates in 1982 consisted specifically of the following:

1. Verification that at least 500 feet of massive chalk occurs across the entire site.

2. Mapping of exposed faults, joints and other discontinuities in Trenches 15 and 16.

3. A deep hole drilling program to evaluate the chalk south of Trench 16.

Adequacy of Hydrogeological Characterization

The characterization as presented in the Part B and during the meeting with Golder Associates appears to be generally adequate. Most areas which are of concern in designing a ground-water monitoring system or in developing a site operations plan have been investigated and reported.

One area in which additional work would be beneficial is in defining vertical flow paths in the vicinity of the trenches. Modeling performed to define flow paths and interactions in and between the Selma Chalk and the Eutaw formation indicate vertical downward flow in higher elevations where saturated chalk levels have a greater elevation than the potentiometric level of the Eutaw and vertical upward flow along major discharge areas, such as

Bodka Creek. This is acceptable as a description of what is happening in a general sense, however, in order to assure that screened intervals for current and future chalk monitoring wells are properly located, flow nets must be developed for the chalk monitoring system. These flow nets should be developed using data from appropriately screened piezometers. Until this data is generated and verifies the screened interval depth of the chalk wells, there will always be some doubts as to their real usefulness.

GROUND-WATER MONITORING PRIOR TO AND DURING INTERIM STATUS

Pre-Interim Status

Initially, ground-water monitoring at the Chemical Waste Management, Inc., Emelle facility, was conducted under the conditions of an interim permit based on the Alabama Solid Waste Disposal Act, 1969 (Title 22, Chapter 16, Sections 346-351). Under this permit, as issued in 1977 to Resource Industries of Alabama, wells were to be placed around the perimeter of the original site. These wells were to be constructed to a depth of 30 feet below the maximum depth of waste disposal trenches. Solid waste permit conditions required semi-annual sampling of these wells for the following constituents:

COD	volatile solids
specific conductance	chlorinated
acidity	zinc
total alkalinity	copper
chlorides	arsenic
pH	cadmium
TOC	chromium
cyanide	lead
phenols	mercury

State files contain no additional information as to how or where these wells were located or constructed. Similarly, analytical data from these wells is not available in State files.

The Environmental Protection Agency, Region IV, issued TSCA approvals for the site (now under the name of Waste Management of Alabama, Inc.) for PCB solids, in June 1978, and PCB liquids in October 1979. These approvals were issued under the authority of 40 CFR Part 761. A condition of this approval was the location of shallow chalk wells located adjacent to each of the trenches approved for PCB disposal.

Interim Status Ground-Water Monitoring

As a land disposal facility, Chemical Waste Management, Inc. in Emelle became subject to the 40 CFR Part 265, Subpart F ground-water monitoring requirements on November 19, 1981. CWM's initial interim status monitoring system consisted of Wells 1, 2, 3, and 4 (see Figure 5). Little information is available on the construction, total depth, or screened intervals in these wells. CWM's Part B permit application summarizes the data on these wells as follows:

Well 1 Located on private property east of the intersection of Highway 17 and 116. A free-flowing artesian well reportedly drilled 940 feet below land surface prior to October 1964. Depth of screening and other construction details are unknown.

Well 2 Located east of office-laboratory building. Drilled 1,085 feet below land surface during first quarter, 1978. Well is cased with PVC pipe for upper 25 feet, with annular space sealed with cement. Well is uncased below 25 feet.

Well 3 Located approximately 3,700 feet south of the office building and west of Highway 17. The well was reportedly drilled to a depth of 670 feet below ground surface in 1960. No record of construction is available.

Well 4 Located approximately 3,900 feet west of Well 3. A free-flowing artesian well drilled approximately 700 feet below land surface in 1960. No record of construction is available.

Based on Geological Survey of Alabama Map 158, flow in the Eutaw Aquifer was assumed to be to the south-southwest. Therefore, CWM designated Well 1 as the upgradient well. CWM began quarterly sampling of this system, in accordance with 40 CFR Part 265.92, in February 1982. The first inspection of the RCRA system was performed in June 1982, by representatives of the Alabama Department of Environmental Management (ADEM). No violations of Subpart F (or the state regulatory equivalent thereof) were found during the inspection, however the inspection files note that CWM was performing a hydrogeological evaluation of the site at that time. An EPA inspection of the facility conducted prior to the effective date of the Subpart F requirements noted the presence of 23 monitoring wells (presumably those required by the old solid waste disposal permit), but did not verify any violations of the RCRA regulations in effect at that time.

During a September 1982, facility inspection, ADEM inspectors tentatively determined that Well 1 may not be hydraulically upgradient, and Wells 2 and 3 were of questionable construction. Shortly thereafter, a meeting was held with CWM representatives to discuss these findings, and in November 1982, CWM proposed installation of an additional RCRA monitoring well. The proposed well was located in the Eutaw Aquifer along the eastern property line. This well (designated as Well 5) was constructed under the supervision of Golder Associates, geotechnical consultant to CWM. Elevations taken from Well 5, when compared to the elevations taken from Wells 1-4 during 1982, indicated that Eutaw Aquifer flow in the vicinity of CWM was from west to east.

Also, in November 1982, CWM requested and received a waiver from ADEM for monitoring for coliform bacteria (as required by Part 265.93(b) (1)).

Placement of Well 5 provided CWM with a ground-water monitoring system consisting of one downgradient and four upgradient wells. CWM proposed additional wells (Wells 6, 7, and 8) in April 1983. This new system resulted in new Well 8 as an upgradient well, and Wells 5, 6, and 7 as downgradient wells (see Figure 6). ADEM requested at this time that CWM continue monitoring Wells 1-4 while developing background quality data from Wells 5-8.

The construction and completion details for Wells 5-8 are well documented. The wells consist of four-inch diameter carbon steel casing (grouted in place) and a two-inch diameter stainless steel well screen. Originally, each well (except Well 8, which is a free-flowing artesian well) was equipped with a dedicated dual pump system consisting of Middleburg-type bladder pumps

with PVC casings and Teflon bladders. Boring logs for the wells are presented in CWM's original Part B permit application (September 1983).

As a result of statistically significant differences in data from Wells 1-4, ADEM requested that CWM perform a ground-water quality assessment in accordance with the State equivalent of Part 265.93. As CWM accepts most of the hazardous wastes identified in Part 261, and since the facility was preparing a complete Part B application, it was determined that analysis of Part 261 Appendix VIII constituents was required. During preparations for this sampling, several events occurred:

1. CWM, EPA, and ADEM decided that Wells 2 and 3 should be plugged upon completing the assessment. Lack of information on construction details made these wells unacceptable as RCRA monitoring wells.

2. CWM completed the first statistical evaluation of data from Wells 5-8, and found statistically significant changes in indicator parameters using the Student's t-test. Application of John Skinner's 11/30/83 "Guidance to EPA Regions on Student's t - test for Indicating Ground Water Contamination at Land Disposal Facilities" identified these as "false" positives. It was agreed that the Appendix VIII analysis of data from these wells could be used to resolve this issue.

3. Evaluation of elevation data from all eight wells showed that the Eutaw aquifer has an extremely flat gradient. Evaluation of Well 5 construction details showed that it was completed in a lower zone of the Eutaw aquifer than Wells 6-8. CWM, EPA, and ADEM agreed that one (possibly two) additional wells were required, but that more studies were needed in order to properly locate any new RCRA wells. A procedure for locating this well was agreed upon in a meeting between all parties on September 19, 1984.

CWM conducted Appendix VIII sampling during November of 1984. Very low concentrations of certain compounds were detected. As the results were inconclusive, it was decided that the wells should be resampled. ADEM and EPA split samples with CWM during this phase of the assessment. Four subsequent sets of samples were taken, however, consistent data was not obtained. Toluene and acetone were consistently detected, therefore efforts focused on determining the source of these compounds in the wells. A review of well construction records revealed that acetone had been used to rinse cutting oil from pipe threading. The pipes had subsequently been steam cleaned, but apparently this precaution did not remove all the acetone from the threading. Samples of archived acetone from this operation were tested and found to contain high levels of toluene.

It was hypothesized that these compounds remained in the wells and were detected after the wells had been purged using inadequate purging procedures. This hypothesis was tested by replacing the pump system in Well 7 with a high rate submersible pump. Three well volumes were then removed using these pumps

placed at the top of the water column. No toluene or acetone was detected in the samples collected with a bailer after this purging procedure.

The conclusion was that the CWM facility had not affected the Eutaw aquifer. However, as the result of the assessment, CWM replaced the pumping systems in the RCRA wells with a high rate (10 gpm) submersible pump coupled with a bladder-type sampling pump, both of which are constructed of stainless steel with Teflon fittings. CWM also modified its interim status monitoring program to sample for chloroform, trichloroethylene, tetrachloroethylene, toluene, chromium, and nickel, in addition to the parameters required under Part 265.92.

Upon completion of the assessment, CWM proceeded with plugging Wells 2, 3, and 4. The facility ceased using Well 1 as a RCRA monitoring well. CWM proceeded with installation of a new well, Well 9, as agreed upon earlier. Also, as required by the December 1984 consent agreement, Well 5 was recased into the proper zone of the Eutaw aquifer. It's sole use is for determination of water level elevations. The current Eutaw Formation monitoring system thus consists of Wells 6, 7, 8, and 9 (Well 8 being the upgradient well)(see Figure 7). Appendix D to this report contains pertinent construction details for these wells.

The numbers and locations of these wells do not meet the "immediate detection" standard for RCRA detection monitoring systems. However, it is important to note, at this point, that the December 1984 consent agreement, in part, required CWM to submit a demonstration for a waiver from the ground-water monitoring requirements at 40 CFR Part 265, Subpart F. This waiver specifically applies to the Eutaw ground-water monitoring system. Given the unique site characteristics, which are the primary basis for the waiver demonstration, the Task Force does not think it appropriate at this time to require any additional monitoring effort in the Eutaw.

Consent Agreement Wells

CWM installed a series of "shallow" monitoring wells around Trenches 8-21 in late 1985 (see Figure 8), as required by a consent agreement between EPA and CWM (please see discussion below). The wells were located for the purpose of verifying CWM's request in January 1985 for a waiver from Part 265.91(a). Data from these wells was to be used to verify that the time for waste constituents to travel from a RCRA disposal unit to the Eutaw Formation or the nearest surface water would exceed 1,000 years.

The shallow well system consists of two types of wells. "Fracture" wells are screened at intervals where fractures were detected during coring of the well. "Companion" wells are screened and completed deeper than the fracture wells (25 feet below the bottom of the adjacent disposal trench). These wells are located 20- 50 feet from the edge of the adjacent landfill trench wall. These wells are constructed of two-inch threaded PVC pipe, with screens consisting of slotted PVC pipe. Additional construction details are described in the "Proposed Final Plan and Protocol for Consent Agreement Ground Water Monitoring Program," April 1985 and are contained in Appendix E. These wells are monitored for specific parameters of concern as agreed upon in the December 1984 Consent Agreement.

Quarterly sampling of these wells began in April 1986. Data from the initial sampling event indicated the presence of chloroform in several wells, but this was traced to the city water used for flushing the newly completed wells. A few wells contained very low concentrations of volatile organic compounds, but further investigation was not conducted at that time due to the low levels reported.

The second quarterly sampling event detected 1,1-dichloroethane at very low levels in one shallow well. Resampling of the well indicated a detectable amount of the compound was still present. Further investigation was conducted at the request of ADEM because:

1. The well in question, Well SM5, is located near one of the older trenches, therefore contamination would more likely be detected there (older trenches were built under less stringent construction guidelines. Also, the trench adjacent to Well SM5 had operated prior to January 1983 and therefore received free liquids, and the leachate from the trench was known to contain 1,1-dichloroethane);

2. The well data showed the presence of 1,1-dichloroethane during each sampling event at levels of 127, 75.6, and 41.2 ppb, respectively; and

3. Well SM5 is screened across a fracture. ADEM and EPA geologists feel that, should hazardous constituents escape from a trench, they would be likely to be detected along a fracture in the chalk, as the fracture may present a "path of least resistance".

The investigation of Well SM5 consisted initially of a resampling of the well in August 1986. The resampling detected 1,1-dichloroethane at a level of 30.6 ppb. Four additional wells were then constructed around Well 5 in an effort to relocate the fracture screened in Well 5 and to determine if a flow path or rate of flow could be calculated between any of the wells and the adjacent disposal trench. Sampling of these "rate wells" did not detect the presence of 1,1-dichloroethane. Further, an examination of the data shows that the concentration of the compound dropped in the well over time:

Sampling Date - Well SM5	1,1-Dichloroethane (ug/l)
04/03/86	127.0
07/09/86	75.6
07/31/86	41.2
08/25/86	30.6
10/24/86	5.5

This data could indicate that the compound was introduced to the well during construction, and that additional purging of the well has served to eliminate this outside source of contamination.

GROUND-WATER MONITORING UNDER 40 CFR PART 264

Upon issuance of their Federal RCRA permit, CWM will no longer be required to conduct monitoring of the Eutaw Formation as they have been under interim status. The State permit, however, will require CWM to continue to monitor the Eutaw. CWM submitted a waiver request in their Part B demonstrating that there is virtually no potential for migration of hazardous wastes or hazardous waste constituents to the Eutaw Formation (uppermost aquifer) within the active life and 30 year closure and post-closure period. The transit time through the Selma chalk was estimated by CWM to be 10,000 years. Independent EPA estimates of transit time using conservative estimates for equation variables were 330 years and 3,000 years for estimates using Darcy's Equation and a 2-D solute transport model, respectively. The very conservative 330-year estimate is considerably longer than the end of the post-closure period.

CWM's Federal RCRA permit will require that the consent agreement monitoring wells be monitored in lieu of the Eutaw wells to determine if there is migration of hazardous waste constituents and confirm the rate of migration should it be detected. Under the permit, these wells will be monitored semi-annually and will be evaluated for contamination using specific, objective criteria.

Each six months samples will be collected at each well and analyzed for 30 purgeable organic constituents and three metals--nickel, chromium, and arsenic. A complete list of compounds is found in Appendix F. A well will be considered contaminated if any of the following criteria are met:

Purgeable Organic Constituents

-- 1 compound detected greater than 50 ug/l
-- 2 compounds detected, each greater than 30 ug/l
-- 3 compounds detected, each greater than 20 ug/l

Metals

-- Nickel, chromium, or arsenic detected greater than 30 ug/l

CWM GROUND-WATER SAMPLING AND ANALYSIS

In order to evaluate the sample collection and handling procedure utilized by CWM at the Emelle facility, two documents - the Corporate Manual for Ground Water Sampling and the CWM Emelle Site Specific Plan were reviewed. In addition to the document review, a sampling overview of the CWM ground-water sampling crew was conducted during October 14-15, 1986.

In addition to the two previously mentioned plans, several other ground water sampling plans were documented in the PRC information package developed for this evaluation. These include unidentified draft sample handling procedures which may or may not have been used and several sampling plans which were developed for non-routine sampling events, including the ground-water quality assessment conducted in 1984 and 1985.

Insofar as the historical and current RCRA ground-water monitoring systems are concerned, there are three important technical aspects to consider regarding sampling procedures and, subsequently, the degree of confidence with which ground-water data developed from major modifications to the system can be compared. These are summarized below:

1. In addition to the fact that there was little or no construction information for the original system (Wells 1 - 4), there was significant variation in sampling methodology for samples collected at different wells in the system. Well 1, for example, is a flowing stock supply well and was sampled directly from the discharge. No purging was necessary. Wells 2, 3, and 4 were sampled with bladder pumps. Prior to sampling, the wells were purged three water column volumes or more, then sampled. Because of the slow pump rates and the great yield of the wells, there may have been little removal of water above the pumps, resulting in a sample comprised of mixed formation and stagnant water.

2. The current RCRA system (Wells 6 - 9) utilizes dual pump systems for purging and sampling. This system has itself undergone modification, primarily during the assessment period. Prior to the assessment, the purge and sample pumps were both low rate bladder pumps. During an iterative program, developed from week to week in March and April of 1985 and jointly developed with Region IV EPA and ADEM, it became clear that the wells were not being adequately purged. The problem was similar to that previously discussed with the original system. The pumps were underrated for the yield of the wells, allowing stagnant water to remain in the upper portion of the casing (more or less above the purge pump). This stagnant water apparently mixed with formation water in the interval occupied by the sampling pump, contaminating the sample with acetone and toluene. As described earlier in the report, following the assessment all pumps were removed from the wells, followed by complete purging with high rate pumps at the top of the water columns. The dual pump system was then reinstalled with a higher rate purge pump above the sampling pump. During sampling, the purge pump remains on to prevent any movement downward of water to the sampling pump.

3. During discussions related to the assessment, the question was raised regarding sample pumps and tubing purging procedures used prior to sample collection. It appeared that volumes of water discharged from the sample pump and line prior to sample collection may have been inadequate, resulting in a situation where portions of some samples may have contained water that resided in the pumps or tubing for weeks or months. Standard procedures used by CWM for purging the sample lines were revised to provide for adquate line purging.

In light of these facts, it is not appropriate in the strictest technical sense, to compare the historical data from the original wells and the data from the current system. This may even be said for all the data from the current system, given the problems enumerated above. Analyses for selected hazardous consitituents conducted on samples collected from the current system appear to indicate that the wells are not contaminated. Follow-up sampling after well remediation efforts and after a revision of sampling protocols have resulted in the collection of samples that are not contaminated and are representative of water quality in the Eutaw.

Current Sampling and Analysis Plan

Given the preceding facts, it is appropriate to review the current sampling and analytical methodology. The comments below reflect a review of the corporate and site-specific procedures and observations of sampling personnel during the ground-water sampling overview conducted in October 1986. A checklist completed for this overview is included as Appendix G of this report. Note that the corporate plan includes options for several procedures to accomodate site-specific conditions at the large number of facilities covered by the plan. These comments predominately reflect observations of sampling procedures made during the evaluation and the subsequent sampling overview.

1. CWM personnel correctly calibrated the pH and specific conductance meters prior to going out into the field. The corporate SOP requires checking calibration every 4 hours. During the overview the pH meter was checked against pH7 and pH10 buffer solutions at each well. These procedures are acceptable.

2. Water levels were determined at each well with an electric water level measurement device. After removal from each well, the wetted portion was rinsed copiously with DI water, dried with a clean paper towel and placed in a bag. These procedures in and of themselves are minimally adequate and acceptable. One problem noted during the measurement and decontamination procedures was the failure of CWM personnel to wear gloves. Although hands were washed in deionized water prior to handling the equipment the Task Force recommends that all sampling personnel touching any equipment which enters a well, wear clean, powderless disposable gloves such as latex physician's examination gloves.

3. CWM personnel, using measured water levels and known well diameters and depths, correctly determined the volume to be purged at each well using a calculator and the equation for the volume of a cyclinder.

Standard volumes to purge the sample pump and line had been calculated for each well. Those volumes were correctly calculated and allow for complete replacement of stagnant water prior to sampling.

4. The glove issue is raised again here as a problem observed during the complete sampling exercise. The same recommendation made in No. 2 above.

5. The types of samples collected are listed in Table 5 along with the bottle types and preservatives used. These parameters encompass all the required RCRA parameters. The bottle types and preservatives used are acceptable. One minor concern, however, is the sample volume used for the radiometric parameters. CWM collects one liter of sample in a plastic bottle. Regional guidance from the Eastern Environmental Radiation Facility, as well as the EPA Technical Enforcement Guidance Document, specifies one gallon sample volume. Method 9310, SW-846 does not specify a particular volume of sample but indicates that enough volume to provide a solids density thickness of 5 mg/cm2 in the counting planchet is needed. It further states that for very low radioactivity samples it is essential to analyze as large a sample as is needed to give reasonable times. CWM should make sure, in light of this guidance, that the one liter samples are adequate.

6. CWM filters all samples except those collected for purgeable organic and total organic halide analyses. Filtration occurs in an in-line disposable Gelman R filter (0.45 micron). Prior to sampling, three filter volumes are flushed through the filter, which is pressed on the sample discharge line. EPA does not approve of filtering any samples except those collected for metals analyses when the sample is turbid, and in those cases, EPA guidance recommends analyzing both filtered and unfiltered samples. Based on observations made by Region IV, ESD personnel during previous sampling efforts at the site and on observation made during the Task Force evaluation, the quality of water collected from each well is such that filtration is not necessary for any analytical parameter. The Task Force recommends that samples collected from the RCRA monitoring wells not be filtered.

7. Samples were packed in sealed shuttles with the chain of custody/analytical request form and shipped via Federal Express to the laboratory.

Quality Assurance/Quality Control

CWM uses the following prcedures to assure quality in analyses of ground-water samples collected from the RCRA ground-water monitoring system.

1. Trip blanks - For each sampling event, CWM personnel send a purgeable organic (VOA) trip blank with the sample shipment.

2. Field Blanks - Field blanks for all parameters are prepared at one location for each sampling event.

3. Duplicates - At one well, selected at the time of sampling, a complete duplicate sample is collected.

4. Laboratory Performance Evaluation - The corporate office in Oak Brook, Illinois operates a performance evaluation program to provide quality assurance on the analyses provided by the laboratory, etc.

These measures generally provide an acceptable level of quality assurance regarding validity and acceptablity of data.

Analytical Procedures

The analytical procedures used by CWM and their laboratories are listed in Table 6. Region IV ESD Laboratory Evaluation and Quality Assurrance Section staff evaluated these procedures and determined that they are acceptable procedures capable of providing quality data under the facility's RCRA ground-water monitoring program.

LABORATORY REVIEW

The on-site and off-site laboratory facilities handling ground-water samples were evaluated regarding responsibilities under CWM's ground-water sampling and analysis plan. The on-site laboratory was evaluated during the facility inspection. The CWM contract laboratory, Environmental Testing and Certification, Inc., (ETC), Edison, New Jersey, was evaluated by EPA NEIC and EPA Region V during previous Task Force inspections at other sites during 1985, and was not visited by Region IV. See the Hazardous Waste Ground-Water Task Force Reports for SCA Chemical Services, Model City, New York; and Kettleman Hills Facility, Kings County, California, for comments related to the laboratory evaluation. Both labs were evaluated for their ability to produce quality data for those parameters required by 40 CFR Part 265.92 and the priority pollutants as described by EPA Headquarters on page twelve (12) in the Kettleman Hills Report. Analytical equipment, methods amd quality assurance procedures were examined for adequacy. Laboratory records were reviewed for completeness, accuracy and compliance with State and Federal requirements.

Ground-Water Sampling and Analysis Plan

Under the October 1984, Consent Agreement, CWM was to continue to implement their ground-water quality assessment plan and analytical protocol. CWM was to submit a Proposed Plan and Protocol to be followed whenever samples were taken from monitoring wells at the facility. The documents reviewed during the inspection were:

1. "WMI Manual for Ground Water Sampling", prepared by Waste Management, Inc., (CWM parent company)

2. Proposed Plan and Protocol for the Groundwater Monitoring, Emelle, Alabama, April 1985.

3. Laboratory Standard Operating Procedures, February 21, 1985, by Environmental Testing and Certification, Inc., Edison, New Jersey.

The WMI Manual for Ground Water Sampling is a comprehensive document and was declared "business confidential". It presents detailed procedures for collecting, preserving, handling, documenting (field records and chain-of-custody) and shipping samples. The document is a generic plan for all WMI related facilities and was not site specific for the Emelle, Alabama, facility. The WMI Manual prescribes filtering of sample aliquots, except for volatile organic carbon (VOA), total organic halide (TOX), pH, and specific conductance parameters. Samples for metals, extractable organics, pesticides, and total organic carbon (TOC) were filtered in-line with disposable Gelman R 0.45 micron filters during collection but reported as total metals, etc. Drinking water standards are based on total metals. Therefore, the data reported were not consistent with the requirements for drinking water supplies listed in 40 CFR Part 141.23 (f). This practice may result in data biased low for these parameters. Table I-2 in the WMI Manual for Ground Water Sampling, listed preservative and holding time requirements for some ground-water samples that are outdated.

Sample Handling, Preservation and Field Measurements

The sample containers were prepared by ETC and pre-labeled for the required parameters from each sampling point and shipped to the facility. The samples were preserved immediately upon collection. Pre-measured preservatives for each sample were shipped in the sampling bottles or in small vials. ETC periodically checks the sample preservation where pH adjustment is required after the samples arrive in the laboratory. CWM does not have a QC procedure to check the pH to insure proper adjustment prior to shipping the sample container to the contract laboratory.

Holding times were being met for all parameters, except volatile organic carbon compounds and the extractable organic compounds. The contract laboratory did not analyze and/or extract the samples in the required holding time as stipulated in the WMI Manual or as required in the RCRA regulations for drinking water samples collected during the March 6-7, 1986, and November 21, 1984, sampling events. There were three (3) separate sampling events reviewed during the audit, and holding time requirements for extractables were exceeded in two of the three sampling events. These data were not flagged by the contract laboratory or CWM as exceeding the required holding time in the reports to ADEM or EPA.

Field measurements (pH and specific conductance) conducted by CWM personnel were observed by the audit team. Meter calibration, quality control checks, documentation and reporting for the parameters were acceptable. CWM quality assurance practices for these parameters had drastically improved from practices observed during a facility audit in October, 1985. Therefore, data generated by CWM for these parameters are of acceptable quality.

Laboratory Sample Analysis

The Kettleman Hills Report mentions some inadequacies found at the contract laboratory. Analytical methods with lower detection limits need to be used for the pesticides, PCB's, cadmium, chromium and lead. A review of the data indicated that this deficiency still existed. The analytical method for total organic carbon (TOC) was described as inappropriate because volatiles were stripped from the sample during the sample preparation step to remove inorganic carbon (carbon dioxide) prior to measurement of the organic carbon. If TOC samples cannot be analyzed immediately, preservation by lowering the sample pH to less than two is required. CWM was preserving the samples to meet this requirement to retard any biological action during shipping and prior to analysis. The inorganic carbon consitituents are normally removed by lowering the sample pH followed by purging with an inert gas prior to measuring the TOC. The method detection limit for TOC (approximately 1 mg/l) is at least one to two orders of magnitude above the concentration of the volatile organic components of the TOC. However, these volatiles should be detected in the VOA analysis. Therefore, the emphasis on organic contamination should be placed on the VOA results instead of the TOC data.

TOX analysis were conducted in an area where the samples could have been contaminated with methylene chloride. ETC reportedly moved the TOX analysis to another area after the Task Force audit. Data from RCRA wells used to

monitor the Eutaw Formation indicates the presence of chlorides (approximately 500-700 mg/L). Chlorides can interfere in the TOX procedure when the inorgano-halide concentration exceeds the organic-halide concentration by more than 20,000 times. Care should be taken when reviewing the TOX data and greater emphasis should be placed on the organic analyses for chlorinated organic compounds.

Samples for phenol analysis were collected and appropriately preserved with sulfuric acid to pH <2. They were then analyzed by EPA Method 420.1, EPA 600/04-79-020, a method approved for ground water. The contract laboratory, however, did not raise the sample aliquot pH to four (4) prior to the distillation step in Method 420.1, as required in Footnote 25, 40 CFR Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants, Federal Register, June 30, 1986. This practice may result in data biased low for these parameters.

Quality Assurance and Data Documentation

The on-site laboratory has established a formal quality assurance (QA) program that consists of a QA plan, standard operating procedures (SOP) and includes the use of duplicates, and reference standards to verify the quality of data for each parameter analyzed. Instrument calibration and maintenence were maintained and temperatures of regulated devices were checked. All raw data, quality control records and calculations were documented and maintained on file as required.

TASK FORCE ANALYTICAL DATA EVALUATION

Samples of ground water were collected from two RCRA monitoring wells, ten Consent Agreement wells and two TSCA PCB monitoring wells. In addition to the ground-water samples, leachate samples were collected from the sumps at Trenches 9 and 15. All samples were to be analyzed for the constituents and parameters listed in Appendix B, however, because of problems with obtaining a complete sample within a reasonable time from some wells and because the oily nature of the leachate sample from Trench 15 prevented a complete analysis, all constituents and parameters could not be analyzed for all wells or trenches. The analytical data summary tables for all analyses are included as Tables 7, 8, and 9 of this report. These data are discussed in the following section. The complete data is included as Appendix H. Some analyses reported in these tables are estimated values and are noted with a "J". Several compounds are reported because there was sufficient presumptive evidence to warrent their inclusion.

RCRA Wells (Eutaw System)

Inorganic elements/compounds - A total of eight metals - barium, lead, aluminum, manganese, calcium, magnesium, iron and sodium - were detected in the samples collected at Wells 7 and 8. Lead and aluminum were not detected, at MQL's (minimum quantification limits) of 4 ug/l and 94 ug/l, respectively, in the sample from Well 7. Calcium was not detected in the sample from Well 8 at a MQL of 3 ug/l.

None of the metals concentrations reported exceed any primary or secondary drinking water standards. Although the concentration of barium in the sample collected at Well 8, 500 ug/l, is only one-half of the National Interim Primary Drinking Water Standard of 1.0 mg/l, it is an order of magniturde higher than any historical values reported by CWM for samples from the Eutaw well sytem (see Appendix I, Historical Ground-Water Data).

Sodium was detected at concentrations of 510 mg/l and 420 mg/l at Well 7 and Well 8, respectively. These values are consistent with historical data reported by the facility.

Conventional parameters - Ammonia and chloride were the only parameters within this category present at detectable levels. Ammonia was measured at 1.3 mg/l and 1.1 mg/l in Wells 7 and 8, respectively. Chloride was measured at 510 mg/l and 410 mg/l in Wells 7 and 8, respectively, exceeding the Secondary Drinking Water Standards of 250 mg/l.

General comments - Both sodium and chloride were detected in these samples at concentrations ranging from approximately 400 mg/l to 500 mg/l. In each well the concentrations were measured at a near 1:1 ratio. These concentrations are generally indicative of the salinity in the upper portion of the Eutaw Formation. Water in this portion of the formation is considered marginally potable, therefore most drinking water supply wells are completed in lower portions of the Eutaw or the deeper Gordo Formation.

Based on these data, it does not appear that waste disposal practices at the Emelle facility have affected ground-water quality in the Eutaw Formation.

Consent Agreement Wells and PCB Wells

Thirteen consent agreement and PCB wells, all completed in approximately the same zone (25 - 50 feet below bottoms of trenches), were sampled and analyzed, as sample volume allowed, for the same parameters as the RCRA deep wells (see Appendix B). A number of inorganic elements/compounds, purgeable organic compounds and conventional parameters were detected in these samples. These data are summarized in Table 8, and are discussed below.

Inorganic elements/compounds - Thirteen metals were detected in these samples (no sample contained all of the metals). Of these thirteen, barium, zinc, aluminum, manganese, calcium, magnesium and iron have been shown, by chemical analysis of the chalk by Region IV, ESD, to be chalk constituents (8). Sodium, detected in all thirteen samples, and potassium, detected in ten samples, could be derived from clay minerals associated with the chalk and/or bentonite used as an annular space sealant in well construction.

The remaining metals - arsenic, cobalt, nickel and selenium - are all present at trace levels. Of these, nickel is present at the highest concentrations, 29 ug/l and 25 ug/l, in wells SM-5 and M-58 respectively. Concentrations of the other metals are all less than 11 ug/l.

Purgeable Organic Compounds - A total of six purgeable organic compunds were detected in four of the thirteen wells that were sampled. Three of the wells (SM-2, SM-5, and SM-9) are Consent Agreement Wells and one (M-56) is a PCB well. The compounds detected, in order of decreasing concentration, are methyl butyl ketone, chloroform, 1,1-dichloroethane (presumptive evidence only), trichloroethene, toluene, and benzene. Except for methyl butyl ketone, which was reported at a concentration of 14 ug/l, no compounds were detected at a concentration greater than 6.3 ug/l.

Conventional Parameters - This group of parameters consists of phenols, total organic carbon (TOC), total organic halogen (TOX), cyanide, sulfate, chloride, nitrate - nitrite nitrogen, and ammonia. Because adequate sample volumes had not recovered at some of the wells sampled, a priority list (see Table 10) was established identifying the types of samples most important to the Task Force evaluation. The purgeable organic, extractable organic and metals samples were thought to be the most important. As a result, samples for most or all of the conventional parameters were not collected at some of the wells. The anlytical data summary table, Table 8, clearly indicates which samples were or were not collected. The following is a brief description of the occurrence and concentrations of these parameters in samples collected at the Consent Agreement and PCB wells.

Ammonia - Samples were collected at Wells SM-2, SM-5, SM-7A, SM-13, SM-14, SM-16 and M-62. Concentrations range from 0.80 mg/l at SM-16 to 1.4 mg/l at M-62.

Chloride - Samples were collected at Wells SM-2, SM-5, SM-7A, SM-13, SM-14, SM-16, M-58 and M-62. Concentrations range from 44 mg/l at SM-5 to 490 mg/l

at M-62, which is the only value to exceed the secondary drinking water standard of 250 mg/l.

Nitrate-Nitrite Nitrogen - Samples were collected at SM-2, SM-5, SM-7A, SM-13, SM-14, SM-16 and M-62. Concentrations ranged from below detection (at a MQL of 0.05 mg/l) at SM-5 and M-62, to a high of 1.3 mg/l at SM-14. None of the concentrations exceed the National Interim Primary Drinking Water Standard of 10.0 mg/l.

Sulfate - Samples were collected at SM-2, SM-5, SM-7A, SM-13, SM-14, SM-16, M-58, and M-62. Concentrations range from below detection (MQL of 0.10 mg/l) at M-62 to 650 mg/l at SM-14. The Secondary Drinking Water Standard of 250 mg/l was exceeded at Wells SM-5, SM-7A, SM-14, SM-16, and M-58.

TOC - Samples were collected at all wells except for SM-9 and M-567. TOC was not detected at a MQL ranging from 2 mg/l to 5 mg/l at any of the wells sampled except for the background well, BG-02, where an estimated 55 mg/l was detected.

TOX - Samples were collected at wells BG-02, SM-2, SM-5, SM-7A, SM-13, SM-14, SM-16, M-58 and M-62. TOX was measured only in the background well, BG-02, at a concentration of 250 ug/l. Because of the remote location of this well with respect to the facility, and the fact that no chlorinated purgeable organics were detected at this well, the TOX value is highly suspect. MQL's in all other samples ranged from 10 ug/l to 120 ug/l.

It is difficult to draw any firm conclusions about possible shallow saturated chalk contamination using data from the Task Force evaluation. Of all the data reported from analyses of samples collected at the Consent Agreement and PCB chalk wells, the data for selected metals (arsenic, cobalt, nickel and selenium) and purgeable organic compunds are the most useful. TOC and TOX were the priority conventional parameters and analyses was obtained for these paramters from 11 of 13 and 9 of 13 wells, respectively. These data, however, do not appear to be useful indicators for this evaluation, since the samples from the background well, Well BG-02, were the only samples in which TOC and TOX were detected. It should be stated that this well appears to be located properly with respect to its function as a background or control well, and no explanation can be offered at this time for these apparently anomolous values.

The selected metals data does not indicate a clear pattern with regard to fracture-screened or deep-screened wells. Of the five wells adjacent to trenches in which these metals were detected, two are deep wells, two are fracture wells and one is a PCB well. The PCB wells were generally sited with respect to observed fractures and were completed at depths approximately 25 feet below trench bottoms. If the PCB well in question, M-58, were indeed a fracture well equivalent, then the data might indicate a trend towards higher metals concentrations and greater number of metal compounds occurring in fracture wells.

Of the six purgeable organic compounds detectable in samples collected from Consent Agreement wells, four, two each in wells SM-5 and SM-9, were detected in fracture wells. If the reasoning in the previous paragraph is followed, the compound detected in the sample from well M-56 could also be

considered to be from a fracture well sample, indicating that possibly five of six occurrences of purgeable organic compounds were from fracture wells.

It would be unusual, however, if these fractures (e.g. Well SM-5 and SM-9 fractures) are indeed active conduits, that so few organic compuonds were detected at the low levels measured (all less than 15 ug/l). The leachate in these trenches is a virtual soup of inorganic and organic compounds. One would expect, given the low levels of detection utilized in these analyses, that more than two purgeable organic compounds would be detected and that extractable organic compounds would have been detected as well.

The Task Force recommends that the following tasks be completed to evaluate the significance and probability of the fractures as conduits for leachate migration.

1. Conduct a trace element geochemical study of the Selma Chalk in the vicinity of the Emelle facility. Samples should be collected from on-site and off-site locations with utmost regard for obtaining pristine samples. The study should include, at a minimum, analysis for the trace metals arsenic, chromium, cobalt, nickel, and selenium. These analyses should look at both total and leachable (e.g. EP Toxicity procedure) concentrations. It is critical that the occurrence and mobility of these metals in the chalk be understood if decisions regarding contamination are to be made on the concentrations of arsenic, chromium and nickel in ground water collected from the Consent Agreement wells. This study should be performed by either EPA or ADEM.

2. Sampling the purgeable organic compounds in the vicinity of active trenches, particularly downwind should be conducted with the highest regard for field quality control and quality assurance. Field blanks should be prepared for purgeable organic analyses at each station where odors and wind blown dust are present during sampling to help evaluate the low level concentrations of organic compunds such as reported for Task Force samples. This task should be performed jointly by CWM and either EPA or ADEM during several regularly scheduled sampling events at CWM. Ideally, samples should be split at the "hot wells" sampled during the Task Force evaluations and any other wells at which purgeable organic compunds have been recently detected or which are in active areas.

These conclusions are speculative and are based on observations made during the Task Force Evaluation. While they are by no means conclusive, they do indicate that some fractures may be conduits for leachate migration from certain trenches.

Leachate Samples

Although samples of leachate collected from Trenches 9 and 15 were to be analyzed for the complete list of parameters (see Table 9), a complete set of analyses could be obtained only for the sample collected from Trench 9. The

oily, concentrated nature of the sample from Trench 15 created sample preparation problems which prevented the organics laboratory from conducting any analyses, therefore, only metals and conventional analyses was performed and reported for this sample. Table 9 contains the analytical summary for the leachate samples.

Inorganic elements/compounds - Eighteen metals were detected in the two samples (all eighteen were detected only in the sample from Trench 15). With few exceptions, the sample from Trench 15 had the highest concentrations of detected metals.

Extractable organic compounds (including chlorinated compounds) - Twenty-one extractable organic compounds were detected in the sample from Trench 9 at a total concentration of 786,430 ug/L.

Purgeable organic compounds - Eight purgeable organic compounds were detected in the sample from Trench 9 at a total estimated concentration of 430,000 ug/L.

Conventional organic parameters - Purgeable organic halogen, phenol (4AAP), total organic carbon and total organic halogen analyses were conducted on samples from both trenches. The results generally show approximately an order of magnitude higher concentrations in the samples collected from Trench 15.

Conventional parameters - Ammonia and chloride were detected in samples from both trenches. As is the case for most other samples collected and analysed for both trenches, the values for Trench 15 are higher. Cyanide was not analysed for the sample from Trench 9 and was detected in the sample from Trench 15 at an estimated concentration of 11 mg/L. Sulfate was detected in the sample from Trench 9 at an estimated concentration of 1400 mg/L, but was not detected in the sample collected at Trench 15.

The analyses appear to be typical of what would be expected for leachate developed in trenches at the facility.

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FIGURES

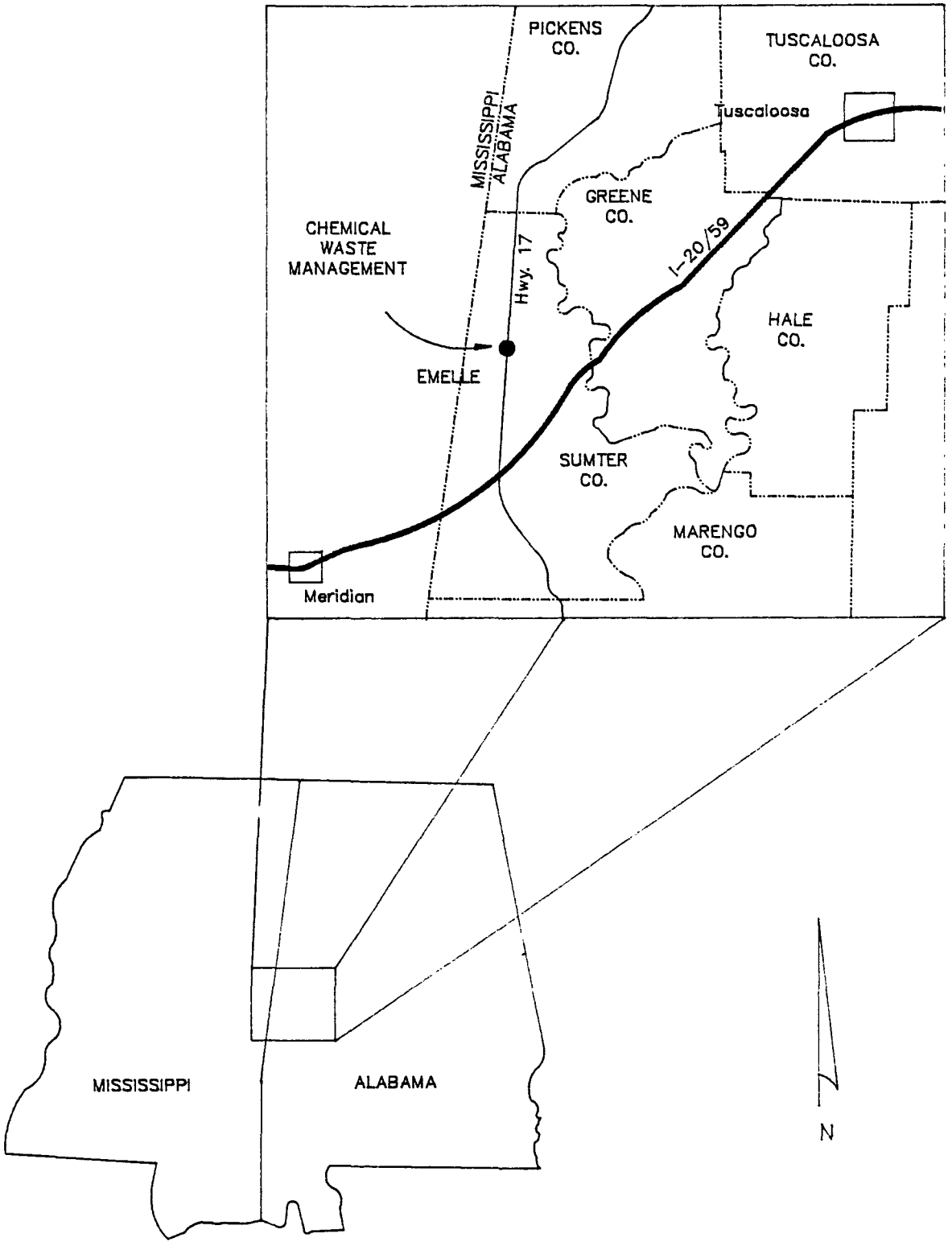


FIGURE 1
FACILITY LOCATION MAP
CHEMICAL WASTE MANAGEMENT, INC.
EMELLE, ALABAMA

DH63198

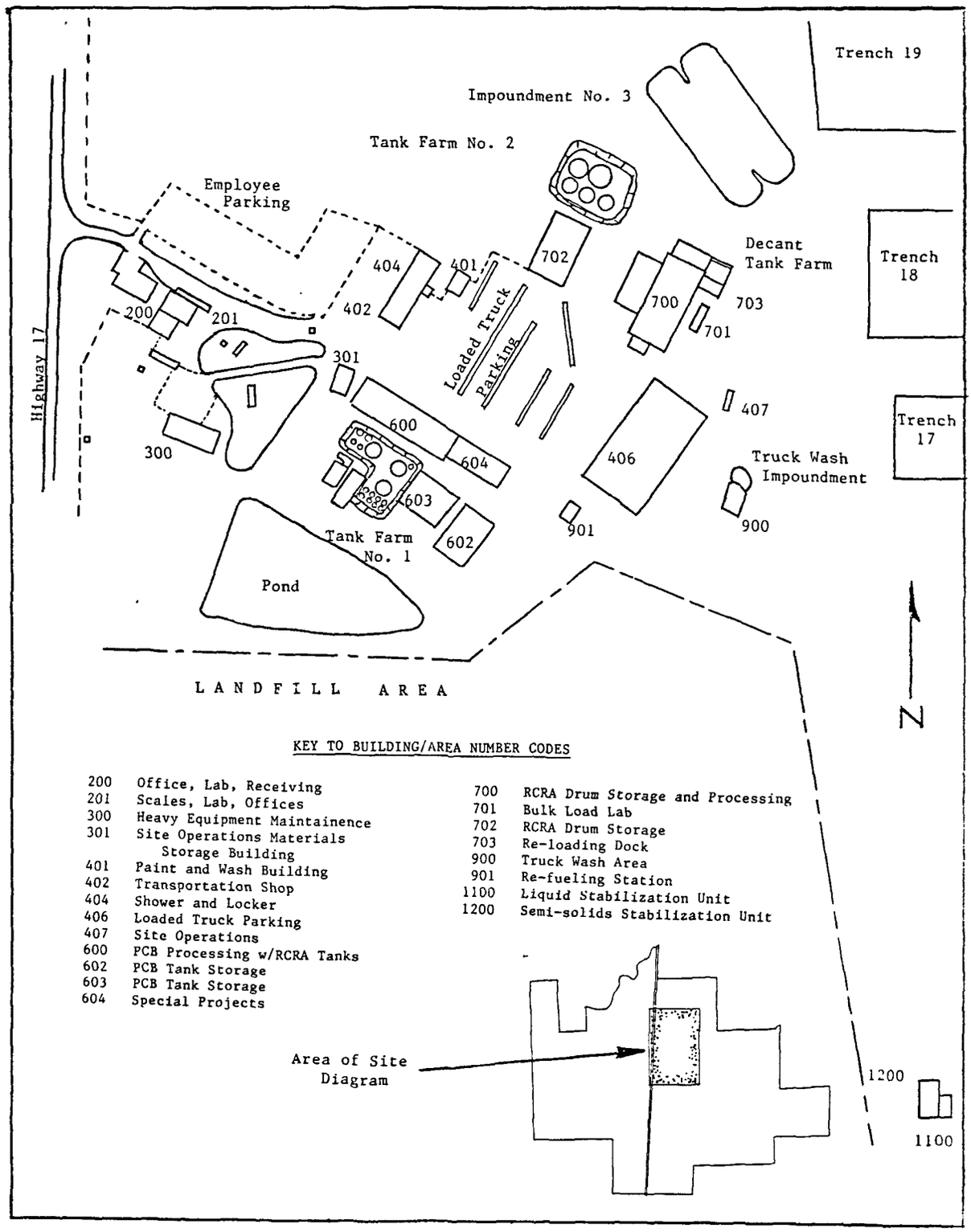
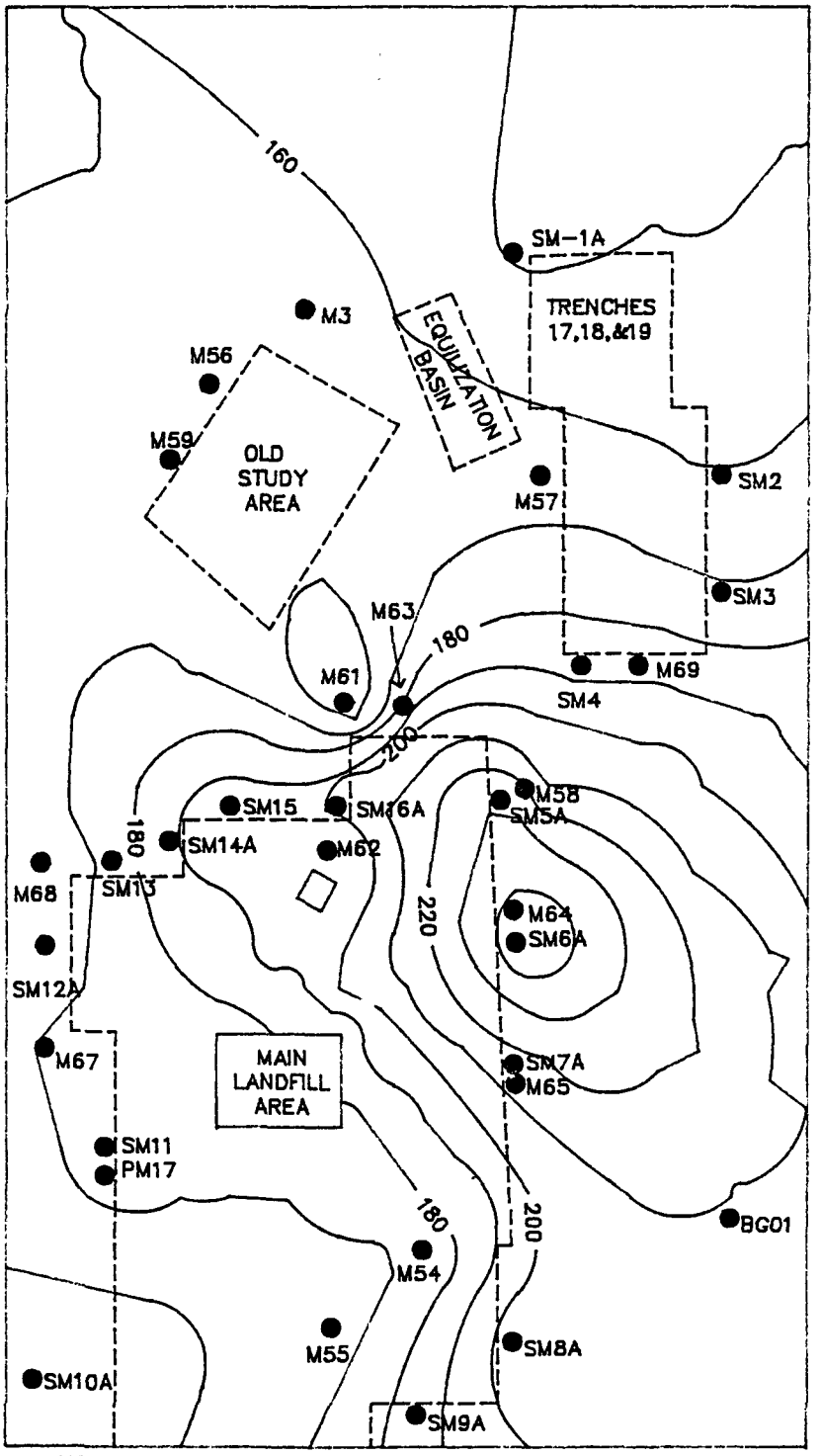


Figure 2
Site Diagram
Chemical Waste Management, Inc.
Emelle, Alabama

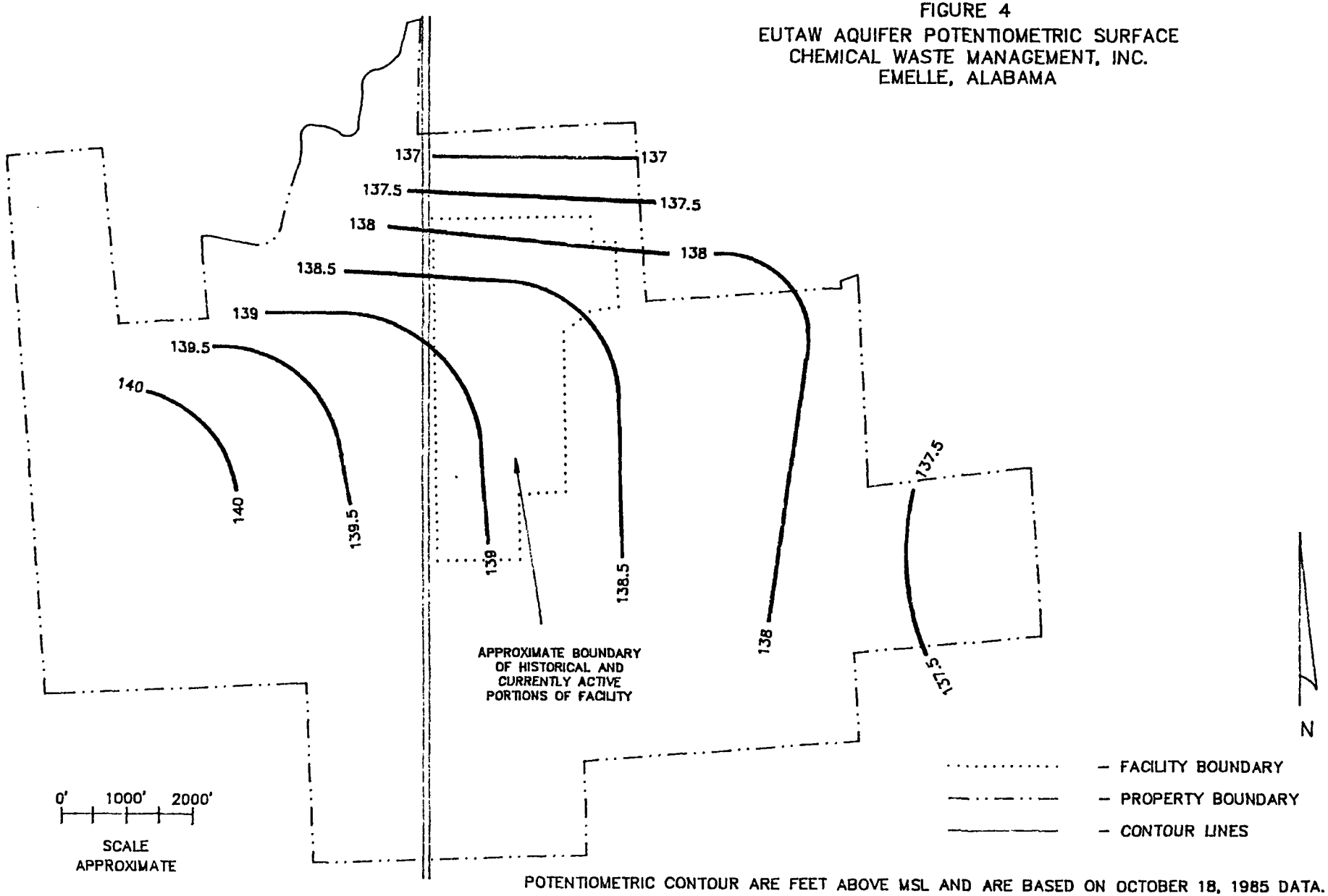


NOTE: CONTOURS ARE FEET ABOVE MSL AND ARE BASED ON SEPTEMBER 1986 GWTF DATA.

FIGURE 3
CWM PCB, CHALK WELLS
CHALK POTENTIOMETRIC MAP
CHEMICAL WASTE MANAGEMENT, INC.
EMELLE, ALABAMA

DH6319C

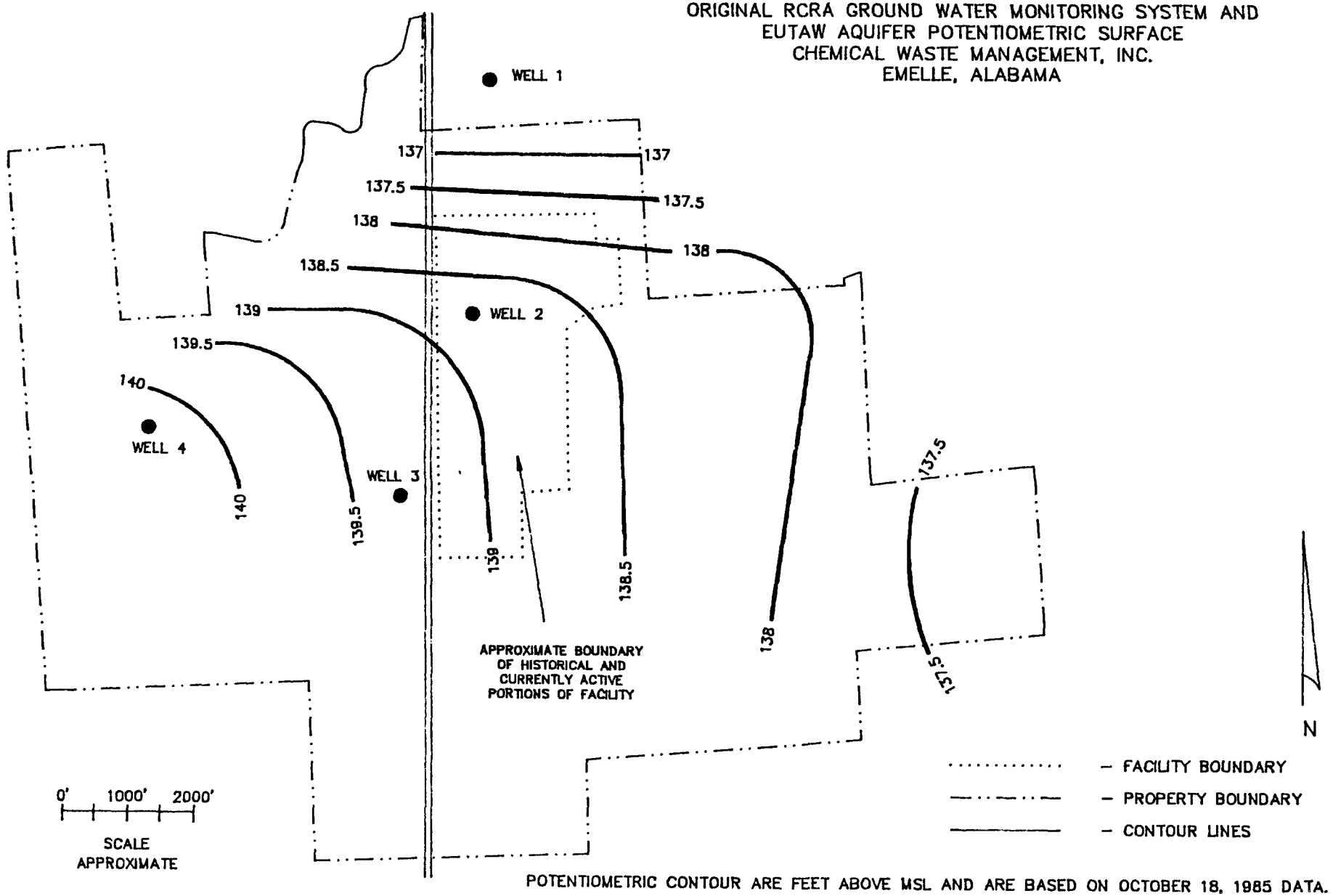
FIGURE 4
EUTAW AQUIFER POTENTIOMETRIC SURFACE
CHEMICAL WASTE MANAGEMENT, INC.
EMELLE, ALABAMA



POTENTIOMETRIC CONTOUR ARE FEET ABOVE MSL AND ARE BASED ON OCTOBER 18, 1985 DATA.

DH6318A

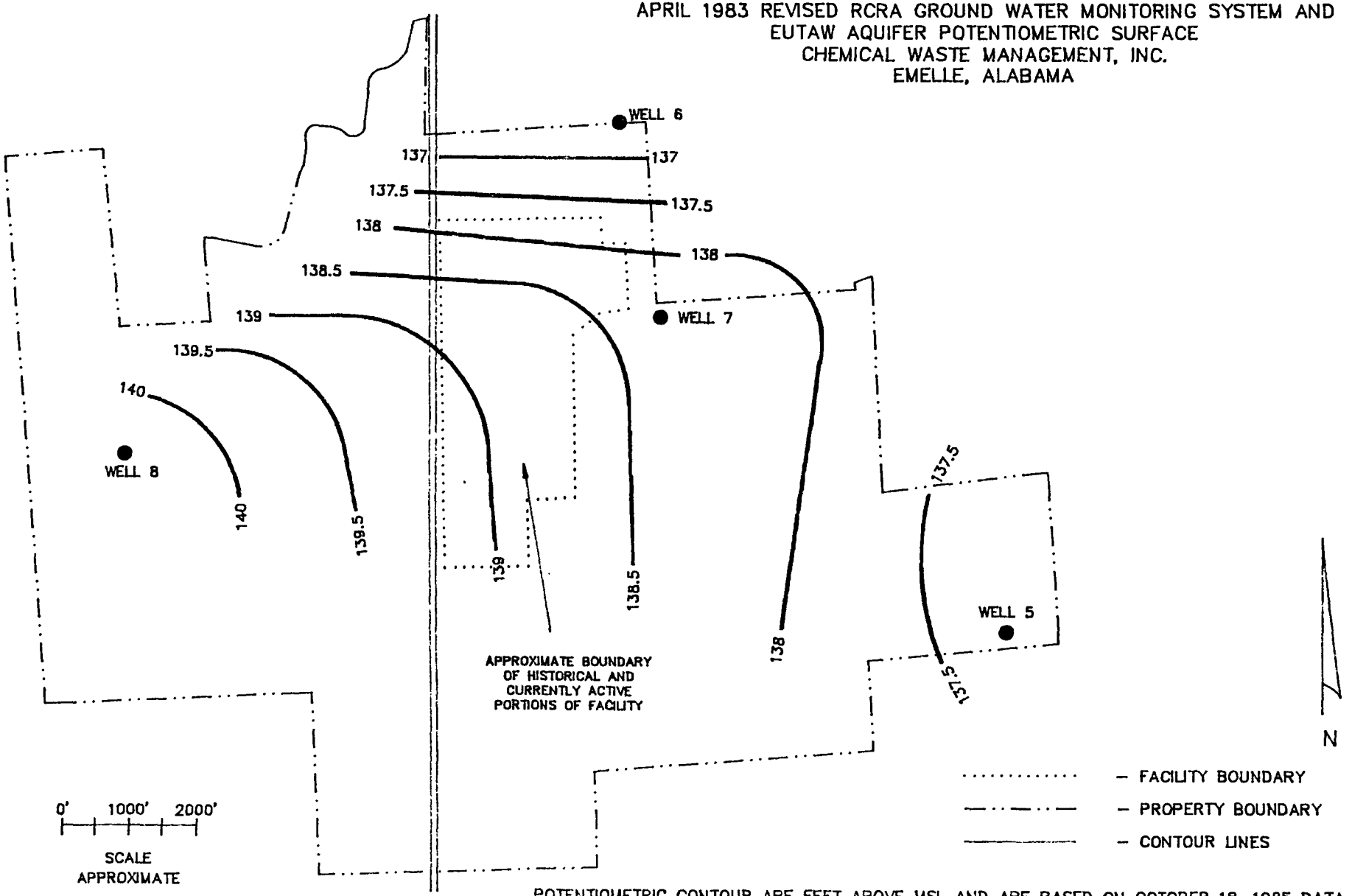
FIGURE 5
ORIGINAL RCRA GROUND WATER MONITORING SYSTEM AND
EUTAW AQUIFER POTENTIOMETRIC SURFACE
CHEMICAL WASTE MANAGEMENT, INC.
EMELLE, ALABAMA



POTENTIOMETRIC CONTOUR ARE FEET ABOVE MSL AND ARE BASED ON OCTOBER 18, 1985 DATA.

DH6318A

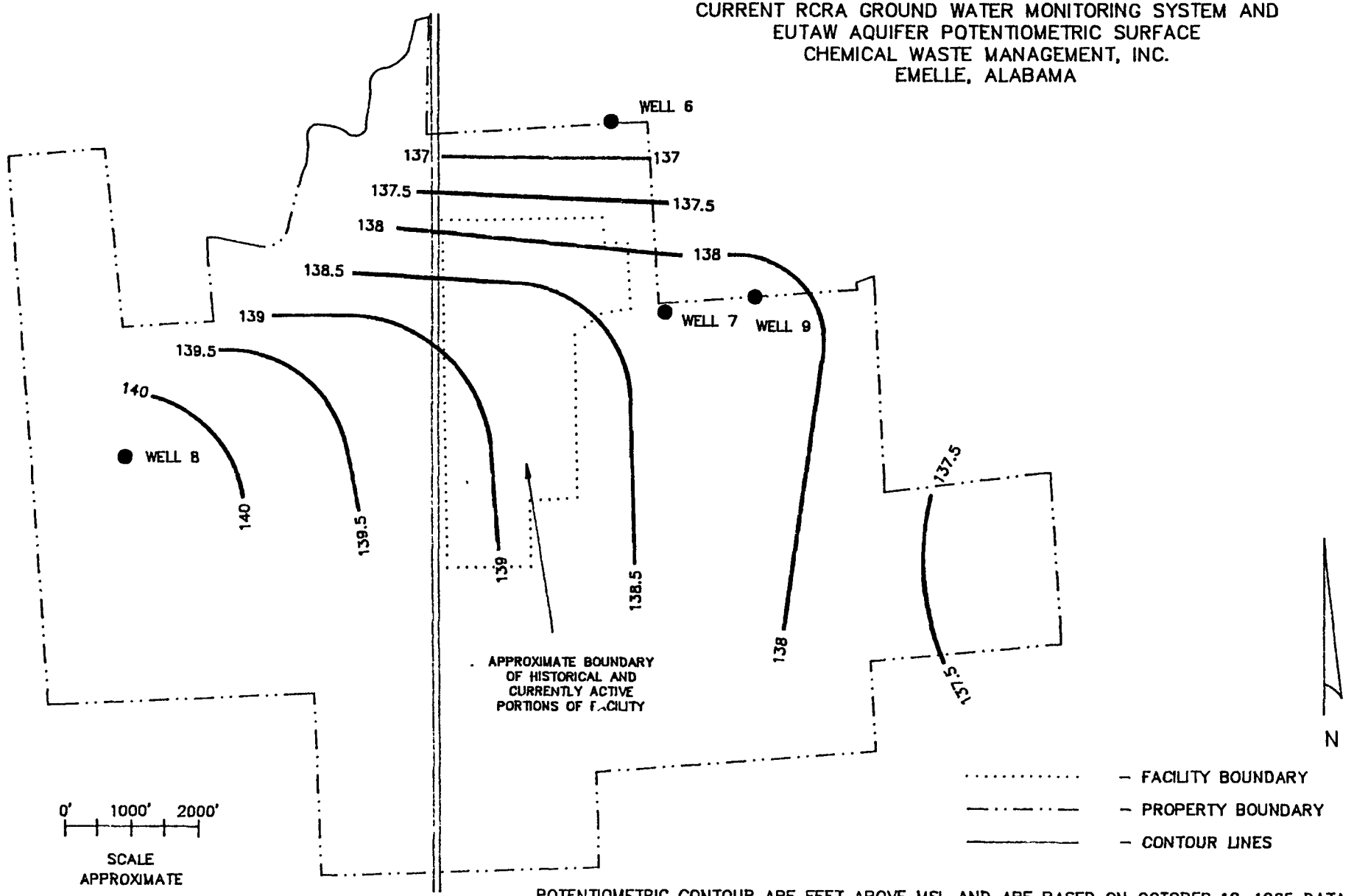
FIGURE 6
APRIL 1983 REVISED RCRA GROUND WATER MONITORING SYSTEM AND
EUTAW AQUIFER POTENTIOMETRIC SURFACE
CHEMICAL WASTE MANAGEMENT, INC.
EMELLE, ALABAMA



POTENTIOMETRIC CONTOUR ARE FEET ABOVE MSL AND ARE BASED ON OCTOBER 18, 1985 DATA.

DH6319A

FIGURE 7
CURRENT RCRA GROUND WATER MONITORING SYSTEM AND
EUTAW AQUIFER POTENTIOMETRIC SURFACE
CHEMICAL WASTE MANAGEMENT, INC.
EMELLE, ALABAMA



POTENTIOMETRIC CONTOUR ARE FEET ABOVE MSL AND ARE BASED ON OCTOBER 18, 1985 DATA.

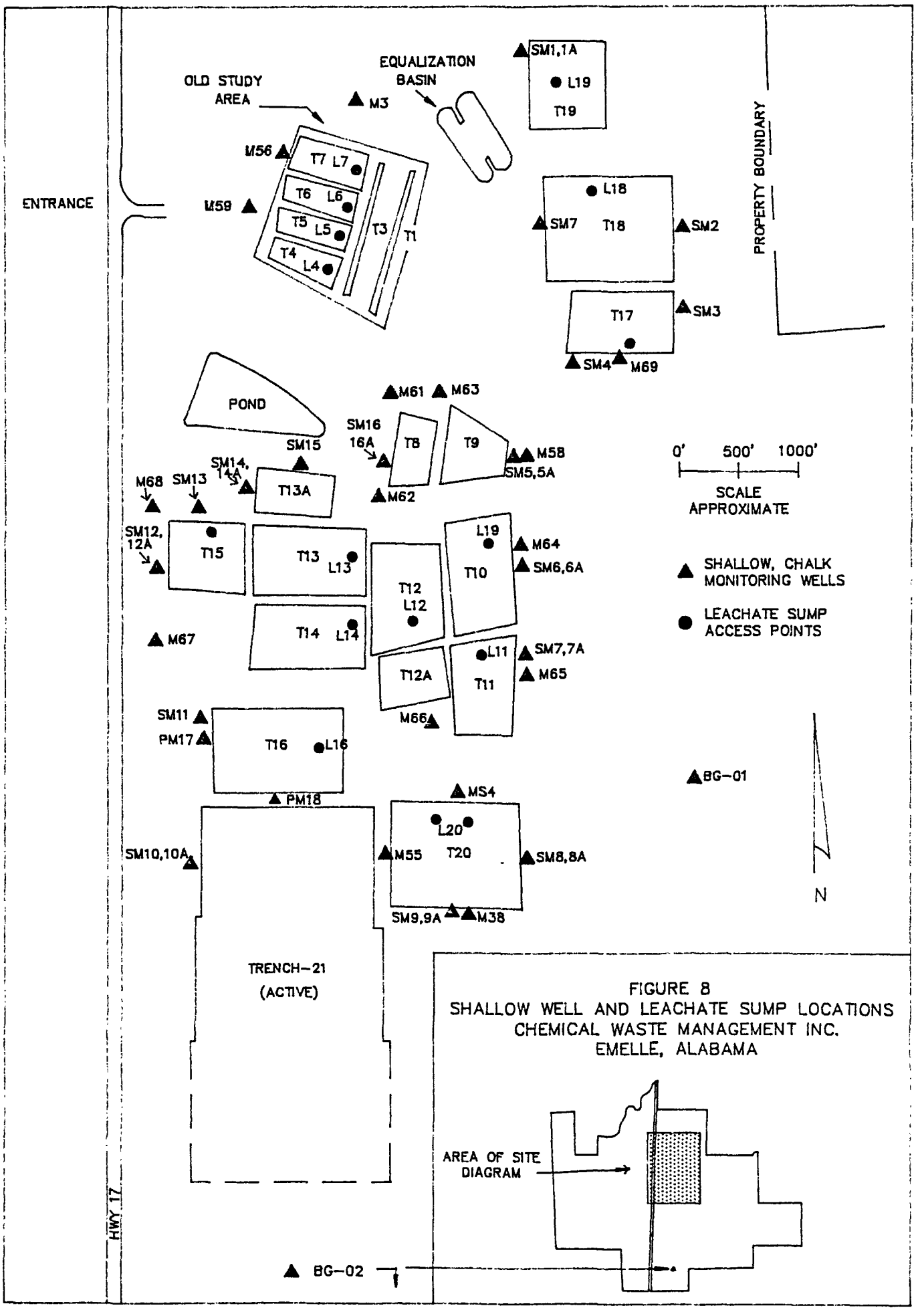


FIGURE 8
SHALLOW WELL AND LEACHATE SUMP LOCATIONS
CHEMICAL WASTE MANAGEMENT INC.
EMELLE, ALABAMA

DH6319

TABLES

TABLE 1
SAMPLING SUMMARY
HWGWTF EVALUATION
CHEMICAL WASTE MANAGEMENT, INC.
EMELLE, ALABAMA
SEPTEMBER 15-25, 1986

WELL NO	DATE SAMPLED	LOCATION	BOTTLES SUBMITTED FOR ANALYSIS
BG-02	9/23/86	4500 FT SOUTH OF TRENCH NO 21	E(2), Tm,Tc,Tx,P,C,V
SM-2	9/22/86	EAST SIDE OF TRENCH NO 18	F
SM-5	9/23/86	EAST SIDE OF TRENCH NO 9	F
SM-6	9/23/86	EAST SIDE OF TRENCH NO 10	E(4), Tm,Tc,Tx,P,C,V
SM-7A	9/23/86	EAST SIDE OF TRENCH NO 11	F
SM-8	9/22/86	EAST SIDE OF TRENCH NO 20	E(2), Tm, V
SM-9A	9/23/86	SOUTH SIDE OF TRENCH NO 20	E(2), Tm,Tc,P,C,V
SM-9A dup			E(2), Tm,Tc,P,C,V
SM-11	9/23/86	WEST SIDE OF TRENCH NO 16	E(2), Tm,Tc,P,C,V
SM-13	9/22/86	NORTH SIDE OF TRENCH NO 15	F
SM-14	9/22/86	WEST SIDE OF TRENCH NO 13	F
SM-16	9/22/86	WEST SIDE OF TRENCH NO 8	F
Eutaw 7	9/17/86	PROPERTY CORNER EAST OF TRENCH NO 17	F
Eutaw 7 dup			
Eutaw 8	9/18/86	ONE MILE WEST OF HWY 17	F
M-56	9/23/86	NW CORNER OLD STUDY AREA	E(3), Tm,V
M-58	9/23/86	EAST SIDE OF TRENCH NO 9	E(4),Tm,Tc,Tx,P,C,S,V
M-62	9/23/86	SW CORNER OF TRENCH NO 8	E(3), Tm,Tc,P,V
L-9	9/19/86	LEACHATE SUMP, TRENCH NO 9	F
L-15	9/19/86	LEACHATE SUMP, TRENCH NO 15	F
TB-1	9/22/86		F
TB-2	9/22/86		F
FB-1	9/17/86		F
FB-2	9/22/86		F
FB-3	9/23/86		F
PE-01	9/22/86		F

BG - Background chalk well
SM - Consent Agreement chalk well
Eutaw - Deep RCRA well
M - TSCA chalk well
L - Leachate sump
TB - Trip blank
FB - Field blank
PE - Performance Evaluation Sample

E = Extractable Organic (2 = sample bottles) (3 = sample bottles) (4 = sample bottles)
F = Full Sample Set
Tm = Total Metals
Tc = TOC
Tx = TOX
P = Phenol
C = Cyanide
S = SO_4 + Cl
V = 2 P&T Vials, 1 POC Vial, 1 POX Vial

Table 2

SAMPLE BOTTLES AND PRESERVATIVES

PREFERRED ORDER OF COLLECTION

HWGWTF EVALUATION

CHEMICAL WASTE MANAGEMENT, INC.

EMELLE, ALABAMA

No.	Parameter, Container, Preservative[1]
2	Purge and trap, 40 ml vials
1	Purgeable organic carbon, 40 ml vial
1	Purgeable organic halogen, 40 ml vial
4	Extractable organic, 1 liter bottles
1	Total metals, 1 liter bottle, HNO_3 pH < 2
1	Total organic carbon, 250 ml bottle, H_2SO_4 pH < 2
1	Total organic halogen, l liter bottle
1	Phenols, l liter bottle, H_2SO_4 pH < 2
1	Cyanide, l liter bottle, NaOH pH > 12
1	Sulfate and chloride, l liter bottle
1	Nitrate and ammonia, l liter bottle, H_2SO_4 pH < 2

1 All samples also iced to $4^{o}C$

TABLE 3
LIST AND DESCRIPTION OF TRENCHES T-1 THROUGH T-20;
TRENCHES FILLED PRIOR TO FEBRUARY 24, 1986
CHEMICAL WASTE MANAGEMENT, INC.
EMELLE, ALABAMA

Trench Number	Approximate Aerial Dimensions (feet)	Approximate Average Depth (feet)
T-1	50 x 700	30
T-3	50 x 800	40
T-4	150 x 340	60
T-5	120 x 340	60
T-6	120 x 340	65
T-7	170 x 340	65
T-8	200 x 400	80
T-9	320 x 400	80
T-10	270 x 440	100
T-11	280 x 440	100
T-12	300 x 500	100
T-12A	210 x 290	50
T-13	330 x 550	50
T-13A	200 x 410	50
T-14	280 x 550	50
T-15	320 x 520	50
T-16	390 x 640	90
T-17	250 x 500	50
T-18	500 x 610	110
T-19	300 x 400	40
T-20	510 x 600	120

Notes:

1. Trench T-2 was never developed.

2. Trench T-19 no longer receives wastes, and is in the process of being closed.

3. Trenches T-1 through T-9 where active prior to November 19, 1980, but did not receive hazardous wastes after that date.

4. Trenches T-10 through T-20 were active between November 19, 1980, and September 8, 1985, (therefore are interim status units) but did not receive hazardous wastes after the later date.

Source: Chemical Waste Management Part B

TABLE 4
RCRA WASTE LANDFILLED AT CWM, EMELLE
CHEMICAL WASTE MANAGEMENT, INC.
EMELLE, ALABAMA

Process Code	Waste Identification Codes					
D81	D001	D005	D008	D011	D014	D016
	D002	D006	D009	D012	D015	D017
	D004	D007	D010	D013		
	F001	F003	F005	F007	F009	F011
	F002	F004	F006	F008	F010	F012
	F019	F028				
	K001	K016	K029	K041	K062	K096
	K002	K017	K030	K042	K069	K097
	K003	K018	K031	K043	K071	K098
	K004	K019	K032	K046	K073	K099
	K005	K020	K033	K048	K083	K100
	K006	K021	K034	K049	K084	K101
	K007	K022	K035	K050	K085	K102
	K008	K023	K036	K051	K087	K103
	K009	K024	K037	K052	K093	K104
	K010	K025	K038	K060	K094	K105
	K014	K026	K039	K061	K095	K106
	K015	K028	K040	K117	K118	K136
	P001	P023	P044	P063	P084	P109
	P002	P024	P045	P064	P085	P110
	P003	P026	P046	P066	P087	P111
	P004	P027	P047	P067	P088	P113
	P005	P028	P048	P068	P089	P114
	P007	P031	P049	P069	P092	P115
	P008	P033	P050	P070	P093	P116
	P010	P034	P051	P071	P094	P117
	P011	P037	P054	P072	P095	P118
	P012	P038	P056	P073	P096	P119
	P014	P039	P057	P075	P097	P120
	P015	P040	P058	P076	P101	P123
	P016	P041	P059	P077	P102	
	P017	P042	P060	P078	P103	
	P018	P043	P062	P082	P105	
	P020				P108	

*This unit may accept wastes with cyanides at low concentrations exhibiting no reactivity.

Source: Chemical Waste Management Part B

TABLE 4
(Cont.)

Process Code	Waste Identification Codes					
D81 (cont'd.)	U001	U043	U082	U122	U162	U204
	U002	U044	U083	U123	U163	U206
	U003	U045	U084	U124	U164	U207
	U004	U046	U085	U125	U165	U208
	U005	U047	U086	U126	U166	U209
	U007	U048	U087	U127	U167	U210
	U008	U049	U088	U128	U168	U211
	U009	U050	U089	U129	U169	U212
	U010	U051	U090	U130	U170	U213
	U011	U052	U091	U131	U171	U214
	U012	U053	U092	U132	U172	U215
	U014	U055	U093	U134	U173	U216
	U015	U056	U094	U136	U174	U217
	U016	U057	U095	U137	U176	U218
	U017	U058	U097	U138	U177	U219
	U018	U059	U098	U139	U178	U220
	U019	U060	U099	U140	U179	U221
	U021	U061	U101	U141	U180	U222
	U021	U062	U102	U142	U181	U225
	U022	U063	U103	U143	U182	U226
	U024	U064	U104	U144	U183	U227
	U025	U066	U105	U145	U184	U228
	U026	U067	U106	U146	U185	U235
	U027	U068	U107	U147	U186	U236
	U028	U069	U108	U148	U187	U237
	U029	U070	U109	U149	U188	U238
	U030	U071	U110	U150	U190	U239
	U031	U072	U111	U151	U191	U240
	U032	U073	U112	U152	U192	U244
	U034	U074	U113	U153	U193	U247
	U035	U075	U114	U154	U194	U248
	U036	U076	U115	U155	U196	U249
	U037	U077	U116	U156	U197	
	U038	U078	U117	U157	U200	
	U039	U079	U118	U158	U201	
	U041	U080	U119	U159	U202	
	U042	U071	U120	U161	U203	
			U121			
	Site-generated industrial and Clean-up wastes (after stabilization) including:					
	Sanitary wastes		Floor drainage			
	Sump drainage		Contaminated rainwater			

Source: Chemical Waste Management Part B

Table 5

SAMPLE PARAMETERS, CONTAINERS AND PRESERVATIVES

CHEMICAL WASTE MANAGEMENT, INC.

EMELLE, ALABAMA

Sample Type	Bottle Type	Preservative
Extractable Organics (Pesticides and Herbicides)	2 L amber glass (baked)	Cool, $4^{o}C$
Volatile Organics	40 ml(2) baked vials w/septum lid	Cool, $4^{o}C$
Metals	1 L plastic	Nitric, < 2
TOX	1 L amber glass	Na_2SO_3
Phenols, TOC, Nitrate/Nitrite	125 ml amber glass	Sulfuric, < 2
Sulfate	125 ml amber (baked)	Cool, $4^{o}C$
Ammonia	500 ml amber glass	Sulfuric, < 2
Conventional	500 ml (DI rinse) plastic	Cool, $4^{o}C$
Gross Alpha/Beta	1 L plastic	Nitric, < 2

TABLE 6
ANALYTICAL METHODS FOR PART 265 GROUNDWATER MONITORING
CHEMICAL WASTE MANAGEMENT, INC.
EMELLE, ALABAMA

Parameter	Method[1]	Reference[2]
Arsenic	AA	EPA 600
Barium	ICP	EPA 600
Cadmium	ICP	EPA 600
Chromium	ICP	EPA 600
Fluoride	Distillation Probe	EPA 600
Lead	ICP	EPA 600
Mercury	AA1	EPA 600*
Nitrate (as N)	Brucine Sulfate	EPA 600
	Cd Reduction	SM 370
Selenium	AA	EPA 600
Silver	ICP	EPA 600
Endrin	GC	AM
Lindate	GC	AM
Methoxychlor	GC	AM
Toxaphene	GC	AM
2,4-D	GC	AM
2,4,5-TP	GC	AM
Radium 226	Proportional Counter	SM 706
Radium 228	Proportional Counter	SM 707
Gross Alpha	Proportional Counter	SM 703
Gross Beta	Proportional Counter	SM 703
Chloride	Automated Ferricyanimide	SM 271
Iron	ICP	EPA 600
Manganese	ICP	EPA 600
Phenols	Distillation Colorimetric	SM 513
Sodium	ICP	EPA 600
Sulfate	Gravimetric	SM 436
Total organic carbon	Distillation Infrared Detection	SM 1974
Total organic halogen	-	EPA 450.1
Specific conductance	Wheatstone Bridge	SM 70
pH	Electrometric	EPA 239

[1]AA: Furnace Atomic Absorption; ICP: Emission Spectrometry; AA1: Cold Vapor Atomic Absorption; GC: Gas Chromatography

[2]EPA 600: "Methods for Chemical Analysis of Water and Wastes," EPA 600/4-79-020, March, 1979; EPA 600*: "Methods for Chemical Analysis of Water and Wastes," EPA 600/4-79-020, August, 1979; SM: "Standard Methods for the Examination of Water and Wastewater," 15th Edition, 1980; AM: "Manual of Analytical Methods for the Analysis of Pesticides in Humans and Environmental Samples," June, 1980, EPA; EPA 450: EPA Method 450.1, November 1980, Identical to EPA Method 8.66 in SW-846, Rev B.4/81, 40 CFR265.92.

TABLE 7
HWGWTF ANALYTICAL DATA SUMMARY
GROUND WATER SAMPLES, EUTAW WELLS
CHEMICAL WASTE MANAGEMENT
EMELLE, ALABAMA

	WELL 7 EUTAW WELL 09/17/86	WELL 8 EUTAW WELL 09/19/86
INORGANIC ELEMENT/COMPOUND	UG/L	UG/L
BARIUM	38	500
LEAD	--	6.6
ALUMINUM	--	120J
MANGANESE	10	7
	MG/L	MG/L
CALCIUM	4.4	--
MAGNESIUM	1.5	1.1
IRON	0.13J	0.21J
SODIUM	510	420
CONVENTIONAL PARAMETERS	MG/L	MG/L
AMMONIA	1.3	1.1
CHLORIDE	510	410

****

FOOTNOTES
J - ESTIMATED VALUE
-- - MATERIAL WAS ANALYZED FOR BUT NOT DETECTED

TABLE 8
HWGWTF ANALYTICAL DATA SUMMARY
GROUND WATER SAMPLES, CHALK WELLS
CHEMICAL WASTE MANAGEMENT
EMELLE, ALABAMA

	BG-02 CONS AGR WELL 09/23/86	SM-2 CONS AGR WELL 09/22/86	SM-5 CONS AGR WELL 09/23/86	SM-7A CONS AGR WELL 09/23/86	SM-8 CONS AGR WELL 09/22/86	SM-9A CONS AGR WELL 09/23/86	SM-11 CONS AGR WELL 09/23/86	SM-13 CONS AGR WELL 09/22/86	SM-14 CONS AGR WELL 09/22/86	SM-16 CONS AGR WELL 09/22/86	M-56 PCB WELL 09/23/86	M-58 PCB WELL 09/23/86	M-62 PCB WELL 09/17/86
INORGANIC ELEMENT/COMPOUND	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
ARSENIC	--	--	--	--	6.8J	--	--	5.3J	--	--	--	--	--
BARIUM	41	43	110	62	100	80	94	48	54	28	290	36	38
COBALT	7	--	--	--	11	--	10	--	--	--	--	7	--
NICKEL	--	--	29	--	--	--	--	--	--	--	--	25	--
SELENIUM	--	--	2.0J	--	3.6J	--	5.9J	--	--	--	--	--	--
ZINC	--	26	25	--	80	--	--	--	--	--	--	--	--
ALUMINUM	330J	--	1200J	--	1.0J	--	5200J	--	270J	--	400J	--	--
MANGANESE	280	330	140	68	540	880	400	180	350	79	--	210	10
	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
CALCIUM	100	19	180	110	240	32	160	40	160	120	7.4	90	4.2
MAGNESIUM	34	7.1	60	43	30	13	18	16	61	37	8.6	40	1.5
IRON	0.36J	0.44J	2.0J	--	1.6J	0.05J	4.8J	0.03J	0.49J	0.17J	--	4.9J	0.14J
SODIUM	220	310	170	310	260	310	190	330	220	180	180	310	490
POTASSIUM	9.2	--	12	9.9	11	--	7.8	7.8	10	8.0	16	10	--
PURGEABLE ORGANIC COMPOUNDS	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
1,1-DICHLOROETHANE	--	--	2.6JN	--	--	--	--	--	--	--	--	--	--
CHLOROFORM	--	--	6.3	--	--	--	--	--	--	--	--	--	--
TRICHLOROETHENE(TRICHLOROETHYLENE)	--	1.8J	--	--	--	--	--	--	--	--	--	--	--
BENZENE	--	--	--	--	--	--	--	--	--	--	1.0J	--	--
TOLUENE	--	--	--	--	1.3J	--	--	--	--	--	--	--	--
METHYL BUTYL KETONE	--	--	--	--	15	--	--	--	--	--	--	--	--
CONVENTIONAL PARAMETERS	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
AMMONIA	NA	1.0	1.0	1.0	NA	NA	NA	1.1	1.0	0.80	NA	NA	1.4
CHLORIDE	NA	160	44	120	NA	NA	NA	190	63	59	NA	140	490
NITRATE-NITRITE NITROGEN	NA	0.09	--	0.56	NA	NA	NA	0.90	1.3	0.32	NA	NA	--
SULFATE	NA	94	460	560	NA	NA	NA	190	650	400	NA	560	--
TOTAL ORGANIC CARBON	55J	--	--	--	NA	--	--	--	--	--	NA	--	--
	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
TOTAL ORGANIC HALOGEN	250	--	--	--	NA	NA	NA	--	--	--	NA	--	--

****

FOOTNOTES
NA - NOT ANALYZED
J - ESTIMATED VALUE
N - PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
-- - MATERIAL WAS ANALYZED FOR BUT NOT DETECTED

TABLE 9
HWGWTF ANALYTICAL DATA SUMMARY
LEACHATE SAMPLES
CHEMICAL WASTE MANAGEMENT
EMELLE, ALABAMA

	L-9 LEACHATE TRNCH 9 09/22/86	L-15 LEACHATE TRNCH 15 09/18/86
RCRA WASTE CHARACTERISTICS	UG/L	UG/L
PURGEABLE ORGANIC HALOGEN	43000R	680000R
INORGANIC ELEMENT/COMPOUND	UG/L	UG/L
ARSENIC	120J	550J
BARIUM	140	410
COBALT	18	1100
COPPER	84	300
NICKEL	450	3800
LEAD	--	2500J
ANTIMONY	--	560J
SELENIUM	16J	55J
THALLIUM	--	260J
ZINC	220	320
MERCURY	--	0.4JN
ALUMINUM	280J	1000J
MANGANESE	900	340
	MG/L	MG/L
CALCIUM	110	1500
MAGNESIUM	55J	24
IRON	0.65J	2.1J
SODIUM	1000	6500
POTASSIUM	1600	1100
SELECTED CHLORINATED COMPOUNDS	UG/L	UG/L
ALPHA-BHC	50JN	NAI
EXTRACTABLE ORGANIC COMPOUNDS	UG/L	UG/L
1,2-DICHLOROBENZENE	560J	NAI
PHENOL	28000	NAI
4-NITROPHENOL	920JN	NAI
METHYLCYCLOPENTANONE	57000JN	--
METHYLBENZOIC ACID	35000JN	--
OXYBISBENZENE	22000JN	--
BENZENEAMINE	7900JN	--
11 UNIDENTIFIED COMPOUNDS	300000J	--
4-METHYLPHENOL	15000J	--
BENZOIC ACID	320000J	--

(Continued on next page)

TABLE 9
HWGWTF ANALYTICAL DATA SUMMARY
LEACHATE SAMPLES
CHEMICAL WASTE MANAGEMENT
EMELLE, ALABAMA

	L-9 LEACHATE TRNCH 9 09/22/86	L-15 LEACHATE TRNCH 15 09/18/86
PURGEABLE ORGANIC COMPOUNDS	UG/L	UG/L
1,1-DICHLOROETHANE	4000J	NAI
BENZENE	5300J	NAI
TOLUENE	43000	NAI
ETHYL BENZENE	2300J	NAI
TOTAL XYLENES	9200	NAI
DIMETHYLDISULFIDE	42000JN	--
CARBON DISULFIDE	4200J	--
METHYL ETHYL KETONE	230000J	--
CONVENTIONAL PARAMETERS	MG/L	MG/L
AMMONIA	75	140
CHLORIDE	900	12000J
CYANIDE	NA	11J
SULFATE	1400J	--
	UG/L	UG/L
PHENOL (4AAP)	25000	390000
	MG/L	MG/L
TOTAL ORGANIC CARBON	2800J	9900J
PURGEABLE ORGANIC CARBON	210J	1600J
	UG/L	UG/L
TOTAL ORGANIC HALOGEN	4500R	76000R

****

FOOTNOTES
NA - NOT ANALYZED
NAI - INTERFERENCES
J - ESTIMATED VALUE
N - PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
-- - MATERIAL WAS ANALYZED FOR BUT NOT DETECTED

APPENDICES

APPENDIX A

VERSAR WELL MONITORING SHEET

Date: Beg. 9/16/86 End 9/23/86

Site Name/Case No. 6480-1944 HQ CWM - Emelle Ala.

Well No./Location BG-02

SMO No./Fac. No. Q-1342 / MGA642 / Q-2

1. Well Measurements

Well Diameter (inner) 2" PVC

Inner Casing Ht. -

Outer Casing Diameter 8" aluminum

DTW 42.63-TOC

Total Depth 100.60-GS

Water Column Length 57.97 *

3 Casing Vol 27.8 gallons

Vol. Purged 84 gallons

2. General Observations

Organic Vapors (HNu, OVA, TIP) HNu - nothing detected

Sediment N.A

Color JBH ~~N.A~~ Clear

Odor JBH ~~N.A~~ None

3. In Situ Measurements

	1	2	
(Time)	10:07		purge
Temperature	20.3°C		
Conductivity	1100		
pH	6.5		
Turbidity	82 NTU		

	3	4	
(Time)	0850		Sample
Temperature	20.3°C		
Conductivity	1200		
pH	6.9		
Turbidity	42 NTU		

4. Sample Methods

- Bailer
- Bladder ✓
- Other
- Lot No.
- Time Beg. 0850 End 0933
- Depth Sampled Bladder depth
- Sample Volume ~~[illegible]~~ ≈ 4 gallons

5. Notes

- Well Security Lock Cap
- Disposal of Purge Water Ground
- Nonaqueous Phases —
- Dedicated Equipment Well Wizards
- Casing Material PVC
- Weather Conditions Sunny, Humid, Light Breeze
- Other Sample set only 2 extra NO = NO_3 + NH_4 or Sulfate

Measurements { TOC = Top of casing; GS = Ground surface

* not corrected for stick up.

VERSAR WELL MONITORING SHEET

Date: Beg. 9 16 86 End 9/22/86

Site Name/Case No. 6430 1944 HQ CWM - Emelle Al

Well No./Location SM-2

SMO No./Fac. No. Q-1332/MQA-632/Q-6

1. Well Measurements

Well Diameter (inner) 2" PVC

Inner Casing Ht. -

Outer Casing Diameter 8" steel

DTW 42.39 - TOC

Total Depth 153.46 - GS

Water Column Length 111.07 *

3 Casing Vol ≈ ~~[illegible]~~ 53.3

Vol. Purged 10.½ gal

2. General Observations

Organic Vapors (HNu, OVA, TIP)
HNU - Not Detected

Sediment NA

Color JBH ~~NA~~ clear

Odor JBH ~~NA~~ None

3. In Situ Measurements

(Time)	1 ~~[illegible]~~	2 1200
Temperature	~~[illegible]~~	19.1°C
Conductivity	~~[illegible]~~	1210
pH	~~[illegible]~~	7.1
Turbidity		2.6 NTU

purge

(Time)	3 1648	4 ~~[illegible]~~
Temperature	20.6°C	~~[illegible]~~
Conductivity	JBH ~~[illegible]~~ 1025	~~[illegible]~~
pH	7.4	
Turbidity	20 NTU	

Sample

4. Sample Methods

- Bailer
- Bladder ✓
- Other
- Lot No.
- Time Beg. 1640 End 1737
- Depth Sampled bladder depth
- Sample Volume ≈ 4 gallons

5. Notes

- Well Security Locking Cap
- Disposal of Purge Water Ground surface
- Nonaqueous Phases
- Dedicated Equipment well bizzel QED
- Casing Material PVC
- Weather Conditions Sunny, Hot Dusty
- Other Full Set

Measurements { TOC = Top of casing; GS = Ground Surface

* not corrected for stick up

VERSAR WELL MONITORING SHEET

Date: Beg. 9/16/86 End 9/23/86

Site Name/Case No. 6430 1944 HQ CWM - Emelle AL

Well No./Location Sm-5

SMO No./Fac. No. Q1363/MQA663/Q-10

Region IV X-9

1. Well Measurements

Well Diameter (inner) 2" pvc

Inner Casing Ht. —

Outer Casing Diameter 8" Steel

DTW 42.04 - TOC

Total Depth 59.05 - GS

Water Column Length 17.01 *

3 Casing Vol 8.16 ≈ ~~8.92~~ gallons

Vol. Purged 3½ gal

2. General Observations

Organic Vapors (HNu, OVA, TIP)

HNu - Nothing

Above background

Sediment NA

Color clear

Odor None

3. In Situ Measurements

(Time)	1 11 45	2
Temperature	24.2°C	
Conductivity	1075	
pH	7.04	
Turbidity	82 NTU	

(Time)	3	4 0850
Temperature		20.3°C
Conductivity		1200
pH		6.9
Turbidity		>100 NTU

Sample

4. Sample Methods

- Bailer
- Bladder ✓
- Other
- Lot No.
- Time Beg. 1045 End 1110
- Depth Sampled from bladder depth
- Sample Volume ≈ 4.0 gallons

5. Notes

- Well Security Locking Cap
- Disposal of Purge Water Ground
- Nonaqueous Phases
- Dedicated Equipment Well Lateral
- Casing Material PVC all
- Weather Conditions Sunny Humid dusty
- Other Full set

Measurements { TOC = Top of Casing; GS = Ground Surface

* not corrected for stickup

VERSAR WELL MONITORING SHEET

Date: Beg. 9/11/86 End 9/23/86

Site Name/Case No. 6430 1944 HQ CWM - Emelle AL

Well No./Location 5M6

SMO No./Fac. No. Q-1353 / MQA 653 / Q-24

1. Well Measurements

Well Diameter (inner) 2" PVC

Inner Casing Ht. —

Outer Casing Diameter 8" Steel

DTW 20.32-TOC

Total Depth 101.07-GS

Water Column Length 80.75 *

3 Casing Vol ~~[illegible]~~ 38.76 gals.

Vol. Purged 11 7/8 gallon

2. General Observations

Organic Vapors (HNu, OVA, TIP)

HNu - nothing above background

Sediment NA

Color Clear

Odor None

3. In Situ Measurements

(Time)	1 10.35	2	
Temperature	21.7°C		purge
Conductivity	1640		
pH	7.3		
Turbidity	6.1 NTU		

(Time)	3	4 0840	
Temperature		24.8°C	sample
Conductivity		1610	
pH		6.24	
Turbidity		>100 NTU	

4. Sample Methods

- Bailer
- Bladder ✓
- Other
- Lot No.
- Time Beg. 0835 End 0910
- Depth Sampled from bladder depth
- Sample Volume ≈ 3.5 gallons

5. Notes

- Well Security Lock Cap
- Disposal of Purge Water Ground Surface
- Nonaqueous Phases
- Dedicated Equipment well bizards
- Casing Material PVC
- Weather Conditions Sunny, Hot Humid Daily 90°F
- Other

Full except for SO_4 tol and NO_3 + NH_4

Measurements { TOC = Top of Casing; GS = Ground Surface

* not corrected for stick up

VERSAR WELL MONITORING SHEET

Date: Beg. 9/17/86 End 9/23/86

Site Name/Case No. 6430 1986 HO CWM - Emelle AL

Well No./Location SM 7A

SMO No./Fac. No. Q-1330 MQA 630 / Q-20

1. Well Measurements

Well Diameter (inner) 2"

Inner Casing Ht. —

Outer Casing Diameter 8" Steel

DTW 62.99-TOC

Total Depth 123.34-GS

Water Column Length 60.35*

3 Casing Vol 28.96 gallons

Vol. Purged 60.0 gallons

2. General Observations

Organic Vapors (HNu, OVA, TIP)

HNU nothing above background

Sediment NA

Color Clear

Odor None

3. In Situ Measurements

	1	2	
(Time)	1325		Purge
Temperature	23.3C		
Conductivity	1675		
pH	7.3		
Turbidity	47 NTU		

	3	4	
(Time)	1004		Sample
Temperature	24.6C		
Conductivity	1450		
pH	6.98		
Turbidity	22 NTU		

4. Sample Methods

- Bailer
- Bladder X
- Other
- Lot No.
- Time Beg. 0955 End
- Depth Sampled Top bladder depth
- Sample Volume ≈ 4 gallons

5. Notes

- Well Security lock hasp
- Disposal of Purge Water Ground Surface
- Nonaqueous Phases
- Dedicated Equipment Well wizard
- Casing Material PVC
- Weather Conditions Sunny, Humid dusty 90's
- Other Full Suit

measurements { TOC = Top of Casing; GS = Ground Surface } * not corrected for stick

VERSAR WELL MONITORING SHEET

Date: Beg. 9/16/86 End 9/22/86

Site Name/Case No. 6430 1944 HQ CWM-Emelle AL

Well No./Location SM-4

SMO No./Fac. No. Q-1327 / MQA-6271 Q-16

Region IV X-2

1. Well Measurements

Well Diameter (inner) 2"

Inner Casing Ht. —

Outer Casing Diameter 8" Steel

DTW 73.08-TOC

Total Depth 133.0-GS

Water Column Length 59.92 *

3 Casing Vol 28.76 gallons

Vol. Purged 9 gallons

2. General Observations

Organic Vapors (HNu, OVA, TIP)

HNu, nothing above background

Sediment NA

Color Clear

Odor None

3. In Situ Measurements

(Time)	1 1326	2	
Temperature	25.58		purge
Conductivity	1090		
pH	7.52		
Turbidity	2 [illegible]		

(Time)	3 1332	4	
Temperature	26.82		Sample
Conductivity	1225		
pH	7.3		
Turbidity	51 NTU		

4. Sample Methods

- Bailer
- Bladder ✓
- Other
- Lot No.
- Time Beg. 1325 End 1420
- Depth Sampled bladder depth
- Sample Volume ≈ 4 gallons

5. Notes

- Well Security Locking Cap
- Disposal of Purge Water Ground Surface
- Nonaqueous Phases
- Dedicated Equipment [illegible]
- Casing Material PVC
- Weather Conditions 90 Hard Dusty, ~~[illegible]~~ IBH. Cloudy
- Other Set includes: 2 pt VOA, 2 extractables, 1 TOT. Metals, 1-PCC, 1-PCX

Measurements { TOC = Top of Casing; GS = Ground Surface

* not corrected for stick up

VERSAR WELL MONITORING SHEET

Date: Beg. 9/16/86 End 9/23/86

Site Name/Case No. 6430 1949 HQ CWM - Emelle AL

Well No./Location SM-9A

SMO No./Fac. No. 51334, [illegible] // 21353, [illegible] Dup // G4

1. Well Measurements

Well Diameter (inner) 2" PVC

Inner Casing Ht.

Outer Casing Diameter 4 3/4" Aluminum

DTW 58.79-TOC

Total Depth 163.81-GS

Water Column Length 105.02*

3 Casing Vol 50.40 gal

Vol. Purged Dry 12 gal

2. General Observations

Organic Vapors (HNu, OVA, TIP)

[illegible]

Sediment —

Color Clear

Odor —

3. In Situ Measurements

(Time)	1 14:40	2	
Temperature	27.6		Purge
Conductivity	1160		
pH	6.77		
Turbidity	4.9 NTU		

(Time)	3 11:29	4	
Temperature	20.3		Sample
Conductivity	1225		
pH	7.5		
Turbidity	25 NTU		

Measurements { TOC = Top of Casing, GS = Ground Surface

4. Sample Methods

- Bailer
- Bladder ✓
- Other
- Lot No.
- Time Beg. 11:23 End 12:07
- Depth Sampled Predetermined Water
- Sample Volume 5 gallons

5. Notes

- Well Security Locking Cap
- Disposal of Purge Water Ground
- Nonaqueous Phases —
- Dedicated Equipment Well Ground
- Casing Material PVC
- Weather Conditions 90°, Hot, Humid, Dust
- Other Full set Loss: 2 Ext. Org., Sequel, Vegetation, TOX,

*not corrected for Stickup

VERSAR WELL MONITORING SHEET

Date: Beg. 9/16/96 End 9/23/96

Site Name/Case No. 6430 1944 HQ CWM - Emelle AL

Well No./Location Sm - 11

SMO No./Fac. No. MQA635 Q1335 // X-3 Region III // Q-11 Facility

1. Well Measurements

Well Diameter (inner) 2" PVC

Inner Casing Ht. —

Outer Casing Diameter 8" metal

DTW 31.73 - TOC

Total Depth 103.49 - GS

Water Column Length 71.76 *

3 Casing Vol AJD ~~[illegible]~~ 34.44 gals.

Vol. Purged 11.2 gal

2. General Observations

Organic Vapors (HNu, OVA, TIP)

Sediment non

Color Clear

Odor —

3. In Situ Measurements

(Time)	1 1025	2	
Temperature	19.3 C		Sample
Conductivity	900		
pH	7.3		
Turbidity	38 NTU ~~[illegible]~~	>100 NTU	

(Time)	3 14.45	4	
Temperature	20.5		Purge
Conductivity	90		
pH	7.1		
Turbidity	17 NTU		

measurements { TOC - Top of Casing
GS - Ground Surface

4. Sample Methods

- Bailer
- Bladder ✓
- Other
- Lot No.
- Time Beg. 10:00 End 10:45
- Depth Sampled Bladder Depth
- Sample Volume 4 gallons

5. Notes

- Well Security Lock Cap
- Disposal of Purge Water Ground
- Nonaqueous Phases —
- Dedicated Equipment Well Vessel
- Casing Material PVC
- Weather Conditions 90° Humid Dusty
- Other Full Set Less: 2 Ext Org, TOX, SO4+Cl, NO3 + ~~[illegible]~~

* not Corrected for Stick up

VERSAR WELL MONITORING SHEET

Date: Beg. 9/16/96 End 9/22/96

Site Name/Case No. 6430-1999 HQ CWM-Emelle AL

Well No./Location SM-13

SMO No./Fac. No. Q1329, MQA 629// Q-15 Facility

1. Well Measurements

Well Diameter (inner) 2" PVC

Inner Casing Ht. —

Outer Casing Diameter 8" Steel

DTW 43.62-TOC

Total Depth 147.89-GS

Water Column Length 104.27*

3 Casing Vol 50.04 gals

Vol. Purged 14 1/4 gal

2. General Observations

Organic Vapors (HNu, OVA, TIP)

HNu, nothing above background

Sediment —

Color Clear

Odor non

3. In Situ Measurements

(Time)	1 1611	2	
Temperature	19.8°C		purge
Conductivity	1390		
pH	7.3		
Turbidity	18 NTU		

(Time)	3 1759	4	
Temperature	20.3°C		Sample
Conductivity	1195		
pH	7.2		
Turbidity	23 NTU		

4. Sample Methods

- Bailer
- Bladder X
- Other
- Lot No.
- Time Beg. 1755 End 1830
- Depth Sampled Bladder Pump.
- Sample Volume 5 gallon

5. Notes

- Well Security Locking Cap
- Disposal of Purge Water Ground Surface
- Nonaqueous Phases non
- Dedicated Equipment Well Wand
- Casing Material 2" PVC
- Weather Conditions 90°, Humid, Dusty.
- Other Full set

Measurements { TOC = Top of Casing

* not corrected for Stickup

VERSAR WELL MONITORING SHEET

Date: Beg. 9/17/86 End 9/22/86

Site Name/Case No. 6430 1944 HQ CWM-Emelle AL

Well No./Location SM 14

SMO No./Fac. No. Q1359 MQA 654 / Q14

1. Well Measurements

Well Diameter (inner) 2"

Inner Casing Ht. —

Outer Casing Diameter 8" Steel

DTW 28.00 - TOC

Total Depth 72.96 - GS

Water Column Length 44.96

3 Casing Vol ~~[illegible]~~ 21.58 gals.

Vol. Purged 6.75 gallons

2. General Observations

Organic Vapors (HNu, OVA, TIP)

HNu, Nothing detected above background

Sediment —

Color Clear

Odor None

3. In Situ Measurements

(Time)	1 1003	2	
Temperature	25.1°C		purge
Conductivity	1450		
pH			
Turbidity	63 NTU		

(Time)	3 1444	4	
Temperature	20.1°C		Sample
Conductivity	1325		
pH	7.1		
Turbidity	31 NTU		

Measurements { TOC = Top of Casing; GS = Ground Surface

4. Sample Methods

- Bailer
- Bladder ✓
- Other
- Lot No.
- Time Beg. 1443 End 1457
- Depth Sampled bladder depth
- Sample Volume ≈ 4 gallons

5. Notes

- Well Security Locking Cap
- Disposal of Purge Water Ground Surface
- Nonaqueous Phases —
- Dedicated Equipment Well [illegible]
- Casing Material PVC
- Weather Conditions 90° [illegible] Sunny Dust
- Other Full Set

* Not Corrected for stick up

VERSAR WELL MONITORING SHEET

Date: Beg. 9/17/86 End 9/22/86

Site Name/Case No. 6450 1444 HG CWM-Emelle AL

Well No./Location 5M-16

SMO No./Fac. No. Q1331, M2A(3)// 212

1. Well Measurements

Well Diameter (inner) 2" Pvc

Inner Casing Ht. —

Outer Casing Diameter 8" Steel

DTW 35.36-TOC

Total Depth 90.16-GS

Water Column Length 54.8 *

3 Casing Vol 26.3 ~~[illegible]~~ gallons

Vol. Purged 7 gallons

2. General Observations

Organic Vapors (HNu, OVA, TIP)

HNu Nothing above background

Sediment —

Color Clear

Odor None

3. In Situ Measurements

(Time)	1 1111	2	
Temperature	24.00		purge
Conductivity	1300		
pH	6.9-7.1		
Turbidity	58 NTU		

(Time)	3 1518	4	
Temperature	20.6°C		Sample
Conductivity	975		
pH	7.2		
Turbidity	24 NTU		

Measurements { TOC = Top of casing; GS = Ground Surface

4. Sample Methods

- Bailer ____
- Bladder ✓
- Other ____
- Lot No. ____
- Time Beg. 1515 End 1530
- Depth Sampled bladder-depth
- Sample Volume ≈ 4 gallons

5. Notes

- Well Security Locking Cap
- Disposal of Purge Water Ground
- Nonaqueous Phases non
- Dedicated Equipment Well Record
- Casing Material Pvc
- Weather Conditions Sunny 90°C Humid, C.T.
- Other Full Set

* not corrected for stickup

VERSAR WELL MONITORING SHEET

Date: Beg. 9/17/86 End 9/23/86

Site Name/Case No. 6430-1944 HQ

Well No./Location M-58 CWM-Emelle AL

SMO No./Fac. No. 01326, MQA626 // Q-23 Facility // X-4

1. Well Measurements

Well Diameter (inner) 2" ~~PVC~~ Steel

Inner Casing Ht. —

Outer Casing Diameter 8" ~~24~~ steel

DTW 42.89-TOC

Total Depth 110.5-GS

Water Column Length 67.61*

3 Casing Vol 32.45 ~~[illegible]~~ gallon

Vol. Purged 10.1 gallons

2. General Observations

Organic Vapors (HNu, OVA, TIP)

HNu, Nothing above background

Sediment —

Color Clear

Odor non

3. In Situ Measurements

(Time)	1 1033	2	
Temperature	19.8°C		purge
Conductivity	1300		
pH	7.2		
Turbidity	40 NTU		

(Time)	3 1323	4	
Temperature	21.1°C		Sample
Conductivity	1325		
pH	7.2		
Turbidity	48		

Measurements { TOC = Top of Casing; GS = ground surface

4. Sample Methods

- Bailer ____
  Bladder ____
  Other air Lift
  Lot No. ____
- Time Beg. 1314 End 1333
- Depth Sampled ~~[illegible]~~ 53ft
- Sample Volume ~4 gallons

5. Notes

- Well Security Locking Hasp
- Disposal of Purge Water Ground
- Nonaqueous Phases —
- Dedicated Equipment air Lift System
- Casing Material 2" metal, 4" PVC outer
- Weather Conditions Sunny 90's Dusty
- Other Full Set Less: NH_4 + NO_3.

* not corrected for stickup

VERSAR WELL MONITORING SHEET

Date: Beg. 9/17/86 End 9/23/86

Site Name/Case No. 6430-1944 HQ

Well No./Location M-56 CWM-Emelle AL

SMO No./Fac. No. Q1328, MQA628 // Q-7 Facility // X-8 Region IV

1. Well Measurements

Well Diameter (inner) 2" Steel

Inner Casing Ht.

Outer Casing Diameter 8" Steel

DTW 32.76-TOC

Total Depth 87.6-GS

Water Column Length 54.84*

3 Casing Vol 26.32 gallon

Vol. Purged 7 gallons

General Observations

Organic Vapors (HNu, OVA, TIP)

HNU, Nothing above background

Sediment —

Color Clear

Odor None

3. In Situ Measurements

(Time)	1 1424	2 0945	
Temperature	20.1	19.6	purge
Conductivity	675	710	
pH	9.5	8.1	
Turbidity	23	2.9	

(Time)	3 1424	4	
Temperature	20.1°C		Sample
Conductivity	675		
pH	9.5		
Turbidity	23 NTU		

Measurements { TOC - Top of Casing; GS = Ground Surface

4. Sample Methods

- Bailer
- Bladder
- Other air Lift
- Lot No.
- Time Beg. 1415 End 1425
- Depth Sampled per tubing depth
- Sample Volume 2.5 gallon

5. Notes

- Well Security Locking Hasp
- Disposal of Purge Water Ground Surface
- Nonaqueous Phases —
- Dedicated Equipment air Lift System
- Casing Material 2" Metal, 4" Outer PVC
- Weather Conditions Sunny 90's Dusty
- Other Full Set Less: 1 Ext. Org., CN, SO4+Cl, NO3+NH4, TOX, TOC, Phenol.

*not corrected for stick up

VERSAR WELL MONITORING SHEET

Date: Beg. 9/17/86 End 9/23/86

Site Name/Case No. 6450 1944 HA CWM- Emelle AL

Well No./Location M-62

SMO No./Fac. No. Q13,25,114A625// Q-5 Facility

1. Well Measurements

Well Diameter (inner) 2" metal

Inner Casing Ht. —

Outer Casing Diameter 8" ~~PVC~~ Steel

DTW 79.16-TOC

Total Depth 158.6-GS

Water Column Length 79.44 *

3 Casing Vol 38.13 ~~[illegible]~~ gallons

Vol. Purged 9.75 gallons

2. General Observations

Organic Vapors (HNu, OVA, TIP)

HNu, nothing above background

Sediment —

Color Clear

Odor non

3. In Situ Measurements

(Time)	1 1256	2	
Temperature	19.4°C		Purge
Conductivity	1050		
pH	7.5		
Turbidity	31 NTU		

(Time)	3 1353	4	
Temperature	20.9		Sample
Conductivity	1100		
pH	7.7		
Turbidity	35 NTU		

4. Sample Methods

- Bailer
- Bladder ✓
- Other air Lift
- Lot No.
- Time Beg. 1350 End 1358
- Depth Sampled per ~~sample~~ tubing depth
- Sample Volume 2.5 gallons

5. Notes

- Well Security Looking hasp
- Disposal of Purge Water Ground
- Nonaqueous Phases Non
- Dedicated Equipment air Lift System
- Casing Material Metal inner 4" PVC outer
- Weather Conditions 90's, Humid Dusty
- Other Full Set Less: 1 Ext. Org., Tox, CN, SO4+Cl, NO3+NH4.

Measurements { TOC = Top of casing; GS = ground surface

* not corrected for Stick

VERSAR WELL MONITORING SHEET

Date: Beg. 9/17/86 End 9/17/86

Site Name/Case No. 6430-1944HQ

Well No./Location Eutaw #7

SMO No./Fac. No. Q1343/MOA 643 // Q1351/MOA 651 Dup. // Faulty split Q-1

1. Well Measurements

Well Diameter (inner) 2" PVC

Inner Casing Ht.

Outer Casing Diameter 4" metal

DTW 69.33 T.O.C.

Total Depth 708.25' ± G.S.

Water Column Length 638.92'

3 Casing Vol 1226 gallons

Vol. Purged 1482 gallons.

4. Sample Methods

- Bailer
- ~~Bladder~~ Bladder ✓ Submersible 2 pump System
- Other
- Lot No.
- Time Beg. 1743 End 1853
- Depth Sampled bladder depth
- Sample Volume 6 gallons

General Observations

Organic Vapors (HNu, OVA, TIP)

~~Non~~ - HNu = Nothing detected

Sediment Non

Color Clear

Odor Non

5. Notes

- Well Security Locking Cap
- Disposal of Purge Water Ground
- Nonaqueous Phases Non
- Dedicated Equipment Submersible 2 pump System
- Casing Material PVC 2"
- Weather Conditions Hot 90° Humid, Lightning Rain
- Other Full Set

3. In Situ Measurements

(Time)	1 8:45	2 1105
Temperature	19.5	21.6
Conductivity	1490	1490
pH	8.5	8.4
Turbidity	2.7	

(Time)	3 1645	4 17:25
Temperature	22.3	21.7
Conductivity	1490	1420
pH	8.4	8.2
Turbidity		2.7

Purge

VERSAR WELL MONITORING SHEET

Date: Beg. 9/17/86 End 9/18/86

Site Name/Case No. ~~B~~ 6430 1944 HQ, CWM Emelle Ala.

Well No./Location Futaw #8

SMO No./Fac. No. Q-1336 / MOA 636 - facility Q-22
Region III split = X-6

1. Well Measurements

Well Diameter (inner) 2" metal

Inner Casing Ht.

Outer Casing Diameter 8" metal

DTW 2.61 - TOC

Total Depth 692.41 - GS

Water Column Length 689.8

3 Casing Vol 1324.4 gallons

Vol. Purged 2106 gallons

2. General Observations

Organic Vapors (HNu, OVA, TIP)
HNU reading - nothing above background

Sediment clear

Color Clear

Odor none

3. In Situ Measurements

9/18/86

(Time) 1 0845 2 ____

Temperature 22.0°C ____

Conductivity 1500 umhos ____

pH 8.4 ____

Turbidity 21 NTU ____

purge

(Time) 3 0825 4 ____

Temperature 22.0°C ____

Conductivity 1500 ____

pH 8.4 ____

Turbidity 21 NTU ____

sample

4. Sample Methods

- Bailer ____
  Bladder ✓
  Other ____
  Lot No. ____
- Time Beg. 0845 End 1045
- Depth Sampled bladder - depth
- Sample Volume Full set = 6 gallons

5. Notes

- Well Security locking Hasp
- Disposal of Purge Water on ground surface
- Nonaqueous Phases N.A.
- Dedicated Equipment yes
  Two pump system
- Casing Material ____
- Weather Conditions ~~Overcast~~
  Hot 80's day
- Other Full Set
  Free flowing Artesian well. Casing approx. 8 feet above ground surface. Purge pump submersible

VERSAR WELL MONITORING SHEET

Date: Beg. 9/19/86 End 9/19/86

Site Name/Case No. 6430-1944HQ

Well No./Location L-9

SMO No./Fac. No. Q1340 / MAG 40 // Facility Q-9

1. Well Measurements

Well Diameter (inner) 4" metal/PVC

Inner Casing Ht. -

Outer Casing Diameter 4" metal

DTW leachate 29.2

Total Depth 89.3'

Water Column Length 60.1

3 Casing Vol RD ~~88.46~~ 115.38

Vol. Purged non-

2. General Observations

Organic Vapors (HNu, OVA, TIP)

80 ppm - Bucket

0 ppm - well Head

Sediment Light oil Brown particles

Color Light - Dark Brown

Odor ? Respiratory

3. In Situ Measurements - non Taken

(Time)	1	2
Temperature		
Conductivity		
pH		
Turbidity		

(Time)	3	4
Temperature		
Conductivity		
pH		
Turbidity		

4. Sample Methods

- Bailer 2"x8' PVC Bailer + Checkvalve
  - Bladder
  - Other
  - Lot No.
- Time Beg. 1345 End 1425
- Depth Sampled bottom/middle/upper
- Sample Volume 3 gallons

5. Notes

- Well Security non-open for volatile release
- Disposal of Purge Water Back in leachate well
- Nonaqueous Phases oil
- Dedicated Equipment 8' PVC Bailer
- Casing Material Metal, P.V.C.
- Weather Conditions 90% Humid Sunny
- Other Full Set

VERSAR WELL MONITORING SHEET

Date: Beg. 9/19/86 End 9/19/86

Site Name/Case No. 6431-1994 HQ

Well No./Location L-15

SMO No./Fac. No. Q1338 / MCA 658

1. Well Measurements

Well Diameter (inner) 4" PVC

Inner Casing Ht. –

Outer Casing Diameter 4" PVC/metal

DTW/leachate 69.9'

Total Depth 118.2'

Water Column Length 48.3

3 Casing Vol 92.73

Vol. Purged Non-

2. General Observations

Organic Vapors (HNu, OVA, TIP)

>200 PPM - Bucket

0 ppm - wellhead

Sediment non

Color Black

Odor Strong - Rejection

3. In Situ Measurements non - Taken

(Time)	1	2
Temperature		
Conductivity		
pH		
Turbidity		

(Time)	3	4
Temperature		
Conductivity		
pH		
Turbidity		

4. Sample Methods

- Bailer 2" x 8' PVC
  - Bladder
  - Other
  - Lot No.
- Time Beg. 15:44 End 16:27
- Depth Sampled bottom/middle/upper
- Sample Volume 3 gallon

5. Notes

- Well Security non - Lot vehicles release
- Disposal of Purge Water Back in Leachate well
- Nonaqueous Phases Oil - Tar
- Dedicated Equipment 8' PVC Bailers
- Casing Material Metal Bottom, PVC upper
- Weather Conditions 90's humid Sunny
- Other Full Set

APPENDIX B

Hazardous Substance List

VOLATILES

chloromethane
bromomethane
vinyl chloride
chloroethane
methylene chloride
acetone
carbon disulfide
1,1-dichloroethene
1,1-dichloroethane
trans-1,2-dichloroethene
chloroform
1,2-dichloroethane
2-butanone
1,1,1-trichloroethane
carbon tatrachloride
vinyl acetate
bromodichloromethane
1,1,2,2,-tetrachloroethane
1,2-dichloropropane
trans-1,3-dichloropropene
trichloroethane
dibromochloromethane
1,1,2-trichloroethane
benzene
bis-1,3-dichloropropene
2-chloroethylvinylether
bromoform
2-hexanone
4-methyl-2-pentanone
tetrachloroethene
toluene
chlorobenzene
ethylbenzene
styrene

SEMIVOLATILE COMPOUNDS

acenaphthene
2,4-dinitrophenol
bis(2-chloroethyl)ether
2-chlorophenol
1,3-dichlorobenzene
1,4-dichlorobenzene
benzyl alcohol
1,2-dichlorobenzene
2-methylphenol
bis(2-chloroisopropyl)ether
4-methylphenol
n-nitroso-di-n-propylamine
hexachloroethane
nitrobenzene
isophorone
2-nitrophenol
2,4-dimethylphenol
benzoic acid
bis(2-chloroethoxy)methane
2,4-dichlorophenol
1,2,4-trichlorobenzene
naphthalene
4-chloroaniline
hexachlorobutadiene
4-chloro-3-methylphenol
2-methylnaphthalene
hexachlorocyclopentadiene
2,4,6-trichlorophenol
2,4,5-trichlorophenol
phenol
4-nitrophenol
dibenzofuran
2,4-dinitrotoluene
2,6-dinitrotoluene
diethylphthalate
4-chlorophenyl-phenylether
fluorene
4-nitroaniline
4,6-dinitro-2-methylphenol
n-nitrosodiphenylamine(1)
4-bromophenyl-phenylether
hexachlorobenzene
pentachlorophenol
phenanthrene
anthracene
di-n-butylphthalate
fluoranthene
benzidine
pyrene
butylbenzylphthalate
3,3-dichlorobenzidine
benzo(a)anthracene
bis(2-ethylhexyl)phthalate
chrysene
di-n-octyl phthalate
benzo(b)fluoranthene
benzo(k)fluoranthene
benzo(a)pyrene

2-chloronaphthalene
2-nitroaniline
dimethyl phthalate
acenaphthylene
indeno(1,2,3-cd)pyrene
dibenz(a,h)anthracene
benzo(g,h,t)perylene
3-nitroaniline

PESTICIDES/PCB'S

alpha-BHC
delta-BHC
heptachlor
heptachlor epoxide
dieldrin
endrin
4,4-DDD
endosulfan sulfate
methoxychlor
chlordane
aroclor-1016
aroclor-1232
aroclor-1248
aroclor-1260
beta-BHC
gamma-BHC(lindane)
aldrin
endosulfan I
4,4-DDE
endosulfan II
endrin aldehyde
4,4-DDT
endrin ketone
toxaphene
aroclor-1221
aroclor-1242
aroclor-1254

METALS AND OTHERS

aluminum
antimony
arsenic
barium
beryllium
cadmium
calcium
chromium
cobalt
copper
iron
lead
cyanide
ammonia
chloride
nitrate
purgeable organic carbon
purgeable organic halide
magnesium
manganese
mercury
nickel
potassium
selenium
silver
sodium
thallium
tin
vanadium
zinc
percent solids (%)
sulfates
total organic carbon
total organic halide
total phenols

Field Parameters

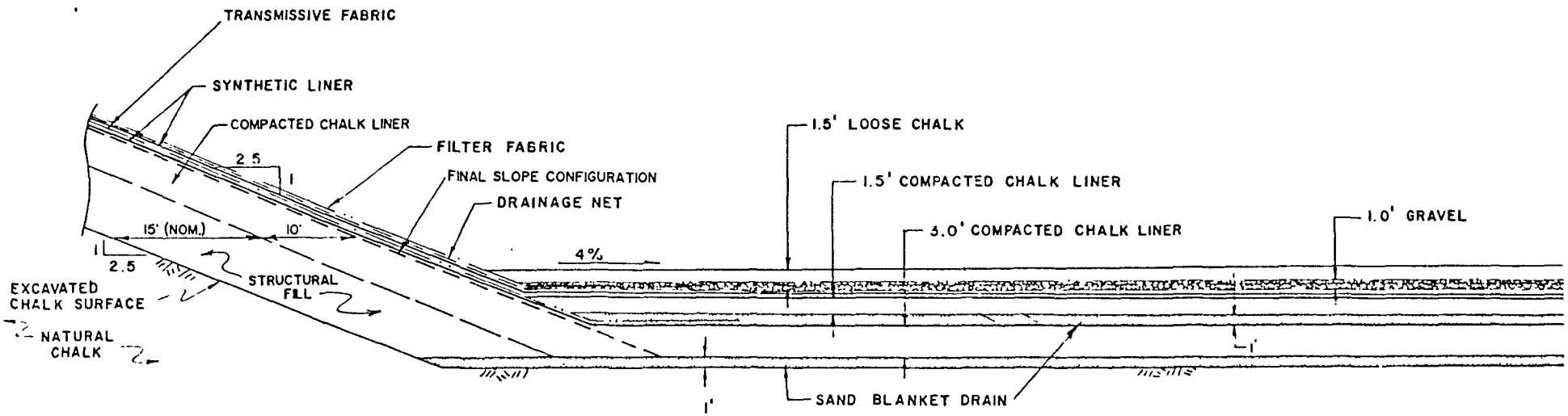
pH

Specific conductance

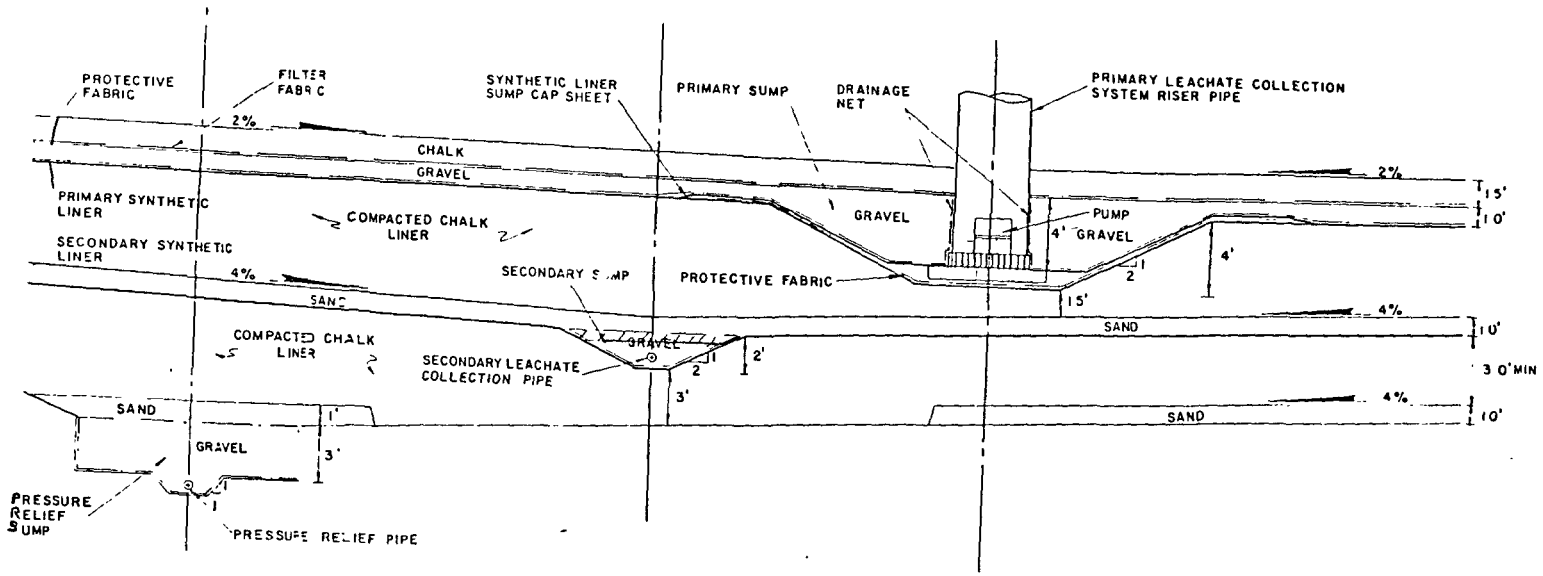
Temperature

Turbidity

APPENDIX C



LANDFILL TRENCH DOUBLE LINER SYSTEM
CHEMICAL WASTE MANAGEMENT, INC.
EMELLE, ALABAMA



SUMP DESIGN, DOUBLE LINER SYSTEM WITH SECONDARY LEACHATE
COLLECTION AND PRESSURE RELIEF SUMP
CHEMICAL WASTE MANAGEMENT, INC.
EMELLE, ALABAMA

APPENDIX D

3.0 EUTAW AQUIFER MONITORING WELL NETWORK

3.1 Previous Well Network

Prior to September, 1985, the Emelle Facility Eutaw Aquifer monitoring well network consisted of eight wells, one of which was located off-site (RCRA Well 1). Wells 1, 2, 3, and 4 were originally drilled as domestic or stock water supply wells before or shortly after the facility was opened. There is no documentation of the construction of Wells 1, 2, 3, and 4 , however, indications are that these wells were completed with a short section of surface casing (typically about 20 feet) in the soil and weathered chalk, an open borehole through the Selma Group, and possibly a section of perforated pipe set in the Eutaw Aquifer.

Wells 5, 6, 7 and 8 were installed between December 1982 and May 1983 by Graves Well Drilling Co. under the supervision of Golder Associates. The installation procedures for these wells are outlined below:

1. The 4" diameter steel casing joints are washed with acetone to remove threading lubricant. All casing is then cleaned with high temperature and pressure steam.

2. Rotary drill a 6 in. diameter hole, with water as the circulation fluid, to the first sand stringer of the Eutaw Formation.

3. Backfill the drillhole with 3 ft. to 5 ft. of drill cuttings to prevent grout clogging of the Eutaw sands.

4. Install the 4 in. diameter steel casing.

5. Inject Portland cement grout under pressure through the 4 in. casing and up the well bore. A 1 ft. to 2 ft. grout plug is left in the bottom of the casing.

6. After the grout sets, drill through the grout plug with a 4 in. rotary tricone bit and thoroughly flush the drill cuttings.

7. Advance the 4 in. drillhole 40 ft. to 50 ft. beneath the end of the 4 in. casing or until the upper sand zones of the aquifer are encountered.

8. Install 40 linear ft. of 2 in. diameter continuous wrap stainless steel screen (0.008 in. slots). The well screen is joined to the 4 in. casing with a lead swedge seal.

9. Develop the well by air lifting until the water is clear (2 to 6 hrs.). Development collapses the Eutaw sands around the screen, producing a natural sand pack.

10. Cover the well head with a 6 in. diameter steel locking cover set in a 2 ft. by 4 ft. concrete pad.

Well locations are presented in Figure 8 and well construction details are presented in Figures 9 and 10. WMI Monitoring Well Information Forms are presented as Appendix C and appropriate data on each well is summarized in Table 2. Wells 6, 7, and 8 were screened in the uppermost (Tombigbee Sand Member) sand unit in the Eutaw Aquifer, while Well 5 was screened in an intermediate sand unit about 150 feet lower. Wells 5, 6, and 7 are downgradient of the Emelle site waste disposal areas while Well 8 is upgradient.

3.2 Modifications to Eutaw Aquifer Monitoring Well Network

In September, 1985, a program was undertaken to modify and update the Eutaw Aquifer monitoring well network. The effort was to include the following tasks:

- Seal and abandon inactive, uncased wells 2, 3, and 4.

TABLE 2

EUTAW AQUIFER MONITORING WELL INFORMATION, EMELLE FACILITY,ALABAMA

WELL #	WELL 5	WELL 6	WELL 7	WELL 8	WELL 9
NORTHING (FT)	8432.00	15729.30	13121.90	11168.40	13266.18
EASTING (FT)	13204.00	7821.60	8187.00	550.10	9345.02
UP/DOWN GRADIENT	DOWN	DOWN	DOWN	UP	DOWN
COLLAR ELEV.(1)	211.63	162.94	207.62	140.93	211.37
GROUND ELEV.(1)	211	164	206	131	209
TOP OF EUTAW(1)	-451	-446	-453	-514	-453
TOP OF SCREEN(1)	-480	-442	-476	-537	-482
BOTTOM OF SCREEN(1)	-520	-482	-516	-577	-522
WELL DEPTH(2)	732	645	723	718	733
TOTAL DEPTH(2)	937	650	708	692	725

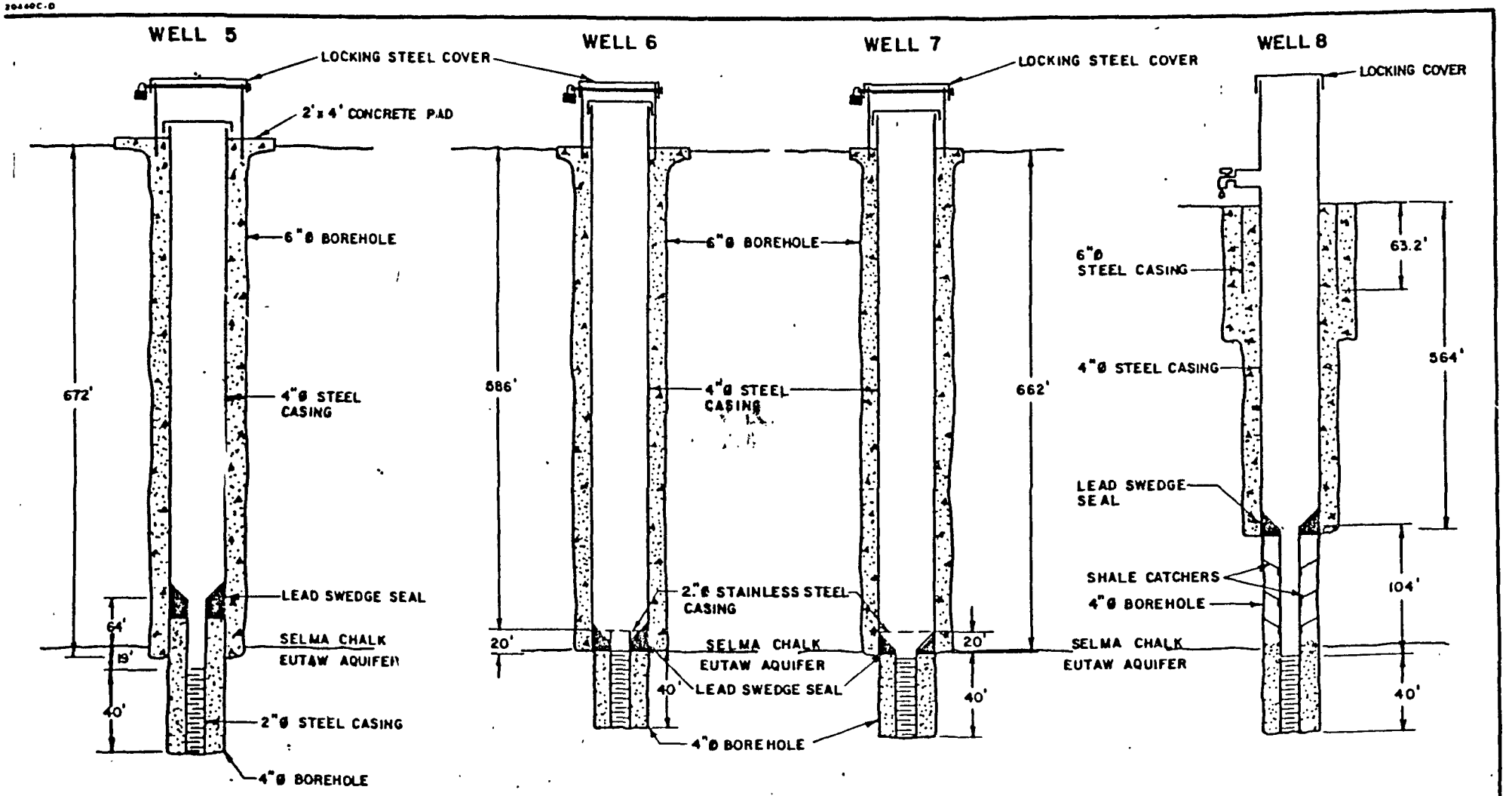
(1) ELEVATION IN FEET MSL

(2) TOP OF CASING TO BOTTOM OF SCREEN

(3) GROUND SURFACE TO BOTTOM OF BORING

New Page
February 24, 1986

20460C-D



LEGEND

- NEAT PORTLAND CEMENT GROUT
- 2"Ø STAINLESS STEEL SCREEN (0.008" OPENING)
- NATURAL SAND PACK

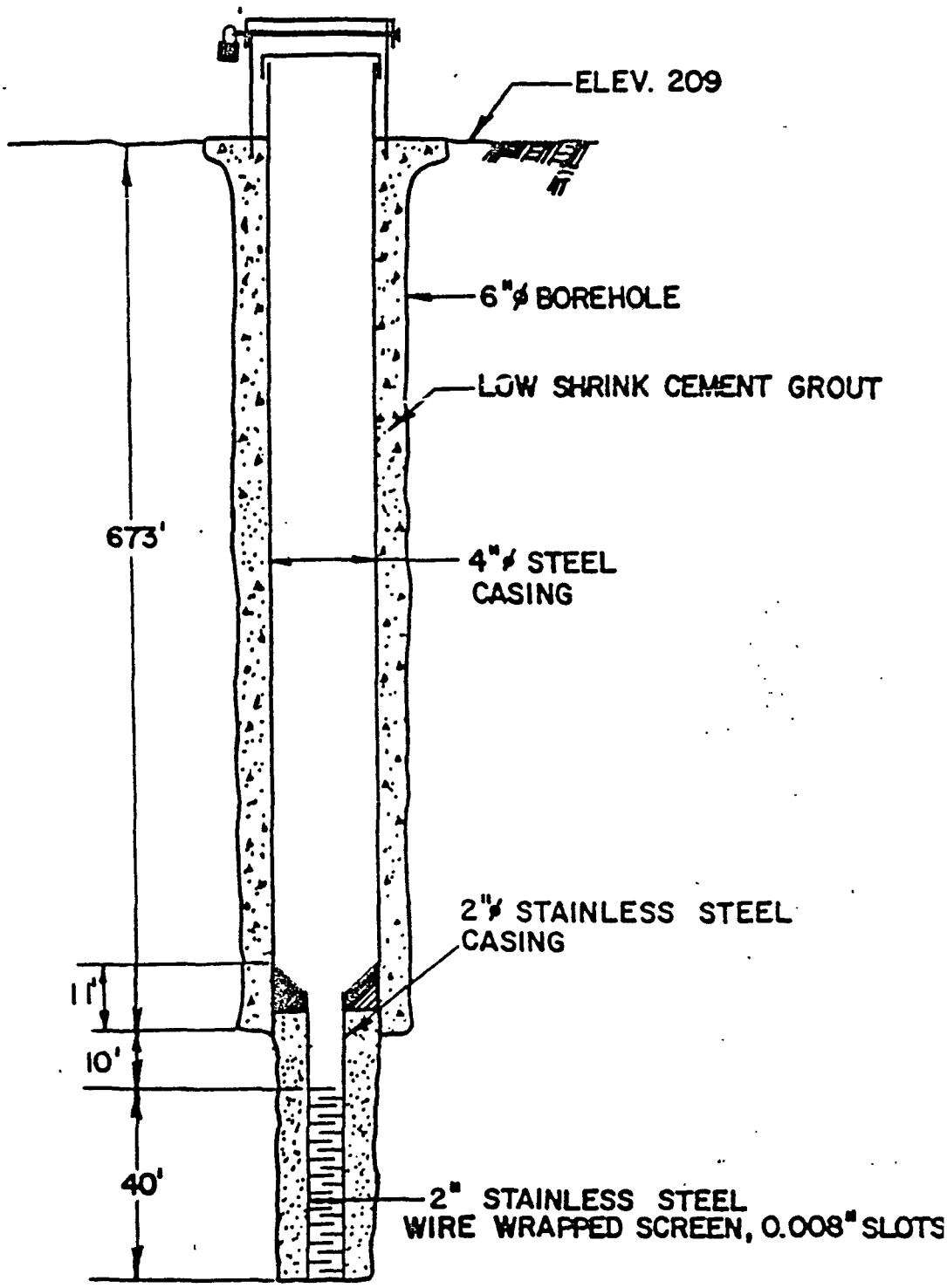
JOB NO	824-1308	SCALE	NOT TO SCALE
DRAWN	SKB	DATE	10-29-85

MONITORING WELL CONSTRUCTION DETAILS

FROM CWM RCRA Part B

AF 20440A-B

WELL 9



JOB NO. 824-1308	SCALE N.T.S.	MONITORING WELL CONSTRUCTION DETAILS
DRAWN T.S.R.	DATE 10/30/85	
CHECKED AES	DWG. NO. 109	
Golder Associates	CHEMICAL WASTE MANAGEMENT, INC.	FIGURE 10

- Rework Well 5 to reset the screen in the uppermost sand unit of the Eutaw Formation, so that head levels in that well would correspond to head levels in the other Eutaw Aquifer monitoring wells.

- Install a fourth downgradient monitoring well, Well 9.

- Assemble geologic, hydrogeologic and well completion information in support of the certificate of compliance.

This report contains the information assembled for the final task. Of the other tasks, all are complete with the exception of sealing and abandoning wells 2 and 3, which is currently planned to take place in late February, 1986.

3.2.1 Sealing Well 4

Well 4 is a flowing artesian well which is adjacent to Well 8, an active monitoring well. Special precautions were therefore required for sealing this well. Prior to grouting, a 4" bit was run to the bottom of the hole to insure that the entire open interval could be grouted. Near the bottom of the Selma Group, the bit encountered what is probably the top of the perforated pipe which extends into the Eutaw Aquifer. A plug was set at the top of the pipe to insure that the cement did not invade the aquifer and the adjacent monitoring well. The hole was then grouted by the tremie method. Similar procedures will be used in sealing wells 2 and 3 except that the plug will not be used. Detailed well sealing procedures are presented below:

1. Mobilize workover rig to the well site.

2. Complete required information on the Well Sealing Form except depth which will be measured with the tremie pipe.

3. Photograph the well head.

4. Remove the steel protective cover and all other surface appurtenances.

5. Install the grout tremie pipe to the full depth of the well; record depth.

6. Pump the computed volume of low shrink cement grout into the well while maintaining submergence of the end of the tremie pipe at all times. Pump additional grout as required to show good return at the surface.

7. Allow grout to settle for about 12 hours and add grout to fill the hole to the surface.

8. Remove all surface fixtures, grade the area to drain away from the well and take a final photograph.

9. Complete remaining information of Well Sealing Form.

The well sealing form completed following the sealing of Well 4 is included as Appendix D. Similar forms will be completed for Wells 2 and 3, when sealed.

3.2.2 Reworking Well 5

In order to insure that head levels measured in Well 5 were comparable to head levels measured in other wells, the screen was removed and reset in the upper sand unit of the Eutaw Aquifer. The procedure was as follows:

1. Mobilize equipment to well site and run tubing into hole with left hand threaded nipple on bottom of tubing and screw into 4 in. X 2 in. lead seal.

2. Pull screen, riser pipe and lead seal out of hole.

3. Run tubing back into hole and inject 16 sacks of cement from 937 ft. to 740 ft..

4. Withdraw tubing to 747 ft. and wash with water to remove grout from interval to be screened.

5. Allow cement to cure overnight. Measure bottom depth the next morning.

6. Re-install screens and lap pipe with new lead seal.

7. Swedge lead seal and develop well by airlifting.

The procedures used to rework Well 5 required significant use of downhole tools which have a high potential for introducing oil and grease into the well. This well is therefore suitable for obtaining water level information only, and should not be used for water quality assessments.

3.2.3 Installing Well 9

After reworking Well 5, an additional downgradient monitoring well was installed. Well 9 was installed to provide additional water quality data and to define areas of eastward and northward gradients in the Eutaw Aquifer beneath the site. Figure 10 shows the completion details of RCRA Well 9. Well 9 was installed by the following procedure:

1. Wash the casing with high pressure water to remove dirt and rust. Swab the casing inside and out with reagent grade acetone to remove threading lubricant. Immediately follow with a potable water rinse. Finally, wash with high temperature and pressure steam.

2. Rotary drill a 6 in. diameter hole with water as the circulation fluid, to the top of the Eutaw Formation

3. Backfill the drillhole with 3 ft. to 5 ft. of drill cuttings to prevent grout clogging of the Eutaw sands.

4. Install the 4 in. diameter steel casing.

5. Inject low shrink grout (Halliburton 50/50 poz/mix) under pressure through the 4 in. casing and up the well bore.

6. After the grout sets, drill through the 4-in. steel pipe with a nominal 3 3/4 in. rotary tricone bit and thoroughly flush the drill cuttings.

7. Advance the drillhole to about 50 ft. beneath the end of the 4 in. casing.

8. Install 40 ft. of 2 in. diameter continuous wrap stainless steel screen (0.008 in. slots) and about 20 ft. of 2 in. stainless steel lap pipe. The well screen and lap pipe are joined to the 4 in. casing with a lead swedge seal.

9. Develop the well by air lifting using filtered compressed air until the water is clear (about 1.5 hrs.). Development collapses the Eutaw sands around the screen, producing a natural sand pack.

10. Cover the well head with a 6 in. diameter steel locking cover set in a 2 ft. by 4 ft. concrete pad.

11. Survey the plan location and MSL elevation of the well.

Following the installation of Well 9, water levels were measured in all 5 of the active monitoring wells in the Eutaw Aquifer. These water levels and the resulting potentiometric contours are shown on Figure 7.

3.2.4 Proposed Well 10

To provide a well on the downgradient side of proposed landfill trenches 23 and 24, Well 10 will be installed prior to disposal of waste in these trenches. This well will be located generally as shown on Figure 7 and will be installed and constructed in the same manner as Well 9. The borehole will be geophysically logged prior to placement of the steel casing and after drilling the final depth into the Eutaw Formation. These logs will include electric logs, gamma log and neutron log.

MONITORING WELL INFORMATION FORM

Site: Emelle Facility, Sumter County, Alabama

Well Number: RCRA 5 Date Installed: reworked 9-13-85

Location: See Drawing 00-150-21

Drilling Co./Driller: Graves Well Drilling

Supervising Co.: Golder Associates Log By: Driller

Drilling Method: Air/Water Rotary Total Depth: 937' Boring Dia: 6"/4"

Ground El.: 211 Standpipe El.: 211.63

Casing: Diameter: 4" Length: 672 Material: steel

Screen: Diameter: 2" Length: 41' Slot Size: 0.008"

Water Level: Initial: ---- 24-hour: --- Other: ---

(Water levels are: --- depth from ground surface or --- elevation msl)

Comments: This well has been reworked and the open interval below the screen grouted. The well is not suitable for water quality assessment.

Description of Screened Interval

From*	To*	Soil Description
691	732	Tombigbee Sand Member, Eutaw Formation. See drillers log for detailed description of strata.
		*See drawing 107 for well completion details

*Values are: x depth from ground surface or _____ elevation msl.

New Page
February 24, 1986

WELL 5

Depth (ft.)	Description
0 - 7	Surface Clay
7 - 620	Chalk (Soapstone - SS)
620 - 662	Chalk with Pepper
662 - 680	Eutaw Sand No Cap Rock
680 - 690	Greenish Blue Sand and Some Soapstone
690 - 699	Soapstone all Way. Some Fine Sand in Sample
699 - 703	Sand Cut Even
703 - 705	Soapstone Snug Cut
705 - 708	Sand
708 - 709	Rock 12" Medium Hard
709 - 717	Streaked Sand and Soapstone More Sand in Last - Medium Fine Blue
717 - 719	Soapstone
719 - 720	Sand
720 - 731	Soapstone
731 - 733	Sand
733 - 738	Soapstone
738 - 743	Sand
743 - 747	Streaked Sand and Soapstone
747 - 749	Streaked Soapstone and Sand
749 - 757	Sand Cut Pretty Good in Mica in Sample
757 - 761	Streaked Sandstone and Sand
761 - 765	Streaked Sand and Some Soapstone
765 - 769	Soapstone
769 - 775	Soapstone with Small Sand Streaks
775 - 778	Sand with Soapstone Streaks
778 - 787	Sand Fair Cutting, Some 2" Soapstone Streaks
787 - 797	Sand - Flakey Soapstone in Wash
797 - 810	Soapstone Snug Cut. Some Fine Sand in Wash
810 - 811½	Rock 18" Soft
811½ - 815	Soapstone Snug
815 - 817	Sand
817 - 824½	Even Cutting Sand - Medium Fine
824½ - 827	Rock 2½" Hard
827 - 845	Blue Medium Sand Lots of Pepper
845 - 857	Soapstone and Sand Streaks
857 - 867	Soapstone Some Fine Sand
867 - 877	Soapstone
877 - 879	Soapstone
879	Rock 4" Medium Hard
879 - 889	Sand and Soapstone Streaks
889 - 897	Medium Sand
897 - 907	Rock at 903' 2" Soft Rest Sand
907 - 917	Good Cutting Medium Sand
917 - 921	Good Cutting Medium Sand
921	Rock 3" Medium Hard Chattery
921 - 927	Good Cutting Sand Medium
927 - 937	Good Cutting Sand Medium
937	Total Depth

MONITORING WELL INFORMATION FORM

Site: Emelle Facility, Sumter County, Alabama

Well Number: RCRA 6 Date Installed: 5-24-83

Location: See Drawing 00-150-21

Drilling Co./Driller: Graves Well Drilling

Supervising Co.: Golder Associates Log By: Driller

Drilling Method: Air/Water Rotar Total Depth: 650 Boring Dia: 6"/4"

Ground El.: 164 Standpipe El.: 162.94

Casing: Diameter: 4" Length: 650 Material: steel

Screen: Diameter: 2" Length: 40' Slot Size: 0.008"

Water Level: Initial: --- 24-hour: --- Other: ---

(Water levels are: --- depth from ground surface or --- elevation msl)

Comments: Downgradient well

Description of Screened Interval

From*	To*	Soil Description
606	646	Tombigbee Sand Member, Eutaw Formation. See drillers log for detailed description of strata.
		*See Drawing 107 for well completion details

*Values are: x depth from ground surface or ____ elevation msl.

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February 24, 19

WELL 6

Depth (ft.)	Description
0.00- 1.75	yellow clay
1.75- 64.65	white chalk sticky some brittle
64.65-317.00	chalk brittle some sticky
317.00-604.75	chalk sticky changed to fluid at 400'
604.75-606.75	chalk sandy with pepper specs
606.75-609.58	chalk sandy with pepper specs
609.58-612.08	sand medium loose
612.08-615.00	sand with chalk
615.00-619.58	chalk
619.58-621.83	sand with chalk seams
621.83-628.08	sand medium loose to loose
628.08-630.40	chalk with sand seams
630.40-634.00	sandy chalk
634.00-639.00	sand medium loose to loose with tight spots
639.00-649.58	yellow clay

MONITORING WELL INFORMATION FORM

Site: Emelle Facility, Sumter County, Alabama

Well Number: RCRA 7 Date Installed: 5-30-83

Location: See Drawing 00-150-21

Drilling Co./Driller: Graves Well Drilling

Supervising Co.: Golder Associates Log By: Driller

Drilling Method: Air/Water Rotary Total Depth: 708 Boring Dia: 6"/4"

Ground El.: 206 Standpipe El.: 207.62

Casing: Diameter: 4" Length: Material: steel

Screen: Diameter: 2" Length: 40' Slot Size: 0.008"

Water Level: Initial: --- 24-hour: --- Other: ---

(Water levels are: --- depth from ground surface or --- elevation msl)

Comments: Downgradient well

Description of Screened Interval

From*	To*	Soil Description
682	722	Tombigbee Sand Member, Eutaw Formation. See drill
		log for detailed description of strata.
		*See drawing 107 for well completion details

*Values are: x depth from ground surface or _____ elevation msl.

New Page

WELL 7

Depth (ft.)	Description
0.00- 3.50	white chalk sticky
3.50-175.00	blue chalk brittle some sticky
175.00-230.50	blue chalk with greenish color brittle
230.50-463.00	chalk greenish gray sticky changed to fluid
463.00-576.00	chalk greenish gray sticky
576.00-626.00	white chalk some brittle
626.00-655.04	hard chalk
655.04-659.04	pepper in clay sandy
659.04-667.04	hard clay
667.04-669.62	sand with clay
669.62-671.00	sand with clay
671.00-676.00	chalk with clay
676.00-685.51	medium loose sand
681.51-687.50	clay
687.50-693.50	sand medium loose
693.50-697.00	tight sand
697.00-699.00	clay
699.00-708.25	tight hard sand

MONITORING WELL INFORMATION FORM

Site: Emelle Facility, Sumter County, Alabama

Well Number: RCRA 8 Date Installed: 5-13-83

Location: See Drawing 00-150-21

Drilling Co./Driller: Graves Well Drilling

Supervising Co.: Golder Associates Log By: Driller

Drilling Method: Air/water Rotary Total Depth: 692 Boring Dia: 6"/4"

Ground El.: 131 Standpipe El.: 140.93

Casing: Diameter: 4" Length: Material:

Screen: Diameter: 2" Length: 40' Slot Size: 0.008"

Water Level: Initial: --- 24-hour: --- Other: ---

(Water levels are: --- depth from ground surface or --- elevation msl)

Comments: Upgradient well

Description of Screened Interval

From*	To*	Soil Description
668	708	Tombigbee Sand Member, Eutaw Formation. See Driller's log for detailed description of strata.
		*See Drawing 107 for well completion details

*Values are: x depth from ground surface or _____ elevation msl.

New Page

WELL 8

Depth (ft.)	Description
0.00- 4.00	clay with brown hard sand
4.00- 7.80	blue clay
7.80- 61.89	white chalk some brittle some sticky
61.89-360.00	white chalk some brittle some sticky
360.00-379.00	chalk sticky - changed to mud pump
379.00-500.00	chalk sticky
500.00-564.00	chalk some sticky some brittle
564.00-620.00	chalk some sticky some brittle-sand seam @ 595'
620.00-623.00	brittle - hard pyrite seam at 612.00'
623.00-623.25	rock seam
623.25-627.50	chalk sticky
627.50-628.50	sandy chalk with pyrite
628.50-638.00	chalk
638.00-651.50	chalk with black specs no sand
651.50-660.50	sand tight with medium loost spots with green black spots clay
660.50-664.00	small rock seams at 669.50' & 675.00'
664.00-679.41	sand green with clay looks more like blue marl
679.41-686.91	sandy chalk
686.91-688.00	tight chalk
688.00-688.25	rock seam
688.25-691.50	sandy chalk
691.50-692.41	tight sticky chalk

flowing 1/2 GPM

MONITORING WELL INFORMATION FORM

Site: Emelle Facility, Sumter County, Alabama

Well Number: RCRA 9 Date Installed: 10-15-85

Location: See Drawing 00-150-21

Drilling Co./Driller: Graves Well Drilling

Supervising Co.: Golder Associates Log By: Driller

Drilling Method: Air/water Rotary Total Depth: 725' Boring Dia: 6"/4"

Ground El.: 209 Standpipe El.: 211.37

Casing: Diameter: 4" Length: 673' Material: steel

Screen: Diameter: 2" Length: 41' Slot Size: 0.008"

Water Level: Initial: --- 24-hour: --- Other: ---

(Water levels are: --- depth from ground surface or --- elevation msl)

Comments: Downgradient well

Description of Screened Interval

From*	To*	Soil Description
684	725	Tombigbee Sand Member, Etuaw Formation. See Driller's log for detailed description of strata.

WELL 9

Depth (ft.)	Description
0.00- 2.50	white chalk
2.50- 207.00	blue chalk brittle
207.00- 246.00	blue white chalk
246.00- 307.00	blue white chalk
309.00- 390.00	chalk gummy
390.00- 412.00	chalk w/ some sea shale
394.00-	switched to fluid drilling
412.00- 489.00	gummy sticky chalk
489.00- 530.00	gummy sticky chalk
574.00- 614.50	brittle chalk or gummy chalk
614.50- 666.75	sticky chalk
666.75- 668.50	hard chalk
668.50- 670.75	brittle chalk
670.75- 672.75	green salt & pepper sand
672.75- 677.50	med. tight to tight green salt & pepper clayey sand
677.50- 682.00	med. tight to med loose green salt & pepper clayey sand
682.00- 690.20	rock seam
690.20- 704.95	salt & pepper sand med. tight to med. loose
704.95- 718.00	med. tight to tight green salt & pepper clayey sand. med. to fine sand
718.00- 722.00	salt & pepper sand clayey w/some shells. med. to fine sand
722.00- 725.30	med. to tight shaley chalk

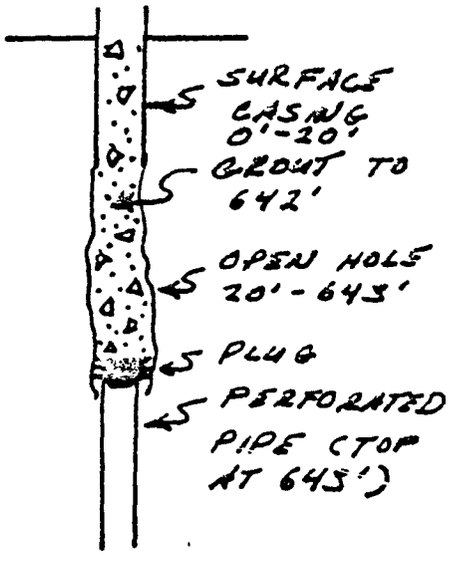
WELL SEALING FORM

PROJECT CWM/RCRA WELLS/EMELLE WELL RCRA 4
JOB NUMBER 853-3107 DATE 9-18-85
GOLDER INSPECTOR AES GROUTER GRAVES/HALLI-BURTON

WELL INFORMATION

DESIGNED WELL DEPTH UNKNOWN ft. MEASURED DEPTH (H) SEE NOTES ft.
DEPTH TO WATER FLOWING CASING STICKUP 0 ft.
CASING TYPE: SEE NOTES INSIDE CASING DIA. (D) 4" in.

GROUT VOLUME



COMPUTED VOLUME

REQUIRED VOLUME = $\frac{D^2 \text{ (in.)} \times H \text{ (ft.)}}{183.4}$ = —— ft.

ACTUAL VOLUME

BAGS OF CEMENT 37.5
~~BAGS OF~~ BENTONITE 150 #
GALLONS OF WATER 430
GROUT VOLUME 84 ft.
GROUT SETTLEMENT 0 in.
ADDED GROUT VOLUME —— ft.
FLYASH 37.5 ft.
CALCIUM CHLORIDE 150 #

COMMENTS

The well was constructed with 4" surface casing to about 20', open hole through the Selma Group, and perforated pipe in the Eutah Aquifer. The top of [illegible] the screened interv[illegible]

APPENDIX E

NOTE: CA designations for wells in this appendix are synonymous with SM designations used for the shallow, chalk wells in the report.

MONITORING WELL INSTALLATION LOG

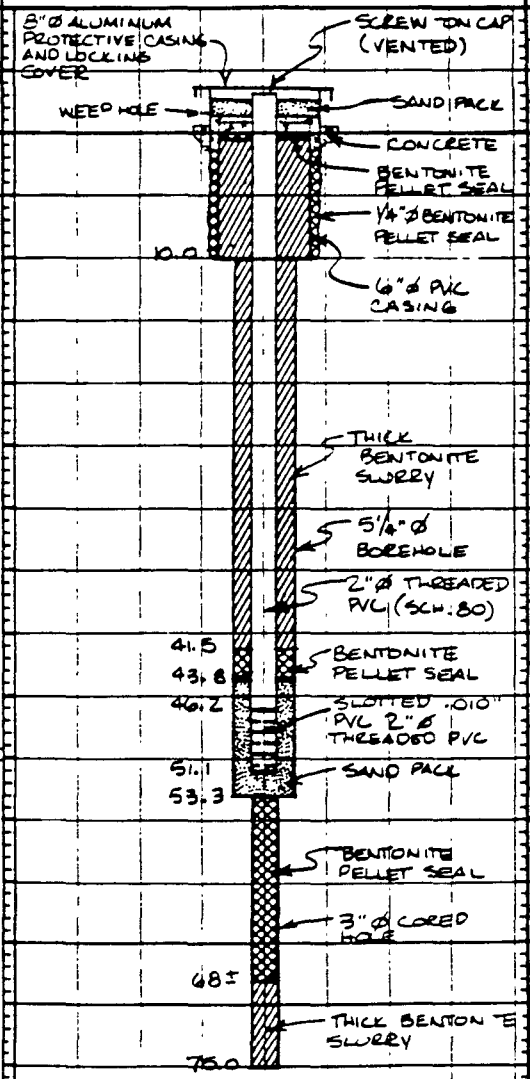
JOB NO. 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO CA-1	SHEET 1 OF 1
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV. 174.26'	WATER DEPTH —
WEATHER SUNNY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 177.36'	DATE/TIME —
TEMP 40° F	DRILL RIG MOBILE B-61 / DRILLER DJ/WG	STARTED 2:35 PM/1-2-86 (TIME / DATE)	COMPLETED 1:20 PM/2-4-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2" in. dia. 49.35 l.f.	WELL SCREEN 2" in. dia. 4.85 l.f.	BENTONITE SEAL 2.3' THICK, 1/2 ø PELLETS, ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 2 1/2 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX. 8 CU FT. ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND
GOLD SEAL BENTONITE POWDER WITH WATER		

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
174.26	GROUND SURFACE
0.0	RECOMPACTED CHALK
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	INSITU CHALK
40.0	
45.0	FRACTURE ZONE 49.4'-50.2'
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	

WELL SKETCH



INSTALLATION NOTES

2"ø PVC STANDPIPE STICKUP = 3.1'

ALUMINUM PROTECTIVE CASING STICKUP = 3.6

WELL DEVELOPMENT NOTES

Golder Associates

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MONITORING WELL INSTALLATION LOG

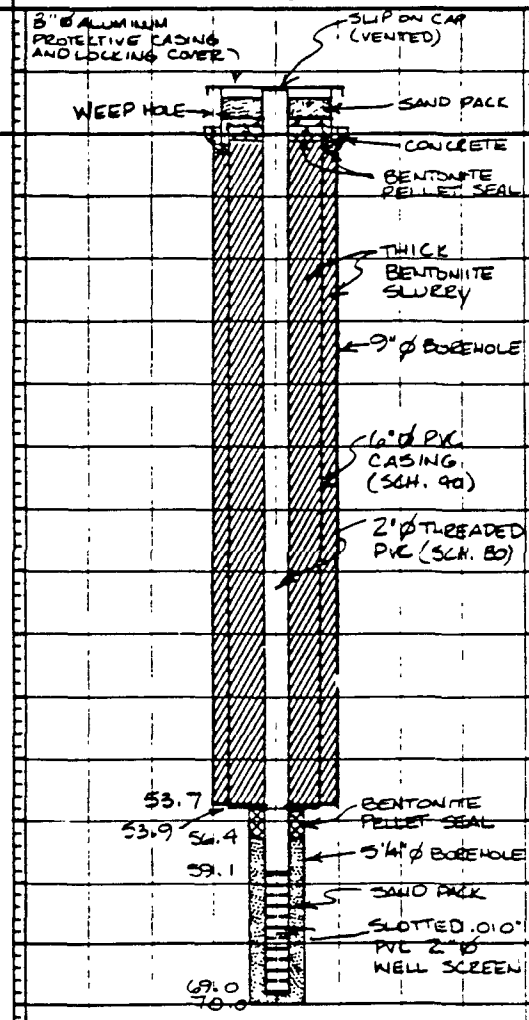
JOB NO. 863-3078.3	PROJECT CWIM/CONSENT WELLS/EMELLE	WELL NO CA-1A	SHEET 1 OF 1
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 174.17'	WATER DEPTH —
WEATHER SUNNY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 177.77'	DATE/TIME —
TEMP. 40° F	DRILL RIG MOBILE B-61 / DRILLER DJ/WG	STARTED 3:10 PM / 1-3-86 (TIME / DATE)	COMPLETED 12:15 PM / 2-4-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 62.75 LF	WELL SCREEN 2 in. dia. 9.85 LF	BENTONITE SEAL 2.5 THICK 1/2" Ø PELLETS, ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 3 1/4 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX 20 CU FT ON OUTSIDE OF 6" PVC; APPROX 10 CU FT ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
174.17'	GROUND SURFACE
0.0	
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	SEE LOG CA-1 FOR SOIL/ROCK DESCRIPTION
40.0	
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	

WELL SKETCH



INSTALLATION NOTES

2" Ø PVC STANDPIPE STICKUP = 3.6'

ALUMINUM PROTECTIVE CASING STICKUP: 3.7'

WELL CA-1A LOCATED N12°E, 10' FROM CA-1 (SEE WELL LOCATION MAP)

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

JOB NO. 853-3098.3 PROJECT CWM / CONSENT WELLS / EMELLE WELL NO. CA-2 SHEET 1 OF 2
GA INSP. EDD DRILLING METHOD ROTARY WASH GROUND ELEV 193.75' WATER DEPTH —
WEATHER SUNNY DRILLING COMPANY TRI-STATE 2" PVC COLLAR ELEV. 196.60' DATE/TIME —
TEMP 40°F DRILL RIG MOBILE B-61 DRILLER DJ/WG STARTED 10:00 AM 1-13-86 (TIME / DATE) COMPLETED 4:10PM 1-14-86 (TIME / DATE)

MATERIALS INVENTORY

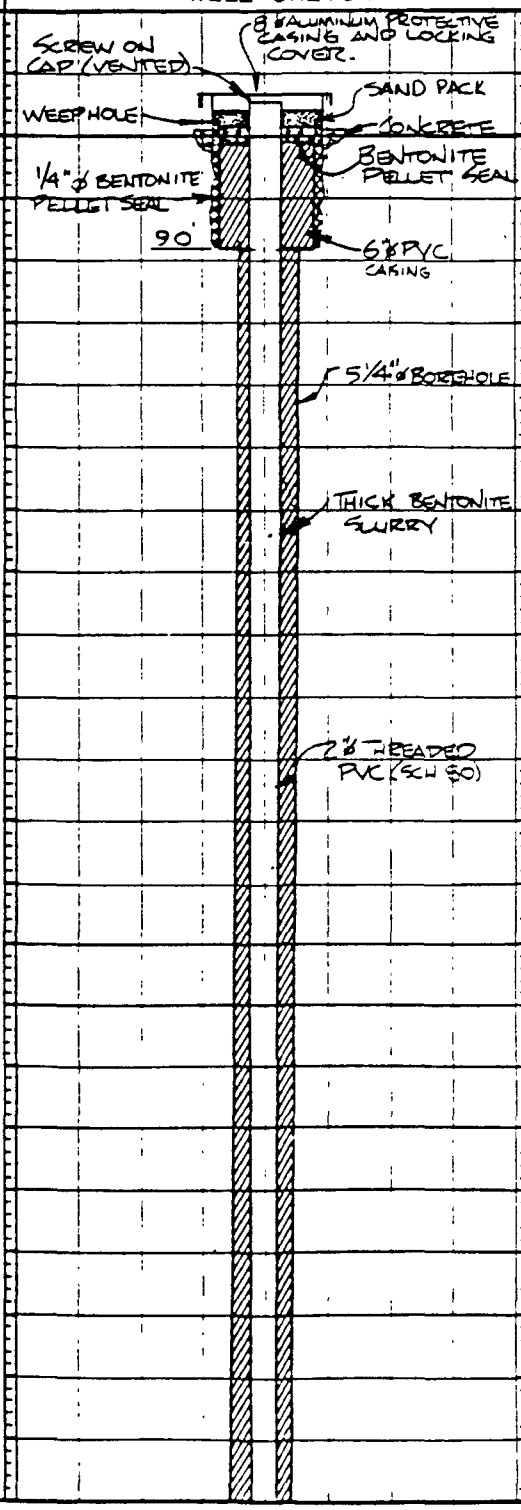
WELL CASING 2 in. dia. 138.0 lf
CASING TYPE PVC SCH. 80
JOINT TYPE THREADED (TEFLON WRAPPED)
GROUT QUANTITY APPROX 16 CU. FT ABOVE PELLET SEAL
GROUT TYPE APPROX. 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER W/WATER

WELL SCREEN 2 in. dia. 9.85 lf
SCREEN TYPE PVC SCH 80
SLOT SIZE .010 INCH
CENTRALIZERS —
DRILLING MUD TYPE —

BENTONITE SEAL 2.3' THICK, 1/2" ø PELLETS ABOVE SCREEN
INSTALLATION METHOD BY HAND
FILTER PACK QTY 4 - 50 LB BAGS
FILTER PACK TYPE 16/30 GRADE BLASTING SAND
INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
193.75'	GROUND SURFACE
0.0	RECOMPACTED CHALK
5.0	
10.0	IN SITU CHALK (NO FRACTURES)
15.0	
20.0	
25.0	
30.0	
35.0	
40.0	
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	
95.0	
100.0	
105.0	
110.0	

WELL SKETCH



INSTALLATION NOTES

WELL ORIGINALLY SET IN THIS HOLE ON 12/11/85 HOWEVER DUE TO THE FACT THAT THE PVC PIPE WAS CUT SHORT, THIS WELL WAS 2.3' TOO HIGH IN THE HOLE. THEREFORE THE 2" PVC WAS PULLED OUT, HOLE FLUSHED, AND THE WELL RESET TO ITS CORRECT DEPTH. A BENTONITE PELLET SEAL WAS ADDED TO THE BOTTOM OF THE HOLE.

2" ø PVC STANDPIPE STICKUP FROM GROUND SURFACE = 2.85'

ALUMINUM CASING STICKUP FROM GROUND SURFACE = 3.3'

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

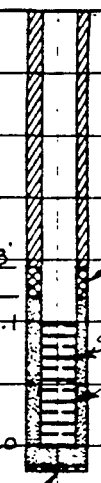
JOB NO. 853-3098.3 PROJECT CWM / CONSENT WELLS/EMELLE WELL NO CA-2 SHEET 2 OF 2
GA INSP. RDD DRILLING METHOD ROTARY WASH GROUND ELEV 193.75' WATER DEPTH —
WEATHER SUNNY DRILLING COMPANY TRI-STATE 2" PVC COLLAR ELEV 196.60' DATE/TIME —
TEMP. 40°F DRILL RIG MOBILE B-61 DRILLER DJ/WG STARTED 10:00 AM 1/13/86 (TIME / DATE) COMPLETED 4:10 PM 1/14/86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 138.0 l.f. WELL SCREEN 2 in. dia. 9.85 l.f. BENTONITE SEAL 2.3 THICK, 1/2" ø PELLETS, 4.50 v-SCREEN
CASING TYPE PVC SCH 80 SCREEN TYPE PVC SCH. 80 INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED) SLOT SIZE .010 INCH FILTER PACK QTY 4-50 LB BAGS
GROUT QUANTITY APPROX. 16 CU FT ABOVE PELLET SEAL CENTRALIZERS — FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX. 1:1 RATIO OF AQUA GEL COLD SEAL BENTONITE POWDER W/WATER DRILLING MUD TYPE — INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
		CONTINUED FROM SHEET 1 OF 2	
110.0			
115.0			
120.0			
125.0	IN SITU CHALK (NO FRACTURES)		
130.0		130.8' BENTONITE PELLET SEAL	
		133.1'	
135.0		135.1 SAND PACK	
140.0		SLOTTED .010" PVC 2" ø WELL SCREEN	
145.0		145.0	
150.0		BENTONITE PELLET SEAL (146.8 TO 147.2')	

WELL DEVELOPMENT NOTES



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MONITORING WELL INSTALLATION LOG

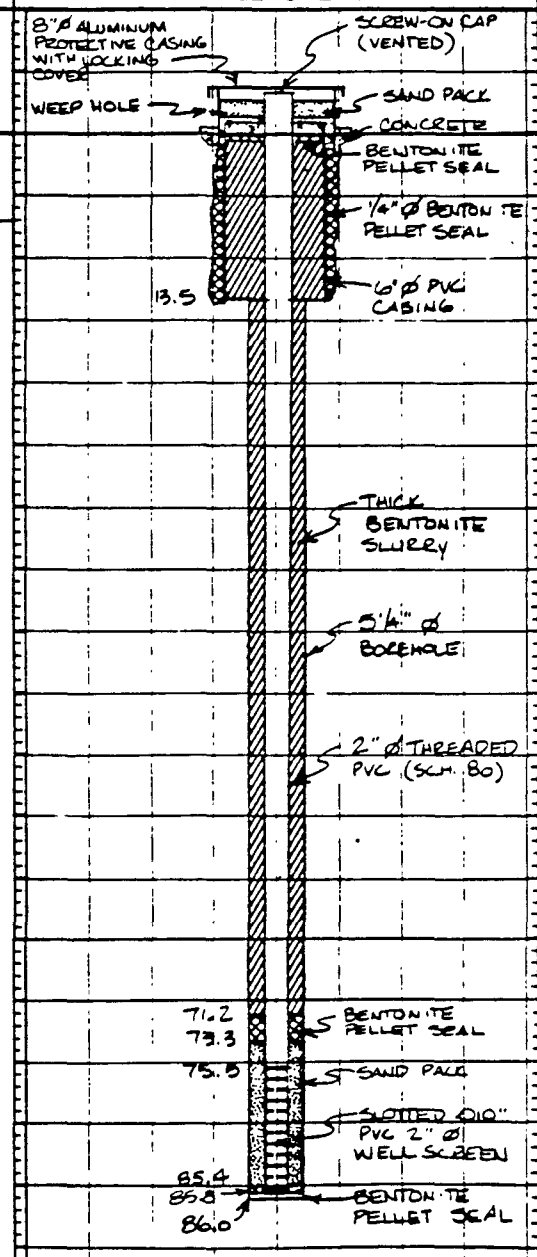
JOB NO. 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO. CA-3	SHEET 1 OF 1
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV. 204.25'	WATER DEPTH —
WEATHER CLOUDY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV. 207.60'	DATE/TIME —
TEMP 45° F	DRILL RIG MOBILE B-61 / DRILLER DT/WG	STARTED 12:30 PM / 1-17-86 (TIME / DATE)	COMPLETED 4:40 PM / 1-20-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in dia. 78.9 l.f.	WELL SCREEN 2 in. dia. 9.85 l.f.	BENTONITE SEAL 2' THICK, 1/2" Ø PELLETS, ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 3 1/3 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX. 14 CU. FT. ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX. 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
204.25'	GROUND SURFACE
0.0 – 5.0	RECOMPACTED CHALK
5.0 – 40.0	IN SITU CHALK (NO FRACTURES)

WELL SKETCH



INSTALLATION NOTES

WELL ORIGINALLY SET IN THIS HOLE ON 12-13-85 HOWEVER, DUE TO THE FACT THAT THE PVC PIPE WAS CUT SHORT, THIS WELL WAS 1.4' TOO HIGH IN THE HOLE. THEREFORE THE 2" PVC WAS PULLED OUT, HOLE FLUSHED, AND THE WELL RESET TO ITS CORRECT DEPTH. A BENTONITE PELLET SEAL WAS ADDED TO THE BOTTOM OF THE HOLE.

2" PVC STANDPIPE STICKUP FROM GROUND SURFACE = 3.35'

ALUMINUM CASING STICKUP FROM GROUND SURFACE = 3.6'

WELL DEVELOPMENT NOTES

Golder Associates

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MONITORING WELL INSTALLATION LOG

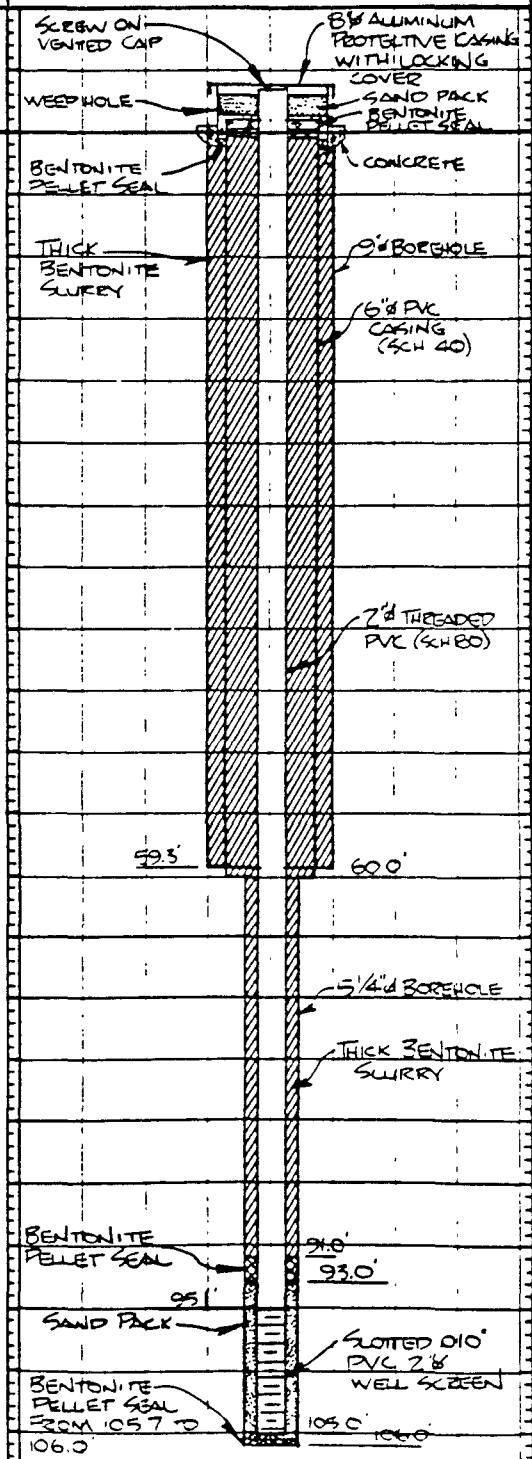
JOB NO. 853-30983 PROJECT CWM / CONSENT WELLS / EMELLE WELL NO CA-4 SHEET 1 OF 1
GA INSP. RDD DRILLING METHOD ROTARY WASH GROUND ELEV 225.0' WATER DEPTH —
WEATHER SUNNY DRILLING COMPANY TRI-STATE 2" PVC COLLAR ELEV 228.45' DATE/TIME —
TEMP 30°F DRILL RIG MOBILE B-61 DRILLER DJ/WG STARTED 7:30 AM 1/15/86 (TIME / DATE) COMPLETED 10:20 AM 1/15/86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in dia. 98.6 l.f WELL SCREEN 2 in. dia. 9.85 l.f BENTONITE SEAL 2.0' THICK, 1/2" PELLETS ABOVE SCREEN
CASING TYPE PVC SCH. 80 SCREEN TYPE PVC SCH. 80 INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED) SLOT SIZE .010 INCH FILTER PACK QTY 4 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX 16 CU FT AROUND 2" PVC; APPROX 20 CU FT ABOVE PELLET SEAL CENTRALIZERS — FILTER PACK TYPE 1/6/30 GRADE BLASTING SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER W/ WATER DRILLING MUD TYPE — INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
225.0'	GROUND SURFACE
0.0	
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	IN SITU CHALK (NO FRACTURES ABOVE LEACHATE)
40.0	
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	
95.0	
100.0	
105.0	
110.0	

WELL SKETCH



INSTALLATION NOTES

WELL ORIGINALLY SET IN THIS HOLE ON 12/15/85 HOWEVER DUE TO THE FACT THAT THE PVC PIPE WAS CUT SHORT THIS WELL WAS 1.7' TOO HIGH IN THE HOLE THEREFORE THE 2" PVC WAS PULLED OUT, HOLE FLUSHED, AND THE WELL RESET TO ITS CORRECT DEPTH. A BENTONITE PELLET SEAL WAS ADDED TO THE BOTTOM OF THE HOLE.

2" PVC STANDPIPE STICKUP FROM GROUND SURFACE = 3.45'

ALUMINUM CASING STICKUP FROM GROUND SURFACE = 3.5'

WELL DEVELOPMENT NOTES

Golder Associates

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MONITORING WELL INSTALLATION LOG

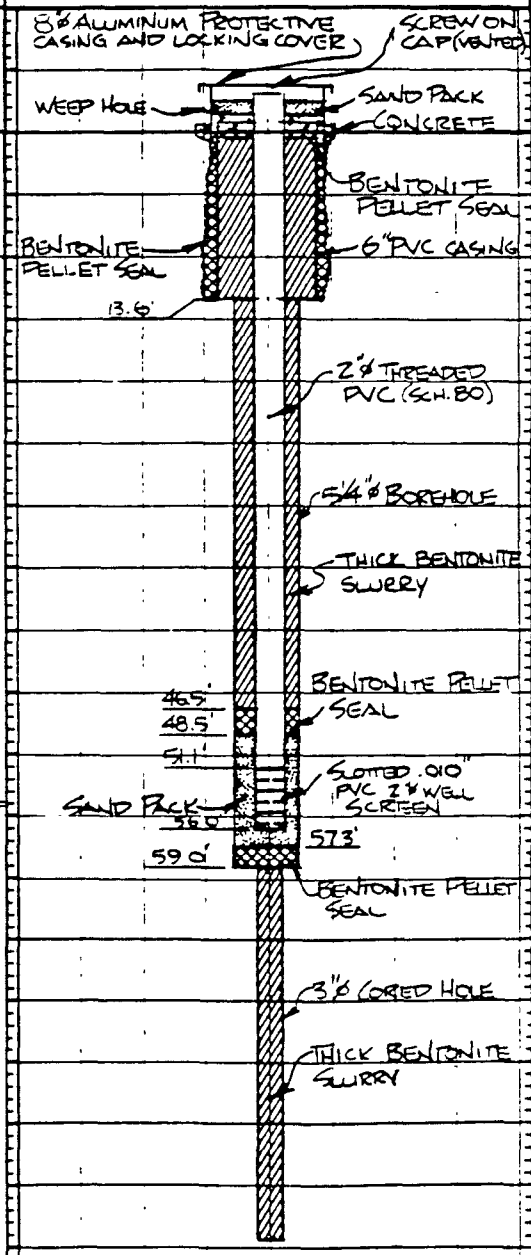
JOB NO. 853-3098 3	PROJECT CWM/CONSENT WELLS/ EMELLE	WELL NO. CA 5	SHEET 1 OF 1
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 249.31'	WATER DEPTH —
WEATHER SUNNY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 252.31'	DATE/TIME —
TEMP. 70°F	DRILL RIG MOBILE B-61 / DRILLER DJ/WG	STARTED 5:10 PM 1/5/86 (TIME / DATE)	COMPLETED 2:15 PM 3/6/86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 54.2 lf	WELL SCREEN 2 in. dia. 4.85 lf	BENTONITE SEAL 2.0' THICK, 1/2" PELLETS ABOVE
CASING TYPE PVC SCH. 80	SCREEN TYPE PVC SCH. 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 2 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX. 8 CU FT. ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE #30 GRADE BLASTING SAND
GROUT TYPE 1:1 RATIO OF AQUA GEL / GOLD SEAL BENTONITE POWDER W/WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
249.31'	GROUND SURFACE
0.0	
5.0	RECOMPACTED CHALK
10.0	
15.0	
20.0	
25.0	IN SITU CHALK
30.0	
35.0	
40.0	
45.0	
50.0	
55.0	FRACTURE ZONE 53.8'-54.1'
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	
95.0	
100.0	

WELL SKETCH



INSTALLATION NOTES

2"ø PVC STANDPIPE STICKUP = 3.0'

ALUMINUM PROTECTIVE CASING STICKUP = 3.7'

WELL DEVELOPMENT NOTES

Golder Associates

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MONITORING WELL INSTALLATION LOG

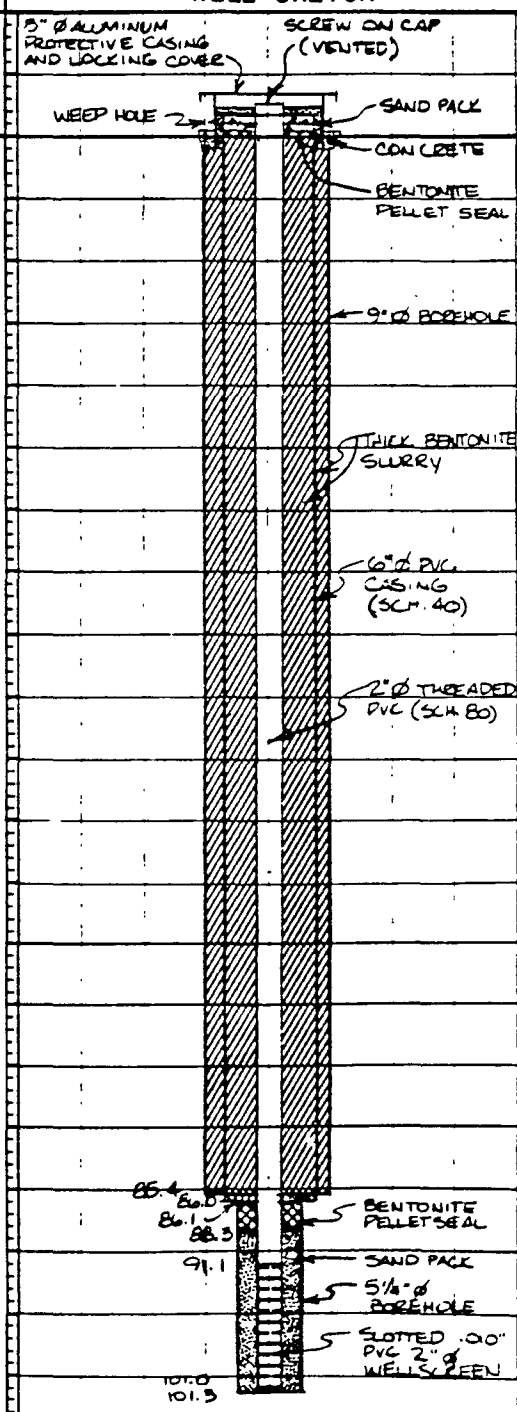
JOB NO. 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO CA-5A	SHEET 1 OF 1
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV. 249.58'	WATER DEPTH —
WEATHER CLOUDY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 252.03'	DATE/TIME —
TEMP. 40°F	DRILL RIG MOBILE B-61 / DRILLER DJ/WG	STARTED 8:15 AM / 1-7-86 (TIME / DATE)	COMPLETED 12:50 PM / 3-6-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 93.6 lf	WELL SCREEN 2 in. dia. 9.85 lf	BENTONITE SEAL 2.2' THICK, 1/2" ø PELLETS, ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 3 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX. 10 CU FT AROUND 6" PVC; APPROX. 10 CU FT ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX. 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
249.58'	GROUND SURFACE
0.0	SEE LOG CA-5 FOR SOIL/ROCK DESCRIPTION
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	
40.0	
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	
95.0	
100.0	
105.0	

WELL SKETCH



INSTALLATION NOTES

2" ø PVC STANDPIPE STICKUP = 2.45'

ALUMINUM PROTECTIVE CASING STICKUP = 3.3'

WELL CA-5A LOCATED 3° W OF S. 10' FROM CA-5. (SEE WELL LOCATION MAP)

WELL DEVELOPMENT NOTES

Golder Associates

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MONITORING WELL INSTALLATION LOG

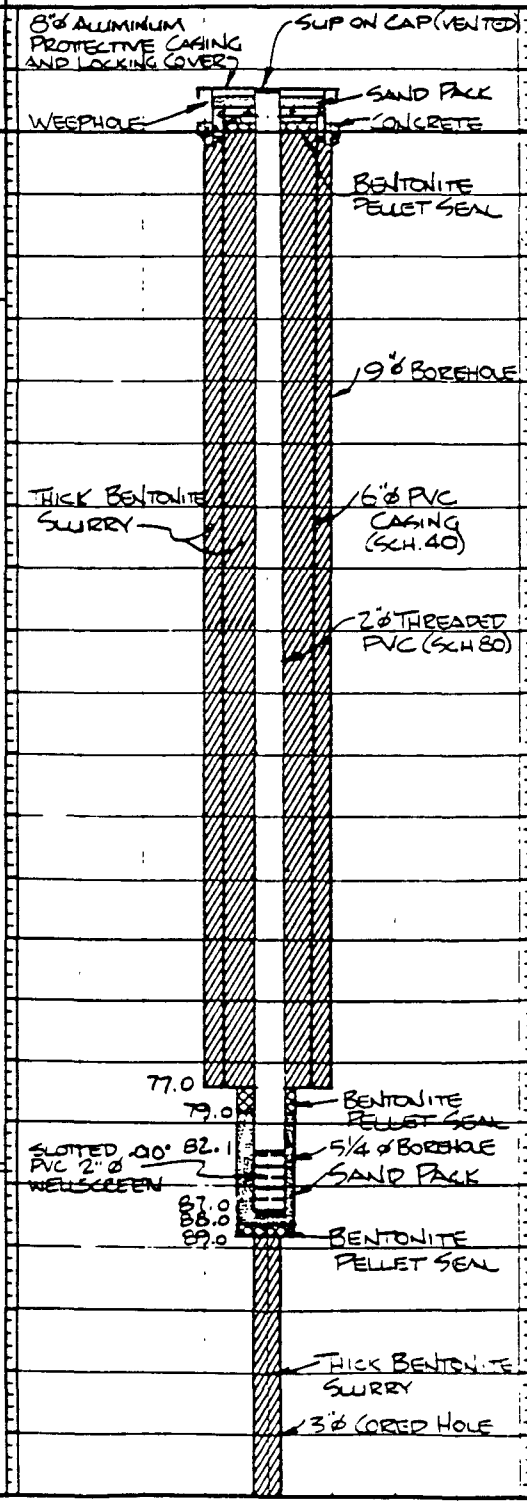
JOB NO. 853-3098.3 PROJECT CWM / CONSENT WELLS/EMELLE WELL NO CA-6 SHEET 1 OF 2
GA INSP. RDD DRILLING METHOD ROTARY WASH GROUND ELEV 262.79' WATER DEPTH —
WEATHER CLOUDY DRILLING COMPANY TRI-STATE 2" PVC COLLAR ELEV 265.89' DATE/TIME —
TEMP 40°F DRILL RIG MOBILE B-61 DRILLER DJ/WG STARTED 2:00 PM 2-27-86 (TIME / DATE) COMPLETED 5:20 PM 3-3-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 85.25 lf WELL SCREEN 2 in. dia. 4.85 lf BENTONITE SEAL 2.0 THICK 1/2" PELLETS ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80 SCREEN TYPE PVC SCH 80 INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED) SLOT SIZE .010 INCH FILTER PACK QTY 2 BAGS (50LB BAGS)
GROUT QUANTITY APPROX. 16 CU FT ABOVE PELLET SEAL APPROX. 18 CU FT AROUND PVC CENTRALIZERS — FILTER PACK TYPE 16/30 GRADE BLAST NO SAND
GROUT TYPE APPROX. 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER W/WATER DRILLING MUD TYPE — INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
262.79'	GROUND SURFACE
0.0	RECOMPACTED CHALK
5.0	
10.0	
15.0	IN SITU CHALK
20.0	
25.0	
30.0	
35.0	
40.0	
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	FRACTURE ZONE 83.6'-84.0'
85.0	
90.0	
95.0	
100.0	
105.0	
110.0	

WELL SKETCH



INSTALLATION NOTES

2"ø PVC STANDPIPE STICKUP = 3.1'

ALUMINUM PROTECTIVE CASING STICKUP = 3.2'

WELL DEVELOPMENT NOTES

Golder Associates

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May 19, 1986

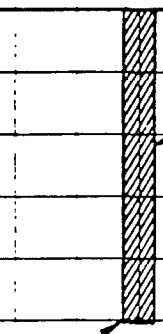
MONITORING WELL INSTALLATION LOG

JOB NO. 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO. CA-6	SHEET 2 OF 2
GA INSP RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 262.79'	WATER DEPTH —
WEATHER CLOUDY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 265.89'	DATE/TIME —
TEMP. 40°F	DRILL RIG MOBILE B-61 DRILLER DJ/WG	STARTED 2:00 PM / 2-27-86 (TIME / DATE)	COMPLETED 5:20 PM / 3-3-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 85.25 l.f.	WELL SCREEN 2 in. dia. 4.85 l.f.	BENTONITE SEAL 2 0" THICK, 1/2 Ø PELLETS ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCH. 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 2 BAGS (50-3 BAGS)
GROUT QUANTITY APPROX. 18 CU. FT. AROUND 6" PVC APPROX. 16 CU. FT. ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX. 11 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
		CONTINUED FROM SHEET 1 OF 2	
110.0			
115.0			
120.0	IN SITU CHALK	3"Ø CORED HOLE	
125.0			
130.0			
135.0		135.1	
140.0			



WELL DEVELOPMENT NOTES

Golder Associates

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MONITORING WELL INSTALLATION LOG

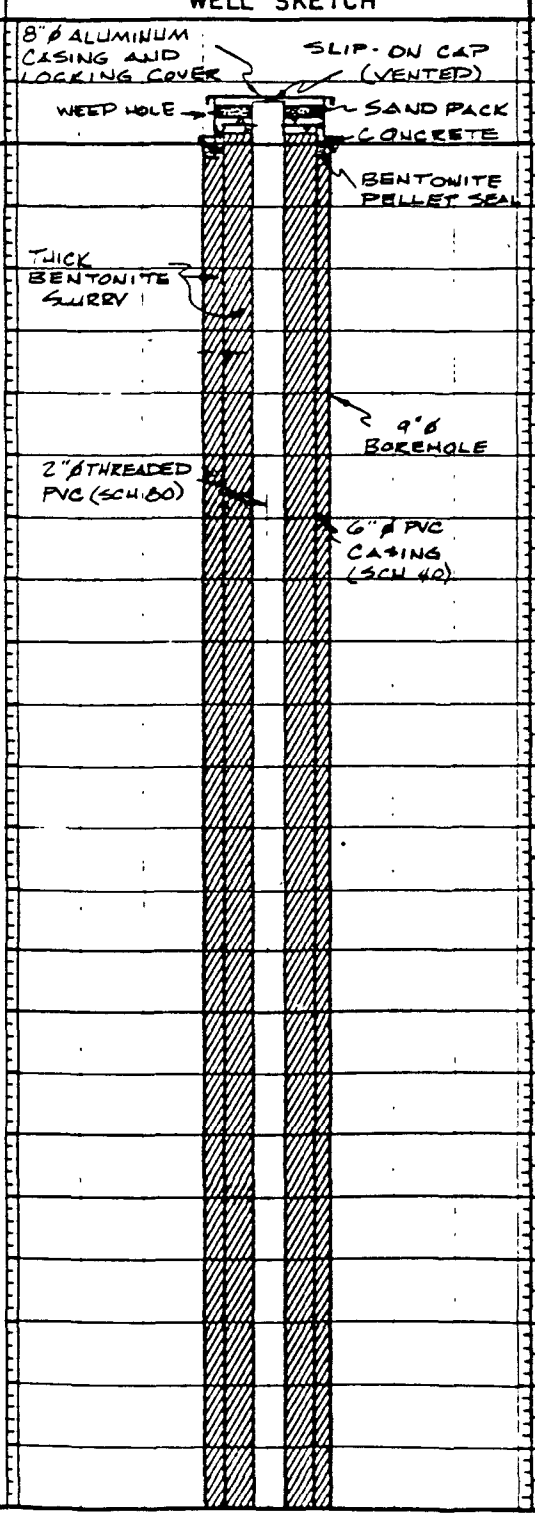
JOB NO. 853-3098.3	PROJECT CWM / CONSENT WELLS / EMELLE		WELL NO. CA-6A	SHEET 1	OF 2
GA INSP. RDD	DRILLING METHOD ROTARY WASH		GROUND ELEV 262.79'	WATER DEPTH —	
WEATHER SUNNY	DRILLING COMPANY TRI-STATE		2" PVC COLLAR ELEV 266.30'	DATE/TIME —	
TEMP. 45° F	DRILL RIG MOBILE B-61	DRILLER DJ / WG	STARTED 8:00 AM / 3-4-86 (TIME / DATE)	COMPLETED 3:40 PM / 3-6-86 (TIME / DATE)	

MATERIALS INVENTORY

WELL CASING 2 in. dia. 121.66 l.f.	WELL SCREEN 2 in. dia. 9.85 l.f.	BENTONITE SEAL 2.0' THICK 1/2" ø PELLETS ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCH 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 3 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX. 20 CU. FT AROUND 6" PVC; APPROX. 16 CU. FT. ABOVE BULK SEAL	CENTRALIZERS —	FILTER PACK TYPE 10/20 GRADE BLASTING SAND
GROUT TYPE APPROX. 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER W/WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
262.79'	GROUND SURFACE
0.0	
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	
40.0	SEE LOG CA-6 FOR SOIL/ROCK DESCRIPTION
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	
95.0	
100.0	
105.0	
110.0	

WELL SKETCH



INSTALLATION NOTES

2" ø PVC STANDPIPE STICKUP = 3.51

ALUMINUM PROTECTIVE CASING "STICKUP" = 3.65

WELL CA-6A LOCATED 10' SOUTH OF CA-6 ALONG N-S ALIGNMENT LINE (SEE WELL LOCATION MAP)

WELL DEVELOPMENT NOTES

Golder Associates

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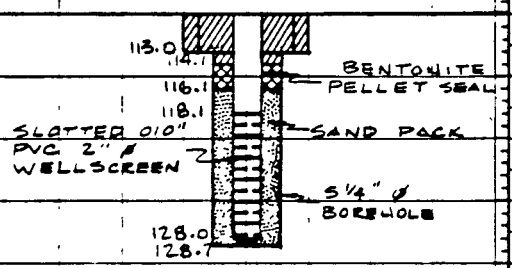
MONITORING WELL INSTALLATION LOG

JOB NO. 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO CA-6A	SHEET 2 OF 2
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 262.79'	WATER DEPTH —
WEATHER SUNNY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 266.30'	DATE/TIME —
TEMP. 45° F	DRILL RIG MOBILE B-61 DRILLER DJ/WG	STARTED 8:00 AM / 3/4/86 (TIME / DATE)	COMPLETED 3:40 PM / 3/6/86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 121.66 l.f.	WELL SCREEN 2 in. dia. 9.85 l.f.	BENTONITE SEAL 2.0' THICK 1/2" Ø PELLETS ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCH. 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 3 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX 20 CU FT AROUND 6" PVC APPROX. 16 CU FT ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
		CON'T FROM SHEET 1 OF 2	
110.0			
115.0			
120.0			
125.0			
130.0			

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

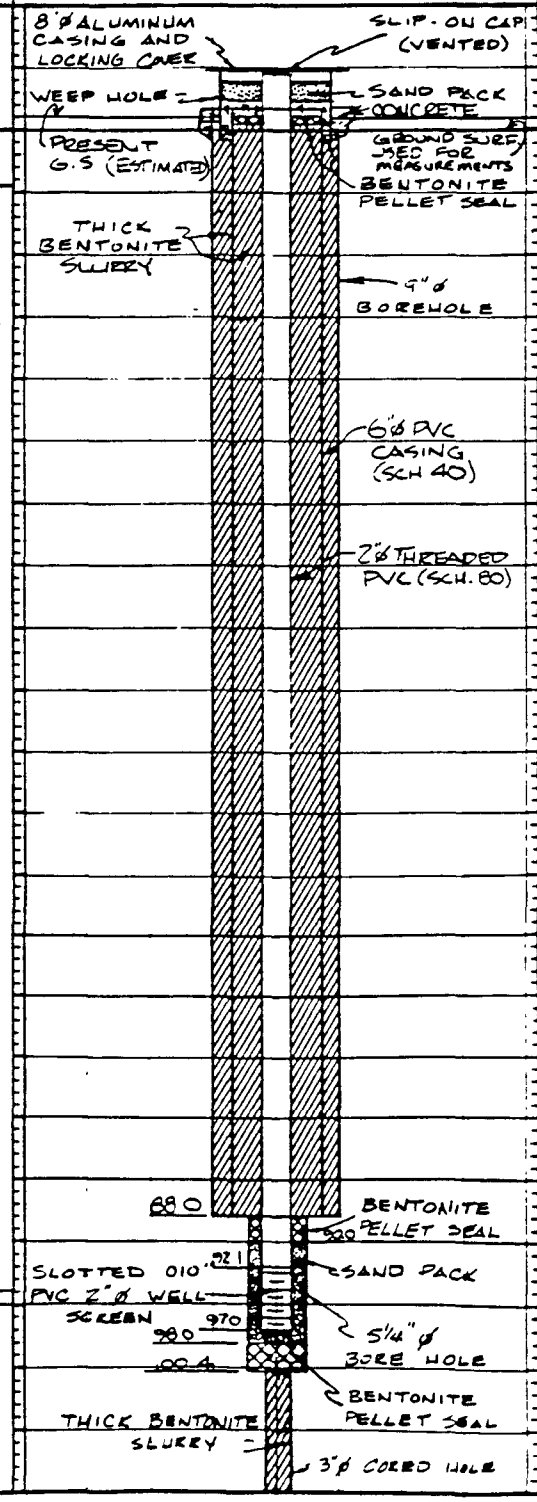
JOB NO. 853-30983	PROJECT CWM / CONSENT WELLS / EMELLE	WELL NO CA-7	SHEET 1 OF 2
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 266.94'	WATER DEPTH —
WEATHER CLOUDY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 271.34'	DATE/TIME —
TEMP. 50°F	DRILL RIG MOBILE B-61 DRILLER DJ/WG	STARTED 8:40AM 3/11/86 (TIME / DATE)	COMPLETED 8:40AM 3/13/86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 96.52 lf	WELL SCREEN 2 in. dia. 4.88 lf	BENTONITE SEAL 2.0' THICK, 1/2" PELLETS ABOVE SCREEN
CASING TYPE PVC SCH 80	SCREEN TYPE PVC SCH. 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 2 BAGS (50 lb BAGS)
GROUT QUANTITY APPROX 20 CU. FT AROUND 6" PVC; 15 CU FT ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX. 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER W/WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
266.94'	GROUND SURFACE
0.0	RECOMPACTED CHALK
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	
40.0	IN SITU CHALK
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	FRACTURE ZONE 93.9'-94.9'
95.0	
100.0	
105.0	
110.0	

WELL SKETCH



INSTALLATION NOTES

2" ø PVC STANDPIPE
STICKUP = 4.4'

ALUMINUM PROTECTIVE CASING STICKUP = 4.5'

WELL DEVELOPMENT NOTES

Golder Associates

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May 19, 1983

MONITORING WELL INSTALLATION LOG

JOB NO. 853-3098 3 PROJECT CWM/CONSENT WELLS/EMELLE WELL NO CA-7 SHEET 2 OF 2

GA INSP. RDD DRILLING METHOD ROTARY WASH GROUND ELEV 266.94' WATER DEPTH —

WEATHER CLOUDY DRILLING COMPANY TRI-STATE 2" PVC COLLAR ELEV 271.34' DATE/TIME —

TEMP 50°F DRILL RIG MOBILE B-61 DRILLER DJ/WG STARTED 8:40AM 3/1/86 (TIME / DATE) COMPLETED 8:40AM 3/3/86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 96.52 ft WELL SCREEN 2 in. dia. 4.88 ft BENTONITE SEAL 2.0 THICK, 1/2" PELLETS, ABOVE SCREEN

CASING TYPE PVC SCH. 80 SCREEN TYPE PVC SCH 80 INSTALLATION METHOD BY HAND

JOINT TYPE THREADED/TEFLON WRAPPED SLOT SIZE .010 INCH FILTER PACK QTY 2 BAGS (50 LB BAGS)

GROUT QUANTITY APPROX 20 CU. FT AROUND 6" PVC ABOVE PELLET SEAL CENTRALIZERS — FILTER PACK TYPE 40/30 GRADE 3 LAST NG SAND

GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL DRILLING MUD TYPE — INSTALLATION METHOD BY HAND

GOLD SEAL BENTONITE POWDER W/WATER

ELEV./DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
		CONTINUED FROM SHEET 1 OF 2	
110.0		3" ø CORED HOLE 115.0	
115.0			
120.0			

WELL DEVELOPMENT NOTES

Golder Associates

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May 19, 1986

MONITORING WELL INSTALLATION LOG

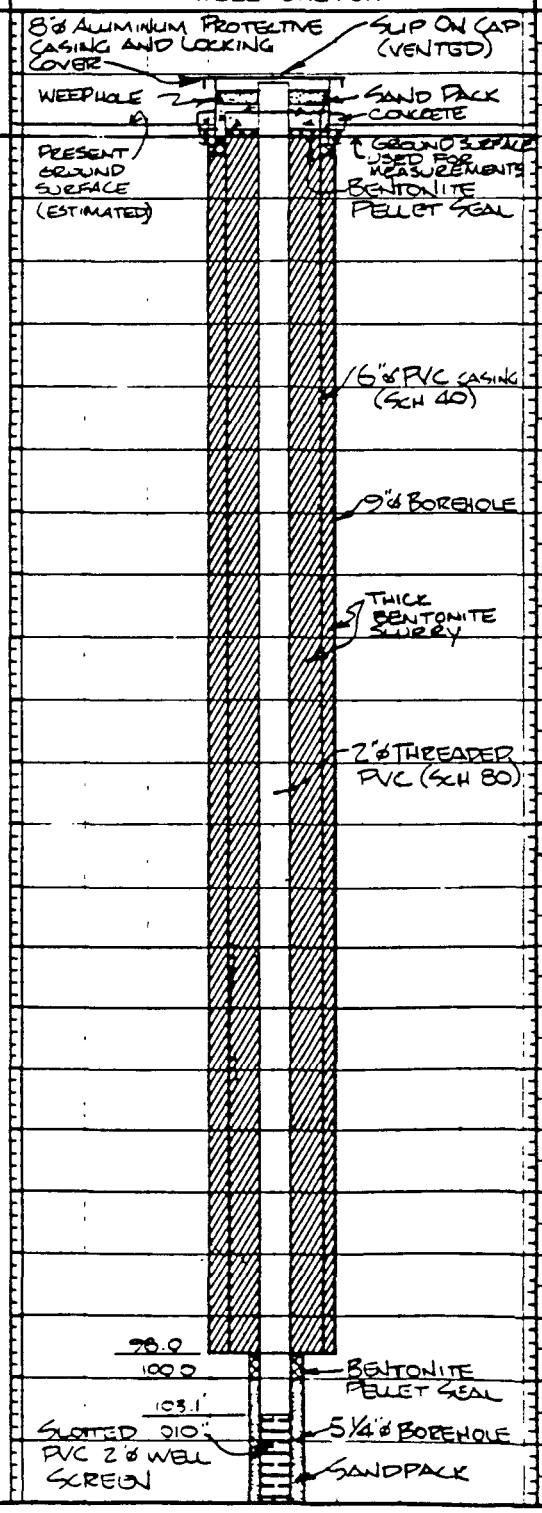
JOB NO. 853-3098.3	PROJECT CWM / CONSENT WELLS / EMELLE	WELL NO. CA-7A	SHEET 1 OF 2
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 266.75'	WATER DEPTH —
WEATHER SUNNY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV. 270.95'	DATE/TIME —
TEMP. 50°F	DRILL RIG MOBILE 3-61 / DRILLER DJ/WG	STARTED 4:10 PM 3-6-86 (TIME / DATE)	COMPLETED 8:40 AM 3/1/86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING	2 in. dia. 107.35 l.f.	WELL SCREEN	2 in. dia. 9.85 l.f.	BENTONITE SEAL	2' THICK 1/2" PELLETS ABOVE SCREEN
CASING TYPE	PVC SCH 80	SCREEN TYPE	PVC SCH. 80	INSTALLATION METHOD	BY HAND
JOINT TYPE	THREADED (TEFLON WRAPPED)	SLOT SIZE	.010 INCH	FILTER PACK QTY	3 1/4 BAGS (50 LB BAGS)
GROUT QUANTITY	APPROX 70 CU FT ABOVE SEAL (APPROX 2 CU FT AROUND 6" PVC)	CENTRALIZERS	—	FILTER PACK TYPE	1/4/30 GRADE BLASTING SAND
GROUT TYPE	APPROX. 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER W/WATER	DRILLING MUD TYPE	—	INSTALLATION METHOD	BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
266.75'	GROUND SURFACE
0.0	
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	
40.0	SEE LOG CA-7 FOR SOIL/ROCK DESCRIPTION
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	
95.0	
100.0	
105.0	
110.0	

WELL SKETCH



INSTALLATION NOTES

2" ø PVC STANDPIPE STICKUP: 4.2'

ALUMINUM PROTECTIVE CASING STICKUP: 4.4'

WELL CA-7A LOCATED 10' SOUTH OF CA-7 ALONG N-S ALIGNMENT LINE (SEE WELL LOCATION MAP)

WELL DEVELOPMENT NOTES

Golder Associates

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May 19, 1993

MONITORING WELL INSTALLATION LOG

JOB NO. 853-3088.3	PROJECT CWM / CONSENT WELLS / EMELLE	WELL NO. CA-7A	SHEET 2 OF 2
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 266.75'	WATER DEPTH —
WEATHER SUNNY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 270.95'	DATE/TIME —
TEMP. 50°F	DRILL RIG MOBILE B-61 / DRILLER DJ/WG	STARTED 4:10PM / 3/6/86 (TIME / DATE)	COMPLETED 8:40AM / 3/11/86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 107.35 lf	WELL SCREEN 2 in. dia. 9.85 lf	BENTONITE SEAL 2' THICK 1/2" PELLETS ABOVE SCREEN
CASING TYPE PVC SCH 80	SCREEN TYPE PVC SCH. 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 3/4 BAGS (50LB BAGS)
GROUT QUANTITY APPROX. 20 CU FT. ABOVE PELLET SEAL (APPROX 27 CU FT AROUND 6" PVC)	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX. 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWER W/WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
		CONTINUED FROM SHEET 1 OF 2	
110.0		5 1/4" ø BOREHOLE — 113.0' — 114.3'	
115.0			
120.0			

WELL DEVELOPMENT NOTES

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May 19, 1986

MONITORING WELL INSTALLATION LOG

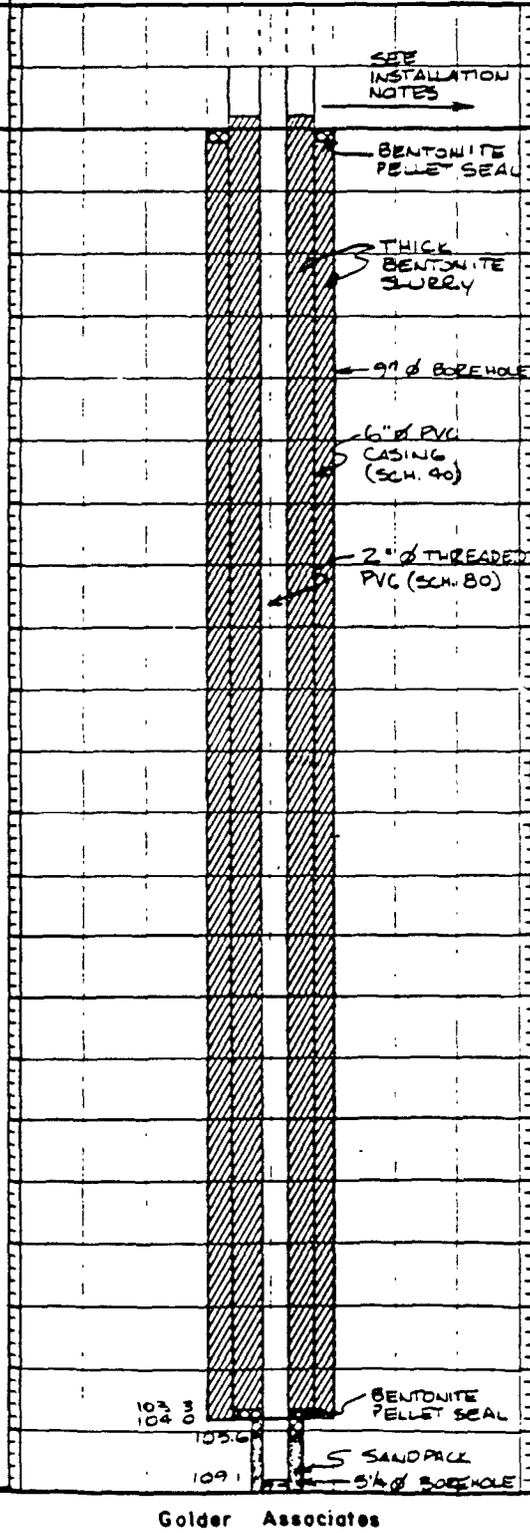
JOB NO. 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO CA-8	SHEET 1 OF 2
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV. 251.62'	WATER DEPTH —
WEATHER CLOUDY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 265.62'	DATE/TIME —
TEMP 40° F	DRILL RIG MOBILE B-61 DRILLER DJ/WG	STARTED 9:05AM / 1-22-86 (TIME / DATE)	COMPLETED 8:20AM / 2-4-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in dia. 123.15 l.f.	WELL SCREEN 2 in. dia. 9.85 l.f.	BENTONITE SEAL 2.3 ft - CC, 12 ø PELLETS ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 3 1/4 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX. 32 CU FT AROUND 6" PVC APPROX. 20 CU FT ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX. 1:1 RATIO AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

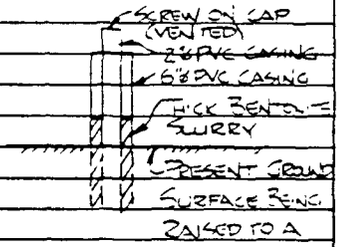
ELEV./DEPTH	SOIL/ROCK DESCRIPTION
251.62'	GROUND SURFACE
0.0	RECOMPACTED CHALK
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	
40.0	IN SITU CHALK
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	
95.0	
100.0	
105.0	FRACTURE ZONE 109.9'-117.3'
110.0	

WELL SKETCH



INSTALLATION NOTES

PROTECTIVE ALUMINUM COVER NOT INSTALLED BECAUSE OF THE GROUND SURFACE BEING RAISED IN THE DITCH WHERE CA-8 IS LOCATED. COVER AND ADDITIONAL BENTONITE SLURRY WILL HAVE TO BE ADDED LATER WHEN THE GROUND IS RAISED TO SPECIFIED GRADE.



PRESENT STICKUP OF 2" PVC STANDPIPE = 4.0' PRESENT STICKUP OF 6" PVC STANDPIPE = 13.2'

ORIGINAL 3 ø COREHOLE CAVED IN FROM 73.8' TO 175.0'

Golder Associates

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May 19, 1986

MONITORING WELL INSTALLATION LOG

JOB NO. 853-3098.3 PROJECT CWM / CONSENT WELLS / EMELLE WELL NO. CA-8 SHEET 2 OF 2
GA INSP. RDD DRILLING METHOD ROTARY WASH GROUND ELEV 251.62' WATER DEPTH —
WEATHER CLOUDY DRILLING COMPANY TRI-STATE 2" PVC COLLAR ELEV. 265.62' DATE/TIME —
TEMP. 40°F DRILL RIG MOBILE B-61 DRILLER DJ/WG STARTED 9:05 A.M. / 1-27-86 (TIME / DATE) COMPLETED 8:20 AM / 2-4-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 123.15 l.f. WELL SCREEN 2 in. dia. 9.85 l.f. BENTONITE SEAL 2.3' THICK 1/2" PELLETS ABOVE SCREEN
CASING TYPE PVC SCH. 80 SCREEN TYPE PVC SCH. 80 INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED) SLOT SIZE .010 INCH FILTER PACK QTY 3 1/4 BAGS (50LB BAGS)
GROUT QUANTITY APPROX 32 CU FT AROUND 6 PVC APPROX 20 CU FT ABOVE PELLET SEAL CENTRALIZERS — FILTER PACK TYPE 16/30 GRADE BLAST LIG SAND
GROUT TYPE APPROX 11 RATIO AQUA GEL GOLD SEAL BENTONITE POWDER W/WATER DRILLING MUD TYPE — INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
		CONTINUED FROM SHEET 1 OF 2	
110.0	FRACTURE ZONE 109.9' - 117.3'	5 1/4" Ø BOREHOLE	
115.0		SLOTTED .010" PVC 2" Ø WELL SCREEN	
		SAND PACK	
120.0		119.5 119.0 120.0 122.3 BENTONITE PELLET SEAL	
125.0			
130.0			
135.0		3" Ø CORED HOLE	
140.0			
145.0		THICK BENTONITE SLURRY	
150.0			
155.0			
160.0			
165.0			WELL DEVELOPMENT NOTES
170.0			
175.0		173.8	

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May 19, 1989

MONITORING WELL INSTALLATION LOG

JOB NO 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE			WELL NO CA-8A		SHEET 1	OF 2
GA INSP RDD	DRILLING METHOD ROTARY WASH			GROUND ELEV 251.69'		WATER DEPTH —	
WEATHER SUNNY	DRILLING COMPANY TRI-STATE			2" PVC COLLAR ELEV 267.89'		DATE/TIME —	
TEMP. 35° F	DRILL RIG MOBILE B-61	DRILLER DJ/WG		STARTED 9:55 AM / 1-29-86 (TIME / DATE)		COMPLETED 9:30 AM / 2-4-86 (TIME / DATE)	

MATERIALS INVENTORY

WELL CASING	2 in. dia. 178.35 lf	WELL SCREEN	2 in. dia. 9.85 lf	BENTONITE SEAL	2.1' THICK, 1/2 ø PELLETS, ABOVE SCREEN
CASING TYPE	PVC SCHEDULE 80	SCREEN TYPE	PVC SCHEDULE 80	INSTALLATION METHOD	BY HAND
JOINT TYPE	THREADED (TEFLON WRAPPED)	SLOT SIZE	.010 INCH	FILTER PACK QTY	3 BAGS (50 LB BAGS)
GROUT QUANTITY	APPROX 50 CU FT AROUND 6" PVC; APPROX. 24 CU FT ABOVE PELLET SEAL	CENTRALIZERS	—	FILTER PACK TYPE	16/30 GRADE BLASTING SAND
GROUT TYPE	APPROX 1:1 RATIO OF AQUA GEL GOLDSEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE	—	INSTALLATION METHOD	BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
251.69'	GROUND SURFACE	SEE INSTALLATION NOTES FOR DETAILS	PROTECTIVE ALUMINUM COVER NOT INSTALLED BECAUSE OF THE GROUND SURFACE BEING RAISED IN THE DITCH NEEDED
0.0		BENTONITE PELLET SEAL	CA-8A IS LOCATED. COVER AND ADDITIONAL BENTONITE SLURRY WILL HAVE TO BE ADDED LATER WHEN THE GROUND IS RAISED TO SPECIFIED GRADE
5.0			
10.0			
15.0		THICK BENTONITE SLURRY	SCREW ON CAP (VENTED)
20.0			2" ø PVC CASING
25.0		9" ø BOREHOLE	6" ø PVC CASING
30.0			THICK BENTONITE SLURRY
35.0			PRESENT GROUND SURFACE BEING RAISED TO A HIGHER GRADE BY CAM
40.0	SEE LOG CA-8 FOR SOIL/ROCK DESCRIPTION	6" ø PVC CASING (SCH. 40)	
45.0		2" ø THREADED PVC (SCH. 80)	PRESENT STICKUP OF 2" PVC STANDPIPE = 1.6'
50.0			PRESENT STICKUP OF 6" PVC STANDPIPE = 4.1
55.0			
60.0			WELL CA-8A LOCATED 2' NORTH OF CA-8 ALONG N-S ALIGNMENT LINE (SEE WELL LOCATION MAP)
65.0			
70.0			
75.0			
80.0			
85.0			
90.0			
95.0			
100.0			
105.0			
110.0			

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May 19, 1988

MONITORING WELL INSTALLATION LOG

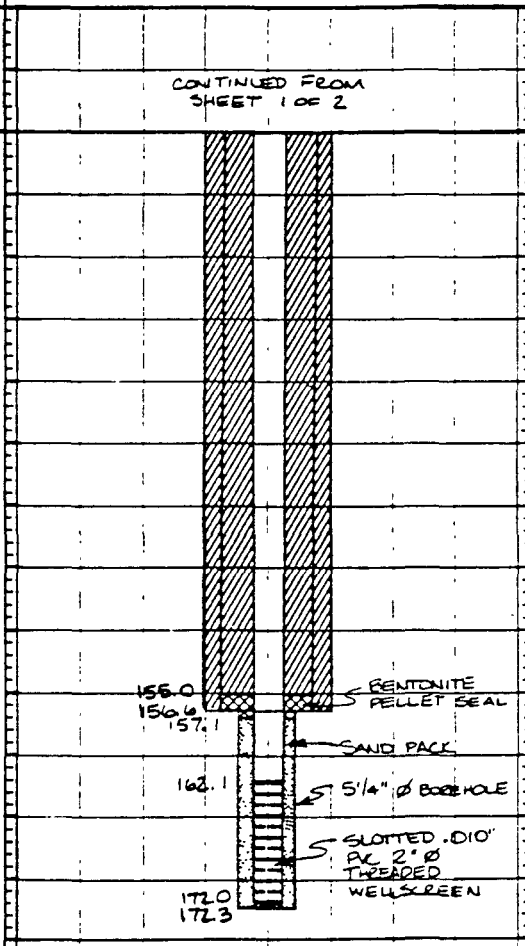
JOB NO. 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO CA-8A	SHEET 2 OF 2
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 251.69'	WATER DEPTH —
WEATHER SUNNY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 267.89'	DATE/TIME —
TEMP. 35° F	DRILL RIG MOBILE B-61 DRILLER DJ/WG	STARTED 9:50AM/1-29-86 (TIME / DATE)	COMPLETED 9:30AM/2-4-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 178.35 l.f.	WELL SCREEN 2 in. dia. 9.85 l.f.	BENTONITE SEAL 2.1' THICK, 1/2" Ø PELLETS ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 3 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX 36 CU FT AROUND 6" PVC; APPROX 2.4 CU FT ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
110.0	SEE LOG CA-8 FOR SOIL/ROCK DESCRIPTION
115.0	
120.0	
125.0	
130.0	
135.0	
140.0	
145.0	
150.0	
155.0	
160.0	
165.0	
170.0	
175.0	
180.0	

WELL SKETCH



INSTALLATION NOTES

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

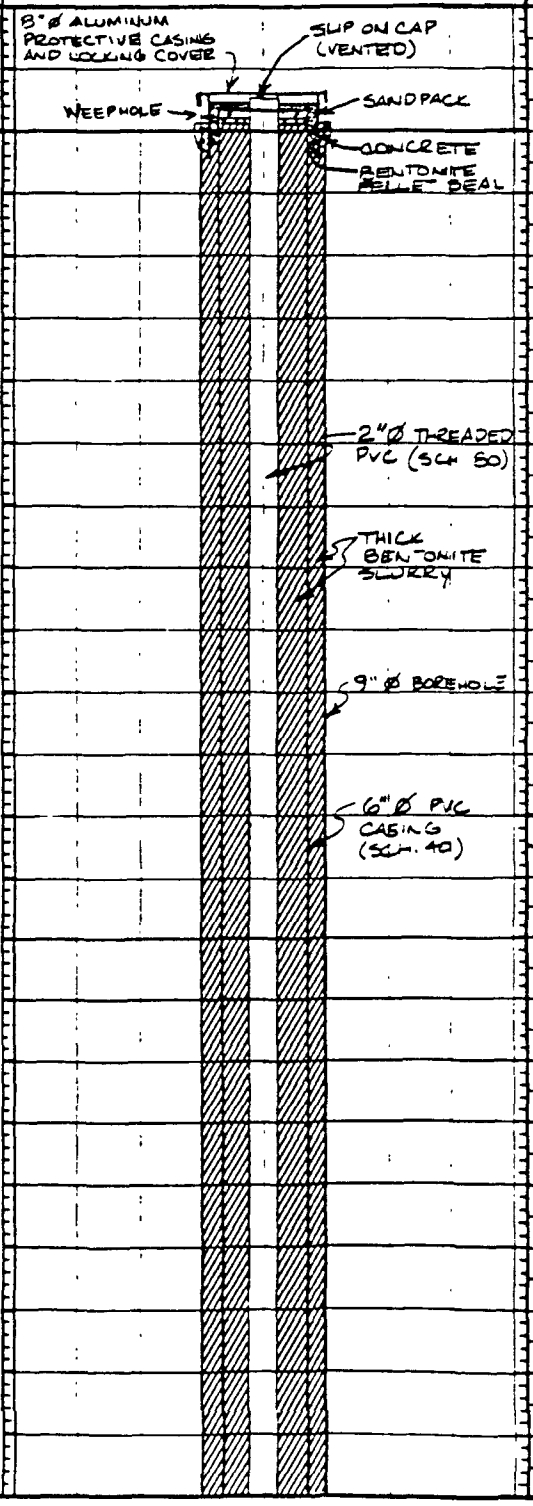
JOB NO. 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE			WELL NO CA-9		SHEET 1	OF 2
GA INSP. RDD	DRILLING METHOD ROTARY WASH			GROUND ELEV 242.7'		WATER DEPTH —	
WEATHER RAIN	DRILLING COMPANY TRI-STATE			2" PVC COLLAR ELEV 245.28'		DATE/TIME —	
TEMP. 50°F	DRILL RIG MOBILE B-61	DRILLER DJ/WG	STARTED 9:00 AM / 2-17-86 (TIME / DATE)		COMPLETED 1:30 PM / 2-2-86 (TIME / DATE)		

MATERIALS INVENTORY

WELL CASING	2 in dia. 143.73 l.f.	WELL SCREEN	2 in. dia. 4.85 l.f.	BENTONITE SEAL	2.3'-CL. 1/2" Ø PELLETS ABOVE SCREEN
CASING TYPE	PVC SCHEDULE 80	SCREEN TYPE	PVC SCHEDULE 80	INSTALLATION METHOD	BY HAND
JOINT TYPE	THREADED (TEFLONWRAPPED)	SLOT SIZE	.010 INCH	FILTER PACK QTY	1 BAG (50 LB BAGS)
GROUT QUANTITY	APPROX. 26.5 FT AROUND 6" PVC; APPROX. 24 CU FT ABOVE PELLET SEAL	CENTRALIZERS	—	FILTER PACK TYPE	16/30 GRADE BLASTING SAND
GROUT TYPE	APPROX 1:1 RATIO OF AQUA GEL GOLDSEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE	—	INSTALLATION METHOD	BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
242.7'	GROUND SURFACE
0.0	
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	
40.0	IN SITU CHALK
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	
95.0	
100.0	
105.0	
110.0	

WELL SKETCH



INSTALLATION NOTES

2" Ø PVC STANDPIPE STICKUP = 2.58'

ALUMINUM PROTECTIVE CASING STICKUP = 2.75'

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

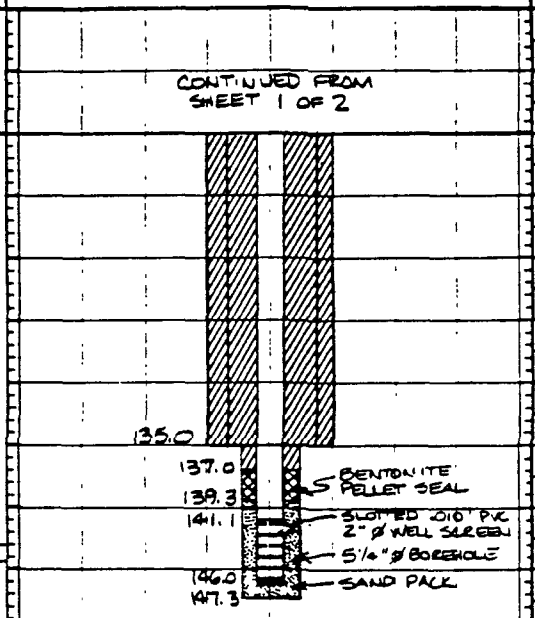
JOB NO. 863-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO. CA-9	SHEET 2 OF 2
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 242.7'	WATER DEPTH —
WEATHER RAIN	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 245.28'	DATE/TIME —
TEMP. 50°F	DRILL RIG MOBILE B-61 / DRILLER DJ/WG	STARTED 9:00AM/2-17-86 (TIME / DATE)	COMPLETED 1:50PM/2-21-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 143.73 l.f	WELL SCREEN 2 in. dia. 4.85 l.f	BENTONITE SEAL 2.5 THICK 1/2 Ø PELLETS ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 1 BAG (50 LB. BAGS)
GROUT QUANTITY APPROX. 260 CU FT AROUND CASING APPROX. 24 CU FT ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL GOLDSEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
110.0	
115.0	
120.0	IN SITU CHALK
125.0	
130.0	
135.0	
140.0	FRACTURE ZONE 143.0' - 144.5'
145.0	
150.0	
155.0	
160.0	

WELL SKETCH



INSTALLATION NOTES

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

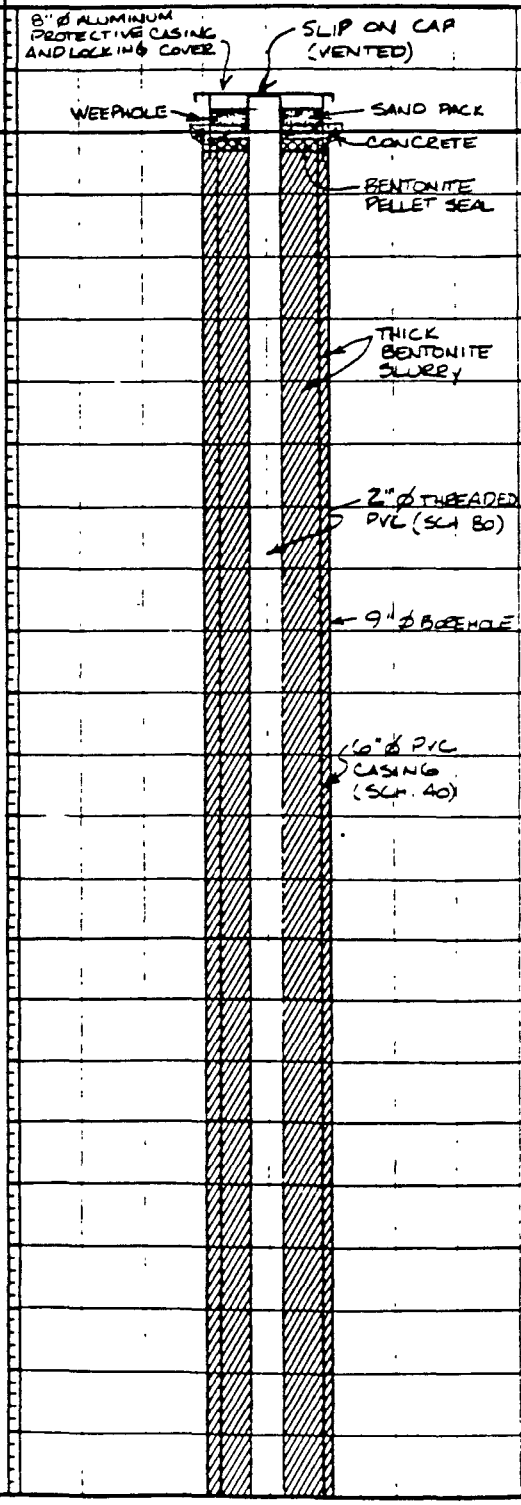
JOB NO 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE		WELL NO CA-9A	SHEET 1	OF 2
GA INSP. RDD	DRILLING METHOD ROTARY WASH		GROUND ELEV 242.96'	WATER DEPTH —	
WEATHER CLOUDY	DRILLING COMPANY TRI-STATE		2" PVC COLLAR ELEV 245.77'	DATE/TIME —	
TEMP. 55°F	DRILL RIG MOBILE B-61	DRILLER DJ/WG	STARTED 12:20 PM/2-19-86 (TIME / DATE)	COMPLETED 9:40 AM/2-25-86 (TIME / DATE)	

MATERIALS INVENTORY

WELL CASING	2 in. dia. 153.96 l.f.	WELL SCREEN	2 in. dia. 9.85 l.f.	BENTONITE SEAL	2.1' THICK, 1/2" Ø PELLETS, ABOVE SCREEN
CASING TYPE	PVC SCHEDULE 80	SCREEN TYPE	PVC SCHEDULE 80	INSTALLATION METHOD	BY HAND
JOINT TYPE	THREADED (TEFLON WRAPPED)	SLOT SIZE	.010 INCH	FILTER PACK QTY	2 1/2 BAGS (50 LB BAGS)
GROUT QUANTITY	APPROX 28 CU. FT. ABOVE PELLET SEAL (APPROX 2" CUT AROUND 2" PVC)	CENTRALIZERS	—	FILTER PACK TYPE	16/30 GRADE BLASTING SAND
GROUT TYPE	APPROX 1:1 25% OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE	—	INSTALLATION METHOD	BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
242.96'	GROUND SURFACE
0.0	
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	
40.0	SEE LOG CA-9 FOR SOIL/ROCK DESCRIPTION
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	
95.0	
100.0	
105.0	
110.0	

WELL SKETCH



INSTALLATION NOTES

2" Ø PVC STANDPIPE STICKUP = 2.81'

ALUMINUM PROTECTIVE CASING STICKUP = 3.0

WELL CA-9A LOCATED 2' EAST OF CA-9 ALONG E-W ALIGNMENT (SEE LOCATION MAP)

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

JOB NO	853-3098.3	PROJECT	CWM/CONSENT WELLS/EMELLE	WELL NO.	CA-9A	SHEET	2 OF 2
GA INSP.	RDD	DRILLING METHOD	ROTARY WASH	GROUND ELEV	242.96'	WATER DEPTH	—
WEATHER	CLOUDY	DRILLING COMPANY	TRI-STATE	2" PVC COLLAR ELEV	245.77'	DATE/TIME	—
TEMP.	55° F	DRILL RIG	MOBILE B-61	DRILLER	DJ/WG	STARTED	1220 PM / 2-19-86 (TIME / DATE)
						COMPLETED	9:40 AM / 2-25-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING	2 in dia. 153.96 l.f.	WELL SCREEN	2 in. dia. 9.85 l.f.	BENTONITE SEAL	2.1' THICK, 1/2" Ø PELLETS, ABOVE SCREEN
CASING TYPE	PVC SCHEDULE 80	SCREEN TYPE	PVC SCHEDULE 80	INSTALLATION METHOD	BY HAND
JOINT TYPE	THREADED (TEFLON WRAPPED)	SLOT SIZE	.010 INCH	FILTER PACK QTY	2 1/2 BAGS (50 LB BAGS)
GROUT QUANTITY	APPROX. 24 CU FT AROUND 6" PVC; APPROX. 28 CU FT ABOVE PELLET SEAL	CENTRALIZERS	—	FILTER PACK TYPE	#1/20 GRADE BLAST SAND
GROUT TYPE	APPROX. 1:1 RATIO OF AQUA GEL GOLDSEAL BENTONITE POWDER W/ H2O WATER	DRILLING MUD TYPE	—	INSTALLATION METHOD	BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
		CONTINUED FROM SHEET 1 OF 2	
110.0	SEE LOG CA-9 FOR SOIL/ROCK DESCRIPTION		
115.0			
120.0			
125.0			
130.0		132.0	
135.0		5 1/4" Ø BOREHOLE	
140.0			
145.0		145.4; 147.5 BENTONITE PELLET SEAL	
150.0		151.1 SAND PACK	
155.0		SLOTTED .010 PVC 2" Ø WELL SCREEN	
160.0		161.0; 163.0	
165.0			WELL DEVELOPMENT NOTES
170.0			

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MONITORING WELL INSTALLATION LOG

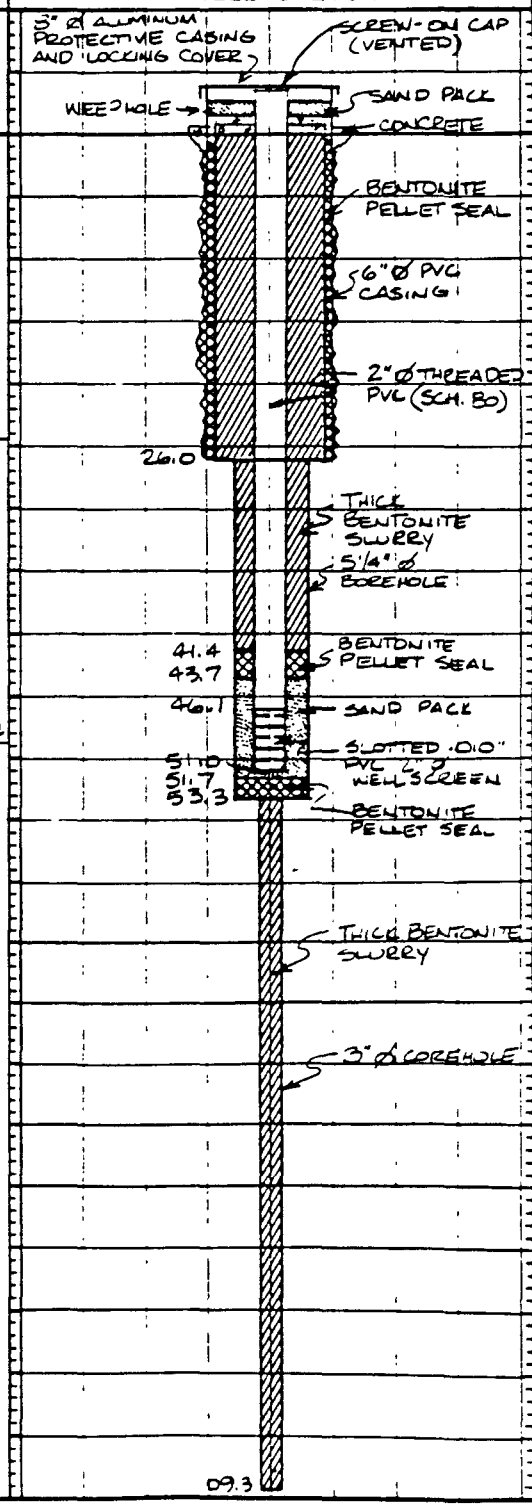
JOB NO. 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO. CA-10	SHEET 1 OF 1
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 191.26'	WATER DEPTH —
WEATHER CLOUDY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 194.76'	DATE/TIME —
TEMP. 45°F	DRILL RIG MOBILE B-61 DRILLER DJ/WG	STARTED 4:15 PM/2-4-86 (TIME / DATE)	COMPLETED 3:00 PM/2-5-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 49.6 l.f.	WELL SCREEN 2 in. dia. 4.90 l.f.	BENTONITE SEAL 2.5' THICK, 1/2" Ø PELLETS, ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 2 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX 4 CU FT. INTO 3 Ø CORE HOLE APPROX 5 CU FT ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
191.26'	GROUND SURFACE
0.0	
5.0	
10.0	RECOMPACTED CHALK
15.0	
20.0	
25.0	
30.0	
35.0	
40.0	
45.0	FRACTURE ZONE 48.9'
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	IN SITU CHALK
80.0	
85.0	
90.0	
95.0	
100.0	
105.0	
110.0	

WELL SKETCH



INSTALLATION NOTES

ORIGINAL 3" Ø COREHOLE CAVED IN FROM 109.3 TO 110.0'. ADDED BENTONITE SLURRY TO BOTTOM OF HOLE BUT HAD DIFFICULTY IN DETERMINING EXACT TOP OF SLURRY IN HOLE. 5 1/4" Ø HOLE REAMED TO 53.8' THEN BENTONITE PELLETS ADDED ONTO TOP OF SLURRY TO SEAL OFF BOTTOM OF HOLE

2" Ø PVC STANDPIPE STICKUP = 3.5'

ALUMINUM PROTECTIVE CASING STICKUP = 3.0'

WELL DEVELOPMENT NOTES

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May 19, 1986

MONITORING WELL INSTALLATION LOG

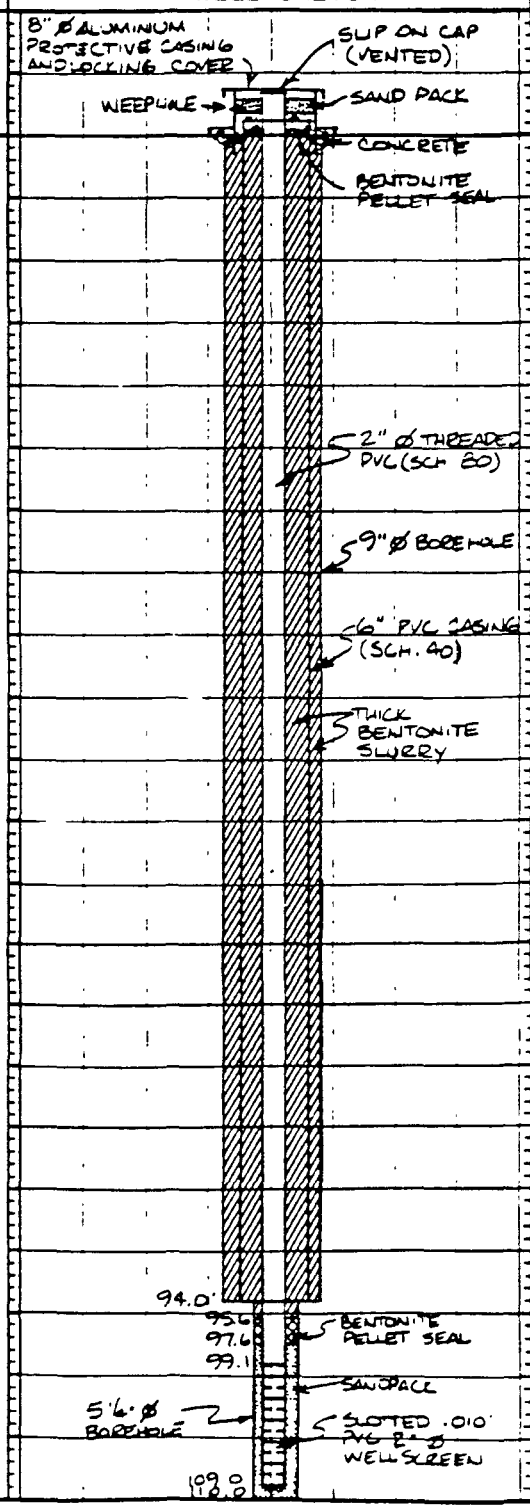
JOB NO. 863-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO CA-10A	SHEET 1 OF 1
GA INSP. RDO	DRILLING METHOD ROTARY WASH	GROUND ELEV 191.27'	WATER DEPTH —
WEATHER CLOUDY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 194.61'	DATE/TIME —
TEMP 45° F	DRILL RIG MOBILE B-61 / DRILLER DJ/WG	STARTED 3:00 PM/2-5-86 (TIME / DATE)	COMPLETED 3:45 PM/2-7-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 102.49 lf	WELL SCREEN 2 in. dia. 9.85 lf	BENTONITE SEAL 2.0' THICK 1/2" ø PELLETS, ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 3 BAGS (50 lb BAGS)
GROUT QUANTITY APPROX 18 CUFT. ABOVE PELLET SEAL (APPROX 20 CUFT. AROUND 6" PVC)	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL COLDSEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
191.27'	GROUND SURFACE
0.0	
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	SEE LOG CA-10 FOR SOIL/ROCK DESCRIPTION
40.0	
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	
95.0	
100.0	
105.0	
110.0	

WELL SKETCH



INSTALLATION NOTES

2" ø PVC STANDPIPE STICKUP = 3.34'

ALUMINUM PROTECTIVE CASING STICKUP = 3.6'

WELL CA-10A LOCATED 14° E OF N, 10' FROM CA-10. (SEE WELL LOCATION MAP)

WELL DEVELOPMENT NOTES

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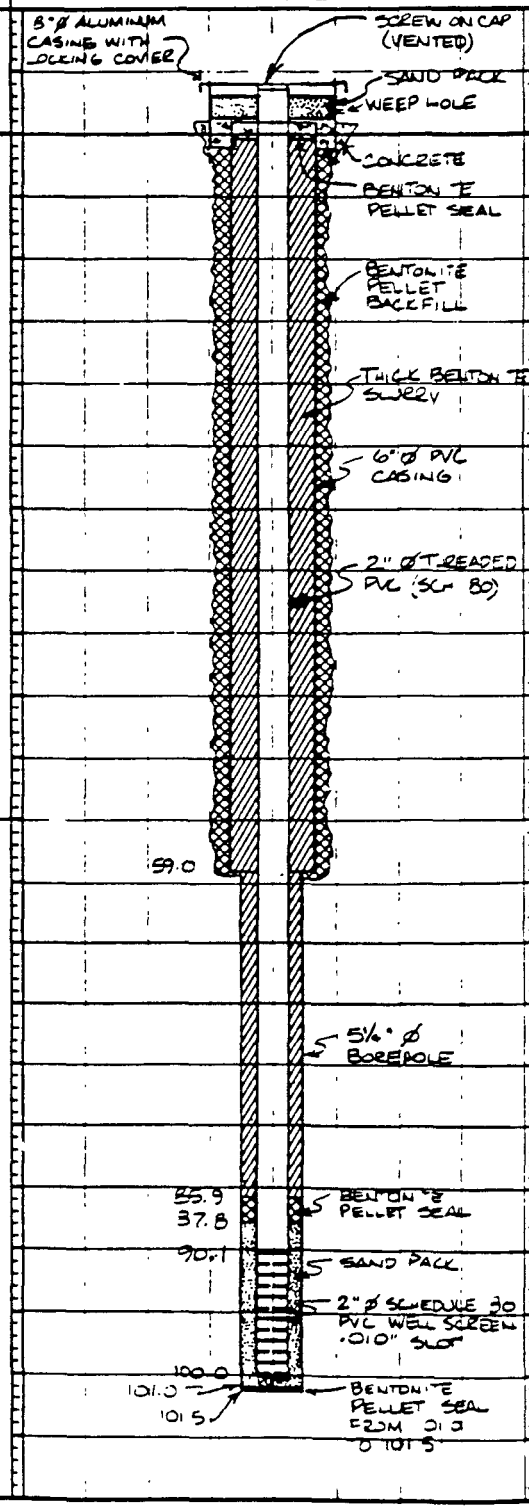
MONITORING WELL INSTALLATION LOG

JOB NO. 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO CA-11	SHEET 1 OF 1
GA INSP. RDO	DRILLING METHOD ROTARY WASH	GROUND ELEV 197.66'	WATER DEPTH –
WEATHER CLOUDY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 201.11'	DATE/TIME –
TEMP. 40° F	DRILL RIG MOBILE B-61 / DRILLER DJ/WG	STARTED 9:50AM / 1-21-86 (TIME / DATE)	COMPLETED 5:15PM / 1-21-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 93.6 l.f.	WELL SCREEN 2 in. dia. 9.85 l.f.	BENTONITE SEAL 1.9' THICK, 1/2" Ø PELLETS, ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 3 1/2 BAGS (50-8 BAGS)
GROUT QUANTITY APPROX. 12 CU FT ABOVE PELLET SEAL	CENTRALIZERS –	FILTER PACK TYPE #6/30 GRADE BLASTING SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE –	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
197.66'	GROUND SURFACE
0.0 – 55.0	RECOMPACTED CHALK
55.0 – 101.5	IN SITU CHALK (NO FRACTURES)



INSTALLATION NOTES

WELL ORIGINALLY SET IN THIS HOLE ON 2-10-85 HOWEVER, DUE TO THE FACT THAT THE PVC PIPE WAS CUT TOO SHORT, ± 5' WELL WAS 1.7' TOO HIGH IN THE HOLE. THEREFORE THE 2" PVC WAS PULLED OUT, HOLE FLUSHED, AND THE WELL RESET TO ITS CORRECT DEPTH. A BENTONITE PELLET SEAL WAS ADDED TO THE BOTTOM OF THE HOLE.

2" Ø PVC STANDPIPE STICKUP FROM G.S. = 3.65'

ALUMINUM CASING STICKUP FROM G.S. = 3.8'

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

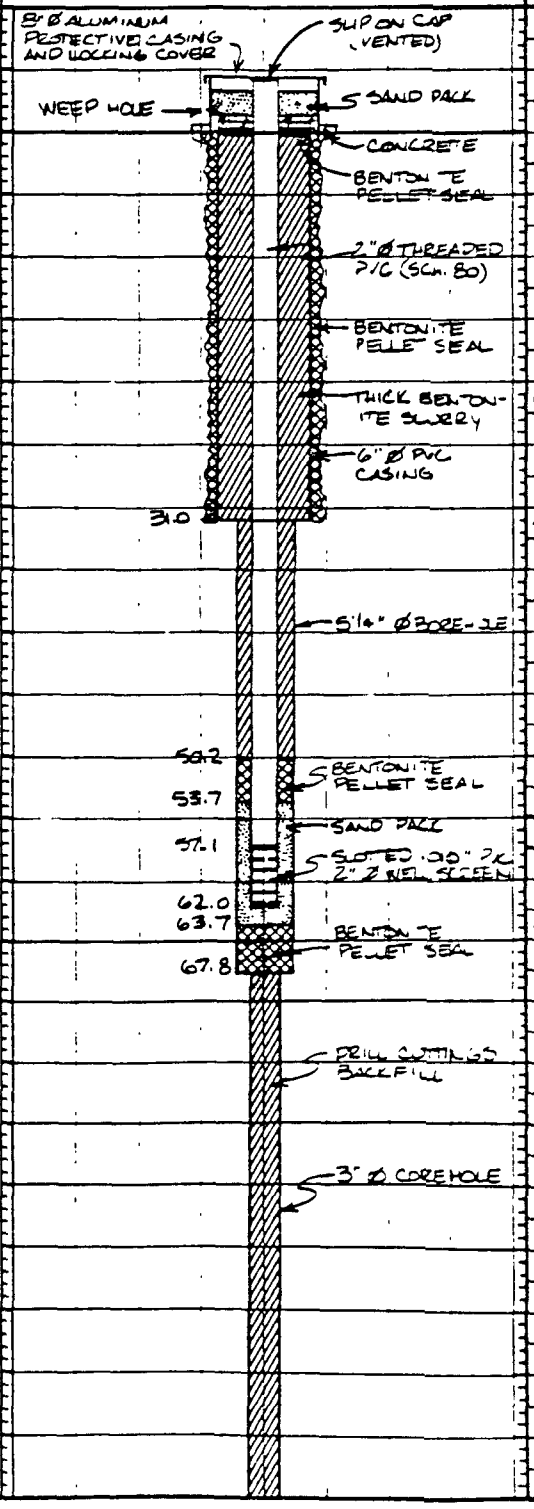
JOB NO 863-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO CA-12	SHEET 1 OF 2
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 191.88'	WATER DEPTH —
WEATHER CLOUDY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 196.02'	DATE/TIME —
TEMP 45° F	DRILL RIG MOBILE B-61 / DRILLER DJ/WG	STARTED 12:00 PM / 2-8-86 (TIME / DATE)	COMPLETED 5:00 PM / 2-12-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 61.29 l.f.	WELL SCREEN 2 in. dia. 4.85 l.f.	BENTONITE SEAL 3.5' T-LL 1/2" Ø PELLETS ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 2¼ BAGS (50 lb BAGS)
GROUT QUANTITY APPROX 20 CU. FT. ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLAST LIG SAND
GROUT TYPE APPROX. 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
191.88'	GROUND SURFACE
0.0	
5.0	
10.0	ZECOMPACTED CHALK
15.0	
20.0	
25.0	
30.0	
35.0	
40.0	
45.0	
50.0	FRACTURE ZONE 57.1'-61.3'
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	IN SITU CHALK
85.0	
90.0	
95.0	
100.0	
105.0	
110.0	

WELL SKETCH



INSTALLATION NOTES

ORIGINAL 3" Ø CORE HOLE COULD NOT BE FILLED WITH SLURRY BECAUSE OF AN OBSTRUCTION IN THE HOLE AT APPROX. 35.0' BELOW GROUND SURFACE THE SLURRY HOSE WOULD NOT PASS BY THIS OBSTRUCTION. THEREFORE THE 5¼" Ø HOLE WAS REAMED OUT TO 67.0' BELOW GROUND SURFACE AND ANY CUTTINGS WOULD FILL IN THE 3" Ø CORED HOLE. A BENTONITE PELLET SEAL WAS THEN PLACED FROM 63.0' TO 67.0' TO SEAL OFF THE BOTTOM OF THE HOLE.

2" Ø PVC STANDPIPE "STICKUP" = 6.16'
ALUMINUM PROTECTIVE CASING "STICKUP" = 6.2'
BENTONITE SLURRY LEVEL BETWEEN THE 2" AND 8" PVC DROPPED APPROX. 7.0' IN 1 HOUR WHEN SLURRY MIXTURE WAS FIRST INJECTED INTO THE WELL.

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MONITORING WELL INSTALLATION LOG

JOB NO. 853-3098.3 PROJECT CWM/CONSENT WELLS/EMELLE WELL NO CA-12 SHEET 2 OF 2

GA INSP RDD DRILLING METHOD ROTARY WASH GROUND ELEV 191.88' WATER DEPTH —

WEATHER CLOUDY DRILLING COMPANY TRI-STATE 2" PVC COLLAR ELEV 196.02' DATE/TIME —

TEMP 45°F DRILL RIG MOBILE B-61 DRILLER DJ/WG STARTED 12:00 PM / 2-8-86 (TIME / DATE) COMPLETED 5:00 PM / 2-12-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 61.29 l.f. WELL SCREEN 2 in. dia. 4.85 l.f. BENTONITE SEAL 3.5 THICK, 12" PELLETS ABOVE SCREEN

CASING TYPE PVC SCHEDULE 80 SCREEN TYPE PVC SCHEDULE 80 INSTALLATION METHOD BY HAND

JOINT TYPE THREADED (TEFLON WRAPPED) SLOT SIZE .010 INCH FILTER PACK QTY 2¼ BAGS (50 LB BAGS)

GROUT QUANTITY APPROX 20 GAL. ABOVE PELLET SEAL CENTRALIZERS — FILTER PACK TYPE #30 GRADE BLASTING SAND

GROUT TYPE APPROX. 1:1 RATIO OF AQUA GEL DRILLING MUD TYPE — INSTALLATION METHOD BY HAND

GOLD SEAL BENTONITE POWDER IN THE WATER

ELEV./DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
		CONTINUED FROM SHEET 1 OF 2	
110.0			
115.0			
120.0	IN SITU CHALK	3" Ø CORED HOLE	
125.0			
130.0		130.0	
135.0			
140.0			

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

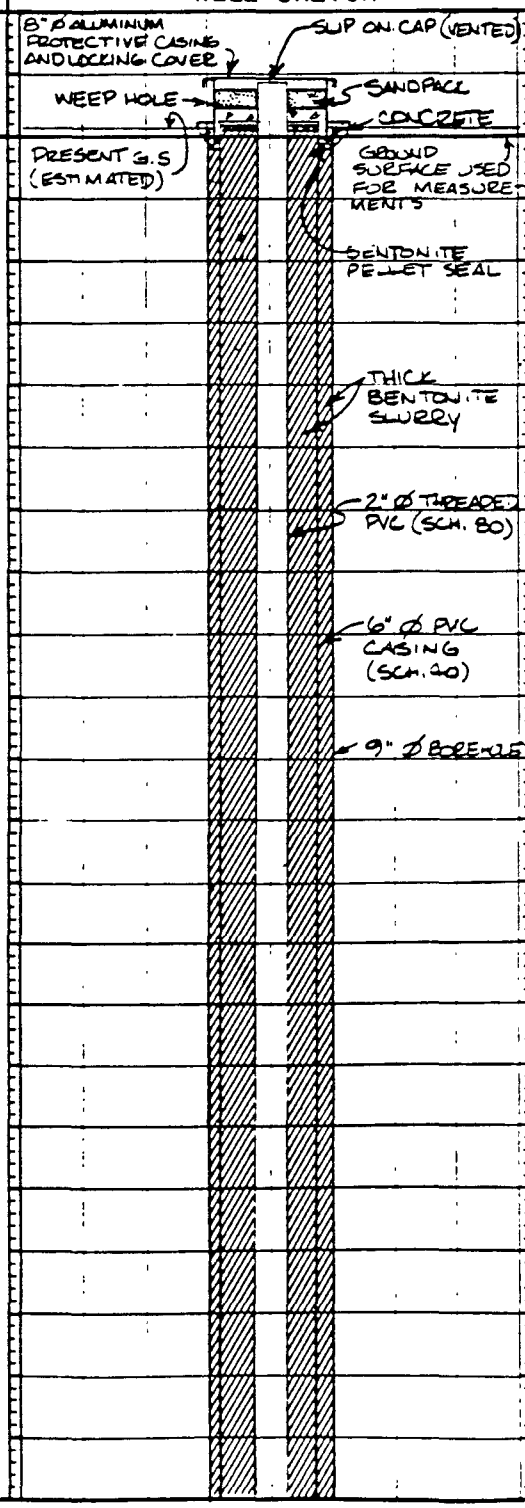
JOB NO. 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE		WELL NO CA-12A	SHEET 1	OF 2
GA INSP. RDD	DRILLING METHOD ROTARY WASH		GROUND ELEV 191.46'	WATER DEPTH —	
WEATHER CLOUDY	DRILLING COMPANY TRI-STATE		2" PVC COLLAR ELEV 195.74'	DATE/TIME —	
TEMP. 25°F	DRILL RIG MOBILE B-61	DRILLER DJ/WG	STARTED 1:40 PM/2-9-86 (TIME / DATE)	COMPLETED 5:00 PM/2-12-86 (TIME / DATE)	

MATERIALS INVENTORY

WELL CASING	2 in. dia. 123.23 l.f.	WELL SCREEN	2 in. dia. 9.85 l.f.	BENTONITE SEAL	2.0' THICK, 1/2" ø PELLETS, ABOVE SCREEN
CASING TYPE	PVC SCHEDULE 80	SCREEN TYPE	PVC SCHEDULE 80	INSTALLATION METHOD	BY HAND
JOINT TYPE	THREADED (TEE ON NIPPLE)	SLOT SIZE	.010 INCH	FILTER PACK QTY	3 BAGS (50 LB BAGS)
GROUT QUANTITY	APPROX 20 CU.FT ABOVE PELLET SEAL; APPROX 6 CU.FT AROUND 6" PVC	CENTRALIZERS	—	FILTER PACK TYPE	10/30 GRADE BLASTING SAND
GROUT TYPE	APPROX 1:1 RATIO OF AQUA SEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE	—	INSTALLATION METHOD	BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
191.46'	GROUND SURFACE
0.0	
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	
40.0	SEE LOG CA-12 FOR SOIL/ROCK DESCRIPTION
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	
95.0	
100.0	
105.0	
110.0	

WELL SKETCH



INSTALLATION NOTES

WELL CA-12A LOCATED 10' IN THE DIRECTION S W OF N, FROM CA-12 (SEE WELL LOCATION MAP)

2" ø PVC STANDPIPE "STICKUP" = 4.28'

ALUMINUM PROTECTIVE CASING "STICKUP" = 4.57'

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

JOB NO. 8533098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO CA-12A	SHEET 2 OF 2
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 191.46'	WATER DEPTH —
WEATHER CLOUDY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 195.74'	DATE/TIME —
TEMP. 25° F	DRILL RIG MOBILE B-61 DRILLER DJ/WG	STARTED 1:40 PM/2-9-86 (TIME / DATE)	COMPLETED 5:00 PM/2-12-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 123.23 l.f.	WELL SCREEN 2 in. dia. 9.85 l.f.	BENTONITE SEAL 2.0 THICK. 12 Ø PELLETS, ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 3 BAGS (50 LB. BAGS)
GROUT QUANTITY APPROX 6 CU FT AROUND 6 PVC APPROX 20 CU FT ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
		CONTINUED FROM SHEET 1 OF 2	WELL CA-12A LOCATED 0 IN THE DIRECTION 18° N OF N, FROM CA-12, SEE WELL LOCATION MAP,
110.0		111.0	
		112.1	
		114.1 BENTONITE PELLET SEAL	
115.0		116.1 5 1/4" Ø BOREHOLE	2" Ø PVC STANDPIPE "STICKUP" = 4.28'
120.0		SLOTTED .010' PVC 2" Ø WELLSCREEN	
125.0		SAND PACK	ALUMINUM PROTECTIVE CASING "STICKUP" = 4.57
		126.0	
		127.0	
130.0			

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

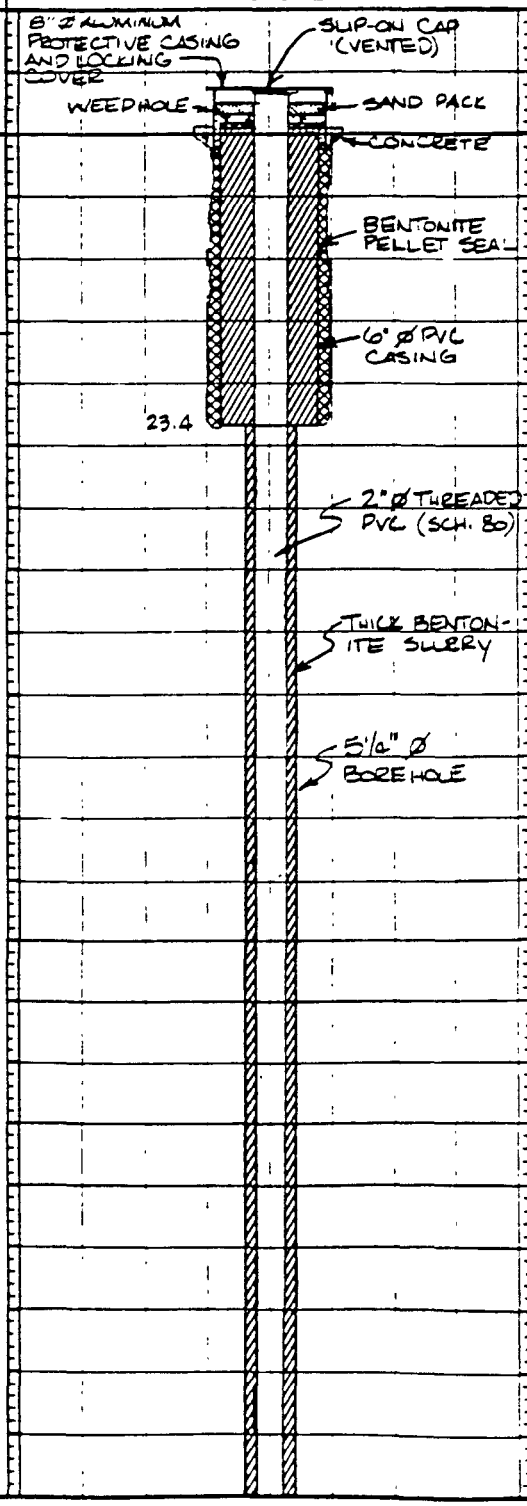
JOB NO. 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO CA-13	SHEET 1 OF 2
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 208.03'	WATER DEPTH —
WEATHER CLOUDY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 211.28'	DATE/TIME —
TEMP. 40° F	DRILL RIG MOBILE B-61 / DRILLER DJ/WG	STARTED 4:00 PM / 1-9-86 (TIME / DATE)	COMPLETED 12:15 PM / 3-5-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 133.9 l.f	WELL SCREEN 2 in. dia. 9.85 l.f	BENTONITE SEAL 2 2' THICK, 2 3 PELLETS, ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 3 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX 16 CU. FT. ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
208.03'	GROUND SURFACE
0.0	RECOMPACTED CHALK
5.0	
10.0	
15.0	
20.0	IN SITU CHALK (NO FRACTURES)
25.0	
30.0	
35.0	
40.0	
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	
95.0	
100.0	
105	
110	

WELL SKETCH



INSTALLATION NOTES

2" Ø PVC STANDPIPE STICKUP = 3.25'

ALUMINUM PROTECTIVE CASING "STICKUP" = 3.55

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

JOB NO. 553-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO CA-13	SHEET 2 OF 2
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 208.03'	WATER DEPTH —
WEATHER CLOUDY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV. 211.28'	DATE/TIME —
TEMP. 40°F	DRILL RIG MOBILE B-61 / DRILLER DJ/WG	STARTED 4:00 PM / 1-9-86 (TIME / DATE)	COMPLETED 12:15 PM / 3-5-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in dia. 133.9 l.f.	WELL SCREEN 2 in. dia. 9.85 l.f.	BENTONITE SEAL 2 2" THICK, 1/2" Ø PELLETS ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 3 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX. 16 CU FT ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION	WELL SKETCH	INSTALLATION NOTES
		CONTINUED FROM SHEET 1 OF 2	2" Ø PVC STANDPIPE STICKUP = 3.25'
110.0			ALUMINUM PROTECTIVE CASING "STICKUP = 3.55
115.0		5 1/4" Ø BOREHOLE	
120.0	IN SITU CHALK (NO FRACTURES)		
125.0		126.6 BENTONITE PELLET SEAL 128.8	
130.0		130.6 SAND PACK	
135.0		SLOTTED .010" PVC 2" Ø WELL SCREEN	
140.0		140.5 140.6	
145.0			
150.0			

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

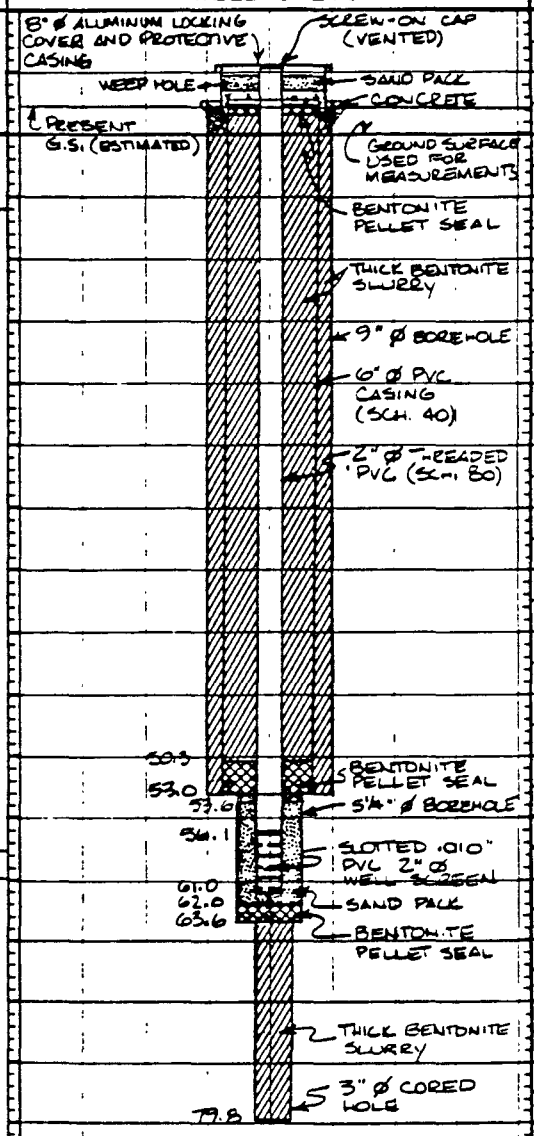
JOB NO. 853-3098.3 PROJECT CWM/CONSENT WELLS/EMELLE WELL NO. CA-14 SHEET 1 OF 1
GA INSP. ROD DRILLING METHOD ROTARY WASH GROUND ELEV 212.26' WATER DEPTH —
WEATHER CLOUDY DRILLING COMPANY TRI-STATE 2" PVC COLLAR ELEV 217.33' DATE/TIME —
TEMP. 65° F DRILL RIG MOBILE B-61 DRILLER DJ/WG STARTED 3:30 PM/3-17-86 (TIME / DATE) COMPLETED 6:00 PM/3-18-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 61.2 l.f. WELL SCREEN 2 in. dia. 4.87 l.f. BENTONITE SEAL 5.3' THICK, 1/2" Ø PELLETS, ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80 SCREEN TYPE PVC SCHEDULE 80 INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED) SLOT SIZE .010 INCH FILTER PACK QTY 2 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX 10 CUFT AROUND 6" PVC; APPROX 12 CUFT ABOVE PELLET SEAL CENTRALIZERS — FILTER PACK TYPE 16/30 GRADE BLAST NG SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER DRILLING MUD TYPE — INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
212.26'	GROUND SURFACE
0.0	RECOMPACTED CHALK
5.0	
10.0	IN SITU CHALK
15.0	
20.0	
25.0	
30.0	
35.0	
40.0	
45.0	
50.0	
55.0	FRACTURE ZONE 57.8'-59.9'
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	

WELL SKETCH



INSTALLATION NOTES

ORIGINAL 3" Ø CORE HOLE CAVED IN FROM 80.6' TO 79.8'

2" Ø PVC STANDPIPE "STICKUP" = 5.07'

ALUMINUM PROTECTIVE CASING STICKUP = 5.3'

"STICKUP" MEASURED FROM GROUND SURFACE ELEVATION 212.26'

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

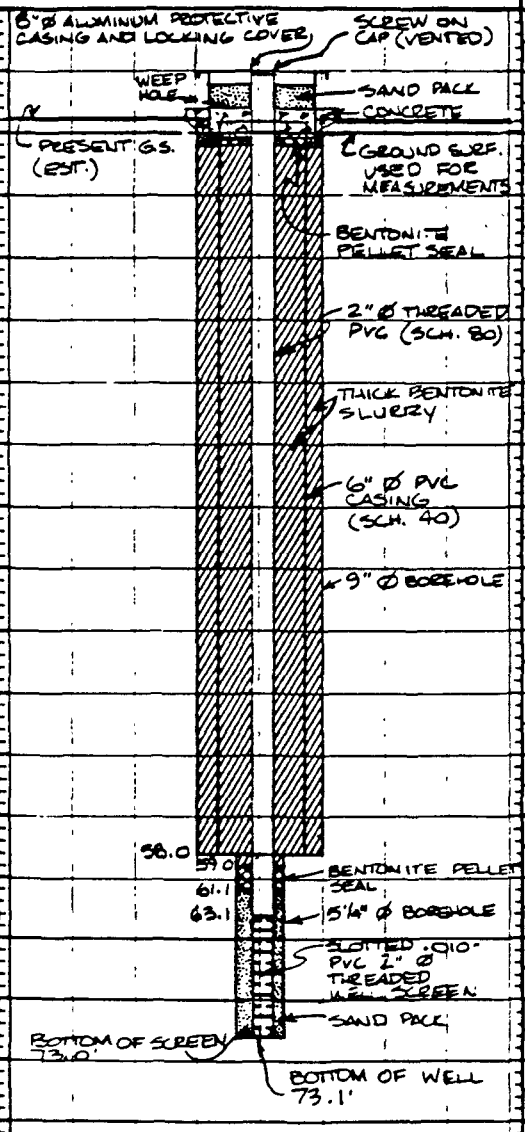
JOB NO. B53-30983	PROJECT CWM / CONSENT WELLS / EMELLE	WELL NO. CA-14A	SHEET 1 OF 1
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 212.24'	WATER DEPTH —
WEATHER SUNNY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 217.01'	DATE/TIME —
TEMP. 70° F	DRILL RIG MOBILE B-61 / DRILLER DJ/WG	STARTED 2:45 PM / 3-13-86 (TIME / DATE)	COMPLETED 3:30 PM / 3-17-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 67.92 l.f.	WELL SCREEN 2 in. dia. 9.85 l.f.	BENTONITE SEAL 2.1' THICK, 1/2" ⌀ PELLETS ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE T-READED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 2 3/4 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX 14 CU.FT. AROUND 2" PVC APPROX 13 CU.FT. ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
212.24'	GROUND SURFACE
0.0	
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	SEE LOG CA-14 FOR SOIL/ROCK DESCRIPTION
35.0	
40.0	
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	

WELL SKETCH



INSTALLATION NOTES

2" ⌀ PVC STANDOFF "STICKUP" = 4.77'

ALUMINUM PROTECTIVE CASING STICKUP = 4.9'

"STICKUP" MEASURED FROM GROUND SURFACE ELEVATION 212.24'

WELL CA-14A LOCATED 10' NORTH OF CA-14 ALONG N-S ALIGNMENT LINE. (SEE WELL LOCATION MAP)

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

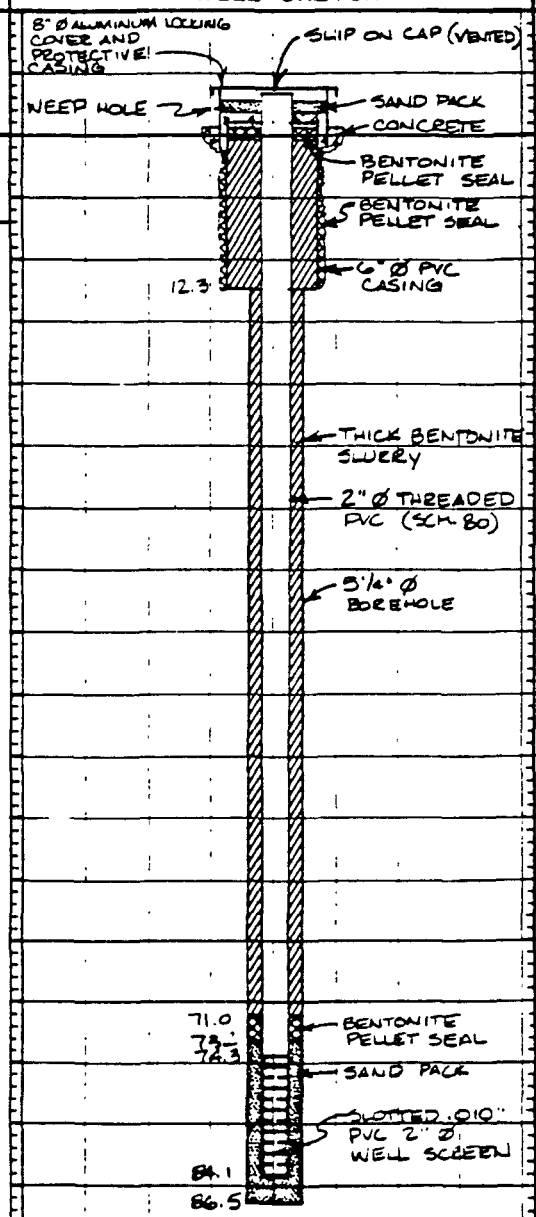
JOB NO. 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE		WELL NO CA-15	SHEET 1	OF 1
GA INSP. RDD	DRILLING METHOD ROTARY WASH		GROUND ELEV 217.18'	WATER DEPTH —	
WEATHER SUNNY	DRILLING COMPANY TRI-STATE		2" PVC COLLAR ELEV 220.48'	DATE/TIME —	
TEMP 45° F	DRILL RIG MOBILE B-61	DRILLER DJ/WG	STARTED 1:55 PM / 12-19-85 (TIME / DATE)	COMPLETED 1:30 PM / 3-5-86 (TIME / DATE)	

MATERIALS INVENTORY

WELL CASING 2 in dia. 77.6 l.f.		WELL SCREEN 2 in. dia. 9.85 l.f.		BENTONITE SEAL 2.2 THICK, 1/2" Ø PELLETS, ABOVE SCREEN	
CASING TYPE PVC SCHEDULE 80		SCREEN TYPE PVC SCHEDULE 80		INSTALLATION METHOD BY HAND	
JOINT TYPE THREADED (TEFLON WRAPPED)		SLOT SIZE .010 INCH		FILTER PACK QTY 3 1/2 BAGS (50 LB EACH)	
GROUT QUANTITY APPROX 12 CU FT ABOVE PELLET SEAL		CENTRALIZERS —		FILTER PACK TYPE 16/30 GRADE 3 SILICA SAND	
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL		DRILLING MUD TYPE —		INSTALLATION METHOD BY HAND	
GOLD SEAL BENTONITE POWDER W/WATER					

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
217.18'	GROUND SURFACE
0.0	RECOMPACTED CHALK
5.0	
10.0	IN SITU CHALK (NO FRACTURES)
15.0	
20.0	
25.0	
30.0	
35.0	
40.0	
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	

WELL SKETCH



INSTALLATION NOTES

2" Ø PVC STANDPIPE STICKUP = 3.3'
ALUMINUM PROTECTIVE CASING "STICKUP" = 3.7'

WELL SCREEN INTERVAL FOR CA-15 AT ELEVATION 142.8' TO 133.0. SPECIFIED INTERVAL IS 142.4' TO 132.2'. WELL SCREEN INTERVAL DIFFERS FROM SPECIFIED INTERVAL DUE TO THE FACT THAT THIS WELL WAS INSTALLED BEFORE THE PVC PIPE LENGTH ERROR WAS NOTICED. DECISION WAS MADE TO LEAVE THE SCREEN AND PIPE AS ORIGINALLY SET. (THERE WERE NO FRACTURES FOUND IN THE ORIGINAL CORE HOLE)

WELL DEVELOPMENT NOTES

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MONITORING WELL INSTALLATION LOG

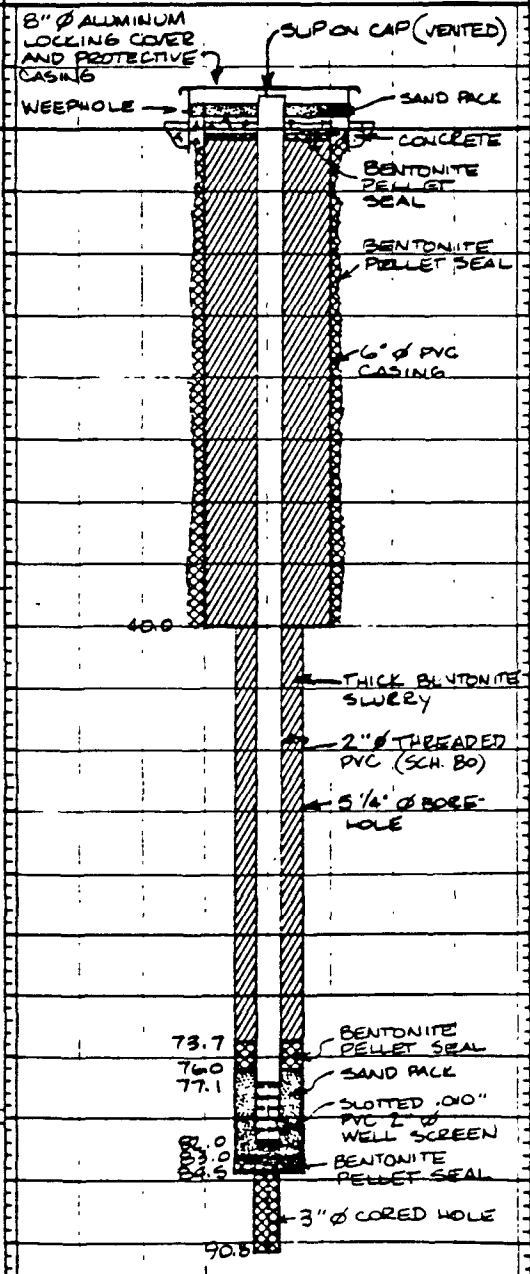
JOB NO. 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE		WELL NO. CA-16	SHEET 1 OF 1	
GA INSP. RDO	DRILLING METHOD ROTARY WASH		GROUND ELEV 243.85'	WATER DEPTH –	
WEATHER SUNNY	DRILLING COMPANY TRI-STATE		2" PVC COLLAR ELEV 246.68'	DATE/TIME –	
TEMP. 50° F	DRILL RIG MOBILE B-61	DRILLER DJ/WG	STARTED 9:40 AM / 2-25-86 (TIME / DATE)	COMPLETED 9:45 AM / 2-26-86 (TIME / DATE)	

MATERIALS INVENTORY

WELL CASING 2 in. dia. 79.98 l.f.	WELL SCREEN 2 in. dia. 4.85 l.f.	BENTONITE SEAL 2.3' THICK, ½ Ø PELLETS, ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 2 BAGS (50 LB BAGS)
GROUT QUANTITY APPROX. 13 CU.FT. ABOVE PELLET SEAL	CENTRALIZERS –	FILTER PACK TYPE #30 GRADE BLASTING SAND
GROUT TYPE APPROX. 1:1 RATIO OF AQUA-GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE –	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
243.85'	GROUND SURFACE
0.0	RECOMPACTED CHALK
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	
40.0	IN SITU CHALK
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	FRACTURE ZONE 79.4'-80.5'
80.0	
85.0	
90.0	
95.0	

WELL SKETCH



INSTALLATION NOTES

ORIGINAL 3" Ø CORE HOLE CAVED IN FROM 90.8' TO 93.0'. BENTONITE PELLETS ADDED TO 3" Ø COREHOLE FROM 85.0' TO 90.8' BEFORE REAMING 5 1/4" Ø HOLE. ADDITIONAL BENTONITE PELLETS ADDED TO 93.0' AFTER 5 1/4" HOLE WAS REAMED AND FLUSHED OUT.

2" Ø PVC STANDPIPE "STICKUP" = 2.83'

ALUMINUM PROTECTIVE CASING "STICKUP" = 3.2'

WELL DEVELOPMENT NOTES

Golder Associates

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May 19, 1986

MONITORING WELL INSTALLATION LOG

JOB NO. 853-30783 PROJECT CWM/ CONSENT WELLS/EMELLE WELL NO. CA-16A SHEET 1 OF 1

GA INSP. RDD DRILLING METHOD ROTARY WASH GROUND ELEV 243.74' WATER DEPTH —

WEATHER SUNNY DRILLING COMPANY TRI-STATE 2" PVC COLLAR ELEV 247.41' DATE/TIME —

TEMP. 60°F DRILL RIG MOBILE B-61' DRILLER DJ/WG STARTED 9:50am/2-26-86 (TIME / DATE) COMPLETED 2:00 PM/2-27-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in. dia. 87.82 l.f. WELL SCREEN 2 in. dia. 9.85 l.f. BENTONITE SEAL 1.7' THICK 1/2" PELLETS ABOVE SCREEN

CASING TYPE PVC SCHEDULE 80 SCREEN TYPE PVC SCHEDULE 80 INSTALLATION METHOD BY HAND

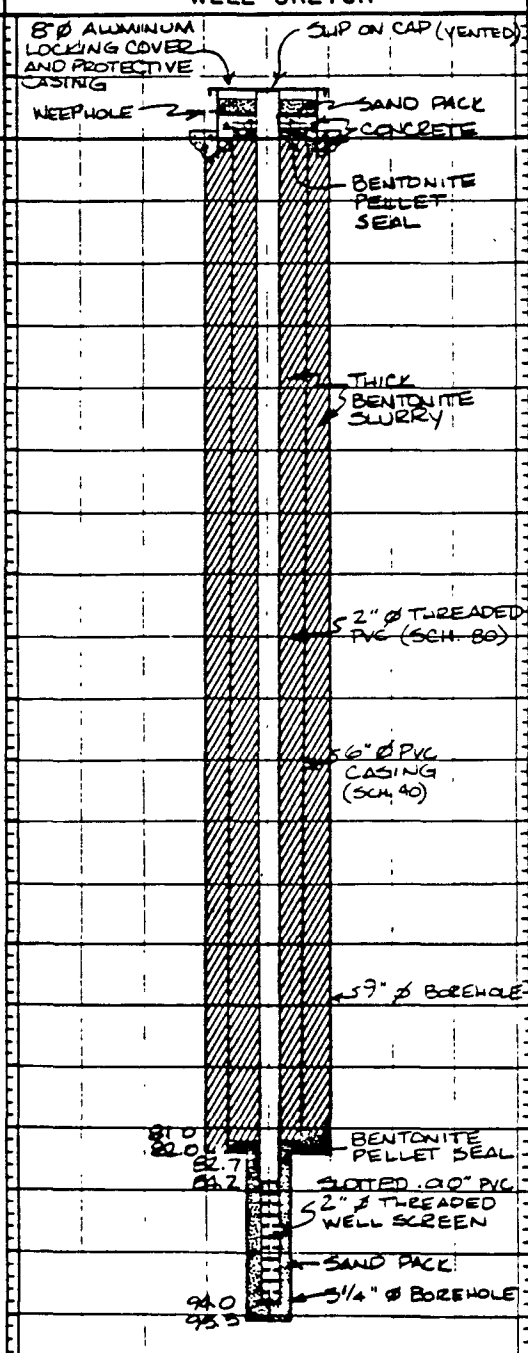
JOINT TYPE THREADED (TEFLON WRAPPED) SLOT SIZE .010 INCH FILTER PACK QTY 3 1/4 BAGS (50 LB BAGS)

GROUT QUANTITY APPROX 12 CU. FT. AROUND 6" Ø PVC APPROX 1/6 CU. FT. ABOVE PELLET SEAL CENTRALIZERS — FILTER PACK TYPE #30 GRADE BLASTING SAND

GROUT TYPE APPROX 1:1 RATIO OF AQUAGEL GOLD SEAL BENTONITE POWDER WITH WATER DRILLING MUD TYPE — INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
243.74'	GROUND SURFACE
0.0	SEE LOG CA-16 FOR SOIL/ROCK DESCRIPTION
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	
40.0	
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	
95.0	
100.0	

WELL SKETCH



INSTALLATION NOTES

2" Ø PVC STANDPIPE "STICKUP" = 3.67'

ALUMINUM PROTECTIVE CASING "STICKUP" = 3.85'

WELL CA-16A LOCATED 10' NORTH OF CA-16 ALONG N-S ALIGNMENT LINE. (SEE WELL LOCATION MAP)

WELL DEVELOPMENT NOTES

Golder Associates

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May 19, 1986

MONITORING WELL INSTALLATION LOG

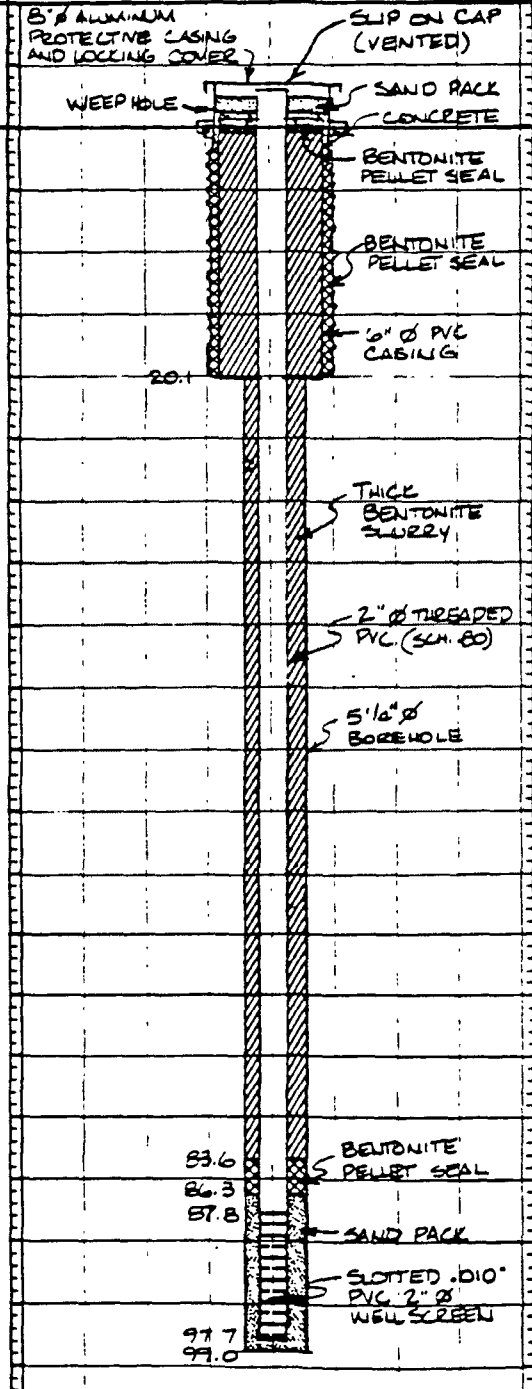
JOB NO. 853-30983	PROJECT CWM/CONSENT WELLS/EMELLE		WELL NO. BG-1	SHEET 1 OF 1	
GA INSP. RDD	DRILLING METHOD ROTARY WASH		GROUND ELEV 293.94'	WATER DEPTH –	
WEATHER SUNNY	DRILLING COMPANY TRI-STATE		2" PVC COLLAR ELEV 296.94'	DATE/TIME –	
TEMP. 35° F	DRILL RIG MOBILE B-61	DRILLER DJ/WG	STARTED 8:25am/12-16-85 (TIME / DATE)	COMPLETED 3:15pm/2-4-86 (TIME / DATE)	

MATERIALS INVENTORY

WELL CASING 2 in. dia. 90.85 l.f	WELL SCREEN 2 in. dia. 9.85 l.f	BENTONITE SEAL 2.7' THICK 1/2" Ø PELLETS ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 3 BAGS (50LB BAGS)
GROUT QUANTITY APPROX. 12.0 FT. ABOVE PELLET SEAL	CENTRALIZERS –	FILTER PACK TYPE #30 GRADE BLASTING SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUAGEL GOLD SEAL BENTONITE POWDER W/WATER	DRILLING MUD TYPE –	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
293.94'	GROUND SURFACE
0.0	
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	IN SITU CHALK (NO FRACTURES)
40.0	
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	
95.0	
100.0	
105.0	

WELL SKETCH



INSTALLATION NOTES

2" Ø PVC STANDPIPE "STICKUP" = 3.0'

ALUMINUM PROTECTIVE CASING STICKUP = 3.6'

WELL SCREEN INTERVAL SET AT DEPTHS BETWEEN 87.8' AND 97.7 AND NOT THE SPECIFIED DEPTH INTERVAL OF 89.0' - 99.0' BECAUSE OF THE PIPE LENGTHS BEING CUT TOO SHORT. THE PIPE LENGTH DISCREPANCY WAS NOT NOTED UNTIL AFTER THE WELL WAS SET. THE DECISION WAS MADE TO LEAVE THE WELL SET AS SHOWN ON THE SKETCH.

WELL DEVELOPMENT NOTES

Golder Associates

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May 19, 1986

MONITORING WELL INSTALLATION LOG

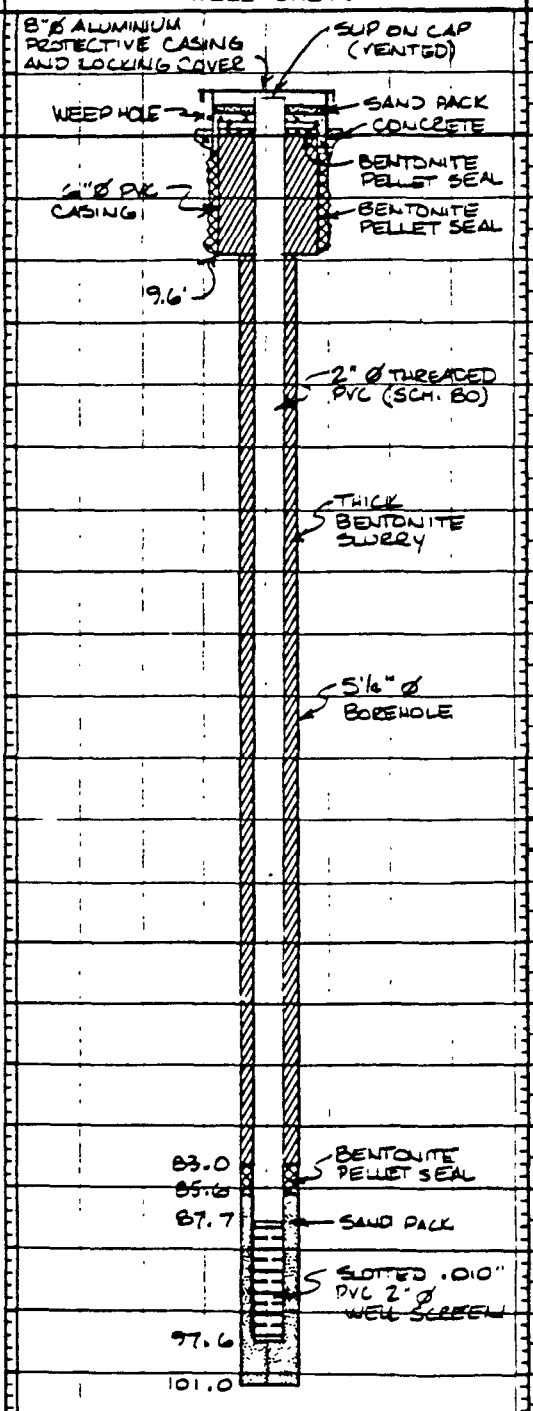
JOB NO. 853-3098.3	PROJECT CWM/CONSENT WELLS/EMELLE	WELL NO BG-2	SHEET 1 OF 1
GA INSP. RDD	DRILLING METHOD ROTARY WASH	GROUND ELEV 260.22'	WATER DEPTH —
WEATHER SUNNY	DRILLING COMPANY TRI-STATE	2" PVC COLLAR ELEV 263.22'	DATE/TIME —
TEMP. 35°F	DRILL RIG MOBILE B-61 DRILLER DJ/WG	STARTED 9:30 AM/12-17-85 (TIME / DATE)	COMPLETED 9:40 AM/2-8-86 (TIME / DATE)

MATERIALS INVENTORY

WELL CASING 2 in dia. 90.75 l.f.	WELL SCREEN 2 in. dia. 9.85 l.f.	BENTONITE SEAL 2.6' [illegible] 1/2" Ø PELLETS ABOVE SCREEN
CASING TYPE PVC SCHEDULE 80	SCREEN TYPE PVC SCHEDULE 80	INSTALLATION METHOD BY HAND
JOINT TYPE THREADED (TEFLON WRAPPED)	SLOT SIZE .010 INCH	FILTER PACK QTY 3 1/4 BAGS (50 LB. BAGS)
GROUT QUANTITY APPROX. 14 CU FT ABOVE PELLET SEAL	CENTRALIZERS —	FILTER PACK TYPE 16/30 GRADE BLASTING SAND
GROUT TYPE APPROX 1:1 RATIO OF AQUA GEL GOLD SEAL BENTONITE POWDER WITH WATER	DRILLING MUD TYPE —	INSTALLATION METHOD BY HAND

ELEV./DEPTH	SOIL/ROCK DESCRIPTION
260.22'	GROUND SURFACE
0.0	
5.0	
10.0	
15.0	
20.0	
25.0	
30.0	
35.0	IN SITU CHALK (NO FRACTURES)
40.0	
45.0	
50.0	
55.0	
60.0	
65.0	
70.0	
75.0	
80.0	
85.0	
90.0	
95.0	
100.0	
105.0	

WELL SKETCH



INSTALLATION NOTES

2" Ø PVC STANDPIPE "STICKUP" = 3.0'

ALUMINUM PROTECTIVE CASING STICKUP: 3 1/4'

WELL SCREEN INTERVAL SET AT DEPTHS BETWEEN 87.7' AND 97.6' AND NOT THE SPECIFIED DEPTH INTERVAL OF 89.0' TO 99.0' BECAUSE OF THE PIPE LENGTHS BEING CUT TOO SHORT. THE PIPE LENGTH DISCREPANCY WAS NOT NOTED UNTIL AFTER THE WELL WAS SET. THE DECISION WAS MADE TO LEAVE THE WELL SET AS SHOWN ON THE SKETCH.

WELL DEVELOPMENT NOTES

Golder Associates

New Page
May 19, 1986

APPENDIX F

MONITORING PARAMETERS AND ANALYTICAL PROCEDURES

Monitoring Parameters	Analytical Procedures
Volatile Organic Compounds	
Benzene	8240[1] or 624[2]
bis(Chloromethyl)ether	"
Bromoform	"
Carbon tetrachloride	"
Chlorobenzene	"
Chlorodibromomethane	"
Chloroethane	"
2-Chloroethylvinyl ether	"
Chloroform	"
Dichlorobromomethane	"
Dichlorodifluoromethane	"
1,1-Dichloroethane	"
1,2-Dichloroethane	"
1,1-Dichloroethylene	"
1,2-Dichloropropane	"
cis-1,3-Dichloropropylene	"
Ethylbenzene	"
Methyl bromide	"
Methyl chloride	"
Methylene chloride	"
1,1,2,2-Tetrachloroethane	"
Tetrachloroethylene	"
Toluene	"
1,2-Trans-dichloroethylene	"
1,1,1-Trichloroethane	"
1,1,2-Trichloroethane	"
Trichloroethylene	"
Trichlorofluoromethane	"
Vinyl chloride	"
trans-1,3-Dichloropropylene	"
Metals	
Arsenic, total	7060[1] or 206.2[3]
Chromium, total	6010[1] or 200.7[3]
Nickel, total	6010[1] or 200.7[3]

1. Test Methods for Evaluating Solid Waste: Physical and Chemical Methods, SW-846

2. Guidelines Establishing Test Procedures for the Analysis of Pollutants, 40 CFR Part 136

3. Methods for Chemical Analysis of Water and Wastes (EPA 600/4-79-020)

APPENDIX G

UNIVERSAL
FIELD OVERVIEW
CHECKLIST

Site Name Chemical Waste Mgmt

Location Emelle, AL

Study Date(s) 10/14-15/86

Facility Contact Wayne Sartin

Phone Number 205-652-9721

Contractor/State Personnel

Address

Phone Number

Project Leader Hunter

Other Contractor/State Personnel

ESD Overview Personnel Hunter

Other Personnel and Affiliation

PLANNING AND PREPARATION

Y or N

1) Was a study plan, work plan, site operations plan, etc. issued for this investigation? ~~N~~

Date Issued _____

If YES:

Was the study plan reviewed by ESD? _____

Was the study plan acceptable? _____

SAMPLING

General Procedures

1) Were sampling locations properly selected? Y

If No, explain _____

2) Were samples collected starting with the least likely contaminated and proceeding to the most likely contaminated? NA
Remarks All wells have dedicated pump and sampling systems.

3) Were new disposable rubber gloves worn during collection of all samples? N
Remarks Corporate sampling protocol requires that personnel do not wear gloves. Hands are rinsed, as needed, with DI H2O.

4) Was sampling equipment wrapped in aluminum foil and protected from possible contamination prior to sample collection? NA

~~If No~~, explain Dedicated sampling equipment

5) If equipment was cleaned in the field, were proper procedures used? (This includes storage method for rinse water and solvents) NA

If No, explain _____

6) What field instruments were used during this investigation? Cambridge Combination pH, SC, + T

Y or N

7) Were field instruments properly calibrated? Y

If No, explain _____

8) Were calibration procedures documented in the field notes? N
Remarks All documentation is recorded in separate book in lab

9) Were the samples chemically field preserved? Y
If No, explain _____ (See p. 9)

10) Were the samples iced? Blue Ice in shuttles Y

11) Were samples for selected parameters field filtered? Y

If Yes, list parameters and describe procedures. All samples except TOX + VOA filtered (Pest/Herb, Metals, NO_3, TKN, Phenols, SO_4, NH_3, Conventional and Gross Alpha + Gross Beta

Well Sampling

1) Was depth of well determined? N
Well is extremely deep - Well construction record depth used for purge volume calculations. Cannot plumb depth due to dedicated equipment.

2) Was depth to water determined? w/ Slope Indicator Dielectric Y

3) Were the above depths to water converted to water level elevations common to all wells? Recorded on field parameter form Y

Describe how the depths were determined. Slope Indicator probe, after DI rinse, was lowered into well till alarm sounded. Tape was pinched at precise point. Excess between pinch + mark was measured, to nearest 0.01 ft and recorded.

4) How was the volume of water originally present in each well determined? Take known depth + water level, determine length of water column X .65 gal (for 4") X 3 = 3 WCV's in gals

5) Was the volume determined correctly? Y

6) How was completeness of purging determined?
Volume
Measure _____
Time/Flow rate ✓
Cond./pH/T _____

7) Was a sufficient volume purged? Y

Was the well over-purged? N

Y or N

8) Was a dedicated (in-place) pump utilized? Y (Grundfos electric submersible 4")

If no, describe the method of purging (bailer - include type and construction material, pump - include type)_____

9) How were the samples collected?

Bailer_____
Pump ✓
Combination_____

Construction material of bailer:_____

Design of bailer

Open Top_____
Closed Top_____
Other_____

10) If a pump was used, describe how it was cleaned before and/or between wells. NA - Dedicated

11) Was the sample properly transferred from ~~bailer~~ pump to sample bottle (i.e., was the purgeable sample agitated, etc.)? Y

12) Was the rope or line allowed to touch the ground? NA

13) Was any wetted rope or line discarded after use at each well? NA

14) How many wells were sampled? 4 (Only observed one)

Surface Water Sampling

1) What procedures and equipment were used to collect surface water samples? _____

Who collected samples?_____

2) Did the samplers wade in the stream during sample collection? _____

If Yes:

Did the sampler face upstream while collecting sample? _____

Did the sampler insure that roiled sediments were not collected along with water sample? _____

Y or N

3) Note any deficiencies observed during the collection of the surface water samples _____

Waste, Sludge, Soil/Sediment Sampling

1) What procedures including equipment were used to collect soil/sediment samples? _____

2) Were the soil/sediment samples well mixed prior to placing the sample in the sample container? _____

3) Note any deficiencies observed during the collection of the soil/sediment samples _____

Total number of samples collected _____

Other Sampling

1) What other types of samples were collected during this investigation? _____

2) What procedures were used for the collection of these samples? _____

Who collected samples?

QUALITY ASSURANCE/QUALITY CONTROL Y or N

(While all of these QA/QC procedures are not necessarily used, please identify the specific techniques which were employed by sampling personnel.)

1) Did the sampling personnel utilize any field trip blanks? Y

VOA Trip blank provided by ETI

Y or N

2) Did the sampling personnel utilize preservative blanks? ~~N~~ Y DH 10/15

If Yes, to either of the above questions, list the types and handling of the blanks Field blank is prepared using reagents in vials such as those used for actual samples.

3) Were any equipment blanks collected? N/A

If Yes, list:

4) Were any duplicate samples collected? Y

If Yes, list the types (parameter coverage, etc.) and describe their handling. Complete set of duplicate samples is collected at one well (#7 this time)

5) Were any spiked samples utilized? N

If Yes, list the types (parameter coverage, etc.) and describe their handling.

FIELD DOCUMENTATION AND CHAIN-OF-CUSTODY

1) Were split samples offered to the site owner or facility representative? N/A

2) Was a receipt for samples given to the site owner or facility representative prior to leaving the site? N/A

3) Were chain-of-custody records completed for all samples? Y

4) Were sample tag numbers and laboratory traffic report form numbers cross referenced to chain-of-custody forms? N/A

5) Were chain-of-custody form numbers recorded in the field log book? Y

6) Were all samples properly sealed at the time of collection? N
Each sample is not individually sealed - hard plaster seal placed on shuttle when closed.

7) Were samples locked in vehicle or kept in a secure place after collection? Y
Locked ~~safeguarded~~ Sample storage building prior to shipment. Clear

Y or N

8) Were ~~all sample tags and~~ DH 10/15 chain-of-custody forms signed by sample collector(s)? Y

9) Were sampling locations adequately documented? Y

~~If No, explain~~ Use location code provided by ETC

10) Was sampling documented with photographs? NA

If Yes, was a photolog maintained?

11) Were the samples shipped to a contract laboratory? NA

If Yes:

Were the traffic report forms filled out properly? ____

Were the samples properly packed for shipment? ____

STATE REGULATORY AGENCY PERSONNEL Y or N

Qualifications of investigative/sampling personnel (training and experience) by names ____

Have investigative/sampling personnel received sampling technique and equipment training? ____

Have personnel received safety training? ____

If yes to either of the above questions, list where and when the training was received and who provided the instruction. ____

Do the investigative/sampling personnel undergo periodic refresher training regarding safety? ____

Did the investigative/sampling personnel have appropriate safety equipment in their possession during this inspection? ____

If YES, describe the equipment which was available and/or used during this inspection. ____

If NO, list the equipment which was needed. ____

Y or N

Have the investigative/sampling personnel been categorized as to the type of inspections they can conduct? _____

Have the investigative/sampling personnel had comprehensive physicals? _____

Do the sampling personnel participate in a medical monitoring program (i.e., periodic follow-up physicals)? _____

If yes, how often? _____ _____

Do the investigative/sampling personnel perform the entire RCRA Interim Status Inspection or merely collect samples? _____

_____

_____

If the personnel only collect samples, how are their sampling efforts coordinated with the rest of the inspection? _____

_____

_____

If state personnel did not collect samples, did they thoroughly evaluate sampling procedures used by facility? _____

_____

_____

If facility collected samples, did state representatives accept a split sample(s)? _____

_____

_____

SOP (Applies only to state overviews)

Has the state developed an SOP for RCRA field sampling? _____

Did the state personnel have a copy of the SOP with them during this inspection? _____

What does the SOP Cover?

Field inspections in general (sampling techniques, etc.)
Sample handling _____
Sample I.D. and chain-of-custody _____
Uses and limitations of various types of bailers and pumps _____
Equipment cleaning _____
Field measurements (cond., pH, T, etc.) _____
Calibration of field instruments _____
Other _____

Did they follow their SOP during this inspection? _____ _____

GENERAL COMMENTS/OBSERVATIONS

Metals preserved with HNO_3
TOX preserved with Na_2SO_3
NO_2 TOC, Phenols preserved with H_2SO_4
NH_3 preserved with H_2SO_4
Gross α + β preserved HNO_3

No checks to insure preservation was within acceptable range

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS-GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13777 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: EUT-7
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1343 INORG SAMPLE NO.: HDQA643
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
100J	UG/L	SILVER
100J	UG/L	ARSENIC
NA	UG/L	BORON
39	UG/L	BARIUM
2U	UG/L	BERYLLIUM
5U	UG/L	CADMIUM
7U	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
4U	UG/L	LEAD
60U	UG/L	ANTIMONY
2UJ	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
10U	UG/L	THALLIUM
8U	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
94U	UG/L	ALUMINUM
10	UG/L	MANGANESE
4.4	MG/L	CALCIUM
1.5	MG/L	MAGNESIUM
0.13J	MG/L	IRON
510	MG/L	SODIUM
4.0UJ	MG/L	POTASSIUM

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13770 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: EUT-8
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/19/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKP
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1336 INORG SAMPLE NO.: MDQA636
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
10UJ	UG/L	SILVER
10UJ	UG/L	ARSENIC
NA	UG/L	BORON
500	UG/L	BARIUM
2U	UG/L	BERYLLIUM
5U	UG/L	CADMIUM
7U	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
6.6	UG/L	LEAD
60U	UG/L	ANTIMONY
5UJ	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
10U	UG/L	THALLIUM
200J	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
120J	UG/L	ALUMINUM
7	UG/L	MANGANESE
3U.1	MG/L	CALCIUM
1.1	MG/L	MAGNESIUM
0.21J	MG/L	IRON
420	MG/L	SODIUM
3.4UJ	MG/L	POTASSIUM

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *L-PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13776 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: BG-02
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1342 INORG SAMPLE NO.: HDQA642
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
10UJ	UG/L	SILVER
10UJ	UG/L	ARSENIC
NA	UG/L	BORON
41	UG/L	BARIUM
2U	UG/L	BERYLLIUM
5U	UG/L	CADMIUM
7	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
4U	UG/L	LEAD
60U	UG/L	ANTIMONY
2UJ	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
2U	UG/L	THALLIUM
20UJ	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
330J	UG/L	ALUMINUM
26U	UG/L	MANGANESE
100	MG/L	CALCIUM
34	MG/L	MAGNESIUM
0.36J	MG/L	IRON
220	MG/L	SODIUM
9.2	MG/L	POTASSIUM

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
*J=ESTIMATED VALUE *N=PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13767 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1332 INORG SAMPLE NO.: MDQA632
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
5U	UG/L	SILVER
100U	UG/L	ARSENIC
NA	UG/L	BORON
43	UG/L	BARIUM
2U	UG/L	BERYLLIUM
0.4U	UG/L	CADMIUM
7U	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
5U	UG/L	LEAD
60U	UG/L	ANTIMONY
5UJ	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
2U	UG/L	THALLIUM
8U	UG/L	VANADIUM
NA	UG/L	YTTRIUM
26	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
94U	UG/L	ALUMINUM
330	UG/L	MANGANESE
19	MG/L	CALCIUM
7.1	MG/L	MAGNESIUM
0.44J	MG/L	IRON
31C	MG/L	SODIUM
60J	MG/L	POTASSIUM

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
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7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13708 — SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-4A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1334 INORG SAMPLE NO.: MDGA634
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
10UJ	UG/L	SILVER
3UJ	UG/L	ARSENIC
NA	UG/L	BORON
77	UG/L	BARIUM
2U	UG/L	BERYLLIUM
5U	UG/L	CADMIUM
7U	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
4U	UG/L	LEAD
60U	UG/L	ANTIMONY
5UJ	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
2U	UG/L	THALLIUM
20UJ	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
94U	UG/L	ALUMINUM
850	UG/L	MANGANESE
32	MG/L	CALCIUM
13	MG/L	MAGNESIUM
0.04J	MG/L	IRON
300	MG/L	SODIUM
8UJ	MG/L	POTASSIUM

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
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7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13785 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-5
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: F DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: 001383 INORG SAMPLE NO.: 000A883
CONTRACT LABORATORY(ORGANIC): COMPO CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
5U	UG/L	SILVER
10UJ	UG/L	ARSENIC
NA	UG/L	BORON
110	UG/L	BARIUM
2U	UG/L	BERYLLIUM
5U	UG/L	CADMIUM
7U	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
29	UG/L	NICKEL
5U	UG/L	LEAD
60U	UG/L	ANTIMONY
2.0J	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
2U	UG/L	THALLIUM
20UJ	UG/L	VANADIUM
NA	UG/L	YTTRIUM
[illegible]	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
120UJ	UG/L	ALUMINUM
140	UG/L	MANGANESE
180	UG/L	CALCIUM
[illegible]	UG/L	MAGNESIUM
2.0J	UG/L	IRON
120	UG/L	SODIUM
12	UG/L	POTASSIUM

****

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13780 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-6
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 OPG SAMPLE NO: DQ1353 INORG SAMPLE NO.: MDQA653
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
5U	UG/L	SILVER
10UJ	UG/L	ARSENIC
NA	UG/L	BORON
57	UG/L	BARIUM
2U	UG/L	BERYLLIUM
5U	UG/L	CADMIUM
7U	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
4U	UG/L	LEAD
60U	UG/L	ANTIMONY
4.0J	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
2U	UG/L	THALLIUM
10UJ	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
570J	UG/L	ALUMINUM
110	UG/L	MANGANESE
180	MG/L	CALCIUM
58	MG/L	MAGNESIUM
0.64J	MG/L	IRON
320	MG/L	SODIUM
11	MG/L	POTASSIUM

****

FOOTNOTES
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7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13765 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SF-7A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: P DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 OEG SAMPLE NO: DQ1330 INORG SAMPLE NO.: NDQA630
CONTRACT LABORATORY(ORGANIC): COMPH CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
5U	UG/L	SILVER
30J	UG/L	ARSENIC
NA	UG/L	BORON
62	UG/L	BARIUM
2U	UG/L	BERYLLIUM
5U	UG/L	CADMIUM
7U	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
4U	UG/L	LEAD
60U	UG/L	ANTIMONY
50J	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
10U	UG/L	THALLIUM
100J	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.4U	UG/L	MERCURY
94U	UG/L	ALUMINUM
68	UG/L	MANGANESE
110	MG/L	CALCIUM
43	MG/L	MAGNESIUM
0.02U	MG/L	IRON
310	MG/L	SODIUM
9.9	MG/L	POTASSIUM

****

FOOTNOTES
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*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD, REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13762 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CPEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-6
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: P DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 OKG SAMPLE NO: DQ1327 INORG SAMPLE NO.: MDQA627
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
100J	UG/L	SILVER
6.8J	UG/L	ARSENIC
NA	UG/L	BORON
100	UG/L	BARIUM
2U	UG/L	BERYLLIUM
0.4U	UG/L	CADMIUM
11	UG/L	COBALT
200J	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
5U	UG/L	LEAD
60U	UG/L	ANTIMONY
3.6J	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
10U	UG/L	THALLIUM
30UJ	UG/L	VANADIUM
NA	UG/L	YTTRIUM
80	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.4U	UG/L	MERCURY
1.6J	UG/L	ALUMINUM
540	UG/L	MANGANESE
240	MG/L	CALCIUM
30	MG/L	MAGNESIUM
1.6J	MG/L	IRON
260	MG/L	SODIUM
11	MG/L	POTASSIUM

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-FSD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13784 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-9A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1358 INORG SAMPLE NO.: HDQA606
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
10UJ	UG/L	SILVER
10UJ	UG/L	ARSENIC
NA	UG/L	BORON
80	UG/L	BARIUM
2U	UG/L	BERYLLIUM
0.4U	UG/L	CADMIUM
7U	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
5U	UG/L	LEAD
60U	UG/L	ANTIMONY
5UJ	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
10U	UG/L	THALLIUM
8U	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
940	UG/L	ALUMINUM
880	UG/L	MANGANESE
32	MG/L	CALCIUM
13	MG/L	MAGNESIUM
0.05J	MG/L	IRON
310	MG/L	SODIUM
8UJ	MG/L	POTASSIUM

****

FOOTNOTES
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*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13769 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-11
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1335 INORG SAMPLE NO.: MDQA635
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
10UJ	UG/L	SILVER
10UJ	UG/L	ARSENIC
NA	UG/L	BORON
94	UG/L	BARIUM
2U	UG/L	BERYLLIUM
5U	UG/L	CADMIUM
10	UG/L	COBALT
10UJ	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
5U	UG/L	LEAD
4U	UG/L	ANTIMONY
5.9J	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
2U	UG/L	THALLIUM
30UJ	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
5200J	UG/L	ALUMINUM
400	UG/L	MANGANESE
160	MG/L	CALCIUM
18	MG/L	MAGNESIUM
4.8J	MG/L	IRON
190	MG/L	SODIUM
7.8	MG/L	POTASSIUM

****

FOOTNOTES
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*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS-GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13764 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: ~~FB-2~~ SM-13
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1329 INORG SAMPLE NO.: MDQA629
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
5U	UG/L	SILVER
5.3J	UG/L	ARSENIC
NA	UG/L	BORON
48	UG/L	BARIUM
2U	UG/L	BERYLLIUM
0.4U	UG/L	CADMIUM
7U	UG/L	COBALT
10UJ	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
5U	UG/L	LEAD
60U	UG/L	ANTIMONY
5UJ	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
10U	UG/L	THALLIUM
8U	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
94U	UG/L	ALUMINUM
18U	UG/L	MANGANESE
40	MG/L	CALCIUM
16	MG/L	MAGNESIUM
0.03J	MG/L	IRON
330	MG/L	SODIUM
7.8	MG/L	POTASSIUM

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-CSD, REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13781 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-14
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: P DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: D01354 INORG SAMPLE NO.: MDQA654
CONTRACT LABORATORY(ORGANIC): CUMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
100J	UG/L	SILVER
30J	UG/L	ARSENIC
NA	UG/L	BORON
54	UG/L	BARIUM
2U	UG/L	BERYLLIUM
5U	UG/L	CADMIUM
7U	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
4U	UG/L	LEAD
60U	UG/L	ANTIMONY
20J	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
10U	UG/L	THALLIUM
8U	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
270J	UG/L	ALUMINUM
350	UG/L	MANGANESE
160	MG/L	CALCIUM
61	MG/L	MAGNESIUM
0.49J	MG/L	IRON
220	MG/L	SODIUM
1U	MG/L	POTASSIUM

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
*J=ESTIMATED VALUE *N=PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13766 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-16
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: F DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1331 INORG SAMPLE NO.: NDQA631
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
5U	UG/L	SILVER
100J	UG/L	ARSENIC
NA	UG/L	BORON
28	UG/L	BARIUM
2U	UG/L	BERYLLIUM
0.4U	UG/L	CADMIUM
7U	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
4U	UG/L	LEAD
60U	UG/L	ANTIMONY
20J	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
10U	UG/L	THALLIUM
100J	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
94U	UG/L	ALUMINUM
79	UG/L	MANGANESE
120	MG/L	CALCIUM
37	MG/L	MAGNESIUM
0.17J	MG/L	IRON
180	MG/L	SODIUM
8.0	MG/L	POTASSIUM

****

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

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13763 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: N-56
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: P DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1328 INORG SAMPLE NO.: MDQA628
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
10UJ	UG/L	SILVER
10UJ	UG/L	ARSENIC
NA	UG/L	BORON
290	UG/L	BARIUM
2U	UG/L	BERYLLIUM
5U	UG/L	CADMIUM
7U	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
4U	UG/L	LEAD
60U	UG/L	ANTIMONY
5UJ	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
10U	UG/L	THALLIUM
20UJ	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
400J	UG/L	ALUMINUM
4U	UG/L	MANGANESE
7.4	MG/L	CALCIUM
8.6	MG/L	MAGNESIUM
0.02U	MG/L	IRON
180	MG/L	SODIUM
16	MG/L	POTASSIUM

****

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

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13761 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-58
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 OPG SAMPLE NO: DQ1326 INORG SAMPLE NO.: MDQA626
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
10UJ	UG/L	SILVER
3UJ	UG/L	ARSENIC
NA	UG/L	BORON
36	UG/L	BARIUM
2U	UG/L	BERYLLIUM
5U	UG/L	CADMIUM
7	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
25	UG/L	NICKEL
4U	UG/L	LEAD
60U	UG/L	ANTIMONY
5UJ	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
10U	UG/L	THALLIUM
20UJ	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
91U	UG/L	ALUMINUM
21U	UG/L	MANGANESE
90	MG/L	CALCIUM
40	MG/L	MAGNESIUM
4.9J	MG/L	IRON
31U	MG/L	SODIUM
10	MG/L	POTASSIUM

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
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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 DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13760 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-62
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: P DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1325 INORG SAMPLE NO.: MDQA625
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
100J	UG/L	SILVER
30UJ	UG/L	ARSENIC
NA	UG/L	BORON
36	UG/L	BARIUM
2U	UG/L	BERYLLIUM
5U	UG/L	CADMIUM
7U	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
5U	UG/L	LEAD
60U	UG/L	ANTIMONY
50UJ	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
10U	UG/L	THALLIUM
8U	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
94U	UG/L	ALUMINUM
16U	UG/L	MANGANESE
36	MG/L	CALCIUM
19	MG/L	MAGNESIUM
2.2J	MG/L	IRON
30U	MG/L	SODIUM
12	MG/L	POTASSIUM

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13778 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-62
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1351 INORG SAMPLE NO.: MDQA651
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
100J	UG/L	SILVER
100J	UG/L	ARSENIC
NA	UG/L	BORON
38	UG/L	BARIUM
2U	UG/L	BERYLLIUM
5U	UG/L	CADMIUM
7U	UG/L	COBALT
100J	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
5U	UG/L	LEAD
60U	UG/L	ANTIMONY
5UJ	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
10U	UG/L	THALLIUM
8U	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
94U	UG/L	ALUMINUM
10	UG/L	MANGANESE
4.2	MG/L	CALCIUM
1.5	MG/L	MAGNESIUM
0.14J	MG/L	IRON
490	MG/L	SODIUM
40J	MG/L	POTASSIUM

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *B-PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS-GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13774 SAMPLE TYPE: LEACHATE

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: L-9
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1340 INORG SAMPLE NO.: MDQA640
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
5U	UG/L	SILVER
120J	UG/L	ARSENIC
NA	UG/L	BORON
140	UG/L	BARIUM
2U	UG/L	BERYLLIUM
0.4U	UG/L	CADMIUM
16	UG/L	COBALT
6U	UG/L	CHROMIUM
84	UG/L	COPPER
NA	UG/L	MOLYBDENUM
450	UG/L	NICKEL
5U	UG/L	LEAD
46U	UG/L	ANTIMONY
16J	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
10U	UG/L	THALLIUM
16UJ	UG/L	VANADIUM
NA	UG/L	YTTRIUM
220	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.4U	UG/L	MERCURY
280J	UG/L	ALUMINUM
900	UG/L	MANGANESE
110	MG/L	CALCIUM
55J	MG/L	MAGNESIUM
0.65J	MG/L	IRON
1000	MG/L	SODIUM
1600	MG/L	POTASSIUM

****

FOOTNOTES
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*J=ESTIMATED VALUE *U=PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13772 — SAMPLE TYPE: LEACHATE

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: L-15
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/18/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: P DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1338 INORG SAMPLE NO.: HDQA638
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
5U	UG/L	SILVER
550J	UG/L	ARSENIC
NA	UG/L	BORON
410	UG/L	BARIUM
2U	UG/L	BERYLLIUM
5U	UG/L	CADMIUM
1100	UG/L	COBALT
1900J	UG/L	CHROMIUM
300	UG/L	COPPER
NA	UG/L	MOLYBDENUM
3800	UG/L	NICKEL
2500J	UG/L	LEAD
560J	UG/L	ANTIMONY
55J	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
260J	UG/L	THALLIUM
700J	UG/L	VANADIUM
NA	UG/L	YTTRIUM
320	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.4JN	UG/L	MERCURY
1000J	UG/L	ALUMINUM
340	UG/L	MANGANESE
1500	MG/L	CALCIUM
24	MG/L	MAGNESIUM
2.1J	MG/L	IRON
6500	MG/L	SODIUM
1100	MG/L	POTASSIUM

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13771 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FD-1
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1337 INORG SAMPLE NO.: HDQA637
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
5U	UG/L	SILVER
100J	UG/L	ARSENIC
NA	UG/L	BORON
14	UG/L	BARIUM
2U	UG/L	BERYLLIUM
5U	UG/L	CADMIUM
7U	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
4U	UG/L	LEAD
4U	UG/L	ANTIMONY
5UJ	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
10U	UG/L	THALLIUM
8U	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
91U	UG/L	ALUMINUM
4U	UG/L	MANGANESE
0.400UJ	MG/L	CALCIUM
0.08U	MG/L	MAGNESIUM
0.02U	MG/L	IRON
1.00J	MG/L	SODIUM
0.70UJ	MG/L	POTASSIUM

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
*J=ESTIMATED VALUE *P=PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13773 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FB-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1339 INORG SAMPLE NO.: MDQA639
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
5U	UG/L	SILVER
30J	UG/L	ARSENIC
NA	UG/L	BORON
15	UG/L	BARIUM
2U	UG/L	BERYLLIUM
0.4U	UG/L	CADMIUM
7U	UG/L	COBALT
50UJ	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
4U	UG/L	LEAD
4U	UG/L	ANTIMONY
20J	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
2U	UG/L	THALLIUM
8U	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
91U	UG/L	ALUMINUM
4U	UG/L	MANGANESE
0.50UJ	MG/L	CALCIUM
0.100J	MG/L	MAGNESIUM
0.02U	MG/L	IRON
20J	MG/L	SODIUM
0.80UJ	MG/L	POTASSIUM

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *P-PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13782 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FB-3
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: F DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: D01355 INORG SAMPLE NO.: HDQA655
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
5U	UG/L	SILVER
10UJ	UG/L	ARSENIC
NA	UG/L	BORON
12	UG/L	BARIUM
2U	UG/L	BERYLLIUM
0.4U	UG/L	CADMIUM
7U	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
4U	UG/L	LEAD
4U	UG/L	ANTIMONY
5UJ	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
2U	UG/L	THALLIUM
8U	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
94U	UG/L	ALUMINUM
4U	UG/L	MANGANESE
0.50UJ	MG/L	CALCIUM
0.20UJ	MG/L	MAGNESIUM
0.02U	MG/L	IRON
2UJ	MG/L	SODIUM
0.80UJ	MG/L	POTASSIUM

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
*J=ESTIMATED VALUE *P=PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13779 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: TR-1
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1352 INORG SAMPLE NO.: NDQA652
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
100U	UG/L	SILVER
30UJ	UG/L	ARSENIC
NA	UG/L	BORON
3U	UG/L	BARIUM
2U	UG/L	BERYLLIUM
0.4U	UG/L	CADMIUM
7U	UG/L	COBALT
100UJ	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
5U	UG/L	LEAD
60U	UG/L	ANTIMONY
50UJ	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
10U	UG/L	THALLIUM
10UJ	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
94U	UG/L	ALUMINUM
4U	UG/L	MANGANESE
0.07U	MG/L	CALCIUM
0.100UJ	MG/L	MAGNESIUM
0.02U	MG/L	IRON
0.300UJ	MG/L	SODIUM
0.80UJ	MG/L	POTASSIUM

****

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

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/08/86

METALS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13775 ---- SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CPEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: 16-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1341 INORG SAMPLE NO.: NDQA641
CONTRACT LABORATORY(ORGANIC): CUMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	ELEMENT
100J	UG/L	SILVER
100J	UG/L	ARSENIC
NA	UG/L	BORON
9	UG/L	BARIUM
2U	UG/L	BERYLLIUM
0.4U	UG/L	CADMIUM
7U	UG/L	COBALT
6U	UG/L	CHROMIUM
18U	UG/L	COPPER
NA	UG/L	MOLYBDENUM
23U	UG/L	NICKEL
4U	UG/L	LEAD
4U	UG/L	ANTIMONY
20J	UG/L	SELENIUM
NA	UG/L	TIN
NA	UG/L	STRONTIUM
NA	UG/L	TELLURIUM
NA	UG/L	TITANIUM
2U	UG/L	THALLIUM
8U	UG/L	VANADIUM
NA	UG/L	YTTRIUM
20U	UG/L	ZINC
NA	UG/L	ZIRCONIUM
0.2U	UG/L	MERCURY
94U	UG/L	ALUMINUM
4U	UG/L	MANGANESE
0.400J	MG/L	CALCIUM
0.200J	MG/L	MAGNESIUM
0.02U	MG/L	IRON
1.00J	MG/L	SODIUM
0.80UJ	MG/L	POTASSIUM

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *M-PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13777 SAMPLE TYPE: GROUNDWA.

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: EUT-7
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1343 INORG SAMPLE NO.: MDQA643
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-FSD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13770 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: EUT-8
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/19/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1336 INORG SAMPLE NO.: MDQA636
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13776 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: BG-02
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1342 INORG SAMPLE NO.: MDQA642
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13767 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1332 INORG SAMPLE NO.: MDQA632
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
1.8J	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13768 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-4A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1334 INORG SAMPLE NO.: MDQA634
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13785 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-5
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1363 INORG SAMPLE NO.: MDQA663
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
2.6JN	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
6.3	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13780 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-6
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1353 INORG SAMPLE NO.: MDQA653
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13765 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-7A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1330 INORG SAMPLE NO.: MDQA630
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13762 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-8
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1327 INORG SAMPLE NO.: MDQA627
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
1.3J	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13784 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-9A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1358 INORG SAMPLE NO.: MDQA606
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13769 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-11
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1335 INORG SAMPLE NO.: MDQA635
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

*****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13764 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: ~~FB-2~~ SM-13
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1329 INORG SAMPLE NO.: MDQA629
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

*****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13781 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-14
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1354 INORG SAMPLE NO.: MDQA654
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13766 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-16
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1331 INORG SAMPLE NO.: MDQA631
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-FSD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13763 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-56
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1328 INORG SAMPLE NO.: MDQA628
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
1.0J	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE 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-FSD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13761 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-58
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1376 INORG SAMPLE NO.: MDQA626
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10UJ	UG/L	CHLOROMETHANE
10UJ	UG/L	BROMOMETHANE
10UJ	UG/L	VINYL CHLORIDE
10UJ	UG/L	CHLOROETHANE
20UJ	UG/L	METHYLENE CHLORIDE
10UJ	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10UJ	UG/L	1,1-DICHLOROETHANE
10UJ	UG/L	TRANS-1,2-DICHLOROETHENE
10UJ	UG/L	CHLOROFORM
10UJ	UG/L	1,2-DICHLOROETHANE
10UJ	UG/L	1,1,1-TRICHLOROETHANE
10UJ	UG/L	CARBON TETRACHLORIDE
10UJ	UG/L	BROMODICHLOROMETHANE
10UJ	UG/L	1,2-DICHLOROPROPANE
10UJ	UG/L	TRANS-1,3-DICHLOROPROPENE
10UJ	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10UJ	UG/L	BENZENE
10UJ	UG/L	DIBROMOCHLOROMETHANE
10UJ	UG/L	1,1,2-TRICHLOROETHANE
10UJ	UG/L	CIS-1,3-DICHLOROPROPENE
10UJ	UG/L	2-CHLOROETHYLVINYL ETHER
10UJ	UG/L	BROMOFORM
10UJ	UG/L	1,1,2,2-TETRACHLOROETHANE
10UJ	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10UJ	UG/L	TOLUENE
10UJ	UG/L	CHLOROBENZENE
10UJ	UG/L	ETHYL BENZENE
10UJ	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13760 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-62
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1375 INORG SAMPLE NO.: MDQA625
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

*****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13778 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-62
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1351 INORG SAMPLE NO.: MDQA651
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-FSD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13774 SAMPLE TYPE: LEACHATE

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: L-9
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1340 INORG SAMPLE NO.: MDQA640
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
17000U	UG/L	CHLOROMETHANE
17000U	UG/L	BROMOMETHANE
17000U	UG/L	VINYL CHLORIDE
17000U	UG/L	CHLOROETHANE
17000UJ	UG/L	METHYLENE CHLORIDE
8400U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
4000J	UG/L	1,1-DICHLOROETHANE
8400U	UG/L	TRANS-1,2-DICHLOROETHENE
8400U	UG/L	CHLOROFORM
8400U	UG/L	1,2-DICHLOROETHANE
8400U	UG/L	1,1,1-TRICHLOROETHANE
8400U	UG/L	CARBON TETRACHLORIDE
8400U	UG/L	BROMODICHLOROMETHANE
8400U	UG/L	1,2-DICHLOROPROPANE
8400U	UG/L	TRANS-1,3-DICHLOROPROPENE
8400U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
5300J	UG/L	BENZENE
8400U	UG/L	DIBROMOCHLOROMETHANE
8400U	UG/L	1,1,2-TRICHLOROETHANE
8400U	UG/L	CIS-1,3-DICHLOROPROPENE
17000U	UG/L	2-CHLOROETHYLVINYL ETHER
8400U	UG/L	BROMOFORM
8400U	UG/L	1,1,2,2-TETRACHLOROETHANE
8400U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
43000	UG/L	TOLUENE
8400U	UG/L	CHLOROBENZENE
2300J	UG/L	ETHYL BENZENE
9200	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13772 SAMPLE TYPE: LEACHATE

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: L-15
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/18/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1338 INORG SAMPLE NO.: MDQA638
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
NAI	UG/L	CHLOROMETHANE
NAI	UG/L	BROMOMETHANE
NAI	UG/L	VINYL CHLORIDE
NAI	UG/L	CHLOROETHANE
NAI	UG/L	METHYLENE CHLORIDE
NAI	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
NAI	UG/L	1,1-DICHLOROETHANE
NAI	UG/L	TRANS-1,2-DICHLOROETHENE
NAI	UG/L	CHLOROFORM
NAI	UG/L	1,2-DICHLOROETHANE
NAI	UG/L	1,1,1-TRICHLOROETHANE
NAI	UG/L	CARBON TETRACHLORIDE
NAI	UG/L	BROMODICHLOROMETHANE
NAI	UG/L	1,2-DICHLOROPROPANE
NAI	UG/L	TRANS-1,3-DICHLOROPROPENE
NAI	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
NAI	UG/L	BENZENE
NAI	UG/L	DIBROMOCHLOROMETHANE
NAI	UG/L	1,1,2-TRICHLOROETHANE
NAI	UG/L	CIS-1,3-DICHLOROPROPENE
NAI	UG/L	2-CHLOROETHYLVINYL ETHER
NAI	UG/L	BROMOFORM
NAI	UG/L	1,1,2,2-TETRACHLOROETHANE
NAI	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
NAI	UG/L	TOLUENE
NAI	UG/L	CHLOROBENZENE
NAI	UG/L	ETHYL BENZENE
NAI	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13771 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FB-1
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1337 INORG SAMPLE NO.: MDQA637
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
100J	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13773 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FB-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1339 INORG SAMPLE NO.: MDQA639
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
20UJ	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

*****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13782 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FB-3
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1355 INORG SAMPLE NO.: MDQA655
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13779 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: TB-1
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1352 INORG SAMPLE NO.: MDQA652
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
10U	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS
WATER

SAMPLE NO.: 86C13775 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: TB-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1341 INORG SAMPLE NO.: MDQA641
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP SAMPLE DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
10U	UG/L	CHLOROMETHANE
10U	UG/L	BROMOMETHANE
10U	UG/L	VINYL CHLORIDE
10U	UG/L	CHLOROETHANE
10U	UG/L	METHYLENE CHLORIDE
10U	UG/L	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
10U	UG/L	1,1-DICHLOROETHANE
10U	UG/L	TRANS-1,2-DICHLOROETHENE
10U	UG/L	CHLOROFORM
10U	UG/L	1,2-DICHLOROETHANE
10U	UG/L	1,1,1-TRICHLOROETHANE
10U	UG/L	CARBON TETRACHLORIDE
10U	UG/L	BROMODICHLOROMETHANE
10U	UG/L	1,2-DICHLOROPROPANE
10U	UG/L	TRANS-1,3-DICHLOROPROPENE
10U	UG/L	TRICHLOROETHENE(TRICHLOROETHYLENE)
10U	UG/L	BENZENE
10U	UG/L	DIBROMOCHLOROMETHANE
10U	UG/L	1,1,2-TRICHLOROETHANE
10U	UG/L	CIS-1,3-DICHLOROPROPENE
10U	UG/L	2-CHLOROETHYLVINYL ETHER
10U	UG/L	BROMOFORM
10U	UG/L	1,1,2,2-TETRACHLOROETHANE
10U	UG/L	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
2.3J	UG/L	TOLUENE
10U	UG/L	CHLOROBENZENE
10U	UG/L	ETHYL BENZENE
10U	UG/L	TOTAL XYLENES

*****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13777 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: EUT-7
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1343 INORG SAMPLE NO.: MDQA643
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

****

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

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13770 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: EUT-8
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/19/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1336 INORG SAMPLE NO.: MDQA636
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

*****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13776 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: BG-02
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1342 INORG SAMPLE NO.: MDQA642
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

****

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

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13767 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1332 INORG SAMPLE NO.: MDQA632
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
200UJ	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13768 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-4A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1334 INORG SAMPLE NO.: MDQA634
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

****

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

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13785 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-5
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALER:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1363 INORG SAMPLE NO.: MDQA663
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

****

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

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
10U	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13780 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-6
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMICT:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1353 INORG SAMPLE NO.: MDQA653
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
30UJ	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13765 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-7A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1330 INORG SAMPLE NO.: MDQA630
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

****

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

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
10U	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13762 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-8
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1327 INORG SAMPLE NO.: MDQA627
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

****

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

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
10U	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
15	METHYL BUTYL KETONE
10U	STYRENE

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13784 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-9A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1358 INORG SAMPLE NO.: MDQA606
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
10U	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13769 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-11
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1335 INORG SAMPLE NO.: MDQA635
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13764 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: ~~FB-2~~ SM-13
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1329 INORG SAMPLE NO.: MDQA629
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13781 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-14
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1354 INORG SAMPLE NO.: MDQA654
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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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 DETECTION LIMIT.

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13766 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-16
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1331 INORG SAMPLE NO.: MDQA631
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
10U	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13763 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-56
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1328 INORG SAMPLE NO.: MDQA628
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

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FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS
THE MINIMUM DETECTION LIMIT.

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13761 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-58
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1326 INORG SAMPLE NO.: MDQA626
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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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 DETECTION LIMIT.

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	ACETONE
10UJ	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10UJ	VINYL ACETATE
10UJ	METHYL ISUBUTYL KETONE
10UJ	METHYL BUTYL KETONE
10UJ	STYRENE

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13760 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-62
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1325 INORG SAMPLE NO.: MDQA625
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13778 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-62
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1351 INORG SAMPLE NO.: MDQA651
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
K-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
10U	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

*****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13774 SAMPLE TYPE: LEACHATE

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: L-9
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1340 INORG SAMPLE NO.: MDQA640
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
42000JN	DIMETHYLDISULFIDE
200000UJ	ACETONE
4200J	CARBON DISULFIDE
230000J	METHYL ETHYL KETONE
17000U	VINYL ACETATE
17000U	METHYL ISOBUTYL KETONE
17000U	METHYL BUTYL KETONE
8400U	STYRENE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13772 SAMPLE TYPE: LEACHATE

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: L-15
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/18/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALER:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1338 INORG SAMPLE NO.: MDQA638
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
NAI	ACETONE
NAI	METHYL ETHYL KETONE
NAI	CARBON DISULFIDE
NAI	METHYL BUTYL KETONE
NAI	METHYL ISOBUTYL KETONE
NAI	STYRENE
NAI	VINYL ACETATE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13771 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FB-1
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1337 INORG SAMPLE NO.: MDQA637
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

****

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

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
10U	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13773 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FB-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1339 INORG SAMPLE NO.: MDQA639
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
30UJ	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-FSD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13782 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: ENELLE STATE: AL

STATION I.D.: FB-3
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1355 INORG SAMPLE NO.: MDQA655
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

*****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/85 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13779 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: TB-1
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALER:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1352 INORG SAMPLE NO.: MDQA652
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
17J	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PURGEABLE ORGANICS ANALYSIS, MISC
WATER

SAMPLE NO.: 86C13775 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: TB-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1341 INORG SAMPLE NO.: MDQA641
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
R-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

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

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	ACETONE
10U	CARBON DISULFIDE
10UR	METHYL ETHYL KETONE
10U	VINYL ACETATE
10U	METHYL ISOBUTYL KETONE
10U	METHYL BUTYL KETONE
10U	STYRENE

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13777 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EDELLE STATE: AL

STATION I.D.: EUT-7
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1343 INORG SAMPLE NO.: MDQA643
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20U	UG/L	1,3-DICHLOROBENZENE
20U	UG/L	1,4-DICHLOROBENZENE
20U	UG/L	1,2-DICHLOROBENZENE
20U	UG/L	BIS(2-CHLOROETHYL) ETHER
20U	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20U	UG/L	N-NITROSODI-N-PROPYLAMINE
20U	UG/L	NITROBENZENE
20U	UG/L	HEXACHLOROBUTADIENE
20U	UG/L	1,2,4-TRICHLOROBENZENE
20U	UG/L	NAPHTHALENE
20U	UG/L	BIS(2-CHLOROETHOXY) METHANE
20U	UG/L	ISOPHORONE
20U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20U	UG/L	ACENAPHTHYLENE
20U	UG/L	ACENAPHTHENE
20U	UG/L	DIMETHYL PHTHALATE
20U	UG/L	2,4-DINITROTOLUENE
20U	UG/L	2,6-DINITROTOLUENE
20U	UG/L	4-CHLOROPHENYL PHENYL ETHER
20U	UG/L	FLUORENE
20U	UG/L	DIETHYL PHTHALATE
20U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20U	UG/L	HEXACHLOROBENZENE (HCB)
20U	UG/L	4-BROMOPHENYL PHENYL ETHER
20U	UG/L	PHENANTHRENE
20U	UG/L	ANTHRACENE
20U	UG/L	DI-N-BUTYLPHTHALATE
20U	UG/L	FLUORANTHENE
20U	UG/L	PYRENE
20U	UG/L	BENZYL BUTYL PHTHALATE
20U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20U	UG/L	BENZO(A)ANTHRACENE
20U	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20U	UG/L	DI-N-OCTYLPHTHALATE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO-A-PYRENE
20U	UG/L	INDENO (1,2,3-CD) PYRENE
20U	UG/L	DIBENZO(A,H)ANTHRACENE
20U	UG/L	BENZO(GHI)PERYLENE
20U	UG/L	2-CHLOROPHENOL
20U	UG/L	2-NITROPHENOL
20U	UG/L	PHENOL
20U	UG/L	2,4-DIMETHYLPHENOL
20U	UG/L	2,4-DICHLOROPHENOL
20U	UG/L	2,4,6-TRICHLOROPHENOL
20U	UG/L	4-CHLORO-3-METHYLPHENOL
100U	UG/L	2,4-DINITROPHENOL
100U	UG/L	2-METHYL-4,6-DINITROPHENOL
100U	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,PEG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13770 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: EUT-8
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/19/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1336 INORG SAMPLE NO.: MDQA636
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
270J	UG/L	1,3-DICHLOROBENZENE
270J	UG/L	1,4-DICHLOROBENZENE
270J	UG/L	1,2-DICHLOROBENZENE
270J	UG/L	BIS(2-CHLOROETHYL) ETHER
270J	UG/L	HEXACHLOROETHANE
270J	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
270J	UG/L	N-NITROSODI-N-PROPYLAMINE
270J	UG/L	NITROBENZENE
270J	UG/L	HEXACHLOROBUTADIENE
270J	UG/L	1,2,4-TRICHLOROBENZENE
270J	UG/L	NAPHTHALENE
270J	UG/L	BIS(2-CHLOROETHOXY) METHANE
270J	UG/L	ISOPHORONE
270J	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
270J	UG/L	2-CHLORONAPHTHALENE
270J	UG/L	ACENAPHTHYLENE
270J	UG/L	ACENAPHTHENE
270J	UG/L	DIMETHYL PHTHALATE
270J	UG/L	2,4-DINITROTOLUENE
270J	UG/L	2,6-DINITROTOLUENE
270J	UG/L	4-CHLOROPHENYL PHENYL ETHER
270J	UG/L	FLUORENE
270J	UG/L	DIETHYL PHTHALATE
270J	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
270J	UG/L	HEXACHLOROBENZENE (HCB)
270J	UG/L	4-BROMOPHENYL PHENYL ETHER
270J	UG/L	PHENANTHRENE
270J	UG/L	ANTHRACENE
270J	UG/L	DI-N-BUTYLPHTHALATE
270J	UG/L	FLUORANTHENE
270J	UG/L	PYRENE
270J	UG/L	BENZYL BUTYL PHTHALATE
270J	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
270J	UG/L	BENZO(A)ANTHRACENE
270J	UG/L	CHRYSENE
530J	UG/L	3,3'-DICHLOROBENZIDINE
270J	UG/L	DI-N-OCTYLPHTHALATE
270J	UG/L	BENZO(B AND/OR K)FLUORANTHENE
270J	UG/L	BENZO(B AND/OR K)FLUORANTHENE
270J	UG/L	BENZO-A-PYRENE
270J	UG/L	INDENO (1,2,3-CD) PYRENE
270J	UG/L	DIBENZO(A,H)ANTHRACENE
270J	UG/L	BENZO(GHI)PERYLENE
270J	UG/L	2-CHLOROPHENOL
270J	UG/L	2-NITROPHENOL
270J	UG/L	PHENOL
270J	UG/L	2,4-DIMETHYLPHENOL
270J	UG/L	2,4-DICHLOROPHENOL
270J	UG/L	2,4,6-TRICHLOROPHENOL
270J	UG/L	4-CHLORO-3-METHYLPHENOL
130UJ	UG/L	2,4-DINITROPHENOL
130UJ	UG/L	2-METHYL-4,6-DINITROPHENOL
130UJ	UG/L	PENTACHLOROPHENOL
130UJ	UG/L	4-NITROPHENOL

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13776 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: BG-02
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1342 INORG SAMPLE NO.: MDQA642
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20U	UG/L	1,3-DICHLOROBENZENE
20U	UG/L	1,4-DICHLOROBENZENE
20U	UG/L	1,2-DICHLOROBENZENE
20U	UG/L	BIS(2-CHLOROETHYL) ETHER
20U	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20U	UG/L	N-NITROSODI-N-PROPYLAMINE
20U	UG/L	NITROBENZENE
20U	UG/L	HEXACHLOROBUTADIENE
20U	UG/L	1,2,4-TRICHLOROBENZENE
20U	UG/L	NAPHTHALENE
20U	UG/L	BIS(2-CHLOROETHOXY) METHANE
20U	UG/L	ISOPHORONE
20U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20U	UG/L	ACENAPHTHYLENE
20U	UG/L	ACENAPHTHENE
20U	UG/L	DIMETHYL PHTHALATE
20U	UG/L	2,4-DINITROTOLUENE
20U	UG/L	2,6-DINITROTOLUENE
20U	UG/L	4-CHLOROPHENYL PHENYL ETHER
20U	UG/L	FLUORENE
20U	UG/L	DIETHYL PHTHALATE
20U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20U	UG/L	HEXACHLOROBENZENE (HCB)
20U	UG/L	4-BROMOPHENYL PHENYL ETHER
20U	UG/L	PHENANTHRENE
20U	UG/L	ANTHRACENE
20U	UG/L	DI-N-BUTYLPHTHALATE
20U	UG/L	FLUORANTHENE
20U	UG/L	PYRENE
20U	UG/L	BENZYL BUTYL PHTHALATE
20U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20U	UG/L	BENZO(A)ANTHRACENE
20U	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20U	UG/L	DI-N-OCTYLPHTHALATE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO-A-PYRENE
20U	UG/L	INDENO (1,2,3-CD) PYRENE
20U	UG/L	DIBENZO(A,H)ANTHRACENE
20U	UG/L	BENZO(GHI)PERYLENE
20U	UG/L	2-CHLOROPHENOL
20U	UG/L	2-NITROPHENOL
20U	UG/L	PHENOL
20U	UG/L	2,4-DIMETHYLPHENOL
20U	UG/L	2,4-DICHLOROPHENOL
20U	UG/L	2,4,6-TRICHLOROPHENOL
20U	UG/L	4-CHLORO-3-METHYLPHENOL
100U	UG/L	2,4-DINITROPHENOL
100U	UG/L	2-METHYL-4,6-DINITROPHENOL
100U	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13767 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1332 INORG SAMPLE NO.: MDQA632
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20UJ	UG/L	1,3-DICHLOROBENZENE
20UJ	UG/L	1,4-DICHLOROBENZENE
20UJ	UG/L	1,2-DICHLOROBENZENE
20UJ	UG/L	BIS(2-CHLOROETHYL) ETHER
20UJ	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20UJ	UG/L	N-NITROSODI-N-PROPYLAMINE
20UJ	UG/L	NITROBENZENE
20UJ	UG/L	HEXACHLOROBUTADIENE
20UJ	UG/L	1,2,4-TRICHLOROBENZENE
20UJ	UG/L	NAPHTHALENE
20UJ	UG/L	BIS(2-CHLOROETHOXY) METHANE
20UJ	UG/L	ISOPHORONE
20UJ	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20UJ	UG/L	ACENAPHTHYLENE
20UJ	UG/L	ACENAPHTHENE
20UJ	UG/L	DIMETHYL PHTHALATE
20UJ	UG/L	2,4-DINITROTOLUENE
20UJ	UG/L	2,6-DINITROTOLUENE
20UJ	UG/L	4-CHLOROPHENYL PHENYL ETHER
20UJ	UG/L	FLUORENE
20UJ	UG/L	DIETHYL PHTHALATE
20UJ	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20UJ	UG/L	HEXACHLOROBENZENE (HCB)
20UJ	UG/L	4-BROMOPHENYL PHENYL ETHER
20UJ	UG/L	PHENANTHRENE
20UJ	UG/L	ANTHRACENE
20UJ	UG/L	DI-N-BUTYLPHTHALATE
20UJ	UG/L	FLUORANTHENE
20UJ	UG/L	PYRENE
20UJ	UG/L	BENZYL BUTYL PHTHALATE
20UJ	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20UJ	UG/L	BENZO(A)ANTHRACENE
20UJ	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20UJ	UG/L	DI-N-OCTYLPHTHALATE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO-A-PYRENE
20UJ	UG/L	INDENO (1,2,3-CD) PYRENE
20UJ	UG/L	DIBENZO(A,H)ANTHRACENE
20UJ	UG/L	BENZO(GHI)PERYLENE
20UJ	UG/L	2-CHLOROPHENOL
20UJ	UG/L	2-NITROPHENOL
20UJ	UG/L	PHENOL
20UJ	UG/L	2,4-DIMETHYLPHENOL
20UJ	UG/L	2,4-DICHLOROPHENOL
20UJ	UG/L	2,4,6-TRICHLOROPHENOL
20UJ	UG/L	4-CHLORO-3-METHYLPHENOL
100UJ	UG/L	2,4-DINITROPHENOL
100UJ	UG/L	2-METHYL-4,6-DINITROPHENOL
100UJ	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

****

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

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13768 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-4A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1334 INORG SAMPLE NO.: MDQA634
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20U	UG/L	1,3-DICHLOROBENZENE
20U	UG/L	1,4-DICHLOROBENZENE
20U	UG/L	1,2-DICHLOROBENZENE
20U	UG/L	BIS(2-CHLOROETHYL) ETHER
20U	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20U	UG/L	N-NITROSODI-N-PROPYLAMINE
20U	UG/L	NITROBENZENE
20U	UG/L	HEXACHLOROBUTADIENE
20U	UG/L	1,2,4-TRICHLOROBENZENE
20U	UG/L	NAPHTHALENE
20U	UG/L	BIS(2-CHLOROETHOXY) METHANE
20U	UG/L	ISOPHORONE
20U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20U	UG/L	ACENAPHTHYLENE
20U	UG/L	ACENAPHTHENE
20U	UG/L	DIMETHYL PHTHALATE
20U	UG/L	2,4-DINITROTOLUENE
20U	UG/L	2,6-DINITROTOLUENE
20U	UG/L	4-CHLOROPHENYL PHENYL ETHER
20U	UG/L	FLUORENE
20U	UG/L	DIETHYL PHTHALATE
20U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20U	UG/L	HEXACHLOROBENZENE (HCB)
20U	UG/L	4-BROMOPHENYL PHENYL ETHER
20U	UG/L	PHENANTHRENE
20U	UG/L	ANTHRACENE
20U	UG/L	DI-N-BUTYLPHTHALATE
20U	UG/L	FLUORANTHENE
20U	UG/L	PYRENE
20U	UG/L	BENZYL BUTYL PHTHALATE
20U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20U	UG/L	BENZO(A)ANTHRACENE
20U	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20U	UG/L	DI-N-OCTYLPHTHALATE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO-A-PYRENE
20U	UG/L	INDENO (1,2,3-CD) PYRENE
20U	UG/L	DIBENZO(A,H)ANTHRACENE
20U	UG/L	BENZO(GHI)PERYLENE
20U	UG/L	2-CHLOROPHENOL
20U	UG/L	2-NITROPHENOL
20U	UG/L	PHENOL
20U	UG/L	2,4-DIMETHYLPHENOL
20U	UG/L	2,4-DICHLOROPHENOL
20U	UG/L	2,4,6-TRICHLOROPHENOL
20U	UG/L	4-CHLORO-3-METHYLPHENOL
100U	UG/L	2,4-DINITROPHENOL
100U	UG/L	2-METHYL-4,6-DINITROPHENOL
100U	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-FSD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13785 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-5
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1363 INORG SAMPLE NO.: MDQA663
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20U	UG/L	1,3-DICHLOROBENZENE
20U	UG/L	1,4-DICHLOROBENZENE
20U	UG/L	1,2-DICHLOROBENZENE
20U	UG/L	BIS(2-CHLOROETHYL) ETHER
20U	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20U	UG/L	N-NITROSODI-N-PROPYLAMINE
20U	UG/L	NITROBENZENE
20U	UG/L	HEXACHLOROBUTADIENE
20U	UG/L	1,2,4-TRICHLOROBENZENE
20U	UG/L	NAPHTHALENE
20U	UG/L	BIS(2-CHLOROETHOXY) METHANE
20U	UG/L	ISOPHORONE
20U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20U	UG/L	ACENAPHTHYLENE
20U	UG/L	ACENAPHTHENE
20U	UG/L	DIMETHYL PHTHALATE
20U	UG/L	2,4-DINITROTOLUENE
20U	UG/L	2,6-DINITROTOLUENE
20U	UG/L	4-CHLOROPHENYL PHENYL ETHER
20U	UG/L	FLUORENE
20U	UG/L	DIETHYL PHTHALATE
20U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20U	UG/L	HEXACHLOROBENZENE (HCB)
20U	UG/L	4-BROMOPHENYL PHENYL ETHER
20U	UG/L	PHENANTHRENE
20U	UG/L	ANTHRACENE
20U	UG/L	DI-N-BUTYLPHTHALATE
20U	UG/L	FLUORANTHENE
20U	UG/L	PYRENE
20U	UG/L	BENZYL BUTYL PHTHALATE
20U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20U	UG/L	BENZO(A)ANTHRACENE
20U	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20U	UG/L	DI-N-OCTYLPHTHALATE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO-A-PYRENE
20U	UG/L	INDENO (1,2,3-CD) PYRENE
20U	UG/L	DIBENZO(A,H)ANTHRACENE
20U	UG/L	BENZO(GHI)PERYLENE
20U	UG/L	2-CHLOROPHENOL
20U	UG/L	2-NITROPHENOL
20U	UG/L	PHENOL
20U	UG/L	2,4-DIMETHYLPHENOL
20U	UG/L	2,4-DICHLOROPHENOL
20U	UG/L	2,4,6-TRICHLOROPHENOL
20U	UG/L	4-CHLORO-3-METHYLPHENOL
100U	UG/L	2,4-DINITROPHENOL
100U	UG/L	2-METHYL-4,6-DINITROPHENOL
100U	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13780 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-6
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1353 INORG SAMPLE NO.: MDQA653
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20UJ	UG/L	1,3-DICHLOROBENZENE
20UJ	UG/L	1,4-DICHLOROBENZENE
20UJ	UG/L	1,2-DICHLOROBENZENE
20UJ	UG/L	BIS(2-CHLOROETHYL) ETHER
20UJ	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20UJ	UG/L	N-NITROSODI-N-PROPYLAMINE
20UJ	UG/L	NITROBENZENE
20UJ	UG/L	HEXACHLOROBUTADIENE
20UJ	UG/L	1,2,4-TRICHLOROBENZENE
20UJ	UG/L	NAPHTHALENE
20UJ	UG/L	BIS(2-CHLOROETHOXY) METHANE
20UJ	UG/L	ISOPHORONE
20UJ	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20UJ	UG/L	ACENAPHTHYLENE
20UJ	UG/L	ACENAPHTHENE
20UJ	UG/L	DIMETHYL PHTHALATE
20UJ	UG/L	2,4-DINITROTOLUENE
20UJ	UG/L	2,6-DINITROTOLUENE
20UJ	UG/L	4-CHLOROPHENYL PHENYL ETHER
20UJ	UG/L	FLUORENE
20UJ	UG/L	DIETHYL PHTHALATE
20UJ	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20UJ	UG/L	HEXACHLOROBENZENE (HCB)
20UJ	UG/L	4-BROMOPHENYL PHENYL ETHER
20UJ	UG/L	PHENANTHRENE
20UJ	UG/L	ANTHRACENE
20UJ	UG/L	DI-N-BUTYLPHTHALATE
20UJ	UG/L	FLUORANTHENE
20UJ	UG/L	PYRENE
20UJ	UG/L	BENZYL BUTYL PHTHALATE
20UJ	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20UJ	UG/L	BENZO(A)ANTHRACENE
20UJ	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20UJ	UG/L	DI-N-OCTYLPHTHALATE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO-A-PYRENE
20UJ	UG/L	INDENO (1,2,3-CD) PYRENE
20UJ	UG/L	DIBENZO(A,H)ANTHRACENE
20UJ	UG/L	BENZO(GHI)PERYLENE
20UJ	UG/L	2-CHLOROPHENOL
20UJ	UG/L	2-NITROPHENOL
20UJ	UG/L	PHENOL
20UJ	UG/L	2,4-DIMETHYLPHENOL
20UJ	UG/L	2,4-DICHLOROPHENOL
20UJ	UG/L	2,4,6-TRICHLOROPHENOL
20UJ	UG/L	4-CHLORO-3-METHYLPHENOL
100UJ	UG/L	2,4-DINITROPHENOL
100UJ	UG/L	2-METHYL-4,6-DINITROPHENOL
100UJ	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13765 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-7A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE RECD: DATE/TIME 00/00/00 RECD BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: D01330 INORG SAMPLE NO.: MDQA630
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

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.

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20U	UG/L	1,3-DICHLOROBENZENE
20U	UG/L	1,4-DICHLOROBENZENE
20U	UG/L	1,2-DICHLOROBENZENE
20U	UG/L	BIS(2-CHLOROETHYL) ETHER
20U	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20U	UG/L	N-NITROSODI-N-PROPYLAMINE
20U	UG/L	NITROBENZENE
20U	UG/L	HEXACHLOROBUTADIENE
20U	UG/L	1,2,4-TRICHLOROBENZENE
20U	UG/L	NAPHTHALENE
20U	UG/L	BIS(2-CHLOROETHOXY) METHANE
20U	UG/L	ISOPHORONE
20U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20U	UG/L	ACENAPHTHYLENE
20U	UG/L	ACENAPHTHENE
20U	UG/L	DIMETHYL PHTHALATE
20U	UG/L	2,4-DINITROTOLUENE
20U	UG/L	2,6-DINITROTOLUENE
20U	UG/L	4-CHLOROPHENYL PHENYL ETHER
20U	UG/L	FLUORENE
20U	UG/L	DIETHYL PHTHALATE
20U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20U	UG/L	HEXACHLOROBENZENE (HCB)
20U	UG/L	4-BROMOPHENYL PHENYL ETHER
20U	UG/L	PHENANTHRENE
20U	UG/L	ANTHRACENE
20U	UG/L	DI-N-BUTYLPHTHALATE
20U	UG/L	FLUORANTHENE
20U	UG/L	PYRENE
20U	UG/L	BENZYL BUTYL PHTHALATE
20U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20U	UG/L	BENZO(A)ANTHRACENE
20U	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20U	UG/L	DI-N-OCTYLPHTHALATE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO-A-PYRENE
20U	UG/L	INDENO (1,2,3-CD) PYRENE
20U	UG/L	DIBENZO(A,H)ANTHRACENE
20U	UG/L	BENZO(GHI)PERYLENE
20U	UG/L	2-CHLOROPHENOL
20U	UG/L	2-NITROPHENOL
20U	UG/L	PHENOL
20U	UG/L	2,4-DIMETHYLPHENOL
20U	UG/L	2,4-DICHLOROPHENOL
20U	UG/L	2,4,6-TRICHLOROPHENOL
20U	UG/L	4-CHLORO-3-METHYLPHENOL
100U	UG/L	2,4-DINITROPHENOL
100U	UG/L	2-METHYL-4,6-DINITROPHENOL
100U	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13762 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-8
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1327 INORG SAMPLE NO.: MDQA627
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20UJ	UG/L	1,3-DICHLOROBENZENE
20UJ	UG/L	1,4-DICHLOROBENZENE
20UJ	UG/L	1,2-DICHLOROBENZENE
20UJ	UG/L	BIS(2-CHLOROETHYL) ETHER
20UJ	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20UJ	UG/L	N-NITROSODI-N-PROPYLAMINE
20UJ	UG/L	NITROBENZENE
20UJ	UG/L	HEXACHLOROBUTADIENE
20UJ	UG/L	1,2,4-TRICHLOROBENZENE
20UJ	UG/L	NAPHTHALENE
20UJ	UG/L	BIS(2-CHLOROETHOXY) METHANE
20UJ	UG/L	ISOPHORONE
20UJ	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20UJ	UG/L	ACENAPHTHYLENE
20UJ	UG/L	ACENAPHTHENE
20UJ	UG/L	DIMETHYL PHTHALATE
20UJ	UG/L	2,4-DINITROTOLUENE
20UJ	UG/L	2,6-DINITROTOLUENE
20UJ	UG/L	4-CHLOROPHENYL PHENYL ETHER
20UJ	UG/L	FLUORENE
20UJ	UG/L	DIETHYL PHTHALATE
20UJ	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20UJ	UG/L	HEXACHLOROBENZENE (HCB)
20UJ	UG/L	4-BROMOPHENYL PHENYL ETHER
20UJ	UG/L	PHENANTHRENE
20UJ	UG/L	ANTHRACENE
20UJ	UG/L	DI-N-BUTYLPHTHALATE
20UJ	UG/L	FLUORANTHENE
20UJ	UG/L	PYRENE
20UJ	UG/L	BENZYL BUTYL PHTHALATE
20UJ	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20UJ	UG/L	BENZO(A)ANTHRACENE
20UJ	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20UJ	UG/L	DI-N-OCTYLPHTHALATE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO-A-PYRENE
20UJ	UG/L	INDENO (1,2,3-CD) PYRENE
20UJ	UG/L	DIBENZO(A,H)ANTHRACENE
20UJ	UG/L	BENZO(GHI)PERYLENE
20UJ	UG/L	2-CHLOROPHENOL
20UJ	UG/L	2-NITROPHENOL
20UJ	UG/L	PHENOL
20UJ	UG/L	2,4-DIMETHYLPHENOL
20UJ	UG/L	2,4-DICHLOROPHENOL
20UJ	UG/L	2,4,6-TRICHLOROPHENOL
20UJ	UG/L	4-CHLORO-3-METHYLPHENOL
100UJ	UG/L	2,4-DINITROPHENOL
100UJ	UG/L	2-METHYL-4,6-DINITROPHENOL
100UJ	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13784 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-9A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1358 INORG SAMPLE NO.: MDQA606
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20U	UG/L	1,3-DICHLOROBENZENE
20U	UG/L	1,4-DICHLOROBENZENE
20U	UG/L	1,2-DICHLOROBENZENE
20U	UG/L	BIS(2-CHLOROETHYL) ETHER
20U	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20U	UG/L	N-NITROSODI-N-PROPYLAMINE
20U	UG/L	NITROBENZENE
20U	UG/L	HEXACHLOROBUTADIENE
20U	UG/L	1,2,4-TRICHLOROBENZENE
20U	UG/L	NAPHTHALENE
20U	UG/L	BIS(2-CHLOROETHOXY) METHANE
20U	UG/L	ISOPHORONE
20U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20U	UG/L	ACENAPHTHYLENE
20U	UG/L	ACENAPHTHENE
20U	UG/L	DIMETHYL PHTHALATE
20U	UG/L	2,4-DINITROTOLUENE
20U	UG/L	2,6-DINITROTOLUENE
20U	UG/L	4-CHLOROPHENYL PHENYL ETHER
20U	UG/L	FLUORENE
20U	UG/L	DIETHYL PHTHALATE
20U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20U	UG/L	HEXACHLOROBENZENE (HCB)
20U	UG/L	4-BROMOPHENYL PHENYL ETHER
20U	UG/L	PHENANTHRENE
20U	UG/L	ANTHRACENE
20U	UG/L	DI-N-BUTYLPHTHALATE
20U	UG/L	FLUORANTHENE
20U	UG/L	PYRENE
20U	UG/L	BENZYL BUTYL PHTHALATE
20U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20U	UG/L	BENZO(A)ANTHRACENE
20U	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20U	UG/L	DI-N-OCTYLPHTHALATE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO-A-PYRENE
20U	UG/L	INDENO (1,2,3-CD) PYRENE
20U	UG/L	DIBENZO(A,H)ANTHRACENE
20U	UG/L	BENZO(GHI)PERYLENE
20U	UG/L	2-CHLOROPHENOL
20U	UG/L	2-NITROPHENOL
20U	UG/L	PHENOL
20U	UG/L	2,4-DIMETHYLPHENOL
20U	UG/L	2,4-DICHLOROPHENOL
20U	UG/L	2,4,6-TRICHLOROPHENOL
20U	UG/L	4-CHLORO-3-METHYLPHENOL
100U	UG/L	2,4-DINITROPHENOL
100U	UG/L	2-METHYL-4,6-DINITROPHENOL
100U	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13769 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-11
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1335 INORG SAMPLE NO.: MDQA635
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

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 MINUMUM QUANTITATION LIMIT.

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20U	UG/L	1,3-DICHLOROBENZENE
20U	UG/L	1,4-DICHLOROBENZENE
20U	UG/L	1,2-DICHLOROBENZENE
20U	UG/L	BIS(2-CHLOROETHYL) ETHER
20U	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20U	UG/L	N-NITROSODI-N-PROPYLAMINE
20U	UG/L	NITROBENZENE
20U	UG/L	HEXACHLOROBUTADIENE
20U	UG/L	1,2,4-TRICHLOROBENZENE
20U	UG/L	NAPHTHALENE
20U	UG/L	BIS(2-CHLOROETHOXY) METHANE
20U	UG/L	ISOPHORONE
20U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20U	UG/L	ACENAPHTHYLENE
20U	UG/L	ACENAPHTHENE
20U	UG/L	DIMETHYL PHTHALATE
20U	UG/L	2,4-DINITROTOLUENE
20U	UG/L	2,6-DINITROTOLUENE
20U	UG/L	4-CHLOROPHENYL PHENYL ETHER
20U	UG/L	FLUORENE
20U	UG/L	DIETHYL PHTHALATE
20U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20U	UG/L	HEXACHLOROBENZENE (HCB)
20U	UG/L	4-BROMOPHENYL PHENYL ETHER
20U	UG/L	PHENANTHRENE
20U	UG/L	ANTHRACENE
20U	UG/L	DI-N-BUTYLPHTHALATE
20U	UG/L	FLUORANTHENE
20U	UG/L	PYRENE
20U	UG/L	BENZYL BUTYL PHTHALATE
20U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20U	UG/L	BENZO(A)ANTHRACENE
20U	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20U	UG/L	DI-N-OCTYLPHTHALATE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO-A-PYRENE
20U	UG/L	INDENO (1,2,3-CD) PYRENE
20U	UG/L	DIBENZO(A,H)ANTHRACENE
20U	UG/L	BENZO(GHI)PERYLENE
20U	UG/L	2-CHLOROPHENOL
20U	UG/L	2-NITROPHENOL
20U	UG/L	PHENOL
20U	UG/L	2,4-DIMETHYLPHENOL
20U	UG/L	2,4-DICHLOROPHENOL
20U	UG/L	2,4,6-TRICHLOROPHENOL
20U	UG/L	4-CHLORO-3-METHYLPHENOL
100U	UG/L	2,4-DINITROPHENOL
100U	UG/L	2-METHYL-4,6-DINITROPHENOL
100U	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13781 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-14
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1354 INORG SAMPLE NO.: MDQA654
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

****

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20UJ	UG/L	1,3-DICHLOROBENZENE
20UJ	UG/L	1,4-DICHLOROBENZENE
20UJ	UG/L	1,2-DICHLOROBENZENE
20UJ	UG/L	BIS(2-CHLOROETHYL) ETHER
20UJ	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20UJ	UG/L	N-NITROSODI-N-PROPYLAMINE
20UJ	UG/L	NITROBENZENE
20UJ	UG/L	HEXACHLOROBUTADIENE
20UJ	UG/L	1,2,4-TRICHLOROBENZENE
20UJ	UG/L	NAPHTHALENE
20UJ	UG/L	BIS(2-CHLOROETHOXY) METHANE
20UJ	UG/L	ISOPHORONE
20UJ	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20UJ	UG/L	ACENAPHTHYLENE
20UJ	UG/L	ACENAPHTHENE
20UJ	UG/L	DIMETHYL PHTHALATE
20UJ	UG/L	2,4-DINITROTOLUENE
20UJ	UG/L	2,6-DINITROTOLUENE
20UJ	UG/L	4-CHLOROPHENYL PHENYL ETHER
20UJ	UG/L	FLUORENE
20UJ	UG/L	DIETHYL PHTHALATE
20UJ	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20UJ	UG/L	HEXACHLOROBENZENE (HCB)
20UJ	UG/L	4-BROMOPHENYL PHENYL ETHER
20UJ	UG/L	PHENANTHRENE
20UJ	UG/L	ANTHRACENE
20UJ	UG/L	DI-N-BUTYLPHTHALATE
20UJ	UG/L	FLUORANTHENE
20UJ	UG/L	PYRENE
20UJ	UG/L	BENZYL BUTYL PHTHALATE
20UJ	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20UJ	UG/L	BENZO(A)ANTHRACENE
20UJ	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20UJ	UG/L	DI-N-OCTYLPHTHALATE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO-A-PYRENE
20UJ	UG/L	INDENO (1,2,3-CD) PYRENE
20UJ	UG/L	DIBENZO(A,H)ANTHRACENE
20UJ	UG/L	BENZO(GHI)PERYLENE
20UJ	UG/L	2-CHLOROPHENOL
20UJ	UG/L	2-NITROPHENOL
20UJ	UG/L	PHENOL
20UJ	UG/L	2,4-DIMETHYLPHENOL
20UJ	UG/L	2,4-DICHLOROPHENOL
20UJ	UG/L	2,4,6-TRICHLOROPHENOL
20UJ	UG/L	4-CHLORO-3-METHYLPHENOL
100UJ	UG/L	2,4-DINITROPHENOL
100UJ	UG/L	2-METHYL-4,6-DINITROPHENOL
100UJ	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13766 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-16
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1331 INORG SAMPLE NO.: MDQA631
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

****

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20UJ	UG/L	1,3-DICHLOROBENZENE
20UJ	UG/L	1,4-DICHLOROBENZENE
20UJ	UG/L	1,2-DICHLOROBENZENE
20UJ	UG/L	BIS(2-CHLOROETHYL) ETHER
20UJ	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20UJ	UG/L	N-NITROSODI-N-PROPYLAMINE
20UJ	UG/L	NITROBENZENE
20UJ	UG/L	HEXACHLOROBUTADIENE
20UJ	UG/L	1,2,4-TRICHLOROBENZENE
20UJ	UG/L	NAPHTHALENE
20UJ	UG/L	BIS(2-CHLOROETHOXY) METHANE
20UJ	UG/L	ISOPHORONE
20UJ	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20UJ	UG/L	ACENAPHTHYLENE
20UJ	UG/L	ACENAPHTHENE
20UJ	UG/L	DIMETHYL PHTHALATE
20UJ	UG/L	2,4-DINITROTOLUENE
20UJ	UG/L	2,6-DINITROTOLUENE
20UJ	UG/L	4-CHLOROPHENYL PHENYL ETHER
20UJ	UG/L	FLUORENE
20UJ	UG/L	DIETHYL PHTHALATE
20UJ	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20UJ	UG/L	HEXACHLOROBENZENE (HCB)
20UJ	UG/L	4-BROMOPHENYL PHENYL ETHER
20UJ	UG/L	PHENANTHRENE
20UJ	UG/L	ANTHRACENE
20UJ	UG/L	DI-N-BUTYLPHTHALATE
20UJ	UG/L	FLUORANTHENE
20UJ	UG/L	PYRENE
20UJ	UG/L	BENZYL BUTYL PHTHALATE
20UJ	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20UJ	UG/L	BENZO(A)ANTHRACENE
20UJ	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20UJ	UG/L	DI-N-OCTYLPHTHALATE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO-A-PYRENE
20UJ	UG/L	INDENO (1,2,3-CD) PYRENE
20UJ	UG/L	DIBENZO(A,H)ANTHRACENE
20UJ	UG/L	BENZO(GHI)PERYLENE
20UJ	UG/L	2-CHLOROPHENOL
20UJ	UG/L	2-NITROPHENOL
20UJ	UG/L	PHENOL
20UJ	UG/L	2,4-DIMETHYLPHENOL
20UJ	UG/L	2,4-DICHLOROPHENOL
20UJ	UG/L	2,4,6-TRICHLOROPHENOL
20UJ	UG/L	4-CHLORO-3-METHYLPHENOL
100UJ	UG/L	2,4-DINITROPHENOL
100UJ	UG/L	2-METHYL-4,6-DINITROPHENOL
100UJ	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13763 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-56
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1328 INORG SAMPLE NO.: MDQA628
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20U	UG/L	1,3-DICHLOROBENZENE
20U	UG/L	1,4-DICHLOROBENZENE
20U	UG/L	1,2-DICHLOROBENZENE
20U	UG/L	BIS(2-CHLOROETHYL) ETHER
20U	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20U	UG/L	N-NITROSODI-N-PROPYLAMINE
20U	UG/L	NITROBENZENE
20U	UG/L	HEXACHLOROBUTADIENE
20U	UG/L	1,2,4-TRICHLOROBENZENE
20U	UG/L	NAPHTHALENE
20U	UG/L	BIS(2-CHLOROETHOXY) METHANE
20U	UG/L	ISOPHORONE
20U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20U	UG/L	ACENAPHTHYLENE
20U	UG/L	ACENAPHTHENE
20U	UG/L	DIMETHYL PHTHALATE
20U	UG/L	2,4-DINITROTOLUENE
20U	UG/L	2,6-DINITROTOLUENE
20U	UG/L	4-CHLOROPHENYL PHENYL ETHER
20U	UG/L	FLUORENE
20U	UG/L	DIETHYL PHTHALATE
20U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20U	UG/L	HEXACHLOROBENZENE (HCB)
20U	UG/L	4-BROMOPHENYL PHENYL ETHER
20U	UG/L	PHENANTHRENE
20U	UG/L	ANTHRACENE
20U	UG/L	DI-N-BUTYLPHTHALATE
20U	UG/L	FLUORANTHENE
20U	UG/L	PYRENE
20U	UG/L	BENZYL BUTYL PHTHALATE
20U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20U	UG/L	BENZO(A)ANTHRACENE
20U	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20U	UG/L	DI-N-OCTYLPHTHALATE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO-A-PYRENE
20U	UG/L	INDENO (1,2,3-CD) PYRENE
20U	UG/L	DIBENZO(A,H)ANTHRACENE
20U	UG/L	BENZO(GHI)PERYLENE
20U	UG/L	2-CHLOROPHENOL
20U	UG/L	2-NITROPHENOL
20U	UG/L	PHENOL
20U	UG/L	2,4-DIMETHYLPHENOL
20U	UG/L	2,4-DICHLOROPHENOL
20U	UG/L	2,4,6-TRICHLOROPHENOL
20U	UG/L	4-CHLORO-3-METHYLPHENOL
100U	UG/L	2,4-DINITROPHENOL
100U	UG/L	2-METHYL-4,6-DINITROPHENOL
100U	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-FSD,REG IV
ATHENS GEORGIA

1/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13761 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-58
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1326 INORG SAMPLE NO.: MDQA626
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20UJ	UG/L	1,3-DICHLOROBENZENE
20UJ	UG/L	1,4-DICHLOROBENZENE
20UJ	UG/L	1,2-DICHLOROBENZENE
20UJ	UG/L	BIS(2-CHLOROETHYL) ETHER
20UJ	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20UJ	UG/L	N-NITROSODI-N-PROPYLAMINE
20UJ	UG/L	NITROBENZENE
20UJ	UG/L	HEXACHLOROBUTADIENE
20UJ	UG/L	1,2,4-TRICHLOROBENZENE
20UJ	UG/L	NAPHTHALENE
20UJ	UG/L	BIS(2-CHLOROETHOXY) METHANE
20UJ	UG/L	ISOPHORONE
20UJ	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20UJ	UG/L	ACENAPHTHYLENE
20UJ	UG/L	ACENAPHTHENE
20UJ	UG/L	DIMETHYL PHTHALATE
20UJ	UG/L	2,4-DINITROTOLUENE
20UJ	UG/L	2,6-DINITROTOLUENE
20UJ	UG/L	4-CHLOROPHENYL PHENYL ETHER
20UJ	UG/L	FLUORENE
20UJ	UG/L	DIETHYL PHTHALATE
20UJ	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20UJ	UG/L	HEXACHLOROBENZENE (HCB)
20UJ	UG/L	4-BROMOPHENYL PHENYL ETHER
20UJ	UG/L	PHENANTHRENE
20UJ	UG/L	ANTHRACENE
20UJ	UG/L	DI-N-BUTYLPHTHALATE
20UJ	UG/L	FLUORANTHENE
20UJ	UG/L	PYRENE
20UJ	UG/L	BENZYL BUTYL PHTHALATE
20UJ	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20UJ	UG/L	BENZO(A)ANTHRACENE
20UJ	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20UJ	UG/L	DI-N-OCTYLPHTHALATE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO-A-PYRENE
20UJ	UG/L	INDENO (1,2,3-CD) PYRENE
20UJ	UG/L	DIBENZO(A,H)ANTHRACENE
20UJ	UG/L	BENZO(GHI)PERYLENE
20UJ	UG/L	2-CHLOROPHENOL
20UJ	UG/L	2-NITROPHENOL
20UJ	UG/L	PHENOL
20UJ	UG/L	2,4-DIMETHYLPHENOL
20UJ	UG/L	2,4-DICHLOROPHENOL
20UJ	UG/L	2,4,6-TRICHLOROPHENOL
20UJ	UG/L	4-CHLORO-3-METHYLPHENOL
100UJ	UG/L	2,4-DINITROPHENOL
100UJ	UG/L	2-METHYL-4,6-DINITROPHENOL
100UJ	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-FSD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13760 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-62
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1325 INORG SAMPLE NO.: MDQA625
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

****

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20UJ	UG/L	1,3-DICHLOROBENZENE
20UJ	UG/L	1,4-DICHLOROBENZENE
20UJ	UG/L	1,2-DICHLOROBENZENE
20UJ	UG/L	BIS(2-CHLOROETHYL) ETHER
20UJ	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20UJ	UG/L	N-NITROSODI-N-PROPYLAMINE
20UJ	UG/L	NITROBENZENE
20UJ	UG/L	HEXACHLOROBUTADIENE
20UJ	UG/L	1,2,4-TRICHLOROBENZENE
20UJ	UG/L	NAPHTHALENE
20UJ	UG/L	BIS(2-CHLOROETHOXY) METHANE
20UJ	UG/L	ISOPHORONE
20UJ	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20UJ	UG/L	ACENAPHTHYLENE
20UJ	UG/L	ACENAPHTHENE
20UJ	UG/L	DIMETHYL PHTHALATE
20UJ	UG/L	2,4-DINITROTOLUENE
20UJ	UG/L	2,6-DINITROTOLUENE
20UJ	UG/L	4-CHLOROPHENYL PHENYL ETHER
20UJ	UG/L	FLUORENE
20UJ	UG/L	DIETHYL PHTHALATE
20UJ	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20UJ	UG/L	HEXACHLOROBENZENE (HCB)
20UJ	UG/L	4-BROMOPHENYL PHENYL ETHER
20UJ	UG/L	PHENANTHRENE
20UJ	UG/L	ANTHRACENE
20UJ	UG/L	DI-N-BUTYLPHTHALATE
20UJ	UG/L	FLUORANTHENE
20UJ	UG/L	PYRENE
20UJ	UG/L	BENZYL BUTYL PHTHALATE
20UJ	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20UJ	UG/L	BENZO(A)ANTHRACENE
20UJ	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20UJ	UG/L	DI-N-OCTYLPHTHALATE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO-A-PYRENE
20UJ	UG/L	INDENO (1,2,3-CD) PYRENE
20UJ	UG/L	DIBENZO(A,H)ANTHRACENE
20UJ	UG/L	BENZO(GHI)PERYLENE
20UJ	UG/L	2-CHLOROPHENOL
20UJ	UG/L	2-NITROPHENOL
20UJ	UG/L	PHENOL
20UJ	UG/L	2,4-DIMETHYLPHENOL
20UJ	UG/L	2,4-DICHLOROPHENOL
20UJ	UG/L	2,4,6-TRICHLOROPHENOL
20UJ	UG/L	4-CHLORO-3-METHYLPHENOL
100UJ	UG/L	2,4-DINITROPHENOL
100UJ	UG/L	2-METHYL-4,6-DINITROPHENOL
100UJ	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13769 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EUFELLE STATE: AL

STATION I.D.: SM-11
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1335 INORG SAMPLE NO.: MDQA635
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

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.

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20U	UG/L	1,3-DICHLOROBENZENE
20U	UG/L	1,4-DICHLOROBENZENE
20U	UG/L	1,2-DICHLOROBENZENE
20U	UG/L	BIS(2-CHLOROETHYL) ETHER
20U	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20U	UG/L	N-NITROSODI-N-PROPYLAMINE
20U	UG/L	NITROBENZENE
20U	UG/L	HEXACHLOROBUTADIENE
20U	UG/L	1,2,4-TRICHLOROBENZENE
20U	UG/L	NAPHTHALENE
20U	UG/L	BIS(2-CHLOROETHOXY) METHANE
20U	UG/L	ISOPHORONE
20U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20U	UG/L	ACENAPHTHYLENE
20U	UG/L	ACENAPHTHENE
20U	UG/L	DIMETHYL PHTHALATE
20U	UG/L	2,4-DINITROTOLUENE
20U	UG/L	2,6-DINITROTOLUENE
20U	UG/L	4-CHLOROPHENYL PHENYL ETHER
20U	UG/L	FLUORENE
20U	UG/L	DIETHYL PHTHALATE
20U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20U	UG/L	HEXACHLOROBENZENE (HCB)
20U	UG/L	4-BROMOPHENYL PHENYL ETHER
20U	UG/L	PHENANTHRENE
20U	UG/L	ANTHRACENE
20U	UG/L	DI-N-BUTYLPHTHALATE
20U	UG/L	FLUORANTHENE
20U	UG/L	PYRENE
20U	UG/L	BENZYL BUTYL PHTHALATE
20U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20U	UG/L	BENZO(A)ANTHRACENE
20U	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20U	UG/L	DI-N-OCTYLPHTHALATE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO-A-PYRENE
20U	UG/L	INDENO (1,2,3-CD) PYRENE
20U	UG/L	DIBENZO(A,H)ANTHRACENE
20U	UG/L	BENZO(GHI)PERYLENE
20U	UG/L	2-CHLOROPHENOL
20U	UG/L	2-NITROPHENOL
20U	UG/L	PHENOL
20U	UG/L	2,4-DIMETHYLPHENOL
20U	UG/L	2,4-DICHLOROPHENOL
20U	UG/L	2,4,6-TRICHLOROPHENOL
20U	UG/L	4-CHLORO-3-METHYLPHENOL
100U	UG/L	2,4-DINITROPHENOL
100U	UG/L	2-METHYL-4,6-DINITROPHENOL
100U	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13778 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-62
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE I.D.: 1944 ORG SAMPLE NO: DQ1351 INORG SAMPLE NO.: MDQA651
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20U	UG/L	1,3-DICHLOROBENZENE
20U	UG/L	1,4-DICHLOROBENZENE
20U	UG/L	1,2-DICHLOROBENZENE
20U	UG/L	BIS(2-CHLOROETHYL) ETHER
20U	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20U	UG/L	N-NITROSODI-N-PROPYLAMINE
20U	UG/L	NITROBENZENE
20U	UG/L	HEXACHLOROBUTADIENE
20U	UG/L	1,2,4-TRICHLOROBENZENE
20U	UG/L	NAPHTHALENE
20U	UG/L	BIS(2-CHLOROETHOXY) METHANE
20U	UG/L	ISOPHORONE
20U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20U	UG/L	ACENAPHTHYLENE
20U	UG/L	ACENAPHTHENE
20U	UG/L	DIMETHYL PHTHALATE
20U	UG/L	2,4-DINITROTOLUENE
20U	UG/L	2,6-DINITROTOLUENE
20U	UG/L	4-CHLOROPHENYL PHENYL ETHER
20U	UG/L	FLUORENE
20U	UG/L	DIETHYL PHTHALATE
20U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20U	UG/L	HEXACHLOROBENZENE (HCB)
20U	UG/L	4-BROMOPHENYL PHENYL ETHER
20U	UG/L	PHENANTHRENE
20U	UG/L	ANTHRACENE
20U	UG/L	DI-N-BUTYLPHTHALATE
20U	UG/L	FLUORANTHENE
20U	UG/L	PYRENE
20U	UG/L	BENZYL BUTYL PHTHALATE
20U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20U	UG/L	BENZO(A)ANTHRACENE
20U	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20U	UG/L	DI-N-OCTYLPHTHALATE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO-A-PYRENE
20U	UG/L	INDENO (1,2,3-CD) PYRENE
20U	UG/L	DIBENZO(A,H)ANTHRACENE
20U	UG/L	BENZO(GHI)PERYLENE
20U	UG/L	2-CHLOROPHENOL
20U	UG/L	2-NITROPHENOL
20U	UG/L	PHENOL
20U	UG/L	2,4-DIMETHYLPHENOL
20U	UG/L	2,4-DICHLOROPHENOL
20U	UG/L	2,4,6-TRICHLOROPHENOL
20U	UG/L	4-CHLORO-3-METHYLPHENOL
100U	UG/L	2,4-DINITROPHENOL
100U	UG/L	2-METHYL-4,6-DINITROPHENOL
100U	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE 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-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13774 SAMPLE TYPE: LEACHATE

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: L-9
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: D01340 INORG SAMPLE NO.: MDQA640
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
4000UJ	UG/L	1,3-DICHLOROBENZENE
4000UJ	UG/L	1,4-DICHLOROBENZENE
560J	UG/L	1,2-DICHLOROBENZENE
4000UJ	UG/L	BIS(2-CHLOROETHYL) ETHER
4000UJ	UG/L	HEXACHLOROETHANE
4000UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
4000UJ	UG/L	N-NITROSODI-N-PROPYLAMINE
4000UJ	UG/L	NITROBENZENE
4000UJ	UG/L	HEXACHLOROBUTADIENE
4000UJ	UG/L	1,2,4-TRICHLOROBENZENE
4000UJ	UG/L	NAPHTHALENE
4000UJ	UG/L	BIS(2-CHLOROETHOXY) METHANE
4000UJ	UG/L	ISOPHORONE
4000UJ	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
4000UJ	UG/L	2-CHLORONAPHTHALENE
4000UJ	UG/L	ACENAPHTHYLENE
4000UJ	UG/L	ACENAPHTHENE
4000UJ	UG/L	DIMETHYL PHTHALATE
4000UJ	UG/L	2,4-DINITROTOLUENE
4000UJ	UG/L	2,6-DINITROTOLUENE
4000UJ	UG/L	4-CHLOROPHENYL PHENYL ETHER
4000UJ	UG/L	FLUORENE
4000UJ	UG/L	DIETHYL PHTHALATE
4000UJ	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
4000UJ	UG/L	HEXACHLOROBENZENE (HCB)
4000UJ	UG/L	4-BROMOPHENYL PHENYL ETHER
4000UJ	UG/L	PHENANTHRENE
4000UJ	UG/L	ANTHRACENE
4000UJ	UG/L	DI-N-BUTYLPHTHALATE
4000UJ	UG/L	FLUORANTHENE
4000UJ	UG/L	PYRENE
4000UJ	UG/L	BENZYL BUTYL PHTHALATE
4000UJ	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
4000UJ	UG/L	BENZO(A)ANTHRACENE
4000UJ	UG/L	CHRYSENE
8000UJ	UG/L	3,3'-DICHLOROBENZIDINE
4000UJ	UG/L	DI-N-OCTYLPHTHALATE
4000UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
4000UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
4000UJ	UG/L	BENZO-A-PYRENE
4000UJ	UG/L	INDENO (1,2,3-CD) PYRENE
4000UJ	UG/L	DIBENZO(A,H)ANTHRACENE
4000UJ	UG/L	BENZO(GHI)PERYLENE
4000UJ	UG/L	2-CHLOROPHENOL
4000UJ	UG/L	2-NITROPHENOL
28000	UG/L	PHENOL
4000UJ	UG/L	2,4-DIMETHYLPHENOL
4000UJ	UG/L	2,4-DICHLOROPHENOL
4000UJ	UG/L	2,4,6-TRICHLOROPHENOL
4000UJ	UG/L	4-CHLORO-3-METHYLPHENOL
20000UJ	UG/L	2,4-DINITROPHENOL
20000UJ	UG/L	2-METHYL-4,6-DINITROPHENOL
20000UJ	UG/L	PENTACHLOROPHENOL
920JN	UG/L	4-NITROPHENOL

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13772 SAMPLE TYPE: LEACHATE

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: L-15
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/18/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1338 INORG SAMPLE NO.: MDQA638
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

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

*****ANALYTICAL RESULTS*****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-FSD,REG IV
ATHENS GEORGIA

1/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13771 SAMPLE TYPE: GROUNDWA

ROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
OURCE: CHEM WASTE MGT
ITY: EMELLE STATE: AL

TATION I.D.: FB-1
TORET STATION NO:

AMPLE COLLECTION: START DATE/TIME 09/17/86
AMPLE COLLECTION: STOP DATE/TIME 00/00/00

OLLECTED BY: R DELUCA RECEIVED FROM:
AMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
ALER:

EMIST: CHH
NALYTICAL METHOD:

ASE NO.: 1944 ORG SAMPLE NO: DQ1337 INORG SAMPLE NO.: MDQA637
ONTRACT LABORATORY(ORGANIC): COMPU CHEM
ONTRACT LABORATORY(INORGANIC): CENTEC

EMARK:
EMARK:

AMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS*

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20U	UG/L	1,3-DICHLOROBENZENE
20U	UG/L	1,4-DICHLOROBENZENE
20U	UG/L	1,2-DICHLOROBENZENE
20U	UG/L	BIS(2-CHLOROETHYL) ETHER
20U	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20U	UG/L	N-NITROSODI-N-PROPYLAMINE
20U	UG/L	NITROBENZENE
20U	UG/L	HEXACHLOROBUTADIENE
20U	UG/L	1,2,4-TRICHLOROBENZENE
20U	UG/L	NAPHTHALENE
20U	UG/L	BIS(2-CHLOROETHOXY) METHANE
20U	UG/L	ISOPHORONE
20U	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20U	UG/L	ACENAPHTHYLENE
20U	UG/L	ACENAPHTHENE
20U	UG/L	DIMETHYL PHTHALATE
20U	UG/L	2,4-DINITROTOLUENE
20U	UG/L	2,6-DINITROTOLUENE
20U	UG/L	4-CHLOROPHENYL PHENYL ETHER
20U	UG/L	FLUORENE
20U	UG/L	DIETHYL PHTHALATE
20U	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20U	UG/L	HEXACHLOROBENZENE (HCB)
20U	UG/L	4-BROMOPHENYL PHENYL ETHER
20U	UG/L	PHENANTHRENE
20U	UG/L	ANTHRACENE
20U	UG/L	DI-N-BUTYLPHTHALATE
20U	UG/L	FLUORANTHENE
20U	UG/L	PYRENE
20U	UG/L	BENZYL BUTYL PHTHALATE
20U	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20U	UG/L	BENZO(A)ANTHRACENE
20U	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20U	UG/L	DI-N-OCTYLPHTHALATE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20U	UG/L	BENZO-A-PYRENE
20U	UG/L	INDENO (1,2,3-CD) PYRENE
20U	UG/L	DIBENZO(A,H)ANTHRACENE
20U	UG/L	BENZO(GHI)PERYLENE
20U	UG/L	2-CHLOROPHENOL
20U	UG/L	2-NITROPHENOL
20U	UG/L	PHENOL
20U	UG/L	2,4-DIMETHYLPHENOL
20U	UG/L	2,4-DICHLOROPHENOL
20U	UG/L	2,4,6-TRICHLOROPHENOL
20U	UG/L	4-CHLORO-3-METHYLPHENOL
100U	UG/L	2,4-DINITROPHENOL
100U	UG/L	2-METHYL-4,6-DINITROPHENOL
100U	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

****

*FOOTNOTES***
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13773 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FB-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1339 INORG SAMPLE NO.: MDQA639
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

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FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED, THE NUMBER IS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20UJ	UG/L	1,3-DICHLOROBENZENE
20UJ	UG/L	1,4-DICHLOROBENZENE
20UJ	UG/L	1,2-DICHLOROBENZENE
20UJ	UG/L	BIS(2-CHLOROETHYL) ETHER
20UJ	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20UJ	UG/L	N-NITROSODI-N-PROPYLAMINE
20UJ	UG/L	NITROBENZENE
20UJ	UG/L	HEXACHLOROBUTADIENE
20UJ	UG/L	1,2,4-TRICHLOROBENZENE
20UJ	UG/L	NAPHTHALENE
20UJ	UG/L	BIS(2-CHLOROETHOXY) METHANE
20UJ	UG/L	ISOPHORONE
20UJ	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20UJ	UG/L	ACENAPHTHYLENE
20UJ	UG/L	ACENAPHTHENE
20UJ	UG/L	DIMETHYL PHTHALATE
20UJ	UG/L	2,4-DINITROTOLUENE
20UJ	UG/L	2,6-DINITROTOLUENE
20UJ	UG/L	4-CHLOROPHENYL PHENYL ETHER
20UJ	UG/L	FLUORENE
20UJ	UG/L	DIETHYL PHTHALATE
20UJ	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20UJ	UG/L	HEXACHLOROBENZENE (HCB)
20UJ	UG/L	4-BROMOPHENYL PHENYL ETHER
20UJ	UG/L	PHENANTHRENE
20UJ	UG/L	ANTHRACENE
20UJ	UG/L	DI-N-BUTYLPHTHALATE
20UJ	UG/L	FLUORANTHENE
20UJ	UG/L	PYRENE
20UJ	UG/L	BENZYL BUTYL PHTHALATE
20UJ	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20UJ	UG/L	BENZO(A)ANTHRACENE
20UJ	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20UJ	UG/L	DI-N-OCTYLPHTHALATE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO-A-PYRENE
20UJ	UG/L	INDENO (1,2,3-CD) PYRENE
20UJ	UG/L	DIBENZO(A,H)ANTHRACENE
20UJ	UG/L	BENZO(GHI)PERYLENE
20UJ	UG/L	2-CHLOROPHENOL
20UJ	UG/L	2-NITROPHENOL
20UJ	UG/L	PHENOL
20UJ	UG/L	2,4-DIMETHYLPHENOL
20UJ	UG/L	2,4-DICHLOROPHENOL
20UJ	UG/L	2,4,6-TRICHLOROPHENOL
20UJ	UG/L	4-CHLORO-3-METHYLPHENOL
100UJ	UG/L	2,4-DINITROPHENOL
100UJ	UG/L	2-METHYL-4,6-DINITROPHENOL
100UJ	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13782 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FB-3
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1355 INORG SAMPLE NO.: MDQA655
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

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FOOTNOTES
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*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED, THE NUMBER IS THE MINUMUM QUANTITATION LIMIT.

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20UJ	UG/L	1,3-DICHLOROBENZENE
20UJ	UG/L	1,4-DICHLOROBENZENE
20UJ	UG/L	1,2-DICHLOROBENZENE
20UJ	UG/L	BIS(2-CHLOROETHYL) ETHER
20UJ	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20UJ	UG/L	N-NITROSODI-N-PROPYLAMINE
20UJ	UG/L	NITROBENZENE
20UJ	UG/L	HEXACHLOROBUTADIENE
20UJ	UG/L	1,2,4-TRICHLOROBENZENE
20UJ	UG/L	NAPHTHALENE
20UJ	UG/L	BIS(2-CHLOROETHOXY) METHANE
20UJ	UG/L	ISOPHORONE
20UJ	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20UJ	UG/L	ACENAPHTHYLENE
20UJ	UG/L	ACENAPHTHENE
20UJ	UG/L	DIMETHYL PHTHALATE
20UJ	UG/L	2,4-DINITROTOLUENE
20UJ	UG/L	2,6-DINITROTOLUENE
20UJ	UG/L	4-CHLOROPHENYL PHENYL ETHER
20UJ	UG/L	FLUORENE
20UJ	UG/L	DIETHYL PHTHALATE
20UJ	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20UJ	UG/L	HEXACHLOROBENZENE (HCB)
20UJ	UG/L	4-BROMOPHENYL PHENYL ETHER
20UJ	UG/L	PHENANTHRENE
20UJ	UG/L	ANTHRACENE
20UJ	UG/L	DI-N-BUTYLPHTHALATE
20UJ	UG/L	FLUORANTHENE
20UJ	UG/L	PYRENE
20UJ	UG/L	BENZYL BUTYL PHTHALATE
20UJ	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20UJ	UG/L	BENZO(A)ANTHRACENE
20UJ	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20UJ	UG/L	DI-N-OCTYLPHTHALATE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO-A-PYRENE
20UJ	UG/L	INDENO (1,2,3-CD) PYRENE
20UJ	UG/L	DIBENZO(A,H)ANTHRACENE
20UJ	UG/L	BENZO(GHI)PERYLENE
20UJ	UG/L	2-CHLOROPHENOL
20UJ	UG/L	2-NITROPHENOL
20UJ	UG/L	PHENOL
20UJ	UG/L	2,4-DIMETHYLPHENOL
20UJ	UG/L	2,4-DICHLOROPHENOL
20UJ	UG/L	2,4,6-TRICHLOROPHENOL
20UJ	UG/L	4-CHLORO-3-METHYLPHENOL
100UJ	UG/L	2,4-DINITROPHENOL
100UJ	UG/L	2-METHYL-4,6-DINITROPHENOL
100UJ	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13779 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: TB-1
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1352 INORG SAMPLE NO.: MDQA652
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20UJ	UG/L	1,3-DICHLOROBENZENE
20UJ	UG/L	1,4-DICHLOROBENZENE
20UJ	UG/L	1,2-DICHLOROBENZENE
20UJ	UG/L	BIS(2-CHLOROETHYL) ETHER
20UJ	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20UJ	UG/L	N-NITROSODI-N-PROPYLAMINE
20UJ	UG/L	NITROBENZENE
20UJ	UG/L	HEXACHLOROBUTADIENE
20UJ	UG/L	1,2,4-TRICHLOROBENZENE
20UJ	UG/L	NAPHTHALENE
20UJ	UG/L	BIS(2-CHLOROETHOXY) METHANE
20UJ	UG/L	ISOPHORONE
20UJ	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20UJ	UG/L	ACENAPHTHYLENE
20UJ	UG/L	ACENAPHTHENE
20UJ	UG/L	DIMETHYL PHTHALATE
20UJ	UG/L	2,4-DINITROTOLUENE
20UJ	UG/L	2,6-DINITROTOLUENE
20UJ	UG/L	4-CHLOROPHENYL PHENYL ETHER
20UJ	UG/L	FLUORENE
20UJ	UG/L	DIETHYL PHTHALATE
20UJ	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20UJ	UG/L	HEXACHLOROBENZENE (HCB)
20UJ	UG/L	4-BROMOPHENYL PHENYL ETHER
20UJ	UG/L	PHENANTHRENE
20UJ	UG/L	ANTHRACENE
20UJ	UG/L	DI-N-BUTYLPHTHALATE
20UJ	UG/L	FLUORANTHENE
20UJ	UG/L	PYRENE
20UJ	UG/L	BENZYL BUTYL PHTHALATE
20UJ	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20UJ	UG/L	BENZO(A)ANTHRACENE
20UJ	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20UJ	UG/L	DI-N-OCTYLPHTHALATE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO-A-PYRENE
20UJ	UG/L	INDENO (1,2,3-CD) PYRENE
20UJ	UG/L	DIBENZO(A,H)ANTHRACENE
20UJ	UG/L	BENZO(GHI)PERYLENE
20UJ	UG/L	2-CHLOROPHENOL
20UJ	UG/L	2-NITROPHENOL
20UJ	UG/L	PHENOL
20UJ	UG/L	2,4-DIMETHYLPHENOL
20UJ	UG/L	2,4-DICHLOROPHENOL
20UJ	UG/L	2,4,6-TRICHLOROPHENOL
20UJ	UG/L	4-CHLORO-3-METHYLPHENOL
100UJ	UG/L	2,4-DINITROPHENOL
100UJ	UG/L	2-METHYL-4,6-DINITROPHENOL
100UJ	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS
WATER

SAMPLE NO.: 86C13775 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: TB-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1341 INORG SAMPLE NO.: MDQA641
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

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

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
20UJ	UG/L	1,3-DICHLOROBENZENE
20UJ	UG/L	1,4-DICHLOROBENZENE
20UJ	UG/L	1,2-DICHLOROBENZENE
20UJ	UG/L	BIS(2-CHLOROETHYL) ETHER
20UJ	UG/L	HEXACHLOROETHANE
20UJ	UG/L	BIS(2-CHLOROISOPROPYL) ETHER
20UJ	UG/L	N-NITROSODI-N-PROPYLAMINE
20UJ	UG/L	NITROBENZENE
20UJ	UG/L	HEXACHLOROBUTADIENE
20UJ	UG/L	1,2,4-TRICHLOROBENZENE
20UJ	UG/L	NAPHTHALENE
20UJ	UG/L	BIS(2-CHLOROETHOXY) METHANE
20UJ	UG/L	ISOPHORONE
20UJ	UG/L	HEXACHLOROCYCLOPENTADIENE (HCCP)
20UJ	UG/L	2-CHLORONAPHTHALENE
20UJ	UG/L	ACENAPHTHYLENE
20UJ	UG/L	ACENAPHTHENE
20UJ	UG/L	DIMETHYL PHTHALATE
20UJ	UG/L	2,4-DINITROTOLUENE
20UJ	UG/L	2,6-DINITROTOLUENE
20UJ	UG/L	4-CHLOROPHENYL PHENYL ETHER
20UJ	UG/L	FLUORENE
20UJ	UG/L	DIETHYL PHTHALATE
20UJ	UG/L	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20UJ	UG/L	HEXACHLOROBENZENE (HCB)
20UJ	UG/L	4-BROMOPHENYL PHENYL ETHER
20UJ	UG/L	PHENANTHRENE
20UJ	UG/L	ANTHRACENE
20UJ	UG/L	DI-N-BUTYLPHTHALATE
20UJ	UG/L	FLUORANTHENE
20UJ	UG/L	PYRENE
20UJ	UG/L	BENZYL BUTYL PHTHALATE
20UJ	UG/L	BIS(2-ETHYLHEXYL) PHTHALATE
20UJ	UG/L	BENZO(A)ANTHRACENE
20UJ	UG/L	CHRYSENE
40UJ	UG/L	3,3'-DICHLOROBENZIDINE
20UJ	UG/L	DI-N-OCTYLPHTHALATE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO(B AND/OR K)FLUORANTHENE
20UJ	UG/L	BENZO-A-PYRENE
20UJ	UG/L	INDENO (1,2,3-CD) PYRENE
20UJ	UG/L	DIBENZO(A,H)ANTHRACENE
20UJ	UG/L	BENZO(GHI)PERYLENE
20UJ	UG/L	2-CHLOROPHENOL
20UJ	UG/L	2-NITROPHENOL
6J	UG/L	PHENOL
20UJ	UG/L	2,4-DIMETHYLPHENOL
20UJ	UG/L	2,4-DICHLOROPHENOL
20UJ	UG/L	2,4,6-TRICHLOROPHENOL
20UJ	UG/L	4-CHLORO-3-METHYLPHENOL
100UJ	UG/L	2,4-DINITROPHENOL
100UJ	UG/L	2-METHYL-4,6-DINITROPHENOL
100UJ	UG/L	PENTACHLOROPHENOL
100UJ	UG/L	4-NITROPHENOL

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13777 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: EUT-7
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1343 INORG SAMPLE NO.: MDQA643
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20U	BENZYL ALCOHOL
20U	2-METHYLPHENOL
20U	4-METHYLPHENOL
100U	BENZOIC ACID
20U	4-CHLOROANILINE
20U	2-METHYLNAPHTHALENE
100U	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100U	3-NITROANILINE
20U	DIBENZOFURAN
100U	4-NITROANILINE

****

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

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13770 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: EUT-8
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/19/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1336 INORG SAMPLE NO.: MDQA636
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
27UJ	BENZYL ALCOHOL
27UJ	2-METHYLPHENOL
27UJ	4-METHYLPHENOL
130UJ	BENZOIC ACID
27UJ	4-CHLOROANILINE
27UJ	2-METHYLNAPHTHALENE
130UJ	2 4 5-TRICHLOROPHENOL
130UJ	2-NITROANILINE
130UJ	3-NITROANILINE
27UJ	DIBENZOFURAN
130UJ	4-NITROANILINE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13776 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: BG-02
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1342 INORG SAMPLE NO.: MDQA642
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20U	BENZYL ALCOHOL
20U	2-METHYLPHENOL
20U	4-METHYLPHENOL
100U	BENZOIC ACID
20U	4-CHLOROANILINE
20U	2-METHYLNAPHTHALENE
100U	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100U	3-NITROANILINE
20U	DIBENZOFURAN
100U	4-NITROANILINE

****

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

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86

EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13767 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1332 INORG SAMPLE NO.: MDQA632
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	BENZYL ALCOHOL
20UJ	2-METHYLPHENOL
20UJ	4-METHYLPHENOL
100UJ	BENZOIC ACID
20UJ	4-CHLOROANILINE
20UJ	2-METHYLNAPHTHALENE
100UJ	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100UJ	3-NITROANILINE
20UJ	DIBENZOFURAN
100UJ	4-NITROANILINE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13768 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-4A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1334 INORG SAMPLE NO.: MDQA634
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20U	BENZYL ALCOHOL
20U	2-METHYLPHENOL
20U	4-METHYLPHENOL
100U	BENZOIC ACID
20U	4-CHLOROANILINE
20U	2-METHYLNAPHTHALENE
100U	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100U	3-NITROANILINE
20U	DIBENZOFURAN
100U	4-NITROANILINE

*****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13785 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-5
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1363 INORG SAMPLE NO.: MDQA663
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20U	BENZYL ALCOHOL
20U	2-METHYLPHENOL
20U	4-METHYLPHENOL
100U	BENZOIC ACID
20U	4-CHLOROANILINE
20U	2-METHYLNAPHTHALENE
100U	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100U	3-NITROANILINE
20U	DIBENZOFURAN
100U	4-NITROANILINE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13780 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-6
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1353 INORG SAMPLE NO.: MDQA653
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	BENZYL ALCOHOL
20UJ	2-METHYLPHENOL
20UJ	4-METHYLPHENOL
100UJ	BENZOIC ACID
20UJ	4-CHLOROANILINE
20UJ	2-METHYLNAPHTHALENE
100UJ	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100UJ	3-NITROANILINE
20UJ	DIBENZOFURAN
100UJ	4-NITROANILINE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13765 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-7A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1330 INORG SAMPLE NO.: MDQA630
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20U	BENZYL ALCOHOL
20U	2-METHYLPHENOL
20U	4-METHYLPHENOL
100U	BENZOIC ACID
20U	4-CHLOROANILINE
20U	2-METHYLNAPHTHALENE
100U	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100U	3-NITROANILINE
20U	DIBENZOFURAN
100U	4-NITROANILINE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13762 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-8
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1327 INORG SAMPLE NO.: MDQA627
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	BENZYL ALCOHOL
20UJ	2-METHYLPHENOL
20UJ	4-METHYLPHENOL
100UJ	BENZOIC ACID
20UJ	4-CHLOROANILINE
20UJ	2-METHYLNAPHTHALENE
100UJ	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100UJ	3-NITROANILINE
20UJ	DIBENZOFURAN
100UJ	4-NITROANILINE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86

EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13784 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-9A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1358 INORG SAMPLE NO.: MDQA606
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20U	BENZYL ALCOHOL
20U	2-METHYLPHENOL
20U	4-METHYLPHENOL
100U	BENZOIC ACID
20U	4-CHLOROANILINE
20U	2-METHYLNAPHTHALENE
100U	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100U	3-NITROANILINE
20U	DIBENZOFURAN
100U	4-NITROANILINE

*****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13769 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-11
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1335 INORG SAMPLE NO.: MDQA635
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20U	BENZYL ALCOHOL
20U	2-METHYLPHENOL
20U	4-METHYLPHENOL
100U	BENZOIC ACID
20U	4-CHLOROANILINE
20U	2-METHYLNAPHTHALENE
100U	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100U	3-NITROANILINE
20U	DIBENZOFURAN
100U	4-NITROANILINE

****

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

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13764 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: ~~FB-2~~ SM-13
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: D01329 INORG SAMPLE NO.: MDQA629
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	BENZYL ALCOHOL
20UJ	2-METHYLPHENOL
20UJ	4-METHYLPHENOL
100UJ	BENZOIC ACID
20UJ	4-CHLOROANILINE
20UJ	2-METHYLNAPHTHALENE
100UJ	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100UJ	3-NITROANILINE
20UJ	DIBENZOFURAN
100UJ	4-NITROANILINE

****

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

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13781 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-14
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1354 INORG SAMPLE NO.: MDQA654
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	BENZYL ALCOHOL
20UJ	2-METHYLPHENOL
20UJ	4-METHYLPHENOL
100UJ	BENZOIC ACID
20UJ	4-CHLOROANILINE
20UJ	2-METHYLNAPHTHALENE
100UJ	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100UJ	3-NITROANILINE
20UJ	DIBENZOFURAN
100UJ	4-NITROANILINE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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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 ESTIMATED MINIMUM QUANTITATION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-FSD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13766 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-16
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1331 INORG SAMPLE NO.: MDQA631
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	BENZYL ALCOHOL
20UJ	2-METHYLPHENOL
20UJ	4-METHYLPHENOL
100UJ	BENZOIC ACID
20UJ	4-CHLOROANILINE
20UJ	2-METHYLNAPHTHALENE
100UJ	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100UJ	3-NITROANILINE
20UJ	DIBENZOFURAN
100UJ	4-NITROANILINE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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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 ESTIMATED MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13763 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-56
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1328 INORG SAMPLE NO.: MDQA628
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20U	BENZYL ALCOHOL
20U	2-METHYLPHENOL
20U	4-METHYLPHENOL
100U	BENZOIC ACID
20U	4-CHLOROANILINE
20U	2-METHYLNAPHTHALENE
100U	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100U	3-NITROANILINE
20U	DIBENZOFURAN
100U	4-NITROANILINE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13761 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EVELLE STATE: AL

STATION I.D.: M-58
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1326 INORG SAMPLE NO.: MDQA626
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	BENZYL ALCOHOL
20UJ	2-METHYLPHENOL
20UJ	4-METHYLPHENOL
100UJ	BENZOIC ACID
20UJ	4-CHLOROANILINE
20UJ	2-METHYLNAPHTHALENE
100UJ	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100UJ	3-NITROANILINE
20UJ	DIBENZOFURAN
100UJ	4-NITROANILINE

*****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13760 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-62
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1325 INORG SAMPLE NO.: MDQA625
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	BENZYL ALCOHOL
20UJ	2-METHYLPHENOL
20UJ	4-METHYLPHENOL
100UJ	BENZOIC ACID
20UJ	4-CHLOROANILINE
20UJ	2-METHYLNAPHTHALENE
100UJ	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100UJ	3-NITROANILINE
20UJ	DIBENZOFURAN
100UJ	4-NITROANILINE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13778 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-62
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1351 INORG SAMPLE NO.: MDQA651
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20U	BENZYL ALCOHOL
20U	2-METHYLPHENOL
20U	4-METHYLPHENOL
100U	BENZOIC ACID
20U	4-CHLOROANILINE
20U	2-METHYLNAPHTHALENE
100U	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100U	3-NITROANILINE
20U	DIBENZOFURAN
100U	4-NITROANILINE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED, THE NUMBER IS THE ESTIMATED MINIMUM QUANTITATION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-FSD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13774 SAMPLE TYPE: LEACHATE

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: L-9
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1340 INORG SAMPLE NO.: MDQA640
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
57000JN	METHYLCYCLOPENTANONE
35000JN	METHYLBENZOIC ACID
22000JN	OXYBISBENZENE
7900JN	BENZENEAMINE
300000J	11 UNIDENTIFIED COMPOUNDS
4000UJ	BENZYL ALCOHOL
4000UJ	2-METHYLPHENOL
15000J	4-METHYLPHENOL
320000J	BENZOIC ACID
4000UJ	4-CHLOROANILINE
4000UJ	2-METHYLNAPHTHALENE
20000UJ	2 4 5-TRICHLOROPHENOL
20000UJ	2-NITROANILINE
20000UJ	3-NITROANILINE
4000UJ	DIBENZOFURAN
20000UJ	4-NITROANILINE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE ESTIMATED MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13772 SAMPLE TYPE: LEACHATE

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: L-15
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/18/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1338 INORG SAMPLE NO.: MDQA638
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
NAI	BENZOIC ACID
NAI	2-METHYLPHENOL
NAI	4-METHYLPHENOL
NAI	2,4,5-TRICHLOROPHENOL
NAI	BENZYL ALCOHOL
NAI	4-CHLOROANILINE
NAI	DIBENZOFURAN
NAI	2-METHYLNAPHTHALENE
NAI	2-NITROANILINE
NAI	3-NITROANILINE
NAI	4-NITROANILINE

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-FSD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13771 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FB-1
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1337 INORG SAMPLE NO.: MDQA637
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20U	BENZYL ALCOHOL
20U	2-METHYLPHENOL
20U	4-METHYLPHENOL
100U	BENZOIC ACID
20U	4-CHLOROANILINE
20U	2-METHYLNAPHTHALENE
100U	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100U	3-NITROANILINE
20U	DIBENZOFURAN
100U	4-NITROANILINE

****

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

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13773 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FB-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1339 INORG SAMPLE NO.: MDQA639
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	BENZYL ALCOHOL
20UJ	2-METHYLPHENOL
20UJ	4-METHYLPHENOL
100UJ	BENZOIC ACID
20UJ	4-CHLOROANILINE
20UJ	2-METHYLNAPHTHALENE
100UJ	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100UJ	3-NITROANILINE
20UJ	DIBENZOFURAN
100UJ	4-NITROANILINE

****

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

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-FSD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13782 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FB-3
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1355 INORG SAMPLE NO.: MDQA655
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	BENZYL ALCOHOL
20UJ	2-METHYLPHENOL
20UJ	4-METHYLPHENOL
100UJ	BENZOIC ACID
20UJ	4-CHLOROANILINE
20UJ	2-METHYLNAPHTHALENE
100UJ	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100UJ	3-NITROANILINE
20UJ	DIBENZOFURAN
100UJ	4-NITROANILINE

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
*J=ESTIMATED VALUE *N=PRESUMPTIVE EVIDENCE OF PRESENCE 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 ESTIMATED MINIMUM QUANTITATION LIMIT.

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13779 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: TB-1
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1352 INORG SAMPLE NO.: MDQA652
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	BENZYL ALCOHOL
20UJ	2-METHYLPHENOL
20UJ	4-METHYLPHENOL
100UJ	BENZOIC ACID
20UJ	4-CHLOROANILINE
20UJ	2-METHYLNAPHTHALENE
100UJ	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100UJ	3-NITROANILINE
20UJ	DIBENZOFURAN
100UJ	4-NITROANILINE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED, THE NUMBER IS
THE ESTIMATED MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 EXTRACTABLE ORGANIC ANALYSIS, MISC
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13775 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: TB-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE,/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1341 INORG SAMPLE NO.: MDQA641
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS
HOLDING TIMES EXCEEDED(40 CFR 136,OCTOBER 26,1984)

*****ANALYTICAL RESULTS*****

RESULTS IN: UG/L	COMPOUND NAME
20UJ	BENZYL ALCOHOL
20UJ	2-METHYLPHENOL
20UJ	4-METHYLPHENOL
100UJ	BENZOIC ACID
20UJ	4-CHLOROANILINE
20UJ	2-METHYLNAPHTHALENE
100UJ	2 4 5-TRICHLOROPHENOL
100UJ	2-NITROANILINE
100UJ	3-NITROANILINE
20UJ	DIBENZOFURAN
100UJ	4-NITROANILINE

****

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

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13777 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: EUT-7
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1343 INORG SAMPLE NO.: MDQA643
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
*J=ESTIMATED VALUE *N=PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K=ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
*U=MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS
THE MINIMUM QUANTITATION LIMIT.
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13770 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: EUT-8
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/19/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1336 INORG SAMPLE NO.: MDQA636
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
*J=ESTIMATED VALUE *N=PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K=ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
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THE MINIMUM QUANTITATION LIMIT.
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13776 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: BG-02
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1342 INORG SAMPLE NO.: MDQA642
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
NA	UG/L	ALDRIN
NA	UG/L	HEPTACHLOR
NA	UG/L	HEPTACHLOR EPOXIDE
NA	UG/L	ALPHA-BHC
NA	UG/L	BETA-BHC
NA	UG/L	GAMMA-BHC (LINDANE)
NA	UG/L	DELTA-BHC
NA	UG/L	ENDOSULFAN I (ALPHA)
NA	UG/L	DIELDRIN
NA	UG/L	4,4'-DDT (P,P'-DDT)
NA	UG/L	4,4'-DDE (P,P'-DDE)
NA	UG/L	4,4'-DDD (P,P'-DDD)
NA	UG/L	ENDRIN
NA	UG/L	ENDOSULFAN II (BETA)
NA	UG/L	ENDOSULFAN SULFATE
NA	UG/L	CHLORDANE (TECH. MIXTURE) /1
NA	UG/L	PCB-1242 (AROCLOR 1242)
NA	UG/L	PCB-1254 (AROCLOR 1254)
NA	UG/L	PCB-1221 (AROCLOR 1221)
NA	UG/L	PCB-1232 (AROCLOR 1232)
NA	UG/L	PCB-1248 (AROCLOR 1248)
NA	UG/L	PCB-1260 (AROCLOR 1260)
NA	UG/L	PCB-1016 (AROCLOR 1016)
NA	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
NA	UG/L	METHOXYCHLOR
NA	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13767 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EVELLE STATE: AL

STATION I.D.: SM-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1332 INORG SAMPLE NO.: MDQA632
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
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7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,PEG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13768 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-4A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1334 INORG SAMPLE NO.: MDQA634
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
NA	UG/L	ALDRIN
NA	UG/L	HEPTACHLOR
NA	UG/L	HEPTACHLOR EPOXIDE
NA	UG/L	ALPHA-BHC
NA	UG/L	BETA-BHC
NA	UG/L	GAMMA-BHC (LINDANE)
NA	UG/L	DELTA-BHC
NA	UG/L	ENDOSULFAN I (ALPHA)
NA	UG/L	DIELDRIN
NA	UG/L	4,4'-DDT (P,P'-DDT)
NA	UG/L	4,4'-DDE (P,P'-DDE)
NA	UG/L	4,4'-DDD (P,P'-DDD)
NA	UG/L	ENDRIN
NA	UG/L	ENDOSULFAN II (BETA)
NA	UG/L	ENDOSULFAN SULFATE
NA	UG/L	CHLORDANE (TECH. MIXTURE) /1
NA	UG/L	PCB-1242 (AROCLOR 1242)
NA	UG/L	PCB-1254 (AROCLOR 1254)
NA	UG/L	PCB-1221 (AROCLOR 1221)
NA	UG/L	PCB-1232 (AROCLOR 1232)
NA	UG/L	PCB-1248 (AROCLOR 1248)
NA	UG/L	PCB-1260 (AROCLOR 1260)
NA	UG/L	PCB-1016 (AROCLOR 1016)
NA	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
NA	UG/L	METHOXYCHLOR
NA	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS
THE MINIMUM QUANTITATION LIMIT.
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13785 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-5
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: D01363 INORG SAMPLE NO.: MDQA663
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

*****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13780 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-6
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1353 INORG SAMPLE NO.: MDQA653
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

****

FOOTNOTES
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13769 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-7A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1330 INORG SAMPLE NO.: MDQA630
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

*****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
*J=ESTIMATED VALUE *N=PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K=ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
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1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13762 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-8
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1327 INORG SAMPLE NO.: MDQA627
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
NA	UG/L	ALDRIN
NA	UG/L	HEPTACHLOR
NA	UG/L	HEPTACHLOR EPOXIDE
NA	UG/L	ALPHA-BHC
NA	UG/L	BETA-BHC
NA	UG/L	GAMMA-BHC (LINDANE)
NA	UG/L	DELTA-BHC
NA	UG/L	ENDOSULFAN I (ALPHA)
NA	UG/L	DIELDRIN
NA	UG/L	4,4'-DDT (P,P'-DDT)
NA	UG/L	4,4'-DDE (P,P'-DDE)
NA	UG/L	4,4'-DDD (P,P'-DDD)
NA	UG/L	ENDRIN
NA	UG/L	ENDOSULFAN II (BETA)
NA	UG/L	ENDOSULFAN SULFATE
NA	UG/L	CHLORDANE (TECH. MIXTURE) /1
NA	UG/L	PCB-1242 (AROCLOR 1242)
NA	UG/L	PCB-1254 (AROCLOR 1254)
NA	UG/L	PCB-1221 (AROCLOR 1221)
NA	UG/L	PCB-1232 (AROCLOR 1232)
NA	UG/L	PCB-1248 (AROCLOR 1248)
NA	UG/L	PCB-1260 (AROCLOR 1260)
NA	UG/L	PCB-1016 (AROCLOR 1016)
NA	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
NA	UG/L	METHOXYCHLOR
NA	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13784 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: S4-9A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1358 INORG SAMPLE NO.: MDQA606
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

*****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13769 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-11
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1335 INORG SAMPLE NO.: MDQA635
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
NA	UG/L	ALDRIN
NA	UG/L	HEPTACHLOR
NA	UG/L	HEPTACHLOR EPOXIDE
NA	UG/L	ALPHA-BHC
NA	UG/L	BETA-BHC
NA	UG/L	GAMMA-BHC (LINDANE)
NA	UG/L	DELTA-BHC
NA	UG/L	ENDOSULFAN I (ALPHA)
NA	UG/L	DIELDRIN
NA	UG/L	4,4'-DDT (P,P'-DDT)
NA	UG/L	4,4'-DDE (P,P'-DDE)
NA	UG/L	4,4'-DDD (P,P'-DDD)
NA	UG/L	ENDRIN
NA	UG/L	ENDOSULFAN II (BETA)
NA	UG/L	ENDOSULFAN SULFATE
NA	UG/L	CHLORDANE (TECH. MIXTURE) /1
NA	UG/L	PCB-1242 (AROCLOR 1242)
NA	UG/L	PCB-1254 (AROCLOR 1254)
NA	UG/L	PCB-1221 (AROCLOR 1221)
NA	UG/L	PCB-1232 (AROCLOR 1232)
NA	UG/L	PCB-1248 (AROCLOR 1248)
NA	UG/L	PCB-1260 (AROCLOR 1260)
NA	UG/L	PCB-1016 (AROCLOR 1016)
NA	UG/L	TOXAPHENE
**	UG/L	CHLORDENE /2
**	UG/L	ALPHA-CHLORDENE /2
**	UG/L	BETA CHLORDENE /2
**	UG/L	GAMMA-CHLORDENE /2
**	UG/L	1-HYDROXYCHLORDENE /2
**	UG/L	GAMMA-CHLORDANE /2
**	UG/L	TRANS-NONACHLOR /2
**	UG/L	ALPHA-CHLORDANE /2
**	UG/L	CIS-NONACHLOR /2
NA	UG/L	METHOXYCHLOR
NA	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13764 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: ~~FB-3~~ SM-13
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1329 INORG SAMPLE NO.: MDQA629
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS
THE MINIMUM QUANTITATION LIMIT.
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13781 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-14
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1354 INORG SAMPLE NO.: MDQA654
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS
THE MINIMUM QUANTITATION LIMIT.
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2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13766 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EVELLE STATE: AL

STATION I.D.: SM-16
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1331 INORG SAMPLE NO.: MDQA631
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

*****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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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-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13763 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-56
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1328 INORG SAMPLE NO.: MDQA628
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
NA	UG/L	ALDRIN
NA	UG/L	HEPTACHLOR
NA	UG/L	HEPTACHLOR EPOXIDE
NA	UG/L	ALPHA-BHC
NA	UG/L	BETA-BHC
NA	UG/L	GAMMA-BHC (LINDANE)
NA	UG/L	DELTA-BHC
NA	UG/L	ENDOSULFAN I (ALPHA)
NA	UG/L	DIELDRIN
NA	UG/L	4,4'-DDT (P,P'-DDT)
NA	UG/L	4,4'-DDE (P,P'-DDE)
NA	UG/L	4,4'-DDD (P,P'-DDD)
NA	UG/L	ENDRIN
NA	UG/L	ENDOSULFAN II (BETA)
NA	UG/L	ENDOSULFAN SULFATE
NA	UG/L	CHLORDANE (TECH. MIXTURE) /1
NA	UG/L	PCB-1242 (AROCLOR 1242)
NA	UG/L	PCB-1254 (AROCLOR 1254)
NA	UG/L	PCB-1221 (AROCLOR 1221)
NA	UG/L	PCB-1232 (AROCLOR 1232)
NA	UG/L	PCB-1248 (AROCLOR 1248)
NA	UG/L	PCB-1260 (AROCLOR 1260)
NA	UG/L	PCB-1016 (AROCLOR 1016)
NA	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
NA	UG/L	METHOXYCHLOR
NA	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED, THE NUMBER IS
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13761 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-58
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1326 INORG SAMPLE NO.: MDQA626
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
*J=ESTIMATED VALUE *N=PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K=ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
*U=MATERIAL WAS ANALYZED FOR BUT NOT DETECTED, THE NUMBER IS
THE MINIMUM QUANTITATION LIMIT.
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13760 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-62
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1325 INORG SAMPLE NO.: MDQA625
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
*J=ESTIMATED VALUE *N=PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K=ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
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2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13778 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-62
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1351 INORG SAMPLE NO.: MDQA651
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
*J=ESTIMATED VALUE *N=PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K=ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
*U=MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS
THE MINIMUM QUANTITATION LIMIT.
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13774 SAMPLE TYPE: LEACHATE

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: L-9
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1340 INORG SAMPLE NO.: MDQA640
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
5.0U	UG/L	ALDRIN
5.0U	UG/L	HEPTACHLOR
5.0U	UG/L	HEPTACHLOR EPOXIDE
50JN	UG/L	ALPHA-BHC
5.0U	UG/L	BETA-BHC
5.0U	UG/L	GAMMA-BHC (LINDANE)
5.0U	UG/L	DELTA-BHC
5.0U	UG/L	ENDOSULFAN I (ALPHA)
10.0U	UG/L	DIELDRIN
10.0U	UG/L	4,4'-DDT (P,P'-DDT)
10.0U	UG/L	4,4'-DDE (P,P'-DDE)
10.0U	UG/L	4,4'-DDD (P,P'-DDD)
10.0U	UG/L	ENDRIN
10.0U	UG/L	ENDOSULFAN II (BETA)
10.0U	UG/L	ENDOSULFAN SULFATE
50.0U	UG/L	CHLORDANE (TECH. MIXTURE) /1
500	UG/L	PCB-1242 (AROCLOR 1242)
100U	UG/L	PCB-1254 (AROCLOR 1254)
50U	UG/L	PCB-1221 (AROCLOR 1221)
50U	UG/L	PCB-1232 (AROCLOR 1232)
50U	UG/L	PCB-1248 (AROCLOR 1248)
100U	UG/L	PCB-1260 (AROCLOR 1260)
50U	UG/L	PCB-1016 (AROCLOR 1016)
100U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
50.0U	UG/L	METHOXYCHLOR
10.0U	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
*J=ESTIMATED VALUE *N=PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K=ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
*U=MATERIAL WAS ANALYZED FOR BUT NOT DETECTED, THE NUMBER IS
THE MINIMUM QUANTITATION LIMIT.
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13772 SAMPLE TYPE: LEACHATE

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: L-15
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/18/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1338 INORG SAMPLE NO.: MDQA638
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
NAI	UG/L	ALDRIN
NAI	UG/L	HEPTACHLOR
NAI	UG/L	HEPTACHLOR EPOXIDE
NAI	UG/L	ALPHA-BHC
NAI	UG/L	BETA-BHC
NAI	UG/L	GAMMA-BHC (LINDANE)
NAI	UG/L	DELTA-BHC
NAI	UG/L	ENDOSULFAN I (ALPHA)
NAI	UG/L	DIELDRIN
NAI	UG/L	4,4'-DDT (P,P'-DDT)
NAI	UG/L	4,4'-DDE (P,P'-DDE)
NAI	UG/L	4,4'-DDD (P,P'-DDD)
NAI	UG/L	ENDRIN
NAI	UG/L	ENDOSULFAN II (BETA)
NAI	UG/L	ENDOSULFAN SULFATE
NAI	UG/L	CHLORDANE (TECH. MIXTURE) /1
NAI	UG/L	PCB-1242 (AROCLOR 1242)
NAI	UG/L	PCB-1254 (AROCLOR 1254)
NAI	UG/L	PCB-1221 (AROCLOR 1221)
NAI	UG/L	PCB-1232 (AROCLOR 1232)
NAI	UG/L	PCB-1248 (AROCLOR 1248)
NAI	UG/L	PCB-1260 (AROCLOR 1260)
NAI	UG/L	PCB-1016 (AROCLOR 1016)
NAI	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
NAI	UG/L	METHOXYCHLOR
NAI	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
*J=ESTIMATED VALUE *N=PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K=ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
*U=MATERIAL WAS ANALYZED FOR BUT NOT DETECTED, THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
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2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13771 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FB-1
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1337 INORG SAMPLE NO.: MDQA637
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

****

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-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13773 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FB-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1339 INORG SAMPLE NO.: MDQA639
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD, REG IV
ATHENS GEORGIA

11/25/85 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13782 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FB-3
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1355 INORG SAMPLE NO.: MDQA655
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS 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-FSD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13779 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: TB-1
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1352 INORG SAMPLE NO.: MDQA652
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
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2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

11/25/86 PESTICIDES/PCB'S AND OTHER CHLORINATED COMPOUNDS
WATER

SAMPLE NO.: 86C13775 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: TB-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CHH
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: D01341 INORG SAMPLE NO.: MDQA641
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: CHH

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	COMPOUND
0.05U	UG/L	ALDRIN
0.05U	UG/L	HEPTACHLOR
0.05U	UG/L	HEPTACHLOR EPOXIDE
0.05U	UG/L	ALPHA-BHC
0.05U	UG/L	BETA-BHC
0.05U	UG/L	GAMMA-BHC (LINDANE)
0.05U	UG/L	DELTA-BHC
0.05U	UG/L	ENDOSULFAN I (ALPHA)
0.10U	UG/L	DIELDRIN
0.10U	UG/L	4,4'-DDT (P,P'-DDT)
0.10U	UG/L	4,4'-DDE (P,P'-DDE)
0.10U	UG/L	4,4'-DDD (P,P'-DDD)
0.10U	UG/L	ENDRIN
0.10U	UG/L	ENDOSULFAN II (BETA)
0.10U	UG/L	ENDOSULFAN SULFATE
0.50U	UG/L	CHLORDANE (TECH. MIXTURE) /1
0.50U	UG/L	PCB-1242 (AROCLOR 1242)
1.0U	UG/L	PCB-1254 (AROCLOR 1254)
0.50U	UG/L	PCB-1221 (AROCLOR 1221)
0.50U	UG/L	PCB-1232 (AROCLOR 1232)
0.50U	UG/L	PCB-1248 (AROCLOR 1248)
1.0U	UG/L	PCB-1260 (AROCLOR 1260)
0.50U	UG/L	PCB-1016 (AROCLOR 1016)
1.0U	UG/L	TOXAPHENE
--	UG/L	CHLORDENE /2
--	UG/L	ALPHA-CHLORDENE /2
--	UG/L	BETA CHLORDENE /2
--	UG/L	GAMMA-CHLORDENE /2
--	UG/L	1-HYDROXYCHLORDENE /2
--	UG/L	GAMMA-CHLORDANE /2
--	UG/L	TRANS-NONACHLOR /2
--	UG/L	ALPHA-CHLORDANE /2
--	UG/L	CIS-NONACHLOR /2
0.50U	UG/L	METHOXYCHLOR
0.10U	UG/L	ENDRIN KETONE

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED, THE NUMBER IS
THE MINIMUM QUANTITATION LIMIT.
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS.
2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD, REG IV
ATHENS GEORGIA

2/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13777 SAMPLE TYPE: GROUNDWA

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.01U	MG/L	CYANIDE	00720
510	MG/L	CHLORIDE	00940
0.10U	MG/L	SULFATE	00945
20U	UG/L	PHENOLS (4AAP)	32730
1.3	MG/L	AMMONIA	00610
0.05U	MG/L	NITRATE-NITRITE NITROGEN	00630
0.10U	MG/L	PURGEABLE ORGANIC CARBON	
5U	UG/L	PURGEABLE ORGANIC HALOGEN	
2UJ	MG/L	TOTAL ORGANIC CARBON	00680
120U	UG/L	TOTAL ORGANIC HALOGEN	

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE LGT
CITY: EMELLE STATE: AL

STATION I.D.: EUT-7
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: K DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1343 INORG SAMPLE NO.: MDQA643
CONTRACT LABORATORY(ORGANIC): CONPO CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS*

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FOOTNOTES*
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *U-PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13770 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: PUT-8
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/19/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE RECD: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1336 INORG SAMPLE NO.: MDQA636
CONTRACT LABORATORY(ORGANIC): CHMPH CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.01U	MG/L	CYANIDE	00720
20J	MG/L	TOTAL ORGANIC CARBON	00680
20U	UG/L	TOTAL ORGANIC HALOGEN	
0.100	MG/L	PURGEABLE ORGANIC CARBON	
5U	UG/L	PURGEABLE ORGANIC HALOGEN	
10U	UG/L	PHENOLS (4AAP)	32730
1.1	MG/L	AMMONIA	00610
0.05U	MG/L	NITRATE-NITRITE NITROGEN	00630
0.05U	MG/L	SULFATE	00945
410	MG/L	CHLORIDE	00940

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
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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 DETECTION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13776 SAMPLE TYPE: GROUNDWA

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.010	MG/L	CYANIDE	00720
100	UG/L	PHENOLS (4AAP)	32730
55J	MG/L	TOTAL ORGANIC CARBON	00680
250	UG/L	TOTAL ORGANIC HALOGEN	
0.100	MG/L	PURGEABLE ORGANIC CARBON	
50	UG/L	PURGEABLE ORGANIC HALOGEN	

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: BG-02
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: F DEUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: D01342 INORG SAMPLE NO.: MDQA642
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

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 DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD/REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13767 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SB-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: K DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1332 INORG SAMPLE NO.: HDQA632
CONTRACT LABORATORY(ORGANIC): CONPH CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS*

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.010	MG/L	CYANIDE	00720
100	UG/L	PHENOLS (4AAP)	32730
50UJ	MG/L	TOTAL ORGANIC CARBON	00680
600J	UG/L	TOTAL ORGANIC HALOGEN	
0.100	MG/L	PURGEABLE ORGANIC CARBON	
50	UG/L	PURGEABLE ORGANIC HALOGEN	
1.0	MG/L	AMMONIA	00610
0.09	MG/L	NITRATE-NITRITE NITROGEN	00630
94	MG/L	SULFATE	00945
160	MG/L	CHLORIDE	00940

****

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 DETECTION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
- ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: R6C13768 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SW-4A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1334 INORG SAMPLE NO.: MDQA634
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.010	MG/L	CYANIDE	00720
30J	MG/L	TOTAL ORGANIC CARBON	00680
0.10U	MG/L	PURGEABLE ORGANIC CARBON	
50	UG/L	PURGEABLE ORGANIC HALOGEN	
200J	UG/L	PHENOLS (4AAP)	32730

****

FOOTNOTES
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*L=ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U=MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

2/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13735 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SW-5
TOREI STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: K DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
FALED:

HEMIST: GKB CHEMIST:
NALYTICAL METHOD:

ASE NO.: 1944 ORG SAMPLE NO: DQ13o3 INORG SAMPLE NO.: MDOA663
ONTRACT LABORATORY(ORGANIC): COMPU CHEM
ONTRACT LABORATORY(INORGANIC): CENTEC

EMARK:
EMARK:

AMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS*

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.01U	MG/L	CYANIDE	00720
30J	MG/L	TOTAL ORGANIC CARBON	00680
0.10U	MG/L	PURGEABLE ORGANIC CARBON	
5U	UG/L	PURGEABLE ORGANIC HALOGEN	
50U	UG/L	TOTAL ORGANIC HALOGEN	
200J	UG/L	PHENOLS (4AAP)	32730
1.0	MG/L	AMMONIA	00610
0.05U	MG/L	NITRATE-NITRITE NITROGEN	00630
460	MG/L	SULFATE	00945
44	MG/L	CHLORIDE	00940

****

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 LIMIT OF DETECTION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: R6C13780 SAMPLE TYPE: GROUNDWA

PROJECT NO.: R6-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-6
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 08/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: E DELLEA RECEIVED FROM:
SAMPLE RECD: DATE/TIME 00/00/00 REC'D BY:
FILED:

MEMBER: GKL CHEMIST:
ANALYTICAL METHOD:

ARC NO.: 1941 ORG SAMPLE NO: D01353 INORG SAMPLE NO.: R00A653
OUTRACT: [CONTRACTOR(COMPUTER)] CONTRACT
OUTRACT: [ORGANIZATION(DESCRIPTION)] CONTRACT

FLAGS:
FLAGS:

SAMPLE LOG VERIFIED BY: JEB DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.010	MG/L	CYANIDE	00720
60J	MG/L	TOTAL ORGANIC CARBON	00680
100J	UG/L	TOTAL ORGANIC HALOGEN	
0.100	MG/L	PURGEABLE ORGANIC CARBON	
50	UG/L	PURGEABLE ORGANIC HALOGEN	
100	UG/L	PHENOLS (4AAP)	32730

****

FOOTNOTES*
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*J-ESTIMATED VALUE *R-PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13765 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEL WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-7A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: F DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 QEC SAMPLE NO: D01330 INORG SAMPLE NO.: MDQA630
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.010	MG/L	CYANIDE	00720
200J	UG/L	PHENOLS (4AAP)	32730
3UJ	MG/L	TOTAL ORGANIC CARBON	00680
500	UG/L	TOTAL ORGANIC HALOGEN	
0.100	MG/L	PURGEABLE ORGANIC CARBON	
5U	UG/L	PURGEABLE ORGANIC HALOGEN	
1.0	MG/L	AMMONIA	00610
0.56	MG/L	NITRATE-NITRITE NITROGEN	00630
560	MG/L	SULFATE	00945
120	MG/L	CHLORIDE	00940

****

FOOTNOTES
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*J=ESTIMATED VALUE *L=PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

:2/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13762 SAMPLE TYPE: GROUNDWA

'ROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
OURCE: CHEM WASTE MGT
'ITY: EMELLE STATE: AL

'TATION I.D.: SM-8
'TORET STATION NO:

'AMPLE COLLECTION: START DATE/TIME 09/22/86
'AMPLE COLLECTION: STOP DATE/TIME 00/00/00

'OLLECTED BY: F DELUCA RECEIVED FROM:
AMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
FALED:

HEMIST: GKB CHEMIST:
NALYTICAL METHOD:

ASE NO.: 1944 ORG SAMPLE NO: DQ1327 INORG SAMPLE NO.: MDQA627
ONTRACT LABORATORY(ORGANIC): COMPU CHEM
ONTRACT LABORATORY(INORGANIC): CENTEC

EMARK:
EMARK:

AMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS*

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.100	MG/L	PURGEABLE ORGANIC CARBON	
200J	UG/L	PURGEABLE ORGANIC HALOGEN	

****

FOOTNOTES*
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*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13784 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-176 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-9A
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: F DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1358 INORG SAMPLE NO.: MDQA606
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.010	MG/L	CYANIDE	00720
0.100	MG/L	PURGEABLE ORGANIC CARBON	
50	UG/L	PURGEABLE ORGANIC HALOGEN	
2.00J	MG/L	TOTAL ORGANIC CARBON	00680
100	UG/L	PHENOLS (4AAP)	32730

****

FOOTNOTES
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*L=ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSTS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13769 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-176 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SM-11
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB CHEMIST:
ANALYTICAL METHOD:

ASE NO.: 1944 ORG SAMPLE NO: DQ1335 INORG SAMPLE NO.: MDQA635
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: DFP DATA VERIFIED BY: GKB

REMARKS*

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.010	MG/L	CYANIDE	00720
200J	UG/L	PHENOLS (4AAP)	32730
4UJ	MG/L	TOTAL ORGANIC CARBON	00680
0.100	MG/L	PURGEABLE ORGANIC CARBON	
50	UG/L	PURGEABLE ORGANIC HALOGEN	

****

FOOTNOTES*
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *P-PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

2/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13704 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: ~~FE-2~~ SM-13
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1329 INORG SAMPLE NO.: MDQA629
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS*

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
5UJ	MG/L	TOTAL ORGANIC CARBON	00680
100UJ	UG/L	TOTAL ORGANIC HALOGEN	
0.10U	MG/L	PURGEABLE ORGANIC CARBON	
5U	UG/L	PURGEABLE ORGANIC HALOGEN	
10U	UG/L	PHENOLS (4AAP)	32730
1.1	MG/L	AMMONIA	00610
0.90	MG/L	NITRATE-NITRITE NITROGEN	00630
100	MG/L	SULFATE	00945
190	MG/L	CHLORIDE	00940
0.01U	MG/L	CYANIDE	00720

****

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

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13781 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SU-14
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: D01354 INORG SAMPLE NO.: M0QA654
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.01U	MG/L	CYANIDE	00720
63	MG/L	CHLORIDE	00940
650	MG/L	SULFATE	00945
10U	UG/L	PHENOLS (4AAP)	32730
1.0	MG/L	AMMONIA	00610
1.3	MG/L	NITRATE-NITRITE NITROGEN	00630
0.10U	MG/L	PURGEABLE ORGANIC CARBON	
5U	UG/L	PURGEABLE ORGANIC HALOGEN	
3UJ	MG/L	TOTAL ORGANIC CARBON	00680
5UU	UG/L	TOTAL ORGANIC HALOGEN	

****

FOOTNOTES
*A=AVERAGE VALUE *NA=NOT ANALYZED *NAI=INTERFERENCES
*J=ESTIMATED VALUE *N=PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13766 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-176 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: SW-16
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1941 ORG SAMPLE NO: DQ1331 INORG SAMPLE NO.: MDQA631
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.010	MG/L	CYANIDE	00720
100	UG/L	PHENOLS (4AAP)	32730
3UJ	MG/L	TOTAL ORGANIC CARBON	00680
50U	UG/L	TOTAL ORGANIC HALOGEN	
0.10U	MG/L	PURGEABLE ORGANIC CARBON	
50	UG/L	PURGEABLE ORGANIC HALOGEN	
0.80	MG/L	AMMONIA	00610
0.32	MG/L	NITRATE-NITRITE NITROGEN	00630
400	MG/L	SULFATE	00945
59	MG/L	CHLORIDE	00940

****

FOOTNOTES
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*J=ESTIMATED VALUE *N=PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

2/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13763 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-56
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: [illegible] RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SALED:

CHEMIST: [illegible] SUBMIST:
ANALYTICAL METHOD:

[illegible] NO.: 1844 [illegible] SAMPLE NO.: [illegible] INORG SAMPLE NO.: [illegible]
[illegible] LABORATORY(ORGANIC): [illegible] CHEM
[illegible] LABORATORY(INORGANIC): CENTER

[illegible]
[illegible]

SAMPLE LOG VERIFIED BY: [illegible] DATA VERIFIED BY: [illegible]

REMARKS*.

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.100	MG/L	PURGEABLE ORGANIC CARBON	
0.010	UG/L	PURGEABLE ORGANIC HALOGEN	

****

FOOTNOTES*
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*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13701 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: M-58
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: P DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 09/00/00 REC'D BY:
SEALED:

CHEMIST: GKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1326 INORG SAMPLE NO.: MDQA626
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS*

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
3.0UJ	MG/L	TOTAL ORGANIC CARBON	00680
50U	UG/L	TOTAL ORGANIC HALOGEN	
0.10U	MG/L	PURGEABLE ORGANIC CARBON	
5U	UG/L	PURGEABLE ORGANIC HALOGEN	
560	MG/L	SULFATE	00945
140	MG/L	CHLORIDE	00940
20UJ	UG/L	PHENOLS (4AAP)	32730
0.01U	MG/L	CYANIDE	00720

****

FOOTNOTES*
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*J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE 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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THE MINIMUM DETECTION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
SPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13778 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: MOBILE STATE: AL

STATION I.D.: MW-02
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE RECD: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: CKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1941 ORG SAMPLE NO: DQ1351 INORG SAMPLE NO.: MDQA651
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: MFP DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.01U	MG/L	CYANIDE	00720
490	MG/L	CHLORIDE	00940
0.10U	MG/L	SULFATE	00945
10U	UG/L	PHENOLS (4AAP)	32730
1.4	MG/L	AMMONIA	00610
0.05U	MG/L	NITRATE-NITRITE NITROGEN	00630
0.10U	MG/L	PURGEABLE ORGANIC CARBON	
5U	UG/L	PURGEABLE ORGANIC HALOGEN	
30J	UG/L	TOTAL ORGANIC CARBON	00680
120U	UG/L	TOTAL ORGANIC HALOGEN	

****

FOOTNOTES
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*L=ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U=MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS
THE MINIMUM DETECTION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13750 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: B-62
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GAB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1325 INORG SAMPLE NO.: NDQA625
CONTRACT LABORATORY(ORG/MIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: MFP DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
50	UG/L	PURGEABLE ORGANIC HALOGEN	
0.100	MG/L	PURGEABLE ORGANIC CARBON	
200UJ	UG/L	PHENOLS (4AAP)	32730

****

FOOTNOTES
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*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
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SA"PLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

7/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13774 SAMPLE TYPE: LEACHATE

PROJECT NO.: 86-176 PROGRAM ELEMENT: RCRA
OURCE: CHEM WASTE MGT
ITY: EMELLE STATE: AL

TATION I.D.: 1-9
TORET STATION NO:

AMPLE COLLECTION: START DATE/TIME 09/22/86
AMPLE COLLECTION: STOP DATE/TIME 00/00/00

OLLECTED BY: R DELUCA RECEIVED FROM:
AMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
EALED:

HEMIST: GKI CHEMIST:
NALYTICAL METHOD:

ASE NO.: 1941 ORG SAMPLE NO: D01340 INORG SAMPLE NO.: NDQA640
ONTRACT LABORATORY(ORGANIC): COMPU CHEM
ONTRACT LABORATORY(INORGANIC): CENTEC

EMARK:
EMARK:

AMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS*
-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
-COMPOUND MAY OR MAY NOT BE PRESENT
-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.020	MG/L	CYANIDE	00720
2800J	MG/L	TOTAL ORGANIC CARBON	00680
4500R	UG/L	TOTAL ORGANIC HALOGEN	
210J	MG/L	PURGEABLE ORGANIC CARBON	
43000R	UG/L	PURGEABLE ORGANIC HALOGEN	
25000	UG/L	PHENOLS (4AAP)	32730
75	MG/L	AMMONIA	00610
50U	MG/L	NITRATE-NITRITE NITROGEN	00630
1400J	MG/L	SULFATE	00945
900	MG/L	CHLORIDE	00940

****

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 DETECTION LIMIT.

7

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13772 SAMPLE TYPE: LEACHATE

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: L-15
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/18/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1941 ORG SAMPLE NO: DQ1338 INORG SAMPLE NO.: MDQA638
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS
R-QUALITY CONTROL INDICATES THAT DATA ARE UNUSEABLE
B-COMPOUND MAY OR MAY NOT BE PRESENT
R-RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION

****

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
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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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*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
11J	MG/L	CYANIDE	00720
9900J	MG/L	TOTAL ORGANIC CARBON	00680
760000R	UG/L	TOTAL ORGANIC HALOGEN	
1600J	MG/L	PURGEABLE ORGANIC CARBON	
680000R	UG/L	PURGEABLE ORGANIC HALOGEN	
390000	UG/L	PHENOLS (4AAP)	32730
140	MG/L	AMMONIA	00610
5000	MG/L	NITRATE-NITRITE NITROGEN	00630
10000	MG/L	SULFATE	00945
12000J	MG/L	CHLORIDE	00940

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13771 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: FL-1
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DLUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: DQ1337 INORG SAMPLE NO.: MDQA637
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.01U	MG/L	CYANIDE	00720
20J	MG/L	TOTAL ORGANIC CARBON	00680
120U	UG/L	TOTAL ORGANIC HALOGEN	
0.10U	MG/L	PURGEABLE ORGANIC CARBON	
5U	UG/L	PURGEABLE ORGANIC HALOGEN	
10U	UG/L	PHENOLS (4AAP)	32730
0.10U	MG/L	AMMONIA	00610
0.05U	MG/L	NITRATE-NITRITE NITROGEN	00630
0.10U	MG/L	SULFATE	00945
0.10U	MG/L	CHLORIDE	00940

****

FOOTNOTES*
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *U-PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13773 SAMPLE TYPE: GROUNDWA

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.01U	MG/L	CYANIDE	00720
20J	MG/L	TOTAL ORGANIC CARBON	00680
50U	UG/L	TOTAL ORGANIC HALOGEN	
0.10U	MG/L	PURGEABLE ORGANIC CARBON	
50	UG/L	PURGEABLE ORGANIC HALOGEN	
200J	UG/L	PHENOLS (4AAP)	32730
0.10U	MG/L	AMMONIA	00610
0.05U	MG/L	NITRATE-NITRITE NITROGEN	00630
0.10U	MG/L	SULFATE	00945
0.10U	MG/L	CHLORIDE	00940

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: MOBILE STATE: AL

STATION I.D.: FB-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/22/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1941 ORG SAMPLE NO: D01339 INORG SAMPLE NO.: MD0A639
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS

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FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *L-PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

2/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13782 SAMPLE TYPE: GROUNDWA

ROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
OURCE: CHEM WASTE MGT
ITY: EMELLE STATE: AL

TATION I.D.: FB-3
TORET STATION NO:

AMPLE COLLECTION: START DATE/TIME 09/23/86
AMPLE COLLECTION: STOP DATE/TIME 00/00/00

OLLECTED BY: R DELUCA RECEIVED FROM:
AMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
EALED:

HEMIST: GKB CHEMIST:
NALYTICAL METHOD:

ASE NO.: 1941 ORG SAMPLE NO: DQ1355 INORG SAMPLE NO.: MDQA655
ONTRACT LABORATORY(ORGANIC): COMPH CHEM
ONTRACT LABORATORY(INORGANIC): CENTEC

EMARK:
EMARK:

AMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS*

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.01U	MG/L	CYANIDE	00720
0.10U	MG/L	CHLORIDE	00940
0.01U	MG/L	SULFATE	00945
10U	UG/L	PHENOLS (4AAP)	32730
0.01U	MG/L	AMMONIA	00610
0.05U	MG/L	NITRATE-NITRITE NITROGEN	00630
0.10U	MG/L	PURGEABLE ORGANIC CARBON	
5U	UG/L	PURGEABLE ORGANIC HALOGEN	
5UJ	MG/L	TOTAL ORGANIC CARBON	00680
60UJ	UG/L	TOTAL ORGANIC HALOGEN	

****

FOOTNOTES*
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *P-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
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*L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS
THE MINIMUM DETECTION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13779 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: FORELLE STATE: AL

STATION I.D.: TP-1
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/17/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: R DELUCA RECEIVED FROM:
SAMPLE RECEIVED DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GRI CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1884 ELG SAMPLE NO: 001352 INORG SAMPLE NO.: H00A652
ORIGIN: LABORATORY(ORGANIC), EDSED EMED
ORIGIN: LABORATORY(INORGANIC): CENTES

EDARA:
EDARA:

SAMPLE LOG VERIFIED BY: SFO DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
1.0U	MG/L	TOTAL ORGANIC CARBON	00680
0.10U	MG/L	AMMONIA	00610
0.05U	MG/L	NITRATE-NITRITE NITROGEN	00630
0.10U	MG/L	SULFATE	00945
0.10U	MG/L	CHLORIDE	00940
10U	UG/L	PHENOLS (4AAP)	32730

****

FOOTNOTES*
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES
*J-ESTIMATED VALUE *P-PRESUMPTIVE EVIDENCE OF PRESENCE 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 DETECTION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-ESD,REG IV
ATHENS GEORGIA

12/16/86

SPECIFIED ANALYSIS
DATA REPORTING SHEET
WATER

SAMPLE NO.: 86C13775 SAMPLE TYPE: GROUNDWA

PROJECT NO.: 86-476 PROGRAM ELEMENT: RCRA
SOURCE: CHEM WASTE MGT
CITY: EMELLE STATE: AL

STATION I.D.: 16-2
STORET STATION NO:

SAMPLE COLLECTION: START DATE/TIME 09/23/86
SAMPLE COLLECTION: STOP DATE/TIME 00/00/00

COLLECTED BY: D DELUCA RECEIVED FROM:
SAMPLE REC'D: DATE/TIME 00/00/00 REC'D BY:
SEALED:

CHEMIST: GKB CHEMIST:
ANALYTICAL METHOD:

CASE NO.: 1944 ORG SAMPLE NO: D01341 INORG SAMPLE NO.: M00A641
CONTRACT LABORATORY(ORGANIC): COMPU CHEM
CONTRACT LABORATORY(INORGANIC): CENTEC

REMARK:
REMARK:

SAMPLE LOG VERIFIED BY: WFP DATA VERIFIED BY: GKB

REMARKS

*****ANALYTICAL RESULTS*****

RESULTS	UNITS	PARAMETER	STORET
0.010	MG/L	CYANIDE	00720
30J	MG/L	TOTAL ORGANIC CARBON	00680
200J	UG/L	TOTAL ORGANIC HALOGEN	
0.100	MG/L	PURGEABLE ORGANIC CARBON	
50	UG/L	PURGEABLE ORGANIC HALOGEN	
500J	UG/L	PHENOLS (4AAP)	32730
0.10U	MG/L	AMMONIA	00610
0.05U	MG/L	NITRATE-NITRITE NITROGEN	00630
0.200J	MG/L	SULFATE	00945
0.10U	MG/L	CHLORIDE	00940

****

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

APPENDIX I

FROM CWM RCRA Part B

TABLE I-6

INTERIM STATUS GROUNDWATER MONITORING RESULTS
FOR INDICATORS OF GROUNDWATER CONTAMINATION
EMELLE FACILITY
1983-1984

Parameter/Quarter	Well 5	Well 6	Well 7	Well 8
pH				
1st	8.68	8.90	9.20	8.20
2nd	9.11	8.68	9.40	8.49
3rd	8.61	8.39	9.43	8.45
4th	9.05	8.77	9.15	8.47
Mean	8.86	8.69	9.30	8.40
Standard Deviation	0.254	0.216	0.137	0.136
Specific Conductance (u mhos)				
1st	2,000	1,693	1,900	1,823
2nd	2,850	2,100	2,400	2,300
3rd	2,700	1,800	2,100	2,100
4th	2,500	2,063	2,200	2,213
Mean	2,562.5	1,914	2,150	2,109
Standard Deviation	280.995	198.858	208.167	207.504
TOC (mg/liter)				
1st	46.5	117.25	39.25	94.25
2nd	4.95	5.13	14	23.75
3rd	7.3	16.75	28.75	13.25
4th	1.55	1.43	5.25	9.0
Mean	15.08	35.14	22.40	35.063
Standard Deviation	21.08	55.128	13.108	39.942
TOX (ug/liter)				
1st	139.75	-	61.25	<5
2nd	84.65	50.48	30.30	84.65
3rd	85.98	32.30	72.05	46.08
4th	51.50	21	29.50	15.08
Mean	90.47	34.59	48.28	48.60
Standard Deviation	36.52	14.87	21.67	34.85

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FROM CWM RCRA Part B

TABLE I-7

INTERIM STATUS GROUNDWATER MONITORING RESULTS
FOR GROUNDWATER QUALITY
EMELLE FACILITY
1983-1984

Parameter/Quarter	Well 5	Well 6	Well 7	Well 8
Chloride (ug/liter)				
1st	675,000	324,000	675,000	433,000
2nd	700,000	430,000	570,000	490,000
3rd	713,000	448,000	589,000	475,000
4th	640,000	390,000	530,000	430,000
Mean	682,000	398,000	591,000	457,000
Manganese (ug/liter)				
1st	12	16	<8	33
2nd	<100	<6	<5	29
3rd	<5	6	ND	7
4th	<5	<5	7	<5
Mean	-[1]	-[1]	-[1]	-[1]
Sodium (ug/liter)				
1st	600,000	360,000	450,000	46,000
2nd	600,000	400,000	500,000	500,000
3rd	490,000	420,000	450,000	420,000
4th	480,000	370,000	400,000	380,000
Mean	542,500	387,500	450,000	336,500
Sulfate (ug/liter)				
1st	<2,000	<2,000	<2,000	<2,000
2nd	<9,000	<9,000	<9,000	<9,000
3rd	16,000	3,000	<2,000	10,000
4th	2,000	<2,000	<2,000	12,000
Mean	-[1]	-[1]	-[1]	-[1]
Phenol (ug/liter)				
1st	80	90	<50	100
2nd	<50	<50	<50	<50
3rd	<50	<50	<50	<50
4th	<50	<50	<50	70
Mean	-[1]	-[1]	-[1]	-[1]

[1]These statistics were not calculated when any values were below the minimum detection limit.

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TABLE I-8

INTERIM STATUS GROUNDWATER MONITORING RESULTS
FOR DRINKING WATER QUALITY
EMELLE FACILITY
1983-1984

Parameter/Quarter	Well 5	Well 6	Well 7	Well 8
Arsenic (ug/liter)				
1st	<5	<50	<3	<5
2nd	5	<5	<3	6
3rd	ND	ND	ND	ND
4th	ND	<5	ND	ND
Barium (ug/liter)				
1st	29	<10	10	<10
2nd	<100	<6	10	<6
3rd	21	26	19	41
4th	32	16	17	18
Cadmium (ug/liter)				
1st	<10	<10	<8	<10
2nd	<5	<6	<5	<6
3rd	ND	ND	ND	ND
4th	ND	ND	ND	ND
Fluoride (ug/liter)				
1st	2,800	3,200	2,600	3,000
2nd	2,800	2,300	2,800	2,500
3rd	2,900	3,000	2,800	2,900
4th	3,100	3,600	3,300	3,400
Lead (ug/liter)				
1st	8	<7	<4	7
2nd	<100	<6	5	<6
3rd	ND	<5	<5	<5
4th	6	6	37	13

TABLE I-8 cont'd.

Parameter/Quarter	Well 5	Well 6	Well 7	Well 8
Mercury (ug/liter)				
1st	0.2	<0.2	<0.3	<0.2
2nd	<0.2	<0.1	<0.3	<0.1
3rd	ND	ND	ND	ND
4th	ND	ND	ND	ND
Nitrate (ug/liter)				
1st	<40	<40	<40	<40
2nd	<40	<40	<40	<40
3rd	<40	<40	<40	<40
4th	<40	<40	<40	<40
Selenium (ug/liter)				
1st	<5	<5	<4	<5
2nd	<5	<5	<4	<5
3rd	ND	<5	<5	ND
4th	<5	<5	<5	ND
Silver (ug/liter)				
1st	<10	<10	<20	<10
2nd	<25	<10	<10	<10
3rd	ND	<10	ND	<10
4th	ND	ND	ND	ND
Endrin (ug/liter)				
1st	<0.1	<0.1	<0.1	<0.1
2nd	<0.1	<0.1	<0.1	<0.1
3rd	<0.1	<0.1	<0.1	<0.1
4th	<0.1	<0.1	<0.1	<0.1

TABLE I-8 cont'd.

Parameter/Quarter	Well 5	Well 6	Well 7	Well 8
Lindane (ug/liter)				
1st	<2.0	<2.0	<2.0	<2.0
2nd	<2.0	<2.0	<2.0	<2.0
3rd	<2.0	<2.0	<2.0	<2.0
4th	<2.0	<2.0	<2.0	<2.0
Methoxychlor (ug/liter)				
1st	<50	<50	<50	<50
2nd	<50	<50	<50	<50
3rd	<51	<50	<51	<50
4th	<50	<50	<50	<50
Toxaphene (ug/liter)				
1st	<2.5	<2.5	<2.5	<2.5
2nd	<2.5	<2.5	<2.5	<2.5
3rd	<2.6	<2.5	<2.6	<2.5
4th	<2.5	<2.5	<2.5	<2.5
2,4-D (ug/liter)				
1st	<50	<50	<50	<50
2nd	<50	<50	<50	<50
3rd	<50	<50	<50	<50
4th	<50	<50	<50	<50
2,4,5-TP Silvex (ug/liter)				
1st	<5	<5	<5	<5
2nd	<5	<5	<5	<5
3rd	<5	<5	<5	<5
4th	<5	<5	<5	<5

FROM CWM RCRA Part B

TABLE I-12

INTERIM STATUS GROUNDWATER MONITORING RESULTS
FOR INDICATORS OF GROUNDWATER CONTAMINATION
EMELLE FACILITY
1983-1984

Parameter/Semi-Annual	WELL 5	WELL 6	WELL 7	WELL 8
pH[1]				
1st	8.78	8.64	8.92	8.65
Specific Conductance (u mhos)[1]				
1st	2,600	1,745	2,415	2,220
TOC (mg/liter)[1]				
1st	1.43	4	9.33	3.4
TOX (ug/liter)[1]				
1st	44.75	27.75	43.75	47.25

[1]The values given for the first semi-annual are the means of four replicate values

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FROM CWM RCRA Part B

TABLE I-13

INTERIM STATUS GROUNDWATER MONITORING RESULTS
FOR GROUNDWATER QUALITY
EMELLE FACILITY
1983-1984

PARAMETER/SEMI-ANNUAL	WELL 5	WELL 6	WELL 7	WELL 8
Chloride (ug/liter)				
1st	690,000	410,000	410,000	440,000
Iron (ug/liter)				
1st	ND	ND	ND	<100
Manganese (ug/liter)				
1st	ND	<5	ND	<5
Sodium (ug/liter)				
1st	590,000	450,000	520,000	460,000
Sulfate (ug/liter)				
1st	28,000	<2,000	<2,000	<2,000
Phenol (ug/liter)				
1st	<50	-[1]	<50	-[1]

[1]No data

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TABLE I-14

INTERIM STATUS GROUNDWATER MONITORING RESULTS
FOR DRINKING WATER QUALITY
1983-1984

Parameter/Semi-Annual	WELL 5	WELL 6	WELL 7	WELL 8
Arsenic (ug/liter)				
1st	ND	ND	ND	ND
Barium (ug/liter)				
1st	22	26	28	20
Cadmium (ug/liter)				
1st	ND	ND	ND	ND
Fluoride (ug/liter)				
1st	2,500	2,900	3,100	3,400
Lead (ug/liter)				
1st	<5	<5	<5	ND
Mercury (ug/liter)				
1st	ND	ND	ND	ND
Nitrate (ug/liter)				
1st	<100	<100	<100	<100
Selenium (ug/liter)				
1st	ND	ND	<5	<5
Silver (ug/liter)				
1st	ND	ND	ND	ND

TABLE I-14 cont.'d

Parameter/Semi-Annual	WELL 5	WELL 6	WELL 7	WELL 8
Endrin (ug/liter)				
1st	ND	ND	ND	ND
Lindane (ug/liter)				
1st	ND	ND	ND	ND
Methoxychlor (ug/liter)				
1st	ND	ND	ND	ND
Toxaphene (ug/liter)				
1st	ND	ND	ND	ND
2,4-D (ug/liter)				
1st	ND	ND	ND	ND
2,4,5-TP Silvex (ug/liter)				
1st	ND	ND	ND	ND

TABLE I-18 cont'd.

GROUNDWATER SURFACE ELEVATIONS

1984

Well Number	First Semi-Annual July 1984
5	136.63
6	136.61
7	138.12
8	140.35

GROUNDWATER SURFACE ELEVATIONS

1983 - 1984

Well Number	First Quarter July 1983	Second Quarter October 1983	Third Quarter January 1984	Fourth Quart April 1984
5	138.69	135.48	137.15	136.72
6	137.32	136.86	137.24	137.27
7	138.56	138.12	138.42	138.52
8	139.63	138.42	139.73	139.55

FROM CWM RCRA Part B

TABLE I-19

GROUNDWATER
SAMPLING EVENTS
DATES

WELL NOS. 1 THRU 4:

First Quarter	February, 1982
Second Quarter	April, 1982
Third Quarter	July, 1982
Fourth Quarter	October, 1982
First Semi-Annual	May, 1983
Second Semi-Annual	July, 1983
Third Semi-Annual	January, 1984
Fourth Semi-Annual	July, 1984

WELL NOS. 5 THRU 8:

First Quarter	July, 1983
Second Quarter	October, 1983
Third Quarter	January, 1984
Fourth Quarter	April, 1984
First Semi-Annual	July, 1984

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