

CSX/VAUGHN LANDFELL AND BRAMLETTE ROAD MGP SITES

FFASE III INVESTIGATION AND SITE ASSESSMENT REPORT

VOLUME II

PREPARED BY:

SITE REMEDIATION SERVICES GROUP DUKE ENGINEERING & SERVICES, INC. 400 SOUTH TRYON STREET P.O. BOX 1004 CHARLOTTE, NORTH CAROLINA 28201-1004

JUNE 2000

· ·			
		· · · · · · · · · · · · · · · · · · ·	
		4	
		`	

APPENDIX A

CORRESPONDENCE



AND PLANNING SECTION

ENVIRONMENTAL ENGINEE

NOV 1 7 1998

2600 Bull Street Columbia, SC 29201-1708 November 13, 1998

FILE	-
SH. ALER	DATE

COPY

COMMISSIONER: Douglas E. Bryant

BOARD: John H. Burriss Chairman

Duke Power Attn: Ralph Roberts, P.E.

Charlotte, NC 28202-1802

526 S. Church St.

☐ ROUTE

William M. Hull, Jr., MD Vice Chairman

Roger Leaks, Jr. Secretary

Mark B. Kent

Cyndi C. Mosteller Brian K. Smith

Rodney L. Grandy

Re: CSXT-Bramlette Road/Vaughn Landfill, Site ID #00801

Phase III Workplan received April 10, 1997 Site Visit/Meeting on October 29, 1998

Greenville County

Dear Mr. Roberts:

The Department has reviewed the referenced workplan proposal. The plan is approved as submitted with the exception that the Department is requesting one additional surface water sampling location in the Reedy River as discussed in the referenced meeting. Enclosed is a monitoring well approval for the installation of up to twenty-five (25) permanent shallow, mid-depth and deep monitoring wells at the referenced site. Please ensure that a copy of this approval is available at the site during installation activities. The analytical results from soil and groundwater samples should be submitted to my attention within thirty (30) days of receipt from the laboratory.

If you have any questions regarding this project please contact me at (803) 734-4666.

Sincerely,

Sarah W. Price, Hydrogeologist Groundwater Quality Section

Bureau of Water

saral

Marshall Williams, Director Environmental Real Estate Transactions, 301 cc: West Bay Street, Suite 800, Jacksonville, FL 32202 Charles Bristow, Appalachia II District EQC



Date of Issue: November 13, 1998

Approval No: 300

2600 Bull Street Columbia, SC 29201-1708

Monitoring Well Installation Approval

COMMISSIONER: Douglas E. Bryant

BOARD: John H. Burriss Chairman

William M. Hull, Jr., MD Vice Chairman

Roger Leaks, Jr. Secretary

Mark B. Kent

Cyndi C. Mosteller

Brian K. Smith

Rodney L. Grandy

Approval is hereby granted to: Ralph Roberts (on behalf of): Duke Power

Site ID#: 00801 County: Greenville

This approval is for the construction of up to twenty-five (25) permanent monitoring wells in accordance with the construction plans and technical specifications submitted to the Department on April 10, 1997. The well(s) are to be constructed within the surficial aquifer for the intended purpose of monitoring groundwater quality, free product thickness, and/or water level(s) at the referenced facility. Approval is provided with the following conditions:

- 1. The surveyed elevations, boring and/or geologist logs and actual (as built) construction details for each well be submitted to Sarah Price within thirty (30) days of completion (of last well(s) installed).
- 2. Well construction and sampling derived waste including, but not necessarily limited to, drill cuttings, drilling fluids, development and purge water should be managed properly and in compliance with applicable requirements. If containerized, each vessel should be clearly labeled with regard to contents, source, and date of activity.
- 3. A minimum of forty-eight (48) hours prior to initiation of drilling activities, please provide notice to Charles Bristow, Appalachia II District, EQC Office (843-241-1090).
- 4. Please provide groundwater quality analytical data (chemical analyses and/or water level(s)) and associated measurements (i.e., in-situ field measurements) to Sarah Price within thirty (30) days of receipt from laboratory.
- 5. Monitoring wells shall be installed by a well driller certified by the State of South Carolina.
- 6. Each well shall be labeled with an identification plate constructed of a durable material affixed to the casing or surface pad where it is readily visible. The plate shall provide monitoring well I.D.#, date of construction, static water level, and driller name and state certification number.
- 7. Wells shall be abandoned per R.61-71.10.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and the Department of Health and Environmental Control Regulations R.61-71.

Approved by:

B. Thomas Knight, P.G., Manager

Groundwater Quality Section

Bureau of Water



Duke Power
Environment, Health & Safety
526 South Church Street
P.O. Box 1006
Charlotte, NC 28201-1006

February 22, 1999

Dr. Randall Dozier
The School District of Greenville County
301 Camperdown Way
Box 2848
Greenville, SC 29602-2848

Re:

Bramlette Rd. MGP Fine Arts School

Dear Dr. Dozier:

Duke Power will start an environmental assessment of the former Bramlette Road Manufactured Gas Plant (MGP) site the third week of February 1999. This site is at the intersection of Bramlette Road and Washington Avenue and is across the street from the School District of Greenville County's Fine Arts School. The assessment will include the installation of twenty-two monitoring wells and the collection of ground water, surface water and soil samples. The purpose of the assessment is to determine where residues from the former MGP operation are located so that a cleanup plan can be developed. The South Carolina Department of Health and Environmental Control (DHEC) has approved the assessment work plan.

We have no reason to think there is an environmental or health problem at the school. First, MGP activities did not take place on the school property. Also, because the school is not down hill from the site, migration of contaminants to the school is not expected.

To confirm contaminants have not migrated to school property we plan to install two monitoring wells on the south side of Bramlette Road and east of the marsh area. If the well locations are on school property we will contact you.

Thank you for your support with this project. If you have any questions please give George Acker a call at 370-4544 or you can contact me at (704) 373-7888.

Sincerely,

Ralph Roberts Environment, Health and Safety



Duke Power
Environment, Health & Safety
526 South Church Street
P.O. Box 1006
Charlotte, NC 28201-1006

April 14, 1999

Mr. Leroy Lewis
Director Operations/Maintenance
The School District of Greenville County
2 Space Drive
Taylors, SC 29687

Re: Bramlette Rd. MGP Fine Arts School

Dear Mr. Lewis:

Duke Power has been installing groundwater-monitoring wells as part of an environmental assessment of the former Bramlette Road manufactured gas plant site. This site is at the intersection of Bramlette Road and Washington Avenue and is across the street from the School District of Greenville County's Fine Arts School.

As we discussed in mid February, the planned location for two of the wells was south of Bramlette Road and east of the marsh area. A review of the tax property maps indicates that these wells will be located on school system property. Duke will provide you with a copy of the groundwater monitoring results when we receive them from the analytical laboratory.

Thank you for your support with this project. If you have any questions please contact me at (704) 373-7888.

Sincerely,

Ralph Roberts Environment, Health and Safety

(
			`	
	·			
:				
				·
				· ·

APPENDIX B

Phase III Workplan

CSX/VAUGHN LANDFILL AND BRAMLETTE ROAD, MGP SITE PHASE III WORKPLAN

CSX/VAUGHN LANDFILL AND BRAMLETTE ROAD, MGP SITE PHASE III WORKPLAN

TABLE OF CONTENTS

1.1	Site Description and History
1.2	Previous Investigations
1.3	Scope and Opbjectives
2.0	FAUNAL STUDY
2.1	Background
2.2	Rational and Study Destign
3.0	SURFACE WATER SAMPLING
3.1	Previous Sampling and Results
3.2	Proposed Sample Locations
3.3	Sample Collection and Analysis
4.0	GROUNDWATER INVESTIGATION
4.1	Previous Investigations
4.2	Monitoring Well Locations
4.2.1	MGP Site
4.2.2	CSX/Vaughn Landfill Site
4.3	Well Construction
4.4	Sample Collection and Analysis

INTRODUCTION

1.0

5.0 SOIL SAMPLING

6.0 SCHEDULE

LIST OF FIGURES

- 1. Site Location
- 2. USGS Topographic Map
- 3. Faunal Study Proposed Sample Locations
- 4. Surface Water Proposed Sample Locations
- 5. Proposed Monitoring Well Locations
- 6. Shallow Well Construction Details
- 7. Mid Depth Well Construction Details
- 8. Deep Well Construction Details

LIST OF APPENDICES

- I. SCDHEC Letter
- II. Ground Water Sampling Procedure

CSX/VAUGHN LANDFILL AND BRAMLETTE ROAD, MGP SITE PHASE III WORKPLAN

1.0 INTRODUCTION

This workplan describes the various field and laboratory tasks to be included in the Phase III site investigation of the former Bramlette Rd. Manufactured Gas Plant and Vaughn Landfill sites in Greenville, South Carolina.

1.1 Site Description and History

. 2

The Bramlette Road Manufactured Gas Plant (MGP) site is located in the north-west quadrant of the Bramlette Road and West Washington Street intersection in the City View section of Greenville, SC. The Vaughn Landfill site is located approximately 800 feet west of the intersection and south of Bramlette Rd. (Figures 1 and 2).

Both sites are owned by CSX Transportation (CSXT) and are part of more extensive CSXT holdings in the vicinity of Bramlette Rd. and east of the railway right-of-way, totaling approximately 40 acres. The MGP site covers an area of 3.69 acres and the landfill covers an area of approximately seven acres.

The MGP site was developed by Southern Public Utilities in 1917. The plant site plan is shown in Figure 3. Plant ownership and operation transferred to Duke Power Company (DPC) in 1935. Piedmont Natural Gas Company purchased the site in 1951 and demolished the gas plant in the late 1950's. The property was sold to Piedmont and Northern Railway in 1963 which became part of the Seaboard Cost Line (CSX) in 1967.

The site was used as a trucking facility during the 1970's and 1980's. The property is currently vacant. Access is restricted with a fence.

The Vaughn Landfill site was developed as an unpermitted demolition landfill in 1988. The depth of debris varies from eight to 14 feet. It is located in the flood plain of the Reedy River. The flood plain has been classified as a wetland by the Army Corps of Engineers (ACE).

1.2 Previous Investigations

A phase I investigation was completed by Applied Engineering and Science Inc. (AES) in early 1995. The investigation included 34 soil borings and seven groundwater samples in the landfill and seven soil borings and four surface water samples from the floodplain immediately adjacent to the landfill. Analytical results indicated impact to soil and water by volatile and semi-volatile organic compounds and metals. Results of the investigation are presented in an AES report dated March 1995 and titled "Site Investigation; Soil, Sediment, and Groundwater Sampling; Vaughn Landfill, CSX Real Property."

A phase II investigation was completed by AES in 1996. It included a biological survey in the landfill/wetlands area, the installation of eight monitoring wells to assess groundwater quality, an assessment of the extent of the coal tar in the soil and groundwater in both the landfill area and the former MGP site and a site characterization and a contaminant pathway evaluation. The investigation results are presented in an AES report dated September 1996 entitled "Site Investigation Phase II Vaughn Landfill/Duke Power Sites CSXT Real Properties Bramlette Road Greenville, South Carolina."

1.3 Scope and Objectives

The South Carolina Department of Health and Environmental Control (SCDHEC) provided comments to the Phase II Assessment Report and suggestions for additional work in a letter dated December 6, 1996 from Tom Knight to Charles Bristow (Appendix I). Additional guidance was provided in a meeting with the SCDHEC, CSXT, AES, the ACE and DPC held December 18, 1996. The SCDHEC requests additional information on the following:

- Evaluate the potential impact to the fauna from the site contaminants.
- Determine the horizontal and vertical extent of the groundwater contaminant plume.
- Determine the extent of free product coal tar.
- Resample monitoring wells and surface water. Include analyses for Fe and Mn.

The basic objective of Phase III is to collect the data necessary to develop a corrective action plan.

2.0 FAUNAL STUDY

2.1 Background

The CSXT/Vaughn Landfill site was identified as containing approximately 40 acres of jurisdictional wetland by the ACE in 1994. Results of an investigation by AES indicates the site has been impacted by coal tar residues originating from the former DPC MGP. The site investigation included an evaluation of the effects of the coal tar residue on the

flora of the wetlands. This study was conducted by Environmental Corporation of America. SCDHEC has recommended that the Phase III investigation include a faunal survey of the impacted wetland and compare the results to a nearby wetland not impacted with coal tar residues. Discussions with the Army Corps of Engineers revealed that Chewacla soils (which are present at the CSX site) are not common in this area and finding a comparable control wetland with this soil type would be difficult or impossible. Because of this constraint, we propose to conduct an intensive faunal survey of the CSX site and compare our finding to those reported in the scientific literature.

2.2 Rational and Study Design

The site vegetation evaluation by Environmental Corporation of America indicated that most of the wetlands area had some standing water during their sampling work, with deeper water in drainage ditches located on the site. The standing water would leach any soluble coal tar constituents from the soil and also potentially receive coal tar constituents from the groundwater.

This proposed study will sample the fauna which comes in direct contact with the soil (amphibians), mud (amphibians, macrobenthos and some fish) and the water column (fish and zooplankton). Sampling animals from these habitats should represent the "worst case" scenarios, where exposure to coal tar residues would be the greatest.

Two locations are proposed to be sampled. One site will be adjacent to the CSXT/Vaughn Landfill in an area known to be impacted by coal tar residues, based on the investigations by AES and Environmental Corporation of America. The second site is a wetland area along the southern section of Ditch 5 near monitoring well MW5 south of the coal tar plume identified in the 1996 phase II report (Figure 3).

Sampling will consist of backpack shocking or seining for fish, dip netting for frogs and salamanders and net sampling for zooplankton. Aquatic insects will be sampled using qualitative techniques with comparable level of efforts expended at each sampling location. Sampling will be conducted along transects in the two areas. Water samples will be taken at the time of faunal sampling and analyzed for the parameters listed in Section 3.3.

3.0 SURFACE WATER SAMPLING

3.1 Previous Sampling and Results

Four surface water samples were collected for the Phase I study (Figure 4). Two samples (WE001 and WE002) from the wetlands east of the Vaughn Landfill and two samples (WW001 and WW002) from the wetlands west of the Vaughn Landfill. These samples were generally analyzed for total petroleum hydrocarbons (TPH), volatile organic compounds (VOC), semi-volatile organic compounds (S-VOC) and Metals. Results were below the detection limit for VOC and S-VOC. The metals Pb, Se and Ba were above the MCL for one or more of the samples. TPH was detected in three samples at concentrations of 4.5 to 40 ppm.

Four surface water samples were collected for the Phase II study (Figure 4). Two samples from the Reedy River (RR1 and RR2). Both samples were below the detection limit for VOC. Both samples contained low levels (<120 parts per billion (ppb)) of Di-N-Butylphthalate (DBP) and the upstream sample also contained 20 ppb Butylbenzylphthalate (BBP). Both compounds are not typically associated with MGP sites. One surface water sample (FD1) was collected from the end of Ditch 5 near where it discharges to the Reedy River. An additional sample (WD1) was collected from a small ditch draining Willard St. and discharging to Ditch 5. Both of these samples

contained low levels DBP and BBP. The Ditch 5 sample also contained nine ppb of Naphthalene.

3.2 Proposed Sample Locations

į

A total of nine surface water samples are proposed for this work plan (Figure 4). All surface water samples will be "grab" samples.

To determine if the Reedy River has been impacted by discharges from the MGP and Vaughn Landfill sites, two samples will be collected from the river at the locations sampled in the Phase II investigation. One sample will be collected where the river passes under Bramlette St. This sample will be considered as a background sample since surface and ground water flows from the MGP and Vaughn Landfill sites are believed to intersect the Reedy River downgradient from this location. A second Reedy River sample will be collected where the river passes under Willard St. This location is less than fifty yards downstream from where Ditch 5, which is the surface water outflow from the MGP and Vaughn sites, enters the Reedy River.

The end of Ditch 5 will be sampled at the location sampled in Phase II. An additional sample will be collected from Ditch 5 near the location of monitoring well MW-5 and the faunal study location.

Surface water samples will also be collected from Ditch 1 and Ditch 2 where each ditch passes under Bramlette Road. These samples will give an indication of the water quality for some of the water flowing into the wetlands area. It should be noted that additional surface water enters the wetlands area from the railroad right-of-way east of the wetlands and from industrial and residential properties along Washington St. east of the wetlands. Samples are not planned for these areas.

One surface water sample will be collected from the wetlands area east of the Vaughn Landfill, near Ditch 4 and former surface water sample WE002, one sample will be collected from the wetlands area west of the landfill near monitoring well MW-6 and former surface water sample WW002. An additional surface water sample will be collected from the area selected for the faunal study near the landfill.

3.3 Sample Collection and Analysis

Surface water samples will be collected by Duke Power Company, Scientific Services. In-situ analysis of surface water samples will be conducted using a Hydrolab® Water Quality Analyzer. Parameters measured will include temperature, pH, Specific Conductance and dissolved oxygen

Surface water samples will be analyzed by Duke Power Company, Laboratory Services, Huntersville, NC, SCDHEC certification # 99005.

Surface water samples will be analyzed for VOC following EPA Method 601/602 and for S-VOC following EPA Method 625.

Surface water samples will also be analyzed for the following total dissolved metals following appropriate EPA Methodology: Barium, Calcium, Iron, Potassium, Magnesium, Manganese, Sodium Tin, Zinc, Cadmium, Chromium, Copper, Nickel, Lead, Arsenic, Selenium and Mercury. Samples will also be analyzed for Chloride, Ammonia, Acidity, Alkalinity, Cyanide, Sulfate, Oil and Grease, Total Suspended Solids Total Dissolved Solids and Total Organic Carbon.

4.0 GROUNDWATER INVESTIGATION

The proposed groundwater investigation is designed to determine the vertical and horizontal extent of the groundwater contaminant plume and to determine the extent of free product coal tar.

4.1 Previous Investigations

Seven groundwater samples were collected for the Phase I investigation. All samples were collected from the Vaughn Landfill using either pits or temporary boreholes. Samples were analyzed for VOC, S-VOC, PCB and metals. Three sample locations (LF23A, LF25A and LF27A) detected VOC above state standards and two sample locations (LF23A and LF27A) detected S-VOC above recommended levels.

Seven shallow groundwater monitoring wells and one deep groundwater monitoring well were constructed for the Phase II investigation (Figure 5). One well (MW7) was located on the former MGP site. Four wells were located on the Vaughn Landfill, including one deep well. One well was located upgradient and east of the landfill and two wells were located west of the landfill between the Reedy River and the landfill. The wells were checked for free product and analyzed for VOC and S-VOC.

The deep monitoring well (MW3D) contained approximately three inches of free product tar. Three wells, one shallow (MW3) and the deep well on the landfill and the well at the MGP site, exceeded MCLs for VOC and five wells (all of the wells on the landfill and the well on the MGP site) exceeded the recommended concentrations for S-VOC.

4.2 Monitoring Well Locations

4.2.1 MGP Site

One shallow monitoring well currently exists at the MGP site. Sample analytical results exceeded state standards for VOC and recommended levels for S-VOC in that well. To determine the horizontal extent of contamination at the MGP site five new shallow monitoring wells are proposed (Figure 5). These wells are generally placed in each corner of the site plus one in the middle of the site near an area of heavily stained soil between the former retort house and purifier boxes. Existing monitoring well MW7 was placed near the former tar separators, the area most likely to have the highest contaminant concentrations and the potential for free product. The shallow monitoring wells will be screened to intersect the water table. See Section 4.3 for well construction details.

To determine if a dense non-aqueous phase liquid (DNAPL), which is the expected form of free product coal tar, exists at the MGP site, mid depth wells will be nested with each of the proposed shallow monitoring wells and the existing shallow well MW7. The mid depth wells will terminate at the stiff saprolite confining layer identified in MW3D or at the first significant confining layer. This is the location free product tar would be expected to accumulate. An additional deep well will be installed near MW7 which will terminate at the top of bedrock. This well will be used to determine if any DNAPL has migrated past the saprolite to the top of bedrock. This well will also help determine the vertical extent of contamination. See Section 4.3 for deep well construction details.

4.2.2 CSX/Vaughn Landfill Site

To further define the horizontal extent of dissolved contaminants at the water table three new shallow wells are proposed (Figure 5). There is potential that contaminants have migrated in a narrow band along Ditch 5. To help define the southern boundary of the

contaminant plume a well is proposed to be located adjacent to Ditch 5 about even with existing monitoring well MW5. Previous sampling results for MW5 indicated a trace of naphthalene (12 ppb) with all other contaminants of concern below the detection limit. Results of a previous soil sample (WW12) between the proposed well location and the toe of the landfill had no indication of contamination. A soil sample closer to the toe of the landfill (WW11) detected significant levels of S-VOC.

To help define the extent of the contaminant plume in the westerly direction a shallow monitoring well is proposed to be located approximately even with existing monitoring well MW6 but along the railroad embankment, west of the wetlands. This well will also provide water table elevation data which may help to determine the flow path between the wetland and the Reedy River.

To help determine the extent of the contaminant plume in the north-east quadrant of the Vaughn Landfill one monitoring well is proposed to be located on the Greenville County School District Property near Bramlette Rd.

A mid depth well will be nested with each new shallow monitoring well and with existing shallow wells MW1, MW5 and MW6. These wells will help define the extent of DNAPL. The mid depth wells will terminate at the top of the stiff saprolite layer which accumulated the DNAPL in MW3D or at the first significant confining layer. If the mid depth wells show that the free product is not wide spread, but limited to the area around MW3D, then additional mid depth wells will be installed in the immediate vicinity of MW3D to define the extent of free product in that area.

An additional deep well will be nested with existing monitoring wells MW3 and MW3D. The new deep well will terminate at the top of bedrock to explore the possibility of DNAPL migrating past the top of saprolite.

If the depth difference between the water table and the confining layer where the mid depth well would terminate is less than 13 feet, only one well will be installed at that location. The one well will be a combined well, instead of the proposed shallow and mid depth monitoring wells. The screened interval for the combined well will be from the top of saprolite to the water table.

4.3 Well Construction

Monitoring wells will be constructed by a SCDHEC certified driller, Duke Power Company, Geotechnical Center, Seneca, SC.

Shallow monitoring wells will be constructed by boring with a hollow stem auger to a depth of approximately nine feet below the water table. A 10 foot long, two inch diameter PVC screen will be set to intersect the water table (Figure 6).

The mid depth wells will be constructed the same as the shallow wells except the boring will terminate at the top of the stiff saprolite and a five foot screen will be set at the bottom of the well (Figure 7). The combined well will be constructed similar to the mid depth well except a 15 foot screen will be used and will extend from the bottom of the well to the water table.

The deep wells will be constructed by boring with a hollow stem auger to the top of the confining layer. A PVC outer casing will be set and grouted in place. The boring will then continue through the outer casing to auger refusal. A five foot screen will be set at the bottom of the boring (Figure 8).

Based on the free product assessment in the new wells, additional wells may be required to more closely define the extent of free product in the vicinity of MW3D or other monitoring wells.

4.4 Groundwater Sampling and Analysis

Groundwater samples will be collected using generally accepted groundwater sampling procedures (Appendix II) by Duke Power Company, Scientific Services. In-situ analysis will include pH, Specific Conductance, Temperature, Dissolved Oxygen and Redox Potential.

Groundwater samples will be analyzed by Duke Power Company, Laboratory Services, Huntersville, NC, SCDHEC certification # 99005.

Samples will be analyzed for VOC following EPA Method 601/602 and for S-VOC following EPA Method 625. Samples will also be analyzed for the following total dissolved metals following appropriate EPA Methodology: Barium, Calcium, Iron, Potassium, Magnesium, Manganese, Sodium Tin, Zinc, Cadmium, Chromium, Copper, Nickel, Lead, Arsenic, Selenium and Mercury. Samples will also be analyzed for Chloride, Ammonia, Acidity, Alkalinity, Sulfate, Total Dissolved Solids and Total Organic Carbon.

5.0 SOIL SAMPLING

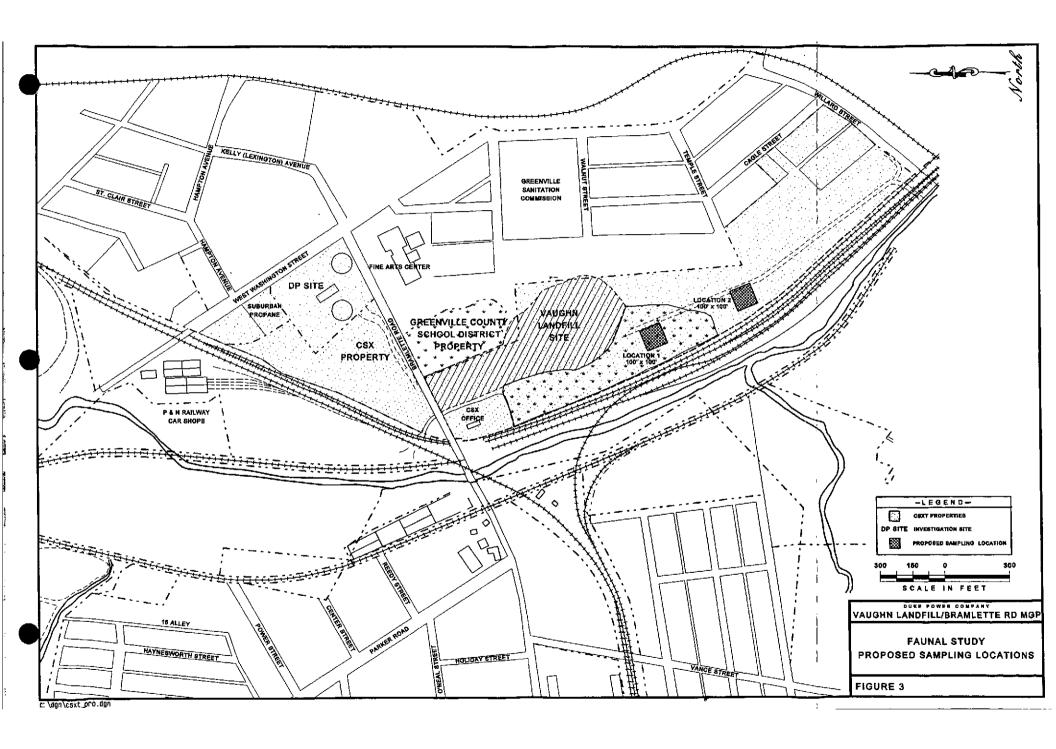
Project Contract

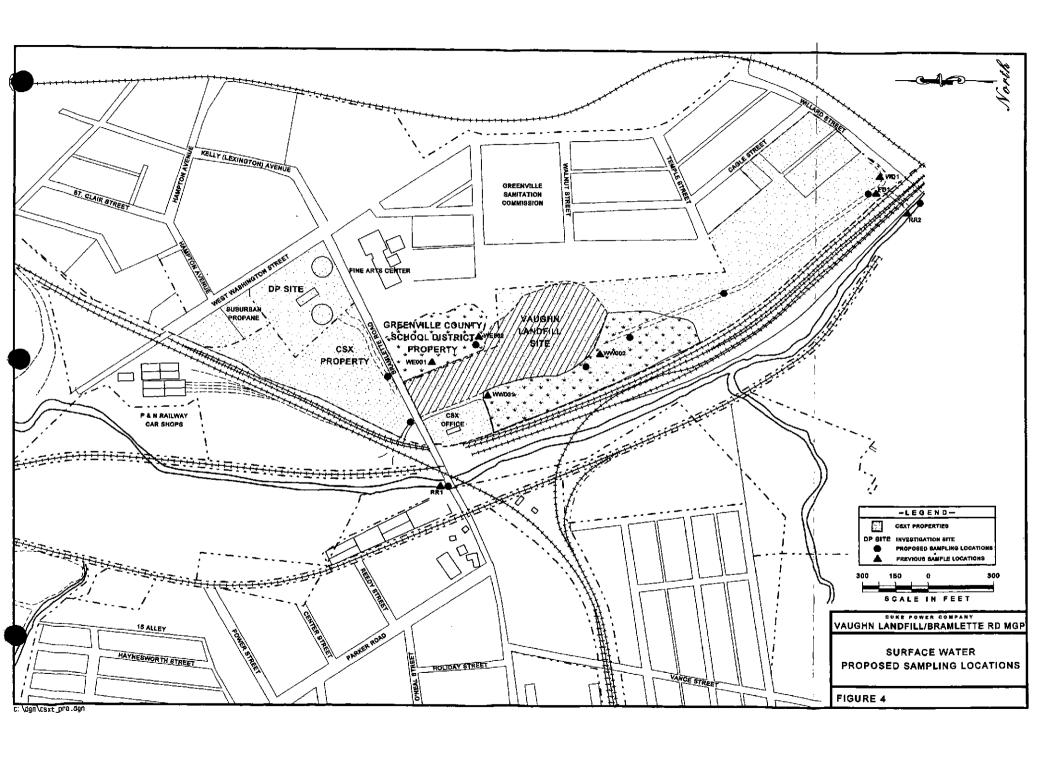
Soil samples will be collected from the auger borings for all new mid depth, combined and deep monitoring wells. Samples will be collected at continuous depths using a split-barrel sample spoon. Soil samples will be classified in the field using the Unified Soil Classification System, and verified by a S.C. registered geologist.

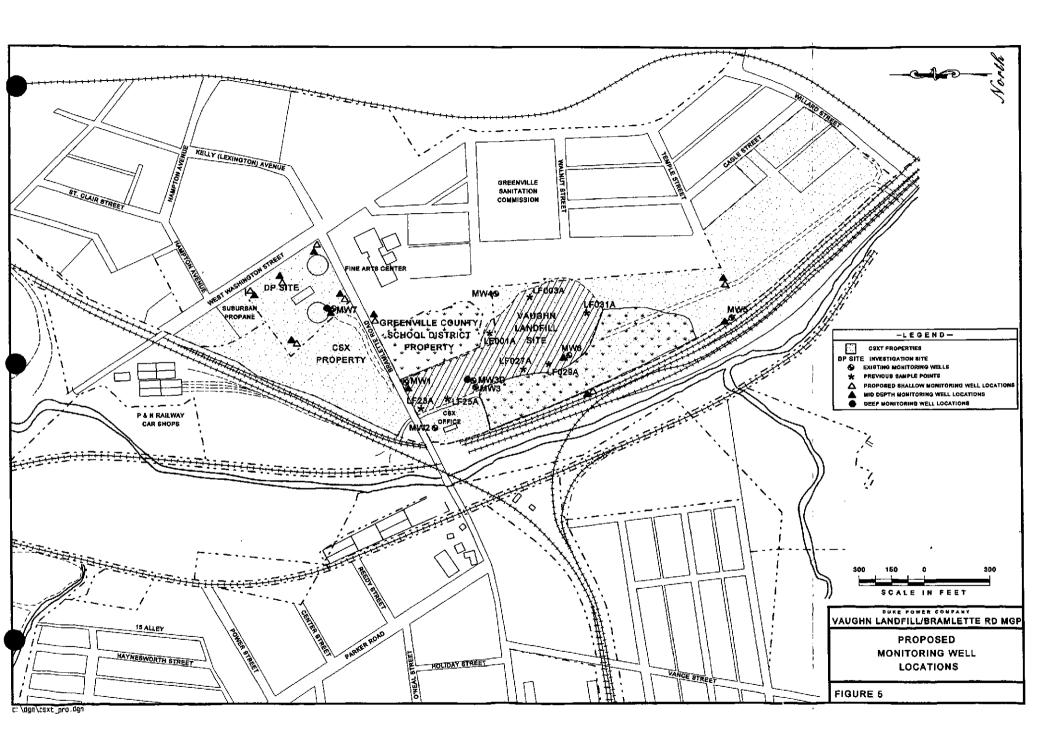
Based on field inspection approximately three samples from each boring will be selected for field screening. One sample per boring will be selected for laboratory analysis for VOC, S-VOC, cyanide and metals.

P&NRY.CO. TEXAS OIL CO. N85*- 00E-FENCE POST FENCE POST N53°-11'E N53*-11'E 200.8 165.8 **FENCE POST** FENCE POST PURIFIER BOXES WATER GAS-PLANT P&NRY.CO. 0 000 WEST WASHINGTON STREET AREA = 3.69 ACRES RETORT RELIEF HOLDER OFFICE BOOSTER ROOM GAS HOLDER GAS HOLDER BRAMLETTE ROAD **DUKE POWER COMPANY** HISTORIC SITE PLAN **BRAMLETTE ST. MGP** GREENVILLE, S.C.

FIGURE 2







NOTES: 1.ALL DIMENSIONS ARE APPROXIMATE.

2.ALL CASING MATERIAL SHALL BE SCH 40 PVC.

3.WELL SCREEN MATERIAL SHALL BE SCH 40 PVC.

FIGURE 6

DUKE POWER CO.

SHALLOW WELL CONSTRUCTION DETAILS

NOTES: 1.ALL DIMENSIONS ARE APPROXIMATE.

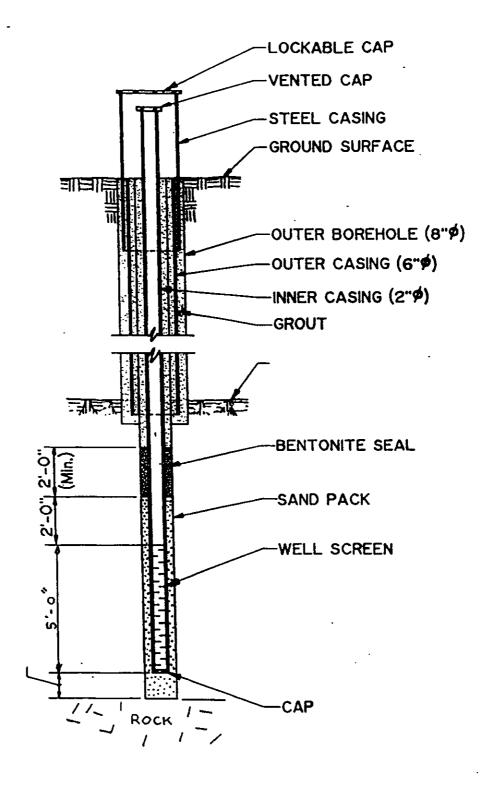
2.ALL CASING MATERIAL SHALL BE SCH40 PVC

3.WELL SCREEN MATERIAL SHALL BE SCH40 PVC

FIGURE 7

DUKE POWER CO.

MID DEPTH WELL CONSTRUCTION DETAILS



NOTES:

- I. ALL CASING JOINTS HAVE SCREW CONNECTORS.
- 2. ALL CASING MATERIAL SHALL BE SCH 40 PVC
- 3. WELL SCREEN MATERIAL SHALL BE SCH 40 PVC

FIGURE 8

DUKE POWER CO.

DEEP WELL
CONSTRUCTION DETAILS

APPENDIX I SCDHEC LETTER



MEMORANDUM

To:

Charles Bristow, Hydrogeologist

Appalachia II District EQC

From:

Tom Knight, PG, Manager /

Geohydrologic Section

Water Monitoring, Assessment and Protection Division

Date:

December 6, 1996

Re:

医和代型虫

CSX Transportation-Bramlette Road Site

Assessment Report (9/3/96)

Greenville County

RECEIVED

DEC 1 1 1996

EQC GREEN

I have reviewed the referenced report and offer the following comments:

- The recommendations are acceptable and should be implemented.
- A meeting should be scheduled to discuss the next phase of investigation with both Duke Power and CSX if both parties are agreeable.
- I agree that the current status of the water supply well at the former Coal Gasification plant should be determined soon.
- The free phase coal tar (DNAPL) at well MW-3B is noted. Some process to remove the product as it collects in this well should be devised.
- The vertical extent of the contaminant plume needs to be determined. The product at MW-3B is at a location distal to the gasification plant. Areas where the coal tar may have settled should be evaluated.
- It is not anticipated that the saprolite is impermeable at the site. The DNAPL at well MW-3B is probably moving along the interface between alluvial sediments and saprolite due to a permeability difference at that location. The top of bedrock and the transition zone also should be investigated.
- I recommend that the next sampling event include the parameters dissolved iron and manganese. Apparently strong reducing conditions or direct reduction of the metals are being developed by the degradation of the hydrocarbons (I noticed heavy iron bacteria throughout the wetlands area). Potential toxic effects of these metals on aquatic toxicity should be evaluated.

Bristow-CSXT Memo. December 6, 1996 - Page Two

- Free product should be remediated as this will remain an ongoing source for dissolved constituents in groundwater.
- Prioritization of activities should include an evaluation of the relative risks from the various exposure pathways with the most likely pathways to be targeted for corrective action to remove the risk first. Additional considerations include long term impact to the environment and to groundwater quality, plus the discharges to the Reedy River, the stream and the wetlands.
- Corrective action will be necessary at this site due to ongoing discharges to the wetlands, DNAPL present in the groundwater, and concentrations of contaminants including known and/or probable human carcinogens in surficial soils.
- Although the plant survey is helpful in establishing the potential impact to the plant community, the potential impact upon the fauna needs to be evaluated as well (especially aquatic toxicity effects-hydrocarbons have been noticed in the stream in various places to its confluence with the Reedy River).
- The source of the sulfate in well MW-3 should be evaluated as this concentration is above the proposed MCL for this compound.
- Please note that the maximum concentration allowable in groundwater for the 15 National Toxicity Program designated polynuclear aromatic hydrocarbons (PAH, i.e. probable human carcinogens) is 2 ug/l (list attached). Non-differentiated PAH maximum concentrations are established at 2 ug/l and all other PAH maximum allowable concentrations in groundwater are established at 25 ug/l. These levels are based upon available data for the protection of human health as advised by the Department's toxicologist, Dr. John Brown.
- Please include field specific conductance and field pH data in the data summary table in future reports.
- Several compounds are present in the groundwater above or near 10 percent of their respective solubility limits in wells MW-1, 3, 6, 7, and in boring LF-023A. This strongly suggests that free phase coal tar is present in the immediate vicinity of each of these locations.

If you have any questions, please contact me at (803) 734-5227.

ΤK

3

Asharasila.

Section 1

enc: Designated PAH's

cc: Doug Johns Quinton Epps

DESIGNATED PAH's

Benz [a] anthracene Benzo[b] fluoranthene Benzo[j]fluoranthene Benzo [k] fluoranthene Benzo[a]pyrene Dibenzo (a, h) acridine Dibenzo[a,j]acridine Dibenz[a,h]anthracene Dibenzo[c,g]carbazole Dibenzo[a,e]pyrene Dibenzo [a, h] pyrene Dibenzo[a,i]pyrene Dibenzo [a, 1] pyrene Ideno[1,2,3-cd]pyrene 5-Methylchrysene

12/5/96

ΤK

APPENDIX II GROUND WATER SAMPLING PROCEDURE

PROCEDURE 3500: GROUND WATER INVESTIGATION
GROUND WATER MONITORING, SAMPLE COLLECTION
AND AQUIFER INVESTIGATIONS
AT DUKE POWER COMPANY LOCATIONS

Prepared August 26, 1996

INTRODUCTION

Duke power has numerous locations throughout the system that require ground water monitoring on a routine and non-routine basis. The ground water monitoring activities can be segmented into three distinct categories. These categories include underground storage tank (UST) monitoring, non-underground storage tank (NUST) monitoring and long-term monitoring.

Underground storage tank monitoring includes all locations where known leaks of these tanks have been documented and they are currently regulated by a State UST program. These monitoring programs target organic contaminants related to gasoline and fuel oil found at transportation facilities and fuel storage facilities at fossil generating stations.

The NUST monitoring includes all ground water monitoring not related to UST's or have dedicated sampling systems installed. These programs center around the abandoned manufactured gas plants located throughout the system. In general, these programs target organic compounds associated with coal tars, however other chemicals such cyanide, phenols, and trace metals are also important constituents monitored at these sites.

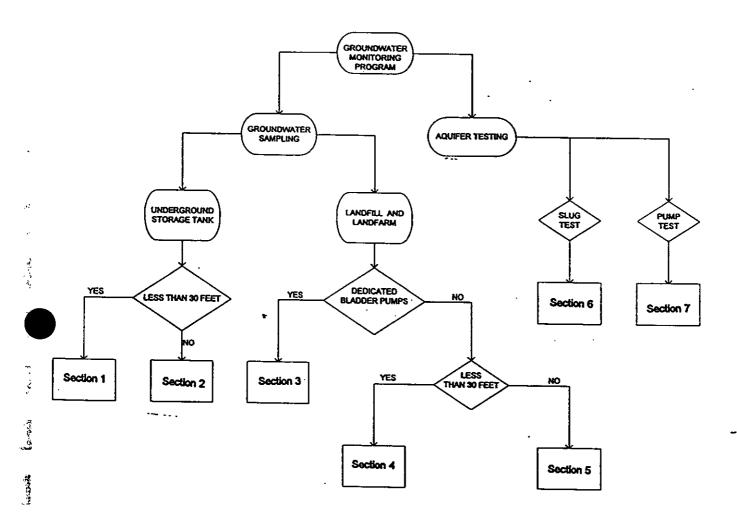
The long-term monitoring programs are programs where dedicated sampling systems have been installed. These systems are found at industrial waste landfills, dry ash landfills, asbestos landfills and land farms located at nuclear and fossil generating facilities.

The purpose for this procedure is to bring a consistent method for conducting the field aspects related to ground water monitoring and assessment. As such the guideline contains 7 sections. Each section details the sampling procedure for each type of program explained above. This procedure is a revision of the Geraghty and Milier Sampling and Analysis Plan prepared in September, 1990. The procedure is an improvement in the G&M Plan in that it addresses the specific sampling requirements for different ground water monitoring programs and at the same time allows flexibility in the way these programs are implemented. In addition, this procedure in principal follows the latest protocols outlined in US EPA, Region IV, Environmental Investigations, Standard Operating Procedures and Quality Assurance Manual, May, 1996.

PROCEDURE 3500

GROUND WATER SAMPLING

PROCEDURE FLOW CHART



SECTION 1

GUIDELINES FOR SAMPLING GROUNDWATER (UST SITES)

MONITORING WELLS LESS THAN 30 FEET DEEP

1.0 EQUIPMENT PREPARATION / STAGING

- Stage the equipment using a site specific checklist, if available, like the one shown at the end of this section.
- To the extent possible, pre-label sample bottles, field data sheets, and custody sheets prior to leaving the lab.
- On the day of sampling, prior to leaving the lab, collect fresh milli-Q water into a plastic carboy. Ensure the carboy is thoroughly rinsed with the milli-Q water. This water will be used to collect field blank samples while in the field.
- If applicable, collect samples for the trip blank directly from the milli-Q source prior to going into the field, label accordingly, and carry the sample with you into the field. Do not open this sample while in the field.
- Samples for trip blanks should include analyses for volatiles (small 40 ml vial).

2.0 SITE PREPARATION

- Organize the sampling equipment, sample bottles, etc. and prepare a "work station" for measuring the indicator parameters.
- Calibrate the Hydrolab water quality analyzer according to the Standard Operating Procedure (SOP) 3220 and document the calibration data on a form similar to the one shown at the end of this section.
- Locate the well locations and decide on a sampling sequence. Groundwater monitoring wells should be sampled from the least contaminated to the most contaminated and from the upper aquifer (shallow wells) to the deeper aquifer (deep wells).
- Unlock each well and measure the volatile organics concentration using the photoionization detector (PID) according to the SOP 3310.
- If the PID registers a reading of greater than 10 pmm, measure for freeproduct.
- Measure the depth to water using the water level meter SOP 3100. If unknown, measure the total depth of well. Perform the necessary calculations as shown on the attached Groundwater Monitoring Data Sheet to determine the well volume needed for purging.

3.0 PURGING

NOTE: If this site has been sampled previously, dedicated tubing should be available. For the sake of discussion, it is assumed this is a new site and new tubing will be needed.

- Put on a clean pair of gloves.
- Place new teflon tubing into the well ensuring that you have reached the bottom. Allow an additional 3 to 5 feet of tubing to extend from the well.
- Cut a 3 to 5 foot section of Tygon tubing and attach the two pieces of tubing together.
- Place the Tygon tubing into the roller head of the peristaltic pump.
- Place the tubing discharge end into a purge container, turn the pump on and adjust the flowrate of the pump to maximum. Continue to pump until one complete well volume has been removed or the well has been evacuated.
- Collect a sample of groundwater into a 500 ml container and immediately
 measure the pH, temperature, and specific conductivity of the sample by
 pouring part of the sample into the Hydrolab calibration cup, cover using the
 soft rubber cap, and rinse the probes thoroughly. Discard the rinse water.
- Fill the cup to the top, and cover the open end and allow the readings to stabilize.
- Once the readings have stabilized, record the values on a field sheet as shown on the attached Groundwater Monitoring Data Sheet.
- Continue to remove one well volume, collect a sample, and measure for pH, temperature, and specific conductivity until the pH has stabilized within 0.20+/- units and temperature and specific conductivity are within ±10% over three consecutive well volumes.
- If the well becomes evacuated to dryness during the course of purging, it is considered that true groundwater is now entering the well during recharge and sampling can begin.
- Once the indicator parameters have stabilized or the well is completely evacuated, sampling may begin.

4.0 SAMPLING

- Allow the well to recharge to ensure adequate volume is available for the collection of samples. If the well has not sufficiently recharged within 8 hours to collect samples, suspend sampling and notify the project scientist.
- Locate all the sample bottles for the well and place initials of the sample collector, and the time of sample collection onto the label. Fill out the custody sheet as shown on the attached example.
- Place a fresh pair of clean gloves on.
- Collect samples in order of their volatility:

- Volatile Organics
- pH, specific conductance
- Semi-volatile organics
- Metals
- Decrease the flowrate of the pump to less than 100 ml per minute to minimize the turbidity of the sample and the potential for volatization of the sample.
 Fill up the sample bottles according to the study specifications and preserve each sample accordingly (acidification, ice, etc.).
- Slowly fill the 40 ml vial for the volatile analyses. These vials are preacidified, therefore, do not overfill but form an inverted miniscus. Place the cap over the top of the miniscus and screw on tightly.
- Invert the bottle and gently tap the sides of the vial and inspect for air bubbles. If air bubbles are present, uncap and try again.
- A total of 3 samples (or three 40 ml vials) per each well location is normally required for volatile samples.
- Fill the brown sample jugs for semi-volatiles. The flowrate can be adjusted to a higher rate for these analyses.
- Once all samples have been collected, turn the pump off. Wearing clean
 gloves, remove the tubing from the pump and well by winding it up into a tight
 circle. Place the tubing into a plastic bag and label the bag specific to the
 well and site for future use. Replace the well cap and lock the well.
- Perform the purging and sampling sequence for each well until all wells have been sampled.

5.0 FIELD BLANKS

 Collect all field blanks by sampling directly from the plastic carboy containing the milli-Q water. Complete the labeling requirements for the sample and custody sheet.

6.0 POST SAMPLING

- Perform the post calibration of the Hydrolab water quality analyzer according to the SOP 3220.
- Ensure that all samples have been properly labeled and are preserved according to the analyte.
- Ensure the custody sheet has been accurately completed.
- Place a custody seal over all coolers not directly delivered to the laboratory by the sampling team.
- Review all field sheets and calibration sheets for accuracy and completeness.
- .Ensure that all wells have been locked and complete a final site inspection and fill out a Site Checklist like the attached example.
- Ensure that all data is filed accordingly upon return to the laboratory.

SITE: TODDVILLE GARAGE UST

WELL LOCATIONS: 28 - MW1, MW2, MW3, MW4, MW5, MW8, MW7, MW8, MW9, MW10, MW11, MW12, MW13, MW14, MW15, MW16, MW17 MW18, MW19, MW20, MW21, MW22, MW23, MW24, MW25, MW26, MW27, MW28

TRIP BLANK: 2 (625 and VOC)
FIELD BLANK: 2 (625 and VOC)

QC SAMPLE: 1 (625)

= preservation pre it fiel

# OF LABEL	•.	BOTTLE VOL (ml)	BOTTLE TYPE	j,	5.	ANALYSES	PRESERVATION
90 0 90 31 29	90 30 90 31 29	300 40 300 40 2500 7 190 500	Clear BOD Small brown vial Clear BOD Small brown vial Brown Jug Clear plastic			VOC 601/6527 VOC 504.1) VOC (504.1) VOC (504.1) 625 Lead	Place on ice, then acidify with 5 ml of HCl. 5573 Pour the HCl acidified sample from the BOD bottle and place on ice. Place on ice, then acidify with 5 ml of HCl. 5073 Pour the HCl acidified sample from the BOD bottle and place on ice. Place on ice. Acidify with 5 ml of HNO3.
2 1 2 2 3 2 2 3 3	pH buffers Conductivit 500 ml bott Digital them Calculator P avderless	d connector for (7.00, 4.00) y standard (matelies for Hydrolab nometer gloves ration forms ms	ch previous data)		6 5 24 6	Small cooler Large cooler Ice Evacuation container Pocket knife / scissor Hard hat Safety glasses Plastic bag Rain gear Tool box Gas can	> COLLECT THE MILLI-Q WATER > COLLECT AND TIME THE TRIP BLANKS > GET THE HYDROLAB READOUT UNIT > GET ICE
60 40 4 2 1 box	50% HNO3 50% HCl via Tags for 625 Water level s Product Inter 1.5 inch balle PID probe	ls samples neter face meter			3 4 28 2 box 2 box 2 box	Generator Peristatic pump Dedicated tubing Peristatic pump tubing PVC tubing String	· : . : : : : :

DUKE POWER COMPANY GROUNDWATER MONITORING DATA SHEET									
GROUNDWATI	ER MONI	TORING	3 DATA	SHEET		 		· · ·	
LOCATION:	TODAY	CLLE							
PROJECT TITLE:	UST					•			
SAMPLING DATE:	10-Jan-96		!	FIELD CREW:	LDC	, GLF		,	
MONITORING WELL NUM	IBER:	mwı				VEL METER	T I	Ihvest [400	
WELL VOLUME CALCUL	ATION	<u></u>			• •				
WELL WELL DIAMETER DEPTH (INCHES) (FEET) 2" 24.65 4" N/A LITERS PER WELL VOLU	- JME REMOVED	WATER LEVEL (FEET) 8.92 N/A	= =	WATER COLUMN (FEET) 15.73 N/A OBSERVATIO	x x	3.14 x r^2 0.0218 0.0873	n n	VOLUME (FT^3) O.3429 N/A	
WELL LITERS TO	REMOVE:		ODORS DE	TECTED:	FREE PRO	DUCT MEAS	UREME	NT:	
VOLUME (FT^3 x 28.32 W	T^3)		TYPE:	FUEL	METHOD:	INVES.	TIGA'	TOR.	
2" WELL	4" WELL		STRONG:		THICKNES	SS:	0.6	ol ff	
1 9.71	N/A		MINOR:		OTHER:		•		
5			NONE:		PRODUCT	LEVEL (ft):	8,0	11	
10					<u> </u>	_			
20			PID Readin	g= 15.4	ppm				
									
WATER METHOD LEVEL (P=PUMP) (FEET) (B=BAIL)	VOLUME (LITERS)	EVACUATED VOLUME (LITERS)		pH (units)	TEMP (deg C)	SPECIFIC CONDUCT. (umho/cm)	1000000	COMPLETE EVACUATION (Y/N)	
8.92 P	10	10		5.82	14.8	481		7	
N/A P	10	20		5.63	13.2	539		Ν	
P P	10	30		5.61	13.0	580		Ν	
P	10	40		5.64	12.9	569		N	
	\ <u>.</u>								
		వ	A COLUMN	Eδ		<u> </u>	7		
	'				ļ	ļ			
				<u> </u>	<u> </u>	<u> </u>			
	ļ				<u> </u>	ļ		·	
COMMENTS: WATER LEVEL AND WELL DEPTH REFERENCED TO TOP OF PVC WELL CASING.									
- ypore gron	nd well	. , તે વ	200	snape.		<u> </u>			
		•	·						

Proje Resu Addr Matr	NT:T ect Name ³ : ilts to/Phone ess and/or P ix (type of sa	000VELLI "ST ":RS ROFS":	antini / 6	329	ANA / <u>5</u> 2	LYS	SIS RE				S REQ	UEST (m	ay note	bottle t	ype—N	MUST N	IOTE F	PRESE	YVATI	VE'*
FRAC	CHEMPLOT Number	- Sampl	le Description or ID ¹⁰	sa Date	Collect mpling i	instruc	ing etions ¹¹ Name	- 1	(plus re	highest	EPA 602	(xylenes, MTBE) isopanyl ether	E08)							
			mwl .	1/10/9	6 14¢	20	LAC				3				ļ					
			FIELD BLANK	 	14		LOC		Н		3	 		 	┼			 	 	
			TRIP BLANK	 		30_ 0.5	LOC		\vdash		3_	 				+	 	 	 	
			OC - MWI	 * -		05	LDC		-		 	-			-	 	 		· · · · ·	
				 				十一			 	11	+		 					
								1												Ľ
				Ì													<u> </u>			
																<u> </u>				
								_			<u> </u>	ļ	-	4	 	 		 	<u> </u>	
				 				_			 		 			-	 	 	<u> </u>	
		<u> </u>		 						4	 		- 	-			 	┪—		
			······				•				 	 	+	-	 		 	- 		
	:			 				-}			 		+	1	 	1	 	<u> </u>		
				1				1	一		 	_	+		1					
															<u> </u>					
Sam Nam		ed WYes	210 "		Total # o	of sam	ples ¹⁸ :	L			9									
Deliv	ered by":	- U	Delivered by:		1	Deliv	ered by:				Turna	round	Requ	ested18:						
	Date/Time: Date/Time: Date/Time:			Time:				□ Ru	sh (2 v	3 weel veeks)										
Received by: Received by: Received by:				ved by:					_	cy Rus	sh equeste	d			·					

Comments¹⁷: _

^{*} See instructions on back of form.

* White, canary — LS Files Pink — Client Copy

GUIDELINE TO OPERATION OF A PERISTALTIC PUMP

Equipment

Pump
Pump head
Special tygon tubing
PVC tubing for well
Generator

Method

- * Connect pump to generator
- * Connect special tygon tubing to well tubing placing intake end into well
- * Open pump head
- * Insert special tygon tubing into pump head
- * Close pump head
- * Determine flow direction through pump head
- * Start generator
- * Set flow rate (usually maximum for purging)
- * Set flow toggle switch in appropriate setting (forward or reverse)
- * To stop flow, set toggle switch in center position

SECTION 2

GUIDELINES FOR SAMPLING GROUNDWATER (UST SITES)

MONITORING WELLS 30 FEET DEEP AND GREATER

1.0 EQUIPMENT PREPARATION / STAGING

- Stage the equipment using a site specific checklist, if available, like the one shown.
- To the extent possible, pre-label sample bottles, field data sheets, and custody sheets prior to leaving the lab.
- On the day of sampling, prior to leaving the lab, collect fresh milli-Q water into a plastic carboy. Ensure the carboy is thoroughly rinsed with the milli-Q water. This water will be used to collect field blank samples while in the field.
- Collect samples for the trip blank directly from the milli-Q source prior to going into the field, label accordingly, and carry the sample with you into the field. Do not open this sample while in the field.
- Samples for trip blanks should include analyses for semi-volatiles (large brown jug) and volatiles (small 40 ml vial).

2.0 SITE PREPARATION

- Organize the sampling equipment, sample bottles, etc. and prepare a "work station" for measuring the indicator parameters.
- Calibrate the Hydrolab water quality analyzer according to the SOP3220 and document the calibration data on a form similar to the one shown.
- Locate the well locations and decide on a sampling sequence. Groundwater
 monitoring wells should be sampled from the least contaminated to the most
 contaminated and from the upper aquifer (shallow wells) to the deeper
 aquifer (deep wells).
- Unlock each well and measure the volatile organics concentration using the photoionization detector (PID) according to the SOP 3310.
- If the PID registers a reading of greater than 10 pmm, measure for freeproduct.
- Measure the depth to water using the water level meter SOP 3100. If unknown, measure the total depth of well. Perform the necessary calculations as shown on the attached Groundwater Monitoring Data Sheet to determine the well volume needed for purging.

3.0 PURGING

- Put on a clean pair of gloves.
- Remove a bailer from the protective wrapping and secure a string through the bailer top.
 - NOTE: The Grundfos Redi-Flo 2 submersible pump can be used as an alternative to the bailer.
- Lower the bailer into the well, allowing enough string to equal the well depth
 plus three feet. Cut the string, tie a loop on the end and place the loop over
 your hand.
- Remove the filled bailer by winding or looping the bailer string ensuring that
 no contact with any surfaces is made. Discard the groundwater into a purge
 container. Continue to "bail the well" until one complete well volume has
 been removed.
- Collect a sample of groundwater into a 500 ml container and immediately measure the pH, temperature, and specific conductivity of the sample.
- Pour part of the sample into the Hydrolab calibration cup, cover using the soft rubber cap, and rinse the probes thoroughly. Discard the rinse water.
- Fill the cup to the top, and cover the open end and allow the readings to stabilize.
- Once the readings have stabilized, record the values on a field sheet as shown on the attached Groundwater Monitoring Data Sheet.
- Continue to remove one well volume, collect a sample, and measure for pH, temperature, and specific conductivity until the pH has stabilized within 0.20+/- units and temperature and specific conductivity are within ±10% over three consecutive well volumes.
- If the well becomes evacuated to dryness during the course of purging, it is considered that true groundwater is now entering the well during recharge and sampling can begin.
- Once the indicator parameters have stabilized or the well is completely evacuated, sampling may begin.

4.0 SAMPLING

٠,

- Allow the well to recharge to ensure adequate volume is available for the collection of samples.
- Locate all the sample bottles for the well and place the initials of the sample collector, and the time of sample collection onto the label. Fill out the custody sheet as shown on the attached example.
- Place a fresh pair of clean gloves on.
- Gently lower the bailer down the well to minimize the turbidity and potential for volatilization of the sample. Fill up the sample bottles according to the study specifications and preserve each sample accordingly (acidification, ice, etc.).

- Gently displace the ball valve located near the bailer bottom and slowly fill
 the 40ml vial for the volatile analyses. These vials are pre-acidified,
 therefore, do notoverfill but form an inverted miniscus. Place the cap over
 the top of the miniscus and screw on tightly.
- Invert the bottle and gently tap the sides of the vial and inspect for air bubbles. If air bubbles are present, uncap and try again.
- A total of 3 samples (or three 40 ml vials) per each well location is normally required for volatile samples.
- Fill the brown sample jugs for semi-volatiles.
- Once all samples have been collected, discard the bailer. Replace the well cap and lock the well.
- Perform the purging and sampling sequence for each well until all wells have been sampled.

5.0 FIELD BLANKS

 Collect all field blanks by sampling directly from the plastic carboy containing the milli-Q water. Complete the labeling requirements for the sample and custody sheet.

6.0 POST SAMPLING

- Perform the post calibration of the Hydrolab water quality analyzer according to the SOP 3220.
- Ensure that all samples have been properly labeled and are preserved according to the analyte.
- Ensure the custody sheet has been properly filled out.
- Place a custody seal over all coolers not directly delivered to the laboratory by the sampling team.
- Review all field sheets and calibration sheets for accuracy and completeness. Ensure that all data is filed accordingly upon return to the laboratory.
- Ensure that all wells have been locked and complete a final site inspection and fill out a Site Checklist like the attached example.

SITE: TODDVILLE GARAGE UST

PID probe

WELL LOCATIONS: 28 - MW1, MW2, MW3, MW4, MW5, MW6, MW7, MW8, MW9, MW10, MW11, MW12, MW13, MW14, MW15, MW16, MW17
MW18, MW19, MW20, MW21, MW22, MW23, MW24, MW25, MW26, MW27, MW28

TRIP BLANK: 2 (625 and VOC) FIELD BLANK: 2 (625 and VOC)

QC SAMPLE: 1 (625)

	# OF	# OF	BOTTLE	BOTTLE			•	
	LABEL	вот	VOL (ml)	TYPE			ANALYSES	PRESERVATION
•	0	30	300	Clear BOD			VOC	Place on ice, then acidify with 5 ml of HCI.
_	90	90	40	Small brown vial			voc	Pour the HCl acidified sample from the BOD bottle and place on ice.
	0	30	300	Clear BOD			VOC (504,1)	Place on ice, then acidify with 5 mi of HCl.
	90	90	40	Small brown vial			VOC (504.1)	Pour the HCl acidified sample from the BOD bottle and place on ice.
	31	31	2500	Brown Jug			625	Place on ice.
	29	29	500	Clear plastic			Lead	Acidify with 5 ml of HNO3.
	2	Hydrolab ł	(20			6	Small cooler	> COLLECT THE MILLI-Q WATER
	1	Gall call and connector for Hydrolah				5	Large cooler	
	,				_	24	lca .	> COLLECT AND TIME THE TRIP BLANKS
	2					6	Evacuation container	
	3				 .		Pocket knife / scissor	> GET THE HYDROLAB READOUT UNIT
	2						Hard hat	
_	2						Safety glasses	> GET ICE
	3	Powderles	s gloves				Plastic bag	
			bration forms				Rain gear	Ser plant
		Custody fo	rms	:		1	Tool box	50° C
_		Copy of pr	evious data			1	Gas can	
		Mill-Q wat	er					
	30	50% HNO	3 vials			3	Generator	
	60	50% HCI v	fais			4	Peristaltic pump	
	40	Tags for 6	25 samples		:	28	Dedicated tubing	
	4	Water leve	l meter		2	box	Peristattic pump tubing	
	2	Product Int	erface meter	•	2	box	PVC tubing	
	1 box	1.5 inch baller			2	String		

ľ	LOCATION: PROJECT TO	ITLE:	TODE UST	VILLE						
' <u> </u>	SAMPLING	DATE:	10-Jan-96		<u></u>	FIELD CREW:	L01	c, GLF		
	MONITORIN	G WELL NUM	//BER:	MWIZ]			EVEL METER	·	1000
	WELL VOLU	IME CALCUL	ATION							
	WELL DIAMETER (INCHES) 2" 4" LITERS PER	AMETER DEPTH (FEET) 2" 48.25 4" N/A TERS PER WELL VOLUME REMOVI		WATER LEVEL (FEET) 15.74 N/A	CVEL = COLUMN X (FEET)				= =	VOLUME (FT^3) 0.7087 N/A
-4	WELL	LITERS TO	REMOVE:		ODORS DE	TECTED:	FREE PRO	DUCT MEAS	SUREME	vT:
4	VOLUME	(FT^3 x 28.32 LF	T^3}		TYPE:		METHOD:			
1		2" WELL	4" WELL		STRONG:		THICKNE	SS:	i	
	1	20.07	N/A		MINOR:		OTHER:	 -		
Ž	5 10				NONE:	<u> </u>	PRODUCT	LEVEL (ft):	N/A	
	20				PID Readin	g= 0·0	ppm]		
, e	WATER LEVEL (FEET)	METHOD (P=PUMP) (B=BAIL)	VOLUME (LITERS)	EVACUATED VOLUME (LITERS)		pH (units)	TEMP (deg C)			COMPLETE EVACUATION (Y/N)
.3	15.74	<u> </u>	20	20		6.57	15.6	493		N
3	N/A	<u>B</u>	20_	40	7974761111 No. 1	6.49	17.1	481		N
		В	20	60		6.49	17.1	476		N
		 					· · ·	<u> </u>		
		 	<u></u>		Ami	<i>-</i>	ļ			
³				 						
;										
									12:15:	
· ;	COMMENTS	: WATER LE	VEL AND WE	LL DEPTH RE	FERENCED '	TO TOP OF PV	C WELL C	ASING.	<u> </u>	

CLIE Proje Resu Addr Matri	NT ² : ect Name ³ : its to/Phone ess and/or P ix (type of sa	·	ANA ANT / 5	Allysis Red		ST F	S REQ	UESTE (ma	y note	ottle ty	peM DL or	UST N Metho	OTE P	RESEF	PVATIV	/E ¹²
FRAC	CHEMPLOT Number	Sample Description or ID'°	Sampling Date Time	instructions" Name	EPA (1 7	EPA (xylew	isophopyl EDB)								
		WAIS .	1/10/96 10	00 LAC	1		3						 			
}		FIELD BLANK TRIP BLANK		15 LDC 30 LDC	 		3									
 		ac - MW12		5 LOC												
												<u> </u>	ļ			ļ
																╂╍──┤
			 				 					 				
			 				-					Ì				
			1													
																
				<u> </u>	<u> </u>	*	 									
			 	ļ	 							 	 			
 	:		 	 	 		 				 	 				
			 	 												
Samp	le Preserv	ed Oyes ONO " D. Cololl	Total #	of samples ¹⁵ :	4		9					<u> </u>	<u> </u>			
Delive	ered by 16:	Delivered by:		Delivered by:			1 -	round l	-							
Date/	Time:	Date/Time:	<u> </u>	Date/Time:			☐ Rus	utine (3 sh (2 w	eeks)	•						
Received by: Received by: Received by:								ergenc e Resu			1					
Comn	nents17:															

^{*} See instructions on back of form.

[&]quot;White, canary - LS Files Pink - Client Copy

	·-			
(
			,	

APPENDIX C

Summary of Bramlette Road MGP Site Development

BRAMLETTE ST. MGP GREENVILLE S.C.

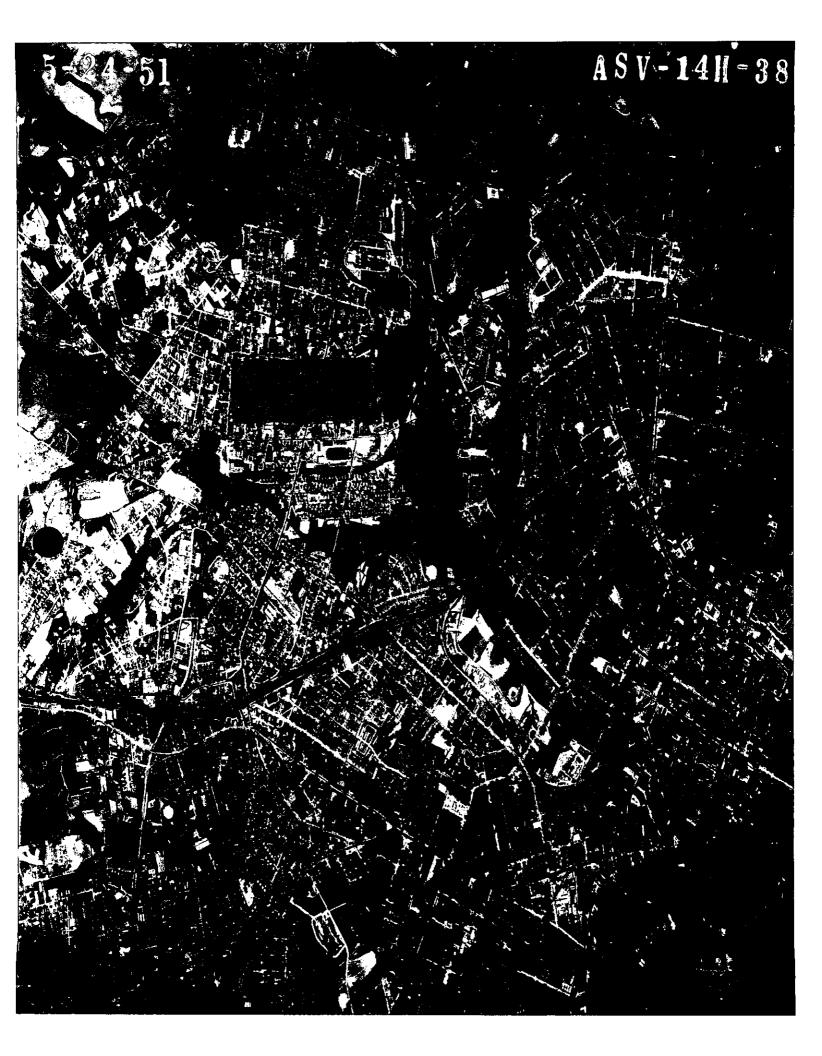
1916:	Contract to construct a new coal gas plant on a former baseball field near the Southern Railway Depot awarded to Gallivan Construction Company by Southern Public Utilities. The new plant will replace the Broad St. plant which used the water gas process (oil and coke) which is more expensive. Coke from the new plant will be sold.
1917:	The new plant is finished in April. Capacity is 170,000 ft3/day. Building is 68'x46', 2 benches, 6 retorts each. Tar and ammonia washer tanks for 18,000 gal. tar and 10,000 gal. ammonia. Four inch line to gas holders at Broad St. facility. Facility produces 2,000 tons of coke annually.
1918:	Addition to Bramlette gas plant, capacity up to 350,000 ft3/day. Water gas plant (Broad St) used for peaking. Southern Utilities is replacing all its water gas works with coal gas.
1920:	Add new water gas set, purifiers, tar extractor and holder to (Broad St.?) plant. Extend distribution system west of Reedy River. Feeder lines to north and east sections of Greenville made last year. Capacity is 350,000 for coal gas and 1,000,000 ft3/day for water gas in Greenville.
1922:	Bramlette plant is increased to 560,000 ft3/day capacity. 75% of population within city used gas for cooking or heating or both, serves 3,000 customers. 44 miles of 6" to 16" mains. Bramlette St. holder is 200,000 ft3.
1945:	A water gas plant starts operation at Bramlette St. This plant doubles the gas production capacity in Greenville. The new plant uses the coke by-product from the coal gas plant and mixes it with oil. A 50,000 ft3 gas holder is also constructed.
1951	Duke Power sells the gas operation and property to Piedmont Natural Gas.
1963	Piedmont Natural Gas sells the property to Piedmont and Northern Railway.
1967	Piedmont and Northern Railway is merged with Seaboard Coast Line Railroad Company.

ţ			
		,	
•			
	•		

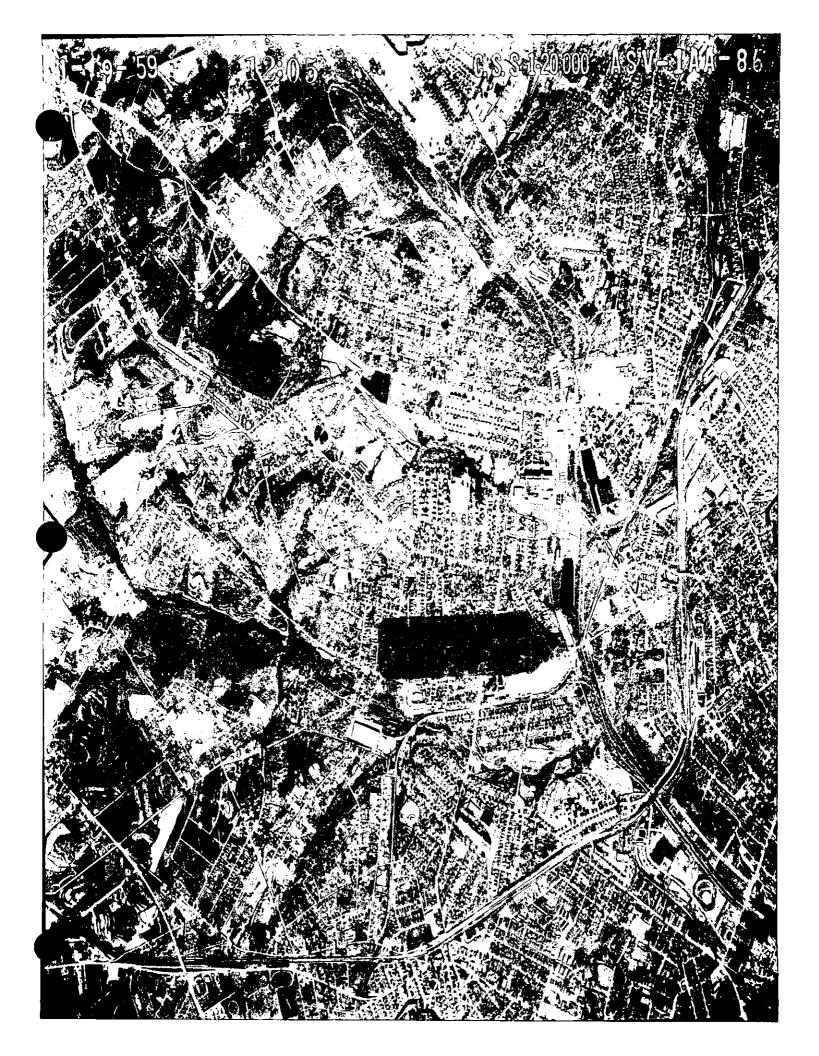
APPENDIX D

Aerial Photographs













APPENDIX E

Phase III Faunal Assessment Report

INTRODUCTION

Aquatic invertebrates, amphibians, and zooplankton were sampled at two locations at the Bramlette site on March 17, 1999; the fish were sampled at the same two locations on March 18. The purpose of the sampling was to inventory the aquatic fauna and to determine if the coal tar had any effect on the aquatic fauna. Sampling locations were established in an area directly over the coal tar plume and in an area downstream, outside the plume.

SITE DESCRIPTION

The Bramlette wetlands area is subject to greatly varying water depths depending on the intensity and duration of rainfall during a particular year. During the course of the year much of the wetland area dries out so that only a few pools and Ditch 5 might have water throughout the year. Any leaching from the coal tar plume would have the greatest effect on the fauna during low water periods when groundwater would make the greatest contribution to total flow. Conversely, any effects of leachate would be least during wet periods when surface runoff waters would dominate the flow. During March 17 and 18 sampling the water in the wetlands was confined to the flow along the landfill above the beaver dam and in Ditch 5; there were scattered, isolated pools of water in the rest of the wetland area. We assume, therefore, that our sampling was conducted during a "worst case" situation in terms of high potential leachate concentration in the surface waters.

METHODS

Two sampling locations, two 100 foot squares, were established on March 17,1999; one was designated Plume Sampling Area (PSA) and the other Non-plume Sampling Area (NSA)(Figure 1). A global position system unit (Trimble Pathfinder Basic Plus) was used to locate the northwest corner of the PSA and the southwest corner of the NSA. The PSA was located so that half the sampling was done above and below an active beaver dam. The dam was located approximately 20 feet south of the ditch cut through the Vaughan landfill. The maximum water depth behind the dam was about 3.5 feet; below the dam there was a broad seepage area with one deeper channel approximately 10 to 15 feet wide with water less than a foot deep. No current measurements were taken but a very low flow was evident.

The NSA was also located above and below a beaver dam, but this dam did not appear to be maintained. The water was confined to the ditch draining the site. Below the dam the ditch was about ten feet wide and water depth was about 18 inches. Above the dam the water was about 3 feet deep and was largely confined to the ditch. The majority of the site was dry; small, isolated pools were scattered throughout the site.

Fish, aquatic macroinvertebrates, and zooplankton were sampled in each of the squares. Amphibians were sampled within each square and, also, in isolated pools between the ditch and sewer lines to the west.

Zooplankton

Zooplankton was sampled by taking two 3 meter horizontal hauls with a 0.3 meter diameter net with 80u mesh. The contents of the plankton bucket were transferred to a sample bottle and preserved with formalin. In the laboratory, subsamples were examined under a dissecting microscope (12X to 80X) and a compound scope was used for making identifications. The sample bottles were brought to 220 ml with tap water. The samples were thoroughly agitated and four 5 ml subsamples were withdrawn and placed in a square Petri dish with gridlines. Due to the high organic matter content, the samples were examined under a dissecting microscope so that organic matter could be moved to expose zooplankton for counting. All zooplankters in a square were counted at 40X magnification under a Zeiss dissecting microscope. For each sampling location all taxa from each square counted were summed and a percentage per taxon was calculated. Three squares were counted for the PSA and 5 squares were counted for NSA; numbers per liter were calculated for each sampling location. Several additional scans of each sample were made to compile a species list.

Amphibians

Amphibian collections were conducted at station PSA and NSA. In addition, collections were made in shallow water pools adjacent to NSA. Collection were made using a long handled dip net with a 1000 micrometer mesh bag-net, an enamel pan used as a dipper, and by hand. Incidental amphibian collections were made during electro-fishing. All specimens were preserved in the field in 15% buffered formaldehyde solution. Final specimen storage is in 70% ethyl alcohol. Salientid (frogs and toads) larvae were identified using Altig (1970) and Blair et al. (1968). Adult salientids were identified using Martof et al. (1980).

Macroinvertebrates

Macroinvertebrates were collected with 1000-micron mesh kick net. The collections were timed so that the sampling effort at each site was the same. Organisms were sorted from debris in the field, preseserved, and returned to the laboratory for identification.

Fish

Fish were sampled for 30 minutes at each location using a backpack electrofisher. As many of the stunned fish as possible were collected with dip nets, preserved in 10% formalin, and returned to the lab for identification. All fish were identified to species, enumerated, and individually measured for total length (mm).

RESULTS AND DISCUSSION

Zooplankton

Zooplankton of temporary waters vary greatly in number of species and abundance (Galindo et al. 1994; Serrano et al. 1998). Serrano and Toja (1998) reported annual population densities ranging from 21 to 536 individuals per liter in 1991/1992 and 1 to 488 individuals per liter in 1992/1993. The population densities recorded from Bramlette fit into this range. The densities from the NSA location were very low because the net tows did not sample many of the zooplankters that are associated with the substrate. Zooplankton from the PSA and NSA locations were carrying eggs and the presence of immature forms indicated ongoing successful reproduction and survival. The extreme differences in total densities between the locations was due to habitat types. The PSA was more limnetic (due to the beaver dam) as evidenced by *Synchaeta, Bosmina, and Brachionus*; the NSA populations were dominated by benthic forms such as *Scapholebris* and *Simocephalus*. Based on the zooplankton sampling results, there was no obvious plume effect.

Table Z-1. Percent composition of zooplankton at two Bramlette sampling locations.

		Taxon	Numbers		Percenta	ıge	#/liter	
PSA						•		
	Rotifera	Synchaeta spp.	118		93.6%		55.3	
	Copepoda	Nauplii		3		2.4%)	1.4
	Cladocera	Bosmina longirostris	5		4.0%		2.3	
NSA								
	Copepoda	Cyclops vernalis	1		50%		0.28	
	Cladocera	Simocephalus (immat	ure) 1		50%		0.28	

Table Z-2. Species list of zooplankton found at two Bramlette sampling locations.

	PSA	NSA
Rotifera		
Synchaeta spp.	X	
Brachionus sp.	X	
Cladocera		
Bosmina longirostris	\mathbf{X}	X
Illyocryptus sp.	X	
Scapholebris kingi		X
Simocephalus exspinosus		X

Copepoda

Cyclopoida		
Cyclops vernalis	X	X
*Copepodites	X	X
*Nauplii	X	X
Harpacticoida	X	

^{*} Immature developmental stages.

Amphibians

Bull frog larvae (*Rana catesbeiana*), of approximately the same size were collected at all three sampling stations. In our region this is the only species where larvae regularly over winter as tadpoles taking approximately one year to develop into adults (Martof et al.,1980).

Eleven salientid (frogs and toads) egg masses were observed in the marsh samplingarea. These egg masses were in irregular balls indicating probable ranid parentage. The observed egg masses were much larger than would be expected from the tree frog species (all of which are small) expected to be found in the upper Piedmont of South Carolina.

Calls of the spring peeper, *Hyla crucifer*, were heard throughout the entire area during the sampling period. In addition, three distinct additional salientid calls were also noted, although adults associated with these calls were not observed. No salamander species were observed.

Larval and adult collections, observed egg masses, and adult calls in and around the sampling stations is indicative of successful salientid breeding within the sampled Bramlette wetland. Amphibian collections are summarized in Table A-1.

Table A-1. Amphibian species collected at three Bramlette sampling locations. L=larvae (tadpoles); A=adults.

Species	PSA	NSA	NSA-
			pool
Rana catesbeiana - L	X	X	X
R. sphenocephala -A	X	-	-
Hyla crucifer - A	-	-	X
Egg masses	-	-	X

Macroinvertebrates

A total of 34 taxa were collected at the Bramlette site, 26 within the area potentially affected by the plume, and 19 outside the plume area (Table M-1). The two locations had 11 taxa in common. The available habitats at the respective locations accounts for much of the differences in the macroinvertebrate communities. Although the PSA site is primarily lentic, and the NSA lotic, many of the insects found may inhabit either environment (Merritt and Cummins 1996). The PSA site had a greater variety of habitats available with the pool area of emergent vegetation, snags, silt, and leaf litter, and a smaller area of flowing water with some sand, silt, and leaf litter. At the NSA habitat types consisted primarily of snags, leaf litter, and silt.

The beaver dam at PSA was old, and the pond had been there for some time, and macroinvertebrates collected there had obviously established reproducing populations. It does not appear that coal tar has had an effect on the macroinvertebrate community.

Table M-1. Macroinvertebrates collected during the
 Bramlette site sampling on March 17, 1999. An "R"
 means that the organism was rare (1 or 2 collected),
 "C" = common (3-9), and "A" = abundant (10 or more).

TAXON	PSA	NSA
Annelida	-	
Oligochaeta		
Haplotaxida		
Naididae		
Pristina sima	R	•
Tubificidae	С	Ŕ
Limnodrilus claparedianus	С	•
Limnodrilus profundicola	R	•
Spirosperma ferox	A	Α
Lumbriculida		
Lumbriculidae		
Eclipidrilus spp.	•	С
Lumbriculus	С	•
Arthropoda		
Crustacea		
Decapoda		
Cambaridae		
Procambarus troglodytes	A	А
Insecta		
Coleoptera		
Curculionidae		
Lixus spp.	R	_
Dytiscidae		•
Agabus obtusatus	R	
Agabus punctatus		R

Agabus stagninus	С	
Hydroporus spp.	С	R
Hygrotus spp.	R	
Neoporus lynceus	С	С
Hydrophilidae		
Tropisternus blachleyi blachheyi	R	R
Dintoro		
Diptera Ceratopogonidae		
Palpomyia-Bezzia complex		Б
Chironomidae-Chironominae	•	R
Chironomus spp.	7.	C
Glyptotendipes spp.	A	С
	С	•
Polypedilum spp. Chironomidae-Orthocladiinae	R	•
Orthocladius spp.	•	R
Psectrocladius spp.	•	R
Chironomidae-Tanypodinae	-	_
Krenopelopia spp.	A	С
Meropelopia spp.	R	•
Procladius spp. Simuliidae	С	•
	-	
Simulium spp.	Ř	•
Stratiomyidae	R	•
Hemipterara		
Gerridae		
Neogerris hesione		С
Heteroptera		
Corixidae		
Trichocorixa spp		R
1110oco11nd bpp	•	K
Odonata-Anisoptera		
Aeshnidae		
Aeshna umbrosa	•	R
Libellulidae		
Plathemis lydia	С	•
Trichoptera		
Limnephilidae		
Ironoquia spp.	A	R
Mollusca		
Gastropoda		
Basommatophora		
Physidae		
Physella spp.	С	R
Dologymode		
Pelecypoda Heterodonta		
necerodonia		

Sphaeriidae			A	A
TOTAL	TAXA	FOUND	26	19

Fish

Only three species of fish were collected at the two sampling locations (Table F-1). Eastern mosquitofish (*Gambusia holbrooki*) were numerically dominant at each location and they were considerably more abundant at the station located within the coal tar plume (PSA) than below it (NSA). The mean length for eastern mosquitofish at the PSA station was 25 mm with a range in lengths of 11 to 40 mm. This indicates that this species of fish was reproducing at this location and that several year classes were present.

The station located oustside of the coal tar plume (NSA) had greater species diversity, but lower fish densities (Table F-1). In addition to the eastern mosquitofish, green sunfish and bluegill were also collected at the NSA station. However, only 5 fish were collected at this station compared to 115 collected at the PSA station. With the low numbers of fish collected at the NSA station, it was difficult to determine if reproduction was occurring here or if these fish were migrants from upstream (eastern mosquitofish) or from the nearby Reedy River (green sunfish and bluegills) during flood periods.

Due to the uniqueness of the current study site, little comparable fishery data are available. However, Wegener et al. (1973) in vegetated aquatic areas associated with Florida's Lake Tohopekaliga and Carlson and Duever (1977) in a south Florida cypress strand reported that mosquitofish were one of the most abundant species to inhabitat these areas. Therefore, their dominance at the Bramlette Road site is not unusual. It is also not unusual that they were more abundant at the PSA station where water levels were deeper and somewhat stablized by the beaver dams than at the NSA station where water levels were shallow and more vulnerable to drought. The NSA station also lacked vegetation that might provided cover for the eastern mosquitofish from predation by green sunfish and bluegills at the PSA station. Predation by these fish may have resulted in the low density of eastern mosquitofish at this station.

Summary

Sampling results from the Bramlette site indicated that species dependent on water for completing all or part of their life cycle were present at the plume and non-plume areas. Differences in taxonomic composition and species abundance between the sampling areas were great in some instances. This was largely due to to the extreme differences in the habitat types: the plume sampling area was dominated by the beaver pond and the non-plume sampling area consisted almost entirely of the drainage ditch. Based on the sampling results of March 17 and 18,1999, aquatic and semi-aquatic species were found in the plume and non-plume areas indicatinf that the animal populations were self sustaining.

LITERATURE CITED

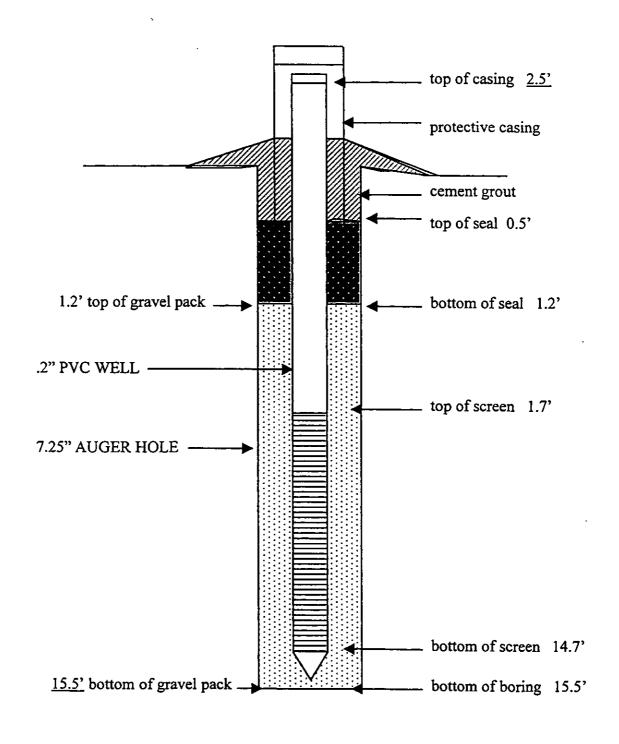
- Altig, R. 1970. A key to the tadpoles of the continental United States and Canada. Herpetologica 26:180-207.
- Blair, W.F., A.P. Blair, P. Brodkorb, F.R. Cagle, and G.A. Moore. 1968. Vertebrates of the United States, 2nd Ed. McGraw-Hill Book Co., New York, N.Y.
- Carlson, J. E. and M. J. Duever. 1977. Seasonal fish population fluctuations in south Florida swamp. Proceedings of the Annual Conference of the Southeastern Association of Fish and Wildlife Agencies 31:603-611.
- Galindo, M D., N. Mazuelos, J. A. Mata, and L. Serrano. 1994. Microcrustacean and rotifer diversity and richness relating to water temporality in different ponds in the Donana National Park. Verh. Internat. Limnol. 25:1350-1356.
- Martof, B.S., W.M. Palmer, J.R. Bailey, J.R. Harrison, III. 1980. Amphibians and reptiles of the Carolinas and Virginia. Univ. North Carolina Press, Chapel Hill, N.C.
- Merritt, R.W., and K.W. Cummins. 1996. An Introduction to the Aquatic Insects of North America. Kendall/Hyumt Publishing Company, Dubuqe, IA.
- Serrano, L., and J. Toja. 1998. Interannual variability in the zooplankton community of a shallow temporary pond. Verh. Internat. Limnol. 24:1575-1581.
- Wegener, W., D. Holcomb, and V. Williams. 1973. Sampling shallow water fish populations using the Wegener ring. Proceedings of the Annual Conference of the Southeastern Association of Game and Fish Commissioners 27:663-673.

V.			
		·	
		,	

APPENDIX F

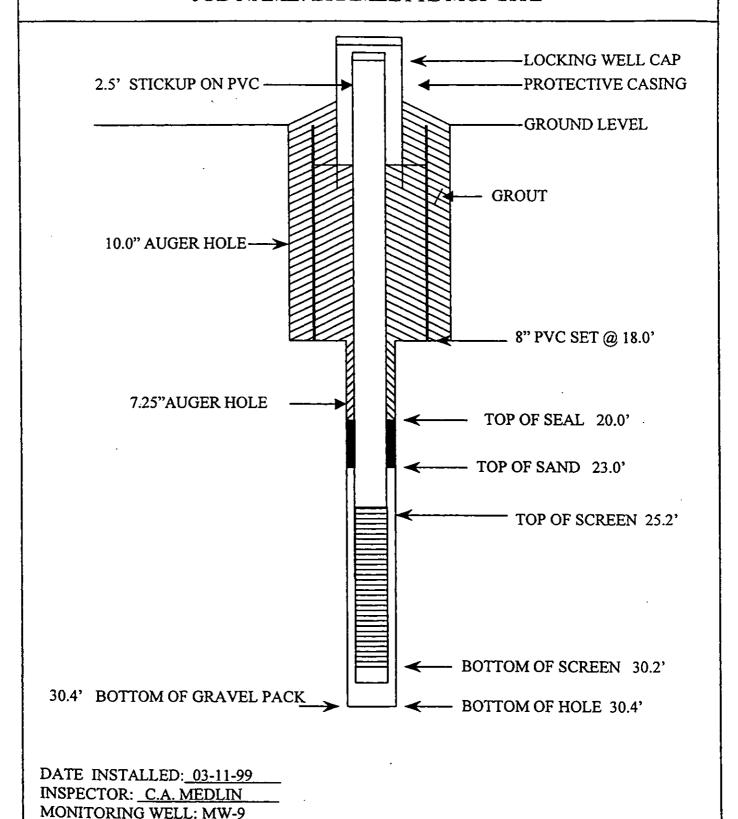
Phase III
Monitoring Well
Construction Records

JOB NAME: Bramlette MGP Site

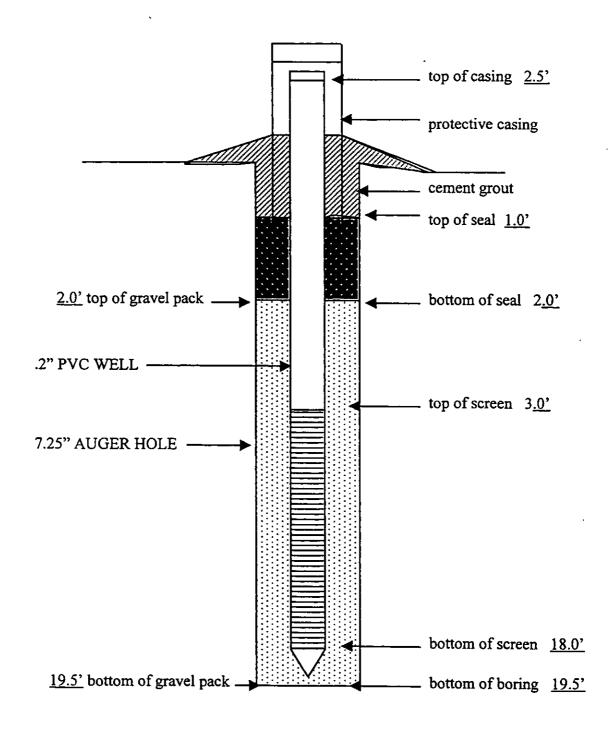


DATE INSTALLED: <u>03-8-99</u> INSPECTOR: <u>C A Medlin</u> MONITORING WELL: <u>MW-8</u>

MONITORING WELL INSTALLATION RECORD JOB NAME: BRAMLETTE MGP SITE

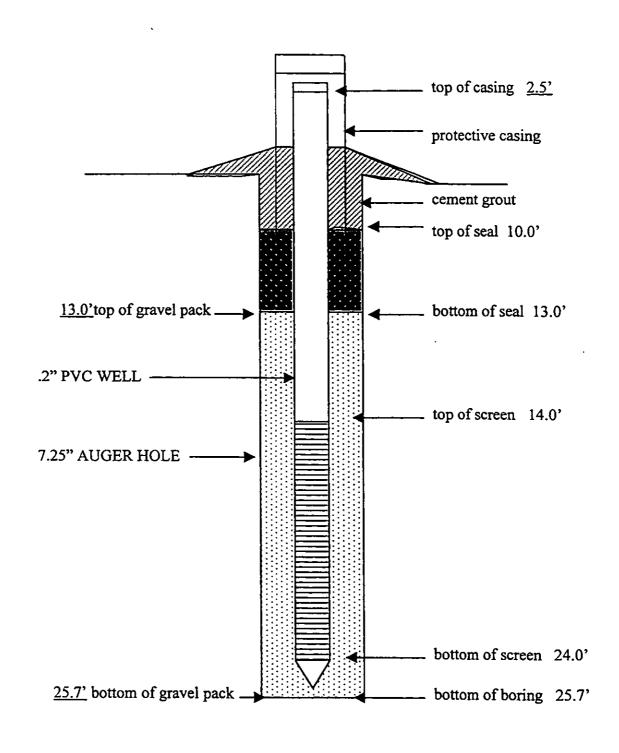


JOB NAME: Bramlette MGP Site



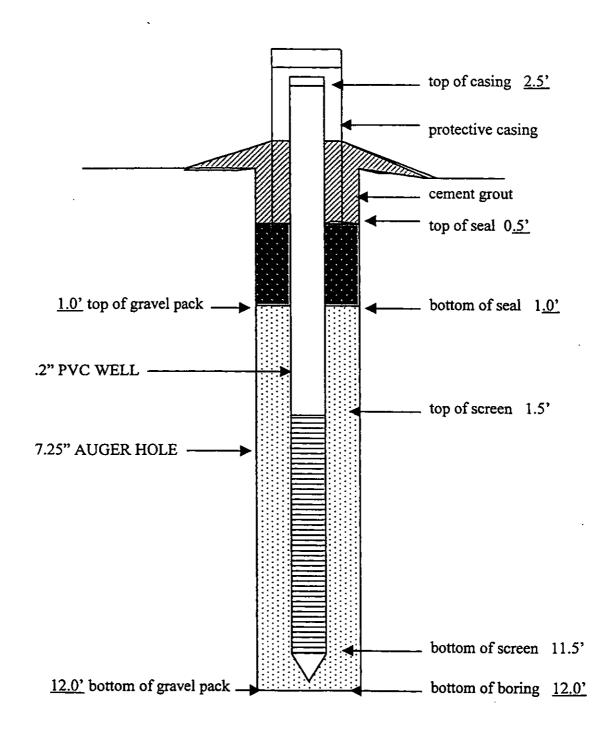
DATE INSTALLED: <u>02-24-99</u> INSPECTOR: <u>C A Medlin</u> MONITORING WELL: <u>MW-10</u>

JOB NAME: Bramlette MGP Site



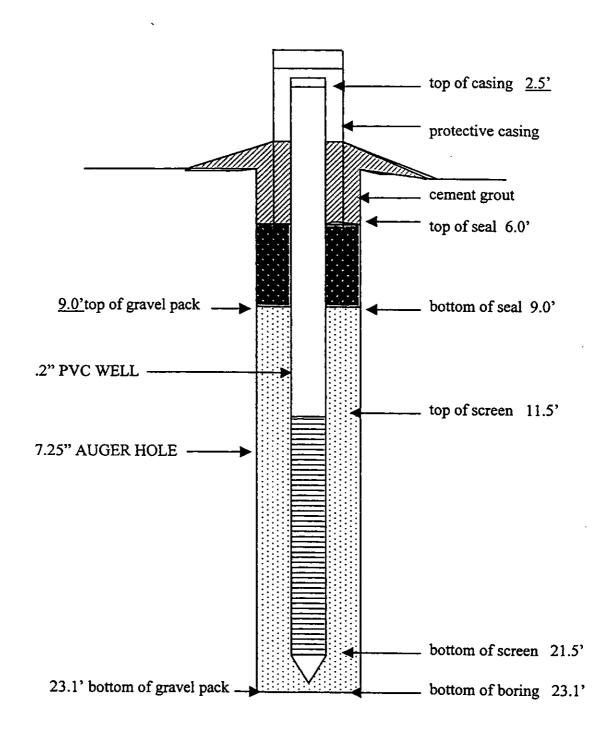
DATE INSTALLED: <u>02-25-99</u> INSPECTOR: <u>C A Medlin</u> MONITORING WELL: <u>MW-11</u>

JOB NAME: Bramlette MGP Site



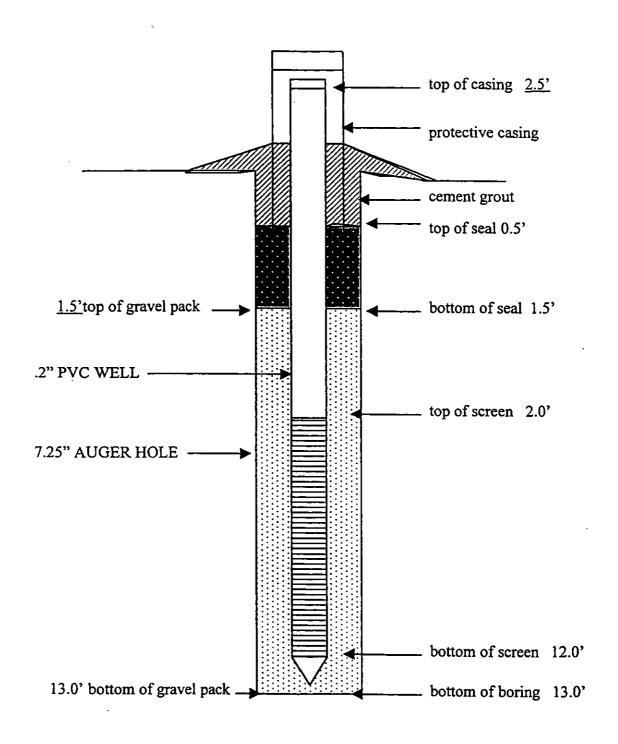
DATE INSTALLED: <u>02-25-99</u> INSPECTOR: <u>C A Medlin</u> MONITORING WELL: MW-12

JOB NAME: Bramlette MGP Site



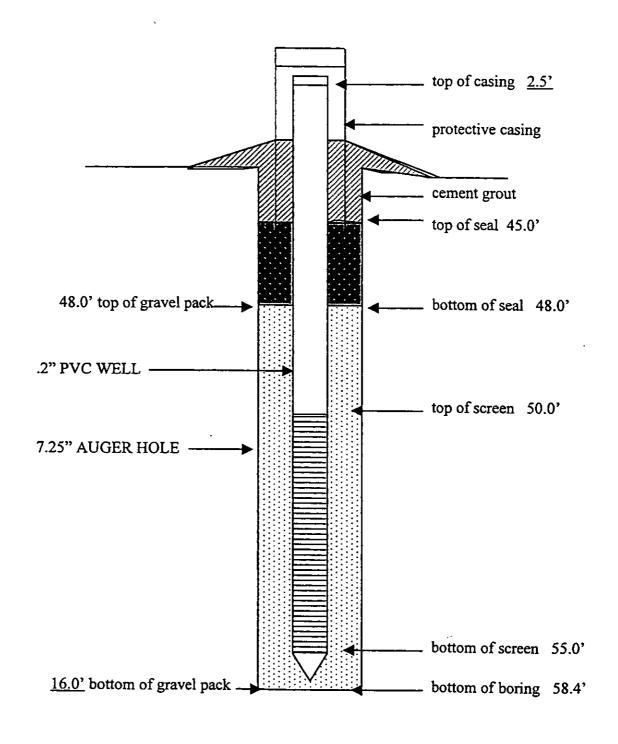
DATE INSTALLED: <u>03-18-99</u> INSPECTOR: <u>C A Medlin</u> MONITORING WELL: <u>MW-13</u>

JOB NAME: Bramlette MGP Site



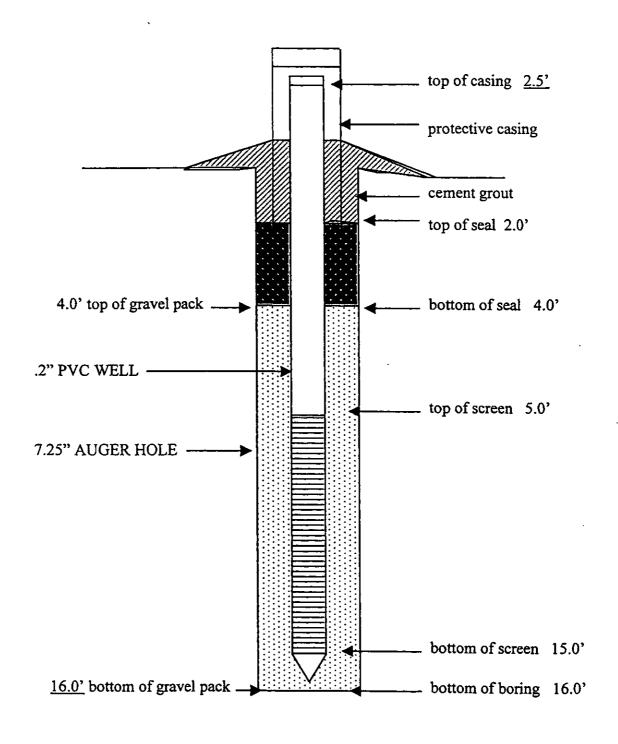
DATE INSTALLED: <u>03-18-99</u> INSPECTOR: <u>C A Medlin</u> MONITORING WELL: <u>MW-14</u>

JOB NAME: Bramlette MGP Site



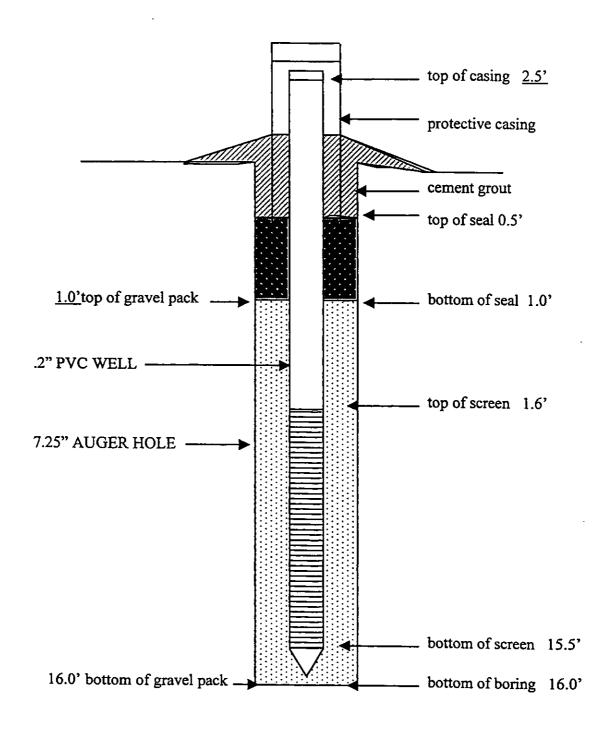
DATE INSTALLED: <u>03-4-99</u> INSPECTOR: <u>C A Medlin</u> MONITORING WELL: <u>MW-15</u>

JOB NAME: Bramlette MGP Site



DATE INSTALLED: <u>03-8-99</u> INSPECTOR: <u>C A Medlin</u> MONITORING WELL: <u>MW-16</u>

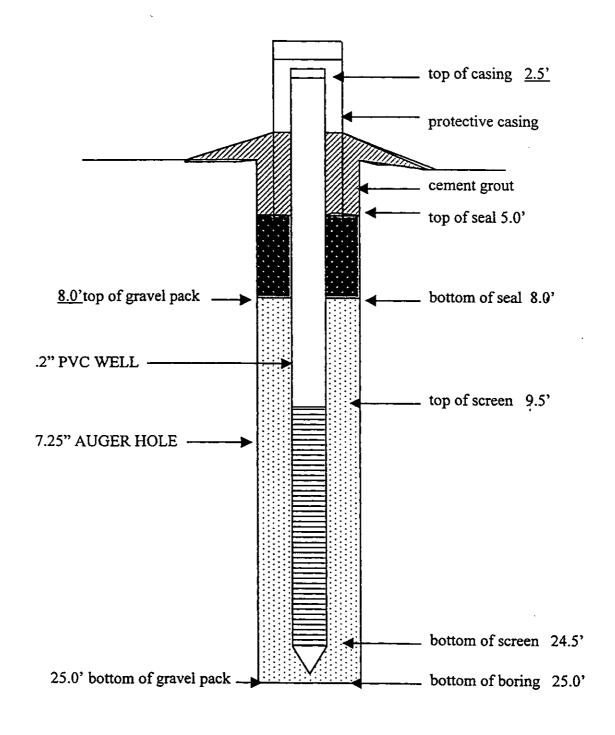
JOB NAME: Bramlette MGP Site



DATE INSTALLED: 03-17-99 INSPECTOR: C A Medlin

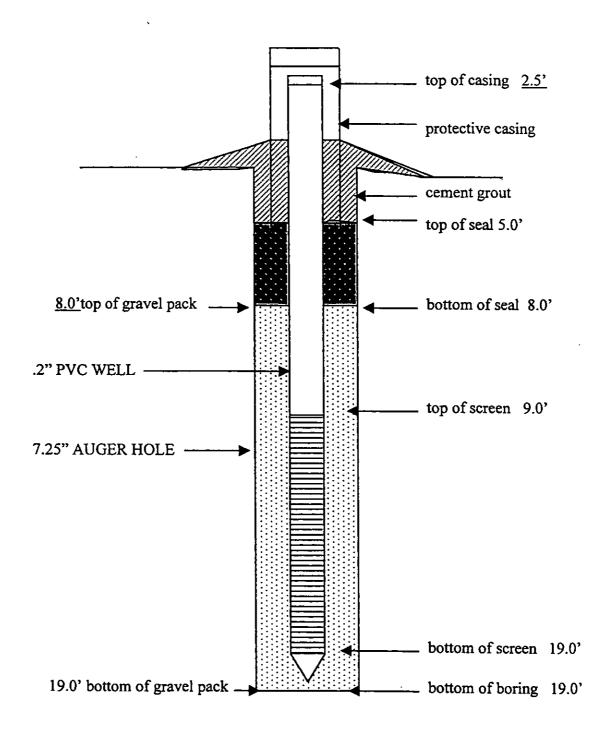
MONITORING WELL: MW-17

JOB NAME: Bramlette MGP Site



DATE INSTALLED: 03-23-99 INSPECTOR: <u>C A Medlin</u> MONITORING WELL: <u>MW-18</u>

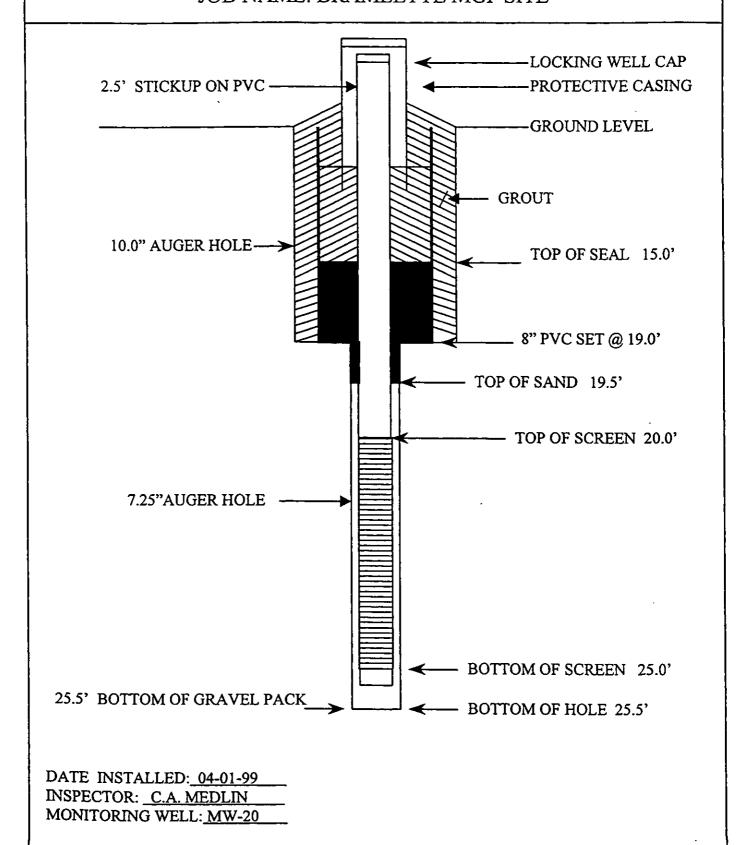
JOB NAME: Bramlette MGP Site



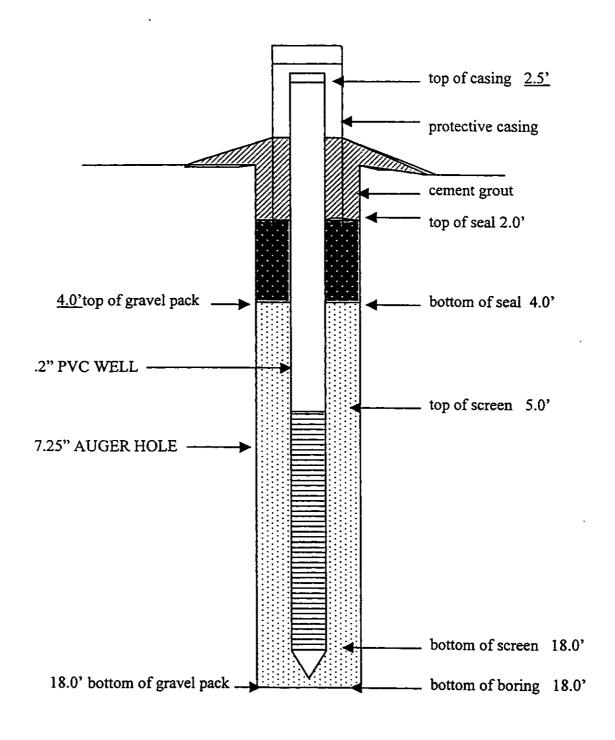
DATE INSTALLED: 03-25-99 INSPECTOR: C A Medlin

MONITORING WELL: MW-19

MONITORING WELL INSTALLATION RECORD JOB NAME: BRAMLETTE MGP SITE



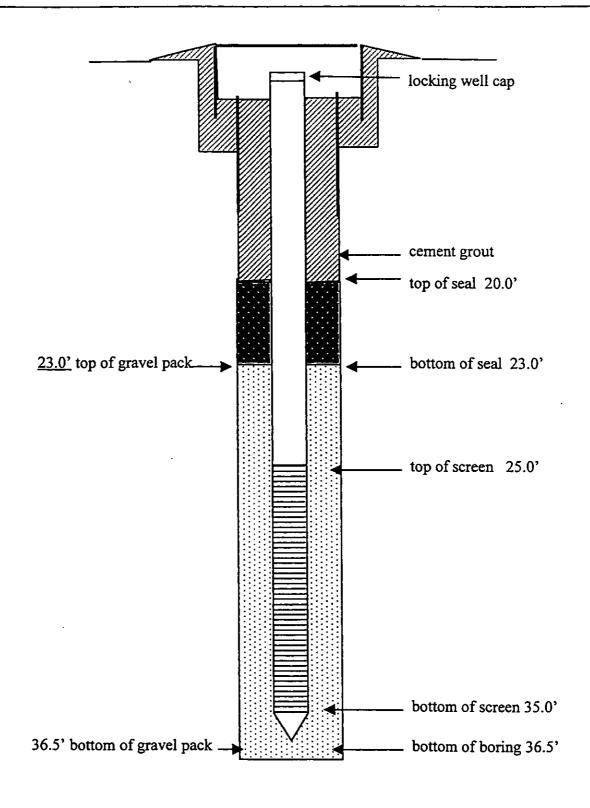
JOB NAME: Bramlette MGP Site



DATE INSTALLED: <u>03-29-99</u> INSPECTOR: <u>C A Medlin</u>

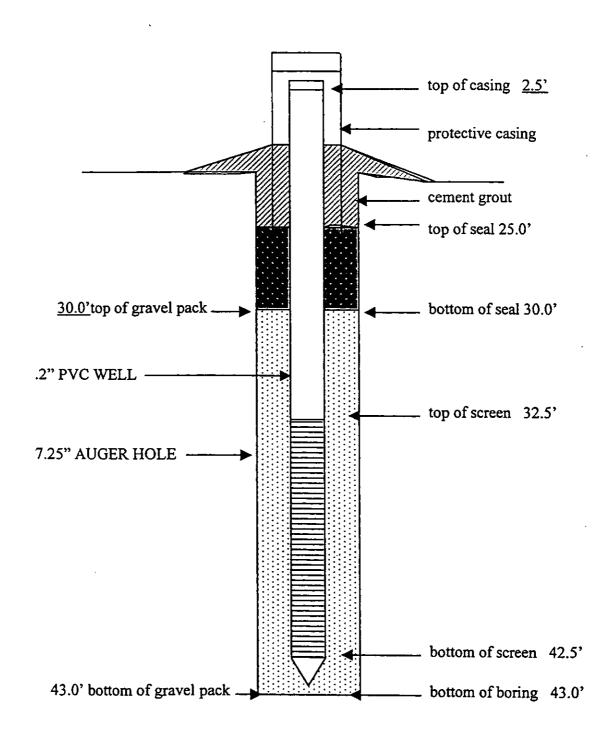
MONITORING WELL: MW-21

JOB NAME: Bramlette MGP Site



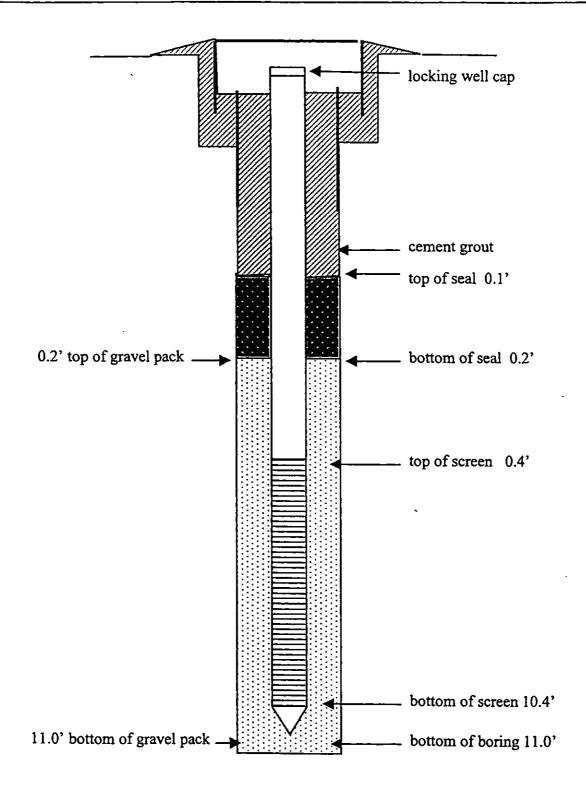
DATE INSTALLED: <u>04-07-99</u> INSPECTOR: C.A.MEDLIN MONITORING WELL: <u>MW-22</u>

JOB NAME: Bramlette MGP Site



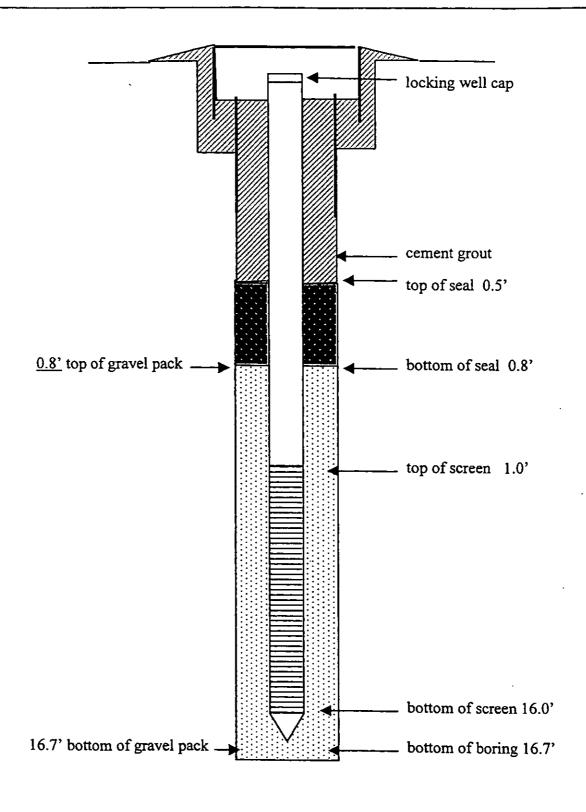
DATE INSTALLED: <u>05-03-99</u> INSPECTOR: <u>C A Medlin</u> MONITORING WELL: <u>MW-23</u>

JOB NAME: Bramlette MGP Site



DATE INSTALLED: <u>05-03-99</u> INSPECTOR: C.A.MEDLIN MONITORING WELL: <u>MW-24</u>

JOB NAME: Bramlette MGP Site



DATE INSTALLED: <u>05-05-99</u> INSPECTOR: C.A.MEDLIN MONITORING WELL: <u>MW-25</u>

FORM	M-260

REVISION 3 PAGE | OF f

DUKE POWER COMPANY

	PROJECT Greevuille - Brambette Rd.
COIL	TEST RODING EIEI D DEDODT

ı								PROJECT Greenville-Brandette Rd.
۱					;	SOI	L TE	EST BORING FIELD REPORT
l	воя	ING NO	MI	~ د	8			STARTING TIME
ļ	JOB	NO.						GROUND SURFACE ELEV.
l	JOB	NAME へ	1:4 D	ومهالر	LUA	Sha	llow	well compined HRS. DRILLING HRS. MOVING
I	DAT	E 3-8	2-99	WE	ATUER	plan		INSPECTORMRILLER CAMELLIA Time Rocker
١	<i>U</i>				AIIICI		-1	
ĺ		S	AMPLIN	2ND 6"	380 62	SCALE	UD	SOIL CLASSIFICATION AND REMARKS
			1070	2,10	- WILD 0	0 -		Noto: had in go to 2.0' to bet Past Brigle and Jack
Ì	1	2.0'	7	4	10			40/100:4/BEN / Black 5/: stoly mich Sith Free/Consesa
1		3.5						Look Lille Cor MIXED in Sample
	2	3.5		2				BRNISH GAY Black Stightly Micay 5: 1/4, Fine Med, Sand
Ì	_	5.0				 5 -		
ŀ	3	5.0'	2	2	2	 —		DAIL GIA Slighty Man, Sily Fin/Med. sand.
1	16	6.5	2	2	3	 	-	Last 6" of spoon #3 was yellowish Gray selfy Clay Pun Clay
	7	8.0		_		1—		Grayish BEN, x/15/14/4 MICRY SIMY +THE STORY MAY
	5	8.0	2	1				BRNISH GAM Slightly MICA, SIHY FINE SAND
		9.51	-	-1		- 10 -		with sifty Clay scams in sample
	6	9.5	2	3	4	1—		yellowish Ben, Gray stightly Maca, Very Silte five saw
Ì		11.0						
	7	11,0		6	4			yellowish BRU MICA, very Sitty Fixe JANA
		12.5'			<u> </u>	 	<u> </u>	(Pure SAND)
	8	12.5		8	6	1—	<u></u>	Yellowish BRN, MICA, Very Sithy Fine Som
		14.0'	_				<u> </u>	(Mire sand)
	2	14.0'	1 -	4	5	{ —	\vdash	Gray Mica silly Fire/ COSISE SAND
_		15.5"		28		 	-	Looking UK weathered Rock
		17.0	 7 -	20	15	20 -	┼	Gray Mica, 3: Hy Fine/ Course S And
	\vdash	1.1.0	 	 	 		-	

3+19-99 H20 @ Z.Z

> 30 **3**5

BORING TERMINATED 120 **BORING REFUSAL** Z.Z' WATER TOB DEPTH OVER WATER 24 HR:DEPTH WATER LOSSES NONE CASING SIZE LENGTH N/A

25

METHOD OF ADVANCING BORING DEPTH POWER AUGER 00° TO120 HAND CHOP:W/MUD:W/WATER TO -ROTARY DRILL:W/MUD:W/WATER TO -DIAMOND CORE TO_

FORM M-26C

REVISION 3

PAGE_I_OF_I

DUKE POWER COMPANY

PROJECT Greenville Bramlette Rd.

	BUE	ING NO	М	և, -		JUII		SI BURING FIELD		
1		NO.	_	_					URFACE ELEV.	
	JUB	NAME	<u> </u>	<u>دې د</u>	<u>مد ر</u>	<u> </u>		HRS. DRILL	ing HRS. MOVING _ . Medling Tim Bar	
1	DAT	F 7-1	0.7	2 W	ATHER	درح	<u>ar_</u>		ster Dickard	<u> </u>
		-							STEP DICKOUD	
		<i>Si</i>	SAMPLING				บอ	SOIL CLA	SSIFICATION AND REMARKS	
		151 6-		ZND 6*	3RD 6*	- o -				
•	-					_		BON 10" AUG	er down to 18.	0' 4110
						_			8" Puc Pipe Do	
						_		16 4' Deill 3	is wouldn't Dush	>: ce
					-			ON down to		
						- 5 -				
						_				
						—				
								<u> </u>		
						10 -				
								SAMPLES From	1 0.0' - 18.0' TA	Ken
						15 -			- 8 APDION 6.0'	
						1-				
16.4'				<u> </u>		!				. 4
	14	18.8		3	4			Black / Gray mic	CA. Silty Fine/COA	rse SAUN
		20.3'		<u> </u>			<u> </u>	NO AGET ' KMK	c /.//, weathered. Ko	F/C .
	12	Z0.3		2	4	20 ~	<u> </u>	Whitish Glay mic	CA, Silty Flar / COM	ese SAND
		21.8						20 Dagr		
	13	21.8		4	5		ļ	whitish Gray / Yellowis	4 Red MICA, Silly Fi	W/COARSE
	L.,	23.3'		 	ļ			SAND - NO	oder	
	#	23.3		4	6			Yellawish Red Mice	9, 5:1ty Fine COMES	SAND
		24.8		-	/3	25 -		I NO Odac	•	
	113	24.8	5	7	د/	-	<u> </u>	Yellowish Red, Mil	CA, Silty Fine COAYS	e sand
		24.3			 	 —	├	NO oder		_
		26.3		15	11	 —	— —	Clay / Yellowish Red	Mica, Silty Flor/CI	BAISE Smel
	_	27.8	0	7.	11.57			No odor		
	μ^{γ}	27.8	8	121	47	30 -	-	Yellowish Cray, Thi	CA, Silty FTNe / COAT	se SANd
	<u>ءرا</u>	Z9,3				-	<u> </u>	1 2 2 1 2		
99	<u> </u>	<i>29.3'</i>	•	50=	۳.		-	YCHOURS Ked/Groy 7	THER, SILY YING COAL	sc sand
3-11-99	 	30.0	1	├	+	-	<u> </u>	7/1.4	21 0 55	,
-	\vdash	 		 	 	1-		- 74" Auger	Refusar 1 @ 30.4	
	—	 	<u> </u>	-	\vdash	35 -	 	x= 4 = 2 4 1	11	
	 	 	 	 		1 —	 	Set Z" Wel		SCICEN
	一	<u> </u>	1	t	t	1-	 	From 25.2	1. 40 30·S.	-
	\vdash	 	 -	1	t	1-				
	Г	1		 		1,				·
	Г			†	T	// o -	1			
	BO	RING TER	MINATE		30.		<u> </u>	METHO	OD OF ADVANCING BORING	DEPTH
	BO	RING REFI	USAL _			+' U	υ/ . [*] .	The Comment	R AUGER	0.0 TO30#
	W/	TER TOB I	DEPTH.		NIA				CHOP-WANLID-WANATER	_ TO -
	W/	NTER 24 H	R:DEPTI	H	<u>2.5</u>			16-99 ROTAL	RY-ORIEL-W/MUD:W/WATER	_ TO -
	•	NTER LOSS					<u> </u>	-(DAME	OND CORE	_ TO -
	I CA	CIMIC CITE			A II M.		HOTH	4.1/A	OULD GOILE	(~ iv ~

+ STANDARD PENETRATION RESISTANCE IS SUM OF BLOWS FOR 2ND 6" AND 3RD 6" TO DRIVE 1-3/8" I.D., 2" O.D. SPLIT BARREL SAMPLER WITH 140 POUND HAMMER FALLING 30 INCHES

REVISION 3

PAGE_/_OF_I

DUKE POWER COMPANY

PROJECT Greenville - Bramlette Rd. SOIL TEST BORING FIELD REPORT

BO	RING NO	Mu	1-10				s	STARTING TIME		
	3 NO							GROUND SURFACE ELEV.		
101	NAME 👍	id I	Dep H	14	Shall	<u>Inv</u>	Combined H	IRS. DRILLING	HRS. MOVING	
DA	π <u>. 2-2.</u>	3-99	2_ w	EATHER	clou	dy	INSPECTOR/DRILLER	CA. Medlin		ler
								Charles Ayers		
	S	AMPLIN			SCALE	מט		SOIL CLASSIFICATION AND F		
		1\$T 6°	2ND 6	380 6*	- o -		<u>-</u>			
	1.0'		,	2	-		11.1/min 30.	1 -1:14		1111
-	2.5'		' -	_	 —		Jeliuwish BKN	y slightly mich	Silty Tlan	SAW
2	2.5		.3	3			Wellowish BEN	, Slightly MICA,	Silly Fine	SAND
	4.0'				- 5 -			, consumpression		z mwa
3	4.0'	2	4	6			Lt Grayish Rea	, slightly mich	, silty Claus	4 FINE
	5.5'						SANC	•		
4	5.5	5	6	7		-	Yellowith BRN	, slighty mica,	stightly clayed	. <i>50 try</i>
5	7.0	 	Z	Z	 —		FIM SANA	· / 30v // = =		- / - //
-2-	8.5'	- '-	-		- o -	-	LICIAN / YE//A	vish BEM, Very 7m	ICA, TINE SA	MAY SILT
6	8.5'	,	,	2		<u> </u>	Wellow mi	Ry SIlty Fia	111-1, 80	
	10.0'	Ľ	Ľ						- ANGER SHE	yr el
7	10.0'	-	,	1	l = 1		yellow / L+ 1/e/	Yowish BRN, Mic	A. Silter Fix	Wed.
	11.5		ļ		- 5 -		SANA		<u>-</u>	•
8			<u>Z</u>	4	<u> </u>	<u> </u>	Rolling BRU/4	<u>Iellavi A BRV., TNIC</u>	CR, Silty Fin	e/Mel Short
9	13.0	-	.7	5	-	 				,
~	14.5	1-	5	3			yellavish BEU.	MICA, SILTY T	Fre / Med. 5	AND
10	15.0	2	.3	6	-	 	Olive DOM	Dark oline BRN,	mark till	Fine/Med
	16.5			Ĺ	- a -		SANA SANA	VAIR OFFE DAY	Michy Shity	1 street MEA.
11	16.5	3	8	11				Ve BEN, MICA,	Sith Finell	Ted SANA
<u> </u>	18.0				 					, 1
<u>/ 2</u>	18.0	4	7	8			BRN / DAIK al	Ne Ben, Mica,	51/4 FINE/1	1el sand
\vdash	19.5	 			- 5 -	-				
\vdash	<u> </u>	 	 	 			TOKE TEIN	with 15' 3	S AND S	20'-
	 	 		 	1	<u> </u>	Seal From		CICEN +184	" 3.0 70 /8.8
								1.0 10 20		
					<u> </u>					
			ļ			<u> </u>				
 -	 		 		 	<u> </u>				
 	<u> </u>		-	 	 —	- -				
\vdash	 	 	-	\vdash				·		
	+	1	1	\vdash	 5 -	+			······································	
			 	 	1-					
							· · · · · · · · · · · · · · · · · · ·			
┡		ļ	 	 	Ļ o -	ļ				
-	RING TER	AZINATT	<u></u>	19.	<u> </u>	1	<u></u>	MCDIOD OF ADVISOR	200110	
Bo	RING REF	MINAIE USAI	N		•		·-	METHOD OF ADVANCING	BORING	DEPTH
W	ATER TOB	DEPTH	4.	7 6	10.	0'	N 2-24-99	POWER AUGER HAND CHOP:WANUD:WAN	MTED	00' TO195
W.	ATER 24 H	R:DEPT	H <u></u> 2	<u>4)3</u>	<u> </u>			ROTARY DRILL-W/MUD.Y		
W	ATER LOSS	SES	NO	NK 1	<u> ۶ کیار</u>			DIAMOND CORE	MANIEN	- 10 -
LC	SING SIZE		W()	*	LE	NGTH_	NA	3		

+ STANDARD PEKETRATION RESISTANCE IS SUM OF BLOWS FOR ZND 6" AND 3RD 6" TO DRIVE \$\frac{3}{3}\$ 1.0., 2" 0.0. SPLIT BARREL SAMPLER WITH 140 POUND HAMMER FALLING 30 INCHES \$\frac{3}{3}\$

REVISION 3

PAGE OF

DUKE POWER COMPANY

PROJECT Greenville Brand He Zood

BOE	RING NO	М	. W		30I	_ _	STARTING TIME	
	NO.						GROUND SURFACE ELEV.	
	NAME_						HRS. DRILLING HRS. MOVING	
		24-0	2 <i>0</i> 115		·C	Tou I.		
UA.	t <u> </u>	7-5	<u>27</u> W	EAINEN		ousy	_ INSPECTOR/ORILLER CA_Media Tim Barker	
		AMPLI	MC			-	Chades Ayers	
			2ND 6"	200.4	SCALE	מע	SOIL CLASSIFICATION AND REMARKS	
_	1,0'	2	3	4	- 0 -		Wellowish Ben, Mica. Sitte Fine Med 5	and
	2.5'						yellowish Ben, Mica, Sifty Fine/Med. 5	<i></i>
Z	2.5'	ı	3	4			Vellowish BRU, MiCA, Silfe Five I Med. SA	and
	4.0'						yellowish BRU. Mica, silly Fine / Med. SA with odor	
3	4.0	1	I	1	5 -		yellowith BRN. Mica, silly Five / Med. SA.	Nd
ļ	5,5'							
4	5.5'	5	5		 		white BRN. yellow Thick, silty Fine Po	W.5C
	7.0		<u> </u>				SAND	<u></u>
5	20	5	5	/			yollowish BRN, mica, Fine sandy sift	
-	85		 	ļ	-10 -			
6	8.5'		1	1			yellow BRN, micay silty Fine/Coarse	SANK
-	10.0	_		<u> </u>				- , , -
7		 		1	 —		Notes Spoon went 0.7 to much on Last	<u>//-</u>
	12.2'	 ,	-	-	 —		Note: Spoon went 0.7 H much on last	Blow ,
	17.2'	 ' -	3	3	-/5 -		white / 6mg slightly MICAy Sity Fire/COM	irse Saud
	13.7'	3	┿.	2	—	\vdash		
一	15,2	1	 ' -	-	 —	$\vdash \vdash \vdash$	yellowish BRU/ White MICA, SIlty Fire/ COA	150 SMAN
//	15.2'	3	3	3	 			
	16.2		1	-	_		yellowish BRU, white mica, sitty Fine Co	MISS SAUL
∇	16.7'	1	 	1	 2 0 -	 	· · · · · · · · · · · · · · · · · · ·	
	18-2'		 ``	<u> </u>	1—		NO RECOVERY IN Spoon #@ 16.7'W/SA	THU CATION
11	182'	,	7	1			Lt. BRN- mile Silter Fire /Mal. Sa	ad .
	19.2'				1-		Lt. BRNy Milay Silty Fine Med. SA.	
S1	19,7	Z	Z	4			Yellowish ormer MICA. 5:14 Fine I Med.	Sand
	21,2				-25 -		Yellowith ormer MICA, Silly Fran / Med.	
13	21.2'		4	6			yellowish BRN, mica, sitty Fine / Med.	SANT
	22.7			L]			
14	22.7'	3	17	9	 		yellowish BRU, Torker, silly Fine/Course	SANZ
	24,2'		 	<u> </u>	<u> </u>			
13	24.2'	7	6	12	1—		Yellowish BRN, MICA, sith FINE /COATSE	SAND
⊢	25.7		┼		 			
<u> </u>			╅		 	\vdash	Hole terminated @ 75.7'	
	 	_	┼	 	{ -		set A 2" Pipe with A 10.0' Scre	w @
_		 		 	 35 −	 	14.0' TO 24.0' W/ SCAL From 10.0'	-13.0-
-	<u> </u>	}	┼	-				
\vdash	 	\vdash	+	 	 	 		
	 	\vdash	 	+	1-			
!	 	-	1	1 -	1			
	 	 	+	†	// 0 -	 		
BC	RING TER	MINATI	ED	25.7	1		METHOD OF ADVANCING BORING	DEPTH
1	RING REF			II A				0.0 TOZS
W/	ATER TOB	DEPTH		2.6			HAND CHOP WANUB WANTER	- TO -
W/	ATER 24 H	R:DEPT		2,6			ROTARY DRILL WAND WAYATER	- TO -
	ATER LOSS			10'ne			DIMMONDE	
CA	SING SIZE		NI	4	LE	NGTH	N/17	TO_

REVISION 3

DUKE POWER COMPANY

PAGE___OF__L

PROJECT Greenville - Bramlette Rd. SOIL TEST BORING FIELD REPORT

BOR	ING NO	M	<u>w -</u>	12			STARTING TIME				
JOB	NO						GROUND SURFACE ELEV.				
JOB	NAME	<u>5h</u>	1/2	مس	<u>پې د</u>	11_	HRS. DRILLINGHRS. MOVING				
DATI	E <u>2-2</u>	5-9	2_w	EATHER	<u>P.c/</u>	oude	GROUND SURFACE ELEVHRS. MOVINGHRS. MOVINGHRS. MOVINGHRS. MOVINGHRS. MOVING	(er			
				· · ·	, -	· · · · ·					
<u> </u>	<u>s</u>	AMPLIN			\$CALE	UD	SOIL CLASSIFICATION AND REMARKS				
\dashv		157 6	2ND 6	3RD 6"	- 0 -			0011			
+			 	<u> </u>	<u> </u>		NO SAMPLES TAKEN BOTING IS 5.0' From MW-11	0014			
					- 5 -		Drilled down to 12.0' set A well Dipe with A 10.0' Screen 1.5' to 11.5' seal from 0.5' To	z"			
\rightarrow		<u> </u>	 	<u> </u>			well Pipe with a 10.0' Screen	From			
	.	 	 				1,5 to 11.5 Seal from 0.5 To	1.0			
-			 		-						
				 	_						
			 	†	0 -						
	·										
			ļ]					
\Box		<u> </u>	ļ .	ļ	- 5 -						
		 	ļ	1							
	-	├	 	-	—			•			
		 	 		—						
\Box			 	†							
					- 0 -			 			
											
\square				ļ	\			<u> </u>			
\vdash		├	├	 		<u> </u>					
$\vdash \vdash \vdash$		 	 	 	- 5 -						
\vdash		-	 	 	-	 					
\vdash		 	 		1—						
				1							
				1.							
					Ţ <u>"</u> -						
			<u> </u>		<u> </u>						
		ļ	 	 							
┞╼╾┤		 	 	 	 						
┠╼╌┤		 	 - -	+	- 5						
$\vdash \dashv$		 	 -	+	-	\vdash					
		T	 	†	1-						
		1		1	1						
			<u> </u>		- -						
لِيا		<u> </u>									
	RING TER			12.0	•		METHOD OF ADVANCING BORING	DEPTH			
1	RING REF			N/N 2.6'	,		POWER AUGER	8-0'TO125			
	WATER 24 HP-DEGITH 2 (a ' 10										
	TER LOSS			38N-	د ۱	~S.e.	ROTARY DRILL:W/MUD:W/WATER	- TO -			
	ING SIZE			I A		NGTH_	N/A DIAMOND CORE	- TO -			

DUKE POWER COMPANY

PAGE___OF__

PROJECT Greenville - Brandette Rd.

SOIL TEST BORING FIELD REPORT **BORING NO.** STARTING TIME JOB NO. **GROUND SURFACE ELEV.** JOB NAME MIC HRS. DRILLING HRS. MOVING CA. Medlin DATE 3-17-99 WEATHER Clean - Hot INSPECTOR/DRILLER

		AMPLIN	IG		SCALE	110	COUL OF ACCIDICATION AND DEMADES	
		1ST 6	2ND 5"	3RD 6	- 0 -	00	SOIL CLASSIFICATION AND REMARKS	
_		Z	1	2 = 12	<u>"</u>		yellowish BRN, Strebtly mica, Silty Fine	Med SAM
	3.0,	j	<u> </u>		<u> </u>			
Z	3.0		1=	1.5			Yellowish BEN, slightly Mocay Five sandy	51H
	5.1,				- 5 -			
3	5.1	1	3	3	J		TOP 6" WAS BRN. MICA. Silty Fire SAND LAST 1.0' WAS Y MANY BOW FINE SANDY C/MAY Yellowish Ben. / Olive slightly MIKA, Fine SAND	
	6.6			<u> </u>]	<u></u>	LAST 1.0' WAS 4 CHANGE BOW FINE SMALL CLARGE	SULF
4	6.6	Z	2	3	l		yellowish Ben. 10/2 stickthe Man Five should	silte class
	8.1				J	<u> </u>		///
3	8.1	1	2	3	- - to -		dive Gray stightly Mixay Flue sandy 56	to class
	9.6		<u> </u>			<u> </u>		
6		2	Z	2]		Bluish Gray 51:5 lety Mich, silty Very Fine	Sunde Mac
	//./							
Z	11.1"	0	0	0			Wishet of Homen - Pushed spoon 1.5'	
L	126				L = _	>	Bluish Son Sticloth Mica, Classen Very five 3	ande SH
8	126	0	0		15 -	L	Bluick from MICA. Claves Five said 50)	11
L	14,1]	· .	Weight of Hammer Pudred Spoon 1.5' Bluigh Gray Stickly Mich, Clayer Very Five 3 Bluigh Gray MICH, Clayer Five Speaky 50	
9	14.1	0	2	2			yellowish BRU, Thica, Very Silty Fine Son	d
<u> </u>	15.6	<u> </u>						
10	15.6	z	1	1:	20 -		Whitish Gray MICAN VILL Str. For SAN	w
<u> </u>	יו.כו						Whitish Gray MICAY VLY Sly FINE SAI	
2/	17.1	1	1	2			Yellowish BRN, Gray Micay Very Sity STAY	Mrs SALD
L	18.6							,
12	18.6	0	1				BRN/GIAN Mica, SIlty FIM/COATSES	FAND
	20.1				7 -		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A.
13	20.1'	2	3	3	25 -		CHAY MICH. STHE Five COATES Suc	nd .
	21.6						Cray micry Sitty Five COATSE SUN	
14	21,6'	4	B	9			Looks Like weather of Book	7
	23.1'						Looks like unathered Pock	
		_			7			
					} ∘ -		Hole ferminated @ 23.1'	
								·
]		Note: We set a z" well with	4 100'
$oxed{oxed}$							Note: We set A 2" well with a screen set from 11.5' TO ZI	
					2-			·
				1	P° -			
	1			1	1			
				1	1			
				\top	1			
	Γ			1	1//-			
				1	70 -	T T		
BO	RING TER	MINATE	D	23.1	/		METHOD OF ADVANCING BORING	DEPTH
80	RING REFI	USAL_	MA	4			POWER AUGER	0.0 TO23.1
	TER TOB				. – .		HAND CHOD-WAND-WAVATED	
1			. 7) - 7		-/8	. 9 a I HATO OTTO THE TOTAL CT	- TO -

ROTARY DRILL:WANUD:WANTER

DIAMOND CORE

3-18-99

NA

used

LENGTH_

3.

None

WATER 24 HR:DEPTH

WATER LOSSES

CASING SIZE

TO _

TO -

METHOD OF ADVANCING BORING

HAND CHOP:W/MUD:WAWATER

ROTARY DRILL:W/MUD:WAWATER

POWER AUGER

DIAMOND CORE

0

5

9

LENGTH NA

NIA

3.6

None

NIA

BORING TERMINATED

BORING REFUSAL

WATER TOB DEPTH_

WATER LOSSES

CASING SIZE_

WATER 24 HR:DEPTH _

DEPTH

- TO -

TO -

TO -

0.0' TO13.6

ROTARY DRILL:WAMUD:WAWATER

DIAMOND CORE

WATER 24 HR:DEPTH

WATER LOSSES

CASING SIZE_

NONE USEA

LENGTH_

N/A

STANDARD PENETRATION RESISTANCE IS SUM OF BLOWS FOR 2ND 6" AND 3RD 6" TO DRIVE 1-3/8" I.D., 2" O.D. SPLIT BARREL SAMPLER WITH 140 POUND HAMMER FALLING 30 INCHES

TO -

- TO -

REVISION 3

PAGE 1 OF 1

DUKE POWER COMPANY

PROJECT Greenville - Brandte &.

				L TE	ST BORING FIELD REPORT	
	NO <u>M</u>		, 		STARTING TIME]
					GROUND SURFACE ELEV.	
IAN BOL	ME_ <u>56</u>	Allou.)		HRS. DRILLING HRS. MOVING HRS. MOVING HRS. MOVING HRS. MOVING HRS. MOVING	
DATE	3-8-	22_WE	ATHER <u>Clea</u>	<u> </u>	INSPECTOR/DRILLER CH. Medlin, Jim Barker	·
	1	ING	SCALE	סט	SOIL CLASSIFICATION AND REMARKS	
	181	5- ZNU 6-	380 6 O		NO Soil SAMPLES Required	
					NO Soil SAMPLES Required due to well being Located 5.0' From	n
_					MW-15	
	··	1	5 -		Drilled down to 16.0' And Set A	
-					2" Well with A 10.0' serecu set From 5.0' - 15.0' With A sea @ 2.0	
					From 5.0 - 13.0 With a scar & 2.0	70 40
					Note: Cuttings has A strong od	or
	-		 			
						
	}		— —			
		-	 			<u> </u>
		- 	1-1-	<u> </u>		
			20 -			-
		-				·
		+-	 - - 			
			25 -			
\vdash		<u> </u>				
						
 			+			
	- - -	+	 3 0 -	 		-
 			 	<u> </u>		
 -		-	- 3 -	+		
		 	+	 		
			<u> </u>			
 			// 0 -	 		
BORIN	G TERMINA	TED	1600	<u> </u>	METHOD OF ADVANCING BORING	DEPTH
	G REFUSAL		VA			T0/60
ŧ	TOB DEP		7.2 '		HAND CHOP:WAAUD:WAVATER	TO -
1	R 24 HR:DE		Ne use	7	ROTARY DRILL:W/MUD:W/WATER	- TO -
CASIN	R LOSSES_ G SIZF	~/		NGTH_	N/A DIAMOND CORE	– to <i>–</i>
UND IN	- VILL			.iiu (n_	· · · · · · · · · · · · · · · · · · ·	

REVISION 3

DUKE POWER COMPANY

PAGE__LOF___

PROJECT Greenville-Branktha

,	e e			,	SOI		ST BORING FIELD REPORT]			
BOF	RING NO	M	W-	<u></u>			STARTING TIME				
JOB	NO						GROUND SURFACE ELEV.	{			
TOB	NAME A	ا له:۸	كحط	h A	nd	Shal	low Combined HRS. DRILLINGHRS. MOVING	<u>}</u>			
DAT	re 3 -	16-0	9 w	CATUED	01-	<u></u>	INSPECTOR/DRILLER CH. Mellin Jim Bx	-Ker			
DA.	<u>ر بر</u>		***	LATHEH			Joyes Holcombe	1.18.			
		AMPLIN									
				380 6°	SCALE	מט	SOIL CLASSIFICATION AND REMARKS	1			
		1910	ZAUB	ם עמנ	- 0 -						
$\overline{}$	1.0'	4	4	25	—	_	Black slightly mxn, silly Fire/coarse sa	ul			
	2.5'	-			_						
2	2.5'	9	6	3			Black Rubber Like for, NO Soil				
	40'				_						
3	4,0'	۵	0	٥	- 5 -	-3	wight of Hammer Paded span 1.5'				
	5.5				\geq		yellowith BRN, Stightly Mica, Flare SANDy Solly	1/44			
4	5.5	0	0	0			1Black coal for Looking staff				
	7.0		<u></u>				yellowish BRM, slightly Mina, Jim Sandy 5:	14-			
5	20	0	0	0 -	10 -		wight of Hommer Pushed spoon 1.5	<u></u>			
	8.5						Black / Dark Gray stightly pora, The Sandy	5:4			
6	8.5	0	0	0	=		PRIACK SILTY Fine SAME WI COAT HAY A	Mie			
	10.0			<u> </u>		<u> </u>	Sample				
י	10.0	٥	2	3		 	Yellowish BRN, MICAY Silty Fine SAND				
	11.5'		ļ		-15-	ļ	Note: # 7 WAS Pur sand W/ strong odo				
8	11.5	10	19	23	15-		BZU Mica silty Fine sand w/ stron	5 odor			
_	13.0			22		ļ					
2	13.0	11	34	22	 	<u> </u>	BRN. MICHY Sitty Fine SAND W/ STICK	5 Odor			
<u> </u>	14.5	-	100	 	 —	<u> </u>	// // 201	<u> </u>			
10	14.5	7	//	9_	70 -	-	4-llowish BRN, V. MICA, Fine sandy silt	w/ odor			
<u> </u>	16.0	6	9	111	\ `—	-	//				
77	120	6	 Z	14	 —	-	yellowah BLD, MICA, 5/tg Fire/ Medium	SANd			
	17.5			 -	 —	-	Still has a strong Odor				
	-	 	 -	 -	1—	-	12.0				
 	 	-		 	 25 -	╁╌	13.9	661564			
	 	1		 	┨	-	Note; Set A 2" well with ANS From 1.6' to 15.5	CIZEII			
	 		<u> </u>	 	 	-	7.6 70 73.3				
\vdash		 	•	 				,			
 		-		 	1—						
			1		 30 -	†					
		 		 	1						
\vdash					1						
Г				1	1—		 				
	T	<u> </u>			1 5						
					 }₅ -						
Г					1 —						
		1			1						
					1 —			-			
					40						
					<u> </u>						
BC	BORING TERMINATED /4.0' METHOD OF ADVANCING BORING DEPTH										
	RING REF			MA			POWER AUGER	0.0' TO/60'			
ı	ATER TOB						HAND CHOP:W/MUD:W/WATER	— то -			
ı	ATER 24 H			2,6			8-17-99 ROTARY DRILLWAMUD:WAVATER	_ TO -			
ł	ATER LOS			Non			DIAMOND CODE	- TO -			
LCA	SING SIZE		<u>~/</u>	A	L6	ENGTH_	MIH	• •			

Like odor (No cont tar oda)

CASING SIZE

LENGTH MA

Note: Symples 5-17 has

FORM M-26C

REVISION 3

DUKE POWER COMPANY

PAGE OF 1

PROJECT <u>Greenville</u> - Bramlette Rd. SOIL TEST BORING FIELD REPORT

BOF	RING NO		w-	18			STARTING TIME	
108	NO						GROUND SURFACE ELEV	
JOE	NAME /	Mid	Da all	ė.	Shall		combined HRS. DRILLING HRS. MOVING	
DATE 3-22-99 WEATHER Clean Nicconspector/DRILL							CA Mallin Ten Re	·Ker
UK	<u> </u>	<u> </u>	•••	AIREN		<u>~/~</u>	Joyca Holcomba	,,,(ε,
		AMPLIN	10				JOYEL MICOMAN	
			2ND 6	200 6-	SCALE	UD	SOIL CLASSIFICATION AND REMARKS	
		1918	2800	SAU 0	- o -		 	
L	1.0	3	3	2	—		Red Mila, Five/Med. SANdy Clayer.	51/1
	2.5				—		The state of the s	
Z	2.5'	3_	3	2			yellowish Red Maca, Fine soudy Claye	4 51/1
	4.0'				5 -			
M	4.0'	1	3	2			yellowish Red MICA, FINE SANDY 51 H	-
	5,5							
4	5.5	3	3	Z		<u></u>	yellowigh Red mice, Five sandy silt	with
Ľ	7.0		<u> </u>		<u> </u>		LAST 4" of SAMPLE beiNG DAIK BEA. TOP S	soi/
5	7.0'		ı	1	40-		LAST 4" OF SAMPLE BEING DAIK BEN, TOP S STRONG BRN. SISKHY MICA, YCH FINE FARRY LOOKS LIKE TOP SOIL, MIND SOME SMALL R	214
 	8.5		<u> </u>		-	<u> </u>	LOOKS Like TOPSOIL MAD SOME SMALL RO	at init
6		0	0	Z		2	Wight of Hammer Pushed Joan 1.0'	-
	10.0		<u> </u>				dive Gay Mica, Very Fine sandy Silly Clas	<u></u>
<u> Z</u>	10.0'	1	2	1	 	<u> </u>	Olive Ging Mica, Very For SANDY SIHT	
<u> </u>	11.5	<u> </u>			-15 -		WI some wood Particles in Sumple	
<u> </u>	11.5	0	1	Z	<u>'</u>		Top 6" = dive Camy Mica, Very FAVE sandy 5:15	4
	13.0'	<u> </u>	<u> </u>		<u> </u>		LAST 1.0 = DAK CHAG MICA Silty FTAR SAM	of ,
9	13.0'	 _ i .	<u> </u>	 _			Gray Mila, 5/4 FINE JAND PUL	sand)
	14.5	 _	-	 		<u> </u>		
10	14.5	Z	3	1	 20 -	 	GARy MICA, Silty Five sand Due	saud/
	16.0	-			 			- // ·
<i>//</i>	16.0	2	5	6	∤ -	<u> </u>	Gray mica, sitty Fine sand Pure ?	EAND)
17	17.5'	1	6	4	 	 		
15	19.0		اح-	7	{ —		Gray MICA, 5/24 Flue/Med, SAND	
13	19.0'		5	4	 ≥5 -	 	Com Malon dell = land day	
۲	20.5		1	 	┤ 一	<u></u>	Gray MICA, Silty FTW / CRAISE JAND	
14	20.5	1 5	5	4	1		Cron mico Silta Flue COAISE SAND	
	22.0		 	-			LAST 4" WAS DAIK GRAN VEN MOLA, VENTINESAN	1 4
15	22.0		4	3	1		Gray Mich Silty Fix/CDASS SAND	04.51//
	23.5				 }₀ -		LAST 6" LINES INIK MAY VERY MIKE VOW FINE :	sail - 14
16	23.5	Z	3	5	1 —		DARK Gray Very mich, very Fine sandy s	
	25.0			<u> </u>	1-		Start	
17			12	19	1 —		DARK GAMY VERY MICAY VELY FINE SANDY S.	14
	26.5				75		Looks Like weathered Exk in Parts o	[SANDE
					-35 -			
							Set A Z' will with A 15.0' SCICEN	set
							From 9.5' TO 24.5'	
	ļ	ļ			√ 0		Note: Checked water on 3-25-99 Ho	00 10.4
	<u>L</u>	<u> </u>			<u> </u>			
	RING TER				5.0		METHOD OF ADVANCING BORING	DEPTH
1	RING REF	_			4		POWER AUGER	0.0' 10 25.0
4	ATER TOB			13			HAND SHOP WAND WAYATER	— то —
	ATER 24 H			1,3.0			ROTARY DRILLWAND.WWATER	— то —
W/	ATER LOSS	SES	No	144	1150	<u> </u>	DIAMOND CODE	

+ STANDARD PENETRATION RESISTANCE IS SUM OF BLOWS FOR 2ND 6" AND 3ND 6" TO DRIVE 1-3/8" 1.0., 2" O.D. SPLIT BARREL SAMPLER WITH 140 POUND HAMMER FALLING 30 INCHES Strong odor > complete Tar 3.25-99

FORM	M-26C
	コタリーとひし

REVISION 3

DUKE POWER COMPANY

PAGE OF

PROJECT Greenville Bramlette Rd. SOIL TEST BORING FIELD REPORT

	BOF	RING NO	MI	ر ا - ن	9			STARTING TIME	
ļ		NO.						GROUND SURFACE ELEV.	
i	101	MAME	AA:	id î)eoH	h h	را/	HDS DDILLING LIDE MOUNIC	
	DAT	rs .3-2	23 - 9	79 w	EATHER	Class	, ua	aurinspector/driller CA. Medin Jim Barker	— I
	Joyce Holcombe	Jovee Holcombe							
		<u>s</u>	AMPLI	1G		SCALE	UD	•	
			151 6	2ND 6"	3RD 6	0 -		SOIL SEASON ISATION AND TELIMINA	
	1	1,0	2	2	3			Yellowish Red, Mica, 51/19 Five/Med. SAU	
	Ţ	2.5				1—		Tellians Ken, MICH. SITTY HIPE/MED! SAILL	_
	N	2.5	1	8	8			Yellowish Red, Mich, Softy Fine / Med. SAND	
	_	4.0'				5 -		W/ Some wood Particles in Sample	
	3_	4.0	7	2_	١.	=	->	BIZN, MICA, SIHY FINE SAND W/ Trash;	
	4	5.5'	2	z	 	 —		Sample, wood, concrete Plastic Partic	
trous		7.0			- '-	 		DACK BRN. / Black Stickly Mica Hive / COASSE SAND LOOKS LIKE TODSOIL From SWAM	
dor *	5	7.0'	1	1	١.		- 2	Olive Slightly MICH, Fim SANDY Clayer S.	5
OA	_	8.5				102		CAN see COAL TAI in Sample	~
	4	8.5	0	0	0		>	weight of Hammer Pushed TROOK 1.5	
3.25-99	 	10.0		ļ	ļ	 	<u> </u>	Olive slightly mich, Fire sandy alman &	1/
,	┡	10.6	_		_	 —		Strong odd in #6	
	ሥ	100	0	Z	3	- 15		pline, slightly man, Flore smaly cloney s	1/4
	Q	11.5'	Z	3	3	 —		LAST 3" of Sample WAS BEN SALED (Pule SA	ud)
	0	13.0'			<u> </u>			alive slightly MICAY, Fire sand, when silt	
Loaded _>	9	13.0'	0	0	0			s unight of Homore Pushel Pashel Sport 1.5	
W/COAL TAR		14.5				70 -		BRU, micay silty Fine sand, Landed w/ cont	
TAr	10	14.5'	3	4	5	Z0 -		BRN, mica; sith Fire/Mediun sand w/ coal +	
		16.0	<u> </u>	 -		 			
	X.	16.0	-	<u> </u>	 				
	 		 -			=		 	
	一	-	 		 	25 -	>>	Note: We couldn't Get spoon To go down	
			1	 		1—		Bottom of Auger because of sand coming to	70
				1.				up IN Auger. So we RAW Auger down 10/9	2 1451-
								Using 5,000 LBS of diren Pressure 1P.53	rl
	<u> </u>	<u> </u>	<u> </u>		<u> </u>	 30 −	ļ		•
	<u> </u>	 -	 	ļ	<u> </u>	1_		set 2" well w/ 10.0' screen set from	
	┝	ļ	 		 	 —		9.0' 70 19.0'	
	\vdash	 	+	 	 	 —	}	 	
	\vdash		 	 	 	1_	—	Note: this Rosine is one of the wort	
		<u> </u>		 	 	35 -		Note: this Boring is one of the worst	
			1			1—		CIO & STAMPETTS	
	<u> </u>	ļ	ـــــ	ļ	<u> </u>	 	<u></u>		
	<u> </u>		 	ļ	-	1/0 -	-		
	RC	RING TER	BAINATE	<u></u>	19.6	1,	1	HEXTIGO OF A PULL HOUSE PROVIDE	
		IRING REF			NA				TO PS- O
	•	ATER TOB	_	6.		ON	3	7-75-9-9	
•	W	ATER 24 H	R:DEPT						TO —
		ATER LOSS			<u> </u>	<u> </u>		TIMOUD COOF	TO
	CA	SING SIZE		∧/	Ą	LE	NGTH_	N/A	10

+ STANDARD PENETRATION RESISTANCE IS SUM OF BLOWS FOR 2ND 6" AND 3RD 6" TO DRIVE 1-3/8" I.D., 2" O.D. SPLIT BARREL SAMPLER WITH 140 POUND HAMMER FALLING 30 INCHES

signs of coal tary

4.0

7.0

BORING TERMINATED

WATER TOB DEPTH_

WATER LOSSES_

CASING SIZE

WATER 24 HR:DEPTH

BORING REFUSAL 25.5' - 7'4 Auger

MA

LENGTH WIA

4

6

6

5

All in sample of

l	2	11.0	6	_4	5		Reddish BRN. MICAy SIHO FIN / COATSE JANN
		8.5					WI TIN Wood Concrete in sample
	4	8.5'	8	12	2	- ∤0 -	NO Soil, Just wood in spoon
j		10.0					<u> </u>
Ì	X	10.0	6	2	3		NO RECOURTY IN Spoon W/ SAND CATCHER
		11.5!					
*	5	11.5	4	3	4		OLIVE MICH, FINE SANDY sitty Clay
		13.0				L	END of Space had Gray Very men in fine smally 51/4 Also wood Particles
l	6	13,0'	5	5	2	75 -	No Soil just wood Particles
		14.5					·
X	7	14.5	4	7	9		Some wood Parlicles And Gray Micay silly Fing Mel. SAW
		16.0					W/ COAL TAR All IN SAMPLE Pare SAND
1	8	16,0	Z	4.	3	20 -	Gray Mica, sity FTox / Med. SHEED (Pare SAND)
7		17.5			٠.		, , ,
	9	17.5	10	11	13	 	GIAY THICK, 5: /th Five / Med. SAND
		19.01				 	Loaded W/ COAL TAR
	10	19.0		17	20	<u> </u>	Gray Mica Silty Fin sandy weathered Rock
		20.5'	<u></u>		ļ	75 -	* Note set 8" The down TO 19.0' And Crowted it
	X	20.5	21	50:	z"		auger Cutting bard, we was Able to Ryu
	Ľ	21.1	ļ	L	ļ	 	It down To 25.5' where it Refused.
	<u> </u>	<u> </u>				 	NO Recovery in spow of speed Catcher
	<u> </u>	<u> </u>		<u> </u>	<u> </u>	ļ	We set A Z" Well W/ A S.O' SCREN
	∟ _	<u> </u>	↓_	<u> </u>	<u> </u>	-30 -	set from 20.0' TO 25.0'
		<u> </u>	 		<u> </u>	1_	
	<u> </u>		<u> </u>	<u> </u>	↓	↓	
	<u> </u>		 	1	├	↓ —	
	<u> </u>		-		-	↓ —	
	<u> </u>	 	-		 	 35 -	
	ļ	 	1			- 1	
	-	 	}	 	+	-	
	-	 	-			┤ —	
	<u> </u>	 	-	╄	┼	-	

+ STANDARD PENETRATION RESISTANCE IS SUM OF BLOWS FOR 2ND 6" AND 3RD 6" TO DRIVE 1-3/8" I.D., 2" O.D. SPLIT BARREL SAMPLER WITH 140 POUND HAMMER FALLING 30 INCHES

DEPTH

TO -

TO -

- TO -

ራ ዕ' TO**ረ**S*S*

METHOD OF ADVANCING BORING

HAND CHOP:W/MUD:W/WATER

ROTARY DRILL:W/MUD:W/WATER

POWER AUGER

DIAMOND CORE

CASING SIZE

NIA

LENGTH_

NA

REVISION 3

DUKE POWER COMPANY

PAGE___OF__L

PROJECT Greenville - Brampette Rd. SOIL TEST BORING FIELD REPORT

	ם	RING NO	MI	1- 2				STARTING TIME
	ı	ning no 3 NO.		<u> </u>		-		GROUND SURFACE ELEV.
				Dan	و ملا	1_ < 1	h a lla	COMP'ME HRS. DRILLING HRS. MOVING
•	30	rc 2 - 2	a a	9	FATUED	امام	(4.00)	+ inspector/Driller CA. Medlin Jim Barker
	"	<u>ع - د_</u> ۱۲	2-2	Z W:	EAINEH	CITUA	y w	Rooster Sickard
		S	AMPLI			SCALE	UD	SOIL CLASSIFICATION AND REMARKS
			151 5*	2ND 6-	3RD 6	- 0 -	00	
	-	-		<u> </u>		 		Note: Hitting trash concrete, Bricks down to 3.0
	1	3.0'	Z	2	1			Reddich RRN, Michy Silly Fire / Med. JAN W/
	<u> </u>	4.5	<u> </u>					some concrete Partides in sample
	2	4.5	1	2	6	- 5 -		Reddith BRN, MICH, SIHM FINE SAND W/ WOOD AND
	<u> </u>	6-8		-			Ì	CONCreta And Provement in Sumples
	1	7.5	2	3	G	-		Very Little Soil had Plywood hug in spoon shoe
	4	7.5	8	14	3	 		Sheet Rock And Rags, Not much Soil
		9.0'				-10 -		Zitel Ruce Ruy Ruys, 100. Macu Still
	5	9.0	2	21	4			Strong BRN, Mica, sitty fine SAND W/ SOME MOTE
	 _	10.5	<u> </u>	-				sheat Rock Not much soil
	6	12.0	12	3	2		 	1- SMALL ROCK TN SPOON
has AN_	7		 	1	Η			Store 304 mm = - 1 -14
oder		13.5'	-	<u> </u>	 `	15 -	 	Strong BRN, MICH, FINE SANDY SIH
coal tar	8	13.5	2	4	2			Strong BRN, Very MICA. Five spady 51H
	<u> </u>	15.0'		<u> </u>	<u> </u>	_		has odor Not Real Strong
	19	15.0	2	8	15	 		GRAYISL BEN. MICHY SIlly FINE / COASS- SAND
	<u></u>	16.5	7	10	50: 3	,, 20 -	-	Weathered Rock in End of Spoon
	10	16.5	1	1.8	20:7		 	Graying BRN, MICA, sitty Fine / coarse sand
			 			1—		weathered Rock in End of spina - down Pressur = 900 PS
								Augered on down to Return @ 18.0' And
	<u> </u>	<u> </u>	ļ	<u> </u>	ļ	25 -		Set A 2" well w/ A 13.0' Screen set from
	\vdash	 		 -				5,6' TO 18.0'
	-	<u> </u>		<u> </u>	├──	{ — }		
		ļ	 	1	 	1—	<u> </u>	Note: Queen had and the miles
		1	 	1		1_		Pulled And odor was strong.
						30 -		THE PART DAY
	<u> </u>		<u> </u>					
	-	 	-	 		 		
	\vdash	┼	├	 	-	∤ —		
	-	 	-	╅	-	- 35	 	
			┼	+	 	 	 	
		 	1	 				
						1		
						/ <u> </u>		
		RING TER					D 11	METHOD OF ADVANCING BORING DEPTH
	1	RING REFI ATER TOB			3.21		- <i>1 /4</i> 3-	POWER AUGER 0.0' TORD HAND CHORMANITONIANA
7	1	ATER 24 H			9,6			10-99 Tambo Oriot . WANDO: WATER 10
	1	ATER LOSS))))		.5-	ROTARY DRILL-W/MUD.W/WATER — TO —
		SING SIZE			1111			DIAMOND CORETO

+ STANDARD PENETRATION RESISTANCE IS SUM OF BLOWS FOR 2ND 6" AND 3RD 6" TO DRIVE 1-3/8" I.D., 2" D.D. SPLIT BARREL SAMPLER WITH 140 POUND HAMMER FALLING 30 INCHES

REVISION 3

PAGE / OF Z

DUKE POWER COMPANY

PROJECT Greewille - Brandette Pd. SOIL TEST BORING FIELD REPORT

JOB NAME MICH Depth well ONTE 4-6-99 WEATHER Cloudy INSPECTORABILLER CA. Mailin, Jim Barker SAMPLINE SAMPLINE SAMPLINE SOLICLASSIFICATION AND REMARKS 1 1.0 3 4 5 Red ish BRA; Mica, Fire I Strudy 9 14 2.5 4 6 7 ROW, S. Red, Mica, Fire Strudy 5:14 4.0 3 2 3 5 BRA; S. Red, Mica, Fire Strudy 5:14 5.5 1 2 1 Red Very Mica, Fire Strudy 5:14 7.0 0 1 2 10 Red Very Mica, Fire Strudy 5:14 7.0 0 1 2 10 Red Very Mica, Fire Strudy 5:14 7.0 0 1 2 10 Red Very Mica, Fire Strudy 5:14 7.0 0 1 2 10 Red Very Mica, Fire Strudy 5:14 7.0 0 1 2 10 Red Very Mica, Fire Strudy 5:14 7.0 0 1 2 10 Red Very Mica, Fire Strudy 5:14 7.0 0 1 2 10 Red Very Mica, Fire Strudy 5:14 7.0 0 1 2 10 Red Very Mica, Fire Strudy 5:14 7.0 0 1 2 10 Red Very Mica, Fire Strudy 5:14 7.0 0 1 2 10 Red Very Mica, Fire Strudy 5:14 7.0 0 1 2 10 Red Very Mica, Fire Strudy 5:14 7.0 0 1 2 10 Red Very Mica, Fire Strudy 5:14 8.5 1 2 2 1 Red Very Mica, Fire Strudy 5:14 8.5 2 2 1 Red Very Mica, Fire Strudy 5:14 8.5 1 2 2 2 Strug Bry, Mica, Fire Strudy 5:14 8.5 1 2 2 2 Strug Bry, Mica, Fire Strudy 5:14 8.5 1 2 2 1 15 Gray Mica, Fire Strudy 5:14 13.0 1 13.0 1 14.5 2 3 3 20 14.5 2 3 3 20 14.5 2 3 3 3 4 15.2 3 5 2 3 3 3 15.2 5 6 4 16.2 0 7 1 2 3 17.5 2 4 4 3 5 18.5 2 5 7 3 3 19.6 10 19.6 1		RING NO		W-2				STARTING TIME
DATE 4-6-99 WEATHER Closely WISPECTORORRILLER CA. MANIN, Jim BAKE SAMPLING SAMPLING SAMPLING SOUL CLASSIFICATION AND REMARKS 1 1,0' 3 4 5								GROUND SURFACE ELEV.
SAMPLING SALE MORE JABLE UD SOIL CLASSIFICATION AND REMARKS 1 1.0' 3 4 5	10	B NAME	Mid	Dep	th	We//		HRS. DRILLINGHRS. MOVING
SAMPLING SOLL UD SOLL CLASSIFICATION AND REMARKS 1 1,0	DA	TE #-	6-9	2_ w	EATHER	Clou	dy	INSPECTOR/DRILLER CA. Martin, Jim BArker
1 1.0' 3 4 5 Red ish BEN, MICE, Fire I Mech I SANDY S 1 2.5' 4 6 7 Red ish BEN, MICE, Fire I Mech I SANDY S 1 2.5' 4 6 7 Rewish Red, MICE, Fire SANDY S 1 4.0' 3 2 3 5 BEN ST. Red, MICE, Fire SANDY S 1 5.55' 2 1 Red Very MICE, Very Fire SANDY S 1 7.0' 2 1 Red Very MICE, Fire SANDY S 1 7.0' 0 1 2 1 Red Very MICE, Fire SANDY S 1 1 1 1 1 1 1 1 1								<u> </u>
1 1.0' 3 4 5 Redaid BRW, Mila, Fire Intel Sandy SIT 2.25' 4 6 7 Rewish Red, Mila, Fire Sandy SIT 4.0' 3 2 3 5 BRWISH Red, Mila, Fire Sandy SIT 4.0' 3 2 3 5 BRWISH Red, Mila, Fire Sandy SIT 4.55' 1 2 1 Red Very Mila, Fire Sandy SIT 4.55' 1 2 1 Red Very Mila, Fire Sandy SIT 4.55' 1 2 1 Red Very Mila, Fire Sandy SIT 4.55' 1 2 1 Red Very Mila, Fire Sandy SIT 4.55' 1 2 1 Red Very Mila, Fire Sandy SIT 4.55' 2 2 2 Sitang Gray, Mila, Fire Sandy SIT 4.55' 2 2 2 Sitang Gray, Mila, Fire Sandy SIT 4.55' 2 2 1 Sitang Gray, Mila, Fire Sand Fire Sandy SIT 4.55' 2 2 1 Sitang Gray, Mila, Fire Sand Fire				_	,	SCALE	un	SOUL OF ASSIFICATION AND REMARKS
2.5' 4 6 7 BRUISH Red, MICA, FINI SANDY SIH 4.0' 3 2 3 5 BRUISH Red, MICA, FINI SANDY SIH 5.5.5' 1 2 1 Red Very MICA, Way five SANDY SIH 7.0' 0 1 2 1 Red Very MICA, Way five SANDY SIH 7.0' 0 1 2 1 Red Very MICA, Way five SANDY SIH 7.0' 0 1 2 1 Red Very MICA, Way five SANDY SIH 7.0' 0 1 2 1 Red Very MICA, Way five SANDY SIH 8.5' 2 2 2 SHANG FINY, MICA, Way five SANDY SIH 7.00' 0 0 2 SHANG FINY, MICA, Way five SANDY SIH WINT 1.00' 1 Listed of Herman Pashel SANDY SIH WINT 1.15' 2 2 1 Is GOOD MICA, Way MICA, Way five SANDY SIH WINT 1.15' 2 2 1 Is GOOD MICA, Way SIH FIVE SANDY (Five) 1.15' 2 2 1 Is GOOD MICA, WAS FIVE SANDY (FIVE) 1.15' 2 2 3 DAY GOOD MICA, WAS FIVE SANDY WINT 1.10' 1 2 3 DAY GOOD MICA, Way SIH FIVE SANDY 1.14'S 2 3 3 DAY GOOD MICA, SIH FIVE SANDY 1.14'S 2 3 3 DAY GOOD MICA, SIH FIVE SANDY 1.15' 3 3 SHOW MICA, SIH FIVE SANDY 1.15' 3 SHOW MICA, SIH FIVE SANDY 1.15' 4 ID SANDY 1.15' 4 ID SANDY 1.15' 5 SHOW MICA, SIH FIVE SANDY 1.15' 5 SHOW MICA, SI	-	<u> </u>	1ST 6°	2ND 6*	3RD 6"	- 0 -		- Cole denote intitut neb itemento
2.5' 4 6 7 3.4.0' 3 2 3 5 BRUISH Red, MICA, FINI SAWY SIH 4.0' 3 2 3 5 BRUISH Red, MICA, FINI SAWY SIH 4.0' 3 2 3 5 BRUISH Red, MICA, FINI SAWY SIH 4.5.5' 1 2 1 Red Very MICA, Very fire SAWY SIH 7.0'	-	1	-				ļ	21.15
2 2.5" 4 6 7 3 4.0' 3 2 3 5 BRUISH RED, MICR, FINE SANDY SIFT 5 5.5' 1 2 1 RED VELY MICR, Way Fire SANDY SIFT 7.0' 2 1 2 10 RED VELY MICR, Way Fire SANDY SIFT 7.0' 3 2 10 BRED VELY MICR, Way Fire SANDY SIFT 7.0' 4 2 10 RED VELY MICR, Way Fire SANDY SIFT 7.0' 5 7.0' 0 1 2 10 RED VELY MICR, Way Fire SANDY SIFT 8.55' 7 2 2 2 STATE FIRE JAMES SIFT 10.0' 0 0 2 DEL GROW, WAY MICR, Way Fire SANDY SIFT 11.5' 1 15 GROW, MICR, Way SIFT 11.5' 2 1 15 GROW, MICR, Way SIFT 11.5' 2 2 1 15 GROW, MICR, Way SIFT 11.5' 1 2 3 DAY GROW, MICR, Way SIFT 11.5' 2 3 3 DAY GROW, MICR, Way SIFT 11.5' 2 3 3 DAY GROW, MICR, Way SIFT 11.5' 2 3 3 DAY GROW, MICR, Way SIFT 11.5' 2 3 3 DAY GROW, MICR, Way SIFT 11.5' 2 3 3 DAY GROW, MICR, Way SIFT 11.5' 2 3 3 DAY GROW, MICR, Way SIFT 11.5' 2 3 3 DAY GROW, MICR, WAY SIFT 11.5' 2 3 3 DAY GROW, MICR, WAY SIFT 11.5' 2 3 3 DAY GROW, MICR, WAY SIFT 11.5' 2 3 3 DAY GROW, MICR, WAY SIFT 11.5' 2 3 3 DAY GROW, MICR, WAY SIFT 11.5' 2 3 3 DAY GROW, MICR, WAY SIFT 11.5' 2 3 3 DAY GROW, MICR, WAY SIFT 11.5' 2 3 3 DAY GROW, MICR, WAY SIFT 11.5' 2 3 3 DAY GROW, MICR, WAY SIFT 11.5' 2 3 3 DAY GROW, MICR, WAY SIFT 11.5' 2 3 3 DAY GROW, MICR, WAY SIFT 12.5' 2 3 3 DAY GROW, MICR, WAY SIFT 13.5' 4 4 5 4 4 5 4 4 5 4 4 5 4 4 4 5 4	-			4	5	_		Keddish BRN, MILA, FIM / Medi SANdy SI/F
4.0' 3 2 3 5	7	25	11	 	77	—	├	72 1 5 7 5 7 5 7 5 7 7 7 7 7 7 7 7 7 7 7 7
3 4.0' 3 2 3 BBN. 1/2 Red MICE, Fire SANDY 5: 5.5' 2 1 Red New Mice, Fire SANDY 5: 1 2 1 Red New Mice, Fire SANDY 5: 1 2 1 Red New Mice, Fire SANDY 5: 1 2 1 Red Mice, Fire SANDY 5: 1 2 10 Dec. Mice, Fire SANDY 5: 1 2 10 Dec. Mice, Fire SANDY 5: 1 2 10 Dec. Mice, Fire SANDY 5: 1 2 0 Dec. Mice, Fire SANDY 5: 1 1.5' 2 2 1 Dec. Mice, Fire SANDY 6: 1 2 0 Dec. Mice, Mice, Fire SANDY 6: 1 2 0 Dec. Mice, Mice, Fire SANDY 6: 1 2 0 Dec. Mice, Mice, Fire SANDY 6: 1 2 0 Dec. Mice, Mice, Fire SANDY 6: 1 2 0 Dec. Mice, Mice, Fire SANDY 6: 1 2 0 Dec. Mice, Mice, Fire SANDY 6: 1 2 0 Dec. Mice, Fire SANDY 6: 1 2 Dec. Mice, Fire SANDY 6:	عا			<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	/		 	BUNISH REU MICA, +INI SANNY 5/17
4 5.5' 2 1 Red Nety Mich Very firm Showly 5: 1 7.0' 2 10 2 2 2 2 2 2 2 2 2	7			-	2	- 5 -	-	Pour 2 min 55 miles
4 5.5' 2 Red Very Mich Volly Flor Sandly Sift 7.0' 1 2 1 Red Very Mich Volly Flor Sandly Sift 8.5' 0 1 2 10 2 10 2 10 3 3 4 10 10 10 10 10 10 10	⊢			-	3	-	}	DKN. Str Ked MICA, +IME SANAY SITT
7.0'	4			7	-	—	├──	2. I War maran West To a mark with
S	-			_				
6 8.5' Z Z Z S STATE TO BOOK SWAMP 501 (100 501) 10.0' STATES THE THICK PLUE THE SAME SILLY STATES THE SAME SILLY SILLY STATES THE SAME SILLY SILLY STATES THE SAME SILLY SIL	17				2		=	
6 8.5' Z Z Z Z SHAME CHAY MILE, VLLY FILE SANDY SIFT 1000' O O Z DAY GAME AND PROBLEMENT SANDY SIFT	1-			 '-'	_	10 -		
10.0	6			12	2	—		
7 10.0' 0 0 2 Dail Gray Very Mira, Very this stack SIH Wish 11.5' 2 2 1 15 Last 2" was The Creek Sand (fire) 13.0' 1 2 3 Day Gray, May Sity Fire Sand W/ Roots 13.0' 1 2 3 Day Gray, Mira, Very Sity Fire Sand W/ Roots 14.5' 2 3 3 Day Gray, Mira, Very Sity Fire Sand W/ Has 14.5' 2 3 3 Day Gray, Mira, Very Sity Fire Sand W/ Has 10 14.5' 2 3 3 Day Gray, Mira, Very Sity Fire Sand W/ Has 10 14.5' 2 3 3 Day Gray, Mira, Very Sity Fire Sand 10 14.5' 2 3 Day Gray, Mira, Very Sity Fire Sand 10 14.5' 2 3 Day Gray, Mira, Very Sity Fire Sand 10 14.5' 2 3 Day Gray, Mira, Very Sity Fire Sand 11.5' 12 3 Day Gray, Mira, William Sand 12.0' 1 2 3 Day Gray, Mira, Sity Fire Sand 12.0' 1 2 3 Day Gray, Mira, Sity Fire Sand 12.0' 1 2 3 Day Gray, Mira, Sity Fire Sand 12.0' 1 2 3 Day Gray, Mira, Sity Fire Sand 12.0' 1 2 3 Day Gray, Mira, Sity Fire Sand 12.0' 1 2 3 Day Gray, Mira, Sity Fire Sand 12.0' 1 2 3 Day Gray, Mira, Sity Fire Sand 12.0' 1 2 3 Day Gray, Mira, Sity Fire Sand 12.0' 1 2 3 Day Gray, Mira, Sity Fire Sand 12.0' 1 2 3 Day Gray, Mira, Fire Sand 12.0' 1 2 3 Day Gray, William BRN, Mira, Fire Sand 12.0' 1 2 5 Day Gray, William BRN, William BRN, William Fire Sand 12.0' 1 2 4 4 3 5 Vellauish BRN, William, Fire Sand 12.0' Day Gray, William BRN,				<u>.</u>			L-3	
11.5 2 2 1 15 6	7			0	Z			Dock Gran New Town New Fran Sand SILL WILLES
B 11.5' 2 2 1 15 13.0' 2 3 Day Gray Mica, Very Sty Five Stand W/ Roots 13.0' 2 3 Day Gray Mica, Very Sty Five Stand W/ Has 14.5' 2 3 3 3 20 Day Gray Mica, Very Sty Five Stand W/ Has 16.0' 2 3 Day Gray Mica, Very Sty Five Stand W/ Has 17.5' 3 3 3 3 Day Gray Mica, Very Sty Five Stand 17.5' 3 3 3 Day Gray Mica, Sty Five Stand 17.5' 3 3 3 Day Gray Mica, Sty Five Stand 17.5' 3 3 3 Day Gray Mica, Sty Five Stand 17.5' 3 3 3 Day Gray Mica, Sty Five Stand 17.5' 3 4 6 Urllowish BRN, Mica, Five Standy Sty Five Standy				1		1		Last 2" was Aug Creek Sand (Eng)
13.0' 2 3 Daty Crown, Trica, July 5th, Five Spaced W/ transport 13.0' 1 2 3 Daty Crown, Trica, July 5th, Five Spaced W/ transport 14.5' 2 3 3 20 Daty Crown, Trica, July 5th, Five Spaced 14.0' 1 2 3 No Recovery) N Spoon W/ Small Parties 17.5' 3 3 3 Light Crown, Trica, July 5th, Five Spaced 17.5' 3 3 3 Light Crown, Selfy Five Spaced 17.5' 3 3 3 Light Crown, Selfy Five Spaced 17.5' 1 2 25 Datk Crown, Trica, Silfy Five Spaced 12.19.0' 1 2 25 Datk Crown, Trica, Silfy Five Spaced 13.20.5' 3 6 6 Yellowish BRN, Mica, Five Spaced, Silfy 13.20.5' 3 6 6 Yellowish BRN, Trica, Five Spaced, Silfy 14.220' 4 6 6 Yellowish BRN, Trica, Five Spaced, Silfy 15.23.5' 2 3 3 Yellowish BRN, Trica, Five Spaced, Silfy 16.26.0' 4 5 6 Yellowish BRN, Trica, Five Spaced, Silfy 17.27.5' 2 4 4 5 Yellowish BRN, V. Mica, Five Spaced, Silfy 18.29.0' 3 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 18.29.0' 3 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowish BRN, V. Mica, Very Silfy Five State 19.30.5' 4 6 Yellowis	8			2	1	- 15 -		Gran mica Very Silly Five Speed 111/ Roots
13.0						1		All is same
19.5' 2 3 3 3 3 3 3 3 4 5 4 5 5 5 5 5 5 5	9	13.0'	1	Z	3			Day GIAL MICA. Very Sity Five SAUN WI HAS
D 14.5		14.5						
	10		_	3	3			
17.5' 3 3 3 25 25 26 20.0' 1 2 25 20.5' 20.5	<u> </u>					20		
17.5' 3 3 3 Light Gray MICA, 5: Hy FINE SAND 19.0' 1 2 5 Dank Gray MICA, 5: Hy FINE SAND 12 19.0' 1 2 5 Dank Gray MICA, 5: Hy FINE SAND 20.5' Last 6' Was yellowish BRU, MiCA, FINE SANDY 5: Ht 13 20.5' 8 6 6 Yellowish BRU, MICA, FINE SANDY 5: Ht 22.0' 4 6 6 Yellowish BRU, MICA, FINE SANDY 5: Ht 23.5' 2 3 3 Yellowish BRU, MICA, FINE SANDY 5: Ht 25.0' 4 5 6 Yellowish BRU, MICA, FINE SANDY 5: Ht 27.5' 2 4 4 35 Yellowish BRU, V. MICA, FINE SANDY 5: Ht 29.0' 3 4 6 Yellowish BRU, V. MICA, FINE SANDY 5: Ht 29.0' 3 4 6 Yellowish BRU, V. MICA, FINE SANDY 5: Ht 29.0' 3 4 6 Yellowish BRU, V. MICA, FINE SANDY 5: Ht 30.5' Yellowish BRU, V. MICA, FINE SANDY 5: Ht 30.5' Yellowish BRU, V. MICA, FINE SANDY 5: Ht 30.5' Yellowish BRU, V. MICA, FINE SANDY 5: Ht 30.5' Yellowish BRU, V. MICA, FINE SANDY 5: Ht 30.5' Yellowish BRU, V. MICA, FINE SANDY 5: Ht 30.5' Yellowish BRU, V. MICA, FINE SANDY 5: Ht 30.5' Yellowish BRU, V. MICA, FINE SANDY 5: Ht 30.5' Yellowish BRU, V. MICA, FINE SANDY 5: Ht 30.5' Yellowish BRU, V. MICA, FINE SANDY 5: Ht 30.5' Yellowish BRU, V. MICA, FINE SANDY 5: Ht 30.5' Yellowish BRU, V. MICA, FINE SANDY 5: Ht 30.5' Yellowish BRU, V. MICA, FINE SANDY 5: Ht 30.5' Yellowish BRU, V. MICA, FINE SANDY 6: Ht 40.0' Yellowish BRU, V. MICA, FINE SANDY 6: Ht 40.0' Yellowish BRU, V. MICA, FINE SANDY 6: Ht 40.0' Yellowish BRU, V. MICA, FINE SANDY 6: Ht 40.0' Yellowish BRU, V. MICA, FINE SANDY 6: Ht 40.0' Yellowish BRU, V. MICA, FINE SANDY 6: Ht 40.0' Yellowish BRU, V. MICA, FINE SANDY 6: Ht 40.0' Yellowish BRU, V. MICA, FINE SANDY 6: Ht 40.0' Yellowish BRU, V. MICA, FINE SANDY 6: Ht 40.0' Yellowish BRU, V. MICA, FINE SANDY 6: Ht 40.0' Yellowish BRU, V. MICA, FINE SANDY 6: Ht 40.0' Yellowish BRU, V. MICA, FINE SANDY 6: Ht 40.0' Yellowish BRU, V. MICA, FINE SANDY 6: Ht 40.0' Yellowish BRU, V. MICA, FINE SANDY 6: Ht 40.0' Yellowish BRU, V. MICA, FINE SANDY 6	Ж			Z	3			NO RECOVERY IN SOSON WI SAND CATCHER
19.0' 1 2 25 Dady Gray, Mica, Sith Flax Stand 20.5' Last 6' was yellowish BRU, Mica, Flax Standy 51H 13 20.5' 3 6 6 Yellowish BRU, Mica, Flax Standy 51H 14 22.0' 4 6 6 30 Yellowish BRU, Mica, Flax Standy 51H 15 23.5' 2 3 3 Yellowish BRU, Mica, Flax Standy 51H 25.0' 4 5 6 Yellowish BRU, Mica, Flax Standy 51H 25.0' 4 5 6 Yellowish BRU, Mica, Flax Standy 51H 29.0' 3 4 5 Yellowish BRU, W. Mica, Flax Standy 51H 29.0' 3 4 5 Yellowish BRU, W. Mica, Flax Standy 51H 29.0' 3 4 5 Yellowish BRU, W. Mica, Flax Standy 51H 16 29.0' 3 4 5 Yellowish BRU, W. Mica, Flax Standy 51H 16 29.0' 3 4 5 Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Way 51Hy Flax Standy 30.5' Yellowish BRU, W. Mica, Y				<u> </u>	<u> </u>	l	<u></u>	
12 19,0'	14			3_	<u> 3</u>		<u> </u>	Light Gray MICA, Sitty FINE SAND
20.5'	- <u>-</u> -			1 .	-	-75 -	-	
13 20.5 3 6 6	15			 	<u>Z</u>	 —	<u> </u>	DAN GIAG MICA, Silly TIM SANA
22.0'	١.,			 	1		-	LAST 6" WAS Yellowish BRN, MICA, FINE SANDY SIH
14 22.0' 4 6 6 30	1/3			9	6	-	-	Yellorish BRU, Willy Fine Smaly 51H
15 23.5 2 3 3	1,2			+,	 		<u> </u>	. // / 30
15 23.5 2 3 3	14-7	72.8	7	10	<u>Θ</u> _	3 0 -	┼	Yellowish BRA. Thicag + Ten SANDLY 31 H
25.0	170	23.5	2	1-3	3	┨┈	 	10/1-11 2011
16 26.0' 4 5 6			~	+~	 _ _	 —		YELLOWISH BRN. MICA, TIM SHANG SIFF
27.5' 35	17			1	6	1		Wallowick DON - micro File - 11
17 27.5' Z 4 4 5 YELLOWISH BRN, V. MKRY TTVE SANDY SIFTY SANDY SANDY SIFTY SAN	Ť			1-	 		ļ	FERRINGS BEN, MICH, TINE SAWAY STIT
29.0' 18 29.0' 30.5' 19 30.5' BORING TERMINATED 36.5' BORING REFUSAL N/A WATER 10B DEPTH 16.2' WATER 24 HR:DEPTH 10.1' WATER 10SSES NON- U.Sed Wellowish BRN, V. MICR., V. W. SIfty — The SAME DIAMOND CODE. METHOD OF ADVANCING BORING D. POWER AUGER ROTARY DRILL: WAND: WAND: WWWATER DIAMOND CODE.	17		,	4	4	35 -	 	Wellowish RDU I Mara Free grant with
BORING TERMINATED 36.5' BORING REFUSAL N/A- WATER TOB DEPTH 16.2' WATER LOSSES NON USED WATER LOSSES NON USED WELL-WATER CORE		29.0		 	 	1-		Theres Bring V. Thing (18 Strang Self
30.5'	16	3 Z9.0'	3	4	5	1		Willowich RON V. Mico Very SIK + The Sound
BORING TERMINATED 36.5' BORING REPUSAL N/A- WATER TOB DEPTH 16.2' WATER 24 HR:DEPTH 10.1' WATER LOSSES NON USED DIAMOND COPE						1		The state of the state
BORING TERMINATED 36.5' BORING REFUSAL N/A- WATER TOB DEPTH 16.2' WATER 24 HR:DEPTH 10.1' WATER LOSSES NONE USED DIAMOND CODE	19	30.5	Z	4	6	1/0		Yellowish BRN. W. MICH. Very SIH - The Span
BORING REFUSAL N/A- WATER TOB DEPTH /6.2' WATER 24 HR:DEPTH /0.1' WATER LOSSES NON- U.S. C. DIAMOND CODE	L.	320			<u> </u>			1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
WATER TOB DEPTH /6.2' WATER 24 HR:DEPTH /0.1' WATER LOSSES NON LUSED WATER LOSSES NON LUSED DIAMOND CODE	J					• •		METHOD OF ADVANCING BORING DE
WATER TOB DEPTH 76.2 HAND CHOP:WMHUD:WWWATER WATER 24 HR:DEPTH 10.1 ROTARY DRILL:WMUD:WWWATER WATER LOSSES NON- USED DIAMOND CODE								
WATER LOSSES NON USed HOTARY DRILL WANDD WATER								
WATER LUSSES 10002 U.S.E.A. DIAMOND CODE						<u>/</u>	. 1	ROTARY DRILL-WAND:WAVATER
CASING SIZE ALIA LENGTH ALIA-			_					DIAMOND CODE

+ STANDARD PENETRATION RESISTANCE IS SUM OF BLOWS FOR 2ND 6" AND 3RD 6" TO DRIVE 1-3/8" I.D., 2" O.D. SPLIT BARREL SAMPLER WITH 140 POUND HAMMER FALLING 30 INCHES

FORM		
	л вл.	. 756

REVISION 3

DUKE POWER COMPANY

PAGE 2-OF Z

PROJECT Greenville Browlette Rd.

BORING NO. MW-22 JOB NO. GROUND SURFACE ELEV. JOB NAME MID Depth Well HRS. DRILLING HRS. MOVING DATE 4-7-99 WEATHER Clear Hot INSPECTOR/DRILLER SAMPLING SEALE UD SOIL CLASSIFICATION AND REMARKS 20 32.0' 4 6 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	}	EST BORING FIELD REPORT	L TI	SOI	;				
JOB NO. JOB NAME MID Depth Well DATE 4-7-99 WEATHER Clear Hot INSPECTOR/DRILLER CAMBOLISM, TIM BAKER SAMPLING SAMPLING SOIL CLASSIFICATION AND REMARKS 20. 32.0' 4 6 6 9 9 9 4 10 4 10 10 10 10 10 10 10 10 10 10 10 10 10						<u> </u>	MI	ING NO	BOF
SAMPLING STEP 2HDE 3RDF 40 SCALE UD SOIL CLASSIFICATION AND REMARKS 20 32.0' 4 6 6 40 40 40 40 40 40 4		ACAMAD AMBERAT ELEM							100
SAMPLING STEP 2HDE 3RDF 40 SCALE UD SOIL CLASSIFICATION AND REMARKS 20 32.0' 4 6 6 40 40 40 40 40 40 4	MOVING	HRS. DRILLING HRS. MI	JOB NAME Mid Depth well						
SAMPLING STEP 2HDE 3RDF 40 SCALE UD SOIL CLASSIFICATION AND REMARKS 20 32.0' 4 6 6 40 40 40 40 40 40 4	m BACKER	of inspector/oriller CA, Mollin, Jin	a H	Ck	EATHER	<u> </u>	7-99	E 4-1	DAT
20 32.0' 4 6 6 40 yellowish BRN, Mich, Very Sitty Fore Come Son 33.5' 21 33.5' 3 4 6 yellowish BRN, Mich, Very Sitty Fore SAND 35.0' 22 35.0' 12 16 19 5 Dark BRN, Mich, Very Sitty Fore Coarse JAN 36.5'									
20 32.0' 4 6 6 40 yellowish BRN, Mich, Very Sitty Fore Come Son 33.5' 21 33.5' 3 4 6 yellowish BRN, Mich, Very Sitty Fore SAND 35.0' 22 35.0' 12 16 19 5 Dark BRN, Mich, Very Sitty Fore Coarse JAN 36.5'		SOIL CLASSIFICATION AND REMARKS	בט 🖠	SCALE	1	lG .	AMPLIN	S	
21 33.5 3 4 6 yellowish BPN, Mica, very sitty Five SAND 22 35.0 12 16 19 5 DAIK BRN, Mica, Sitty Five COArs-JAN 36.5 Set a 2" well with 10 screen set From 25.0 70 35.0				40 -	3RD 6"	2ND 6"	151 5	77.0/	74
21 33.5 3 4 6 yellowish BDN, Mica, very sity Five SAND 22 35.0 12 16 19 5 DAIK BON, MICA, Sity Five COARS - JAN 36.5 Set A 2" Well with 10 Screen Set From 25.0 70 35.0'	trun Comse SANK	yellowish KIZN, Thica, Very Sitty -	-	-	6	6	4		20
22 35.0 12 16 19 5 DAIK BRN, MICHAY Sty FINE/COARS-JAN 36.5' Well with 10' Screen Set A 2" Well with 10' Screen set From 25.0' TO 35.0'			-	 —	6	4-	7		2.1
22 35.0 12 16 19 5 DAIK BRN, MICAY 5: Hy FINE/CDARS-JAN 36.5' Well with 10' Screen set From 25.0' TO 35.0'				-	- -	-	ب		
Sct A 2" Well with 10' Screen sct From 25.0' 70 35.0'	1 CAArse JANde	DAIK ROW MICA Softer Five /		j —_	19	16	12		ZZ
Sct A 2" Well with 10' Screen sct From 25.0' 70 35.0'		werthered Rock						36.5'	
set From 25.0' 70 35.0'	i	<u> </u>							
set From 25.0' 70 35.0'	SCreen	Set a z" well with 10'	<u> </u>						
	,	set From 25.0' 70 35.0'	<u> </u>	<u> </u>		<u> </u>			
			∔—	↓ o -		ļ	<u> </u>		
			 	 -	 	-	<u> </u>		
			<u> </u>	┤	 		 	-	
			├	 —			ļ		
			 	 		 			-
5			+-	+ 5 -	-	 			
	·		\vdash	1-	 				
			 	1—	1				
				1_					
				<u>1</u>					
			T			<u> </u>			
<u> </u>			. _	<u> </u>		<u> </u>	1		
 				 		ļ	<u> </u>		
			-	 	<u> </u>	ļ	-		<u> </u>
			 	 5 -	<u> </u>	 	 		_
┣═╅┈┈┼┈╅╼╎ ┈┤╼╶ ├┈╎ ╌┈┈┈┈┈┈┈┈┈┈┈┈			·	 —-	<u> </u>	├	 		\vdash
┠╌┼╌┼╌┼╌┼┈┤╌╎╴├╌┼╌╴╌┈┈┈		 	-	 —	-	 	 		
┠┼╌┼╶┼╌┼╌┤╼┞╨╁┈╾╼			·	 		 	├─-		┢
┠┼╌┈┼┈┼┈┤┈╎┈├┈┼┈┈┈┈┈			-		-	 	 		\vdash
			+-	+ o -	 	 -	 		
			·	1—	†—	 	1		一
			 	<u> </u>		 		<u> </u>	一
				 			<u> </u>		
				 					
5			\top	T					
			. []	<u> </u>		<u> </u>	<u> </u>	<u> </u>
]	ļ	Ь	ļ	ļ	<u> </u>
				4	 	<u> </u>	↓	 	<u> </u>
			+	↓ o -	1	-	 	 	
			 	1 -	1-2/		1 AIRIATO	DINC TED	
ACOUSE DEFINE	DEPTH	1							•
WATER TOR DEPTH	0.0 1036.5		,						
WATER 24 HR-DEPTH	TO	HAND CHUP:W/MUD:W/MATER							
WATER LOSSES NOWS IASSE		DOTABLE DATE							
CASING SIZE N/A LENGTH N/A- DIAMOND SORE — TO	' '	ROTARY DRILL.W/MUD.W/WATER	دما	کـدا	ON-				

FORM M-26C

REVISION 3

DUKE POWER COMPANY ___

PAGE / OF Z

PROJECT BIAND HER REPORT

	SOIL TEST BORING FIELD REPORT									
BOF	RING NO	M	W-	· 23	3		STARTING TIME			
JOB	NO	_					GROUND SURFACE ELEV.			
JOE	NAME	Mic	المحة	sth	w-1	1	HRS. DRILLING HRS. MOVING			
			we INSPECTOR/DRILLER CA Mallin, Jim Backer							
	Joyce Holcombe									
	S.	<u>AMPLIN</u>	IG_		us 10	145	•			
		1ST 6"	ZND 6	3RD 6"	SCALE	UD	SOIL CLASSIFICATION AND REMARKS			
1	1.0'	Z	1	N	-		Strong BEN, Stishtly Micay Fine South, stighty			
	Z.5 "						LUMBER 31/F			
_2	2.5	1=	12"	1			Drill Grouper / BRN 5/15/14/1/ Mila, Very Fine Son			
-	40			4.	_		Mach SIF was			
3	4,0		1=	12"	- 5 -		Dark Gray very mica trive sandy sitt			
11	5.5	,			 —		D // 6			
4	5.5			1			Dark Gray Very MILP, Very Fire SANdy SI IT			
	7.0'	Z	5	7			15 124 1 24 1 21 1 21			
	8.5.	-	3		 —		LAST 6" WAS Yellow, mica, Tiley Fray Med, SANCY SI /			
6	8.5'	,	Z	3	- B -		MISTER WAS YELDED, MICA STAN HAVY MON, SANA			
Ť	100'			_	-		yellow, Thica, Sily Franch sand			
7	10.0'	3	1	1	1—		Hallowich ROM TONCO SIX TE /24 Cust			
	11.5			 			yellowish BRN, Mica, Stry Fren / Med, Send			
8	11.5'	1	1	2	_		12 12" was wellowish FRA wich Ste Surlance SAN			
	13.0'				- 5 -		LAST 6" WAS Yellow Very Mich, Sity Flow Penner SANGE			
9	13.0'	1	1	2			yellowish BRN, Very Man, Very Sith Tout Mal			
<u> </u>	14.5						SAND			
10	14.5	1	2	4]		yellowish BRN, Very Mica, Very Fine SANDY SIH			
<u> </u>	16.0		<u> </u>	ļ	 - o -					
<u>//</u> _	160	2	2	2	ļ		yellowish BRN. Very Mich, SIly FTre/Med, SAN			
<u> </u>	17.5	-	-,,-	-		<u> </u>				
μZ	17.5	13	4	3_	 —	 -	Yellowish BON, Very Mich, Very 5/14 Frue/Coars			
13	19.0'	2	2	3		 				
۲2	19.0	-		-	 5 ~	 	H. Bico, Very Mica, Very Silly Flor Connessan			
14	20.5	1	2	2	 					
 	22,0		-	 	 		Yellowish Ben, Very Mica, Very Sty + The Same			
15	72.0'		Z	4	1 —		yellowish BRAN, Very Mica, Very Sifty + Fore SAND			
r-	23.5	1		 	1		January Die Hay Mick, Day Sifty + The SHAL			
16	23.5	ı	2	3	- 0 -		yellowish BRN. Very Mica, levy sitte Fin SAND			
	25.0'						The state of the s			
1/2	25.0	2	3	8	1_		Hellowish BRN Very Mich Very Str. Fine Sound			
<u> </u>	26.5		<u> </u>	<u> </u>		<u> </u>				
<i>18</i>	26.5	12	z	4	- 5 -	<u> </u>	yellowish BRM Very Milly Very Sith Fine Smid			
<u> </u>	280'	 _		 	 	<u> </u>				
1/2	28.0	2	3	5	 		yellowith BRM. Vay MICA. Very Sifty Fren SANA			
20	29.5	<u></u>	-	1	┤ ——		1 .//- 2 1 P.O. 1/2			
20	29.5	2	3	6			YOURS DAW, VLY THICK, VLY SIFE FTAN SAND			
!	71.0	 	 	 	- 0 -	 	<u> </u>			
BO	RING TER	MINATE	D_ 4	43.0		<u> </u>	METHOD OF ADVANCING BORING DEPTH			
	RING REF			VIA			METHOD OF ADVANCING BORING DEPTH POWER AUGER OO' TO43.			
	ATER TOB			0.2'			LIAND OLIOD HIS WAY			
W/	ATER 24 H	R:DEPTI		27			DOTAGY DOWN			
	ATER LOSS		_	one			DHAMONO CORC			
CA	SING SIZE			VA.	LE	NGTH_	WA DIAMOND CORE - 10 -			

+ STANDARD PENETRATION RESISTANCE IS SUM OF BLOWS FOR 2ND 6" AND 3RD 6" TO DRIVE 1-3/8" I.D., 2" 0.D. SPLIT BARREL SAMPLER WITH 140 POUND HAMMER FALLING 30 INCHES

4 28-99

CASING SIZE

LENGTH_

DUKE POWER COMPANY

PAGE Z OF Z

PROJECT Brambe He Rd.

1		4.			50I		SI BURING FIELD REPURT
	ING NO		1W-	·2 S			STARTING TIME
	NO			11		t .	GROUND SURFACE ELEV.
JOB	NAME	MEG	dzp	₩_	mél	<u> </u>	HRS. DRILLING HRS. MOVING
DAT	E_#-	ZB-:	<u>29</u> w	EATHER			INSPECTOR/DRILLER CA. Media Jim Barker
<u> </u>					Col	4	Joyce Holcombe
						מט	SOIL CLASSIFICATION AND REMARKS
	31.0'	1ST 6"	2ND 6"		 0 -		Bo the man is the said of the
2/	32.5		3	6	{ —		BRN, Very MICO, Very Fire Smoody 5:14
22	32.5		4	6	1—		BRN., Very Mica, Very Fire SANdy 51/+
	34.0'		<u> </u>		1—		311
23	34.0'		3	5	- -		BRN, Very MRCA, Very Five SANDEY 5:14
	35.5				Ţ <u>.</u>		
24	35.5	Z	3	5	↓		BRN, Very Mica, Very Fin SANNY SIH
L_	32.01		1		 —		
25	37.0	2	4	5			BRN., Vuy MICA, Very Free SANdy 51/t
1 2 2	38.5°	19	3	11	 0 -		
چا	40.0		<u> </u>	#	┤—		BRN, Very Mica, Very Fire SANDY 51/1
27	40.0		5	8	 		BRN. 16 Mich 16 Fr. Sander 21 H
<u> </u>	41.5		Ť	1	1—	<u> </u>	BRN, Very Mica, Very Fore Sandy 51 ft
ZB	41.5		15	8	1-		BRN, Ving Mica, Very Fine SANDY SIH
	43.0				Ţ <u>.</u>		
Z9	43.0	4	6	9]_		BRN. Very MCA, Very Fine SANdy SIH
$ldsymbol{ldsymbol{ldsymbol{eta}}}$	44.5	 	↓		↓		
-	 	ļ		ļ	┥		Set A Z" Well With A 10.0 Screen Set From 32.5' TO 42.5'
	ļ		├┈ ─	 	+ a -	 -	Set From 32.5 TO 42.5"
-	 	┼	+-	-			
		┼─~	┼	╁┈	┥		
	 	†	 		┪		Note: This Boring is Clean of At
			 	1	1 <u> </u>		Note: This Boring is clean of At
					十 5 -		
]_		
<u> </u>	ļ		-	ļ.,	J —	<u> </u>	
1		 	 	ļ	↓ —	<u> </u>	
_		—	+		- + 0 -	-	
\vdash		+	+-	 	┨—	-	
	+	 	╅╾╌	╁╌	┪—	 	
	 		1	1-	┪──		
		1	1	1	7-		
					丁		
		1	<u> </u>	1	<u> </u>		
_	1	_	 	 	4—		
	 	+	+-	-	┦—		
\vdash	-	 	+	+-	+ o ·	-	
RI	ORING TER	RMINAT	ED.	4:	3-0	1	METHOD OF ADVANCING BORING DEPTH
1	ORING RE			NL	4		POWER AUGER CONTROL TO
W	ATER TOB	DEPTH		0.1	7		HAND CHOP-WARE TO TO
	ATER 24 H			0.5			ROTARMORIES TO
W	WATER LOSSES None Used						BIAMOND CORE

+ STANDARD PENETRATION RESISTANCE IS SUM OF BLOWS FOR 2ND 6" AND 3RD 6" TO DRIVE 1-3/8" I.D., 2" O.D. SPLIT BARREL SAMPLER WITH 140 POUND HAMMER FALLING 30 INCHES

TO -

1			4 h	4.4	26C
	\neg	ΠN	ΛR	71°-2	200

DUKE POWER COMPANY

REVISION 3

PAGE_1_OF_/

PROJECT BRAMLETT & Rd.

SOIL TEST BORING FIELD REPORT						
BORING NO. <u>M W- 24</u>		STARTING TIME				
JOB NO		GROUND SURFACE ELEV.				
JOB NAME Thallow W	cll	HRS. ORILLING HRS. MOVING				
DATE 5-3-99 WEATHER	Chan NIC	HRS. DRILLING HRS. MOVING INSPECTOR/DRILLER CYA, Madia, Jim Broker				
SAMPLING	SCALE UD	SOIL CLASSIFICATION AND REMARKS				
1ST 6" 2ND 6" 3RD 6"	0	i				
	 -	NO Soil Samples Taken From This				
	<u>`</u>	NO Soil Samples Taken From This Boring All Samples Taken in MW-Z3 Approx. 5.0' AWAY				
	 	HOPTOK. 5.0 AWAY				
	 					
	5	Doille dans to 110' Aud of a				
		Drilled down to 11.0' AND set A				
		C MATT SCIPE A TOTAL SCIPE.				
	70	flush Mount set about				
	 _	0.4' About Ground				
	<u> </u>					
	↓	Top of seal @ 0.1'				
	5	seal seal Top of SAND @ 0.2' Top of Screen 0.4' H20@ 0.9'				
- 	{`	Top of screen 0.4'				
	{−− ├ ──	H20@ 0.9'				
	┨──├──					
	1					
	20					
	1	1951				
	 					
	1					
	25					
		Bottom of Screw 10.4"				
·		Bottom of Hale 11.0'				
	 30 	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
	<u> </u>					
	┥					
	┤ —					
	┥── ├──					
	 3 5 −−					
	┨╼╸├╼┷					
	┨─ ├─					
	┨──├──					
	√,— 					
	#0 					
BORING TERMINATED //	0	METHOD OF ADVANCING BORING DEPTH				
BORING REFUSAL N/B	2	POWER AUGER O.O' TO #.O				
WATER TOB DEPTH		HAND CHOP WAND WANTER — TO —				
WATER 24 HR:DEPTHO.9		ROTARY DRILL:WANUD:W/WATER — TO —				
	h Used	DIAMOND CORE				
CASING SIZE	LENGTH_	N/#				

REVISION 3

PAGE_/_OF_/

DUKE POWER COMPANY

PROJECT Bramlette Rd.

	1.) احد _	SOI	LTE	EST BORING FIELD REPORT
BORING NO	M	<u>w -</u>	<u> 25</u>			STARTING TIME
JOB NO					<u> </u>	GROUND SURFACE ELEV.
JOB NAME_	4					HRS. DRILLING HRS. MOVING
DATE 3 -	4-99	<u> </u>	EATHER	Cle	as H	67 THIS PECTOR/DRILLER CA. Medlin, Jim Barker
<u>s</u>	AMPLIN			UJ TI SCALE	UD	SOIL CLASSIFICATION AND REMARKS
	1ST.6"	2NO 6	3RD 6*	- 0 -	 	resy soft
1 1.6'		,	1=1,	-	151,	Yellowish BRN, MICA, Sith FINE/Med. SHOW
3.9'					49511	9'= DACK GIAG MICE, VELY FINE SANGE SIH
2 3,9'	0-		>			Weight of Hanner Freshed JAMI 1,5
5,4	_		<u> </u>	- - 5 -	ļ	DAK GIAG MICA, Very FINE SARRY Clayer SIH
3 5.4'	0					weight of Homen Fushed great 15
6.9'	0=		Z		<u> </u>	DAK Grong MICA, Very Fore sandy sitty Clary
8.41	0-	7.0		1—	<u> </u>	DACK Cray mica, Very The Smaly sitty clay
5 8.4'		Z	1			Fur sand - Gray sh BON, very mica, sith, fine sand
9.91						The state of the s
6 9.9'	2	2	3			Pure SAND - (DAYIN BAN. Very MICA, SIlly FINE SAND
11.4			L.,	 —	<u></u>	
7 11.4'	3	3	4_	∤ —	-	Pure SAND - GRAyish BOW, Very MICH, Solly-Fine SHAD
8 12.9'	5-	8	6	- 5 -	+	Proceed Carlot 200 10 min all City
14.4	† 	<u> </u>	9_	1—		Pure Sand - Grayish BRU, Wery Thick, 57 My Fire/Med.
9 14.4'	6	6	8	1_		15 1.0' = Pure SANd - Growish RRU, mich sith + Te SAN
15.9						Last 0.5' = Pune SAND - Grayish BRU, MICA SIME + TI SAN
0 15,9		50=	4"	Ļ o -	<u> </u>	Gray Mica, silty Fine sandy weathers Rock
16.7'	 	<u> </u>	 	-	<u> </u>	
	+	<u> </u>	-	1—	-	Set A 2" well with A 15.0' Screen
·	1		 			set from 1.0' 70 16.0'
			 	1-		BET 17072 710 70 70.8
				5		
		<u> </u>	<u> </u>	<u> </u>		
	ļ	<u> </u>	1	 —	<u> </u>	
	 	 	┼	┤ —	<u> </u>	
	-	 	-	+ a -	┼──	
	 	├	+-	1—	 	
			1	1—		
	<u> </u>			ļ ₅ .		
	-	 	 	- 	<u> </u>	
 	+	-	├	 —	\vdash	
	+	 	 	┪	-	
			<u> </u>	1-		
	1			<u> </u>	1	
BORING TER			16.3	,		METHOD OF ADVANCING BORING DEPTH
BORING REF	_		1/4			POWER AUGER O.O TOGE

Overnite - 5-5-99

LENGTH_MIA

HAND CHOP:W/MUD:W/WATER

DIAMOND CORE

ROTARY-DRILL:W/MUD:W/WATER

WATER TOB DEPTH

WATER LOSSES

CASING SIZE

WATER 24 HR:DEPTH

1.5

USed

NONE

NA

TO .

TO-

TO -



PROMOTE PROTECT PROSPER			
1. LOCATION OF WELL:			4. OWNER OF WELL: Duke Power Co.
County: System N	lame:		「 Address:
Oconec Bran	alatter	16P sita	Address: 422 south church st. Charlotte, N.C. 28242
		'	leiephone No.:
Latitude: Longitud	e: '		Engineer: Mark McGary
Distance and Direction from Road Inter			Address:
			724 302 7202
			Telephone No.: 704 - 373 - 7898
Street Address & City of Well Location	:		5. WELL DEPTH (completed) Date Started: 5-4-99
Sketch Map:			ft. Date Completed: 5 - 5 - 99
			6. ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug
			☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other Auger
			7. USE:
			□ Domestic □ Public Supply—Permit No. □ Industry
			☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☐ Monitor Well ☐ ☐
			8. CASING: @Threaded D Welded
			Diam.: Height: Above/Below
			Total Carlos Car
2 CUTTING SAMPLES: TYPES I	⊒ No		□ Steel □ Other Weight <u>ਤc4 40</u> lb./ft.
		/	
Geophysical Logs:	ase enclose)		in. to ft. depth
	"Thickness	Depth to	9. SCREEN
Formation Description	of Stratum	Bottom of Stratum	Type: PVC Diam: 2"
	Obdicant	- Oudion	Slot/Gauge: 1010 Length: 15.01 Set Between: 1.01 ft. and 16.01 ft. NOTE: MULTIPLE SCREENS
See Attached soil			Set Between: 1.0' ft. and 16.0'ft. NOTE: MULTIPLE SCREENS ft. and ft. USE SECOND SHEET
			Sieve Analysis
Test Boring field Report for MW-25	}		10. STATIC WATER LEVEL
	,	-	ft. below land surface after 24 hours
Report for MW-25			11. PUMPING LEVEL Below Land Surface.
7			N/A_ft. after N/A_hrs. Pumping N/A G.P.M.
		:	Pumping Test: ☐ Yes (please enclose) ☐ No
			Yield: N/A
			12. WATER QUALITY
	1		Chemical Analysis ☐ Yes ② No Bacterial Analysis ☐ Yes ② No
			Please enclose lab results.
			13. ARTIFICIAL FILTER (gravel pack) ☐ Yes ☐ No
		<u> </u>	Installed from 0.8' ft. to 16.7' ft.
			Effective size
			14. WELL GROUTED? 12 Yes □ No
			☑ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
			Depth: From O.O' ft. to O.5' ft.
			15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: N/A- IL N/A- direction
			Type well disinfected Yes Type: N/A
]		upon completion ☐ No Amount: N/A
			16. PUMP: Date installed: N/A Not installed
			Mfr. Name: NIA Model No.: NIA
	-	 -	H.P. WIA Volts NIA Length of drop pipe ft. Capacity gpm
			TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal
*Indicate Water Bearing Zones			17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief:
(Use a 2nd sheet if needed)		:	D. C.
OF DENABLES	<u> </u>		Registered Business Name: Dake Engineering + Ser Date: 5/10/99
There is A Beston	to Seal	from	Address: Box 219, Sevecu SC 29679
			Signed Chailes A. M. Allin Cert. No: 775
0.5 70 0.8	Ste Wiley		Signed: Cert. No.: 775 Authorized Representative

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL Ground Water Protection Division 2600 Bull Street Columbia, S.C. 29201 (803) 7:4-5331 Water Well Record OWNER OF WELL: Address Duke Power Co. 422 South Church St. Charlotte, N.C. 28242

	Address	Duke Power co. 422 south Church St.
		Charlotte, N.C. 28242
. LOCATION OF WELL	Telephone No. Engineer	
County Oconee System Name: Brain to MGP Site	Address	Mark McGary.
Drawtelle MGP Site		
	Telephone No.	704-203.7898
Catholic Longitide:	5. WELL DEPTH (Con	704-373-7898 poleted) Date Started: 5-03-99
Distance And Direction from Road Intersections	11.0'	ft. Cate Completed: 5 - 03-99
	6. Mud Rotary	Jetted Bored Dug
	Air Rotary	Driven Cable tool Tother Auger: N
Street address & City of Well Location	7. USE:	
Sketch Map: (See example on back)	☐ Domestic	Public Supply-Permit No Industry
	Irrigation	Air Conditioning Commerc
	Test Well	Monitoring well
	8.CASING: Threaded	- 1
	Diam. 2" Type PPVC	Height: Above/Below
	Steel	
	in. to	
	in. to	
2. CUTTING SAMPLES Yes No	9. SCREEN:	
	Туре:	PUC Diam Z"
Geophysical Logs Yes (Please enclose) No		,010 Length 10.0°
FORMATION DESCRIPTION STATEMENT THICKNESS TO BETTHE OF	Set Between	4' ft. and 10.4' ft. NOTE: MULTIPLE SCREEN
STREET, STREET		ft. andft. USE SECOND SHEET
San Att. 1 1 mail	Sieve Analysis (1)	
See Attached Soil	1	below land surface after 24 hours
Test Boring Sill	11. PUMPING LEVEL	
Test Boring field Report FOR MW-24		
Report for MW-24		after NA hrs. pumping NA G.P.M.
	Pumping Test:	_
	Yield N/A	·
	12. WATER QUALITY	
	Chemical Analysis	Yes No Bacterial Analysis Yes No
	Please Enclose Lab (ER (Gravel Pack) Yes No
		D.Z 11. to _//.0 1t.
	Effective size	.018 uniformity coefficient 1.56
	14. WELL GROUTED?	
	. –	and Cement Concrete Other
		ANIA to ANIA to
	· · · · · · · · · · · · · · · · · · ·	
	15. NEAREST SOURCE O	FPOSSIBLE CONTAMINATION: N/A Feet U/A Direction Type Well disinfected Yes Type N/A
		upon completion No Amount N/A
	16. PUMP: Date Install	ednot installed
		N/A model no. N/A
		s N/A-length of drop pipe W/A-t. capacity N/A-gp
	TYPE: Submersibl	C C I I C I DING
* Indicate water bearing zones	Jet (deep)	Reciprocating Centrifugal
	and this papert is true to the	
(use a 2nd sheet if needed)	PEGISTERED VI	
There's a Bestonies Seal Front		THE STATE OF THE S
A STATE OF THE SECOND ASSESSMENT OF THE SECOND	WALE /	
	Stoned LUM	e i allegra, some more se
DHEC # 1903 (10/86) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH A	ND ENVIRONMENTAL CO	TESENIATIVE NTROL (ADDRESS ABOVE)



1. LOCATION OF WELL:			4. OWNER OF WELL: DINK POWER CO.
County: System!	Name:		4. OWNER OF WELL: Duke Power Co. Address: 427 Sandh church St.
		Licar	
BrAN BrAN	n/ette M	GY SITE	Telephone No.:
Latitude: Longitud			Engineer: Mark McGary Address:
Distance and Direction from Road Inte	rsections:		provided the control of the control
			Telephone No.: 704 - 373 - 7898
			5. WELL DEPTH (completed) Date Started: 4-27-99
Street Address & City of Well Location	l: —————		
Sketch Map:			43.0 ft. Date Completed: 5-03-99
			6. Mud Rotary
			☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other Auger
	•		7. USE:
			Domestic Public Supply-Permit No.
			☐ Irrigation ☐ Air Conditioning ☐ Commercial ☐ Test Well ☐ Monitor Well ☐
			8. CASING: GThreaded D Welded
			Diam.: Z Height: Above/Below
			Type: PPVC Galvanized Surface 2.5 ft.
2. CUTTING SAMPLES: ET Yes	□ No		□ Steel □ Other Weight <u>Sch, 40</u> lb./ft.
			in. to 32.5 ft. depth Drive Shoe? Yes 170
Geophysical Logs: Yes (ple	ase enclose)		in. toft. depth
	Thickness	Depth to	9. SCREEN
Formation Description	of Stratum	Bottom of Stratum	Type: PVC Diam: Z''
	- Guawiii	Chiamili	Slot/Gauge: . O I Length: /0,0
See Attached			Set Between: 325 ft. and 425 ft. NOTE: MULTIPLE SCREENS ft. and ft. USE SECOND SHEET
- increal			tt. andft. USE SECOND SHEET Sieve Analysis ☐ Yes (please enclose) ☑ No
Soil Test Boring	1		10. STATIC WATER LEVEL
C	 		ft. below land surface after 24 hours
Hield Report For	[11. PUMPING LEVEL Below Land Surface.
The second of th			NIA tt. after NIA hrs. Pumping N/A G.P.M.
MW-Z3			Pumping Test: Yes (please enclose)
			Yield: N/A
	}		12. WATER QUALITY
	1		Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
	1		Please enclose lab results.
}	 	L	13. ARTIFICIAL FILTER (gravel pack) Ø Yes □ No
			Installed from
			Effective size
Ì			14. WELL GROUTED? Dryes \(\sigma \) No
<u> </u>	T		□ Neat Cement □ Sand Cement □ Concrete □ Other
<u> </u>			Depth: From O, 6' ft. to 25.0' ft.
	 		15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: A/A ft. A/A direction
	 		upon completion (P No Amount: N/A
			16. PUMP: Date installed: Not installed : Not installed
	 	<u> </u>	Mfr. Name: N/A Model No.: N/A
			H.P. NA Volts NA Length of drop pipe NA ft. Capacity NA gpm
	 		TYPE: □ Submersible □ Jet (shallow) □ Turbine
1			☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal
*Indicate Water Bearing Zones		 	17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under:
Journ Franci Dealing 20105			my direction and this report is true to the best of my knowledge and belief.
(Use a 2nd sheet if needed)	1		Registered Business Name: Duke ENGineering 4 Ser, Date 3/10/99
3 REMARKS		\$ 100 m	
There is A Bentonite	Seal Fr	0001	Address: BOX 219, Seneca Sc, 29679
25.0' 70 30.0	, ,	*	Signed: Marlis A-Midling Cent. No.: 775
1. 23.0 1030.0	<u> </u>	<u> </u>	Authorized Representative



PROMOTE PROTECT PROSPER	
1. LOCATION OF WELL:	4. OWNER OF WELL: Duke Power Co.
County: System Name:	Address: 422 South Church St. Charlotte, N.C. 28242
Greenville Bramlette MGP site	Charlotte NC. 28242
	Telephone No.:
Latitude: Longitude:	Engineer: Mark McGary
Distance and Direction from Road Intersections:	Address:
Distance and Direction from Hoad intersections.	
	Telephone No.: 704 -373 - 7898
<u>.</u>	5. WELL DEPTH (completed) Date Started: 4-6-99
Street Address & City of Well Location:	· •
Sketch Map:	36.5 ft. Date Completed: 4-7-99
	6. Mud Rotary Jetted Bored Dug
	☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other Auger
	7. USE:
	☐ Domestic ☐ Public Supply-Permit No ☐ Industry
	☐ Irrigation ☐ Air Conditioning ☐ Commercial
	☐ Test Well ☐ Monitor Well ☐
	8. CASING: ☑ Threaded ☐ Welded
	Diam.: Height: Above/Below.
	Type: PVC Galvanized Surface 6,0' ft.
2. CUTTING SAMPLES: ☑ Yes ☐ No	□ Steel □ Other Weight N/A Sch 40 lb./ft.
	in. to 25.0 ft. depth Drive Shoe? Yes Ho
Geophysical Logs:	in. to ft. depth
. "Thickness Depth to	9. SCREEN
Formation Description of Bottom of	Type: Diam.:
Stratum Stratum	Slot/Gauge: , O O Length: /0, 0 '
	Set Between: 25.0' ft. and 35.0' ft. NOTE: MULTIPLE SCREENS
See Attached	ft. andft. USE SECOND SHEET
	Sieve Analysis
Soil Test Boring	10. STATIC WATER LEVEL
	ft. below land surface after 24 hours
field Report For	11. PUMPING LEVEL Below Land Surface.
116.00 1.00	
MW-2Z	NIA ft. after N/A hrs. Pumping N/A G.P.M.
141W 22	Pumping Test: ☐ Yes (please enclose) ☐/No
	Yield: N/A
	12. WATER QUALITY
	Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
<u> </u>	Please enclose lab results.
	13. ARTIFICIAL FILTER (gravel pack) ☐ Yes ☐ No
	Installed from 23.0' ft. to 36.5' ft.
	Effective sizeOIB Uniformity Coefficient 1.56
L	14. WELLGROUTED? ® Yes □ No
	☑ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
	l nous no and management
	15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: N/A ft. N/Adirection
	A //A The well district to the Time well dis
	Type well disinfected Yes Type: N/A
	upon completion (2-No Amount: N/A-
	16. PUMP: Date installed: WA Not installed
	Mfr. Name: N/A Model No.:/A
	H.P
	TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
	☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal
*Indicate Water Bearing Zones	17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under
<u></u>	my direction and this report is true to the best of my knowledge and belief:
(Use a 2nd sheet if needed)	Renistared Business Name: Du Va Fandand Jane
3. REMARKS:	Registered Business Name: Duke Engineering + Ser. Date: 5/10/99
Note: There is A Bentonite scal	Address: Box 219, Senecu S.C. 29679
From 200' 70 23.0'	Market A Market
Trom 200 1025.0	Signed:Cert. No.:Cert. No.:Cert. No.:Cert. No.:



2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:			4. OWNER OF WELL: Duke Power co. Address: 422 South Church St. Telephone No.: Charlotte, N.C. 28242
County: System N	lamė:		Address: 472 South Church St.
County: System A	Lette Mi	GP site	Charlotte, N.C. 28242
Gizes in C	riet -		Telephone No.:
Latitude: Longitud	e:	•	Engineer. Mark McGary
Distance and Direction from Road Inter			Address:
			Telephone No.: 704 -373-7898
			5. WELL DEPTH (completed) Date Started: 3-29-99
Street Address & City of Well Location	:		
Sketch Map:			ft. Date Completed: 3 - 29 - 99
			6. □ Mud Rotary □ Jetted □ Bored □ Dug !
			☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other Aucer
			7. USE:
			☐ Domestic ☐ Public Supply—Permit No ☐ Industry ☐ Irrigation ☐ Ajr_Cenditioning ☐ Commercial
			☐ Test Well ☐ Monitor Well ☐
			8. CASING: IP Threaded Welded
			Diam.: Z" Height: Above/Below ,
0.0157710.04121.50	7. No.		Type: ☐ PVC ☐ Galvanized Surface ft.
2. CUTTING SAMPLES: PYes [□ No		☐ Steel ☐ Other Weight <u>N/#</u> <u>Sch 40</u> lb./ft. <u>0,0'</u> in. to <u>5,0'</u> ft. depth Drive Shoe? ☐ Yes ☑ No
Coordinal Laws D. Van dala		DANO.	in. toft. depth Drive Shoe? ☐ Yes ☑ No
Geophysical Logs:	ase enclose)	Depth to	
Formation Description	of	Bottom of	9. SCREEN Type: PVC Diam: Z"
TOTHORNE DESCRIPTION	Stratum	Stratum	Slot/Gauge: , O O Length: /3,0
			Set Between: 5.0 ft. and 18.0 ft. NOTE: MULTIPLE SCREENS
LSEE Attached	li		ft. andft. USE SECOND SHEET
	1		Sieve Analysis ☐ Yes (please enclose) ☑-Nō
Soil Test Boring			10. STATIC WATER LEVEL
			ft. below land surface after 24 hours
field Report For			11. PUMPING LEVEL Below Land Surface.
, , , , , , , , , , , , , , , , , , ,			<i>N/A</i> ft. after <u><i>N/A</i></u> hrs. Pumping <u><i>N/A</i></u> G.P.M.
MW-21			Pumping Test: Yes (please enclose) PNo
			Yield: _ <i>N/H</i>
			12. WATER QUALITY
			Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
	<u> </u>		Please enclose lab results.
			13. ARTIFICIAL FILTER (gravel pack) ☑Yes ☐No
	ļ		**************************************
			Effective size Uniformity Coefficient _/.56
	 		14. WELL GROUTED? In Yes □ No □ Neat Cement □ Sand Cement □ Concrete □ Other
1			Depth: From
	 		15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: 1/A trailed direction
			N/A Type well disinfected □ Yes Type: N/A
	 		upon completion © No Amount: N/A
1			16. PUMP: Date installed: N/A Not installed
			Mfr. Name: N/A Model No.: N/A
			H.PVoltsLength of drop pipe ft. Capacitygpm
	T	<u> </u>	TYPE: Submersible Jet (shallow) Turbine
L			☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal
*Indicate Water Bearing Zones			17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
(Use a 2nd sheet if needed)			Registered Business Name: Duke Engeneer las 4 Ser Date: 5/10/99
3. REMARKS: A Bentonite Seal	sin p	lace	Address: BOX 219, Seveca, SC, 29629
			Signed: Charles A. Medlin Cert. No. 225
From 2.0' TO 4.0	2,,,,		Signed:

المرابع والمعارض والمعنى المعارض المعاري الأماري المعارض والمعارض والمعارض



1. LOCATION OF WELL:			4. OWNER OF WELL: Duke Power Co.
County: System			Address: 427 South Church St.
Greenville Bru	mlette M	igp site	Address: 422 south church sti Charlotte, N.C. 28242
		-	leiabious vor:
Latitude: Longitud	le:		Engineer Mark McGary
Distance and Direction from Road Inte	rsections:	*	Address:
			Telephone No.: 704 - 373 - 7898
			Telephone No.: '/04 - 3 7 3 - '/898 5. WELL DEPTH (completed) Date Started: 3-30-99
Street Address & City of Well Location); 		· · · · · ·
Sketch Map:			
			6. □ Mud Rotary □ Jetted □ Bored □ Dug
			☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other Aucer
			7. USE: Domestic Public Supply-Permit No Industry
			☐ Domestic ☐ Public Supply-Permit No ☐ Industry ☐ Irrigation ☐ Air Conditioning ☐ Commercial
			☐ Test Well ☑ Monitor Well ☐
			8. CASING: Dentarrated Deliver Welded
			Diam.: Z 4 Height: Above/Below,
2. CUTTING SAMPLES: PYes	□ Ño		Type: ETPVC Galvanized Surface 2.5 ft.
100 1			☐ Steel ☐ Other Weight <u>N/# 5ch, 40</u> lb./ft. <u>O.O'</u> in. to <u>Zo.o'</u> ft. depth Drive Shoe? ☐ Yes ☑ No
Geophysical Logs: Yes (ple	ase enclose)	⊕ No	in. to ft. depth
	*Thickness	Depth to	9. SCREEN
Formation Description	of	Bottom of	Type: PVC Diam Z"
	Stratum	Stratum	Siot/Gauge: . O 1 O Length; 5.0'
See Attached			Set Between: 20.0'ft. and 25.0'ft. NOTE: MULTIPLE SCREENS
ore Allachia			ft. andft. USE SECOND SHEET Sieve Analysis [] Yes (please enclose) [9-No
Soil Test Boring			10. STATIC WATER LEVEL
01 201 801117			ft. below land surface after 24 hours
tield leport for	ļ	:	11. PUMPING LEVEL Below Land Surface.
MW-20			Pumping Test: ☐ Yes (please enclose) ☐ No
			Yield: NA
			12. WATER QUALITY
			Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☑ No
			Please enclose lab results.
	1		13. ARTIFICIAL FILTER (gravel pack) ☐ Yes ☐ No
			Installed from 19.5 ft. to 25.5 ft.
	<u> </u>		Effective size .0/8 Uniformity Coefficient 1.56
			14. WELL GROUTED? Dryes I No
			☑ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other
			Depth: From O,O' ft. to 15.0' ft. 15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: M/R ft. N/Adirection
			Type well disinfected Yes Type://
·			upon completion No Amount: N/A
			16. PUMP: Date installed:Not installed
	1		Mfr. Name: 1/A Model No.: 1//A
	<u> </u>		H.P. N/A Volts N/A Length of drop pipe tt. Capacity gpm
-			TYPE: Submersible Jet (shallow) Turbine
			☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal
*Indicate Water Bearing Zones			17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief:
(Use a 2nd sheet if needed)	i		Registered Business Name: <u>Duke Engeweering + Sefbate: 3/10/99</u>
3. REMARKS: A BENTONITE SEN		100-	
		MC-C	Address: Box 219, Servica, Sc. 28242
From 15.0' 10 19	7.5		Signed: Charles A. Medlin Cert. No. 225
	<u> </u>		Authorized Representative



TAGACIE I ROJELI PROJELA	
1. LOCATION OF WELL:	4. OWNER OF WELL: DUKE POWER CO.
County: System Name:	Address: 422 South Church Sti
Greenville Bramlette MGP Site	Address: 422 South Church St. Charlotte, NF. 28242
Latitude: Longitude:	Engineer, MARK Mc Gary
Distance and Direction from Road Intersections:	Address:
·	
:	Telephone No.: 704-373-7898
Street Address & City of Well Location:	5. WELL DEPTH (completed) Date Started: 3- 23-99
Sketch Map:	ft. Date Completed: 3 - 2 5 - 9 9
	6. ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug
	☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other Auger
	7. USE: Domestic Deblic Supply-Permit No Deficiency
	☐ Imagation ☐ Air_Conditioning ☐ Commercial
	☐ Test Well ☐ Monitor Well ☐
	8. CASING: Threaded Welded
	Diam.: Z Height: Above/Below
2. CUTTING SAMPLES: PYes D No	Type: ☐ PVC ☐ Galvanized Surfaceft. ☐ Steel ☐ Other Weight N/4 3ch 40 lb./ft.
	Or O' in. to 9.0' ft. depth Drive Shoe? Yes 14-No
Geophysical Logs: ☐ Yes (please enclose) ☐ No	in. to ft. depth
"Thickness Depth to	9. SCREEN
Formation Description of Bottom of Stratum	Type: Diam.:
Judian Judian	Slot/Gauge: , O10 Length: /0.0' Set Between: 9.0' ft. and 19.0' ft. NOTE: MULTIPLE SCREENS
See Attached	ft. andft. USE SECOND SHEET
	Sieve Analysis
Soil Test Boring	10. STATIC WATER LEVEL
1 —	tt. below land surface after 24 hours
tield Report For	11. PUMPING LEVEL Below Land Surface.
MW-19	N/A ft. after N/A hrs. Pumping N/A G.P.M.
14(W-17	Pumping Test: Yes (please enclose) This
	Yield: N/A 12. WATER QUALITY
	Chemical Analysis Yes TNO
	Please enclose lab results.
	13. ARTIFICIAL FILTER (gravel pack) Tyes No
	Installed from
	Effective size
	14. WELL GROUTED? ☐ Yes ☐ No
	□ Neat Cement □ Sand Cement □ Concrete □ Other
	Depth: From O.O ft. to 5.0 ft.
	15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: N/A ft. N/A direction .
	upon completion (2) No Amount: N/A
	16. PUMP: Date installed: N/A Not installed
	Mfr. Name: 1)//+ Model No.: N//+
	H.P. 11/14 Volts N/4 Length of drop pipe ft. Capacitygpm
	TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal
*Indicate Water Bearing Zones	17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
(Use a 2nd sheet if needed)	Registered Business Name: Duke Engineering 4 Sec. Date: 5/10/99
SO CELANDRO	
A Bentonite Seal is in place	Address: BOX 219, SENCCA, SC, Z824Z
From 5.0' +0 8.0'	Signed: Marke A. Medler Cert. No. 775
	Authorized Representative



PROMOTE PROTECT PROSPER			
1. LOCATION OF WELL:			4. OWNER OF WELL: DUKE POWER CO
County: System N	lame:	7 7	Address: 422 South Church St.
Greenville Bram	ulette M	agp site	Charlotte, N.C. 28242
Latitude: Longitude	9: ·	, 1	Engineer: Mark McGary
Distance and Direction from Road Inters			Address:
The state of the s	- · · - · · = ·	1	
			Telephone No.: 704 - 373 - 7898
Phones Add A min			5. WELL DEPTH (completed) Date Started: 3-22.99
Street Address & City of Well Location:			
Sketch Map:			25.0 ft. Date Completed: 3-23-99
			6. ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug
			☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other Auscr
			7. USE:
		i	☐ Domestic ☐ Public Supply-Permit No ☐ Industry
			☐ Irrigation ☐ Air Conditioning ☐ Commercial
			Test Well Monitor Well
		1	8. CASING: Threaded D Welded
		1	Diam.: Z'/ Height: Above/Below
	- ·		Type: ErPVC ☐ Galvanized Surface
2. CUTTING SAMPLES: DrYes	□ No		☐ Steel ☐ Other Weight N/A 5ch 40 lb./ft.
Geophysical Logs: Yes (plea	ase enclose)	D No	in. toft. depth
	*Thickness	Depth to	9. SCREEN
Formation Description	of	Bottom of	
	Stratum	Stratum	· /po/
			Slot/Gauge:O!O Length:/5.0 ' Set Between:9.5 ft. and24.5 ft. NOTE: MULTIPLE SCREENS
See Attached	'	' I	
TI WENER	·——		ft. andft. USE SECOND SHEET Sieve Analysis □ Yes (please enclose) ☑ No
Soil Test Boring		1	10. STATIC WATER LEVEL
COLL 1231 COLINA			1
14:11 D - 1 1		1	13.0 ft. below land surface after 24 hours
tield Report for		1	11. PUMPING LEVEL Below Land Surface. N/A tt. after N/A hrs. Pumping N/A G.P.M.
Mw-18 1	1	1	
		<u> </u>	Yield: N/A.
<u></u>	!	1	12. WATER QUALITY
			Chemical Analysis ☐ Yes ② No Bacterial Analysis ☐ Yes ② No
į l	1	1	Please enclose lab results.
		<u> </u>	
	1	1	13. ARTIFICIAL FILTER (gravel pack) PYes INO
		<u> </u>	Installed from 8.0' ft. to 25.0 ft.
[1	Effective size
<u> </u>	<u> </u>		14. WELL GROUTED? @ Yes D No
]	1	,	Neat Cement □ Sand Cement □ Concrete □ Other
		<u></u>	Depth: From 0 0 10 ft. to 5,0 ft.
			15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: N/A It. N/A direction
<u> </u>	<u> </u>	\	N/A Type well disinfected □ Yes Type: N/A
	, 1	\ ,	upon completion □ No Amount: N/#
	1	!	
		·	
ļ İ	1	١ ,	
		<u> </u>	H.PL)/A Volts _L)/A Length of drop pipe ft. Capacitygpm
	1	1	TYPE: Submersible Jet (shallow) Turbine Jet (deep) Reciprocating Centrifugal
*Indicate Water Barrier B	 		Det (deep)
*Indicate Water Bearing Zones			my direction and this report is true to the best of my knowledge and belief.
(Use a 2nd sheet if needed)	1	ſ	Registered Business Name: Duke Engineering + Ser. Date: 5/10/99

A Bentonite Sand is	מוס מנ	*E =	Address: BOX 219, Servica 5.C., 29679
From 5.0' m 0	0	:	Signed: Charles A. Midlin Cert. No.: 775
A Bentante Seal is in place From 5.0' TO 8.0'			Authorized Representative



PROMOTE PROTECT PROSPER						
1. LOCATION OF WELL:			4. OWNER OF WELL: Duke Power co.			
County: System Name:			Address: 422 South Church St. Charlotte, N.C. 28242			
Greenville Bram	lette M	GP SIL	Charlotte NC. Z8242			
Simple to the same			Telephone No.:			
Eatitude: Longitud	l o •	· ·	Engineer: MARK Mc Gary			
Distance and Direction from Road Inte		· · · · · · · · · · · · · · · · · · ·	Address:			
Distance and Direction from Hoad Intel	156000115.					
			Telephone No.: 704 - 373 - 7898			
Manual Auditors M M (1)			5. WELL DEPTH (completed) Date Started: 3-/6-99			
Street Address & City of Well Location): 					
Sketch Map:			ft. Date Completed: 3-/2-99			
			6. Mud Rotary Detted Bored Dug			
			☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other Auger			
			7. USE:			
		i	☐ Domestic ☐ Public Supply-Permit No ☐ Industry			
			☐ trrigation ☐ Air Conditioning ☐ Commercial			
			☐ Test Well ☑ Monitor Well ☐			
			8. CASING: ☐Threaded ☐ Welded			
_			Diam.: Z" Height: Above/Below			
2. CUTTING SAMPLES: PYes [□ No	,-	Type: LEPVC ☐ Galvanized Surface			
			☐ Steel ☐ Other Weight <u>N/A</u> <u>SC4.40</u> lb./ft. 			
Geophysical Logs: Yes (ple	ase enclose)	TR No	in. toft. depth Drive Shoe? [] Yes [] Two			
Tes (pie	*Thickness	Depth to	9. SCREEN			
Formation Description	of	Bottom of	7100			
	Stratum	Stratum	- / /			
			Siot/Gauge:O O Length:/3 . 9 ' Set Between:/. 6 ' ft. and/.5 5 ' ft. NOTE: MULTIPLE SCREENS			
LSee Attached			Set Between:ft. andft. NOTE: MULTIPLE SCREENSft. USE SECOND SHEET			
	-		Sieve Analysis ☐ Yes (please enclose) ☑ No			
Soil Test Boring			10. STATIC WATER LEVEL			
2011 1231 1301 1103						
field Report FOR			11. PUMPING LEVEL Below Land Surface.			
Tield Report TOIC						
MW-17						
1/VI W = //			Pumping Test: ☐ Yes (please enclose) ☐ No			
			Yield: W/A-			
			12. WATER QUALITY			
	1		Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No			
	1		Please enclose lab results.			
			13. ARTIFICIAL FILTER (gravel pack) ☐ Yes ☐ No			
<u>.</u>			Installed from 1.0' ft. to 16:0' ft.			
			Effective sizeO18 Uniformity Coefficient _1.5 6			
			14. WELL GROUTED? Dryes I No			
			☐ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other			
L			Depth: From 0.0 ft. to 0.5 ft.			
			15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: N/A tr. N/A direction			
		,	N/A Type well disinfected ☐ Yes Type: N/A			
			upon completion (P No Amount: V/A			
			16. PUMP: Date installed: Not installed P			
			Mfr. Name: WA Model No.: NA			
			H.P. WA Volts WA Length of drop pipe ft. Capacity gpm			
			TYPE: Submersible Jet (shallow) Turbine			
<u> </u>			☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal			
*Indicate Water Bearing Zones			17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under			
(Upo a Ood abook // cook a			my direction and this report is true to the best of my knowledge and belief.			
(Use a 2nd sheet if needed)			Registered Business Name: Duke Engineering + Schoate: 5/10/99			
a REMARKS. A Bentonite Seal is in place			Address: BOX 219, Serveca 50, 29679			
H ISENIONI TO SEAL		•				
From 0.5 TO 1.	01		Signed Charles A Medles Cert. No.: 775			
<u> </u>		s	Authorized Representative			



1. LOCATION OF WELL:	4. OWNER OF WELL, DUKE POWEr CO.				
County: System Name: Greenville Brankette MGP 5:te	Address: 422 5 Duth Church st.				
Greenville Branlette MGP 5:te	Charlette, 28242 (1) 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
	Telephone No. Engineer: MARK MSGACH				
Latitude: Longitude: Distance and Direction from Road Intersections:	Address:				
Distance and Direction from Road Intersections.					
	Telephone No.: 704 - 373 - 7898				
Street Address & City of Well Location:	5. WELL DEPTH (completed) Date Started: 3-8-99				
Sketch Map:	ft. Date Completed: 3 - 8 - 99				
	6. ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug				
	☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other Augerd				
	7. USE: □ Domestic □ Public Supply-Permit No □ Industry				
	☐ Irrigation ☐ Air Conditioning ☐ Commercial				
	B. CASING: Threaded Welded				
	Diam.: 2" Height: Above/Below				
2. CUTTING SAMPLES: PYES □ No	Type: ☐ PVC ☐ Galvanized Surfaceft.				
2 COTTING SAMPLES: LETTES LI NO	☐ Steel ☐ Other Weight <u>N/A 5cA, 40</u> lb./ft.				
Geophysical Logs: ☐ Yes (please enclose) ☑ No	in. to ft. depth				
*Thickness Depth to	9. SCREEN				
Formation Description of Bottom of Stratum	Type: Puc Diam.: 2"				
	Slot/Gauge:				
See Attached	ft. andft. USE SECOND SHEET				
	Sieve Analysis ☐ Yes (please enclose) ☐ No				
Boring Log For Well # MW-16	10. STATIC WATER LEVEL				
121-11 H MW-16	11. PUMPING LEVEL Below Land Surface.				
00611 44- 19100 1-	N/A tt. after N/A hrs. Pumping N/A G.P.M.				
	Pumping Test: Yes (please enclose)				
	Yield: N/A				
·	12. WATER QUALITY Chemical Analysis □ Yes ☑ No Bacterial Analysis □ Yes ☑ No Please enclose lab results.				
	13. ARTIFICIAL FILTER (gravel pack) ☐ Yes ☐ No				
	Installed from 4.0 ft. to 16.0 ft. Effective size 0/8 Uniformity Coefficient 1.56				
	14. WELL GROUTED? Description Depth: From				
	upon completion ☑ No Amount: ☑/서				
	16. PUMP: Date installed: N/B Not installed				
	Mfr. Name: N/A Model No.: N/A H.P. N/A Volts N/A Length of drop pipe ft. Capacity gpm				
	TYPE: □ Submersible □ Jet (shallow) □ Turbine				
	☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal				
*Indicate Water Bearing Zones	17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief:				
(Use a 2nd sheet if needed)	Registered Business Name: Duke Engineering Service Date: 5/10/97				
3. REMARKS A Benton't seal is in place	Address 7.0 BOX 219, Scucy, SC. 29679				
From 20' to 40'	Signed: Walls D. Marilles Cert. No.: 775				



1. LOCATION OF WELL:			4 OWNER OF WELL: DIKKE POWER CD.			
County: System Name:			Address: 422 South Church Sti			
Greenville Braml	atte MGI	sita	Charlotte, N.C. 28242			
*	, , , , , , , , , , , , , , , , , , , 		Telephone No.:			
Latitude: Longitud	e:		Engineer: MARK MEGATY			
Distance and Direction from Road Inter	rsections:		Address:			
			Tolophore No. 704 _ 202 - 706 6			
			Telephone No.: 704 - 373 - 7893 5. WELL DEPTH (completed) Date Started: 3 - 2 - 99			
Street Address & City of Well Location): -					
Sketch Map:			ft. Date Completed: 3 - 4 - 99			
			6. Mud Rotary			
			☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other Augered 7. USE:			
			☐ Domestic ☐ Public Supply-Permit No ☐ Industry			
			☐ Irrigation ☐ Air Conditioning ☐ Commercial			
			Test Well			
			- //			
			Diam.: Height: Above/Below Type: ☑-PVC ☐ Galvanized Surface ft.			
2. CUTTING SAMPLES: Yes [□ No	-	□ Steel □ Other Weight <u>WA ろくり、40</u> lb./ft.			
Geophysical Logs: ☐ Yes (ple	ase enclose)		in. to ft. depth			
Formation Description	*Thickness of	Depth to Bottom of	9. SCREEN			
i viriation populpion	Stratum	Stratum	Type: P√ ⊆ Diam.: 2'' Slot/Gauge:			
- 11 1			Set Between: _50.0 ft. and _55.0 ft. NOTE: MULTIPLE SCREENS			
See Attached			ft. andft. USE SECOND SHEET			
—			Sieve Analysis ☐ Yes (please enclose) ☑ No			
1201: nd rod toc	<u> </u>		10. STATIC WATER LEVEL			
See Attached Boring Log For Well # 15]		7.2 ft. below land surface after 24 hours			
Well # 13			11. PUMPING LEVEL Below Land Surface.			
			A)/A ft. after N/A hrs. Pumping N/A G.P.M.			
<u> </u>		 -	Pumping Test: Yes (please enclose)			
			12. WATER QUALITY			
			Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No			
			Please enclose lab results.			
			13. ARTIFICIAL FILTER (gravel pack) Pres No			
			Installed from 48.0 ft. to 58.4 ft.			
ļ			Effective sizeOIBUniformity Coefficient			
			14. WELL GROUTED? Yes No			
			□ Neat Cement □ Sand Cement □ Concrete □ Other □ Depth: From □ O.O ft. to □ 45.0 ft.			
						
			15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: W/A tt. N/A direction			
		<u>.</u>	upon completion (2) No Amount: N/A			
			16. PUMP: Date installed: N/A Not installed			
			Mfr. Name: N/A Model No.: N/A-			
			H.P. W/H Volts N/H Length of drop pipe ft. Capacity Magpm			
			TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine			
			☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal			
*Indicate Water Bearing Zones			17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.			
(Use a 2nd sheet if needed)						
		5	Registered Business Name: Duke Engineering & Services Date: 5/10/99			
A Bentonite Seal to	IN PIA	લ્લે ે	Address: PO BOX 219 Seneca 50, 29679			
From 450' 70	uon		Signed: Charles A. M. Llin Cert. No. 275			
3. REMARKS: A BENTONITE Seal is in place From 45.0' TO 48.0'			Authorized Representative			



PROMOTE PROTECT PROSPER				
1. LOCATION OF WELL:	4. OWNER OF WELL: Duke Power co.			
County: System Name:	Address: 477 South Church St.			
Greenville Bramlette MGP site	Charlotte, N.C. 28242			
	Tolombania tia a il monto di li di l			
Latitude: Longitude:	Engineer: Mark M5 Gary			
	Address:			
Distance and Direction from Road Intersections:				
	Telephone No.: 704 - 373 - 7898			
	5. WELL DEPTH (completed) Date Started: 3-18-99			
Street Address & City of Well Location:	,			
Sketch Map:	13.0′ft. Date Completed: 3-18-99			
ŕ	6. Mud Rotary Detted Bored Dug			
	☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other Auger 7. USE:			
	Domestic Public Supply-Permit No Industry			
	☐ Irrigation ☐ Air Conditioning ☐ Commercial			
	☐ Test Well ☐ Monitor Well ☐			
	8. CASING: Lathreaded Weided			
	Diam.: 2" Height: Above/Below			
	Type: 12-PVC Galvanized Surface 2.5 ft.			
2. CUTTING SAMPLES: ☐ Yes ☐ No	☐ Steel ☐ Other Weight N/A 3ch. 40 lb./ft.			
	OO in. to 2.0 ft. depth Drive Shoe? Yes No			
Geophysical Logs: ☐ Yes (please enclose) ☐ No	in. to ft. depth			
*Thickness Depth to	9. SCREEN			
Formation Description of Bottom of	7.4			
Stratum Stratum	1,700.			
	Stot/Gauge:O/O Length:/O ^ / Set Between:Z ^ / ft. and _/Z O / ft. NOTE: MULTIPLE SCREENS			
See Attached	ft. and ft. USE SECOND SHEET			
SCC HILACINED	Sieve Analysis ☐ Yes (please enclose) ☐ No			
Soil Test Boring	10. STATIC WATER LEVEL			
SOIL IST DOTING	5 / /			
E110 - 1 -	The bollow latter during our fact 24 floats			
tield Report For	11. PUMPING LEVEL Below Land Surface.			
	N/A ft. after N/A hrs. Pumping N/A G.P.M.			
MW-14	Pumping Test: ☐ Yes (please enclose) ☐ No			
	Yield: <i>\\/ A</i>			
	12. WATER QUALITY			
	Chemical Analysis □ Yes ☑ No Bacterial Analysis □ Yes ☑ No			
	Please enclose lab results.			
	13. ARTIFICIAL FILTER (gravel pack) PYES No			
	Installed from 1,5 ft. to 13.0 ft.			
	Effective size0/8Uniformity Coefficient/.56			
	14. WELL GROUTED? OF Yes I No			
	☐ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other			
	Depth: From <u>Ø. ⊙′</u> ft. to <u>Ø. ⋝′</u> ft.			
	15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: N/A- ft. N/A-direction			
	N/A Type well disinfected ☐ Yes Type: N/A			
	upon completion E No Amount: WA			
	16. PUMP: Date installed: N/A Not installed 2			
	Mfr. Name: W/A Model No.: W/A			
	H.P. WA Volts WA Length of drop pipe ft. Capacitygpm			
	TYPE: □ Submersible □ Jet (shallow) □ Turbine			
	☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal			
Hadisətə Martin Barrin B	17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under			
*Indicate Water Bearing Zones	my direction and this report is true to the best of my knowledge and belief.			
(Lice a 2nd choot if needed)				
(Use a 2nd sheet if needed)	Registered Business Name: Duke Engineering + Ser. Date: 5/10/99			
3. REMARKS: A Bentonite seal is in Place	Address: Box 219 Severa Sc, 29679			
From 0.5' TO 1.5'	11/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1			
	Signed: / Maule A-Malin Cert. No. 775			
	Authorized Representative			



1. LOCATION OF WELL:			4. OWNER OF WELL: DUK. POWER CO.			
County: System Name:			4. OWNER OF WELL: Duke Power Co. Address: 422 S. Church St. Charlotte, N.C. 28242			
Greenville Bramlette MGP site		GP site	Charlotte N.C. 28242			
			i doptione teo.			
Latitude: Longitud	e: *		Engineer: Mark McGary			
Distance and Direction from Road Inter	rsections:	····	Address:			
	•		70000			
			Telephone No.: 704 - 373 - 7898 5. WELL DEPTH (completed) Date Started: 3-17-99			
Street Address & City of Well Location	:		· · · · · · · · · · · · · · · · · · ·			
Sketch Map:			ft. Date Completed: 3-18-99			
			6. Mud Rotary Detted Bored Dug			
			☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other Auger			
			7. USE: □ Domestic □ Public Supply-Permit No □ Industry			
	•		☐ Irrigation ☐ Air Conditioning ☐ Commercial			
			☐ Test Well			
			8. CASING: Threaded Welded			
			Diam.: 2" Height: Above/Below			
2. CUTTING SAMPLES: THE Yes [□No		Type: ☐-PVC ☐ Galvanized Surfaceft. ☐ Steel ☐ Other Weight			
Geophysical Logs:	ase enclose)	Œ No	in. toft. depth			
	*Thickness	Depth to	9. SCREEN			
Formation Description	of Stratum	Bottom of Stratum	Type: PUC Diam: Z"			
	Suaturn	Suatum	Slot/Gauge:O_I_O Length:/O_O			
See Attached			Set Between:ft. andft. NOTE: MULTIPLE SCREENS ft. andft. USE SECOND SHEET			
			Sieve Analysis ☐ Yes (please enclose) ☐ NO			
Soil Test Boring			10. STATIC WATER LEVEL			
l //			ft. below land surface after 24 hours			
field Report for			11. PUMPING LEVEL Below Land Surface.			
1111-17						
MW-13			Pumping Test: Yes (please enclose)			
ļ			Yield:			
			Chemical Analysis			
			13. ARTIFICIAL FILTER (gravel pack) ☐ Yes ☐ No			
			Installed from 9.0' ft. to 23.1' ft.			
		-	Effective size			
			14. WELL GROUTED? ☑ Yes ☐ No			
		,	☑ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other			
ļ 		<u> </u>	Depth: From O.O' ft. to G.O' ft.			
			15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: N/A ft. N/Adirection			
			Type well disinfected ☐ Yes Type: N/A			
			upon completion P-No Amount: W/H 16. PUMP: Date installed: A / / A- Not installed (9-			
			16. PUMP: Date installed: 1/12 Not installed (9) Mfr. Name: N/A Model No.: N/A			
			H.P. N/A Volts N/A Length of drop pipe ft. Capacity gpm			
			TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine			
			☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal			
*Indicate Water Bearing Zones			17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.			
(Use a 2nd sheet if needed)			Registered Business Name: Duke Engineering 4 Serbate: 5/10/99			
3 REMARKS: A Bentonite 5		N Place	Address: BOX 219 Seneca Sc, 29679			
From 6.0' TO 9.1	9		Signed Charles of Medling Cart No. 775			
			Authorized Representative Cert. No.: 1/3			



1. LOCATION OF WELL:	4. OWNER OF WELL: Duke Power CO.		
County: System Name:	4. OWNEROFWELL: Duke Power CO. Address: 422 S. Church St. Charlotte, N.C. 28242 Telephone No.:		
Greenville Bramlette MGP Site	Charlotte, N.C. 28242		
Lathude: Longitude:	Engineer: Mark Mc Gary		
Distance and Direction from Road Intersections:	Address		
	Telephone No.: 704-373-7898		
2	Telephone No.: 104-313-1898 5. WELL DEPTH (completed) Date Started: 2-25-99		
Street Address & City of Well Location:			
Sketch Map:			
	6. Mud Rotary		
	☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other Auger 7. USE:		
	Domestic Public Supply-Permit No I Industry		
	☐ Irrigation ☐ Air Conditioning ☐ Commercial		
	☐ Test Well ☐ Monitor Well ☐		
	8. CASING: ☐ Threaded ☐ Welded Diam.: Z / Height: Above/Below		
	Diam.: Z Height: Above/Below , Type: ☑ PVC ☐ Galvanized Surface Z.5 ft.		
2. CUTTING SAMPLES: ☑ Yes ☐ No	□ Steel □ Other Weight N/A 5ch 40 lb./ft.		
	O_O in. to _/_5 ft. depth Drive Shoe?		
Geophysical Logs: ☐ Yes (please enclose) ☐ No	in. toft. depth		
Thickness Depth to	9. SCREEN		
Formation Description of Bottom of Stratum	Type: <u>PVC</u> Diam.: Z'' Slot/Gauge: 010 Length: 10:0'		
	Slot/Gauge:		
Sec Attached	tt. and tt. USE SECOND SHEET		
	Sieve Analysis 🔲 Yes (please enclose) 🛂 No		
Soil Test Boring	10. STATIC WATER LEVEL		
1 🙃 🙃	ft. below land surface after 24 hours		
field Report For	11. PUMPING LEVEL Below Land Surface.		
MW-12	Pumping Test: ☐ Yes (please enclose) ☐ No Yield:		
	Yield: N/T		
	1		
	Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No Please enclose lab results.		
	13. ARTIFICIAL FILTER (gravel pack) Tyes No		
	Installed from / O' ft. to /7.0' ft.		
	Effective size .018 Uniformity Coefficient 1.56		
	14. WELL GROUTED? ☑ Yes ☐ No		
	☑ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other		
	Depth: From 0.0' ft. to 0.5' ft.		
	15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: A/A- ft. A/A- direction		
	upon completion No Amount: N/F		
	16. PUMP: Date installed:		
	TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine		
	☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal		
*Indicate Water Bearing Zones	17: WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under		
	my direction and this report is true to the best of my knowledge and belief.		
(Use a 2nd sheet if needed)	Registered Business Name: Duke Engineering + Ser. Date: 5/10/99		
3. REMARKS: A Bentaniti seal is	Address: Box 219 Senega SC. 29679		
in Place From 0.5'-1.0'			
	Signed: Walls A Medico Cert No. 225		



1. LOCATION OF WELL:	4. OWNER OF WELL: DUKE POWER CO.				
County: System Name:	Address: 422 S. Church St.				
County: System Name: Greenville Bramlette MGP site	4. OWNER OF WELL: Duke Power co. Address: 422 S. Church St. Charlotte, N.C. 28242 Telephone No.:				
	Telephone No.: Engineer: Mark McGary				
Latitude: Longitude;	Address:				
Distance and Direction from Road Intersections:					
	Telephone No.: 704-373-7898				
Street Address & City of Well Location:	5. WELL DEPTH (completed) Date Started: 2-24-99				
Sketch Map:	ft. Date Completed: Z - 25 - 99				
	6. ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug				
	☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other Auger				
	7. USE: Domestic Public Supply-Permit No Industry				
	☐ Imigation ☐ Air Conditioning ☐ Commercial				
	☐ Test Well ☐ Monitor Well ☐				
	8. CASING: Threaded Welded				
	Diam.: Z'' Height: Above/Below Type: ☐ PVC ☐ Galvanized Surface ft.				
2. CUTTING SAMPLES: TYPES IN NO	☐ Steel ☐ Other Weight N/4 3ch 40 lb./ft.				
Geophysical Logs:	in. to ft. depth				
Thickness Depth to for Bottom of South	9. SCREEN				
Stratum Stratum	Type: PVC Diam.:				
_ 11 , 1	Set Between: 14.0'ft. and 24.0'ft. NOTE: MULTIPLE SCREENS				
See Attached	ft. andft. USE SECOND SHEET				
Spil Test Boring	Sieve Analysis ☐ Yes (please enclose) ☐ No				
Soil lest Doring	10. STATIC WATER LEVEL				
Gold Don't For	11. PUMPING LEVEL Below Land Surface.				
TICIA REPORT TO					
MW-11	Pumping Test: Tyes (please enclose) 2-No				
	Yield: <u> </u>				
	12. WATER QUALITY				
	Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No				
	Please enclose lab results.				
<u> </u>	13. ARTIFICIAL FILTER (gravel pack) ☑Yes □No Installed from/3, o'ft. toft.				
	Effective size 018 Uniformity Coefficient 1.56				
	14. WELL GROUTED? (2-Yes □ No				
	☑ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other				
	Depth: FromOft. toft. 15. NEAREST SOURCE OF POSSIBLE CONTAMINATION:ft				
	upon completion 国 No Amount: <u>ル/名</u> 16. PUMP: Date installed: ルル				
	16. PUMP: Date installed: Not installed H				
	H.P. NA Volts NA Length of drop pipe ft. Capacity gpm				
	TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine				
	☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal				
*Indicate Water Bearing Zones	17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.				
(Use a 2nd sheet if needed)	Registered Business Name: Duki Engineering \$ 50. Date: 5/10/99				
3. REMARKS: A BENTON: FC SCAl : S IN Place	Address: BOX 219, Seneca 50, 29679				
From 10.0' 70 13.0'	Na Van Tille				
	Signed: // // Cert. No.: 773				
で、AMALIANTON LONGTON MARKANTON COLOTTON TRANSPORTED TO MEST MEST MEST MEST MEST MEST MEST MEST	Authorized Representative				



1. LOCATION OF WELL:			4. OWNER OF WELL: Duke Power co.			
County: System Name:			Address: 422 S. Church St. Charlotte, N.C. 28242 Telephone No.:			
County: System Name: Greenville Bramlette MGP Site			Charlotte NC. 28242			
Greenome Diameters						
Latitude: Longitud	io.		Engineer: Mark McGary			
Distance and Direction from Road Inte			Address:			
Discussion and Discussion from Froduction	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
			Telephone No.: 704 -373 - 2898			
Street Address & City of Well Location	\		5. WELL DEPTH (completed) Date Started: 2-23-99			
Sketch Map:			19.5 ft Date Completed: 7-74-99			
CROSOST Map.			Suid Gomphoted. 2 2 7 77			
			6. Mud Rotary Detted Bored Dug			
			☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other Auger 7. USE:			
			7. USE: Domestic Public Supply-Permit No Industry			
			☐ Irrigation ☐ Air Conditioning ☐ Commercial			
			☐ Test Well ☐ Monitor Well ☐			
			8. CASING: Threaded D Welded			
			Diam.: 2 1/ Height: Above/Below			
2. CUTTING SAMPLES: 12 Yes [□ No		Type: □PVC □ Galvanized Surface			
COTHING SAIVIFES: LETTES L	INO		Steel Other Weight w/A 5ch 40 lb./ft.			
Geophysical Logs: ☐ Yes (ple	ase enclose)	197 310				
Geophysical Logs. Tes (ple	*Thickness					
Formation Description	of	Depth to Bottom of	9. SCREEN Type: Puc Diam: Z"			
	Stratum Stratum		Type: Diam: Z			
11 1 1			Stot/Gauge:, 010 Length:/5.0 ' Set Between:, 2.0 'ft. and/8.0 'ft. NOTE: MULTIPLE SCREENS			
See Attached			Set Between:ft. andft. NOTE: MULTIPLE SCREENSft. USE SECOND SHEET			
			Sieve Analysis			
Soil Test Boring			10. STATIC WATER LEVEL			
C + C			ft. below land surface after 24 hours			
tield Keport for			11. PUMPING LEVEL Below Land Surface.			
			N/A ft. after N/A hrs. Pumping N/A G.P.M.			
MW-10			Pumping Test: ☐ Yes (please enclose) ☐ No			
			Yield:			
	}	, :	12. WATER QUALITY			
			Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No			
			Please enclose lab results.			
			13. ARTIFICIAL FILTER (gravel pack) PYes No			
<u></u>	<u> </u>		Installed from			
		-	Effective size			
			14. WELL GROUTED? Pres DNo			
			☑ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other			
			Depth: From O.O ft. to 1.O ft.			
			15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: N/A tt. N/A direction			
	<u> </u>					
			upon completion [3-No Amount: N/A-			
			16. PUMP: Date installed; /// Not installed @			
			Mfr. Name; N/A Model No.: N/A			
			H.P. N/4 Volts N/4 Length of drop pipe ft. Capacitygpm			
			TYPE: Submersible Jet (shallow) Turbine			
			☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal			
*Indicate Water Bearing Zones			17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under			
	1		my direction and this report is true to the best of my knowledge and belief.			
(Use a 2nd sheet if needed)			Registered Business Name: Duke Engineering + Ser Date: 5/10/99			
3. REMARKS: A Bentonite seal inplace			Day 249 taken to take			
From 1.0' - 2.0'			Address: 130 219, Seveca 5c. 29679			
	and the	3 0.1	Signed: Mallis H. Medlin Cert No. 775			
Market Market Commence of the			Authorized Representative			



TROMOTE TROTECT PROSPER				
1. LOCATION OF WELL:	4. OWNER OF WELL: Duke Power Co. Address: 422 S. Church St. Charlotte, N.C., 28242 Telephone No.: Engineer: Mark Mc Gary Address:			
County: System Name:	Address: 422 S. Church St.			
County: System Name: Greenville Brunlette MGP Site	Charlotte, N.C. 28242			
ಾರ್ಟರ್ ಕ್ರಾರ್ಡ್ ಬಿ. ಆರ್. ಆರ್. ಆರ್. ಕ್ರಾರ್ಟ್ ಕ್ರಾರ್ಟ್ ಕ್ರಾರ್ಟ್ ಕ್ರಾರ್ಟ್ ಕ್ರಾರ್ಟ್ ಕ್ರಾರ್ಟ್ ಕ್ರಾರ್ಟ್ ಕ್ರಾರ್ಟ್ ಕ್ರಾ	Footpoor			
Latitude: Longitude:	Address: Mark Mc Gary			
Distance and Direction from Road Intersections:				
	Telephone No.: 704-373-7898			
Street Address & City of Well Location:	5. WELL DEPTH (completed) Date Started: 3-/0-99			
Sketch Map:				
One will wap.				
	6. ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Other Auger			
	7. USE:			
	☐ Domestic ☐ Public Supply-Permit No ☐ Industry			
	☐ Irrigation ☐ Air Conditioning ☐ Commercial			
	Test Well Monitor Well			
	8. CASING: EThreaded			
	Diam.: ∠ Height: Above/Below Type: ☑ PVC ☐ Galvanized Surface			
2. CUTTING SAMPLES: PYes I No	I □ Steel □ Other │ Weight			
Geophysical Logs:	in. to ft. depth			
*Thickness Depth to Formation Description of Bottom of	9. SCREEN			
Formation Description of Bottom of Stratum	Type: PVC Diam: 2'' Slot/Gauge: .0/0 Length: 5.0'			
	Stot/Gauge:			
See Attached	ft. andft. USE SECOND SHEET			
	Sieve Analysis ☐ Yes (please enclose) ☐ No			
Soil Test Boring	10. STATIC WATER LEVEL			
10.10	tt. below land surface after 24 hours			
tield Keport tor	11. PUMPING LEVEL Below Land Surface.			
Mu = 9				
- /*(W - / - - -	Pumping Test: Yes (please enclose)			
	Yield: N/A 12. WATER QUALITY			
	12. WATER QUALITY Chemical Analysis □ Yes □ No Bacterial Analysis □ Yes □ No			
	Please enclose lab results.			
	13. ARTIFICIAL FILTER (gravel pack)			
	Installed from 23.0' ft. to 30.4' ft.			
	Effective size .0/8 Uniformity Coefficient 1.56			
	14. WELL GROUTED? ☑ Yes ☐ No			
	☑ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other			
	Depth: FromO.O'ft. toft.			
	15. NEAREST SOURCE OF POSSIBLE CONTAMINATION: A H. M. direction			
	Type well disinfected Yes Type:			
	upon completion □ No Amount: 1//			
	16. PUMP: Date installed: 1/A Not installed 2 Mfr. Name: 1/A Model No: 1/A			
	/			
	☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal			
*Indicate Water Bearing Zones	17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief:			
(Use a 2nd sheet if needed)	Registered Business Name: Duke Engineering 4 Ser Date: 5/10/99			
3. REMARKS:				
A Benton to seal in Place	Address: BOX 219, Servica, SC, 29679			
From 20.0'-23.0"	Signed: Maulis 14 - Medlin Cent. No. 225			
	Authorized Representative			



1. LOCATION OF WELL: County: System Name: Green Uille Bramlette M6P site Latitude: Longitude: Distance and Direction from Road Intersections: Street Address & City of Well Location: Sketch Map:		n 6P site	Telephone No.: Engineer: Address: Mark Mc Gury Address: Telephone No.: 704 - 373 - 7898 5. WELL DEPTH (completed) Date Started: 3-8-99 6. Mud Rotary Detted Bored Dug Air Rotary Driven Cable tool Other Auger 7. USE: Domestic Public Supply-Permit No. Dindustry Imigation Air Conditioning Commercial Test Well Monitor Well			
	□ No		8. CASING: Threaded Weided Diam.: Z ' Height: Above/Below Type: PVC Galvanized Surface Z ft. Steel Other Weight Sc4. 40 lb./ft. O10' in. to 1.7' ft. depth Drive Shoe? Yes Above/Below Type: PVC Galvanized Surface Z ft. Weight Sc4. 40 lb./ft.			
Geophysical Logs: ☐ Yes (ple	*Thickness of	Depth to Bottom of	in. toft. depth 9. SCREEN Type: Diam.:			
See Attached Soil Test Boring	Stratum	Stratum	Slot/Gauge: . O ! O Length: /3,0' Set Between: //7' ft. and /4.7' ft. NOTE: MULTIPLE SCREENS ft. and ft. USE SECOND SHEET Sieve Analysis			
field Report for MW-8			11. PUMPING LEVEL Below Land Surface. NA ft. after AA hrs. Pumping AA G.P.M. Pumping Test: Yes (please enclose) PNo Yield: NA			
			12. WATER QUALITY Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☑ No Please enclose lab results.			
			13. ARTIFICIAL FILTER (gravel pack) Pres No Installed from /.2' ft. to /5.5 ft. Effective size .018 Uniformity Coefficient 1.56			
			14. WELL GROUTED? ☑ YES ☐ NO ☐ Neat Cement ☐ Sand Cement ☐ Concrete ☐ Other			
			Type well disinfected 🗆 Yes Type:			
		· · · · · · · · · · · · · · · · · · ·	16. PUMP: Date installed:			
*Indicate Water Bearing Zones			Jet (deep) Reciprocating Centrifugal 17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.			
(Use a 2nd sheet if needed) 3. REMARKS: A Bentonite Scal is From 0.5' 70 1.2'			Registered Business Name: Dulle Everiveer in Ser. Date: 5-10-99 Address: BON 219, SENCON, SC, 29679 Signed: Mulls H. Medlin Cerl. No.: 725 Authorized Representative			

•			
		•	

APPENDIX G

Phase III
Chain of Custody Records
and
Analytical Data

Substant Form 89962 (9-97) Previously Form 35226

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM

Duke Power's Analytical Laboratory 1339 Hagers Ferry Road Huntersville, NC 28078 Phone: (704) 875-5209/875-5245 Fax: (704) 875-5038 MNS Bldg. # 7405 MGO3A2

Container Type:() Glass () Plastic ROBIAL Preservative Added H2S04 ynalysis kequired HNO3 Other None <u>8</u> Analysis P.O. # Venctored Samples Vendor Vendor Sample Class AB I Date Mail Code: MGO3A3 Resp. Center To: 0897 CLIENT: 0702MGPGVLBRMST Report to/Ph. GLF/4844 Project Name: GREENVILLE BRAMLETT ST Mail Code Logged By (Ini.) DB # SMIT Project ID: MGPBRAM Activity ID: ALLACTV Business Unit: 20018 Process:

					_																				
	SA	AΕ	I∀.	LN	ဝ၁	OE (# 7∖	\TOT	2	7	2	9	2	7	2	2	2	2	2	2	2	2	2	2	
٠			CL			_			٥	٥	0	+	0	0		0	0	0	9	0	ઈ	0	0	D D	
					•	ЭТ		ATOT SOH9	-	-	-	+	-	-	1	-	-	-	-	-	1	1	1	-	
1								con	_	L	L	+	_	_	_			1				7-		1	_
1		_			180	CBC	יר אוי	ATOT	-	L	_	_	_	L	_	L		L		Ĺ	_		Ĺ	Щ	estec
1								<u> </u>				-	\vdash	-	_									\vdash	Redu
																									Tumaround Requested
		-		_						L	L	_				_		_		L					umar
1		\dashv	_						_	-		-				_				_	_			$\vdash \mid$	E
Î		Other	None			snA เคอЯ	·	COV																	ĺ
1	흥	ð	ž	3	isyl	euĄ	, B/		_	_	L	-					_	_		Ц				\dashv	
	Analysis				P.O. #		ion	Signature	annelle		uls	11291	700	many	m	sie.	meer	1800	70	alm	46	X	aug	100	-
•	A						orma	Sign	S	7.0	house	Ö	4	مر (1.0	dar	Š	Com	40	Lower	Sign	72	J. 1	Odn	
					_	1	n Inf		*	77	141	ا 27	77	Rich	7.	10%	14 H	4	1,86	150	1	對	70	梦	
	Vendor				Vendor		Collection Information	Time	07416	0111	13	6 189 8	1535	0235	3160 M	10945	1125	1/2/5	11130	1105	0840	835	1410	8780	,
		<u> </u>	LJ 1	 	<u> </u>			Date	63/8/01	64/21/2	6637	35-6-9	149	6/12/16	46/21/5	6/15/12	6/15/49	61549	6115199	0/15/99	665119	<u>66/51/9</u>	11/6/99	54/9//9	
		2	557				ŀ																		
		4 :	Mail Code: IVIGOSA	Kesp. Center 10. 1031				5																	-
	-	F/487					itain	or ID																	
		된.	٦٥	Š S			a C	or II						7 WAS	Š										
		본 20년	7 2	<u>ق</u> ا										アシア	3 7										
	_	Rep	A MLT						۱-1	-2	7-3	4	- 5		- 1	φ	6	9	Ę	12	13	4	15	16	ŀ
		ZMST	ב א		_			_	MW-1	MW-2	MW-3	MW-4	MW-5	MW-0	MAY-7	MW-8	MW-9	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	
		CLIENT: 0702MGPGVLBRMST Report to/Ph GLF/4844	Project Name: GREENVILLE BRAMLETT ST	Dusiness Unit: 20016	Activity ID: Al I ACTV		ag P	PROFS#						,					:						
		ŽĮŽ ZOS			≥ ₹ 2 <u>0</u>	(160	10,	1//	12	13	14	57,	9104	7	8104	400	2	77	77	4023	7	
	F	이 ::	i Nam			Process:		Sample #	60041	0104	1194	7104	4013	4014	104	40	4017	3	*	4020	1607	4022	4	h70H	
-	1	. E	일 교		NIS T ₹			iğ	1066	/									\forall	1	\Box	\overline{A}	1	اد	¢
							-																		_

(1/8/5) 🗆 Routine (2 weeks)	☐ Rush (1 week) ☐ Emergency Rush (24-48 Hrs.)*	Date Results Requested: - Additional Charges Will Apply		
Date/Time	Date/Time	Date/Time		
Accepted By: Sover ONO 6/8/59	Accepted By:	Seal/Lock Opened By:	Comments:	
46/8//	¥ , ,	S	7.	3
Date/Time 6/18/94	Date/Time	Date/Time		
Relinquished by:		Sealed/Locked by:	liy .	Drinking Water ☐ UST ☐ RCRA Waste ☐ Other ☐

Original - AL Files

Copy 1- AL Files

Copy 2 - Client Copy

Jb. Form 89862 (9-97) Previously Form 35228

CHAIN OF CUSTODY RECORDAND ANALYSIS REQUEST FORM

14N-0042 <u>Ti</u> LIMS # GAP_) Logged By (Ini.) Duke Power's Analytical Laboratory 1339 Hagers Ferry Road Huntersville, NC 28078 Phone: (704) 875-5209/875-5245 Fax: (704) 875-5038 MNS Bldg. # 7405 MGO3A2

SEASE ca, Cd, Cr, Mg,Mn,Na, S, Sn,Zn Container Type:() Glass () Plastic I, ACIDITY Preservative Added 0 0 HN03 H2SO4 Required Other None Analysis 9 Analysis P.O. # Venclored Samples Q 1971 Vendor Vendor Sample Class AB US Date Mail Code: MGO3A3 Resp. Center To: 0897 0702MGPGVLBRMSI Report to/Ph GLF/4844 Project Name: GREENVILLE BRAMLETT ST Project ID: MGPBRAM Activity ID: ALLACTV Business Unit: 20018 Process:

CLIENT:

EWI2#

\$ OF CONTAINERS

	1						ا!	0		_	't	_	': V e:		Ξ	#	_
L		der		ပ	lection	Collection Information				2HN			3a, C e,K,		NIDI	: ¬∀.	
	Sample #	PROFS#	Or ID	Date	Time	Signature	ผอ	COI	Aq∃	CF'	∀ΓK'	20T	TSS As, E Cu,F Mi,PŁ	OIF 8	CYA	DH TOT	
P	94014h7K		MW-17	66517	1050	Orkans		က	-	-	F	1	1	1	-	1 12	
1	1421		MW-18	164317	1400	w. bull		3	1	1	1	1 1	1	1	1	1 12	_
I	2007) WW-19	12/9//9)	100%/	しかなが	_	3	1	1	1	1 1	1	1		1 12	
1	1000		MW-20	STOR ,	1.501,	W. Garle		3	1	1	-	1	1	1	1 1	12	_
1	7207			1 65.919	N 0000	W. Fron 12		3	1	1	1	1 1	1	1	1	1 12	_
	1135				16 40 15	Let. Konstacken		3	1	1	1	1 1		1	1	1 12	
	1637		74.	1941-9	5551	BH Warm		3	_	1	-	1	1	1	1	112	
	1038			to 121 - 2	5591	P4 Connelle		3	-	-		1	-	1	1	112	_
1	424		MW-25	166/51/9	15,25/	M. Danz		က	-	-	-	1	-	1	_	112	
	2797			16-17-9		8# Connally	_	3	-	1	T	1 1	-	1	1	1 12	_
	14041		SW-2	12.69	0810	RH Committe		3	-	1	1	1 1	1	1	1	1 12	
	1 4042			56-41-9	1038	RH Comety	-	က	-	-		-	-	-	_	112	
	1550		SW4	6-17-49	1045	PH Come / W		ო	-	7	ᅱ		-	7		112	
\ *	7007		7 SW-5	166-21-9	1100	RH Come Out	\dashv	က	۳				-	-	_	112	
	Shot		SW6 NoT Sympled			/	\dashv	က	-	ᅱ	7	7	-	-		112	
	14047		2-MS	66-21-9	1210	A-4/ 50 2 22	_	က	1	1	1	1	1	1		1 12	
<u></u>				. !				1	Tun	Jarot	Pur	Sedu	Turnaround Requested				_
Re	Relinguished by		Date/Time, / Accepted B	· .	0	Date/Fime	2/10		(Ç		-				
		•		•	1		ジャ	_	ľ	ROLLING (7 WOOKS)	2	a S	Ū				_

□ Emergency Rush (24-48 Hrs.)* Date Results Requested: Additional Charges Will Apply Routine (2 weeks) Rush (1 week) Segvance Date/Time Date/Time Franker Celle 17 OF Comments: ★ &7 Seal/Lock Opened By Accepted By: 861819 Date/Time/ Date/Time TEMP: 0240 Sample Matrix NC SC SCO UST Ground Water Drinking Water DRCRA Waste Sealed/Locked by: Relinquished by:

Copy 2 - Client Copy Copy 1- AL Files

Original - AL Files

Other

Subsecte Form 89962 (9-97) Previously Form 35226

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM Duke Power's Analytical Laboratory

OF CONTAINERS SEASE E Ca, Cd, Cr, , Mg,Mn,Na, e, Sn,Zn Container Type:()Glass ()Plastic 4, ACIDITY Preservative Added { 04 09 H2S04 Required HNO3 Other None sisylsnA <u>8</u> Analysis P.O.# Venclored Samples Vendor Vendor Sample Class AB I 2400-Date Mail Code: MGO3A3 Resp. Center To: 0897 ⊒ ⊒ NOC-66 # SWIT CLIENT: 0702MGPGVLBRMST Report to/Ph. GLF/4844 Logged By (Ini.) Project Name: GREENVILLE BRAMLETT ST 1339 Hagers Ferry Road Huntersville, NC 28078 Phone: (704) 875-5209/875-5245 Fax: (704) 875-5038 Business Unit: 20018
Project ID: MGPBRAM
Activity ID: ALLACTV MNS BIdg. # 7405 MGO3A2 Process: #SIW3

								2-2																		
- 7∀	TOT	12	12	12	m	1	1	ľ		Γ	Τ	Τ	Т	Т	Т								7	Т		Τ
	HC	7	-	+	\vdash	┝	╁	\vdash	┢	╁	╁╴	╁	t	╁	╀	-		1								İ
ΔIN	CXAI					\rfloor																				
	S JIO		Ė	È	<u> </u>	H	-	┢	╁	┞	t	╁	╁	+	╁	-										l
		-	-	-		-															·(.)	İ				l
S (Ni,Pb	H	┞			┞	十	H	\vdash	H	H	╁	+	┢	-						<u>平</u>		1	ĺ		ľ
),6 ,3, (As, B Cu,F	_	-	╚														ted (24-4	ted:				
	SST	F	-	F		┢	T		H	┢	T	┢	┢	┢	H			nes	eks)	•) ysı	dues Apply				
,	эот	F	-	F		=	T	<u> </u>		┢	┢	H	t	T				Tumaround Requested	C Routine (2 weeks)	☐ Rush (1 week)	Emergency Rush (24-48 Hrs.)*	Date Results Requested: Additional Charges Will Apply				
os	∀ΓK '	-	F	-		F			<u> </u>		T	Г		T				pun)e (2	₹	jenc	Sults				
H	CF' I	-	-	-		-	1			Г			T	r			i	Jaro	outir	ush	nerc	Rei Jonal				
85.	₽₽A	-	F	-		F	F	-	_	Г			T					발	Ř	Œ.	Ш	Date Addit				
	Aq∃	3	က	6	က	က	l					T	┞	T							_	<u> </u>	4	li		
	coı	 						T		T			T		П				10							
∀B	⁄ଧ୍ୟଚ	-		_		┞				Н		\vdash	T		Н		\dashv		55 0740							
		14	¥		Ξ	Ι,	T		1/2	F			T		Н		ᅥ		(C							
ا ے	<u>J</u> e	3	3	d		٦,	3	1	Springbell										2/2 5/0	<u>a</u>		ime				
atio	Signature	1		3		3	7	linear	7	•									o de la la la la la la la la la la la la la	ite/		Date/Time				
<u> </u>	Š	7	Q	3		STATE OF THE STATE	6		انسا							ı	ĺ		é č	ď		د				
		Ų	Ţ	3		5	×	1.1	47]]					d							
Collection Information	Time	542/	1135	(335		1513	1400										Ī		Serve Serve							
ဒီ			1 1	()			7 fg	14/ 6	0 22				ļ.,			\dashv	_		B			pened By:				
	Date	617	6-12-89	6179		71-9	6/16/14	5741 66-51-3	Resumble 6-1294 0955	:								إ	; }	.: ∕ <u>`</u>		Open	Comments:			
								_	7			_		_		7		- 6	The Contraction	Accepted By		Seal/Lock O _l	Ē			
									412	/						١			34	cept		al/L	Ŏ			
S									N	•								Ľ	₹	Ac		တိ				
Sample Description									વૅ										64/8							
Sesc	Ω						MW- 18 OC SAMPLE												18/							
	ō						MY									-			. 19							
Sam					NK	FIELD BLANK	ဒ္ဓ	6	22											Date/Time		Date/Time	۱.			
0,					TRIP BLANK	BL	80	37								1	Ì		OGG	ate/		ate/	Σ			
		SW-8	SW-9	SW-10	SIP.	ELD	<i>)</i> -/	1W-	3									٩	7,	Δ	ĺ	Ã	匠			_
		S	Ś	Ś	F	ᄑ	₹	V	긱					Ц		_	_		v		ł		Ν	NPDESU	٦ (J
Lab PPOFO#	5						,									1										<u>v</u>
מַר	2																		Ź				S	z :) ()
				$_{-}$		_	\vdash	7	4	_		-			\dashv	\dashv	_		3	.: α		d b	Ě	ָם פַּ	<u>.</u>	
## d	⊧ b	4048	5	S	405	4052		4057	5516										ST.	hed	Ì	cke	Σ	Vate	vate	JS.C.
Sample #		114	4	4	`			7	"										Kellinguished by	Refinquished by:		Sealed/Locked by:	Sample Matrix NC SC TEMP:	Ground Water	Drinking water u	ACKA Waste
V.	, ,	3																		Selin		eale	Sam	Srou	֓֞֝֟֓֟֝֟֝֟֝֟֟֝֟֝֟֟֝֟֟֟֓֟֟֟֓֟֟֟֓֟֟֟ ֓֓֓֓֓֓֓֓	2
		<u>-</u>	_1	1				!				_			1			Ľ	_			(C)	رحال	<u> </u>		_

Copy 2 - Client Copy Copy 1- AL Files

Original - AL Files

Substantial Substa

CHAIN OF CUSTODY RECOREMEND ANALYSIS REQUEST FORM

3SA: , Cd, Cr, Ng,Mn,Na, Sn,Zn Container Type:() Glass () Plastic **YTIGIDA** Preservative Added H2S04 **Deninpa** HNO3 Other None sisylsnA 8 Analysis P.O. # Venclored Samples MGP Vendor Vendor -004 Sample AB Date Mail Code: MGO3A3 Resp. Center To: 0897 ⊒ ⊒ CLIENT: <u>0702MGPGVLBRMST</u> Report to/Ph. GLF/4844
Project Name: GREENVILLE BRAMLETT ST Mail Code: Logged By (Ini.) W # SWIT Duke Power's Analytical Laboratory 13339 Hagers Ferry Road Huntersville, NC 28078 Phone: (704) 875-5209/875-5245 Project ID: MGPBRAM Activity ID: ALLACTV MNS BIdg. # 7405 MGO3A2 Business Unit: 20018 Fax: (704) 875-5038 Process: #SIWJ

													Ŋ														
	รม	ΛE	IIV.	ΤN	100	OF (#	‡	TOT	12	12	12	*	12	12	12	12	12	12	72	2	12	2	72	7		
									ЭН	-	1	1	₹	-	1	-	-	F	-	ᅱ	ᅱ	F	ᅱ	티	티		
							Ξ	AIDE	CXAI	_	1	-	1	Į,	-	_	_	_		_		_	\downarrow		_		
1					=	SA:	35	S GF	סור צ			ľ					Ť		Ì		Ì		Ì	计	ᅱ		
										-	1	-	+	-	_	4	7	-					~		\neg		
İ				l.	u _z	z'uS	'(∋ S '0	Ni, PŁ			T	,			Н				7	7	_	十	ᅱ	ᅱ		
	J								As, B Cu,F	-	1	┖	4	-	-	1	τ-	~	-	\neg	-	-	ᅵ	-	\neg	g	
1	\dashv			 	<u> </u>	-0	-,		SST	-	1	+	Ŧ	1	1	1	1	-	-	_	$\frac{1}{1}$		ᅱ	_	뉘	lest	
1	\dashv			┝					00T	-	1	1	Ŧ	1	+	1	_	-	_				긤		ᅴ	Turnaround Requested	•
1	ᅦ			,	TIO	IOA	't		 ∀ΓΚ'	-	1	_	Ţ	1	+	1	1	_	_	\exists				7	\exists	盲	
-					-				CF' I	-	-	_	<u> </u>		-	1	<u>,</u>	_		┪			늰	\exists	╣	≅	
1	-	_		\vdash					A93	_	Ĺ	Ė	<u>''</u>	_	È	Н	Н	\exists	_		+	Ì	\dashv	$\dot{\dashv}$	$\dot{\dashv}$	<u>E</u>	
-	-			┝				-	A93			-		_	_	1 1	1	_	_				\exists		긔	匠	_
-	-		_	L			7		<u>VG3</u>	ေ	E	3	3	3	3	3	3	3	3	က	<u> </u>	3	က	က	3	Ī	_
		Other	None			lsnA Jp92			<u>মহ</u>	L		_								4	_		4	_	_		
	8	ŏ	ž	Ĺ	-;		_	av	שט	L	1	\downarrow	8							ᆝ	_	_	_	_	٦		
]		,	Ì	100	3	3	77	17	11/2		Oler	7	3	3	3	-{	0	ব্য		,
	Analysis	2			#		I	드	ure	I	1	ÞŽ	0	3	3	7	>	1	4	1	3	1	3	٦	引		
_	120	3	ŀ	ĺ	P.O			atio	Signature	6	7	\	1	13	ł	Į Š		ģ	ğ	18,	\mathbb{J}	3	, N	4	(4)		John Tohor
•								orm	Š	#	か	Ŀ	ζ	71	Ž)	ß	7	Hco	7	"	Ŗ	j	M	ଐ	到		٢
		1	┪	T	П		1	Inf		×		1	3	PY,	žγ	27	70	R	RI	S	겐	+3	M	4	ما		l
	Ş	3			Vendor		l	Collection Information	<u> </u>	420	0)	2	5	5251	35	(5	25	15	7	30	Ñ	40	K	10	28		
	19	N CONTRACT	l	١	Ven		l		Time	3)	=	ß	6480	5	0935	0915	2990	((2	5)	٤	10	09	0) (d	606		Ĺ
_	Ĺ		L	L				ŭ	<u>e</u>	66.	8	\$	·a·	14.8	4	À	196	15.99	5-91	Z	ş	49	5	34	6-16-990928		
			1	1	ı	1 1			Date	6-11-9	2169	6-15A	7	12	19	1)-0	715	715	1-0	1-0	-	715	7	2-11	1-1		3
			က္ခ						<u> </u>		Ť	Ī		Ť			7	7		\Box	_	"	_	7			פ
	╛	1	Mail Code: MGO3A3																								20.000
		l	욁	Resp. Center To: 0897	1						ĺ																Ę
		<u>¥</u>	oge:	ö				<u>.</u>	or ID	Ì		ĺ	İ	1													r
_	1	7	a C	ter_T	İ		ŀ		<u> </u>							ļ	}	ļ									l
		히	∑	Seg				ع ا	82 82					Ì													l
	ł	Æ	닏	esp.				9	ت آ																		
		유	띰	œ I		-			ב ק	Ĭ					2	3		Ì									l
_		8	回					ľ	•			ho			3 × -9 × ×	֓֟֟֓֟֟֟֓֓֟֟֓֓֟֟֓֓֓֟֟֓֓֟֟֓֓֟֟֓֓֓֟֟֓֓֓֟						_	 	١.,			ŀ
		H	M							MW-1	2-W	MW-3	WW 4	MW-5	\$	7-74/14	WW-8	6-WM	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16		ľ
		S	띪					L		Σ	ĮΣ	ĮΣ	Σ	ĮΣ	≸	3	I≧	Į≩	⋛	₹	≧	⋛	≥	≧	≧		l
		19		18	\$	≥		l _	# (X)		1			l		'			ĺ								
		စ္က	⋛	200	PBI:		l	=	PROFS#	Ì						Ì	ĺ						l				ļ
20		CLIENT: 0702MGPGVLBRMST Report to/Ph. GLF/4844	Project Name: GREENVILLE BRAMLETT ST	ij	Project ID: MGPBRAM	 			<u> </u>	Ļ		L	_	L	L	Ļ	Ļ	L	L	L	L	L	L	Ļ			
ה ה		702	(O)	Ss U		≌ <u>"</u>	ı		224-	68/1	19	k	4012	3	学	おれ	1/2	1	0/9	4019	4020	2	12.2	623	12.07		١
õ	•	O	Jame	ine	<u>8</u>	Activity II Process:			Sample #	1	13	1	B	F	Ŧ	P	3	B	1	13	40	707	1	1	13	1	
Fax: (/04/0/2-2038	-	Ä	ect ∧	Bus	<u>Б</u>	A F			Sam	11		1	\uparrow	$ \downarrow$	1			_	Ļ			_			1		
ĕ		CLE	Proj	#	#SIV	ΕV		L		Š	1					I	<u> </u>				1	1			P		
																	_	_	-	_	_		_				

Relinquished by: Relinquished by: Sealed/Locked by: Sample Matrix NC SC TEMP Ground Water UNPDES Drinking Water UST COMP

Copy 1- AL Files Original - AL Files

Copy 2 - Client Copy

Substitute Form 89962 (9-97) Previously Form 35226

TOTAL # OF CONTAINERS

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM

Duke Power's Analytical Laboratory

0 0 D \mathcal{O} **JATO1** COUNT Container Type:() Glass () Plastic TOTAL MICROBIAL Preservative Added COMP H2S04 Required HNO3 Other None Analysis <u>8</u> **BARD** PH Con melle 4 Comes H Connell Analysis Signature P.O. # Collection Information Venclored Samples I Sample MG Vendor Vendor 0260 0010 8+9/ Bb-1-0 0000 Time 6-15-9 1050 9/11/94 1400 5551 841-9 7020 5751 6/10/19 6/1/405 612-69 Date AB Date 39-14N-0042 Mail Code: MGO3A3 Resp. Center To: 0897 Time Sample Description or ID 0702MGPGVLBRMST Report to/Ph. GLF/4844 کے -ogged By (Ini.) #SWI7 195 ON Project Name: GREENVILLE BRAMLETT ST MW-28-24 MW-24 23 MW-18 MW-21 MW-19 MW-20 MW-22 MW-25 SW6 **SW-2** SW-1 SW-3 SW4 1339 Hagers Ferry Road Huntersville, NC 28078 Phone: (704) 875-5209/875-5245 Project ID: MGPBRAM Lab PROFS# MNS Bldg. # 7405 MGO3A2 Business Unit: 20018 Activity ID: ALLACTV Fax: (704) 875-5038 Exon Zhon 1000 4026 4037 *1212* 4008 4035 4038 4027 4036 C4014025 4039 氢 Process: Sample # CLENT: #SIW1

Turnaround Requested	☐ Routine (2 weeks)	☐ Rush (1 week) ☐ Emergency Rush (24-48 Hrs.)*	Date Results Requested: - Additional Charges Will Apply		
owi Hose	July 80m 6/19/5 0740	Date/Tirhe	ed By: Date/Time	Comments: * OUTOP Seguance	
	0740 6-18-99 / Lake	Date/Time Accepted By:	Date/Time Seal/Lock Opened By:		
	Relinguished by:	Relinquished by: Date	Sealed/Locked by: Date	Sample Matrix NC O SC O TEMP: Ground Water O NPDES O	

017/

SW-7

4017

Copy 2 - Client Copy Copy 1- AL Files

Original - AL Files

RCRA Waste

*

Sua 5 Form 89962 (9-97) Previously Form 35226

CHAIN OF CUSTODY RECORMAND ANALYSIS REQUEST FORM

BTAH980H9 JATOT COUNT Container Type:() Glass () Plastic TOTAL MICROBIAL Preservative Added COMP Required H2S04 HN03 Other None sisylenA <u>8</u> **BARD** LD Complete Analysis P.O. # At Come Signature Venclored Samples Collection Information **BQ** Vendor Vendor Time 5+2/ 1135 Sample Class 1130 Date ABI Date 4DUL Mail Code: MGO3A3 Resp. Center To: 0897 Time Sample Description or ID 0702MGPGVLBRMST Report to/Ph. GLF/4844 -66 # SMIT .ogged By (Ini.) Project Name: GREENVILLE BRAMLETT ST Duke Power's Analytical Laboratory 6-MS SW-8 1339 Hagers Ferry Road Huntersville, NC 28078 Phone: (704) 875-5209/875-5245 Fax: (704) 875-5038 Business Unit: 20018
Project ID: MGPBRAM
Activity ID: ALLACTV Lab PROFS# MNS Bldg. # 7405 MGO3A2 Process: Sample # CLIENT: **LWI2***

Ken Hunaun Kar

Strt/ 6//5//9

MW- 18 QC SAMPLE MW-30

4059

TRIP BLANK FIELD BLANK

1057

SW-10

DH Downs

5151 66/1/9

1335

TOTAL # OF CONTAINERS

		Г					Г	Т	Т
		Tumaround Requested		☐ Rush (1 week) ☐ Emergency Rush (24-48 Hrs.)*	Date Results Requested: Additional Charges Will Apply				
			240						
+	\dashv		0 4						
			ted By: Bower 6/18/99 0740	Ďate/Time	Date/Time				
			when		By:				
			3y: B		ock Opened By:	Comments:			
			Accepted E	Accepted By:	Seal/Lock (Comr			
			0240 6/8/99 Accept	Dáte/Time/	Date/Time	TEMP:			
-			γ				NPDES 🗆	STO	Other 🗆
		(Relinguished by:	Relinquished by:	Sealed/Locked by:	Sample Matrix NC SC TEMP			RCRA Waste 🔟 Of

Copy 1- AL Files Copy 2 - Client Copy

Original - AL Files

PLEVIOUSIY FOOTH SE

)

;

CAVIIDE OIL & GREASE ☐ Emergency Rush (24-48 Hrs.)* nZ,n2, se, dq,iN Cu,Fe,K, Mg,Mn,Na, Container Type:()Glass ()Plastic Date Results Requested:

• Additional Charges Will Apply Turnaround Requested As, Ba, Ca, Cd, Cr, ☐ Routine (2 weeks) **SS1** ☐ Rush (1 week) COL **YTIGIDA** 'b0\$ **זר**ג' Preservative Added כר' **CHN EPA 8270** 0928 A93 က ന ന ന ന က က COMP H2S04 Required HN03 Other None 16/8. **Analysis BARD** <u>8</u> るい Date/Time 6 118/199 (15) Date/Time **Date/Time** Analysis Signature P.O. # Collection Information Venclored Samples 10400 826066-91-7 Vendor 2960 1130 0-16-99 1410 Vendor 0935 2160 (5/5 50 1166-51-9 (420 6480 6001-5 272 Time Sample Class Seal/Lock Operfed By 1549 6-15-9 10-00 6-(6-9) 6-15-99 15% Date Comments -0042 Copy 2 - Client Copy ccepted,By: AB Date Mail Code: MGO3A3 Scepted Resp! Center To: 0897 Sample Description or ID CLIENT: 0702MGPGVLBRMST Report to/Ph. GLF/4844
Project Name: GREENVILLE BRAMLETT ST Mail Code: 90% 90% SO, Logged By (Ini.) LIM8# CA 55/31/2 Date/Time Date/Time TEMP 1944 MMZ MW-15 Duke Power's Analytical Laboratory MW-12 MW-13 MW-14 MW-16 MW-3 MW-10 **MW-5** AWA 4 MW-8 6-MW 1339 Hagers Ferry Road Huntersville, NC 28078 Phone: (704) 875-5209/875-5245 Fax: (704) 875-5038 Sample Matrix NC DSCD Ground Water DNPDESCD Drinking Water DUST D Other 🗆 Business Unit: 20018
Project ID: MGPBRAM
Activity ID: ALLACTV Lab PROFS# MNS BIdg. # 7405 MGO3A2 wanth than Relinquished by: Ground Water □ Drinking Water □ RCRA Waste □ Sealed Cocked by: Religquished by: 422 55% qcoh17.03 RCRA Waste 125 Process: Sample # **EWI2**#

Copy 1- AL Files

Original - AL Files

Previously Form 352.

)

))

) = = 5

ATOTAL # OF CONTAINERS

CAPNIDE OIL & GREASE ☐ Emergency Rush (24-48 Hrs.)* NZ,nZ, Se, Sn,Zn As, Ba, Ca, Cd, Cr, Cu,Fe,K, Mg,Mn,Na, Container Type:() Glass () Plastic Tumaround Requested Date Results Requested:

• Additional Charges Will Apply ☐ Routine (2 weeks) SSI ☐ Rush (1 week) COC **POS** לרג' YTIGIOA Preservative Added NH3 CF' 0728 A93 **EPA 8260** ന ന ന ന ന ന ß COMP \$ H2S04 Required HNO3 Other None **SisylsnA BARD** 9 Saguance Date/Jime Date/Time Date/Time Analysis P.O. # Signature U A-4/ Klarins 118/19 Venclored Samples Collection Information マセク 575/66/51/9 Vendor 617-490900 Vendor -17-90 1038 01218621-7 5-17-49 1045 1050 ŝ Time Comments: ★ & 0431 68/11:3 6-17-49 1100 Sample Class Seal/Lock Opened By 41175 665/2 6-14-89 66.91-9 Date AB Date Accepted By 42 Mail Code: MGO3A3 Scepted Ampleo 25 Resp. Center To: 0897 Sample Description or ID CLIENT: 0702MGPGVLBRMSI Report to/Ph. GLF/4844
Project Name: GREENVILLE BRAMLETT ST Mail Code: 1505 V ogged By (Ini.) t B LIMS#GD 6/18/19 Date/Time Date/Time MW-28-24 MW-24 Z TEMP ver's Analytical Laboratory MW-22 **MW-20** MW-18 **MW-19** MW-21 MW-25 SW-6 SW-3 SW4 **SW-5** <u>SW-2</u> SW-1 Ø 13339 Hagers Ferry Road Huntersville, NC 28078 Phone: (704) 875-5209/875-5245 Sample Matrix NC G SC Ground Water G NPDES G Drinking Water G UST G Other 🗆 Business Unit: 20018 Project ID: MGPBRAM Lab PROFS# MNS Bldg. # 7405 MGO3A2 Activity ID: ALLACTV Relinquished by: Sealed/(Acked by Ground Water Drinking Water D 0 Fax: (704) 875-5038 Relinquished by: 155 A 4038 4035 4047 RCRA Waste 1204 Process: Sample # **EWI2**# *

Copy 2 - Client Copy Copy 1- AL Files Original - AL Files

Substitute riom gardz († Previously Form 352

さいし こうじつびじん りっしょくがん しょうしんしん こうしょうこく こうしょうしん

Duke Power's Analytical Laboratory

SASINATION NOF CONTAINERS

CYANIDE OIL & GREASE ☐ Emergency Rush (24-48 Hrs.)* Cu,Fe,K, Mg,Mn,Na, Ni,Pb, Se, Sn,Zn Container Type:() Glass () Plastic Date Results Requested: • Additional Charges Will Apply Tumaround Requested As, Ba, Ca, Cd, Cr, ☐ Routine (2 weeks) ☐ Rush (1 week) SSI COL 'bOS **YTIGIDA** לרκ' Preservative Added NH3 Cr' EPA 8270 6PA 8260 3 က 6 COMP 0700 H2S04 HNO3 Required Other None Analysis 9 **GRAB** ar) 66/21/3 PH Commelly (소) (소) Date/Time Analysis Date/Time Signature P.O. # Venclored Samples Collection Information Jate/T 77.77 · · 2 Vendor Vendor (245 1235 Time 1135 6-1249 0955 1515 6/11/17 1400 Sample Class 5741 66-51-Seal/Lock Opened By 6-1249 6179 66-21-9 84.790 Date Comments: Accepted By: Septed By: AB Date 20 Kairly Mail Code: MGO3A3 Resp. Center To: 0897 Sample Description or ID 0702MGPGVLBRMST Report to/Ph. GLF/4844 ogged By (Ini.) MW- 18 OC SAMPLE 56 # SMIT 66/8/19 Project Name: GREENVILLE BRAMLETT ST Date/Time/ アカンナ Date/Time Date/Time FIELD BLANK SW-10 TRIP BLANK TEMP: 0740 SW-9 SW-8 Sample Matrix NC SC T Ground Water O NPDES D Drinking Water O UST OR RCRA Waste O Other D 1339 Hagers Ferry Road Huntersville, NC 28078 Phone: (704) 875-5209/875-5245 Fax: (704) 875-5038 Project ID: MGPBRAM MNS BIdg. # 7405 MGO3A2 Lab PROFS# Business Unit: 20018 Activity ID: ALLACTV Relinquished by: 7 Sealed/Locked by: Refinquished by: 4057 5516 Process: Sample # CLIENT: #SIWJ

Copy 2 - Client Copy

Copy 1- AL Files Original - AL Files



Semi-Volatile Organics Case Narrative

A Duke Energy Company

(This document must accompany release of analytical results)

99-JUN-0042

- » Samples were analyzed using USEPA Method SW846-8270.
- » Sample 99014028 had an internal standard failure. Compounds Di-noctylphthalate through Benzo(g,h,i)perylene should be considered as estimates for this sample.
- » Sample 99014046 had a 1:5 dilution due to matrix interfence.

Rodney G. Wike



Duke Power's Analytical Laboratory

Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014009 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-1

Collection Date: 6/16/99 Location: MW-1 Type of Sample: GROUNDWATER

ı	_	_							
K	к.	v	റ്റ	IN	WA.	TED	PV	CCMIC	タクマハ
ı	2	v	vv	164	***	, LI	.	GC/MS	~ 0Z/V

Test Code: MS8270_W	Test Method: SW-846 8:	270	Analyst: RGW7794
	Result	Reporting Limit	Flag
Pyridine	< 1000 ug/L	1000 ug/L	0
n-Nitrosodimethylamine	< 1000 ug/L	1000 ug/L	0
Aniline	< 1000 ug/L	1000 ug/L	0
Phenol	< 1000 ug/L	1000 ug/L	0
bis(2-Chloroethyl)ether	< 1000 ug/L	1000 ug/L	0
2-Chlorophenol	< 1000 ug/L	1000 ug/L	0
1,3-Dichlorobenzene	< 1000 ug/L	1000 ug/L	0
1,4-Dichlorobenzene	< 1000 ug/L	1000 ug/L	O
Benzyl alcohol	< 1000 ug/L	1000 ug/L	0
1,2-Dichlorobenzene	< 1000 ug/L	1000 ug/L	0
2-Methylphenol	< 1000 ug/L	1000 ug/L	0
bis(2-Chloroisopropyl)ether	< 1000 ug/L	1000 ug/L	0
4-Methylphenol	< 1000 ug/L	1000 ug/L	0
Hexachloroethane	< 1000 ug/L	1000 ug/L	0
n-Nitrosodi-n-propytamine	< 1000 ug/L	1000 ug/L	0
Nitrobenzene	< 1000 ug/L	1000 ug/L	0
Isophorone	< 1000 ug/L	1000 ug/L	0
2-Nitrophenol	< 1000 ug/L	1000 ug/L	0
2,4-Dimethylphenol	< 1000 ug/L	1000 ug/L	0
bis(2-Chloroethoxy)methane	< 1000 ug/L	1000 ug/L	0
2,4-Dichlorophenol	< 1000 ug/L	1000 ug/L	0
Benzoic acid	< 1000 ug/L	1000 ug/L	0
1,2,4-Trichtorobenzene	< 1000 ug/L	1000 ug/L	0
Naphthalene	4600 ug/L	1000 ug/L	0
4-Chloroaniline	< 1000 ug/L	1000 ug/L	0
Hexachlorobutadiene	< 1000 ug/L	1000 ug/L	0
4-Chloro-3-methylphenol	< 1000 ug/L	1000 ug/L	0
2-Methylnaphthalene	1300 ug/L	1000 ug/L	0
Hexachtorocyclopentadiene	< 1000 ug/L	1000 ug/L	0
2,4,6-Trichlorophenol	< 1000 ug/L	1000 ug/L	0
2,4,5-Trichlorophenol	< 1000 ug/L	1000 ug/L	0
2-Chloronaphthalene	< 1000 ug/L	1000 ug/L	0
2-Nitroaniline	< 1000 ug/L	1000 ug/L	0
Dimethylphthalate	< 1000 ug/L	1000 ug/L	0
Acenaphthylene	< 1000 ug/L	1000 ug/L	0
2,6-Dinitrotoluene	< 1000 ug/L	1000 ug/L	0
3-Nitroaniline	< 1000 ug/L	1000 ug/L	O
Acenaphthene	< 1000 ug/L	1000 ug/L	0
2,4-Dinitrophenol	< 1000 ug/L	1000 ug/L	0
4-Nitrophenol	< 1000 ug/L	1000 ug/L	0
Dibenzofuran	< 1000 ug/L	1000 ug/L	0
2,4-Dinitrotoluene	< 1000 ug/L	1000 ug/L	0
Diethylphthalate	< 1000 ug/L	1000 ug/L	0
Fluorene	< 1000 ug/L	1000 ug/L	0



Duke Power's Analytical Laboratory

Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014009

Job#:

99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-1

Collection Date: 6/16/99

Location: MW-1

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Co	de: MS8270_W	Test	Metho	od: SW-846 82	70		Analyst:	RGW7794
		_	Re	esult	Repor	ting Limit	Flag	
4	-Chiorophenylphenylether	<	1000	ug/L	1000	ug/L	0	
	4-Nitroaniline	<	1000	ug/L	1000	ug/L	0	
:	2-Methyl-4,6-dinitrophenol	<	1000	ug/L	1000	ug/L	0	
	n-Nitrosodiphenylamine	<	1000	ug/L	1000	ug/L	0	
	1,2-Diphenylhydrazine	<	1000	ug/L	1000	ug/L	0	
4	-Bromophenylphenylether	<	1000	ug/L	1000	ug/L	0	
	Hexachlorobenzene	<	1000	ug/L	1000	ug/L	0	
	Pentachlorophenol	<	1000	ug/L	1000	ug/L	0	
	Phenanthrene	<	1000	ug/L	1000	ug/L	0	
	Anthracene	<	1000	ug/L	1000	ug/L	0	
	di-n-Butylphthalate	<	1000	ug/L	1000	ug/L	0	
	Fluoranthene	<	1000	ug/L	1000	ug/L	0	
	Benzidine	<	5000	ug/L	5000	ug/L	0	
	Pyrene	<	1000	ug/L	1000	ug/L	0	
)	Butylbenzylphthalate	<	1000	ug/L	1000	ug/L	0	
	3,3-Dichlorobenzidine	<	1000	ug/L	1000	ug/L	0	
	Benzo(a)anthracene	<	1000	ug/L	1000	ug/L	0	
	Chrysene	<	1000	ug/L	1000	ug/L	0	
I	bis(2-Ethylhexyl)phthalate	<	1000	ug/L	1000	ug/L	0	
	di-n-Octylphthalate	<	1000	ug/L	1000	ug/L	0	
	Benzo(b)fluoranthene	<	1000	ug/L	1000	ug/L	0	
	Benzo(k)fluoranthene	<	1000	ug/L	1000	ug/L	0	
	Benzo(a)pyrene	<	1000	ug/L	1000	ug/L	0	
	Indeno(1,2,3-c,d)pyrene	<	1000	ug/L	1000	ug/L	0	
	Dibenzo(a,h)anthracene	<	1000	ug/L	1000	ug/L	0	
	Benzo(g,h,i)perylene	<	1000	ug/L	1000	ug/L	0	
						· ·		

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

23U03.D	FIELD ID::	BRALETT ST-MW-1)	LAB ID::	99-JUN-0042 // 9-J14009 //(
				<u> </u>
		Tentatively Identified Compo	ounds Report	

		7	177 37 1	T 5	Identification Basis			
Comment	Probable Molecular	Estimated Concentration	Library Match Probability	Retention Time (RT)	Library	Manual	RT	Scan Number
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	<i>N1</i>	Ivamoer
NO TIC'S IDENTIFIED								
		İ					 	<u></u>
					-		1	
					<u> </u>		-	
			-				 	
					ļ <u></u>		ļ	,
<u> </u>		 					 	
	- 						+ +	

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery	
1.4-Dichlorobenzene-D4	11,70	2-Fluorophenol	0.8%	Nitrobenzene-D5	0.7%	
Naphthalene-D8	15.62	Phenol	0.7%	2-Fluorobiphenyl	0.8%	
Acenaphthene-D10	21.24	2,4,6-Tribromophenol	0.0%	Terphenyl-D14	0.8%	
Phenanthrene-D10	25.92			-		
Chrysene-D12	34.42					
Perylene-D12	39.18					
Pa	ge 1 of 1		(Flags	are described on pag	e #2 of Client	Report)



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: MW-2

Collection Date: 6/16/99 Location: MW-2 Type of Sample: GROUNDWATER

	VO	iΝ	WΔ	I F R	RY	GC/MS - 8	77N
_			***		_,	CONTRIC - O	210

Test Code: MS8270_W	Test Method: SW-846	Test Method: SW-846 8270		
	Result	Reporting Limit	Flag	
Pyridine	< 10 ug/L	10 ug/L	0	
n-Nitrosodimethylamine	< 10 ug/L	10 ug/L	0	
Aniline	< 10 ug/L	10 ug/L	0	
Phenol	< 10 ug/L	10 ug/L	0	
bis(2-Chloroethyl)ether	< 10 ug/L	10 ug/L	0	
2-Chlorophenol	< 10 ug/L	10 ug/L	0	
1,3-Dichlorobenzene	< 10 ug/L	10 ug/L	0	
1,4-Dichlorobenzene	< 10 ug/L	10 ug/L	0	
Benzyl alcohol	< 10 ug/L	10 ug/L	0	
1,2-Dichlorobenzene	< 10 ug/L	10 ug/L	0	
2-Methylphenol	< 10 ug/L	10 ug/L	0	
bis(2-Chloroisopropyl)ether	< 10 ug/L	10 ug/L	0	
4-Methylphenol	< 10 ug/L	10 ug/L	0	
Hexachloroethane	< 10 ug/L	10 ug/L	0	
n-Nitrosodi-n-propylamine	< 10 ug/L	10 ug/L	0	
Nitrobenzene	< 10 ug/L	10 ug/L	0	
Isophorone	< 10 ug/L	10 ug/L	0	
2-Nitrophenol	< 10 ug/L	10 ug/L	0	
2,4-Dimethylphenol	< 10 ug/L	10 ug/L	0	
bis(2-Chloroethoxy)methane	< 10 ug/L	10 ug/L	0	
2,4-Dichlorophenol	< 10 ug/L	10 ug/L	0	
Benzoic acid	< 10 ug/L	10 ug/L	0	
1,2,4-Trichlorobenzene	< 10 ug/L	10 ug/t,	0	
Naphthalene	80 ug/L	10 ug/L	0	
4-Chloroaniline	< 10 ug/L	10 ug/L	0	
Hexachlorobutadiene	< 10 ug/L	10 ug/L	a	
4-Chloro-3-methylphenol	< 10 ug/L	10 ug/L	0	
2-Methylnaphthalene	130 ug/L	10 ug/L	2	
Hexachlorocyclopentadiene	< 10 ug/L	10 ug/L	0	
2,4,6-Trichtorophenol	< 10 ug/L	10 ug/L	0	
2,4,5-Trichlorophenol	< 10 ug/L	10 ug/L	0	
2-Chloronaphthalene	< 10 ug/L	10 ug/L	0	
2-Nitroaniline	< 10 ug/L	10 ug/L	0	
Dimethylphthalate	< 10 ug/L	10 ug/L	0	
Acenaphthylene	< 10 ug/L	10 ug/L	0	
2,6-Dinitrotoluene	< 10 ug/L	10 ug/L	0	
3-Nitroaniline	< 10 ug/L	10 ug/L	0	
Acenaphthene	100 ug/L	10 ug/L	2	
2,4-Dinitrophenol	< 10 ug/L	10 ug/L	0	
4-Nitrophenol	< 10 ug/L	10 ug/L	0	
Dibenzofuran	< 10 ug/L	10 ug/L	0	
2,4-Dinitrotoluene	< 10 ug/L	10 ug/L	0	
Diethylphthalate	< 10 ug/L	10 ug/L	Q	
Fluorene	14 ug/L	10 ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014010 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-2

Collection Date: 6/16/99 Location: MW-2 Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method:	SW-846 8270	Ana	lyst: RGW7794
	Result	Report	ing Limit Flag	_
4-Chlorophenylphenylether	< 10 ug	/L 10	ug/L 0	
4-Nitroaniline	< 10 ug	/L 10	ug/L 0	
2-Methyl-4,6-dinitrophenol	< 10 ug	/L 10	ug/L 0	
n-Nitrosodiphenylamine	< 10 ug	/L 10	ug/L 0	
1,2-Diphenylhydrazine	< 10 ug	/L 10	ug/L 0	
4-Bromophenylphenylether	< 10 ug	/L 10	ug/L 0	
Hexachlorobenzene	< 10 ug	/L 10	ug/L 0	
Pentachlorophenol	< 10 ug	/L 10	ug/L 0	
Phenanthrene	< 10 ug	/L 10	ug/L 0	
Anthracene	< 10 ug	/L 10	ug/L 0	
di-n-Butylphthalate	< 10 ug	/L 10	ug/L 0	
Fluoranthene	< 10 ug	/L 10	ug/L 0	
Benzidine	< 50 ug	/L 50	ug/L 0	
Pyrene	< 10 ug	/L 10	ug/L 0	
Butylbenzylphthalate	< 10 ug	/L 10	ug/L 0	
3,3-Dichlorobenzidine	< 10 ug	/L 10	ug/L 0	
Benzo(a)anthracene	< 10 ug	/L 10	ug/L 0	
Chrysene	< 10 ug	/L 10	ug/L 0	
bis(2-Ethylhexyl)phthalate	< 10 ug	/L 10	ug/L 0	
di-n-Octylphthalate	< 10 ug		ug/L 0	
Benzo(b)fluoranthene	< 10 ug		ug/L 0	
Benzo(k)fluoranthene	< 10 ug		ug/L 0	
Benzo(a)pyrene	< 10 ug	/L 10	ug/L 0	
Indeno(1,2,3-c,d)pyrene	< 10 ug		ug/L 0	
Dibenzo(a,h)anthracene	< 10 ug		ug/L 0	
Benzo(g,h,i)perylene	< 10 ug		ug/L 0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

2/10y Whisenaut 7/16/99

Bata Verified and Approved By. Date

	23U04.D	FIELD ID::	BRALETT ST-MW-2)	LAB ID::	99-JUN-0042 // 95014010
<u> </u>					
				, , , , , , , , , , , , , , , , , , , ,	· · · · · · · · · · · · · · · · · · ·

	Probable	Estimated	Library Match	Retention	Identification Basis]	
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number	
SUBSTITUTED INDENE		73	64%	12.35	Х			1172	
							 -		
							ļ		
									
					I		<u> </u>		

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1,4-Dichlorobenzene-D4	11.71	2-Fiuorophenol	86.2%	Nitrobenzene-D5	81.5%
Naphthalene-D8	15.62	Phenol	76.0%	2-Fluorobiphenyl	73.3%
Acenaphthene-D10	21.25	2,4,6-Tribromophenol	85.9%	Terphenyl-D14	79.0%
Phenanthrene-D10	25.93			-	

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

Chrysene-D12

Perylene-D12

34.43

39.19



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014011 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-3

Collection Date: 6/15/99 Location: MW-3 Type of Sample: GROUNDWATER

Test Code: MS8270_W	Test M	letho	d: SW-846 8270			Analyst:	RGW7794
		Re	sult	Report	ting Limit	Flag	
Pyridine	<	10	ug/L	10	ug/L	0	
n-Nitrosodimethylamine	<	10	ug/L	10	ug/L	0	
Aniline	<	10	ug/L .	10	ug/L	0	
Phenol	<	10	ug/L	10	ug/L	0	
bis(2-Chloroethyl)ether	<	10	ug/L	10	ug/L	0	
2-Chlorophenot	<	10	ug/L	10	ug/L	0	
1,3-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
1,4-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
Benzyl alcohol	<	10	ug/L	10	ug/L	0	
1,2-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
2-Methylphenol	<	10	ug/L	10	ug/L	0	
bis(2-Chloroisopropyl)ether	<	10	ug/L	10	ug/L	0	
4-Methylphenol	<	10	ug/L	10	ug/L	0	
Hexachloroethane	<	10	ug/L	10	ug/L	0	
n-Nitrosodi-n-propylamine Nitrobenzene	<	10	ug/L	10	ug/L	0	
Isophorone	<	10	ug/L	10	ug/L	0	
2-Nitrophenol	<	10	ug/L	10	ug/L	0	
2,4-Dimethylphenol	< <	10 10	ug/L	10	ug/L	0	
bis(2-Chloroethoxy)methane		10	ug/L ug/L	10 10	ug/L	0	
2,4-Dichlorophenol	`	10	ug/L	10	ug/L ug/L	0	
Benzoic acid	<	10	ug/L	10	ug/L	0	
1,2,4-Trichlorobenzene	<	10	ug/L	10	ug/L	o	
Naphthalene		750	ug/L	100	ug/L	0	
4-Chloroaniline	<	10	ug/L	10	ug/L	0	
Hexachlorobutadiene	<	10	ug/L	10	ug/L	0	
4-Chloro-3-methylphenol	<	10	ug/L	10	ug/L	0	
2-Methylnaphthalene		160	ug/L	100	ug/L	0	
Hexachlorocyclopentadiene	<	10	ug/L	10	ug/L	0	
2,4,6-Trichlorophenol	<	10	ug/L	10	ug/L	0	
2,4,5-Trichlorophenol	<	10	ug/L	10	ug/L	0	
2-Chloronaphthalene	<	10	ug/L	10	ug/L	0	
2-Nitroaniline	<	10	ug/L	10	ug/L	0	
Dimethylphthalate	<	10	ug/L	10	ug/L	O	
Acenaphthylene	<	10	ug/L	10	ug/L	0	
2,6-Dinitrotoluene	<	10	ug/L	10	ug/L	0	
3-Nitroaniline	<	10	ug/L	10	ug/L	0	
Acenaphthene		140	-	100	ug/L	0	
2,4-Dinitrophenol	<	10	•	10	ug/L	0	
4-Nitrophenol	<	10	_	10	ug/L	0	
Dibenzofuran		10	•	10	ug/L	0	
2,4-Dinitrotoluene	<	10	•	10	ug/L 	0	
Diethylphthalate	<	10	_	10	ug/L	0	
Fluorene		34	ug/L	10	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014011

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: MW-3

Collection Date: 6/15/99

Location: MW-3

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: S	W-846 8270	Analyst: RG	W7794
	Result	Reporting	LimitFlag	
4-Chlorophenylphenylether	< 10 ug/L	10 (ıg/L 0	
4-Nitroaniline	< 10 ug/L	10 t	ıg/L 0	
2-Methyl-4,6-dinitrophenol	< 10 ug/L	10 i	ıg/L 0	
n-Nitrosodiphenylamine	< 10 ug/L	10	ıg/L 0	
1,2-Diphenylhydrazine	< 10 ug/L	10 (ıg/L 0	
4-Bromophenylphenylether	< 10 ug/L	10 (ıg/L 0	
Hexachtorobenzene	< 10 ug/L	10	:g/L 0	
Pentachlorophenol	< 10 ug/L	10	ıg/L 0	
Phenanthrene	29 ug/L	10	ıg/L 0	
Anthracene	< 10 ug/L	. 10 (ıg/L 0	
di-n-Butylphthalate	< 10 ug/L	10 (ıg/L 0	
Fluoranthene	< 10 ug/L	10 (ıg/L 0	
Benzidine	< 50 ug/L	50	ıg/L 0	
Pyrene	< 10 ug/L	10	ıg/L 0	
Butylbenzylphthalate	< 10 ug/L	10		
3,3-Dichtorobenzidine	< 10 ug/L	10	ıg/L o	
Benzo(a)anthracene	< 10 ug/L	10	.g/L 0	
Chrysene	< 10 ug/L	10	ıg/L o	
bis(2-Ethylhexyl)phthalate	160 ug/L	100	ıg/L 0	
di-n-Octylphthalate	< 10 ug/L	10	:g/L 0	
Benzo(b)fluoranthene	< 10 ug/L	10	.g/L 0	
Benzo(k)fluoranthene	< 10 ug/L	10	ug/L 0	
Benzo(a)pyrene	< 10 ug/L	10	ug/L 0	
Indeno(1,2,3-c,d)pyrene	< 10 ug/L	10	ug/L 0	
Dibenzo(a,h)anthracene	< 10 ug/L	10	_ ug/L 0	
Benzo(g,h,i)perylene	< 10 ug/L	10	ug/L 0	

<u>Description</u> of Flags:

- 0 No Discrepancies Noted
- 3 Detected in Blank
- 1 See Case Namative
- 4 Estimated Concentration also Detected in Blank
- 2 Estimated Concentration
- 5 For Information Only

6 - Holding Time or Analytical Time exceeded (See Case Narrative for additional information)

Troy Whisenart 7/20/99

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

	Probable	Estimated	Library Match Retention Probability Time (RT) (%) (Minutes)	Idei				
Compound	Molecular Weight	Molecular Concentration		$Time\ (RT)$	Library Match	Manual Interpretation	RT	Scan Numbe
No TIC's Identified								. <u> </u>
		{			<u></u>			
					· · · · · · · · · · · · · · · · · · ·			
				<u> </u>				
	-							
				-				
					<u> </u>			
7, ,						-		
							<u> </u>	
								 _
					-			
								

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1.4-Dichlorobenzene-D4	12.31	2-Fluorophenol	8.8%	Nitrobenzene-D5	8.5%
Naphthalene-D8	16.33	Phenol	0.0%	2-Fluorobiphenyl	10.1%
Acenaphthene-D10	21.98	2,4,6-Tribromophenol	10.0%	Terphenyl-D14	8.9%
Pentachlorophenol	0.00		<u></u>		

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

0.00

39.79

3,3-Dichlorobenzidine

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014012 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-4

Collection Date: 6/17/99 Location: MW-4 Type of Sample: GROUNDWATER

est Code: MS8270_W	Test Method: SW-846 82	Analyst: RGW77	
	Result	Reporting Limit	Flag
Pyridine	< 10 ug/L	10 ug/L	0
n-Nitrosodimethylamine	< 10 ug/L	10 ug/L	0
Aniline	< 10 ug/L	10 ug/L	0
Phenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethyl)ether	< 10 ug/L	10 ug/L	0
2-Chlorophenol	< 10 ug/L	10 ug/L	0
1,3-Dichlorobenzene	< 10 ug/L	10 ug/L	0
1,4-Dichlorobenzene	< 10 ug/L	10 ug/L	0
Benzyl alcohol	< 10 ug/L	10 ug/L	0
1,2-Dichlorobenzene	< 10 ug/L	10 ug/L	0
2-Methylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroisopropyl)ether	< 10 ug/L	10 ug/L	0
4-Methylphenol	< 10 ug/L	10 ug/L	0
Hexachloroethane	< 10 ug/L	10 ug/L	0
n-Nitrosodi-n-propylamine	< 10 ug/L	10 ug/L	0
Nitrobenzene	< 10 ug/L	10 ug/L	0
Isophorone	< 10 ug/L	10 ug/L	0
2-Nitrophenol	< 10 ug/L	10 ug/L	0
2,4-Dimethylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethoxy)methane	< 10 ug/L	10 ug/L	0
2,4-Dichlorophenol	< 10 ug/L	10 ug/L	0
Benzoic acid	< 10 ug/L	10 ug/L	0
1,2,4-Trichlorobenzene	< 10 ug/L	10 ug/L	0
Naphthalene	< 10 ug/L	10 ug/L	0
4-Chloroaniline	< 10 ug/L	10 ug/L	0
Hexachlorobutadiene	< 10 ug/L	10 ug/L	0
4-Chloro-3-methylphenol	< 10 ug/L	10 ug/L	
2-Methylnaphthalene	< 10 ug/L	•	0
Hexachlorocyclopentadiene	< 10 ug/L	-	0
2,4,6-Trichlorophenol	< 10 ug/L	•	0
2,4,5-Trichlorophenot	< 10 ug/L	•	0
2-Chloronaphthalene	< 10 ug/L	•	0
2-Nitroaniline	< 10 ug/L	J -	0
Dimethylphthalate	•	10 ug/L	0
Acenaphthylene	<u> </u>	10 ug/L	0
2,6-Dinitrotoluene	_	10 ug/L	0
3-Nitroaniline	< 10 ug/L < 10 ug/L	10 ug/L 10 ua/L	0
Acenaphthene		-5	0
2,4-Dinitrophenol	· -	10 ug/L	0
4-Nitrophenol	10 03/2	10 ug/L	0
Dibenzofuran	< 10 ug/L	10 ug/L	0
2,4-Dinitrotoluene	< 10 ug/L < 10 ua/L	10 ug/L	0
Diethylphthalate	·· -#-	10 ug/L	0
Fluorene	< 10 ug/L < 10 ug/L	10 ug/L 10 ug/L	0 0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014012

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: MW-4

Collection Date: 6/17/99

Location: MW-4

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Meth	nod: SW-846 8	3270		Analyst:	RGW7794
		Result	Report	ing Limit	_Flag_	
4-Chlorophenylphenylether	< 1	0 ug/L	10	ug/L	0	
4-Nitroaniline	< 1	0 ug/L	10	ug/L	0	
2-Methyl-4,6-dinitrophenol	< 1	0 ug/L	10	ug/L	0	
n-Nitrosodiphenylamine	< 1	0 ug/L	10	ug/L	0	
1,2-Diphenylhydrazine	< 1	0 ug/L	10	ug/L	0	
4-Bromophenylphenylether	< 1	0 ug/L	10	ug/L	0	
Hexachlorobenzene	< 1	0 ug/L	10	ug/L	0	
Pentachlorophenol	< 1	0 ug/L	10	ug/L	0	
Phenanthrene	< 1	0 ug/L	10	ug/L	0	
Anthracene	< 1	0 ug/L	10	ug/L	0	
di-n-Butylphthalate	< 1	0 ug/L	10	ug/L	0	
Fluoranthene	< 1	0 ug/L	10	ug/L	0	
Benzidine	< 5	0 ug/L	50	ug/L	0	
Pyrene	< 1	0 ug/L	10	ug/L	0	
Butylbenzylphthalate	< 1	0 ug/L	10	ug/L	0	
3,3-Dichlorobenzidine	< 1	0 ug/L	10	ug/L	0	
Benzo(a)anthracene	< 1	0 ug/L	10	ug/L	0	
Chrysene	< 1	0 ug/L	10	ug/L	0	
bis(2-Ethylhexyl)phthalate	< 1	0 ug/L	10	ug/L	0	
di-n-Octylphthalate	< 1	0 ug/L	10	ug/L	0	
Benzo(b)fluoranthene	< 1	0 ug/L	10	ug/L	0	
Benzo(k)fluoranthene	< 1	0 ug/L	10	ug/L	0	
Benzo(a)pyrene	< 1	0 ug/L	10	ug/L	0	
Indeno(1,2,3-c,d)pyrene	< 1	0 ug/L	10	ug/L	0	
Dibenzo(a,h)anthracene	< 1	0 ug/L	10	ug/L	0	
Benzo(g,h,i)perylene	< 1	0 ug/L	10	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Droy Whisenart 7/16/99
Bola Verified and Approved By, Date

	Probable	Estimated	Library Match	Retention	Idei	Identification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
No TIC's Identified								
						<u> </u>	 	
								<u> </u>
				.		<u> </u>		
		 					 	
		<u> </u>					 	
					_			
<u> </u>		_				 		
				· · · · · · · · · · · · · · · · · · ·				
			- 					

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
	# The state of the			gr.	
1,4-Dichlorobenzene-D4	12.28	2-Fluorophenol	101.5%	Nitrobenzene-D5	79.7%
Naphthalene-D8	16.29	Phenol	76.0%	2-Fluorobiphenyl	64.9%
Acenaphthene-D10	21.93	2,4,6-Tribromophenol	71.4%	Terphenyl-D14	58.2%
Pentachlorophenol	0.00				

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

3,3-Dichlorobenzidine

Perylene-D12

0.00

39.72

JU14.D

FIELD ID::



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014013 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-5

Collection Date: 6/14/99 Location: MW-5 Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Report Generated 7/9/99 13:24:50

st Code: MS8270_W	Test Method: SW-84	Analyst: RGW77	
	Result	Reporting Limit	Flag
Pyridine	< 10 ug/L	10 ug/L	0
n-Nitrosodimethylamine	< 10 ug/L	10 ug/L	
Aniline	< 10 ug/L	10 ug/L	0
Phenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethyl)ether	< 10 ug/L	10 ug/L	0
2-Chlorophenol	< 10 ug/L	10 ug/L	0
1,3-Dichlorobenzene	< 10 ug/L	10 ug/L	0
1,4-Dichlorobenzene	< 10 ug/L	10 ug/L	0
Benzyl alcohol	< 10 ug/L	10 ug/L	0
1,2-Dichlorobenzene	< 10 ug/L	10 ug/L	0
2-Methylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroisopropyl)ether	< 10 ug/L	10 ug/L	0
4-Methylphenol	< 10 ug/L	10 ug/L	0
Hexachloroethane	< 10 ug/L	10 ug/L	0
n-Nitrosodi-n-propylamine	< 10 ug/L	10 ug/L	0
Nitrobenzene	< 10 ug/L	10 ug/L	0
Isophorone	< 10 ug/L	10 ug/L	0
2-Nitrophenol	< 10 ug/L	10 ug/L	0
2,4-Dimethylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethoxy)methane	< 10 ug/L	10 ug/L	0
2,4-Dichlorophenol	< 10 ug/L	10 ug/L	0
Benzoic acid	< 10 ug/L	10 ug/L	G
1,2,4-Trichlorobenzene	< 10 ug/L	10 ug/L	0
Naphthalene	< 10 ug/L	10 ug/L	0
4-Chloroaniline	< 10 ug/L	10 ug/L	0
Hexachlorobutadiene	< 10 ug/L	10 ug/L	0
4-Chloro-3-methylphenol	< 10 ug/L	10 ug/L	0
2-Methylnaphthalene	< 10 ug/L	10 ug/L	Ö
Hexachlorocyclopentadiene	< 10 ug/L	10 ug/L	0
2,4,6-Trichlorophenol	< 10 ug/L	10 ug/L	Ō
2,4,5-Trichlorophenol	< 10 ug/L	10 ug/L	0
2-Chloronaphthalene	< 10 ug/L	10 ug/L	0
2-Nitroaniline	< 10 ug/L	10 ug/L	0
Dimethylphthalate	< 10 ug/L	10 ug/L	0
Acenaphthylene	< 10 ug/L	10 ug/L	0
2,6-Dinitrotoluene	< 10 ug/L	10 ug/L	0
3-Nitroaniline	< 10 ug/L	10 ug/L	0
Acenaphthene	< 10 ug/L	10 ug/L	0
2,4-Dinitrophenol	< 10 ug/L	10 ug/L	0
4-Nitrophenol	< 10 ug/L	10 ug/L	Ó
Dibenzofuran	< 10 ug/L	10 ug/L	0
2,4-Dinitrotoluene	< 10 ug/L	10 ug/L	0
Diethylphthalate	< 10 ug/L	10 ug/L	0
Fluorene	< 10 ug/L	10 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014013 Job #: 99-JUN-0042 Custom

Customer ID: G. FRANKLIN

Sample Description: MW-5

Collection Date: 6/14/99 Location: MW-5 Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Met	hod: SW-846	8270		Analyst:	RGW7794
		Result	Report	ting Limit	Flag	
4-Chlorophenylphenylether	<	10 ug/L	10	ug/L	0	
4-Nitroaniline	<	10 ug/L	10	ug/L	0	
2-Methyl-4,6-dinitrophenol	<	10 ug/L	10	ug/L	0	
n-Nitrosodiphenylamine	<	10 ug/L	10	ug/L	0	
1,2-Diphenylhydrazine	<	10 ug/L	10	ug/L	0	
4-Bromophenylphenylether	<	10 ug/L	10	ug/L	0	
Hexachiorobenzene	<	10 ug/L	10	ug/L	0	
Pentachiorophenol	<	10 ug/L	10	ug/L	0	
Phenanthrene	<	10 ug/L	10	ug/L	0	
Anthracene	<	10 ug/L	10	ug/L	0	
di-n-Butylphthalate	<	10 ug/L	10	ug/L	0	
Fluoranthene	<	10 ug/L	10	ug/L	0	
Benzidine	<	50 ug/L	50	ug/L	0	
Pyrene	<	10 ug/L	10	ug/L	0	
Butylbenzylphthalate	<	10 ug/L	10	ug/L	0	
3,3-Dichlorobenzidine	<	10 ug/L	10	ug/L	0	
Benzo(a)anthracene	<	10 ug/L	10	ug/L	0	
Chrysene	<	10 ug/L	10	ug/L	0	
bis(2-Ethylhexyl)phthalate	<	10 ug/L	10	ug/L	0	
di-n-Octytphthalate	<	10 ug/L	10	ug/L	0	
Benzo(b)fluoranthene	<	10 ug/L	10	ug/L	0	
Benzo(k)fluoranthene	<	10 ug/L	10	ug/L	0	
Benzo(a)pyrene	<	10 ug/L	10	ug/L	0	
Indeno(1,2,3-c,d)pyrene	<	10 ug/L	10	ug/L	0	
Dibenzo(a,h)anthracene	<	10 ug/L	10	ug/L	0	
Benzo(g,h,i)perylene	<	10 ug/L	10	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Droy- Whisenast 7116199

Dafa Verified and Approved By, Date

	Probable	Estimated	Library Match	Retention	Idei	Identification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
No TIC's Identified				hatala a jalja 1886. Maan maa ahii a Maraada a hii	AT 1995. LET A BELLET, ANGELES A SE	1 the obtained with the later than the second		
				 				······································
· · · · · · · · · · · · · · · · · · ·								
			1		<u> </u>		 	
			-	· · · · · · · · · · · · · · · · · · ·			<u> </u>	
· · · · · · · · · · · · · · · · · · ·								
* ** *********************************				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
								· -

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1,4-Dichlorobenzene-D4	12.32	2-Fluorophenol	59.3%	Nitrobenzene-D5	66.1%
Naphthalene-D8	16.32	Phenol	0.0%	2-Fluorobiphenyl	71.6%
Acenaphthene-D10	21.98	2,4,6-Tribromophenol	77.9%	Terphenyl-D14	70.4%
Pentachlorophenol	0.00				

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

0.00

39.80

3,3-Dichlorobenzidine

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: WW-6

Collection Date: 6/16/99 Location: MW-7 Type of Sample: GROUNDWATER

Test Code: MS8270_W	Test Method: SW-846	8270	Analyst: RGW7794
	Result	Reporting Limit	Flag
Pyridine	< 50 ug/L	50 ug/L	0
n-Nitrosodimethylamine	< 50 ug/L	50 ug/L	0
Aniline	< 50 ug/L	50 ug/L	0
Phenot	< 50 ug/L	50 ug/L	0
bis(2-Chloroethyl)ether	< 50 ug/L	50 ug/L	O.
2-Chlorophenol	< 50 ug/L	50 ug/L	0
1,3-Dichlorobenzene	< 50 ug/L	50 ug/L	0
1,4-Dichlorobenzene	< 50 ug/L	50 ug/L	0
Benzyl alcohol	< 50 ug/L	50 ug/L	0
1,2-Dichlorobenzene	< 50 ug/L	50 ug/L	0
2-Methylphenol	< 50 ug/L	50 ug/L	Ö
bis(2-Chloroisopropyl)ether	< 50 ug/L	50 ug/L	0
4-Methylphenol	< 50 ug/L	50 ug/L	0
Hexachloroethane	< 50 ug/L	50 ug/L	0
n-Nitrosodi-n-propylamine	< 50 ug/L	50 ug/L	0
Nitrobenzene	< 50 ug/L	50 ug/L	0
Isophorone	< 50 ug/L	50 ug/L	0
2-Nitrophenol	< 50 ug/L	50 ug/L	0
2,4-Dimethylphenol	65 ug/L	50 ug/L	0
bis(2-Chloroethoxy)methane	< 50 ug/L	50 ug/L	0
2,4-Dichlorophenol	< 50 ug/L	50 ug/L	0
Benzoic acid	< 50 ug/L	50 ug/L	0
1,2,4-Trichlorobenzene	< 50 ug/L	50 ug/L	0
Naphthalene	1300 ug/L	500 ug/L	0
4-Chloroaniline	< 50 ug/L	50 ug/L	0
Hexachlorobutadiene	< 50 ug/L	50 ug/L	0
4-Chioro-3-methylphenol	< 50 ug/L	50 ug/L	0
2-Methylnaphthalene	65 ug/L	50 ug/L	0
Hexachlorocyclopentadiene	< 50 ug/L	50 ug/L	0
2,4,6-Trichlorophenol	< 50 ug/L	50 ug/L	0
2,4,5-Trichlorophenol	< 50 ug/L	50 ug/L	0
2-Chloronaphthalene	< 50 ug/L	50 ug/L	0
2-Nitroaniline	< 50 ug/L	50 ug/L	0
Dimethylphthalate	< 50 ug/L	50 ug/L	0
Acenaphthylene	< 50 ug/L	50 ug/L	0
2,6-Dinitrotoluene	< 50 ug/L	50 ug/L	0
3-Nitroaniline	< 50 ug/L	50 ug/L	0
Acenaphthene	< 50 ug/L	50 ug/L	0
2,4-Dinitrophenol	< 50 ug/L	50 ug/L	0
4-Nitrophenol	< 50 ug/L	50 ug/L	0
Dibenzofuran	< 50 ug/L	50 ug/L	0
2,4-Dinitrotoluene	< 50 ug/L	50 ug/L	0
Diethylphthalate	< 50 ug/L	50 ug/L	0
Fluorene	< 50 ug/L	50 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Fax: 704-875-5038

Phone: 704-875-5209

Sample ID#: 99014015

99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: WW-6

Collection Date: 6/16/99

Location: MW-7

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 82	70	Analyst: RGW7794
	Result	Reporting Limit	Flag
4-Chlorophenylphenylether	< 50 ug/L	50 ug/L	0
4-Nitroaniline	< 50 ug/L	50 ug/L	0
2-Methyl-4,6-dinitrophenol	< 50 ug/L	50 ug/L	0
n-Nitrosodiphenylamine	< 50 ug/L	50 ug/L	0
1,2-Diphenylhydrazine	< 50 ug/L	50 ug/L	0
4-Bromophenylphenylether	< 50 ug/L	50 ug/L	0
Hexachlorobenzene	'< 50 ug/L	50 ug/L	0
Pentachiorophenol	< 50 ug/L	50 ug/L	0
Phenanthrene	< 50 ug/L	50 ug/L	0
Anthracene	< 50 ug/L	50 ug/L	0
di-n-Butylphthalate	< 50 ug/L	50 ug/L	0
Fluoranthene	< 50 ug/L	50 ug/L	0
Benzidine	< 250 ug/L	250 ug/L	0
Pyrene	< 50 ug/L	50 ug/L	0
Butylbenzylphthalate	< 50 ug/L	50 ug/L	0
3,3-Dichlorobenzidine	< 50 ug/L	50 ug/L	0
Benzo(a)anthracene	< 50 ug/L	50 ug/L	0
Chrysene	< 50 ug/L	50 ug/L	0
bis(2-Ethylhexyl)phthalate	< 50 ug/L	50 ug/L	0
di-n-Octylphthalate	< 50 ug/L	50 ug/L	0
Benzo(b)fluoranthene	< 50 ug/L	50 ug/L	0
Benzo(k)fluoranthene	< 50 ug/L	50 ug/L	0
Benzo(a)pyrene	< 50 ug/L	50 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 50 ug/L	50 ug/L	0
Dibenzo(a,h)anthracene	< 50 ug/L	50 ug/L	0
Benzo(g,h,i)perylene	< 50 ug/L	50 ug/L	0

Description of Flags:

- 8 No Discrepancies Noted
- 3 Detected in Blank
- 1 See Case Namative
- 4 Estimated Concentration also Detected in Blank
- 2 Estimated Concentration
- 5 For Information Only
- 6 Holding Time or Analytical Time exceeded (See Case Nerrative for additional information)

	Probable	Estimated	Library Match	Retention	Idei	Identification Basis		
Compound	Molecular Weight	Molecular Concentration F	Probability (%)	Probability Time (RT)	Library Match	Manual Interpretation	RT	Scan Number
No TIC's Identified								
<u> </u>							- "	
			-					<u> </u>
					-			
								
					-			
							 	
					· · · · · ·			
	<u> </u>				1	1	1	

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
				46	
1,4-Dichlorobenzene-D4	12.31	2-Fluorophenol	21.6%	Nitrobenzene-D5	17.7%
Naphthalene-D8	16.34	Phenol	0.4%	2-Fluorobiphenyl	20.1%
Acenaphthene-D10	21.98	2,4,6-Tribromophenol	20.1%	Terphenyl-D14	19.1%
Pentachlorophenol	0.00				

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

3,3-Dichlorobenzidine

Perylene-D12

0.00

39.79



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample iD #: 99014014 Job #: 99-JUN-0042 C

Customer ID: G. FRANKLIN

Sample Description: MW-7

Collection Date: 6/15/99 Location: MW- 1/3 1/31 Type of Sample: GROUNDWATER

TW

est Code: MS8270_W	Test M	letho	d: SW-846 8	3270		Analyst:	RGW779
		Re	sult	Repor	ting Limit	Flag	
Pyridine	<	10	ug/L	10	ug/L	0	
n-Nitrosodimethylamine	<	10	ug/L	10	ug/L	0	
Aniline	<	10	ug/L	10	ug/L	0	
Phenol	<	10	ug/L	10	ug/L	0	
bis(2-Chloroethyl)ether	<	10	ug/L	10	ug/L	0	
2-Chlorophenol	<	10	ug/L	10	ug/L	0	
1,3-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
1,4-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
Benzyl alcohol	<	10	ug/L	10	ug/L	0	
1,2-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
2-Methylphenol	<	10	ug/L	10	ug/L	0	
bis(2-Chloroisopropyl)ether	<	10	ug/L	10	ug/L	o	
4-Methylphenol	<	10	ug/L	10	ug/L	0	
Hexachloroethane	<	10	ug/L	10	ug/L	0	
n-Nitrosodi-n-propylamine	<	10	ug/L	10	ug/L	o	
Nitrobenzene	<	10	ug/L	10	ug/L	0	
Isophorone	<	10	ug/L	10	ug/L	0	
2-Nitrophenol	<	10	ug/L	10	ug/L	ō	
2,4-Dimethylphenot	<	10	ug/L	10	ug/L	o	
bis(2-Chloroethoxy)methane	<	10	ug/L	10	ug/L	0	
2,4-Dichlorophenol	<	10	ug/L	10	ug/L	0	
Benzoic acid	<	10	ug/L	10	ug/L	ō	
1,2,4-Trichlorobenzene	<	10	ug/L	10	ug/L	0	
Naphthalene		470	ug/L	100	ug/L	0	
4-Chloroaniline	<	10	ug/L	10	ug/L	0	
Hexachlorobutadiene	<	10	ug/L	10	ug/L	Ö	
4-Chloro-3-methylphenol	<	10	ug/L	10	ug/L	0	
2-Methylnaphthalene	•	25	ug/L	10	ug/L	0	
Hexachlorocyclopentadiene	<	10	ug/L	10	ug/L ug/L	0	
2,4,6-Trichlorophenol		10	ug/L	10	_		
2,4,5-Trichtorophenol		10	ug/L	10	ug/L	0	
2-Chloronaphthalene	~	10	ug/L	10	ug/L	0	
2-Nitroaniline		10	ug/L	10	ug/L	0	
Dimethylphthalate		10	-		ug/L	0	
Acenaphthylene	`	20	ug/L	10	ug/L	0	
2,6-Dinitrotoluene	_		ug/L	10	ug/L	0	
3-Nitroaniline	< <	10 10	ug/L	10	ug/L	0	
Acenaphthene	`		ug/L	10	ug/L	0	
2,4-Dinitrophenol	<	13	ug/L	10	ug/L	0	
·		10	ug/L	10	J –	0	
4-Nitrophenol Dibenzofuran	<		ug/L	10	•	0	
2,4-Dinitrotoluene	_	11	ug/L	10	ug/L	0	
	<		ug/L	10	J -	0	
Diethylphthalate	<		ug/L	10	•	0	
Fluorene		15	ug/L	10	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014014

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: MW-7

Collection Date: 6/15/99

Location: MW-87 7W 7/15/93

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method:	SW-846 8270			Analyst:	RGW7794
	Resu	ılt	Report	ing Limit	_Flag_	
4-Chlorophenylphenylether	< 10 t	ıg/L	10	ug/L	0	
4-Nitroaniline	< 10 t	ıg/L	10	ug/L	0	
2-Methyl-4,6-dinitrophenol	< 10 t	ıg/L	10	ug/L	0	
n-Nitrosodiphenylamine	< 10 t	ıg/L	10	ug/L	0	
1,2-Diphenylhydrazine	< 10 t	ıg/L	10	ug/L	0	
4-Bromophenylphenylether	< 10 t	ıg/L	10	ug/L	0	
Hexachlorobenzene	< 10 (ıg/L	10	ug/L	0	
Pentachlorophenol	< 10 (ıg/L	10	ug/L	0	
Phenanthrene	17	ıg/L	10	ug/L	0	
Anthracene	< 10 t	ıg/L	10	ug/L	0	
di-n-Butylphthalate	< 10 t	ıg/L	10	ug/L	0	
Fluoranthene	< 10 (ıg/L	10	ug/L	0	
Benzidine	< 50 (ig/L	50	ug/L	0	
Pyrene	< 10 (ıg/L	10	ug/L	0	
Butylbenzylphthalate	< 10 a	.g/L	10	ug/L	0	
3,3-Dichlorobenzidine	< 10 t	ıg/L	10	ug/L	0	
Benzo(a)anthracene		.g/L	10	ug/L	0	
Chrysene	< 10 :	ıg/L	10	ug/L	0	
bis(2-Ethylhexyl)phthalate		ng/L	10	ug/L	6	
di-n-Octylphthalate	< 10 t	ug/L	10	ug/L	0	
Benzo(b)fluoranthene		ug/L	10	ug/L	0	
Benzo(k)fluoranthene		ug/L	10	ug/L	0	
Berizo(a)pyrene	< 10 t	ıg/L	10	ug/L	0	
Indeno(1,2,3-c,d)pyrene		ug/L	10	ug/L	0	
Dibenzo(a,h)anthracene		ug/L	10	ug/L	0	
Benzo(g,h,i)perylene		ug/L	10	ug/L	0	
** *		-			•	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Troy Whisenart 7/16/99
Data Verified and Approved By, Date

	Probable	Estimated	Library Match	Retention	Idei	ntification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
		(48, 2)						
No TIC's Identified		 			<u> </u>		 	
			_				 	
				.			ļ <u> </u>	
							ļ	
							<u> </u>	
					ļ		ļ	
							<u> </u>	
					1			
								<u> </u>
· · · · · · · · · · · · · · · · · · ·								
			<u> </u>					······································
			 					
			 				 	······································
							 	
							 	
			 		 	 	 -	· · · · - · · · ·
		<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>	

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1,4-Dichlorobenzene-D4	12.31	2-Fluorophenol	8.5%	Nitrobenzene-D5	7.9%
Naphthalene-D8	16.33	Phenol	0.0%	2-Fluorobiphenyl	8.9%
Acenaphthene-D10	21.98	2,4,6-Tribromophenol	9.0%	Terphenyl-D14	6.5%
Pentachiorophenol	0.00				· _

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

3,3-Dichlorobenzidine

Perylene-D12

0.00

39.79



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014016 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-8

Collection Date: 6/15/99 Location: MW-8 Type of Sample: GROUNDWATER

Test Code: MS8270_W	Test Method: SW-846 8270		Analyst: RGW7794
	Result	Reporting Limit	Flag
Pyridine	< 100 ug/L	100 ug/L	0
n-Nitrosodimethylamine	< 100 ug/L	100 ug/L	0
Aniline	< 100 ug/L	100 ug/L	0
Phenol	< 100 ug/L	100 ug/L	0
bis(2-Chloroethyl)ether	< 100 ug/L	100 ug/L	0
2-Chlorophenol	< 100 ug/L	100 ug/L	0
1,3-Dichlorobenzene	< 100 ug/L	100 ug/L	0
1,4-Dichlorobenzene	< 100 ug/l.	100 ug/L	0
Benzyt alcohol	< 100 ug/L	100 ug/L	0
1,2-Dichlorobenzene	< 100 ug/L	100 ug/L	0
2-Methylphenol	< 100 ug/L	100 ug/L	0
bis(2-Chloroisopropyl)ether	< 100 ug/L	100 ug/L	0
4-Methylphenol	< 100 ug/L	100 ug/L	0
Hexachloroethane	< 100 ug/L	100 ug/L	0
n-Nitrosodi-n-propylamine	< 100 ug/t.	100 ug/L	o
Nitrobenzene	< 100 ug/L	100 ug/L	0
Isophorone	< 100 ug/L	100 ug/L	0
2-Nitrophenol	< 100 ug/L	100 ug/L	0
2,4-Dimethylphenol	110 ug/L	100 ug/L	0
bis(2-Chloroethoxy)methane	< 100 ug/L	100 ug/L	0
2,4-Dichlorophenol	< 100 ug/L	100 ug/L	0
Benzoic acid	< 100 ug/L	100 ug/L	0
1,2,4-Trichlorobenzene	< 100 ug/L	100 ug/L	0
Naphthalene	1900 ug/l.	1000 ug/L	0
4-Chloroaniline	< 100 ug/L	100 ug/L	0
Hexachiorobutadiene	< 100 ug/L	100 ug/L	0
4-Chloro-3-methylphenol	< 100 ug/L	100 ug/L	0
2-Methylnaphthaiene	210 ug/L	100 ug/L	0
Hexachlorocyclopentadiene	< 100 ug/L	100 ug/L	0
2,4,6-Trichlorophenol	< 100 ug/L	100 ug/L	0
2,4,5-Trichlorophenol	< 100 ug/L	100 ug/L	0
2-Chloronaphthalene	< 100 ug/L	100 ug/L	0
2-Nitroaniline	< 100 ug/L	100 ug/L	0
Dimethylphthalate	< 100 ug/L	100 ug/L	0
Acenaphthylene	< 100 ug/L	100 ug/L	0
2,6-Dinitrotoluene	< 100 ug/L	100 ug/L	0
3-Nitroaniline	< 100 ug/L	100 ug/L	0
Acenaphthene	140 ug/L	100 ug/L	0
2,4-Dinitrophenol	< 100 ug/L	100 ug/L	0
4-Nitrophenol	< 100 ug/L	100 ug/L	0
Oibenzofuran	< 100 ug/L	100 ид/L	0
2,4-Dinitrotoluene	< 100 ug/L	100 ug/L	0
Diethylphthalate	< 100 ug/L	100 ug/L	0
Fluorene	< 100 ug/L	100 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014016

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-8

Collection Date: 6/15/99

Location: MW-8

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

## ## ## ## ## ## ## ## ## ## ## ## ##	Test Code: MS8270_W	Test Method: SW-846 8270		Analyst: RGW7794
# Nitroaniline		Result	Reporting Limit	Flag
2-Methyl-4,G-dinitrophenol	4-Chlorophenylphenylether	< 100 ug/L	100 ug/L	0
N-Nitrosodiphenylamine	4-Nitroaniline	< 100 ug/L	100 ug/L	0
1,2-Diphenylhydrazine	2-Methyl-4,6-dinitrophenol	< 100 ug/L	100 ug/L	0
4-Bromophenylphenylether	n-Nitrosodiphenylamine	< 100 ug/L	100 ug/L	0
4-Bromophenylphenylether < 100 ug/L	1,2-Diphenylhydrazine	< 100 ug/L	100 ug/L	0
Pentachlorophenol	4-Bromophenylphenylether	< 100 ug/L	•	0
Pentachlorophenol < 100 ug/L	Hexachlorobenzene	< 100 ug/L	100 ug/L	0
Phenanthrene 110 ug/L 0 Anthracene < 100	Pentachlorophenol	< 100 ug/L	•	0
Anthracene	Phenanthrene	110 ug/L	•	٥
di-n-Butylphthalate 100 ug/L 100 ug/L 0 Fluoranthene 100 ug/L 100 ug/L 0 Benzidine 500 ug/L 500 ug/L 0 Pyrene 100 ug/L 100 ug/L 0 Butylbenzytphthalate 100 ug/L 100 ug/L 0 3,3-Dichlorobenzidine 100 ug/L 100 ug/L 0 Benzo(a)anthracene 100 ug/L 100 ug/L 0 Chrysene 100 ug/L 100 ug/L 0 bis(2-Ethylhexyl)phthalate 310 ug/L 100 ug/L 0 di-n-Octylphthalate 100 ug/L 100 ug/L 0 Benzo(b)fluoranthene 100 ug/L 100 ug/L 0 Benzo(k)fluoranthene 100 ug/L 100 ug/L 0 Benzo(a)pyrene 100 ug/L 100 ug/L 0 Indeno(1,2,3-c,d)pyrene 100 ug/L 100 ug/L 0 Indeno(1,b)parthracene </td <td>Anthracene</td> <td>< 100 ug/L</td> <td>•</td> <td>0</td>	Anthracene	< 100 ug/L	•	0
Fluoranthene	di-n-Butylphthalate	< 100 ug/L	•	0
Benzidine	Fluoranthene	< 100 ug/L	•	0
Pyrene	Benzidine	< 500 ug/L	•	0
Butylbenzylphthatate < 100 ug/L	Pyrene	< 100 ug/L	•	
3,3-Dichlorobenzidine < 100 ug/L	Butylbenzylphthalate	< 100 ug/L	<u>-</u>	0
Benzo(a)anthracene < 100 ug/L	3,3-Dichlorobenzidine	< 100 ug/L	•	0
Chrysene < 100 ug/L 100 ug/L 0 bis(2-Ethylhexyl)phthatate 310 ug/L 100 ug/L 0 di-n-Octylphthatate < 100 ug/L	Benzo(a)anthracene		•	0
bis(2-Ethylhexyl)phthalate 310 ug/L 100 ug/L 0 di-n-Octylphthalate < 100 ug/L	Chrysene Chrysene	< 100 ug/i.	•	0
di-n-Octylphthalate < 100 ug/L	bis(2-Ethylhexyl)phthatate	310 ug/L	~	0
Benzo(b)fluoranthene < 100 ug/L	di-n-Octylphthalate	< 100 ug/L	100 ug/L	0
Benzo(k)fluoranthene < 100 ug/L	Benzo(b)fluoranthene	< 100 ug/L	-	0
Benzo(a)pyrene < 100 ug/L	Benzo(k)fluoranthene	< 100 ug/L	•	
Indeno(1,2,3-c,d)pyrene < 100 ug/L	Benzo(a)pyrene	< 100 ug/L	•	-
Dibenzo(a,h)anthracene < 100 ug/L 100 ug/L 0	Indeno(1,2,3-c,d)pyrene		u -	-
Denneta h Denneta a	Dibenzo(a,h)anthracene		· · · - v -	· ·
	Benzo(g,h,i)perylene	•		•

Description of Flags:

- 0 No Discrepancies Noted
- 3 Detected in Blank
- 1 See Case Narrative
- 4 Estimated Concentration also Detected in Blank
- 2 Estimated Concentration
- 5 For Information Only

6 - Holding Time or Analytical Time exceeded (See Case Narrative for additional information)

July Whisenast 7/19/99
Dato Verified and Approved By, Date

Thenton

22U07.D FIELD ID::

BRAMLETT ST- MW-8

LAB ID::

99-JUN-0042 // 99014016// (1:10

Tentatively Identified Compounds Report

					1.1.	Alliantian Dania		
	Probable	Estimated	Library Match	Retention	ider	ntification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Numbe
No TIC's Identified								
				<u></u>				
							-	
				<u> </u>				

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1,4-Dichlorobenzene-D4	12.31	2-Fluorophenol	8.0%	Nitrobenzene-D5	8.6%
Naphthalene-D8	16.34	Phenol	0.3%	2-Fluorobiphenyl	9.4%
Acenaphthene-D10	21.98	2,4,6-Tribromophenol	9.7%	Terphenyl-D14	9.7%
Pentachlorophenol	0.00			· · · · · · · · · · · · · · · · · · ·	

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

0.00

39.80

3,3-Dichlorobenzidine

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014017

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-9

Collection Date: 6/15/99

Location: MW-9

Type of Sample: GROUNDWATER

5	VOC	IN	MY.	TER	BY	GC/N	IS -	8270
---	-----	----	-----	-----	----	------	------	------

Test Code: MS8270_W	Test Method: SW-846	6 8270	Analyst: RGW7794
	Result	Reporting Limit	_Flag_
Pyridine	< 10 ug/L	10 ug/L	0
n-Nitrosodimethylamine	< 10 ug/L	10 ug/L	0
Aniline	< 10 ug/L	10 ug/L	0
Phenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethyl)ether	< 10 ug/L	10 ug/L	0
2-Chlorophenol	< 10 ug/L	10 ug/L	0
1,3-Dichlorobenzene	< 10 ug/L	10 ug/L	0
1,4-Dichlorobenzene	< 10 ug/L	10 ug/L	0
Benzył alcohol	< 10 ug/L	10 ug/L	0
1,2-Dichlorobenzene	< 10 ug/L	10 ug/L	0
2-Methylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroisopropyl)ether	< 10 ug/L	10 ug/L	O
4-Methylphenol	< 10 ug/L	10 ug/L	0
Hexachloroethane	< 10 ug/L	10 ug/L	0
n-Nitrosodi-n-propytamine	< 10 ug/L	10 ug/L	0
Nitrobenzene	< 10 ug/L	10 ug/L	0
Isophorone	< 10 ug/L	10 ug/L	O
2-Nitrophenol	< 10 ug/L	10 ug/L	0
2,4-Dimethylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethoxy)methane	< 10 ug/L	10 ug/L	0
2,4-Dichforophenol	< 10 ug/L	10 ug/L	0
Benzoic acid	< 10 ug/L	10 ug/L	0
1,2,4-Trichlorobenzene	< 10 ug/L	10 ug/L	O
Naphthalene	54 ug/L	10 ug/L	0
4-Chloroaniline	< 10 ug/L	10 ug/L	0
Hexachlorobutadiene	< 10 ug/L	10 ug/L	0
4-Chloro-3-methylphenol	< 10 ug/L	10 ug/L	0
2-Methylnaphthalene	17 ug/L	10 ug/L	0
Hexachlorocyclopentadiene	< 10 ug/L	10 ug/L	0
2,4,6-Trichlorophenol	< 10 ug/L	10 ug/L	0
2,4,5-Trichlorophenol	< 10 ug/L	10 ug/L	0
2-Chloronaphthalene	< 10 ug/L	10 ug/L	0
2-Nitroaniline	< 10 ug/L	10 ug/L	0
Dimethylphthalate	< 10 ug/L	10 ug/L	0
Acenaphthylene	< 10 ug/L	10 ug/L	0
2,6-Dinitrotoluene	< 10 ug/L	10 ug/L	0
3-Nitroaniline	< 10 ug/L	10 ug/L	0
Acenaphthene	18 ug/L	10 ug/L	0
2,4-Dinitrophenol	< 10 ug/L	10 ug/L	0
4-Nitrophenol	< 10 ug/L	10 ug/L	0
Dibenzofuran	14 ug/L	10 ug/L	0
2,4-Dinitrotoluene	< 10 ug/L	10 ug/L	0
Diethylphthalate	< 10 ug/L	10 ug/L	0
Fluorene	14 ug/L	10 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Fax: 704-875-5038

Phone: 704-875-5209

Sample ID #: 99014017

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-9

Collection Date: 6/15/99 Location: MW-9

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Meth	od: SW-846	8270		Analyst:	RGW7794
	R	esult	Repor	ting Limit	Flag	
4-Chlorophenylphenylether	< 10	ug/L	10	ug/L	0	
4-Nitroaniline	< 10	ug/L	10	ug/L	0	
2-Methyl-4,6-dinitrophenol	< 10	ug/L	10	ug/L	0	
n-Nitrosodiphenylamine	< 10	ug/L	10	ug/L	0	
1,2-Diphenylhydrazine	< 10	ug/L	10	ug/L	0	
4-Bromophenylphenylether	< 10	ug/L	10	ug/L	0	
Hexachlorobenzene	< 10	ug/L	10	ug/L	0	
Pentachiorophenol	< 10	ug/L	10	ug/L	0	
Phenanthrene	26	i ug/L	10	ug/L	0	
Anthracene	< 10	ug/L	10	ug/L	0	
di-n-Butylphthalate	< 10	ug/L	10	ug/L	0	
Fluoranthene	< 10) ug/L	10	ug/L	0	
Benzidine	< 50	ug/L	50	ug/L	0	
Pyrene	< 10	ug/L	10	ug/L	0	
Butylbenzylphthalate	< 10	ug/L	10	ug/L	0	
3,3-Dichlorobenzidine	< 10	ug/L	10	ug/L	0	
Benzo(a)anthracene	< 10	ug/L	10	ug/L	0	
Chrysene	< 10	ug/L	10	ug/L	0	
bis(2-Ethylhexyl)phthalate	< 10) ug/L	10	ug/L	0	
di-n-Octylphthalate	< 10	ug/L	10	ug/L	0	
Benzo(b)fluoranthene	< 10	ug/L	10	ug/L	0	
Benzo(k)fluoranthene	< 10	ug/L	10	ug/L	0	
Benzo(a)pyrene	< 10	ug/L	10	ug/L	0	
indeno(1,2,3-c,d)pyrene	< 10	ug/L	10	ug/L	0	
Dibenzo(a,h)anthracene	< 10) ug/L	10	ug/L	0	
Benzo(g,h,i)perylene	< 10	ug/L	10	ug/L	O O	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

Report Generated 7/9/99 13:24:50

								l 	
22U11.D	FIELD ID::	BRAMLETT ST- I	MW-9		LAB ID::	99-JUN-0042 /	/ 9901	4017	
	$\overline{}$	Centatively Idea	ntified Con	npounds Rer	ort				
				P		· · · · · · · · · · · · · · · · · · ·			
	Probable	Estimated	Library Match	Retention		ntification Basis			
	Molecular	Concentration	Probability	Time (RT)	Library	Manual		Scan	
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number	
No TIC's Identified									
						<u> </u>			
			<u> </u>	<u> </u>	<u></u>		 		
			ļ. <u></u>	ļ	ļ				
					<u> </u>				
			ļ	 	ļ	ļ	 		
		ļ į	<u> </u>	<u> </u>	 		 		
									
			 						
			 		ļ	<u> </u>	 		
			 		ļ <u>.</u>	<u> </u>			
				<u> </u>	 		+		
							-		
									
									
						 	-		
			·		 	<u></u>			
			· · · · · · · · · · · · · · · · · · ·	ļ			 		
				L		<u> </u>			
10. 1	7 252 100	4 :10	0/ D	D /37 Comments	1 0/ D		· · · · · ·		
Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery				
	12.20		105.40/	A9	90.3%	<u> USEPA8270</u>	G.C. C	onditions	
1,4-Dichlorobenzene-D4	12.32	2-Fluorophenoi	105.4%	Nitrobenzene-D5	89.3%	1			
Naphthalene-D8	16.33	Phenol	0.0%	2-Fluorobiphenyl	87.9%	25m x 0.2mm x			
Acenaphthene-D10	21.98	2,4,6-Tribromophenol	97.4%	Terphenyl-D14	100.1%	Crosslinked 5% Me	ethyl Sili	con Column	
Pentachlorophenol	0.00	-				He, 0.5 ml/min, 45°	C Chold	10 min) 150C	
3,3-Dichlorobenzidine	0.00	4				to 300°C (8.0°C/min,			
Perylene-D12	39.80	<u> </u>	/Floor o	re described on pag	== #2 of Client				
Pi	Page 1 of 1		(riays a	re described on pay	je #2 01 Cilent	периги			



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014018

Job#: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-10

Collection Date: 6/15/99

Location: MW-10

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 827	SVOCIN	WATER	BY GC/M	S - 8270
------------------------------	--------	-------	---------	----------

Test Code: MS8270_W	Test Method: SW-846	8270	Analyst: RGW7794
	Result	Reporting Limit	Flag
Pyridine	< 10 ug/L	10 ug/L	0
n-Nitrosodimethylamine	< 10 ug/L	10 ug/L	0
Aniline	< 10 ug/L `	10 ug/L	0
Phenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethyl)ether	< 10 ug/L	10 ug/L	0
2-Chlorophenol	< 10 ug/L	10 ug/L	0
1,3-Dichlorobenzene	< 10 ug/L	10 ug/L	0
1,4-Dichlorobenzene	< 10 ug/L	10 ug/L	0
Benzyl alcohol	< 10 ug/L	10 ug/L	0
1,2-Dichlorobenzene	< 10 ug/L	10 ug/L	0
2-Methylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroisopropyl)ether	< 10 ug/L	10 ug/L	0
4-Methylphenol	< 10 ug/L	10 ug/L	0
Hexachloroethane	< 10 ug/L	10 ug/L	0
n-Nitrosodi-n-propylamine	< 10 ug/L	10 ug/L	0
Nitrobenzene	< 10 ug/L	10 ug/L	0
Isophorone	< 10 ug/L	10 ug/L	0
2-Nitrophenol	< 10 ug/L	10 ug/L	0
2,4-Dimethylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethoxy)methane	< 10 ug/L	10 ug/L	0
2,4-Dichlorophenol	< 10 ug/L	10 ug/L	0
Benzoic acid	< 10 ug/L	10 ug/L	0
1,2,4-Trichlorobenzene	< 10 ug/L	10 ug/L	0
Naphthalene	< 10 ug/L	10 ug/L	0
4-Chloroaniline	< 10 ug/L	10 ug/L	0
Hexachlorobutadiene	< 10 ug/L	10 ug/L	0
4-Chloro-3-methylphenol	< 10 ug/L	10 ug/L	0
2-Methylnaphthalene	< 10 ug/L	10 ug/L	0
Hexachlorocyclopentadiene	< 10 ug/L	10 ug/L	0
2,4,6-Trichlorophenol	< 10 ug/L	10 ug/L	0
2,4,5-Trichlorophenol	< 10 ug/L	10 ug/L	0
2-Chloronaphthalene	< 10 ug/L	10 ug/L	0
2-Nitroaniline	< 10 ug/L	10 ug/L	0
Dimethylphthalate	< 10 ug/L	10 ug/L	0
Acenaphthylene	< 10 ug/L	10 ug/L	0
2,6-Dinitrotoluene	< 10 ug/L	10 ug/L	0
3-Nitroaniline	< 10 ug/L	10 ug/L	0
Acenaphthene	< 10 ug/L	10 ug/L	0
2,4-Dinitrophenol	< 10 ug/L	10 ug/L	0
4-Nitrophenol	< 10 ug/L	10 ug/L	0
Dibenzofuran	< 10 ug/L	10 ug/L	0
2,4-Dinitrotoluene	< 10 ug/L	10 ug/L	0
Diethylphthalate	< 10 ug/L	10 ug/L	0
Fluorene	< 10 ug/L	10 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014018

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: MW-10

Collection Date: 6/15/99

Location: MW-10

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 82	70	Analyst: RGW7794
	Result	Reporting Limit	_Flag_
4-Chlorophenylphenylether	< 10 ug/L	10 ug/L	0
4-Nitroaniline	< 10 ug/L	10 ug/L	0
2-Methyl-4,6-dinitrophenol	< 10 ug/L	10 ug/L	0
n-Nitrosodiphenylamine	< 10 ug/L	10 ug/L	0
1,2-Diphenylhydrazine	< 10 ug/L	10 ug/L	0
4-Bromophenylphenylether	< 10 ug/L	10 ug/L	0
Hexachlorobenzene	< 10 ug/L	10 ug/L	0
Pentachlorophenol	< 10 ug/L	10 ug/L	0
Phenanthrene	< 10 ug/L	10 ug/L	0
Anthracene	< 10 ug/L	10 ug/L	0
di-n-Butylphthalate	< 10 ug/L	10 ug/L	0
Fluoranthene	< 10 ug/L	10 ug/L	0
Benzidine	< 50 ug/L	50 ug/L	0
Pyrene	< 10 ug/L	10 ug/L	0
Butylbenzylphthalate	< 10 ug/L	10 ug/L	0
3,3-Dichlorobenzidine	< 10 ug/L	10 ug/L	0
Benzo(a)anthracene	< 10 ug/L	10 ug/L	0
Chrysene	< 10 ug/L	10 ug/L	0
bis(2-Ethylhexyl)phthalate	< 10 ug/L	10 ug/L	0
di-n-Octylphthalate	< 10 ug/L	10 ug/L	0
Benzo(b)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(k)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(a)pyrene	< 10 ug/L	10 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 10 ug/L	10 ug/L	0
Dibenzo(a,h)anthracene	< 10 ug/L	10 ug/L	0
Benzo(g,h,i)perylene	< 10 ug/L	10 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

22U12.D FIELD ID:: BRAMLETT ST- MW-10 LAB ID:: 99-JUN-0042 // 99014018

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention	lder	ntification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
No TIC's Identified								
							1	
								<u></u>
	<u> </u>				······································		-	
				-				

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1.4-Dichlorobenzene-D4	12.32	2-Fluorophenol	96.6%	Nitrobenzene-D5	83.0%
Naphthalene-D8	16.32	Phenol	0.0%	2-Fluorobiphenyl	82.3%
Acenaphthene-D10	21.98	2,4,6-Tribromophenol	97.5%	Terphenyl-D14	95.3%
Pentachlorophenol	0.00				

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

0.00

39.80

3,3-Dichlorobenzidine

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014019

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: MW-11

Collection Date: 6/15/99 Location: MW-11 Type of Sample: GROUNDWATER

						_
K.	vac	איעוד	ΔTFF	BYG	CMS	חלכם
•	,,,,		\sim			- 0210

Test Code: MS8270_W	Test Method:	SW-846 8270	Analyst:	RGW7794
	Resu	ılt Repor	ling Limit Flag	
Pyridine	< 10 t	ıg/L 10	ug/L 0	
n-Nitrosodimethylamine	< 10 t	ıg/L 10	ug/L 0	
Aniline	< 10 t	ıg/L 10	ug/L 0	
Phenol	< 10 ι	.g/L 10	ug/L 0	
bis(2-Chloroethyl)ether	< 10 t	ıg/L 10	ug/L 0	
2-Chlorophenol	< 10 t	ıg/L 10	ug/i_ 0	
1,3-Dichlorobenzene	< 10 t	ıg/L 10	ug/L 0	
1,4-Dichlorobenzene	< 10 t	ıg/L 10	ug/L 0	
Benzył alcohol	< 10 (ıg/L 10	ug/L 0	
1,2-Dichlorobenzene	< 10 t	ıg/L 10	ug/L 0	
2-Methylphenol	< 10 t	ıg/L 10	ug/L 0	
bis(2-Chloroisopropyl)ether	< 10 t	ıg/L 10	ug/L 0	
4-Methylphenol	< 10 t	ug/L 10	ug/L 6	
Hexachloroethane	< 10 (ug/L 10	ug/L 0	
n-Nitrosodi-n-propylamine	< 10 (ug/L 10	ug/L 0	
Nitrobenzene	< 10 i	ıg/L 10	ug/L 0	
Isophorone	< 10 1	.ig/L 10	ug/L 0	
2-Nitrophenol	< 10 :	ıg/L 10	ug/L 0	
2,4-Dimethylphenol	< 10 (ug/L 10	ug/L 0	
bis(2-Chloroethoxy)methane	< 10 (ug/L 10	ug/L 0	
2,4-Dichlorophenol	< 10 (ug/L 10	ug/L 0	
Benzoic acid	< 10 (ug/L 10	ug/L. 0	
1,2,4-Trichlorobenzene	< 10 (ug/L 10	ug/L 0	
Naphthalene	< 10	ug/L 10	ug/L 0	
4-Chloroaniline	< 10	ug/L 10	ug/L 0	
Hexachlorobutadiene	< 10	ug/L 10	ug/L 0	
4-Chloro-3-methylphenol	< 10	ug/L 10	ug/L 0	
2-Methylnaphthalene	< 10	ug/L 10	ug/L 0	
Hexachlorocyclopentadiene	< 10	ug/L 10	ug/L 0	
2,4,6-Trichlorophenol	< 10	ug/L 10	ug/L 0	
2,4,5-Trichlorophenol	< 10	ug/L 10	ug/L 0	
2-Chloronaphthalene	< 10	ug/L 10	ug/L 0	
2-Nitroaniline	< 10	ug/L 10	ug/L 0	
Dimethylphthalate	< 10	ug/L 10	սց/L 0	
Acenaphthylene	< 10	ug/L 10	ug/L 0	
2,6-Dinitrotoluene	< 10	ug/L 10	ug/L (1	
3-Nitroaniline	< 10	ug/L 10	ug/L 0	
Acenaphthene	< 10	ug/L 10	ug/L 0	
2,4-Dinitrophenol	< 10	ug/L 10	ug/L 0	
4-Nitrophenol	< 10	ug/L 10	ug/L ()	
Dibenzofuran	< 10	ug/L 10	ug/L 0	
2,4-Dinitrotoluene	< 10	ug/L 10	ug/L 0	
Diethylphthalate		ug/L 10	ug/L 0	
Fluorene	< 10	ug/L. 10	ug/L 0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014019 Job #:

Customer ID: G. FRANKLIN

Sample Description: MW-11

Collection Date: 6/15/99

Location: MW-11

99-JUN-0042

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 82	70	Analyst: RGW7794
	Result	Reporting Limit	_ Flag_
4-Chlorophenylphenylether	< 10 ug/L	10 ug/L	0
4-Nitroaniline	< 10 ug/L	10 ug/L	0
2-Methyl-4,6-dinitrophenol	< 10 ug/L	10 ug/L	0
n-Nitrosodiphenylamine	< 10 ug/L	10 ug/L	0
1,2-Diphenylhydrazine	< 10 ug/L	10 ug/L	0
4-Bromophenylphenylether	< 10 ug/L	10 ug/L	o
Hexachlorobenzene	< 10 ug/L	10 ug/L	0
Pentachlorophenol	< 10 ug/L	10 ug/L	0
Phenanthrene	< 10 ug/L	10 ug/L	0
Anthracene	< 10 ug/L	10 ug/L	0
di-n-Butylphthalate	< 10 ug/L	10 ug/L	0
Fluoranthene	< 10 ug/L	10 ug/L	0
Benzidine	< 50 ug/L	50 ug/L	1
Pyrene	< 10 ug/L	10 ug/L	0
Butylbenzylphthalate	< 10 ug/L	10 ug/L	0
3,3-Dichlorobenzidine	< 10 ug/L	10 ug/L	0
Benzo(a)anthracene	< 10 ug/L	10 ug/L	0
Chrysene	< 10 ug/L	10 ug/L	0
bis(2-Ethylhexyl)phthalate	14 ug/L	10 ug/L	0
di-n-Octylphthalate	< 10 ug/L	10 ug/L	0
Benzo(b)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(k)fluoranthene	< 10 ug/L	10 ug/L	G
Benzo(a)pyrene	< 10 ug/L	10 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 10 ug/L	10 ug/L	a
Dibenzo(a,h)anthracene	< 10 ug/L	10 ug/L	0
Benzo(g,h,i)perylene	< 10 ug/L	10 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Drory Whisenaut 7/16/99

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

Report Generated 7/9/99 13:24:50

22U13.D FIELD ID:: BRAMLETT ST- MW-11 LAB ID:: 99-JUN-0042 // 99014019

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention	Ider	ntification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
No TIC's Identified		AECONO.	a Misaritika a salah ayata da katika sali	ti e ile i i i i i i i i i i i i i i i i		Control of the contro		
				-				
		-					-	
				· · · · · · · · · · · · · · · · · · ·				
41-2-0-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-					<u> </u>			
	<u> </u>				<u> </u>		 	
							 	
								

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
	40.00		70.5%	No. 1	94.6%
1,4-Dichlorobenzene-D4	12.32	2-Fluorophenol	79.5%	Nitrobenzene-D5	
Naphthalene-D8	16.33	Phenol	0.0%	2-Fluorobiphenyl	90.2%
Acenaphthene-D10	21.98	2,4,6-Tribromophenol	101.8%	Terphenyl-D14	98.3%
Pentachlorophenol	0.00				

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

3,3-Dichlorobenzidine

Perylene-D12

0.00

39.80



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014020 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-12

Collection Date: 6/15/99 Location: MW-12 Type of Sample: GROUNDWATER

est Code: MS8270_W	Test Method: SW-8	46 8270	Analyst:	RGW7794
	Result	Reporting Limit	Flag	
Pyridine	< 10 ug/L	10 ug/L	0	
n-Nitrosodimethylamine	< 10 ug/L	10 ug/L	0	
Aniline	< 10 ug/L	10 ug/L	0	
Phenol	< 10 ug/L	10 ug/L	0	
bis(2-Chloroethyl)ether	< 10 ug/L	10 ug/L	0	
2-Chlorophenol	< 10 ug/L	10 ug/L	0	
1,3-Dichlorobenzene	< 10 ug/L	10 ug/L	0	
1,4-Dichlorobenzene	< 10 ug/L	10 սց/L	0	
Benzyl alcohol	< 10 ug/L	10 vg/L	0	
1,2-Dichlorobenzene	< 10 ug/L	10 ug/L	0	
2-Methylphenol	< 10 ug/L	10 ug/L	0	
bis(2-Chloroisopropyl)ether	< 10 ug/L	10 ug/L	0	
4-Methylphenol	< 10 ug/L	10 ug/L	0	
Hexachloroethane	< 10 ug/L	10 ug/L	0	
n-Nitrosodi-n-propylamine	< 10 ug/L	10 ug/L	0	
Nitrobenzene	< 10 ug/L	10 ug/L	0	
Isophorone	< 10 ug/L	10 ug/L	0	
2-Nitrophenol	< 10 ug/L	10 ug/L	0	
2,4-Dimethylphenol	< 10 ug/L	10 ug/L	0	
bis(2-Chloroethoxy)methane	< 10 ug/L	10 ug/L	0	
2,4-Dichlorophenol	< 10 ug/L	10 ug/L	0	
Benzoic acid	< 10 ug/L	10 ug/L	0	
1,2,4-Trichlorobenzene	< 10 ug/L	10 ug/L	0	
Naphthalene	< 10 ug/L	10 ug/L	0	
4-Chloroaniline	< 10 ug/L	10 ug/L	0	
Hexachlorobutadiene	< 10 ug/L	10 ug/L	0	
4-Chloro-3-methylphenol	< 10 ug/L	10 ug/L	0	
2-Methylnaphthalene	< 10 ug/L	10 ug/L	0	
Hexachlorocyclopentadiene	< 10 ug/L	10 ug/L	0	
2,4,6-Trichlorophenol	< 10 ug/L	10 ug/L	0	
2,4,5-Trichlorophenol	< 10 ug/L	10 ug/L	0	
2-Chloronaphthalene	< 10 ug/L	10 ug/L	0	
2-Nitroaniline	< 10 ug/L	10 ug/L	0	
Dimethylphthalate	< 10 ug/L	10 ug/L	0	
Acenaphthylene	< 10 ug/L	10 ug/L	0	
2,6-Dinitrotoluene	< 10 ug/L	10 ug/L	0	
3-Nitroaniline	< 10 ug/L	10 ug/L	0	
Acenaphthene	< 10 ug/L	10 ug/L	0	
2,4-Dinitrophenol	< 10 ug/L	10 ug/L	0	
4-Nitrophenol	< 10 ug/L	10 ug/L	0	
Dibenzofuran	< 10 ug/L	10 ug/L	0	
2,4-Dinitrotoluene	< 10 ug/L	10 ug/L	0	
Diethylphthalate	< 10 ug/L	10 ug/L	0	
Fluorene	< 10 ug/L	10 ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014020

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-12

Collection Date: 6/15/99

Location: MW-12

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method	: SW-846 8276	0		Analyst:	RGW7794
		ult	Report	ing Limit	Flag	
4-Chlorophenylphenylether	< 10	ug/L	10	ug/L	0	
4-Nitroaniline	< 10	ug/L	10	ug/L	0	
2-Methyl-4,6-dinitrophenol	< 10	ug/L	10	ug/L	0	
n-Nitrosodiphenylamine	< 10	ug/L	10	ug/L	0	
1,2-Diphenylhydrazine	< 10	ug/L	10	ug/L	0	
4-Bromophenylphenylether	< 10	ug/L	10	ug/L	0	
Hexachlorobenzene	< 10	ug/L	10	ug/L	0	
Pentachlorophenol	< 10	ug/L	10	ug/L	0	
Phenanthrene	< 10	ug/L	10	ug/L	0	
Anthracene	< 10	ug/L	10	ug/L	0	
di-n-Butylphthalate	< 10	ug/L	10	ug/L	0	
Fluoranthene	< 10	ug/L	10	ug/L	0	
Benzidine	< 50	ug/L	50	ug/L	1	
Pyrene	< 10	ug/L	10	ug/L	0	
Butylbenzylphthalate	< 10	ug/L	10	ug/L	0	
3,3-Dichlorobenzidine	< 10	ug/L	10	ug/L	0	
Benzo(a)anthracene	< 10	ug/L	10	ug/L	0	
Chrysene	< 10	ug/L	10	ug/L	0	
bis(2-Ethylhexyl)phthalate	16	ug/L	10	ug/L	0	
di-n-Octylphthalate	< 10	ug/L	10	ug/L	0	
Benzo(b)fluoranthene	< 10	ug/L	10	ug/L	0	
Benzo(k)fluoranthene	< 10	ug/L	10	ug/L	0	
Benzo(a)pyrene	< 10	ug/L	10	ug/L	0	
Indeno(1,2,3-c,d)pyrene	< 10	ug/L	10	ug/L	0	
Dibenzo(a,h)anthracene	< 10	ug/L	10	ug/L	0	
Benzo(g,h,i)perylene		ug/L	10	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

	Probable	Estimated	Library Match	Retention	Identification Basis				
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number	
No TIC's Identified	.sa 1. 146 f	S. S. Jahren Masska et altere Collistation (1898), in the	odalki 28 Mindus Caraba, Karaki Olki ora	المستحدد الم	Claybe a declar hi accullus de di	s ii begin dudii isdati is esi taha asan erri is	1	Amerikati ile istere alla per l'arritario	
							ļ		
							 		
					<u> </u>		-		
· · · · · · · · · · · · · · · · · · ·									
## T T T T T T T T T T T T T T T T T T									

·									
, , , , , , , , , , , , , , , , , , ,									
							-	74	
						<u></u>			

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1,4-Dichlorobenzene-D4	12.31	2-Fluorophenol	112.2%	Nitrobenzene-D5	92.1%
Naphthalene-D8	16.32	Phenol	0.0%	2-Fluorobiphenyl	103.3%
Acenaphthene-D10	21.97	2,4,6-Tribromophenol	60.5%	Terphenyl-D14	101.8%
Pentachlorophenol	0.00	1			

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

0.00

39.79

3,3-Dichlorobenzidine

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: MW-13

Collection Date: 6/15/99 Location: MW-13 Type of Sample: GROUNDWATER

est Code: MS8270_W	Test M	etho	d: SW-846 8	Z/U		Analyst:	RGW77
	<u></u>	Re	sult	Report	ting Limit	Flag	
Pyridine	<	10	ug/L	10	ug/L	0	
n-Nitrosodimethylamine	<	10	ug/L	10	ug/L	0	
Aniline	<	10	ug/L	10	ug/L	0	
Phenol	<	10	ug/L	10	ug/L	0	
bis(2-Chloroethyl)ether	<	10	ug/L	10	ug/L	0	
2-Chlorophenol	<	10	ug/L	10	ug/L	0	
1,3-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
1,4-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
Benzył alcohol	<	10	ug/L	10	ug/L	0	
1,2-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
2-Methylphenol	<	10	ug/L	10	ug/L	0	
bis(2-Chloroisopropyl)ether	<	10	ug/L	10	ug/L	0	
4-Methylphenol	<	10	ug/L	10	ug/L	0	
Hexachloroethane	<	10	ug/L	10	ug/L	O O	
n-Nitrosodi-n-propylamine	<	10	ug/L	10	ug/L	0	
Nitrobenzene	<	10	ug/L	10	ug/L	0	
Isophorone	<	10	ug/L	10	ug/L	0	
2-Nitrophenol	<	10	ug/L	10	ug/L	0	
2,4-Dimethylphenol	<	10	ug/L	10	ug/L	0	
bis(2-Chloroethoxy)methane	<	10	ug/L	10	ug/L	0	
2,4-Dichlorophenol	<	10	ug/L	10	ug/L	Q.	
Benzoic acid	<	10	ug/L	10	ug/L	0	
1,2,4-Trichlorobenzene	<	10	ug/L	10	ug/L	0	
Naphthalene	<	10	ug/L	10	ug/L	0	
4-Chloroaniline	<	10	ug/L	10	ug/L	0	
Hexachlorobutadiene	<	10	ug/L	10	ug/L	0	
4-Chloro-3-methylphenol	<	10	ug/L	10	ug/L	0	
2-Methylnaphthalene	<	10	ug/L	10	ug/L	0	
Hexachlorocyclopentadiene	<	10	ug/L	10	ug/L	0	
2,4,6-Trichlorophenol	<	10	ug/L	10	ug/L	0	
2,4,5-Trichlorophenol	<	10	ug/L	10	ug/L	0	
2-Chloronaphthalene	<	10	ug/L	10	ug/L	0	
2-Nitroaniline	<	10	ug/L	10	ug/L	0	
Dimethylphthalate	<	10	ug/L	10	ug/L	0	
Acenaphthylene	<	10	ug/L	10	ug/L	0	
2,6-Dinitrotoluene	<	10	ug/L	10	ug/L	0	
3-Nitroaniline	<	10	ug/L	10	ug/L	0	
Acenaphthene	<	10	ug/L	10	ug/L	o	
2,4-Dinitrophenol	<	10	ug/L	10	ug/L	0	
4-Nitrophenol	<	10	ug/L	10	ug/L	0	
Dibenzofuran	<	10	ug/L	10	ug/L	0	
2,4-Dinitrotoluene	<	10	-	10	ug/L	0	
Diethylphthalate	<	10	ug/L	10	ug/L	0	
Fluorene	<	10	ug/L	10	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014021

99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-13

Collection Date: 6/15/99 Location: MW-13

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 8270		Analyst: RGW7794
	Result	Reporting Limit	Flag
4-Chlorophenylphenylether	< 10 ug/L	10 ug/L	0
4-Nitroaniline	< 10 ug/L	10 ug/L	0
2-Methyl-4,6-dinitrophenol	< 10 ug/L	10 ug/L	0
n-Nitrosodiphenylamine	< 10 ug/L	10 ug/L	0
1,2-Diphenylhydrazine	< 10 ug/L	10 ug/L	0
4-Bromophenylphenylether	< 10 ug/L	10 ug/L	0
Hexachlorobenzene	< 10 ug/L	10 ug/L	0
Pentachiorophenol	< 10 ug/L	10 ug/L	0
Phenanthrene	< 10 ug/L	10 ug/L	0
Anthracene	< 10 ug/L	10 ug/L	0
di-n-Butylphthalate	< 10 ug/L	10 ug/L	0
Fluoranthene	< 10 ug/L	10 ug/L	0
Benzidine	< 50 ug/L	50 ug/L	0
Pyrene	< 10 ug/L	10 ug/L	0
Butylbenzylphthalate	< 10 ug/L	10 ug/L	0
3,3-Dichlorobenzidine	< 10 ug/L	10 ug/L	0
Benzo(a)anthracene	< 10 ug/L	10 ug/L	0
Chrysene	< 10 ug/L	10 ug/L	0
bis(2-Ethylhexyl)phthalate	< 10 ug/L	10 ug/L	0
di-n-Octylphthalate	< 10 ug/L	10 ug/L	0
Benzo(b)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(k)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(a)pyrene	< 10 ug/L	10 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 10 ug/L	10 ug/L	0
Dibenzo(a,h)anthracene	< 10 ug/L	10 ug/L	0
Benzo(g,h,i)perylene	< 10 ug/L	10 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention	Idei	Identification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
No TIC's Identified	and the state of t	jagijugan, at inigi	1. i: Alin a ditim servi per limbil integli (ingl. bersin	detour bihodinaldi birrini i kiri, rezilibili mezi	his constitue in it to the ordinal to an	In the state of th		
								*
				- · · · · · · · · · · · · · · · · · · ·				
***				7/8/4				
								<u>.</u>
1.00								
				·				
						<u> </u>		

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1,4-Dichlorobenzene-D4	12.30	2-Fluorophenol	98.6%	Nitrobenzene-D5	80.3%
Naphthalene-D8	16.32	Phenol	0.0%	2-Fluorobiphenyl	82.5%
Acenaphthene-D10	21.97	2,4,6-Tribromophenol	62.4%	Terphenyl-D14	127.6%
Pentachlorophenol	0.00				,

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

0.00

39.78

3,3-Dichlorobenzidine

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014022

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: MW-14

Report Generated 7/9/99 13:24:50

Collection Date: 6/15/99

Location: MW-14

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 82

Test Code: MS8270_W	Test Method: SW-	846 8270	Analyst: RGW7794
	Result	Reporting Limit	_Flag_
Pyridine	< 10 ug/L	10 ug/L	0
n-Nitrosodimethylamine	< 10 ug/L	10 ug/L	0
Aniline	< 10 ug/L	10 ug/L	0
Phenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethyl)ether	< 10 ug/L	10 ug/L	0
2-Chlorophenol	< 10 ug/L	10 ug/L	0
1,3-Dichlorobenzene	< 10 ug/L	10 ug/L	0
1,4-Dichlorobenzene	< 10 ug/L	10 ug/L	0
Benzył alcohol	< 10 ug/L	10 ug/L	0
1,2-Dichlorobenzene	< 10 ug/L	10 ug/L	0
2-Methylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroisopropyl)ether	< 10 ug/L	10 ug/L	0
4-Methylphenol	< 10 ug/L	10 ug/L	0
Hexachioroethane	< 10 ug/L	10 ug/L	0
n-Nitrosodi-n-propylamine	< 10 ug/L	10 ug/L	0
Nitrobenzene	< 10 ug/L	10 ug/L	0
Isophorone	< 10 ug/L	10 ug/L	0
2-Nitrophenol	< 10 ug/L	10 ug/L	0
2,4-Dimethylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethoxy)methane	< 10 ug/L	10 ug/L	0
2,4-Dichlorophenol	< 10 ug/L	10 ug/L	0
Benzoic acid	< 10 ug/L	10 ug/L	0
1,2,4-Trichlorobenzene	< 10 ug/L	10 ug/L	0
Naphthalene	< 10 ug/L	10 ug/L	0
4-Chloroaniline	< 10 ug/L	10 ug/L	0
Hexachlorobutadiene	< 10 ug/L	10 ug/L	0
4-Chloro-3-methylphenol	< 10 ug/L	10 ug/L	0
2-Methylnaphthalene	< 10 ug/L	10 ug/L	0
Hexachlorocyclopentadiene	< 10 ug/L	10 ug/L	0
2,4,6-Trichlorophenol	< 10 ug/L	10 ug/L	0
2,4,5-Trichlorophenol	< 10 ug/L	10 ug/L	0
2-Chloronaphthalene	< 10 ug/L	10 ug/L	0
2-Nitroaniline	< 10 ug/L	10 ug/L	0
Dimethylphthalate	< 10 ug/L	10 ug/L	0
Acenaphthylene	< 10 ug/L	10 ug/L	0
2,6-Dinitrotoluene	< 10 ug/L	10 ug/L	0
3-Nitroaniline	< 10 ug/L	10 ug/L	0
Acenaphthene	< 10 ug/L	10 ug/L	0
2,4-Dinitrophenol	< 10 ug/L	10 ug/L	0
4-Nitrophenol	< 10 ug/L	10 ug/L	0
Dibenzofuran	< 10 ug/L	10 ug/L	Ō
2,4-Dinitrotoluene	< 10 ug/L	10 ug/L	0
Diethylphthalate	< 10 ug/L	10 ug/L	0
7 •	·	· 	-



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014022

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: MW-14

Collection Date: 6/15/99 Location: MW-14

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 8270		Analyst: RGW7794
	Result	Reporting Limit	Flag
4-Chlorophenylphenylether	< 10 ug/L	10 ug/L	0
4-Nitroaniline	< 10 ug/L	10 ug/L	0
2-Methyl-4,6-dinitrophenol	< 10 ug/L	10 ug/L	0
n-Nitrosodiphenylamine	< 10 ug/L	10 ug/L	0
1,2-Diphenylhydrazine	< 10 ug/L	10 ug/L	0
4-Bromophenylphenylether	< 10 ug/L	10 ug/L	0
Hexachlorobenzene	< 10 ug/L	10 ug/L	0
Pentachlorophenol	< 10 ug/L	10 ug/L	0
Phenanthrene	< 10 ug/L	10 ug/L	0
Anthracene	< 10 ug/L	10 ug/L	O
di-n-Butylphthalate	< 10 ug/L	10 ug/L	0
Fluoranthene	< 10 ug/L	10 ug/L	0
Benzidine	< 50 ug/L	50 ug/L	0
Pyrene	< 10 ug/L	10 ug/L	0
Butylbenzylphthalate	< 10 ug/L	10 ug/L	0
3,3-Dichlorobenzidine	< 10 ug/L	10 ug/L	0
Benzo(a)anthracene	< 10 ug/L	10 ug/L	0
Chrysene	< 10 ug/L	10 ug/L	0
bis(2-Ethylhexyl)phthalate	< 10 ug/L	10 ug/L	0
di-n-Octylphthalate	< 10 ug/L	10 ug/L	0
Benzo(b)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(k)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(a)pyrene	< 10 ug/L	10 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 10 ug/L	10 ug/L	0
Dibenzo(a,h)anthracene	< 10 ug/L	10 ug/L	0
Benzo(g,h,i)perylene	< 10 ug/L	10 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Troy Whisewart 7/16/99



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014023

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-15

Collection Date: 6/16/99

Location: MW-15

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test M	etho	d: SW-	846 8270			Analyst	: RGW7794
		Re	sult	Rej	oorti	ng Limit	Flag	
Pyridine	<u> </u>	10	ug/L	1	0	ug/L	0	
n-Nitrosodimethylamine	<	10	ug/L	1	0	ug/L	0	
Aniline	<	10	ug/L	· 1	0	ug/L	0	
Phenol	<	10	ug/L	1	0	ug/L	0	
bis(2-Chloroethyl)ether	<	10	ug/L	1	0	ug/L	0	
2-Chlorophenol	<	10	ug/L	1	0	ug/L	0	
1,3-Dichlorobenzene	<	10	ug/L	1	0	ug/L	0	
1,4-Dichlorobenzene	<	10	ug/L	1	0	ug/L	0	
Benzyl alcohol	<	10	ug/L	1	0	ug/L	0	
1,2-Dichlorobenzene	<	10	ug/L	1	0	ug/L	0	
2-Methylphenol	<	10	ug/L	1	0	ug/L	0	
bis(2-Chloroisopropyl)ether	<	10	ug/L	1	0	ug/L	0	
4-Methylphenol	<	10	ug/L	1	0	ug/L	0	
Hexachloroethane	<	10	ug/L	1	0	ug/L	0	
n-Nitrosodi-n-propylamine	<	10	ug/L	1	0	ug/L	0	
Nitrobenzene	<	10	ug/L	1	10	ug/L	0	
Isophorone	<	10	ug/L	1	10	ug/L	0	
2-Nitrophenol	<	10	ug/L	1	10	ug/L	0	
2,4-Dimethylphenol	<	10	ug/L	1	10	ug/L	0	
bis(2-Chloroethoxy)methane	<	10	ug/L	•	10	ug/L	0	
2,4-Dichlorophenol	<	10	ug/L	1	IQ	ug/L	0	
Benzoic acid	<	10	ug/L	1	01	ug/L	0	
1,2,4-Trichlorobenzene	<	10	ug/L	1	10	ug/L	0	
Naphthalene	<	10	ug/L	1	10	ug/L	0	
4-Chloroaniline	<	10	ug/L	1	10	ug/L	0	
Hexachlorobutadiene	<	10	ug/L	1	10	ug/L	0	
4-Chloro-3-methylphenol	<	10	ug/L	1	10	ug/L	0	
2-Methylnaphthalene	<	10	ug/L	•	10	ug/L	0	
Hexachtorocyclopentadiene	<	10	ug/L	•	10	ug/L	0	
2,4,6-Trichlorophenol	<	10	ug/L	•	10	ug/L	0	
2,4,5-Trichlorophenol	<	10	ug/L	•	10	ug/L	0	
2-Chloronaphthalene	<	10	ug/L	•	10	ug/L	0	
2-Nitroaniline	<	10	ug/L	•	10	ug/L	0	
Dimethylphthalate	<	10	ug/L	•	10	ug/L	0	
Acenaphthylene	<	10	ug/L	•	10	ug/L	0	
2,6-Dinitrotoluene	<	10	ug/L		10	ug/Ł	0	
3-Nitroaniline	<	10	ug/L		10	ug/L	0	
Acenaphthene	<	10	ug/L		10	ug/L	0	
2,4-Dinitrophenol	<	10	-	,	10	ug/L	0	
4-Nitrophenol	<	10	•		10	ug/L	0	
Dibenzofuran	<	10			10	ug/L	0	
2,4-Dinitrotoluene	<	10	•		10	ug/L	0	
Diethylphthalate	<	10	ug/L		10	ug/L	0	
Fluorene	<	10	ug/L		10	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014023

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description:

MW-15

Collection Date:

6/16/99

Location: MW-15

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 8270		Analyst: RGW7794
	Result	Reporting Limit	Flag
4-Chlorophenylphenylether	< 10 ug/L	10 ug/L	0
4-Nitroaniline	< 10 ug/L	10 ug/L	0
2-Methyl-4,6-dinitrophenol	< 10 ug/L	10 ug/L	0
n-Nitrosodiphenylamine	< 10 ug/L	10 ug/L	0
1,2-Diphenylhydrazine	< 10 ug/L	10 ug/L	0
4-Bromophenylphenylether	< 10 ug/L	10 ug/L	0
Hexachlorobenzene	< 10 ug/L	10 ug/L	0
Pentachlorophenol	< 10 ug/L	10 ug/L	0
Phenanthrene	< 10 ug/L	10 ug/L	0
Anthracene	< 10 ug/L	10 ug/L	0
di-n-Butylphthalate	< 10 ug/L	10 ug/L	0
Fluoranthene	< 10 ug/L	10 ug/L	0
Benzidine	< 50 ug/L	50 ug/L	0
Pyrene	< 10 ug/L	10 ug/L	0
Butylbenzylphthalate	< 10 ug/L	10 ug/L	0
3,3-Dichlorobenzidine	< 10 ug/L	10 ug/L	0
Benzo(a)anthracene	< 10 ug/L	10 ug/L	0
Chrysene	< 10 ug/L	10 ug/L	0
bis(2-Ethylhexyl)phthalate	< 10 ug/L	10 ug/L	0
di-n-Octylphthalate	< 10 ug/L	10 ug/L	0
Benzo(b)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(k)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(a)pyrene	< 10 ug/L	10 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 10 ug/L	10 ug/L	0
Dibenzo(a,h)anthracene	< 10 ug/L	10 ug/L	0
Berizo(g,h,i)perylene	< 10 ug/L	10 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

23U05.D FIELD ID:: BRALETT ST-MW-15) LAB ID:: 99-JUN-0042 // 9-J14023

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention	Idei	Identification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
NO TIC'S IDENTIFIED								
			 			-		
		ļ					-	

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
]
1.4-Dichlorobenzene-D4	11.71	2-Fluorophenol	85.1%	Nitrobenzene-D5	88.7%
Naphthalene-D8	15.62	Phenoi	14.0%	2-Fluorobiphenyl	79.8%
Acenaphthene-D10	21.25	2,4,6-Tribromophenol	92.0%	Terphenyl-D14	88.0%
Phenanthrene-D10	25.92				- -

USEPA--8270 G.C. Conditions

11

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

Chrysene-D12

Perylene-D12

34.43

39.18



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014024

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-16

Collection Date: 6/16/99

Location: MW-16

Type of Sample: GROUNDWATER

SVOC	IN WATER BY	GC/MS - 8270
------	-------------	--------------

st Code: M\$8270_W	Test Metho	270		Analyst:	RGW77	
	R	Result		ting Limit	Flag	
Pyridine	< 10	ug/L	10	ug/L	0	
n-Nitrosodimethylamine	< 10	ug/L	10	ug/L	O O	
Aniline	< 10	ug/L	10	ug/L	0	
Phenol	< 10	ug/L	10	ug/L	0	
bis(2-Chloroethyl)ether	< 10	ug/L	10	ug/L	0	
2-Chlorophenol	< 10	ug/L	10	ug/L	0	
1,3-Dichlorobenzene	< 10	ug/L	10	ug/L	0	
1,4-Dichlorobenzene	< 10	ug/L	10	ug/L	0	
Benzyl alcohol	< 10	ug/L	10	ug/L	0	
1,2-Dichlorobenzene	< 10	=	10	ug/L	0	
2-Methylphenol	< 10	ug/L	10	ug/L	0	
bis(2-Chloroisopropyl)ether	< 10	_	10	ug/L	0	
4-Methylphenol	< 10	-	10	ug/L	0	
Hexachloroethane	< 10		10	ug/L	0	
n-Nitrosodi-n-propylamine	< 10	•	10	ug/L	0	
Nitrobenzene	< 10	_	10	ug/L	0	
Isophorone	< 10	ug/L	10	ug/L	0	
2-Nitrophenol	< 10	ug/L	10	ug/L	0	
2,4-Dimethylphenol	< 10	ug/L	10	ug/L	0	
bis(2-Chloroethoxy)methane	< 10	ug/L	10	ug/L	0	
2,4-Dichlorophenol	< 10	ug/L	10	ug/L	0	
Benzoic acid	< 10	ug/L	10	ug/L	0	
1,2,4-Trichlorobenzene	< 10	ug/L	10	ug/L	0	
Naphthaiene	< 10	ug/L	10	ug/L	0	
4-Chloroaniline	< 10	ug/L	10	ug/L	0	
Hexachlorobutadiene	< 10	ug/L	10	ug/L	0	
4-Chloro-3-methylphenol	< 10	ug/L	10	ug/L	0	
2-Methylnaphthalene	< 10	ug/L	10	ug/L	0	
Hexachlorocyclopentadiene	< 10	ug/L	10	ug/L	0	
2,4,6-Trichlorophenol	< 10		10	ug/L	0	
2,4,5-Trichlorophenol	< 10	ug/L	10	ug/L	0	
2-Chloronaphthalene	< 10	ug/L	10	ug/L	0	
2-Nitroaniline	< 10	-	10	ug/L	0	
Dimethylphthalate	< 10	•	10	ug/L	0	
Acenaphthylene	< 10		10	ug/L	0	
2,6-Dinitrotoluene	< 10	=	10	ug/L	0	
3-Nitroaniline	< 10	ug/L	10	ug/L	0	
Acenaphthene	< 10	ug/L	10	ug/L	0	
2,4-Dinitrophenol	< 10	-	10	ug/L	0	
4-Nitrophenol	< 10	-	10	ug/L	0	
Dibenzofuran	< 10	=	10	ug/L	0	
2,4-Dinitrotoluene	< 10	=	10	ug/L	0	
Diethylphthalate	< 10	_	10	ug/L	0	
Fluorene	< 10) ug/L	10	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014024

99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-16

Collection Date: 6/16/99

Location: MW-16

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Meth	od: SW-846 8	3270		Analyst:	RGW7794
	R	esult	Report	ing Limit	Flag	
4-Chlorophenylphenylether	< 10	ug/L	10	ug/L	0	
4-Nitroaniline	< 10	ug/L	10	ug/L	0	
2-Methyl-4,6-dinitrophenol	< 10	ug/L	10	ug/L	0	
n-Nitrosodiphenylamine	< 10	ug/L	10	ug/L	0	
1,2-Diphenylhydrazine	< 10	ug/L	10	ug/L	0	
4-Bromophenylphenylether	< 10	ug/L	10	ug/L	0	
Hexachlorobenzene	< 10	ug/L	10	ug/L	0	
Pentachlorophenol	< 10	ug/L	10	ug/L	0	
Phenanthrene	< 10	ug/L	10	ug/L	0	
Anthracene	< 10	ug/L	10	ug/L	0	
di-n-Butylphthalate	< 10	ug/L	10	ug/L	0	
Fluoranthene	< 10	ug/L	10	ug/L	0	
Benzidine	< 50	ug/L	50	ug/L	0	
Рутепе	< 10	ug/L	10	ug/L	0	
Butylbenzylphthalate	< 10	ug/L	10	ug/L	0	
3,3-Dichlorobenzidine	< 10	ug/L	10	ug/L	0	
Benzo(a)anthracene	< 10	ug/L	10	ug/L	0	
Chrysene	< 10	ug/L	10	ug/L	0	
bis(2-Ethylhexyl)phthalate	< 10	ug/L	10	ug/L	0	
di-n-Octylphthalate	< 10	ug/L	10	υg/L	0	
Benzo(b)fluoranthene	< 10	ug/L	10	ug/L	0	
Benzo(k)fluoranthene	< 10	-	10	ug/L	a	
Benzo(a)pyrene	< 10	ug/L	10	ug/L	Ō	
Indeno(1,2,3-c,d)pyrene	< 10	-	10	ug/L	o o	
Dibenzo(a,h)anthracene	< 10	-	10	ug/L	a	
Benzo(g,h,i)peryiene	< 10	-	10	ug/L	a	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Troy Whisenast 7/16/99
Data Verified and Approved By, Date

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

Report Generated 7/9/99 13:24:50

23U06.D FIELD ID:: BRALETT ST-MW-16) LAB ID:: 99-JUN-0042 / / 95-514024

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention	Identification Basis			
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
<u> </u>				- 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10				
NO TIC'S IDENTIFIED								
							-	
			-					
		ļ				ļ		
	<u>-</u>			· · · · · ·		<u> </u>		
			 			 		. <u> </u>
								
				<u> </u>				
					ļ			
			1					
	 		-					

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1.4-Dichlorobenzene-D4	11.71	2-Fluorophenol	69.8%	Nitrobenzene-D5	73.0%
Naphthalene-D8	15.62	Phenol	60.0%	2-Fluorobiphenyl	59.8%
Acenaphthene-D10	21.25	2,4,6-Tribromophenol	71.3%	Terphenyl-D14	71.6%
Phenanthrene-D10	25.92				

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

Chrysene-D12

Perylene-D12

34.43

39.19



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014025 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-17

Collection Date: 6/15/99 Location: MW-17 Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Code: MS8270_W	Test Metho	od: SW-846 8	3270		Analyst:	RGW77
	R	esult	Report	ting Limit	Flag	
Pyridine	< 1000	ug/L	1000	ug/L	0	
n-Nitrosodimethylamine	< 1000	ug/L	1000	ug/L	0	
Aniline	< 1000	ug/L	1000	ug/L	0	
Phenol	< 1000	ug/L	1000	ug/L	0	
bis(2-Chloroethyl)ether	< 1000	ug/L	1000	ug/L	0	
2-Chlorophenol	< 1000	ug/L	1000	ug/L	0	
1,3-Dichlorobenzene	< 1000	ug/L	1000	ug/L	0	
1,4-Dichlorobenzene	< 1000	ug/L	1000	ug/L	0	
Benzyl alcohol	< 1000	ug/L	1000	ug/L	O	
1,2-Dichlorobenzene	< 1000	ug/L	1000	ug/L	0	
2-Methylphenol	< 1000	·	1000	ug/L	0	
bis(2-Chloroisopropyl)ether	< 1000	=	1000	ug/L	o	
4-Methylphenol	< 1000	-	1000	ug/L	0	
Hexachloroethane	< 1000	-	1000	ug/L	o	
n-Nitrosodi-n-propylamine	< 1000	•	1000	ug/L	0	
Nitrobenzene	< 1000	=	1000	ug/L	0	
Isophorone	< 1000	_	1000	ug/L	0	
2-Nitrophenol	< 1000	-	1000	ug/L	0	
2,4-Dimethylphenol	< 1000		1000	ug/L	0	
bis(2-Chloroethoxy)methane	< 1000	•	1000	ug/L	0	
2,4-Dichlorophenol	< 1000	•	1000	ug/L	0	
Benzoic acid	< 1000	-	1000	ug/L	0	
1,2,4-Trichiorobenzene	< 1000	-	1000	ug/L	0	
Naphthalene	< 1000		1000	ug/L	0	
4-Chloroaniline	< 1000		1000	ug/L	0	
Hexachlorobutadiene	< 1000	•	1000	ug/L	o	
4-Chloro-3-methylphenol	< 1000	•	1000	ug/L	0	
2-Methylnaphthalene	1000	-	1000	ug/L	0	
Hexachlorocyclopentadiene	< 1000	•	1000	ug/L	0	
2,4,6-Trichlorophenol	< 1000	•	1000	ug/L	0	
2,4,5-Trichlorophenol	< 1000	-	1000	ug/L	0	
2-Chloronaphthalene	< 1000	•	1000	ug/L	0	
2-Nitroaniline	< 1000	•	1000	ug/L	0	
Dimethylphthalate	< 1000	-	1000	_	0	
Acenaphthylene	< 1000	-	1000	ug/L ug/L	0	
2,6-Dinitratoluene	< 1000	•	1000	ug/L ug/L	0	
3-Nitroaniline	< 1000		1000	ug/L ug/L	0	
Acenaphthene	< 1000	•	1000	ug/L ug/L	•	
2,4-Dinitrophenol	< 1000	_	1000	ug/L	0	
4-Nitrophenol	< 1000	ū	1000	-	0	
Dibenzofuran	< 1000		1000	ug/L	0	
2,4-Dinitrotoluene	< 1000	-	1000	ug/L ug/L	0	
Diethylphthalate	< 1000	•	1000	-		
	< 1000	-9·-	1000	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #:

99014025

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: MW-17

Collection Date: 6/15/99

Location: MW-17

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

est Code: MS8270_W	Test Method: SW-846 8270)	Analyst: RGW7794
	Result	Reporting Limit	Flag
4-Chlorophenylphenylether	< 1000 ug/L	1000 ug/L	0
4-Nitroaniline	< 1000 ug/L	1000 ug/L	0
2-Methyl-4,6-dinitrophenol	< 1000 ug/L ^	1000 ug/L	0
n-Nitrosodiphenylamine	< 1000 ug/L	1000 ug/L	0
1,2-Diphenylhydrazine	< 1000 ug/L	1000 ug/L	0
4-Bromophenylphenylether	< 1000 ug/L	1000 ug/L	0
Hexachlorobenzene	< 1000 ug/L	1000 ug/L	0
Pentachlorophenol	< 1000 ug/L	1000 ug/L	0
Phenanthrene	< 1000 ug/L	1000 ug/L	0
Anthracene	< 1000 ug/L	1000 ug/L	0
di-n-Butylphthalate	< 1000 ug/L	1000 ug/L	0
Fluoranthene	< 1000 ug/L	1000 ug/L	0
Benzidine	< 5000 ug/L	5000 ug/L	0
Pyrene	< 1000 ug/L	1000 ug/L	0
Butylbenzylphthalate	< 1000 ug/L	1000 ug/L	0
3,3-Dichlorobenzidine	< 1000 ug/L	1000 ug/L	0
Benzo(a)anthracene	< 1000 ug/L	1000 ug/L	0
Chrysene	< 1000 ug/L	1000 ug/L	0
bis(2-Ethylhexyl)phthalate	< 1000 ug/L	1000 ug/L	0
di-n-Octylphthalate	< 1000 ug/L	1000 ug/L	0
Benzo(b)fluoranthene	< 1000 ug/L	1000 ug/L	0
Benzo(k)fluoranthene	< 1000 ug/L	1000 ug/L	0
Benzo(a)pyrene	< 1000 ug/L	1000 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 1000 ug/L	1000 ug/L	0
Dibenzo(a,h)anthracene	< 1000 ug/L	1000 ug/L	0
Benzo(g,h,i)perylene	< 1000 ug/L	1000 ug/L	0

Description of Flags:

- 0 No Discrepancies Noted
- 3 Detected in Blank
- 1 See Case Narrative
- 4 Estimated Concentration also Detected in Blank
- 2 Estimated Concentration
- 5 For Information Only

6 - Holding Time or Analytical Time exceeded (See Case Nametive for additional information)

Anony Whisenant 07/991
Data Serified and Approved By, Date

LAB ID::

99-JUN-0042 // 95-14025 //(1:1

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention	Identification Basis]
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
					7 (A.C. L. 6) (A.C. L. 6)	A Constitution and Carolina (1994) (1995) (1995)		<u>. 10.41 (1.7011), (1.4111)</u> 6
NO TIC'S IDENTIFIED								
	_							
		<u> </u>						
							1	
							;	ſ

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1,4-Dichlorobenzene-D4	11.71	2-Fluorophenol	0.9%	Nitrobenzene-D5	0.7%
Naphthalene-D8	15.62	Phenol	0.7%	2-Fluorobiphenyl	0.7%
Acenaphthene-D10	21.25	2,4,6-Tribromophenol	0.0%	Terphenyl-D14	0.0%
Phenanthrene-D10	25.94				

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

Chrysene-D12

Perylene-D12

34.43

39.19



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014026

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-18

Collection Date: 6/16/99

Location: MW-18

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

T	est Code: MS8270_W	Test Method: SW-846	8270	Analyst: RGW7794
		Result	Reporting Limit	Flag
	Pyridine	< 10 ug/L	10 ug/L	· <u> </u>
	n-Nitrosodimethylamine	< 10 ug/L	10 ug/L	0
	Aniline	< 10 ug/L	10 ug/L	0
	Phenol	< 10 ug/L	10 ug/L	0
	bis(2-Chloroethyl)ether	< 10 ug/i.	10 ug/L	0
	2-Chlorophenol	< 10 ug/L	10 ug/L	0
	1,3-Dichlorobenzene	< 10 ug/L	10 ug/L	0
	1,4-Dichlorobenzene	< 10 ug/L	10 ug/L	0
	Benzyl alcohol	< 10 ug/L	10 ug/L	0
	1,2-Dichlorobenzene	< 10 ug/L	10 ug/L	0
	2-Methylphenol	< 10 ug/L	10 ug/L	0
	bis(2-Chloroisopropyl)ether	< 10 ug/L	10 ug/L	0
	4-Methylphenol	< 10 ug/L	10 ug/L	o o
	Hexachloroethane	< 10 ug/L	10 ug/L	a
ì	n-Nitrosodi-n-propytamine	< 10 ug/L	10 ug/L	0
	Nitrobenzene	< 10 ug/L	10 ug/L	0
	Isophorone	< 10 ug/L	10 ug/L	0
	2-Nitrophenol	< 10 ug/L	10 ug/L	0
	2,4-Dimethylphenol	< 10 ug/L	10 ug/L	0
	bis(2-Chloroethoxy)methane	< 10 ug/L	10 ug/L	0
	2,4-Dichlorophenol	< 10 ug/L	10 ug/L	0
	Benzoic acid	< 10 ug/L	10 ug/L	0
	1,2,4-Trichlorobenzene	< 10 ug/L	10 ug/L	0
	Naphthalene	< 10 ug/L	10 ug/L	0
	4-Chloroaniline	< 10 ug/L	10 ug/L	0
	Hexachlorobutadiene	< 10 ug/L	10 ug/L	0
	4-Chloro-3-methylphenol	< 10 ug/L	10 ug/L	0
	2-Methylnaphthalene	< 10 ug/L	10 ug/L	0
	Hexachlorocyclopentadiene	< 10 ug/L	10 ug/L	0
	2,4,6-Trichlorophenol	< 10 ug/L	10 ug/L	0
	2,4,5-Trichiorophenol	< 10 ug/L	10 ug/L	0
	2-Chloronaphthalene	< 10 ug/L	10 ug/L	0
	2-Nitroaniline	< 10 ug/L	10 ug/L	0
	Dimethylphthalate	< 10 ug/L	10 ug/L	0
	Acenaphthylene	< 10 ug/L	· ·	
	2,6-Dinitrotoluene	< 10 ug/L	_	0
	3-Nitroaniline	< 10 ug/L	•	0
	Acenaphthene			0
	2,4-Dinitrophenol	< 10 ug/L < 10 ug/L	10 ug/L 10 ug/L	0
	4-Nitrophenol	_	•	0
	Dibenzofuran	< 10 ug/L < 10 ug/L	10 ug/L	0
	2,4-Dinitrotoluene	<u> </u>	10 ug/L	0
l		< 10 ug/L	10 ug/L	0
	Diethylphthalate Fluorene	< 10 ug/L	10 ug/L	0
	t moterie	< 10 ug/L	10 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014026

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-18

Collection Date: 6/16/99

Location: MW-18

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 8270		Analyst: RGW7794
	Result	Reporting Limit	Flag
4-Chlorophenylphenylether	< 10 ug/L	10 ug/L	0
4-Nitroaniline	< 10 ug/L	10 ug/L	0
2-Methyl-4,6-dinitrophenol	< 10 ug/L	10 ug/L	0
n-Nitrosodiphenylamine	< 10 ug/L	10 ug/L	0
1,2-Diphenylhydrazine	< 10 ug/L	10 ug/L	0
4-Bromophenylphenylether	< 10 ug/L	10 ug/L	0
Hexachlorobenzene	< 10 ug/L	10 ug/L	0
Pentachlorophenol	< 10 ug/L	10 ug/L	0
Phenanthrene	< 10 ug/L	10 ug/L	0
Anthracene	< 10 ug/L	10 ug/L	0
di-n-Butylphthalate	< 10 ug/L	10 ug/L	0
Fluoranthene	< 10 ug/L	10 ug/L	0
Benzidine	< 50 ug/L	50 ug/L	0
Pyrene	< 10 ug/L	10 ug/L	0
Butylbenzylphthalate	< 10 ug/L	10 ug/L	0
3,3-Dichlorobenzidine	< 10 ug/L	10 ug/L	0
Benzo(a)anthracene	< 10 ug/L	10 vg/L	0
Chrysene	< 10 ug/L	10 ug/L	0
bis(2-Ethylhexyl)phthalate	< 10 ug/L	10 ug/L	0
di-n-Octylphthalate	< 10 ug/L	10 ug/L	0
Benzo(b)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(k)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(a)pyrene	< 10 ug/L	10 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 10 ug/L	10 ug/L	0
Dibenzo(a,h)anthracene	< 10 ug/L	10 ug/L	0
Benzo(g,h,i)perylene	< 10 ug/L	10 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Droy Whisenant 7/14/99

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

Report Generated 7/9/99 13:24:50

23U11.D FIELD ID:: BRALETT ST-MW-18) LAB ID:: 99-JUN-0042 // 95-J14026

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention] Ide	ntification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Numbe
<u></u>		/ <u> </u>	- day selfore and the North Control of		a monachiat,	in a supplied as the state of the same and		
NO TIC'S IDENTIFIED								
· · · · · · · · · · · · · · · · · · ·							ļ	
······································			ļ		 		<u> </u>	
								
		 			<u> </u>			
		-	<u> </u>		1			
<u>,,,,</u> , ,,,, <u>,</u>								
				 ·				.,
				<u> </u>		ļ <u>. </u>		
							 -	
			<u> </u>		 		 	
				<u> </u>	<u> </u>			
					 		 	

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
			orter and the state of the stat		
1,4-Dichlorobenzene-D4	11.71	2-Fluorophenol	72.3%	Nitrobenzene-D5	75.4%
Naphthalene-D8	15.62	Phenol	65.0%	2-Fluorobiphenyl	66.4%
Acenaphthene-D10	21.25	2,4,6-Tribromophenol	82.2%	Terphenyl-D14	76.9%
Phenanthrene-D10	25.93	<u> </u>		<u> </u>	

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

Chrysene-D12

Perylene-D12

34.44

39.20



Test ·

Duke Power's Analytical Laboratory

Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014027 Jo

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-19

Collection Date: 6/16/99

Location: MW-19

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Code: M	S8270_W	Test	Metho	d: SW-846 8270			Analyst:	RGW7794
			Re	sult	Report	ing Limit	Flag_	
1	Pyridine	<	1000	ug/L	1000	ug/L	0	
n-Nitros	odimethylamine	<	1000	ug/L	1000	ug/L	0	
	Aniline	<	1000	ug/L	1000	ug/L	0	
	Phenol	<	1000	ug/L	1000	ug/L	Ο,	
bis(2-C	hioroethyl)ether	<	1000	ug/L	1000	ug/L	0	
2-C	hiorophenol	<	1000	ug/L	1000	ug/L	0	
1,3-Did	chlorobenzene	<	1000	ug/L	1000	ug/L	0	
1,4-Die	chlorobenzene	<	1000	ug/L	1000	ug/L	0	
Ber	nzyl alcohol	<	1000	ug/L	1000	ug/L	0	
1,2-Die	chlorobenzene	<	1000	ug/L	1000	ug/L	0	
2-M	lethylphenoi	<	1000	ug/L	1000	ug/L	0	
bis(2-Chlo	proisopropyl)ether	<	1000	ug/L	1000	ug/L	0	
4-M	lethylphenol	<	1000	ug/L	1000	ug/L	0	
Hexa	chloroethane	<	1000	ug/L	1000	ug/L	0	
n-Nitrosc	di-n-propylamine	<	1000	ug/L	1000	ug/L	0	
Nif	trobenzene	<	1000	ug/L	1000	ug/L	0	
ls	cophorone	<	1000	ug/L	1000	ug/L	0	
2-1	Nitrophenol	<	1000	ug/L	1000	ug/L	0	
	imethylphenol	<	1000	ug/L	1000	ug/L	0	
bis(2-Chlo	roethoxy)methane	<	1000	ug/L	1000	ug/L	0	
•	ichtorophenol	<	1000	ug/L	1000	ug/L	0	
	enzoic acid	<	1000	ug/L	1000	ug/L	0	
	richlorobenzene	<	1000	ug/L	1000	ug/L	0	
	aphthalene		4700	ug/L	1000	ug/L	0	
	Chloroaniline		1000	ug/L	1000	ug/L	0	
	hlorobutadiene	<	1000	ug/L	1000	ug/L	0	
4-Chlore	c-3-methylphenol	<	1000	ug/L	1000	ug/L	0	
	hylnaphthalene		1500	ug/L	1000	ug/L	0	
	rocyclopentadiene	<		ug/L	1000	ug/L	0	
•	Trichlorophenol	<		ug/L	1000	ug/L	0	
	Trichlorophenol	<		ug/L	1000	ug/L	0	
	oronaphthalene	<		ug/L	1000	ug/L	0	
	Nitroaniline	<		ug/L	1000	ug/L	0	
	ethylphthalate	<		ug/L	1000	ug/L	0	
	enaphthylene	<		ug/L	1000	ug/L	0	
•	Dinitrotoluene	<		ug/L	1000	ug/L	0	
	Nitroaniline	<		ug/L	1000	ug/L	0	
	enaphthene	<		ug/L	1000	ug/L	0	
	Dinitrophenol	<		ug/L	1000	ug/L	0	
	Nitrophenol	<		ug/L	1000	ug/L	0	
	ibenzofuran	<		•	1000	ug/L	0	
-	Dinitrotoluene	<		ug/L	1000	ug/L	0	
	thylphthalate	<		ug/L	1000	ug/L	0	
	Fluorene	<	1000	ug/L	1000	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014027

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: MW-19

Collection Date: 6/16/99

Location: MW-19

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-	846 8270	Analyst: RGW7794
	Result	Reporting Limit	Flag
4-Chlorophenylphenylether	< 1000 ug/L	1000 ug/l	0
4-Nitroaniline	< 1000 ug/L	1000 ug/L	0
2-Methyl-4,6-dinitrophenol	< 1000 ug/L	1000 ug/L	0
n-Nitrosodiphenylamine	< 1000 ug/L	1000 ug/L	0
1,2-Diphenylhydrazine	< 1000 ug/L	1000 ug/L	0
4-Bromophenylphenylether	< 1000 ug/L	1000 ug/L	o
Hexachlorobenzene	< 1000 ug/L	1000 ug/L	0
Pentachlorophenol	< 1000 ug/L	1000 ug/L	0
Phenanthrene	< 1000 ug/L	1000 ug/L	o
Anthracene	< 1000 ug/L	1000 ug/L	0
di-n-Butylphthalate	< 1000 ug/L	1000 ug/L	0
Fluoranthene	< 1000 ug/L	1000 ug/L	0
Benzidine	< 5000 ug/L	5000 ug/L.	0
Pyrene	< 1000 ug/L	1000 ug/L	o o
Butylbenzylphthalate	< 1000 ug/L	1000 ug/L	0
3,3-Dichlorobenzidine	< 1000 ug/L	1000 ug/L	0
Benzo(a)anthracene	< 1000 ug/l.	1000 ug/L	0
Chrysene	< 1000 ug/L	1000 ug/L	0
bis(2-Ethylhexyl)phthalate	< 1000 ug/L	1000 ug/L	0
di-n-Octylphthalate	< 1000 ug/L	1000 ug/L	0
Benzo(b)fluoranthene	< 1000 ug/L	1000 ug/L	0
Benzo(k)fluoranthene	< 1000 ug/L	1000 ug/L	0
Benzo(a)pyrene	< 1000 ug/L	1000 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 1000 ug/L	1000 ug/L	0
Dibenzo(a,h)anthracene	< 1000 ug/L	1000 ug/L	0
Benzo(g,h,i)perylene	< 1000 ug/L	1000 ug/L	Q O

Description of Flags:

- 0 No Discrepancies Noted
- 3 Detected in Blank
- i See Case Namative
- 4 Estimated Concentration also Detected in Blank
- 2 Estimated Concentration
- 5 For Information Only
- 6 Holding Time or Analytical Time exceeded

(See Case Narrative for additional information)

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

99-JUN-0042 // 55014027 //(1:100

FIELD ID::

BRALETT ST-MW-19

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention	Ide	ntification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
NO TIC'S IDENTIFIED								

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1,4-Dichlorobenzene-D4	11.71	2-Fluorophenol	0.7%	Nitrobenzene-D5	0.6%
Naphthalene-D8	15.62	Phenol	0.7%	2-Fluorobiphenyl	0.8%
Acenaphthene-D10	21.25	2,4,6-Tribromophenol	0.0%	Terphenyl-D14	0.8%
Phenanthrene-D10	25.94			•	

USEPA--8270 G.C. Conditions

العالدات الكاني

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

34.44

39.19

Chrysene-D12

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014028

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-20

Collection Date: 6/15/99

Location: MW-20

Type of Sample: GROUNDWATER

CV	\sim	IN W	MIE	55	τ	THE STATE	8270

Test Code: MS8270_W	Test Method: SW-846 8270		Analyst: RGW7794
	Result	Reporting Limit	Flag
Pyridine	< 1000 ug/L	1000 ug/L	0
n-Nitrosodimethylamine	< 1000 ug/L	1000 ug/L	0
Aniline	< 1000 ug/L	1000 ug/L	0
Phenol	< 1000 ug/L	1000 ug/L	0
bis(2-Chloroethyl)ether	< 1000 ug/L	1000 ug/L	0
2-Chlorophenol	< 1000 ug/L	1000 ug/L	0
1,3-Dichlorobenzene	< 1000 ug/L	1000 ug/L	0
1,4-Dichlorobenzene	< 1000 ug/L	1000 ug/L	G
Benzyl alcohol	< 1000 ug/L	1000 ug/L	0
1,2-Dichlorobenzene	< 1000 ug/L	1000 ug/L	0
2-Methylphenol	< 1000 ug/L	1000 ug/L	0
bis(2-Chloroisopropyl)ether	< 1000 ug/L	1000 ug/L	0
4-Methylphenol	< 1000 ug/L	1000 ug/L	0
Hexachioroethane	< 1000 ug/L	1000 ug/L	0
n-Nitrosodi-n-propylamine	< 1000 ug/L	1000 ug/L	0
Nitrobenzene	< 1000 ug/L	1000 ug/L	0
Isophorone	< 1000 ug/L	1000 ug/L	0
2-Nitrophenol	< 1000 ug/L	1000 ug/L	0
2,4-Dimethylphenol	< 1000 ug/l.	1000 ug/L	0
bis(2-Chloroethoxy)methane	< 1000 ug/L	1000 ug/L	0
2,4-Dichlorophenol	< 1000 ug/L	1000 ug/L	0
Benzoic acid	< 1000 ug/L	1000 ug/L	0
1,2,4-Trichlorobenzene	5600 ug/L	1000 ug/L	0
Naphthalene	< 1000 ug/L	1000 ug/L	0
4-Chloroaniline	< 1000 ug/L	1000 ug/L	0
Hexachlorobutadiene	< 1000 ug/l.	1000 ug/L	0
4-Chloro-3-methylphenol	< 1000 ug/L	1000 ug/L	0
2-Methylnaphthalene	1300 ug/L	1000 ug/L	0
Hexachlorocyclopentadiene	< 1000 ug/L	1000 ug/L	0
2,4,6-Trichlorophenol	< 1000 ug/L	1000 ug/L	0
2,4,5-Trichlorophenol	< 1000 ug/l.	1000 ug/L	0
2-Chloronaphthalene	< 1000 ug/L	1000 ug/L	0
2-Nitroaniline	< 1000 ug/L	1000 ug/L	0
Dimethylphthalate	< 1000 ug/L	1000 ug/L	0
Acenaphthylene	< 1000 ug/L	1000 ug/L	0
2,6-Dinitrotoluene	< 1000 ug/L	1000 ug/L	0
3-Nitroaniline	< 1000 ug/L	1000 ug/L	0
Acenaphthene	< 1000 ug/L	1000 ug/L	0
2,4-Dinitrophenol	< 1000 ug/L	1000 ug/L	0
4-Nitrophenol	< 1000 ug/L	1000 ug/L	0
Dibenzofuran	< 1000 ug/L	1000 ug/L	0
2,4-Dinitrotoluene	< 1000 ug/L	1000 ug/L	0
Diethylphthalate	< 1000 ug/L	1000 ug/L	0
Fluorene	< 1000 ug/L	1000 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: MW-20

Collection Date: 6/15/99 Location: MW-20 Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 8270		Analyst: RGW7794
	Result	Reporting Limit	Flag
4-Chlorophenylphenylether	< 1000 ug/L	1000 ug/L	0
4-Nitroaniline	< 1000 ug/L	1000 ug/L	0
2-Methyl-4,6-dinitrophenol	< 1000 ug/L	1000 ug/L	0
n-Nitrosodiphenylamine	< 1000 ug/L	1000 ug/L	0
1,2-Diphenylhydrazine	< 1000 ug/L	1000 ug/L	O
4-Bromophenylphenylether	< 1000 ug/L	1000 ug/L	0
Hexachlorobenzene	< 1000 ug/L	1000 ug/L	0
Pentachlorophenol	< 1000 ug/L	1000 ug/L	0
Phenanthrene	< 1000 ug/L	1000 ug/L	o
Anthracene	< 1000 ug/L	1000 ug/L	0
di-n-Butylphthalate	< 1000 ug/L	1000 ug/L	0
Fluoranthene	< 1000 ug/L	1000 ug/L	o
Benzidine	< 5000 ug/L	5000 ug/L	0
Pyrene	< 1000 ug/L	1000 ug/L	0
Butylbenzylphthalate	< 1000 ug/L	1000 ug/L	O
3,3-Dichlorobenzidine	< 1000 ug/L	1000 ug/L	0
Benzo(a)anthracene	< 1000 ug/L	1000 ug/L	0
Chrysene	< 1000 ug/L	1000 ug/L	0
bis(2-Ethylhexyl)phthalate	< 1000 ug/L	1000 ug/L	0
di-n-Octylphthalate	< 1600 ug/L	1000 ug/L	0
Benzo(b)fluoranthene	< 1000 ug/L	1000 ug/L	0
Benzo(k)fluoranthene	< 1000 ug/L	1000 ug/L	0
Benzo(a)pyrene	< 1000 ug/L	1000 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 1000 ug/L	1000 ug/L	0
Dibenzo(a,h)anthracene	< 1000 ug/L	1000 ug/L	0
Benzo(g,h,i)perylene	< 1000 ug/L	1000 ug/L	0
	•	······································	_

Description of Flags:

- 0 No Discrepancies Noted
- 3 Detected in Blank
- 1 See Case Namative
- 4 Estimated Concentration also Detected in Blank
- 2 Estimated Concentration
- 5 For Information Only

6 - Holding Time or Analytical Time exceeded (See Case Narrative for additional information)

Droy Whisenant, 7/20/99

LAB ID:: 99-JUN-0042 / / 9 4028 / / (1:1

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Match Retention Identification Basi	Identification Basis			Identification Basis	
Compound	Molecular Weight		Probability Tim	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number	
No TIC's Identified									
								 _	
				<u>-</u>					
			1						
							ļ		
							 	<u>.</u>	
			 						
							-		
			<u> </u>						
							1		
· · · · · · · · · · · · · · · · · · ·									
		_	 			 			

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1,4-Dichlorobenzene-D4	12.30	2-Fluorophenoi	0.5%	Nitrobenzene-D5	0.7%
Naphthalene-D8	16.32	Phenol	0.0%	2-Fluorobiphenyl	0.9%
Acenaphthene-D10	21.97	2,4,6-Tribromophenol	0.6%	Terphenyl-D14	1.0%
Pentachlorophenol	0.00				-
3,3-Dichlorobenzidine	0.00	1			

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

Perylene-D12

39.78



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: MW-21

Collection Date: 6/16/99 Location: MW-21 Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 8270	0	Analyst: RGW7794
	Result	Reporting Limit	Flag
Pyridine	< 500 ug/L	500 ug/L	0
n-Nitrosodimethylamine	< 500 ug/L	500 ug/L	0
Aniline	< 500 ug/L	500 ug/L	0
Phenol	< 500 ug/L	500 ug/L	0
bis(2-Chloroethyl)ether	< 500 ug/L	500 ug/L	0
2-Chlorophenol	< 500 ug/L	500 ug/L	0
1,3-Dichlorobenzene	< 500 ug/L	500 ug/L	0
1,4-Dichlorobenzene	< 500 ug/L	500 ug/L	0
Benzyl alcohol	< 500 ug/L	500 ug/L	0
1,2-Dichlorobenzene	< 500 ug/L	500 ug/L	0
2-Methylphenol	< 500 ug/L	500 ug/L	0
bis(2-Chloroisopropyl)ether	< 500 ug/L	500 ug/L	0
4-Methylphenol	550 ug/L	500 ug/L	0
Hexachloroethane	< 500 ug/L	500 ug/L	0
n-Nitrosodi-n-propylamine	< 500 ug/L	500 ug/L	0
Nitrobenzene	< 500 ug/L	500 ug/L	0
Isophorone	< 500 ug/L	500 ug/L	0
2-Nitrophenol	< 500 ug/L	500 ug/L	0
2,4-Dimethylphenol	1100 ug/L	500 ug/L	0
bis(2-Chloroethoxy)methane	< 500 ug/L	500 ug/L	0
2,4-Dichlorophenol	< 500 ug/L	500 ug/L	0
Benzoic acid	< 500 ug/L	500 ug/L	0
1,2,4-Trichlorobenzene	< 500 ug/L	500 ug/L	0
Naphthalene	3500 ug/L	500 ug/L	0
4-Chloroaniline	< 500 ug/L	500 ug/L	0
Hexachlorobutadiene	< 500 ug/L	500 ug/L	0
4-Chioro-3-methylphenol	< 500 ug/L	500 ug/L	0
2-Methylnaphthalene	600 ug/L	500 ug/L	0
Hexachlorocyclopentadiene	< 500 ug/L	500 ug/L	0
2,4,6-Trichlorophenol	< 500 ug/L	500 ug/L	0
2,4,5-Trichlorophenol	< 500 ug/L	500 ug/L	0
2-Chloronaphthalene	< 500 ug/L	500 ug/L	0
2-Nitroaniline	< 500 ug/L	500 ug/L	0
Dimethylphthalate	< 500 ug/L	500 ug/L	0
Acenaphthylene	< 500 ug/L	500 ug/L	0
2,6-Dinitrotoluene	< 500 ug/L	500 ug/L	0
3-Nitroaniline	< 500 ug/L	500 ug/L	a
Acenaphthene	< 500 ug/L	500 ug/L	O.
2,4-Dinitrophenol	< 500 ug/L	500 ug/L	0
4-Nitrophenol	< 500 ug/L	500 ug/L	0
Dibenzofuran	< 500 ug/L	500 ug/L	0
2,4-Dinitrotoluene	< 500 ug/L	500 ug/L	0
Diethylphthalate	< 500 ug/L	500 ug/L	0
Fluorene	< 500 ug/L	500 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014035

Job#:

99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-21

Collection Date: 6/16/99

Location: MW-21

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 827	0	Analyst: RGW7794
	Result	Reporting Limit	Flag
4-Chlorophenylphenylether	< 500 ug/L	500 ug/L	0
4-Nitroaniline	< 500 ug/L	500 ug/L	o
2-Methyl-4,6-dinitrophenol	< 500 ug/L	500 ug/L	0
n-Nitrosodiphenylamine	< 500 ug/L	500 ug/L	0
1,2-Diphenylhydrazine	< 500 ug/L	500 ug/L	0
4-Bromophenylphenylether	< 500 ug/L	500 ug/L	O
Hexachlorobenzene	< 500 ug/L	500 ug/L	0
Pentachlorophenol	< 500 ug/L	500 ug/L	0
Phenanthrene	< 500 ug/L	500 ug/L	0
Anthracene	< 500 ug/L	500 ug/L	0
di-n-Butytphthalate	< 500 ug/L	500 ug/L	O
Fluoranthene	< 500 ug/L	500 ug/L	o
Benzidine	< 2500 ug/L	2500 ug/L	1
Pyrene	'< 500 ug/L	500 ug/L	0
Butylbenzylphthalate	< 500 ug/L	500 ug/L	0
3,3-Dichlorobenzidine	< 500 ug/L	500 ug/L	0
Benzo(a)anthracene	< 500 ug/L	500 ug/L	0
Chrysene	< 500 ug/L	500 ug/L	0
bis(2-Ethylhexyl)phthalate	< 500 ug/L	500 ug/L	0
di-n-Octy/phthalate	< 500 ug/L	500 ug/L	0
Benzo(b)fluoranthene	< 500 ug/t∟	500 ug/L	0
Benzo(k)fluoranthene	< 500 ug/L	50 0 บg/L	0
Benzo(a)pyrene	< 500 ug/L	500 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 500 ug/L	500 ug/L	0
Dibenzo(a,h)anthracene	< 500 ug/L	500 ug/L	0
Benzo(g,h,i)perylene	< 500 ug/L	500 ug/L	0
		our age	v

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Visit us on the IntraNet at http://dewww/cssenv/lab_srv/

Tentatively Identified Compounds Report

	Doob - bl-	Estimated	Library Match	Retention	Ider	ntification Basis				
Compound	Probable Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Numbe		
No TIC's Identified										
7.17										
			<u> </u>							

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
	i 6.8		- F		
1,4-Dichlorobenzene-D4	12.30	2-Fluorophenol	1.9%	Nitrobenzene-D5	1.8%
Naphthalene-D8	16.32	Phenol	0.9%	2-Fluorobiphenyl	1.8%
Acenaphthene-D10	21.97	2,4,6-Tribromophenol	1.1%	Terphenyl-D14	1.0%
Pentachlorophenol	0.00				

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

3,3-Dichlorobenzidine

Perylene-D12

0.00

39.78



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99015516 Job #: 99-JUN-0042 Customer ID: G FRANKLIN

Sample Description: MW-22 RESAMPLE

Collection Date: 6/17/99 Location: MW-22 Type of Sample: GROUNDWATER

PAOC	1M	WAIF	KBY	GC/MS	- 827	U
L						

Test Code: MS8270_W	Test Meth	od: SW-846	8270		Analyst:	RGW7794
	F	Result	Report	ting Limit	Flag	
Pyridine	< 10) ug/L	10	ug/L	0	
n-Nitrosodimethylamine	< 10	O ug/L	10	ug/L	0	
Aniline	< 10	ug/L	10	ug/L	0	
Phenol	< 10) ug/L	10	ug/L	0	
bis(2-Chloroethyl)ether	< 10	0 ug/L	10	ug/L	0	
2-Chlorophenol	< 10	0 ug/L	10	ug/L	0	
1,3-Dichlorobenzene	< 10	O ug/L	10	ug/L	0	
1,4-Dichlorobenzene	< 16	0 ug/L	10	ug/L	0	
Benzyl alcohol	< 10	0 ug/L	10	ug/L	0	
1,2-Dichlorobenzene	< 10	0 ug/L	10	ug/L	0	
2-Methylphenol	< 10	0 ug/L	10	ug/L	0	
bis(2-Chloroisopropyl)ether	< 10	O ug/L	10	ug/L	0	
4-Methylphenol	< 10) ug/L	10	ug/L	0	
Hexachloroethane	< 10	0 ug/L	10	ug/L	0	
n-Nitrosodi-n-propylamine	< 10	0 ug/L	10	ug/L	0	
Nitrobenzene	< 16	0 ug/L	10	ug/L	0	
Isophorone	< 10	O ug/L	10	ug/L	0	
2-Nitrophenol	< 10	0 ug/L	10	ug/L	0	
2,4-Dimethylphenol	< 10	0 ug/L	10	ug/L	0	
bis(2-Chloroethoxy)methane	< 10	0 ug/L	10	ug/L	0	
2,4-Dichlorophenol	< 10	0 ug/L	10	ug/L	0	
Benzoic acid	< 10	0 ug/L	10	ug/L	0	
1,2,4-Trichlorobenzene	< 10	0 ug/L	10	ug/L	0	
Naphthalene	< 10	0 ug/L	10	ug/L	0	
4-Chloroaniline	< 10	0 ug/L	10	ug/L	0	
Hexachlorobutadiene	< 10	0 ug/L	10	ug/L	0	
4-Chloro-3-methylphenol	< 10	0 ug/L	10	ug/L	0	
2-Methylnaphthalene	< 10	0 ug/L	10	ug/L	0	
Hexachiorocyclopentadiene	< 10	0 ug/L	10	ug/L	0	
2,4,6-Trichlorophenol	< 10	0 ug/L	10	ug/L	0	
2,4,5-Trichlorophenol	< 16	0 ug/L	10	ug/L	0	
2-Chloronaphthalene	< 1	0 ug/L	10	ug/L	0	
2-Nitroaniline	< 10	0 ug/L	10	ug/L	0	
Dimethylphthalate	< 10	0 ug/L	10	ug/L	0	
Acenaphthylene	< 1	0 ug/L	10	ug/L	0	
2,6-Dinitrotoluene	< 10	0 ug/L	10	ug/L	0	
3-Nitroaniline	< 10	0 ug/L	10	ug/L	0	
Acenaphthene	< 10	0 ug/L	10	ug/L	0	
2,4-Dinitrophenol	< 1	0 ug/L	10	ug/L	0	
4-Nitrophenol	< 1	0 ug/L	10	ug/L	0	
Dibenzofuran	< 10	0 ug/L	10	ug/L	0	
2,4-Dinitrotoluene	< 1	0 ug/L	10	ug/L	0	
Diethylphthalate	< 1	•	10	ug/L	0	
Fluorene	< 1	0 ug/L	10	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99015516

Job#:

99-JUN-0042

Customer ID: G FRANKLIN

Sample Description: MW-22 RESAMPLE

Collection Date: 6/17/99

Location: MW-22

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Me	thod	: SW-846	8270			Analyst:	RGW7794
	<u>-</u>	Res	ult		Report	ling Limit	_Flag_	
4-Chlorophenylphenylether	<	10	ug/L		10	ug/L	0	
4-Nitroaniline	<	10	ug/L		10	ug/L	0	
2-Methyl-4,6-dinitrophenol	<	10	ug/L		10	ug/L	0	
n-Nitrosodiphenylamine	<	10	ug/L		10	ug/L	0	
1,2-Diphenythydrazine	<	10	ug/L		10	ug/L	0	
4-Bromophenylphenylether	<	10	ug/L		10	ug/L	0	
Hexachlorobenzene	<	10	ug/L		10	ug/L	0	
Pentachlorophenol	<	10	ug/L		10	ug/L	0	
Phenanthrene	<	10	ug/L		10	ug/L	O	
Anthracene	<	10	ug/L		10	ug/L	0	
di-n-Butylphthalate	<	10	ug/L		10	ug/L	0	
Fluoranthene	<	10	ug/L		10	ug/L	0	
Benzidine	<	50	ug/L		50	ug/L	0	
Pyrene	<	10	ug/L		10	ug/L	0	
Butylbenzylphthalate	<	10	ug/L		10	ug/L	0	
3,3-Dichlorobenzidine	<		ug/L		10	ug/L	0	
Benzo(a)anthracene	<	10	ug/L		10	ug/L	0	
Chrysene	<	10	ug/L		10	ug/L	0	
bis(2-Ethylhexyl)phthalate	<		ug/L		10	ug/L	0	
di-n-Octylphthalate	<		ug/L		10	ug/L	0	
Benzo(b)fluoranthene	<		ug/L		10	ug/L	0	
Benzo(k)fluoranthene	<		ug/L		10	ug/L	0	
Benzo(a)pyrene	<		ug/L		10	ug/L	0	
Indeno(1,2,3-c,d)pyrene	<		ug/L		10	ug/L	0	
Dibenzo(a,h)anthracene	<		ug/L		10	ug/L	0	
Benzo(g,h,i)perylene	<		ug/L		10	ug/L	0	
			_			•	•	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

BRAMLETT ST- MW-22

FIELD ID::

29U15.D

LAB ID::

99-JUN-0042 // 9-0140/6

99015516

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention	Ider	Identification Basis			
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Numbe	
No TIC's Identified									
							ļ		
								<u></u>	
·					_		 		
								····	
							 		
							· · · · · · · · · · · · · · · · · · ·		
				· · · · · · · · · · · · · · · · · · ·			 		
					-				

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
	*		1 35		
1.4-Dichlorobenzene-D4	12.28	2-Fluorophenol	90.2%	Nitrobenzene-D5	99.6%
Naphthalene-D8	16.29	Phenol	81.0%	2-Fluorobiphenyl	52.5%
Acenaphthene-D10	21.94	2,4,6-Tribromophenol	81.9%	Terphenyl-D14	66.6%
Pentachlorophenol	0.00				

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

0.00

39.72

3,3-Dichlorobenzidine

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014038

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-23

Collection Date: 6/14/99

Location: MW-243 11191

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 827	SV	OC.	IN W	TER	BY	GC/MS	- 8270
-------------------------------------	----	-----	------	-----	----	-------	--------

Report Generated 7/9/99 13:24:50

Test Code: MS8270_W	Test Method: SW-846 827	70	Analyst: RGW7794
	Result	Reporting Limit	_Flag
Pyridine	< 10 ug/L	10 ug/L	0
n-Nitrosodimethylamine	< 10 ug/L	10 ug/L	O
Aniline	< 10 ug/L	10 ug/L	0
Phenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethyl)ether	< 10 ug/L	10 ug/L	0
2-Chlorophenol	< 10 ug/L	10 ug/L	0
1,3-Dichlorobenzene	< 10 ug/L	10 ug/L	0
1,4-Dichlorobenzene	< 10 ug/L	10 ug/L	0
Benzyl alcohol	< 10 ug/L	10 ug/L	0
1,2-Dichlorobenzene	< 10 ug/L	10 ug/L	0
2-Methylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroisopropyl)ether	< 10 ug/L	10 ug/L	0
4-Methylphenol	< 10 ug/L	10 ug/L	0
Hexachloroethane	< 10 ug/L	10 ug/L	0
n-Nitrosodi-n-propylamine	< 10 ug/L	10 ug/L	0
Nitrobenzene	< 10 ug/L	10 ug/L	0
Isophorone	< 10 ug/L	10 ug/L	0
2-Nitrophenol	< 10 ug/L	· 10 ug/L	0
2,4-Dimethylphenol,	< 10 ug/L	10 ug/L	0
bis(2-Chloroethoxy)methane	< 10 ug/L	10 ug/L	0
2,4-Dichlorophenol	< 10 ug/L	10 ug/L	0
Benzoic acid	< 10 ug/L	10 ug/L	0
1,2,4-Trichlorobenzene	< 10 ug/L	10 ug/L	0
Naphthalene	< 10 ug/L	10 ug/L	0
4-Chloroaniline	< 10 ug/l.	10 ug/L	0
Hexachlorobutadiene	< 10 ug/L	10 ug/L	0
4-Chioro-3-methylphenol	< 10 ug/L	10 ug/L	0
2-Methylnaphthalene	< 10 ug/L	10 ug/L	0
Hexachlorocyclopentadiene	< 10 ug/L	10 ug/L	0
2,4,6-Trichlorophenol	< 10 ug/L	10 ug/L	0
2,4,5-Trichlorophenol	< 10 ug/L	10 ug/L	0
2-Chloronaphthalene	< 10 ug/L	10 ug/L	0
2-Nitroaniline	< 10 ug/L	10 ug/L	0
Dimethylphthalate	< 10 ug/L	10 ug/L	0
Acenaphthylene	< 10 ug/L	10 ug/L	0
2,6-Dinitrotoluene	< 10 ug/L	10 ug/L	0
3-Nitroanitine	< 10 ug/L	10 ug/L	0
Acenaphthene	< 10 ug/L	10 ug/L	0
2,4-Dinitrophenol	< 10 ug/L	10 ug/L	0
4-Nitrophenol	< 10 ug/L	10 ug/L	0
Dibenzofuran	< 10 ug/L	10 ug/L	0
2,4-Dinitrotoluene	< 10 ug/L	10 ug/L	0
Diethylphthalate	< 10 ug/L	10 ug/L	0
Fluorene	< 10 ug/L	10 ug/L	0
			-



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014038

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-23

Collection Date: 6/14/99

Location: MW-2/13 711991

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 8270	· .	Analyst: RGW7794
	Result	Reporting Limit	Flag
4-Chlorophenylphenylether	< 10 ug/L	10 ug/L	0
4-Nitroaniline	< 10 ug/L	10 ug/L	o
2-Methyl-4,6-dinitrophenol	< 10 ug/L	10 ug/L	0
n-Nitrosodiphenylamine	< 10 ug/L	10 ug/L	0
1,2-Diphenylhydrazine	< 10 ug/L	10 ug/L	O
4-Bromophenylphenylether	< 10 ug/L	10 ug/L	O
Hexachlorobenzene	< 10 ug/L	10 ug/L	0
Pentachlorophenol	< 10 ug/L	10 ug/L	0
Phenanthrene	< 10 ug/L	10 ug/L	0
Anthracene	< 10 ug/L	10 ug/L	0
di-n-Butylphthalate	< 10 ug/L	10 ug/L	0
Fluoranthene	< 10 ug/L	10 ug/L	0
Benzidine	< 50 ug/L	50 ug/L	0
Pyrene	< 10 ug/L	10 ug/L	0
Butylbenzylphthalate	< 10 ug/L	10 ug/L	0
3,3-Dichlorobenzidine	< 10 ug/L	10 ug/L	0
Benzo(a)anthracene	< 10 ug/L	10 ug/L	0
Chrysene	< 10 ug/L	10 ug/L	0
bis(2-Ethythexyl)phthatate	< 10 ug/L	10 ug/L	0
di-n-Octylphthalate	< 10 ug/L	10 ug/L	0
Benzo(b)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(k)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(a)pyrene	< 10 ug/L	10 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 10 ug/L	10 ug/L	0
Dibenzo(a,h)anthracene	< 10 ug/L	10 ug/L	0
Benzo(g,h,i)perylene	< 10 ug/L	10 ug/L	0
····································	· -#-		=

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

22020.D FIELD ID:: BRAMLETT ST - MW-22 LAB ID:: 99-JUN-0042 / / 95-14038

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention	Identification Basis			
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
No TIC's Identified								
					<u> </u>			
			.		<u> </u>			<u></u>
							ļ .	
							<u>-</u>	
					-			

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
					g o il giora i
1,4-Dichlorobenzene-D4	12.32	2-Fluorophenol	106.1%	Nitrobenzene-D5	97.9%
Naphthalene-D8	16.32	Phenol	0.0%	2-Fluorobiphenyl	81.8%
Acenaphthene-D10	21.98	2,4,6-Tribromophenoi	72.7%	Terphenyl-D14	63.0%
Pentachlorophenol	0.00				

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

0.00

39.80

3,3-Dichlorobenzidine

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: MW-24

Collection Date: 6/14/99 Location: MW-2/14 1000 Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Report Generated 7/9/99 13:24:50

Test Code: MS8270_W	Test Me	etho	d: SW-	846 8270		Analyst:	RGW7794
		Re	sult	Report	ing Limit	Flag	
Pyridine	<	10	ug/L	10	ug/L	0	
n-Nitrosodimethylamine	<	10	ug/L	10	ug/L	0	
Aniline	<	10	ug/L	10	ug/L	0	
Phenol	<	10	ug/L	10	ug/L	0	
bis(2-Chloroethyl)ether	<	10	ug/L	10	ug/L	0	
2-Chlorophenol	<	10	ug/L	10	ug/L	0	
1,3-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
1,4-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
Benzyl alcohol	<	10	ug/L	10	ug/L	0	
1,2-Dichtorobenzene	<	10	ug/L	10	ug/L	0	
2-Methylphenol	<	10	ug/L	10	ug/L	0	
bis(2-Chloroisopropyl)ether	<	10	ug/L	10	ug/L	0	
4-Methylphenol	<	10	ug/L	10	ug/L	0	
Hexachioroethane	<	10	ug/L	10	ug/L	0	
n-Nitrosodi-n-propylamine	<	10	ug/L	10	ug/L	0	
Nitrobenzene	<	10	ug/L	10	ug/L.	0	
Isophorone	<	10	ug/L	10	ug/L	0	
2-Nitrophenol	<	10	ug/L	10	ug/L	0	
2,4-Dimethylphenol	<	10	ug/L	10	ug/L	0	
bis(2-Chloroethoxy)methane	<	10	ug/L	10	ug/L	0	
2,4-Dichlorophenol	<	10	ug/L	10	ug/L	0	
Benzoic acid	<	10	ug/L	10	ug/L	0	
1,2,4-Trichlorobenzene	<	10	ug/L	10	ug/L	0	
Naphthalene	<	10	ug/L	10	ug/L	0	
4-Chloroaniline	<	10	ug/L	10	ug/L	0	
Hêxachlorobutadiene	<	10	ug/L	10	ug/L	0	
4-Chloro-3-methylphenol	<	10	ug/L	10	ug/L	0	
2-Methylnaphthalene	<	10	ug/L	10	ug/L	0	
Hexachlorocyclopentadiene	<	10	ug/L	10	ug/L	0	
2,4,6-Trichlorophenol	<	10	ug/L	10	ug/L	0	
2,4,5-Trichlorophenol	<	10	ug/L	10	ug/L	0	
2-Chloronaphthalene	<	10	ug/L	10	ug/L	0	
2-Nitroaniline	<	10	ug/L	10	ug/L	0	
Dimethylphthalate	<	10	ug/L	10	ug/L	0	
Acenaphthylene	<	10	ug/L	10	ug/L	0	
2,6-Dinitrotoluene	<	10	ug/L	10	ug/L	0	
3-Nitroaniline	<	10	ug/L	10	ug/L	0	
Acenaphthene	<	10		10	ug/L	0	
2,4-Dinitrophenol	<	10	ug/L	10	ug/L	0	
4-Nitrophenol	<	10	ug/L	10	ug/L	0	
Dibenzofuran	<	10		10	ug/L	0	
2,4-Dinitrotoluene	<	10		10	ug/L	0	
Diethylphthalate	<	10		10	ug/L	0	
Fluorene	<	10	ug/L	10	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014037

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-24

Collection Date: 6/14/99

Location: MW-264 Winter

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Result Reporting Limit Flag	Test Code: MS8270_W	Test Method: SW-846 8270		Analyst: RGW7794
4-Chlorophenylphenylether		Result	Reporting Limit	Flag
2-Methyl-4,6-dinitrophenol	4-Chlorophenylphenylether	< 10 ug/L	10 ug/L	
n-Nitrosodiphenylamine	4-Nitroaniline	< 10 ug/L	10 ug/L	0
1,2-Diphenylhydrazine < 10 ug/L	2-Methyl-4,6-dinitrophenol	< 10 ug/L -	10 ug/L	0
4-Bromophenylphenylether	n-Nitrosodiphenylamine	< 10 ug/L	10 ug/L	0
Hexachlorobenzene	1,2-Diphenylhydrazine	< 10 ug/L	10 ug/L	0
Pentachlorophenol	4-Bromophenylphenylether	< 10 ug/L	10 ug/L	0
Phenanthrene < 10 ug/L	Hexachiorobenzene	< 10 ug/L	10 ug/L	0
Anthracene	Pentachlorophenol	< 10 ug/L	10 ug/L	0
di-n-Butytphthalate < 10 ug/L	Phenanthrene	< 10 ug/L	10 ug/L	0
Fluoranthene	Anthracene	< 10 ug/L	10 ug/L	0
Benzidine	di-n-Butylphthalate	< 10 ug/L	10 ug/L	o
Pyrene	Fluoranthene	< 10 ug/L	10 ug/L	0
Butylbenzylphthalate < 10 ug/L	Benzidine	< 50 ug/L	50 ug/L	1
3,3-Dichlorobenzidine	Pyrene	< 10 ug/L	10 ug/L	O
Benzo(a)anthracene < 10 ug/L	Butylbenzylphthalate	< 10 ug/L	10 ug/L	0
Chrysene	3,3-Dichlorobenzidine	< 10 ug/L	10 ug/L	0
bis(2-Ethylhexyl)phthalate 32 ug/L 10 ug/L 0 di-n-Octylphthalate < 10 ug/L 10 ug/L 0 Benzo(b)fluoranthene < 10 ug/L 10 ug/L 0 Benzo(k)fluoranthene < 10 ug/L 10 ug/L 0 Benzo(a)pyrene < 10 ug/L 10 ug/L 0 Indeno(1,2,3-c,d)pyrene < 10 ug/L 10 ug/L 0	Benzo(a)anthracene	< 10 ug/L	10 ug/L	0
di-n-Octylphthalate < 10 ug/L	Chrysene	< 10 ug/L	10 ug/L	o
Benzo(b)fluoranthene < 10 ug/L	bis(2-Ethylhexyl)phthalate	32 ug/L	10 ug/L	0
Benzo(k)fluoranthene < 10 ug/L	di-n-Octylphthalate	< 10 ug/L	10 ug/L	0
Benzo(a)pyrene < 10 ug/L 10 ug/L 0 indeno(1,2,3-c,d)pyrene < 10 ug/L 10 ug/L 0	Benzo(b)fluoranthene	< 10 ug/L	10 ug/L	0
Indeno(1,2,3-c,d)pyrene < 10 ug/L 10 ug/L 0	Benzo(k)fluoranthene	< 10 ug/L	10 ug/L	0
	Benzo(a)pyrene	< 10 ug/L	10 ug/L	0
Dibenzo(a,h)anthracene < 10 ug/L 10 ug/L g	Indeno(1,2,3-c,d)pyrene	< 10 ug/L '	10 ug/L	0
	Dibenzo(a,h)anthracene	< 10 ug/L	10 ug/L	0
Benzo(g,h,i)perylene < 10 ug/L 10 ug/L 0	Benzo(g,h,i)perylene	< 10 ug/L	10 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

22U19.D FIELD ID:: BRAMLETT ST - MW-24 LAB ID:: 99-JUN-0042 / / 95-014037

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention	Ide	ntification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
No TIC's Identified				1000000				
								· - · · · · · · · · · · · · · · · · · ·
							-	
								<u> </u>
			1			-		
			 					

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1,4-Dichlorobenzene-D4	12.31	2-Fluorophenol	69.4%	Nitrobenzene-D5	83.9%
Naphthalene-D8	16.32	Phenol	0.4%	2-Fluorobiphenyl	73.9%
Acenaphthene-D10	21.97	2,4,6-Tribromophenol	70.2%	Terphenyl-D14	65.8%
Pentachlorophenol	0.00				

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

0.00

39.78

3,3-Dichlorobenzidine

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014039 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-25

Collection Date: 6/15/99 Location: MW-25 Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

est Code: MS8270_W	Test Method: SW-846 8	Analyst: RGW77	
	Result	Reporting Limit	Flag_
Pyridine	< 10 ug/L	10 ug/L	0
n-Nitrosodimethylamine	< 10 ug/L	10 ug/L	0
Aniline	< 10 ug/L	10 ug/L	0
Phenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethyl)ether	< 10 ug/L	10 ug/L	0
2-Chlorophenol	< 10 ug/L	10 ug/L	0
1,3-Dichlorobenzene	< 10 ug/L	10 ug/L	0
1,4-Dichlorobenzene	< 10 ug/L	10 ug/L	0
Benzyl alcohol	< 10 ug/L	10 ug/L	0
1,2-Dichlorobenzene	< 10 ug/L	10 ug/∟	0
2-Methylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroisopropyl)ether	< 10 ug/L	10 ug/L	0
4-Methylphenol	< 10 ug/L	10 ug/L	0
Hexachloroethane	< 10 ug/L	10 ug/L	0
n-Nitrosodi-n-propytamine	< 10 ug/L	10 ug/L	0
Nitrobenzene	< 10 ug/L	10 ug/L	0
Isophorone	< 10 ug/L	10 ug/L	0
2-Nitrophenol	< 10 ug/L	10 ug/L	0
2,4-Dimethylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethoxy)methane	< 10 ug/L	10 ug/L	0
2,4-Dichlorophenol	< 10 ug/L	10 ug/L	0
Benzoic acid	< 10 ug/L	10 ug/L	0
1,2,4-Trichlorobenzene	< 10 ug/L	10 ug/L	0
Naphthalene	< 10 ug/L	10 ug/L	C
4-Chloroaniline	< 10 ug/L	10 ug/L	0
Hexachlorobutadiene	< 10 ug/L	10 ug/L	0
4-Chloro-3-methylphenol	< 10 ug/L	10 ug/L	0
2-Methylnaphthalene	< 10 ug/L	10 ug/L	0
Hexachlorocyclopentadiene	< 10 ug/L	10 ug/L	0
2,4,6-Trichloraphenol	< 10 ug/L	10 ug/L	O.
2,4,5-Trichlorophenol	< 10 ug/L	10 ug/L	0
2-Chloronaphthalene	< 10 ug/L	10 ug/L	0
2-Nitroanifine	< 10 ug/L	10 ug/L	0
Dimethylphthalate	< 10 ug/L	10 ug/L	0
Acenaphthylene	< 10 ug/L	10 ug/L	0
2,6-Dinitrotoluene	< 10 ug/L	10 ug/L	0
3-Nitroaniline	< 10 ug/L	10 ug/L	0
Acenaphthene	< 10 ug/L	10 ug/L	0
2,4-Dinitrophenol	< 10 ug/L	10 ug/L	0
4-Nitrophenol	< 10 ug/L	10 ug/L	0
Dibenzofuran	< 10 ug/L	10 ug/L	0
2,4-Dinitrotoluene	< 10 ug/L	10 ug/L	0
Diethylphthalate	< 10 ug/L	10 ug/L	0
Fluorene	< 10 ug/L	10 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID # :

99014039

99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-25

Collection Date:

6/15/99

Location: MW-25

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 8270		Analyst: RGW7794
	Result	Reporting Limit	Flag
4-Chlorophenyiphenylether	< 10 ug/L	10 ug/L	0
4-Nitroaniline	< 10 ug/L	10 ug/L	0
2-Methyl-4,6-dinitrophenol	< 10 ug/L	10 ug/L	0
n-Nitrosodiphenylamine	< 10 ug/L	10 ug/L	0
1,2-Diphenylhydrazine	< 10 ug/L	10 ug/L	0
4-Bromophenylphenylether	< 10 ug/L	10 ug/L	0
Hexachlorobenzene	< 10 ug/L	10 ug/L	0
Pentachlorophenol	< 10 ug/L	10 ug/L	0
Phenanthrene	< 10 ug/L	10 ug/L	0
Anthracene	< 10 ug/L	10 ug/L	o
di-n-Butylphthalate	< 10 ug/L	10 ug/L	0
Fluoranthene	< 10 ug/L	10 ug/L	0
Benzidine	< 50 ug/L	50 ug/L	0
Pyrene	< 10 ug/L	10 ug/L	0
Butylbenzylphthalate	< 10 ug/L	10 ug/L	0
3,3-Dichlorobenzidine	< 10 ug/L	10 ug/L	o
Benzo(a)anthracene	< 10 ug/L	10 ug/L	0
Chrysene	< 10 ug/L	10 ug/L	0
bis(2-Ethylhexyl)phthalate	< 10 ug/L	10 ug/L	0
di-n-Octylphthalate	< 10 ug/L	10 ug/L	0
Benzo(b)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(k)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(a)pyrene	< 10 ug/L	10 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 10 ug/L	10 ug/L	0
Dibenzo(a,h)anthracene	< 10 ug/L	10 ug/L	0
Benzo(g,h,i)perylene	< 10 ug/L	10 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

						·	_	
20U13.D	FIELD ID::	BRALETT ST-M	W-25)		LAB ID::	99-JUN-0042 /	/ 950	14039
	Te	entatively Ide	entified Com	pounds Re	port		· ·· · · · · · · · · · · · · · · · · ·	
the state of the s	sakan dara sa sa sa sa sa sa sa sa sa sa sa sa sa					en en en en en en en en en en en en en e		<u></u>
	Probable	Estimated	Library Match	Retention	Identification Basis			
	Molecular	Concentration	Probability	Time (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
NO TIC'S IDENTIFIED					ļ		ļ	
		<u> </u>				<u> </u>	ļ	<u> </u>
							 -	
					- 			
								_
			<u> </u>					

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1,4-Dichlorobenzene-D4	11.71	2-Fluorophenol	60.2%	Nitrobenzene-D5	56.3%
Naphthalene-D8	15.62	Phenol	52.0%	2-Fluorobiphenyl	49.6%
Acenaphthene-D10	21.25	2,4,6-Tribromophenol	64.0%	Terphenyl-D14	73.9%
Phenanthrene-D10	25.93				<u></u>

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

34.44

39.20

Chrysene-D12

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014040 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: SW-1

Collection Date: 6/17/99 Location: SW1 Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

st Code: MS8270_W	Test Method:	SW-846 8270		Analyst:	RGW779
	Result	Report	ing Limit	Flag	
Pyridine	< 10 ug	rL 10	ug/L	0	
n-Nitrosodimethylamine	< 10 ug.	rL 10	ug/L	0	
Aniline	< 10 ug	/L 10	ug/L	0	
Phenol	< 10 ug.	rL 10	ug/L	0	
bis(2-Chloroethyt)ether	< 10 ug	/L 10	ug/L	0	
2-Chlorophenol	< 10 ug	/L 10	ug/L	0	
1,3-Dichlorobenzene	< 10 ug	/L 10	ug/L	0	
1,4-Dichlorobenzene	< 10 ug	/L 10	ug/L	0	
Benzyl alcohol	< 10 ug	/L 10	ug/L	0	
1,2-Dichlorobenzene	< 10 ug		ug/L	0	
2-Methylphenol	< 10 ug	/L 10	ug/L	0	
bis(2-Chloroisopropyl)ether	< 10 ug	/L 10	ug/L	0	
4-Methylphenol	< 10 ug	/L 10	ug/L	0	
Hexachloroethane	< 10 ug		ug/L	0	
n-Nitrosodi-n-propylamine	< 10 ug	/L 10	ug/L	0	
Nitrobenzene	< 10 ug	/L 10	ug/L	0	
Isophorone	< 10 ug	/L 10	ug/L	0	
2-Nitrophenol	< 10 ug	/L 10	ug/L	0	
2,4-Dimethylphenol	< 10 ug	/L 10	ug/L	0	
bis(2-Chloroethoxy)methane	< 10 ug	/L 10	ug/L	0	
2,4-Dichlorophenol	< 10 ug	/L 10	ug/L	0	
Benzoic acid	< 10 ug	/L 10	ug/L	0	
1,2,4-Trichlorobenzene	< 10 ug	/L 10	ug/L	0	
Naphthalene	< 10 ug	/L 10	ug/L	0	
4-Chloroaniline	< 10 ug	/L 10	ug/L	0	
Hexachlorobutadiene	< 10 ug	/L 10	ug/L	0	
4-Chloro-3-methylphenol	< 10 ug	/L 10	ug/L	0	
2-Methylnaphthalene	< 10 uç	/L 10	ug/L	0	
Hexachlorocyclopentadiene	< 10 uç	/L 10	ug/L	0	
2,4,6-Trichlorophenol	< 10 uç	y'L 10	ug/L	0	
2,4,5-Trichlorophenol		y/L 10	ug/L	0	
2-Chloronaphthalene		1/L 10	ug/L	0	
2-Nitroaniline	< 10 uş	y/L 10	ug/L	0	
Dimethylphthalate	< 10 ug	g/L 10	ug/L	0	
Acenaphthylene		g/L 10	ug/L	0	
2,6-Dinitrotoluene	< 10 ug	g/L 10	ug/L	0	
3-Nitroaniline	< 10 ug	g/L 10	ug/L	0	
Acenaphthene		;/L 10	ug/L	0	
2,4-Dinitrophenol		g/L 10	ug/L	0	
4-Nitrophenol		_ g/L 10	ug/L	0	
Dibenzofuran		g/L 10	ug/L	0	
2,4-Dinitrotoluene		g/L 10	ug/L	0	
Diethylphthalate		g/L 10	ug/L	0	
Fluorene		g/L 10		0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Fax: 704-875-5038

Phone: 704-875-5209

Sample ID # : 99014040

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: SW-1

Collection Date: 6/17/99

Location: SW1

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 8270		Analyst: RGW7794
	Result	Reporting Limit	_Flag_
4-Chlorophenylphenylether	< 10 ug/L	10 ug/L	0
4-Nitroaniline	< 10 ug/L	10 ug/L	0
2-Methyl-4,6-dinitrophenol	< 10 ug/L	10 ug/L	0
n-Nitrosodiphenylamine	< 10 ug/L	10 ug/L	0
1,2-Diphenylhydrazine	< 10 ug/L	10 ug/L	0
4-Bromophenylphenylether	< 10 ug/L	10 ug/L	0
Hexachlorobenzene	< 10 ug/L	10 ug/L	o
Pentachlorophenol	< 10 ug/L	10 ug/L	0
Phenanthrene	< 10 ug/L	10 ug/L	0
Anthracene	< 10 ug/L	10 ug/L	0
di-n-Butylphthalate	< 10 ug/L	10 ug/L	0
Fluoranthene	< 10 ug/L	10 ug/L	0
Benzidine	< 50 ug/L	50 ug/L	0
Pyrene	< 10 ug/L	10 ug/L	o
Butylbenzylphthalate	< 10 ug/L	10 ug/L	o
3,3-Dichlorobenzidine	< 10 ug/L	10 ug/L	0
Benzo(a)anthracene	< 10 ug/L	10 ug/L	o
Chrysene	< 10 ug/L	10 ug/L	0
bis(2-Ethylhexyl)phthatate	< 10 ug/L	10 ug/L	0
di-n-Octylphthalate	< 10 ug/L	10 ug/L	0
Benzo(b)fluoranthene	< 10 ug/L	10 ug/L	o
Benzo(k)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(a)pyrene	< 10 ug/L	10 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 10 ug/L	10 ug/L	0
Dibenzo(a,h)anthracene	< 10 ug/L	10 ug/L	o
Benzo(g,h,i)perylene	< 10 ug/L	10 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

Report Generated 7/9/99 13:24:50

Tentatively Identified Compounds Report

Probable	Estimated	Library Match	Retention	Idei	ntification Basis		
Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
				,			
		Molecular Concentration	Molecular Concentration Probability	Molecular Concentration Probability Time (RT)	Molecular Concentration Probability Time (RT) Library	Molecular Concentration Probability Time (RT) Library Manual	Molecular Concentration Probability Time (RT) Library Manual

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
			3		
1,4-Dichlorobenzene-D4	11.71	2-Fluorophenoi	43.2%	Nitrobenzene-D5	48.8%
Naphthalene-D8	15.62	Phenol	40.0%	2-Fluorobiphenyl	45.7%
Acenaphthene-D10	21.25	2,4,6-Tribromophenol	57.4%	Terphenyl-D14	48.2%
Phenanthrene-D10	25.94				

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

34.44

39.20

Chrysene-D12

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014041

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: SW-2

Collection Date: 6/17/99

Location: SW2

Type of Sample: GROUNDWATER

SVOC IN V	VATER	BY GC/MS .	. X27D

Test Code: MS8270_W	Test Method: SW-	846 8270	Analyst: RGW7794
	Result	Reporting Limit	Flag
Pyridine	< 10 ug/L	10 ug/L	0
n-Nitrosodimethylamine	< 10 ug/L	10 ug/L	0
Aniline	< 10 ug/L	10 ug/L	0
Phenoi	< 10 ug/L	10 ug/L	0
bis(2-Chloroethyl)ether	< 10 ug/L	10 ug/L	0
2-Chlorophenol	< 10 ug/L	10 ug/L	0
1,3-Dichlorobenzene	< 10 ug/L	10 ug/L	0
1,4-Dichlorobenzene	< 10 ug/L	10 ug/L	0
Benzył alcohol	< 10 ug/L	10 ug/L	0
1,2-Dichlorobenzene	< 10 ug/L	10 ug/L	0
2-Methylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroisopropyl)ether	< 10 ug/L	10 ug/L	0
4-Methylphenol	< 10 ug/L	10 ug/L	0
Hexachloroethane	< 10 ug/L	10 ∪g/L	0
n-Nitrosodi-n-propylamine	< 10 ug/L	10 ug/L	0
Nitrobenzene	< 10 ug/L	10 ug/L	0
Isophorone	< 10 ug/L	10 ug/L	0
2-Nitrophenol	< 10 ug/L	10 ug/L	0
2,4-Dimethylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethoxy)methane	< 10 ug/L	10 ug/L	0
2,4-Dichlorophenol	< 10 ug/L	10 ug/L	0
Benzoic acid	< 10 ug/L	10 ug/L	0
1,2,4-Trichlorobenzene	< 10 ug/L	10 ug/L	0
Naphthalene	< 10 ug/L	10 ug/L	0
4-Chloroaniline	< 10 ug/L	10 ug/L	0
Hexachlorobutadiene	< 10 ug/L	10 ug/L	0
4-Chloro-3-methylphenol	< 10 ug/L	10 ug/L	O
2-Methylnaphthalene	< 10 ug/L	10 ug/L	O
Hexachlorocyclopentadiene	< 10 ug/L	10 ug/L	0
2,4,6-Trichlorophenol	< 10 ug/L	10 ug/L	0
2,4,5-Trichlorophenol	< 10 ug/L	10 ug/L	0
2-Chloronaphthalene	< 10 ug/L	10 ug/L	0
2-Nitroaniline	< 10 ug/L	10 ug/L	0
Dimethylphthalate	< 10 ug/L	10 ug/L	0
Acenaphthylene	< 10 ug/L	10 ug/L	0
2,6-Dinitrotoluene	< 10 ug/L	10 ug/L	0
3-Nitroaniline	< 10 ug/L	10 ug/L	0
Acenaphthene	< 10 ug/L	10 ug/L	0
2,4-Dinitrophenol	< 10 ug/L	10 ug/L	0
4-Nitrophenol	< 10 ug/L	10 ug/L	0
Dibenzofuran	< 10 ug/L	10 ug/L	0
2,4-Dinitrotoluene	< 10 ug/L	10 ug/L	0
Diethylphthalate	< 10 ug/L	10 ug/L	0
Fluorene	< 10 ug/L	10 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014041

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: SW-2

Collection Date: 6/17/99

Location: SW2

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 8270		Analyst: RGW7794
	Result	Reporting Limit	_Flag_
4-Chlorophenylphenylether	< 10 ug/L	10 ug/L	0
4-Nitroaniline	< 10 ug/L	10 ug/L	0
2-Methyl-4,6-dinitrophenol	< 10 ug/L	10 ug/L	0
n-Nitrosodiphenylamine	< 10 ug/L	10 ug/L	0
1,2-Diphenylhydrazine	< 10 ug/L	10 ug/L	0
4-Bromophenylphenylether	< 10 ug/L	10 ug/L	0
Hexachiorobenzene	< 10 ug/L	10 ug/L	0
Pentachlorophenol	< 10 ug/L	10 ug/L	0
Phenanthrene	< 10 ug/L	10 ug/L	a
Anthracene	< 10 ug/L	10 ug/L	Q
di-n-Butylphthalate	< 10 ug/L	10 ug/L	Q
Fluoranthene	< 10 ug/L	10 ug/L	0
Benzidine	< 50 ug/L	50 ug/L	0
Pyrene	< 10 ug/L	10 ug/L	0
Butylbenzylphthalate	< 10 ug/L	10 ug/L	0
3,3-Dichlorobenzidine	< 10 ug/L	10 ug/L	0
Benzo(a)anthracene	< 10 ug/L	10 ug/L	0
Chrysene	< 10 ug/L	10 ug/L	0
bis(2-Ethylhexyl)phthalate	< 10 ug/L	10 ug/L	0
di-n-Octylphthalate	< 10 ug/L	10 ug/L	0
Benzo(b)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(k)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(a)pyrene	< 10 ug/L	10 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 10 ug/L	10 ug/L	0
Dibenzo(a,h)anthracene	< 10 ug/L	10 ug/L	0
Benzo(g,h,i)perylene	< 10 ug/L	10 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention	Ider	ntification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
<u> </u>	nes entre de la companya de la companya de la companya de la companya de la companya de la companya de la comp	a poses arcolomo postensionamente amendo amendo antiquant.	as international security and a contraction of the	<u> </u>	Mari A. J. A. Jan., Miller Broker, Sect. (1)	g traditional photograph grant glan		<u> and a production of the second sectors</u>
NO TIC'S IDENTIFIED								
······································					 			
							<u> </u>	
			-		<u> </u>	<u> </u>	-	
	- 		<u> </u>					
						<u> </u>		···
		<u> </u>						
	 							
			 					
								· · · · · ·
								·
							·	
								 ,

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery	
		ng pala salaga in dining palaban sala Mga ngangganan katawa nganggan				F
1,4-Dichlorobenzene-D4	11.71	2-Fluorophenol	72.9%	Nitrobenzene-D5	75.1%	ı
Naphthalene-D8	15.62	Phenol	63.0%	2-Fluorobiphenyl	64.8%	ı
Acenaphthene-D10	21.25	2,4,6-Tribromophenol	80.8%	Terphenyl-D14	91.0%	ı
Phenanthrene-D10	25.94					7

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

34.43

39.20

Chrysene-D12

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: SW-3

Collection Date: 6/17/99 Location: SW3 Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

est Code: MS8270_W	Test Me	etho	i: SW-846 8	270		Analyst:	RGW779
		Res	sult	Repor	ting Limit	Flag	
Pyridine	<	10	ug/L	10	ug/L	0	
n-Nitrosodimethylamine	<	10	ug/L	10	ug/L	0	
Aniline	<	10	ug/L	10	ug/L	0	
Phenoi	<	10	ug/L	10	ug/L	0	
bis(2-Chioroethyl)ether	<	10	ug/L	10	ug/L	0	
2-Chlorophenol	<	10	ug/L	10	ug/L	0	
1,3-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
1,4-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
Benzyl alcohol	<	10	ug/L	10	ug/L	0	
1,2-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
2-Methylphenol	<	10	ug/L	10	ug/L	0	
bis(2-Chloroisopropyl)ether	<	10	ug/L	10	ug/L	0	
4-Methylphenol	<	10	ug/L	10	ug/L	0	
Hexachloroethane	<	10	ug/L	10	ug/L	0	
n-Nitrosodi-n-propylamine	<	10	ug/L	10	ug/L	0	
Nitrobenzene	<	10	ug/L	10	ug/L	0	
Isophorone	<	10	ug/L	10	ug/L	0	
2-Nitrophenol	<	10	ug/L	10	ug/L	0	
2,4-Dimethylphenol	<	10	ug/L	10	ug/L	0	
bis(2-Chloroethoxy)methane	<	10	ug/L	10	ug/L	0	
2,4-Dichlorophenol	<	10	ug/L	10	ug/L	0	
Benzoic acid	<	10	ug/L	10	ug/L	0	
1,2,4-Trichlorobenzene	<	10	ug/L	10	ug/L	0	
Naphthalene	<	10	ug/L	10	ug/L	0	
4-Chloroaniline	<	10	ug/L	10	ug/L	0	
Hexachlorobutadiene	<	10	ug/L	10	ug/L	0	
4-Chloro-3-methylphenol	<	10	ug/L	10	ug/L	0	
2-Methylnaphthalene	<	10	ug/L	10	ug/L	0	
Hexachlorocyclopentadiene	<	10	ug/L	10	ug/L	0	
2,4,6-Trichlorophenol	<	10	ug/L	10	ug/L	0	
2,4,5-Trichlorophenol	<	10	ug/L	10	ug/L	0	
2-Chloronaphthalene	<	10	ug/L	10	ug/L	0	
2-Nitroaniline	<	10	ug/L	10	ug/L	0	
Dimethylphthalate	<	10	ug/L	10	ug/L	0	
Acenaphthylene	<	10	ug/L	10	ug/L	0	
2,6-Dinitrotoluene	<	10	ug/L	10	ug/L	0	
3-Nitroaniline	<	10	ug/L	10	ug/L	0	
Acenaphthene	<	10	ug/L	10	ug/L	a	
2,4-Dinitrophenol	<	10	ug/L	10	ug/L	0	
4-Nitrophenol	<	10	ug/L	10	ug/L	0	
Dibenzofuran	<	10	ug/L	10	ug/L	0	
2,4-Dinitrotoluene	<	10	ug/L	10	ug/L	0	
Diethylphthalate	<	10	ug/L	10	ug/L	0	
Fluorene	<	10	ug/L	10	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014042

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: SW-3

Collection Date: 6/17/99

Location: SW3

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method:	SW-846 8270	Ana	alyst: RGW7794
	Resul	tReport	ing Limit Flag	
4-Chlorophenylphenylether	< 10 ug	g/L 10	ug/L 0	_
4-Nitroaniline	< 10 ບຸ	g/L 10	ug/L 0	
2-Methyl-4,6-dinitrophenol	< 10 uç	g/L 10	ug/L 0	
n-Nitrosodiphenylamine	< 10 ug	g/L 10	ug/L 0	
1,2-Diphenylhydrazine	< 10 ug]/L 10	ug/L 0	
4-Bromophenylphenylether	< 10 uç	g/L 10	ug/L 0	
Hexachlorobenzene	< 10 ug	J/L 10	ug/L 0	
Pentachlorophenol	< 10 uç	g/L 10	ug/L 0	
Phenanthrene	< 10 uç	⊋/L 10	ug/L 0	
Anthracene	< 10 uç	g/L 10	ug/L 0	
di-n-Butylphthalate	< 10 uş	3/L 10	ug/L 0	
Fluoranthene	< 10 uş	p/L 10	ug/L 0	
Benzidine	< 50 ug	9/L 50	ug/L 0	
Pyrene	< 10 uş	g/L 10	ug/L 0	
Butylbenzylphthalate	< 10 ug	y/L 10	ug/L. 0	
3,3-Dichlorobenzidine	< 10 ug	g/L 10	ug/L 0	
Benzo(a)anthracene	< 10 uç	g/L 10	ug/L 0	
Chrysene	< 10 ug	2/L 10	ug/L 0	
bis(2-Ethylhexyl)phthalate	< 10 ug	g/L 10	ug/L 0	
di-n-Octyiphthalate	< 10 ug	3/L 10	ug/L 0	
Benzo(b)fluoranthene	< 10 uş	- g/L 10	ug/L 0	
Benzo(k)fluoranthene	< 10 ug	- 2/L 10	ug/L 0	
Benzo(a)pyrene	< 10 ug	2/L 10	ug/L 0	
Indeno(1,2,3-c,d)pyrene	,	, g/L 10	ug/L 0	
Dibenzo(a,h)anthracene	< 10 ug	- 3/L 10	ug/L 0	
Benzo(g,h,i)perylene	< 10 uş	- g/L 10	ug/L 0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention] Idei	ntification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
NO TIC'S IDENTIFIED								

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1.4-Dichlorobenzene-D4	11.71	2-Fluorophenol	61.7%	Nitrobenzene-D5	59.0%
Naphthalene-D8	15.62	Phenol	54.0%	2-Fluorobiphenyl	53.2%
Acenaphthene-D10	21.25	2,4,6-Tribromophenol	80.2%	Terphenyl-D14	86.0%
Phenanthrene-D10	25.94		,		

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

34.44

39.20

Chrysene-D12

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014043 Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: SW-4

Collection Date: 6/17/99

Location: SW4

Type of Sample: GROUNDWATER

SVOC IN WATER I	BY GC/MS - 8270
-----------------	-----------------

Test Code: MS8270_W	Test Me	etho	d: SW-8	46 8270			Analyst:	RGW7794
		Re	sult		R <u>e</u> port	ing Limit	Flag	
Pyridine	<	10	ug/L		10	ug/L	0	
n-Nitrosodimethylamine	<	10	ug/L		10	ug/L	0	
Aniline	<	10	ug/L		10	ug/L	ů	
Phenol	<	10	ug/L		10	ug/L	0	
bis(2-Chloroethyl)ether	<	10	ug/L		10	ug/L	0	
2-Chlorophenol	<	10	ug/L		10	ug/L	0	
1,3-Dichlorobenzene	<	10	ug/L		10	ug/L	0	
1,4-Dichlorobenzene	<	10	ug/L		10	ug/L	0	
Benzyt alcohol	<	10	ug/L		10	ug/L	ů	
1,2-Dichlorobenzene	<	10	ug/L		10	ug/L	0	
2-Methylphenol	<	10	ug/L		10	ug/L	0	
bis(2-Chloroisopropyl)ether	<	10	ug/L		10	ug/L	0	
4-Methylphenol	<	10	ug/L		10	ug/L	0	
Hexachloroethane	<	10	ug/L		10	ug/L	0	
n-Nitrosodi-n-propylamine	<	10	ug/L		10	ug/L	0	
Nitrobenzene	<	10	ug/L		10	ug/L	0	
Isophorone	<	10	ug/L		10	ug/L	0	
2-Nitrophenol	<	10	ug/L		10	ug/L	0	
2,4-Dimethylphenol	<	10	ug/L		10	ug/L	0	
bis(2-Chloroethoxy)methane	<	10	ug/L		10	ug/L	0	
2,4-Dichlorophenol	<	10	ug/L		10	ug/L	0	
Benzoic acid	<	10	ug/L		10	ug/L	0	
1,2,4-Trichlorobenzene	<	10	ug/L		10	ug/L	0	
Naphthalene	<	10	ug/L		10	ug/L	0	
4-Chloroaniline	<	10	ug/L		10	ug/L	0	
Hexachlorobutadiene	<	10	ug/L		10	ug/L	0	
4-Chloro-3-methylphenol	<	10	ug/L		10	ug/L	0	
2-Methylnaphthalene	<	10	ug/L		10	ug/L	0	
Hexachlorocyclopentadiene	<	10	ug/L		10	ug/L	0	
2,4,6-Trichiorophenol	<	10	ug/L		10	ug/L	0	
2,4,5-Trichlorophenol	<	10	ug/L		10	ug/L	0	
2-Chloronaphthalene	<	10	ug/L		10	ug/L	0	
2-Nitroaniline	<	10	ug/L		10	ug/L	0	
Dimethylphthalate	<	10	ug/L		10	ug/L	0	
Acenaphthylene	<	10	ug/L		10	ug/L	0	
2,6-Dinitrotoluene	<	10	ug/L		10	ug/L	0	
3-Nitroaniline	<	10	ug/L		10	ug/L	0	
Acenaphthene	<	10	ug/L		10	ug/L	0	
2,4-Dinitrophenol	<	10	ug/L		10	ug/L	0	
4-Nitrophenol	<	10	ug/L		10	ug/L	0	
Dibenzofuran	<	10	ug/L		10	ug/L	0	
2,4-Dinitrotoluene	<	10	ug/L		10	ug/L	0	
Diethylphthalate	<	10	ug/L		10	ug/L	0	
Fluorene	<	10	ug/L		10	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014043

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: SW-4

Collection Date: 6/17/99

Location: SW4

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

est Code: MS8270_W	Test Method: SW-846 8:	270	Analyst: RGW7794
	Result	Reporting Limit	Flag
4-Chlorophenylphenylether	< 10 ug/L	10 ug/L	0
4-Nitroaniline	< 10 ug/L	10 ug/L	0
2-Methyl-4,6-dinitrophenol	< 10 ug/L	10 ug/L	0
n-Nitrosodiphenylamine	< 10 ug/L	10 ug/L	0
1,2-Diphenylhydrazine	< 10 ug/L	10 ug/L	0
4-Bromophenylphenylether	< 10 ug/L	10 ug/L	0
Hexachlorobenzene	< 10 ug/L	10 ug/L	0
Pentachlorophenol	< 10 ug/L	10 ug/L	0
Phenanthrene	< 10 ug/L	10 ug/L	0
Anthracene	< 10 ug/L	10 ug/L	0
di-n-Butylphthalate	< 10 ug/L	10 ug/L	0
Fluoranthene	< 10 ug/L	10 ug/L	0
Benzidine	< 50 ug/L	50 ug/L	0
Pyrene	< 10 ug/L	10 ug/L	0
Butylbenzylphthalate	< 10 ug/L	10 ug/L	0
3,3-Dichlorobenzidine	< 10 ug/L	10 ug/L	0
Senzo(a)anthracene	< 10 ug/L	10 ug/L	0
Chrysene	< 10 ug/L	10 ug/L	0
bis(2-Ethylhexyl)phthalate	< 10 ug/L	10 ug/L	0
di-n-Octylphthalate	< 10 ug/L	10 ug/L	0
Benzo(b)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(k)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(a)pyrene	< 10 ug/L	10 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 10 ug/L	10 ug/L	0
Dibenzo(a,h)anthracene	< 10 ug/L	10 ug/L	ō
Benzo(g,h,i)perylene	< 10 ug/L	10 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

23U17.D	FIELD ID::	BRALETT ST-SW	/-4)		LAB ID::	99-JUN-0042 /	/ 990	4043
				 		······································		
	\overline{I}	entatively Ide	ntified Con	npounds Re	port			
						nar vanammen e Bed v		
	Probable	Estimated	Library Match	Retention	Idei	ntification Basis		
	Molecular	Concentration	Probability	Time (RT)	Library	Manual	[Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
NO TIC'S IDENTIFIED								
NO TIC S IDENTIFIED			<u> </u>	-				
				 				
				<u> </u>				
				 				
		-	· · · · · · · · · · · · · · · · · · ·					
			· · · · · · · · · · · ·	<u> </u>				
						<u> </u>		
Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery			
Internat Standard	(Minutes)	Acia Surrogates	76 Recovery	BITY Burrogates	70 Necovery			
1,4-Dichlorobenzene-D4	11.71	2-Fluorophenol	65.3%	Nitrobenzene-D5	68.3%	<u>UŞEPA8270</u>	G.C. C	<u>Conditions</u>
Naphthalene-D8	15.62	Phenol	56.0%	2-Fluorobiphenyl	56.2%	05		·
Acenaphthene-D10	21.25	2,4,6-Tribromophenol	74.5%	Terphenyl-D14	68.2%	25m x 0.2mm x Crosslinked 5% M		
Phenanthrene-D10	25.94						-	
Chrysene-D12	34.44]				He, 0.5 ml/min, 45°C		
Perylene-D12	39.20	<u> </u>	15:			300°C (8.0°C/min),	noid 300	r jor 21 min.
P	Page 1 of 1 (Flags are described on page #2 of Client Report)							



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014046

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: SW-5

Collection Date: 6/17/99

Location: SW5

Type of Sample: GROUNDWATER

SVOC IN	WATER	BY GC/N	1S - 8270
---------	-------	---------	-----------

Test Code: MS8270_W	Test Method: SW-846 82	270	Analyst: RGW7794
	Result	Reporting Limit	_Flag_
Pyridine	< 50 ug/L	50 ug/L	1
n-Nitrosodimethylamine	< 50 ug/L	50 ug/L	1
Aniline	< 50 ug/L '	50 ug/L	1
Phenol	< 50 ug/L	50 ug/L	1
bis(2-Chloroethyl)ether	< 50 ug/L	50 ug/L	1
2-Chlorophenol	< 50 ug/L	50 ug/L	1
1,3-Dichlorobenzene	< 50 ug/L	50 ug/L	1
1,4-Dichlorobenzene	< 50 ug/L	50 ug/L	1
Benzyi alcohol	< 50 ug/L	50 ug/L	1
1,2-Dichlorobenzene	< 50 ug/L	50 ug/L	1
2-Methylphenol	< 50 ug/L	50 ug/L	1
bis(2-Chloroisopropyl)ether	< 50 ug/L	50 ug/L	1
4-Methylphenol	< 50 ug/L	50 ug/L	1
Hexachloroethane	< 50 ug/L	50 ug/L	1
n-Nitrosodi-n-propylamine	< 50 ug/L	50 ug/L	1
Nitrobenzene	< 50 ug/L	50 ug/L	1
Isophorone	< 50 ug/L	50 ug/L	1
2-Nitrophenol	< 50 ug/L	50 ug/L	1
2,4-Dimethylphenol	< 50 ug/L	50 ug/L	1
bis(2-Chloroethoxy)methane	< 50 ug/L	50 ug/L	1
2,4-Dichlorophenol	< 50 ug/L	50 ug/L	1
Benzoic acid	< 50 ug/L	50 ug/L	1
1,2,4-Trichlorobenzene	< 50 ug/L	50 ug/L	1
Naphthalene	< 50 ug/L	50 ug/L	1
4-Chloroaniline	< 50 ug/L	50 ug/L	1
Hexachlorobutadiene	< 50 ug/L	50 ug/L	1
4-Chloro-3-methylphenol	< 50 ug/L	50 ug/L	1
2-Methylnaphthalene	< 50 ug/L	50 ug/L	1
Hexachlorocyclopentadiene	< 50 ug/L	50 ug/L	1
2,4,6-Trichlorophenol	< 50 ug/L	50 ug/L	1
2,4,5-Trichlorophenol	< 50 ug/L	50 ug/L	1
2-Chloronaphthalene	< 50 ug/L	50 ug/L	1
2-Nitroaniline	< 50 ug/L	50 ug/L	1
Dimethylphthalate	< 50 ug/L	50 ug/L	1
Acenaphthylene	< 50 ug/L	50 ug/L	1
2,6-Dinitrotoluene	< 50 ug/L	50 ug/L	1
3-Nitroaniline	< 50 ug/L	50 ug/L	1
Acenaphthene	< 50 ug/L	50 ug/L	1
2,4-Dinitrophenol	< 50 ug/L	50 ug/L	1
4-Nitrophenol	< 50 ug/L	50 ug/L	1
Dibenzofuran	< 50 ug/L	50 ug/L	1
2,4-Dinitrotoluene	< 50 ug/L	50 ug/L	1
Diethylphthalate	< 50 ug/L	50 ug/L	1
Fluorene	< 50 ug/L	50 ug/L	1



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014046

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: SW-5

Collection Date: 6/17/99

Location: SW5

Type of Sample: GROUNDWATER

SVOCTN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 8270)	Analyst: RGW7794
	Result	Reporting Limit	_Flag
4-Chlorophenylphenylether	< 50 ug/L	50 ug/L	1
4-Nitroaniline	< 50 ug/L	50 ug/L	1
2-Methyl-4,6-dinitrophenol	< 50 ug/L	50 ug/L	1
л-Nitrosodiphenylamine	< 50 ug/L	50 ug/L	1
1,2-Diphenylhydrazine	< 50 ug/L	50 ug/L	1
4-Bromophenylphenylether	< 50 ug/L	50 ug/L	1
Hexachlorobenzene	< 50 ug/L	50 ug/L	1
Pentachlorophenol	< 50 ug/L	50 ug/L	1
Phenanthrene	< 50 ug/L	50 ug/L	1
Anthracene	< 50 ug/L	50 ug/L	1
di-n-Butylphthalate	< 50 ug/L	50 ug/L	1
Fluoranthene	< 50 ug/L	50 ug/L	1
Benzidine	< 250 ug/L	250 ug/L	1
Pyrene	< 50 ug/L	50 ug/L	1
Butylbenzylphthalate	< 50 ug/L	50 ug/L	1
3,3-Dichlorobenzidine	< 50 ug/L	50 ug/L	1
Benzo(a)anthracene	< 50 ug/L	50 ug/L	1
Chrysene	< 50 ug/L	50 ug/L	1
bis(2-Ethylhexyl)phthalate	< 50 ug/L	50 ug/L	1
di-n-Octylphthalate	< 50 ug/L	50 ug/L	1
Benzo(b)fluoranthene	< 50 ug/L	50 ug/L	1
Benzo(k)fluoranthene	< 50 ug/L	50 ug/L	1
Benzo(a)pyrene	< 50 ug/L	50 ug/L	1
Indeno(1,2,3-c,d)pyrene	< 50 ug/L	50 ug/L	1
Dibenzo(a,h)anthracene	< 50 ug/L	50 ug/L	1
Benzo(g,h,i)perylene	< 50 ug/L	50 ug/L	1
		=	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention	Idei	ntification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
	sa isto il colta di la distributa della di di di constanti di di di constanti di di di constanti di di constanti	i i i i i i jagojigi iz sali i sali sali sali sali sali sali sa	it is heritari i ar hastri itti i suretti heriti i se	u 1941 shirrey ad i 1944 ta 1944 ta 1944 ta 1944 ta 1944 ta 1944 ta 1944 ta 1944 ta 1944 ta 1944 ta 1944 ta 19	A PRODUCTION OF THE PROPERTY O	The state of the s		
NO TIC'S IDENTIFIED								
							ļ	
						 	 	<u> </u>
							 - -	
							 	
							<u> </u>	
								·
						ļ		<u> </u>
			 					
			 			<u> </u>		
					· · ·			
			 				-	

Γ	Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery	
\vdash							USEPA8270 G.C.
r	1,4-Dichlorobenzene-D4	11.72	2-Fluorophenol	7.4%	Nitrobenzene-D5	45.7%	<u>00L/A-0270 0.C.</u>
r	Naphthalene-D8	15.62	Phenol	5.7%	2-Fluorobiphenyl	36.7%	25m x 0.2mm x 0.33un
٢	Acenaphthene-D10	21.25	2,4,6-Tribromophenol	0.0%	Terphenyl-D14	69.1%	Crosslinked 5% Methyl S
卜	Phenanthrene-D10	25.94					_
	Chrysene-D12	34.44					He, 0.5 ml/min, 45°C (hold

C. Conditions

um Ultra Two Silicon Column

ld 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

39.20

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209

Fax: 704-875-5038

Sample ID#: 99014047

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: SW-7

Collection Date: 6/17/99

Location: SW7

Type of Sample: GROUNDWATER

ENTRACE	BI VAYA'S	CO DV	GC/MS -	NNTH
SYUCI	NAA	ERDI	GUNIO -	02/0

Test Code: MS8270_W	Test Method: SW-846 82	70	Analyst: RGW7794
•	Result	Reporting Limit	Flag
Pyridine	< 10 ug/L	10 ug/L	0
n-Nitrosodimethylamine	< 10 ug/L	10 ug/L	0
Aniline	< 10 ug/L	10 ug/L	0
Phenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethyl)ether	< 10 ug/L	10 ug/L	0
2-Chlorophenol	< 10 ug/L	10 ug/L	0
1,3-Dichlorobenzene	< 10 ug/L	10 ug/L	0
1,4-Dichlorobenzene	< 10 ug/L	10 ug/L	0
Benzyl alcohol	< 10 ug/L	10 ug/L	0
1,2-Dichlorobenzene	< 10 ug/L	10 ug/L	0
2-Methylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroisopropyl)ether	< 10 ug/L	10 ug/L	0
4-Methylphenol	< 10 ug/L	10 ug/L	0
Hexachloroethane	< 10 ug/L	10 ug/L	0
n-Nitrosodi-n-propylamine	< 10 ug/L	10 ug/L	0
Nitrobenzene	< 10 ug/L	10 ug/L	0
Isophorone	< 10 ug/L	10 ug/L	0
2-Nitrophenol	< 10 ug/L	10 ug/L	0
2,4-Dimethylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethoxy)methane	< 10 ug/L	10 ug/L	0
2,4-Dichlorophenol	< 10 ug/L	10 ug/L	0
Benzoic acid	< 10 ug/L	10 ug/L	0
1,2,4-Trichlorobenzene	< 10 ug/L	10 ug/L	0
Naphthalene	< 10 ug/L	10 ug/L	0
4-Chloroaniline	< 10 ug/L	10 ug/L	0
Hexachlorobutadiene	< 10 ug/L	10 ug/L	0
4-Chloro-3-methylphenol	< 10 ug/L	10 ug/L	0
2-Methylnaphthalene	< 10 ug/L	10 ug/L	0
Hexachlorocyclopentadiene	< 10 ug/L	10 ug/L	0
2,4,6-Trichlorophenol	< 10 ug/L	10 ug/L	0
2,4,5-Trichlorophenol	< 10 ug/L	10 ug/L	0
2-Chloronaphthalene	< 10 ug/L	10 ug/L	a
2-Nitroaniline	< 10 ug/L	10 ug/L	0
Dimethylphthalate	< 10 ug/L	10 ug/L	0
Acenaphthylene	< 10 ug/L	10 ug/L	0
2,6-Dinitrotoluene	< 10 ug/L	10 ug/L	0
3-Nitroaniline	< 10 ug/L	10 ug/L	0
Acenaphthene	< 10 ug/L	10 ug/L	0
2,4-Dinitrophenol	< 10 ug/L	10 ug/L	0
4-Nitrophenol	< 10 ug/L	10 ug/L	0
Dibenzofuran	< 10 ug/L	10 ug/L	0
2,4-Dinitrotoluene	< 10 ug/L	10 ug/L	0
Diethylphthalate	< 10 ug/L	10 ug/L	0
Fluorene	< 10 ug/L	10 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014047

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: SW-7

Collection Date: 6/17/99

Location: SW7

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 8270		Analyst: RGW7794
	Result	Reporting Limit	Flag
4-Chlorophenylphenylether	< 10 ug/L	10 ug/L	0
4-Nitroaniline	< 10 ug/L	10 ug/L,	0
2-Methyl-4,6-dinitrophenol	< 10 ug/L	10 ug/L	0
n-Nitrosodiphenylamine	< 10 ug/L	10 ug/L	0
1,2-Diphenylhydrazine	< 10 ug/L	10 ug/L	0
4-Bromophenylphenylether	< 10 ug/L	10 ug/L	0
Hexachlorobenzene	< 10 ug/L	10 ug/L	O
Pentachlorophenol	< 10 ug/L	10 ug/L	0
Phenanthrene	< 10 ug/L	10 ug/L	0
Anthracene	< 10 ug/L	10 ug/L	0
di-n-Butylphthalate	< 10 ug/L	10 ug/L	0
Fluoranthene	< 10 ug/L	10 ug/L	0
Benzidine	< 50 ug/L	50 ug/L	0
Pyrene	< 10 ug/L	10 ug/L	0
Butylbenzylphthalate	< 10 ug/L	10 ug/L	0
3,3-Dichlorobenzidine	< 10 ug/L	10 ug/L	0
Benzo(a)anthracene	< 10 ug/L	10 ug/L	0
Chrysene	< 10 ug/L	10 ug/L	0
bis(2-Ethylhexyl)phthalate	< 10 ug/L	10 ug/L	0
di-n-Octylphthalate	< 10 ug/L	10 ug/L	0
Benzo(b)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(k)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(a)pyrene	< 10 ug/L	10 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 10 ug/L	10 ug/L	0
Dibenzo(a,h)anthracene	< 10 ug/L	10 ug/L	0
Benzo(g,h,i)perylene	< 10 ug/L	10 ug/L	0
		-	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

Report Generated 7/9/99 13:24:50

							_	_
19.D	FIELD ID::	BRALETT ST-SW	V-7)		LAB ID::	99-JUN-0042 /	/ 9 .	4047
						537		
	<u> </u>	and and an analysis of the second		7 7	of the second se	isan mining		
	$-\frac{I}{I}$	Tentatively Ide	ntifi <u>ed Con</u>	npounds Kej	oort			
			120			entification Basis		
	Probable Molecules	Estimated	Library Match			Manual	,	Scan
Compound	Molecular Weight	Concentration	Probability (%)	Time (RT) (Minutes)	Library Match	Manuai Interpretation	RT	Scan Number
Отроина	Weight	(ug/L)	(70)	(Winus)	Mater	Title prevanor	111	Truntoe
							1	
NO TIC'S IDENTIFIED			-					
				 	-		 	
							 	f
······································			-		 		 	(<u></u>
		+	 	 	+	-	 	(
					 	-	+	í
		+						1
						+		(
								1
								i
								(<u> </u>
								<u> </u>
		<u>'</u>				<u> </u>		
			<u></u>		<u> </u>			
			<u> </u>		ļ		1	
		<u> </u>	<u> </u>		 		1	r
			 '		 		 	
				 	 			· · · · · · · · · · · · · · · · · · ·
			<u> </u>				<u> </u>	
Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery			<u> </u>
International a	(Interested)	Acta Darrogano	78 166600013	DITT DUTTOGUES	70 1000000		<u></u>	
1,4-Dichlorobenzene-D4	11.71	2-Fluorophenol	62.0%	Nitrobenzene-D5	63.0%	<u>USEPA8270</u>	G.C. (<u> Conditions</u>
Naphthalene-D8	15.62	Phenol	51.0%	2-Fluorobiphenyl	51.9%	1	- 4	·· 🛖
Acenaphthene-D10	21.25	2,4,6-Tribromophenol	62.4%	Terphanyl-D14	41.5%	25m x 0.2mm x 0 Crosslinked 5% Me		
Phenanthrene-D10	25.94	T	· · · · · · · · · · · · · · · · · · ·		<u> </u>	Urusammed o /v mic	thyi om	con Comm
Chrysene-D12	34.44	1				He, 0.5 ml/min, 45°C		
Pervlene-D12	39.21	1				300°C (8.0°C/min),	hold 30/	0° for 21 min.

(Flags are described on page #2 of Client Report) Page 1 of 1

Perylene-D12

34.44 39.21



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014048

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: SW-8

Collection Date: 6/17/99

Location: SW8

Type of Sample: GROUNDWATER

SVOCT	N WATER	RY CC/M	IS - R270

Test Code: MS8270_W	Test Method: SW-8	46 8270	Analyst: RGW779
	Result	Reporting Limit	Flag
Pyridine	< 10 ug/L	10 ug/L.	0
n-Nitrosodimethylamine	< 10 ug/L	10 ug/L	0
Aniline	< 10 ug/L	10 ug/L	0
Phenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethyl)ether	< 10 ug/L	10 ug/L	0
2-Chlorophenol	< 10 ug/L	10 ug/L	0
1,3-Dichlorobenzene	< 10 ug/L	10 ug/L	0
1,4-Dichlorobenzene	< 10 ug/L	10 ug/L	0
Benzyl alcohol	< 10 ug/L	10 ug/L	0
1,2-Dichlorobenzene	< 10 ug/L	10 ug/L	0
2-Methylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroisopropyl)ether	< 10 ug/L	10 ug/L	0
4-Methylphenol	< 10 ug/L	10 ug/L	0
Hexachloroethane	< 10 ug/L	10 vg/L	0
n-Nitrosodi-n-propytamine	< 10 ug/L	10 ug/L	0
Nitrobenzene	< 10 ug/L	10 ug/L	0
Isophorone	< 10 ug/L	10 ug/L	0
2-Nitrophenol	< 10 ug/L	10 ug/L	0
2,4-Dimethylphenol	< 10 ug/L	10 ug/L	0
bis(2-Chloroethoxy)methane	< 10 ug/L	10 ug/L	0
2,4-Dichlorophenol	< 10 ug/L	10 ug/L	0
Benzoic acid	< 10 ug/L	10 ug/L	0
1,2,4-Trichlorobenzene	< 10 ug/L	10 ug/L	0
Naphthalene	< 10 ug/L	10 ug/L	0
4-Chloroanifine	< 10 ug/L	10 ug/L	0
Hexachlorobutadiene	< 10 ug/L	10 ug/L	0
4-Chloro-3-methylphenol	< 10 ug/L	10 ug/L	0
2-Methylnaphthalene	< 10 ug/L	10 ug/L	0
Hexachlorocyclopentadiene	< 10 ug/L	10 ug/L	0
2,4,6-Trichlorophenol	< 10 ug/L	10 ug/L	0
2,4,5-Trichlorophenol	< 10 ug/L	10 ug/L	0
2-Chloronaphthalene	< 10 ug/L	10 ug/L	0
2-Nitroaniline	< 10 ug/L	10 ug/L	0
Dimethylphthalate	< 10 ug/L	10 ug/L	0
Acenaphthylene	< 10 ug/L	10 ug/Ł	0
2,6-Dinitrotoluene	< 10 ug/L	10 ug/L	0
3-Nitroaniline	< 10 ug/L	10 ug/L	0
Acenaphthene	< 10 ug/L	10 ug/L	0
2,4-Dinitrophenol	< 10 ug/L	10 ug/L	0
4-Nitrophenol	< 10 ug/L	10 ug/L	0
Dibenzofuran	< 10 ug/L	10 ug/L	0
2,4-Dinitrotoluene	< 10 ug/L	10 ug/L	0
Diethylphthalate	< 10 ug/L	10 ug/L	0
Fluorene	< 10 ug/L	10 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014048

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: SW-8

Collection Date: 6/17/99

Location: SW8

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Result Reporting Limit Flag	Test Code: MS8270_W	Test Method	i: SW-84 6 8	3270		Analyst:	RGW7794
4-Chlorophenylpthenylether		Res	ult	Repor	ting Limit	Flag	
2-Methyl-4,6-dinitrophenol	4-Chlorophenylphenylether	< 10	ug/L	10	ug/L		
n-Nitrosodiphenylamine	4-Nitroaniline	< 10	ug/L	10	ug/L	0	
1,2-Diphenylhydrazine	2-Methyl-4,6-dinitrophenol	< 10	ug/L	10	ug/L	0	
4-Bromophemylphenylether	n-Nitrosodiphenylamine	< 10	ug/L	10	ug/L	0	
Hexachlorobenzene	1,2-Diphenylhydrazine	< 10	ug/L	10	ug/L	0	
Pentachlorophenol	4-Bromophenylphenylether	< 10	ug/L	10	ug/L	0	
Phenanthrene < 10 ug/L	Hexachlorobenzene	< 10	ug/L	10	ug/L	0	
Anthracene	Pentachlorophenol	< 10	ug/L	10	ug/L	0	
di-n-Butylphthalate	Phenanthrene	< 10	ug/L	10	ug/L	0	
di-n-Butylphthalate < 10 ug/L	Anthracene	< 10	ug/L	10	ug/L	0	
Fluoranthene	di-n-Butylphthalate	< 10	ug/L	10	ug/L	0	
Pyrene	Fluoranthene	< 10	ug/L	10	-	0	
Pyrene < 10 ug/L 10 ug/L 0 Butylbenzylphthalate <	Benzidine	< 50	ug/L	50	ug/L	0	
Butytbenzylphthalate < 10 ug/L	Pyrene	< 10	ug/L	10	ug/L	0	
3,3-Dichlorobenzidine	Butylbenzylphthalate	< 10	ug/L	10	-	0	
Benzo(a)anthracene < 10 ug/L	3,3-Dichlorobenzidine	< 10	ug/L	10	-	0	
Chrysene < 10 ug/L 0 bis(2-Ethylhexyl)phthalate <	Benzo(a)anthracene	< 10	ug/L	10	_	0	
bis(2-Ethylhexyl)phthalate	Chrysene	< 10	ug/L	10	_	0	
di-n-Octylphthalate < 10 ug/L	bis(2-Ethylhexyl)phthalate	< 10	ug/L	10	-	0	
Benzo(b)fluoranthene < 10 ug/L	di-n-Octylphthalate	< 10	ug/L	10	-	0	
Benzo(k)fluoranthene < 10 ug/L	Benzo(b)fluoranthene	< 10	ug/L	10	-	0	
Benzo(a)pyrene < 10 ug/L	Benzo(k)fluoranthene	< 10	ug/L	10	•	0	
Indeno(1,2,3-c,d)pyrene < 10 ug/L	Benzo(a)pyrene	< 10	ug/L	10	_	0	
Dibenzo(a,h)anthracene < 10 ug/L 10 ug/L 0	Indeno(1,2,3-c,d)pyrene	< 10	ug/L	10	•	_	
Denny/a b Denny/a b	Dibenzo(a,h)anthracene		_		•	_	
	Benzo(g,h,i)perylene		_		ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention] Idei	ntification Basis		
	Molecular	Concentration	Probability	Time(RT)	Library	Manual	RT	Scan Number
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	nı	Ivamoer
NO TIC'S IDENTIFIED					 		-	
			-					
			<u> </u>				 	,
				<u> </u>			-	
								
							-	
					ļ			
	<u> </u>		 					
			 					

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
			atan da pinggan panga Banda da katan		
1,4-Dichlorobenzene-D4	11.72	2-Fluorophenol	68.0%	Nitrobenzene-D5	71.2%
Naphthalene-D8	15.62	Phenoi	59.0%	2-Fluorobiphenyl	59.6%_
Acenaphthene-D10	21.25	2,4,6-Tribromophenol	70.9%	Terphenyl-D14	50.1%
Phenanthrene-D10	25.93			••	

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

Chrysene-D12

Perylene-D12

34.44

39.20



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: SW-9

Collection Date: 6/17/99 Location: SW9 Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

est Code: MS8270_W	Test Me	etho	d: SW-846 82	70		Analyst:	RGW779
		Res	sult	Report	ting Limit	Flag	
Pyridine	<	10	ug/L	10	ug/L	0	
n-Nitrosodimethylamine	<	10	ug/L	10	ug/L	0	
Aniline	<	10	ug/L	10	ug/L	0	
Phenol	<	10	ug/L	10	ug/L	0	
bis(2-Chloroethyf)ether	<	10	ug/L	10	ug/L	0	
2-Chlorophenol	<	10	ug/L	10	ug/L	0	
1,3-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
1,4-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
Benzył alcohol	<	10	ug/L	10	ug/L	0	
1,2-Dichlorobenzene	<	10	ug/L	10	ug/L	0	
2-Methylphenol	<	10	ug/L	10	ug/L	0	
bis(2-Chloroisopropyl)ether	<	10	ug/L	10	ug/L	0	
4-Methylphenol	<	10	ug/L	10	ug/L	0	
Hexachloroethane	<	10	ug/L	10	ug/L	0	
n-Nitrosodi-n-propytamine	<	10	ug/L	10	ug/L	0	
Nitrobenzene	<	10	ug/L	10	ug/L	0	
Isophorone	<	10	ug/L.	10	ug/L	0	
2-Nitrophenol	<	10	ug/L	10	ug/L	0	
2,4-Dimethylphenol	<	10	ug/L	10	ug/L	0	
bis(2-Chloroethoxy)methane	<	10	ug/L	10	ug/L	0	
2,4-Dichlorophenol	<	10	ug/L	10	ug/L	0	
Benzoic acid	<	10	ug/L	10	ug/L	0	
1,2,4-Trichlorobenzene	<	10	ug/L	10	ug/L	. 0	
Naphthalene	<	10	ug/L	10	ug/L	0	
4-Chloroaniline	<	10	ug/L	10	ug/L	0	
Hexachlorobutadiene	<	10	ug/L	· 10	ug/L	0	
4-Chloro-3-methylphenol	<	10	ug/L	10	ug/L	0	
2-Methylnaphthalene	<	10	ug/L	10	ug/L	0	
Hexachlorocyclopentadiene	<	10	ug/L	10	ug/L	0	
2,4,6-Trichlorophenol	<	10	ug/L	10	ug/L	0	
2,4,5-Trichlorophenol	<	10	ug/L	10	ug/L	0	
2-Chloronaphthalene	<	10	ug/L	10	ug/L	0	
2-Nitroaniline	<	10	ug/L	10	ug/L	0	
Dimethylphthalate	<	10	ug/L	10	ug/L	0	
Acenaphthylene	<	10	ug/L	10	ug/L	0	
2,6-Dinitrotoluene	<	10	ug/L	10	ug/L	0	
3-Nitroanitine	<	10	ug/L	10	ug/L	0	
Acenaphthene	<	10	ug/L	10	ug/L	0	
2,4-Dinitrophenol	<	10	ug/L	10	ug/L	0	
4-Nitrophenol	<	10	ug/L	10	ug/L	0	
Dibenzofuran	<	10	ug/L	10	ug/L	0	
2,4-Dinitrotofuene	<	10	ug/L	10	ug/L	0	
Diethylphthalate	<	10	ug/L	10	ug/L	0	
Fluorene	<	10	ug/L	10	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014049

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: SW-9

Collection Date: 6/17/99

Location: SW9

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Metho	od: SW-846 8	270		Analyst:	RGW7794
	R	esult	Report	ing Limit	Flag	
4-Chlorophenylphenylether	< 10	ug/L	10	ug/L	0	
4-Nitroaniline	< 10	ug/L	10	ug/L	0	
2-Methyl-4,6-dinitrophenol	< 10	ug/L	10	ug/L	0	
n-Nitrosodiphenylamine	< 10	ug/L	10	ug/L	0	
1,2-Diphenylhydrazine	< 10	ug/L	10	ug/L	0	
4-Bromophenylphenylether	< 10	ug/L	10	ug/L	0	
Hexachlorobenzene	< 10	ug/L	10	ug/L	0	
Pentachlorophenol	< 10	ug/L	10	ug/L	0	
Phenanthrene	< 10	ug/L	10	ug/L	0	
Anthracene	< 10	ug/L	10	ug/L	0	
di-n-Butylphthatate	< 10	ug/L	10	ug/L	0	
Fluoranthene	< 10	_	10	ug/L	0	
Benzidine	< 50	-	50	ug/L	0	
Pyrene	< 10	-	10	ug/L	0	
Butylbenzylphthalate	< 10	ug/L	10	ug/L	0	
3,3-Dichlorobenzidine	< 10	ug/L	10	ug/L	0	
Benzo(a)anthracene	< 10	ug/L	10	ug/L	0	
Chrysene	< 10	ug/L	10	ug/L	0	
bis(2-Ethylhexyl)phthalate	< 10	=	10	ug/L	0	
di-n-Octylphthalate	< 10	ug/L	10	ug/L	0	
Benzo(b)fluoranthene	< 10	-	10	ug/L	0	
Benzo(k)fluoranthene	< 10	_	10	ug/L	o	
Benzo(a)pyrene	< 10	_	10	ug/L	0	
Indeno(1,2,3-c,d)pyrene	< 10		10	ug/L	0	
Dibenzo(a,h)anthracene	< 10	•	10	ug/L	ō	
Benzo(g,h,i)perylene	< 10	-	10	ug/L	ō	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

99-JUN-0042 // LAB ID:: BRALETT ST-SW-9) FIELD ID:: Tentatively Identified Compounds Report Identification Basis Library Match Retention Probable Estimated Scan Time (RT) Library Manual Probability Concentration Molecular Interpretation RTNumber (Minutes) Match Weight (ug/L)(%) Compound NO TIC'S IDENTIFIED B/N Surrogates % Recovery % Recovery Acid Surrogates Internal Standard (Minutes) USEPA--8270 G.C. Conditions 61.9% 49.1% 1,4-Dichlorobenzene-D4 11.71 Nitrobenzene-D5 2-Fluorophenol 44.3% 55.0% Naphthalene-D8 15.62 2-Fluorobiphenyl Phenol 25m x 0.2mm x 0.33um Ultra Two 36.5% 50.3% Acenaphthene-D10 Terphenyl-D14 21.26 2,4,6-Tribromophenol Crosslinked 5% Methyl Silicon Column 25.94 Phenanthrene-D10 He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 34.44 Chrysene-D12 300°C (8.0°C/min), hold 300° for 21 min. 39.21 Pervlene-D12

Page 1 of 1



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014050 Job #: 99-JUN-0042 Customer ID: G, FRANKLIN

Sample Description: SW-10

Collection Date: 6/17/99 Location: SW-10 Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

st Code: MS8270_W	Test Me	thod:	SW-846 8270			Analyst:	RGW77
	_	Result		Repor	ting Limit	Flag	
Pyridine		10 ug/	L	10	ug/L	0	
n-Nitrosodimethylamine	<	10 ug/		10	ug/L	o	
Aniline	<	10 ug/		10	ug/L	0	
Phenol	<	10 ug/		10	ug/L	0	
bis(2-Chloroethyl)ether	<	10 ug/		10	ug/L	0	
2-Chlorophenol	<	10 ug/		10	ug/L	0	
1,3-Dichlorobenzene	<	10 ug/		10	ug/L	0	
1,4-Dichlorobenzene		10 ug/		10	ug/L	0	
Benzyl alcohol		10 ug/		10	ug/L	0	
1,2-Dichlorobenzene		10 ug/		10	ug/L	ō	
2-Methylphenol		10 ug/		10	ug/L	0	
bis(2-Chloroisopropyl)ether		10 ug/		10	ug/L	ō	
4-Methylphenol		10 ug/		10		0	
Hexachloroethane		10 ug/		10	ug/L	0	
n-Nitrosodi-n-propylamine		10 ug/			ug/L		
Nitrobenzene				10	ug/L	0	
Isophorone		10 ug/		10	ug/L	0	
·		10 ug/		10	ug/L	0	
2-Nitrophenol		10 ug/		10	ug/L	0	
2,4-Dimethylphenol		10 ug/		10	ug/L	0	
bis(2-Chloroethoxy)methane		10 ug/		10	ug/L	0	
2,4-Dichlorophenol		10 ug/		10	ug/L	0	
Benzoic acid		10 ug/		10	ug/L	0	
1,2,4-Trichlorobenzene		10 ug/		10	ug/L	0	
Naphthalene	<	10 ug/	Ľ	10	ug/L	0	
4-Chloroaniline	<	10 ug/		10	ug/L	0	
Hexachlorobutadiene	<	10 ug/		10	ug/L	0	
4-Chloro-3-methylphenol	<	10 ug/	L	10	ug/L	0	
2-Methylnaphthalene	<	10 ug/	TL .	10	ug/L	0	
Hexachlorocyclopentadiene	<	10 ug/	″L	10	ug/L	0	
2,4,6-Trichlorophenol	<	10 ug/	/L	10	ug/L	0	
2,4,5-Trichlorophenol	<	10 ug/	/L	10	ug/L	0	
2-Chloronaphthalene	<	10 ug/	/L	10	ug/L	0	
2-Nitroaniline	<	10 ug/	/L	10	ug/L	0	
Dimethylphthatate	<	10 ug/	/L	10	ug/L	0	
Acenaphthylene	<	10 ug/	n L	10	ug/L	O	
2,6-Dinitrotoluene	<	10 ug	/L	10	ug/L	0	
3-Nitroaniline	<	10 ug		10	ug/L	0	
Acenaphthene	<	10 ug		10	ug/L	0	
2,4-Dinitrophenol	<	10 ug		10	ug/L	0	
4-Nitrophenol	<	10 ug		10	ug/L	0	
Dibenzofuran	<	10 ug.		10	ug/L	0	
2,4-Dinitrotoluene	<	10 ug		10	ug/L	0	
Diethylphthalate	<	10 ug		10	ug/L	o	
Fluorene	<	10 ug.		10	ug/L	o	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014050

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: SW-10

Collection Date: 6/17/99

Location: SW-10

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Method: SW-846 8270		Analyst: RGW7794
	Result	Reporting Limit	Flag
4-Chlorophenylphenylether	< 10 ug/L	10 ug/L	0
4-Nitroaniline	< 10 ug/L	10 ug/L	0
2-Methyl-4,6-dinitrophenol	< 10 ug/L	10 ug/L	0
n-Nitrosodiphenylamine	< 10 ug/L	10 ug/L	0
1,2-Diphenylhydrazine	< 10 ug/L	10 ug/L	0
4-Bromophenylphenylether	< 10 ug/L	10 ug/L	0
Hexachlorobenzene	< 10 ug/L	10 ug/L	o
Pentachlorophenol	< 10 ug/L	10 ug/L	o
Phenanthrene	< 10 ug/L	10 ug/L	o
Anthracene	< 10 ug/L	10 ug/L	0
di-n-Butylphthalate	< 10 ug/L	10 ug/L	0
Fluoranthene	< 10 ug/L	10 ug/L	0
Benzidine	< 50 ug/L	50 ug/L	0
Pyrene	< 10 ug/L	10 ug/L	0
Butylbenzylphthalate	< 10 ug/L	10 ug/L	0
3,3-Dichlorobenzidine	< 10 ug/L	10 ug/L	0
Benzo(a)anthracene	< 10 ug/L	10 ug/L	0
Chrysene	< 10 ug/L	10 ug/L	0
bis(2-Ethylhexyl)phthalate	< 10 ug/L	10 ug/L	0
di-n-Octylphthalate	< 10 ug/L	10 ug/L	0
Benzo(b)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(k)fluoranthene	< 10 ug/L	10 ug/L	0
Benzo(a)pyrene	< 10 ug/L	10 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 10 ug/L	10 ug/L	0
Dibenzo(a,h)anthracene	< 10 ug/L	10 ug/L	0
Benzo(g,h,i)perylene	< 10 ug/L	10 ug/L	0
	•		•

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

Tentatively Identified Compounds Report

`	Probable	Estimated	Library Match	Retention] Iden	tification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
						e. TSSI garages that a filtractic is a second	engi mayake	<u> </u>
NO TIC'S IDENTIFIED								
						-		
	·			·····		 		
			!					
								
				·				

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
and the second s					
1,4-Dichlorobenzene-D4	11.71	2-Fluorophenol	70.5%	Nitrobenzene-D5	69.8%
Naphthalene-D8	15.62	Phenol	60.0%	2-Fluorobiphenyl	55.6%
Acenaphthene-D10	21.25	2,4,6-Tribromophenol	66.2%	Terphenyl-D14	46.1%
Phenanthrene-D10	25.94				

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

34.44

39.20

Chrysene-D12

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014052 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: FIELD BLANK

Collection Date: 6/17/99 Location: FIELD BLK Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Pyridine	Test Code: MS8270_W	Test Method: SW-8	46 8270	Analyst: RGW7794
Pyrtdine		Result	Reporting Limit	Flag
n-Nitrosocimetrylamine	Pyridine	< 10 ug/L	10 ug/L	
Phenol	n-Nitrosodimethylamine	< 10 ug/L	-	0
bis(2-Chloroethyr)ether	Aniline	< 10 ug/L	-	o
bist/2-Chlorophenol	Phenol	< 10 ug/L		0
2-Chlorophenol	bis(2-Chloroethyl)ether	< 10 ug/L	-	0
1,3-Dichlorobenzene	2-Chiorophenoi			0
1,4-Dichlorobenzene	1,3-Dichlorobenzene	< 10 ug/L	• •	0
Benzyl stochol	1,4-Dichlorobenzene		=	0
1.2-Dichlorobenzene	Benzyl alcohol		=	0
2-Methylphenol	1,2-Dichlorobenzene	< 10 ug/L		0
bis(2-Chlorolsopropyl)ether	2-Methylphenol		=	0
A-Methylphenol	bis(2-Chloroisopropyl)ether	< 10 ug/L		0
Hexachloroethane	4-Methylphenol	< 10 ug/L		0
n-Nitrosodi-n-propylamine < 10	Hexachloroethane	< 10 ug/L		0
Nitrobenzene	n-Nitrosodi-n-propylamine	< 10 ug/L	-	0
Resphorone	Nitrobenzene	< 10 ug/L	-	0
2-Nitrophenol < 10	Isophorone	< 10 ug/L	=	0
2,4-Dimethylphenol < 10	2-Nitrophenol	< 10 ug/L		0
bis(2-Chloroethoxy)methane	2,4-Dimethylphenol	< 10 ug/L	-	0
2,4-Dichtorophenol < 10	bis(2-Chloroethoxy)methane		=	0
1,2,4-Trichlorobenzene	2,4-Dichlorophenol	< 10 ug/t.	· · · · · · · · · · · · · · · · · · ·	0
Naphthalene < 10	Benzoic acid	< 10 ug/L	-	0
Naphthalene < 10 ug/L	1,2,4-Trichlorobenzene	< 10 ug/L	10 ug/L	0
Hexachlorobutadiene	Naphthalene		10 ug/L	0
4-Chioro-3-methylphenol	4-Chloroaniline	< 10 ug/L	10 ug/L	O
2-Methylnaphthalene	Hexachlorobutadiene	< 10 ug/L	10 ug/L	0
Hexachlorocyclopentadiene	4-Chioro-3-methylphenol	< 10 ug/L	10 ug/L	o
2,4,6-Trichtorophenol < 10 ug/L	2-Methylnaphthalene	< 10 ug/L	10 ug/L	0
2,4,5-Trichlorophenol < 10 ug/L	Hexachlorocyclopentadiene	< 10 ug/L	10 ug/L	o
2-Chloronaphthalene	2,4,6-Trichlorophenol	< 10 ug/L	10 ug/L	O
2-Nitroaniline	2,4,5-Trichlorophenol	< 10 ug/L	10 ug/L	0
Dimethylphthalate < 10 ug/L	2-Chloronaphthalene	< 10 ug/L	10 ug/L	0
Acenaphthylene < 10 ug/L	2-Nitroaniline	< 10 ug/L	10 ug/L	0
2,6-Dinitrototuene < 10 ug/L	Dimethylphthalate	< 10 ug/L	10 ug/L	0
3-Nitroaniline	Acenaphthylene	< 10 ug/L	10 ug/L	0
Acenaphthene < 10 ug/L 10 ug/L 0 2,4-Dinitrophenol < 10 ug/L 10 ug/L 0 4-Nitrophenol < 10 ug/L 10 ug/L 0 Dibenzofuran < 10 ug/L 10 ug/L 0 2,4-Dinitrotoluene < 10 ug/L 10 ug/L 0 Diethylphthalate < 10 ug/L 10 ug/L 0	2,6-Dinitrototuene	< 10 ug/L	10 ug/L	0
2,4-Dinitrophenol < 10 ug/L	3-Nitroaniline	< 10 ug/L	10 ug/L	0
4-Nitrophenol < 10 ug/L	Acenaphthene	< 10 ug/L	10 ug/L	O
Dibenzofuran < 10 ug/L 10 ug/L 0 2,4-Dinitrotoluene < 10 ug/L	2,4-Dinitrophenol	< 10 ug/L	10 ug/L	O
2,4-Dinitrotoluene < 10 ug/L 10 ug/L 0 Diethylphthalate < 10 ug/L 10 ug/L 0	•	< 10 ug/L	10 ug/L	0
Diethylphthalate < 10 ug/L 10 ug/L 0		< 10 ug/L	10 ug/L	0
		< 10 ug/L	10 ug/L	0
Fluorene < 10 ug/L 10 ug/L 0		< 10 ug/L	10 ug/L	0
	Fluorene	< 10 ug/L	10 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014052

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: FIELD BLANK

Collection Date: 6/17/99

Location: FIELD BLK

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

Test Code: MS8270_W	Test Met	nod: SW-846 8	270		Analyst:	RGW7794
		Result	Reporti	ng Limit	Flag	
4-Chlorophenylphenylether	< 1	0 ug/L	10	ug/L	0	
4-Nitroaniline	< 1	0 ug/L	10	ug/L	0	
2-Methyl-4,6-dinitrophenol	< 1	0 ug/L	10	ug/L	0	
n-Nitrosodiphenylamine	< 1	0 ug/L	10	ug/L	0	
1,2-Diphenylhydrazine	< 1	0 ug/L	10	ug/L	0	
4-Bromophenylphenylether	< 1	0 ug/L	10	ug/L	0	
Hexachiorobenzene	< 1	0 ug/L	10	ug/L	0	
Pentachlorophenol	< 1	0 ug/L	10	ug/L	0	
Phenanthrene	< 1	0 ug/L	10	ug/L	0	
Anthracene	< 1	0 ug/L	10	ug/L	0	
di-n-Butylphthalate	< 1	0 ug/L	10	ug/L	0	
Fluoranthene	< 1	0 ug/L	10	ug/L	0	
Benzidine	< 5	0 ug/L	50	ug/L	0	
Pyrene	< 1	0 ug/L	10	ug/L	0	
Butylbenzylphthalate	< 1	0 ug/L	10	ug/L	0	
3,3-Dichlorobenzidine	< 1	0 ug/L	10	ug/L	ō	
Benzo(a)anthracene	< 1	0 ug/L	10	ug/L	0	
Chrysene		0 ug/L	10	ug/L	o	
bis(2-Ethythexyl)phthalate	< 1	0 ug/L	10	ug/L	o	
di-n-Octylphthalate		0 ug/L	10	ug/L	0	
Benzo(b)fluoranthene		0 ug/L	10	ug/L	0	
Benzo(k)fluoranthene		0 ug/L	10	ug/L	0	
Benzo(a)pyrene		0 ug/L	10	ug/L	ů	
Indeno(1,2,3-c,d)pyrene		0 ug/L	10	ug/L	0	
Dibenzo(a,h)anthracene		0 ug/L	10	ug/L	0	
Benzo(g,h,i)perylene		0 ug/L	10	ug/L	o o	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

Report Generated 7/9/99 13:24:50

29U13.D FIELD ID:: BRAMLETT ST- FIELD-BLANK LAB ID:: 99-JUN-0042 / / 95-014052

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention	Ider	ntification Basis		
Compound	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number
No TIC's Identified								
							-	
		_					-	
			-					
					<u> </u>		<u> </u>	

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
h			14 160		aterior and a state in the second
1,4-Dichlorobenzene-D4	12.28	2-Fluorophenol	94.0%	Nitrobenzene-D5	58.2%
Naphthalene-D8	16.29	Phenol	81.0%	2-Fluorobiphenyl	88.5%
Acenaphthene-D10	21.93	2,4,6-Tribromophenol	66.2%	Terphenyl-D14	136.1%
Pentachlorophenol	0.00			<u> </u>	

USEPA--8270 G.C. Conditions

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

0.00

39.72

3,3-Dichlorobenzidine

Perylene-D12



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014057 Job #: 99-JUN-0042 Customer ID:

Sample Description: BRAMLETTE ST MW-3D

Collection Date: 6/15/99 Location: MW-3D Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

st Code: MS8270_W	Test Method: SW-846 8	270	Analyst: RGW779
	Result	Reporting Limit	Flag
Pyridine	< 1000 ug/L	1000 ug/L	0
n-Nitrosodimethylamine	< 1000 ug/L	1000 ug/L	0
Aniline	< 1000 ug/L	1000 ug/L	0
Phenol	< 1000 ug/L	1000 ug/L	0
bis(2-Chloroethyl)ether	< 1000 ug/L	1000 ug/L	0
2-Chlorophenol	< 1000 ug/L	1000 ug/L	0
1,3-Dichlorobenzene	< 1000 ug/L	1000 ug/L	0
1,4-Dichlorobenzene	< 1000 ug/L	1000 ug/L	0
Benzyl alcohol	< 1000 ug/L	1000 ug/L	0
1,2-Dichlorobenzene	< 1000 ug/L	1000 ug/L	0
2-Methylphenol	< 1000 ug/L	1000 ug/L	0
bis(2-Chloroisopropyl)ether	< 1000 ug/L	1000 ug/L	0
4-Methylphenol	< 1000 ug/L	1000 ug/L	0
Hexachloroethane	< 1000 ug/L	1000 ug/L	0
n-Nitrosodi-n-propylamine	< 1000 ug/i.	1000 ug/L	0
Nitrobenzene	< 1000 ug/L	1000 ug/L	0
Isophorone	< 1000 ug/L	1000 ug/L	0
2-Nitrophenol	< 1000 ug/L	1000 ug/L	0
2,4-Dimethylphenol	< 1000 ug/L	1000 ug/L	0
bis(2-Chloroethoxy)methane	< 1000 ug/L	1000 ug/L	O
2,4-Dichlorophenol	< 1000 ug/L	1000 ug/L	0
Benzoic acid	< 1000 ug/L	1000 ug/L	0
1,2,4-Trichlorobenzene	< 1000 ug/L	1000 ug/L	0
Naphthalene	6400 ug/L	1000 ug/L	0
4-Chloroaniline	< 1000 ug/L	1000 ug/L	0
Hexachiorobutadiene	< 1000 ug/L	1000 ug/L	0
4-Chloro-3-methylphenol	< 1000 ug/L	1000 ug/L	0
2-Methylnaphthalene	1700 ug/L	1000 ug/L	0
Hexachlorocyclopentadiene	< 1000 ug/L	1000 ug/L	0
2,4,6-Trichlorophenol	< 1000 ug/L	1000 ug/L	0
2,4,5-Trichlorophenol	< 1000 ug/L	1000 ug/L	0
2-Chloronaphthalene	< 1000 ug/L	1000 ug/L	0
2-Nitroaniline	< 1000 ug/L	1000 ug/L	0
Dimethylphthalate	< 1000 ug/L	1000 ug/L	0
Acenaphthylene	< 1000 ug/L	1000 ug/L	0
2,6-Dinitrotoluene	< 1000 ug/L	1000 ug/L	0
3-Nitroaniline	< 1000 ug/L	1000 ug/L	0
Acenaphthene	< 1000 ug/L	1000 ug/L	0
2,4-Dinitrophenol	< 1000 ug/L	1000 ug/L	0
4-Nitrophenol	< 1000 ug/L	1000 ug/L	0
Dibenzofuran	< 1000 ug/L	1000 ug/L	0
2,4-Dinitrotoluene	< 1000 ug/L	1000 ug/L	0
Diethylphthalate	< 1000 ug/L	1000 ug/L	0
Fluorene	< 1000 ug/L	1000 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014057

Job#:

99-JUN-0042

Customer ID:

Sample Description: BRAMLETTE ST MW-3D

Collection Date: 6/15/99

Location: MW-3D

Type of Sample: GROUNDWATER

SVOC IN WATER BY GC/MS - 8270

est Code: MS8270_W	Test Method: SW-846 82	70	Analyst: RGW7794
	Result	Reporting Limit	_Flag_
4-Chlorophenylphenylether	< 1000 ug/L	1000 ug/L	0
4-Nitroaniline	< 1000 ug/L	1000 ug/L	0
2-Methyl-4,6-dinitrophenol	< 1000 ug/L	1000 ug/L	0
n-Nitrosodiphenylamine	< 1000 ug/L	1000 ug/L	0
1,2-Diphenylhydrazine	< 1000 ug/L	1000 ug/L	0
4-Bromophenylphenylether	< 1000 ug/L	1000 ug/L	0
Hexachlorobenzene	< 1000 ug/L	1000 ug/L	0
Pentachlorophenol	< 1000 ug/L	1000 ug/L	0
Phenanthrene	< 1000 ug/L	1000 ug/L	0
Anthracene	< 1000 ug/L	1000 ug/L	0
di-n-Butylphthalate	< 1000 ug/L	1000 ug/L	0
Fluoranthene	< 1000 ug/L	1000 ug/L	O
Benzidine	< 5000 ug/L	5000 ug/L	1
Pyrene	< 1000 ug/L	1000 ug/L	0
Butylbenzylphthalate	< 1000 ug/L	1000 ug/L	0
3,3-Dichlorobenzidine	< 1000 ug/L	1000 ug/L	O
Benzo(a)anthracene	< 1000 ug/L	1000 ug/L	0
Chrysene	< 1000 ug/L	1000 ug/L	0
bis(2-Ethylhexyl)phthalate	< 1000 ug/L	1000 ug/L	0
di-n-Octylphthalate	< 1000 ug/L	1000 ug/L	0
Benzo(b)fluoranthene	< 1000 ug/L	1000 ug/L	0
Benzo(k)fluoranthene	< 1000 ug/L	1000 ug/L	0
Berizo(a)pyrene	< 1000 ug/L	1000 ug/L	0
Indeno(1,2,3-c,d)pyrene	< 1000 ug/L	1000 ug/L	0
Dibenzo(a,h)anthracene	< 1000 ug/L	1000 ug/L	0
Benzo(g,h,i)perylene	< 1000 ug/L	1000 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Array Whisenant 7/16/99
Data Verified and Approved By, Date

BRAMLETT ST-BREMLETTE ST MW-3D

LAB ID::

99-JUN-0042 // 99014057// (1:1

Tentatively Identified Compounds Report

	Probable	Estimated	Library Match	Retention	Identification Basis				
Molecular Compound Weight	Molecular Weight	Concentration (ug/L)	Probability (%)	Time (RT) (Minutes)	Library Match	Manual Interpretation	RT	Scan Number	
No TIC's Identified	eri, eta eri, eta eri eri eri eri eri eri eri eri eri eri	i internice mattiili incurrencest litter een een een	iei lieusteje os. početo – e orosto cesi ima tras tra	ii - 1855-kaan ameerinka tahast, ista maradadii					
<u></u>						<u> </u>	-		
									
							-		
				<u> </u>			-		

Internal Standard	(Minutes)	Acid Surrogates	% Recovery	B/N Surrogates	% Recovery
1,4-Dichlorobenzene-D4	12.31	2-Fluorophenol	0.9%	Nitrobenzene-D5	0.7%
Naphthalene-D8	16.33	Phenol	0.0%	2-Fluorobiphenyl	1.1%
Acenaphthene-D10	21.98	2,4,6-Tribromophenol	0.0%	Terphenyl-D14	1.0%
Pentachlorophenol	0.00			<u></u>	

USEPA--8270 G.C. Conditions

54 - 254 3

25m x 0.2mm x 0.33um Ultra Two Crosslinked 5% Methyl Silicon Column

He, 0.5 ml/min, 45°C (hold 4.0 min), 45°C to 300°C (8.0°C/min), hold 300° for 21 min.

Page 1 of 1

0.00

39.79

3,3-Dichlorobenzidine

Perylene-D12



8260 Case Narrative

A Duke Energy Company

(This document must accompany release of analytical results)

CONTRACTOR OF THE PROPERTY OF

The state of the s

L.I.M.S. Work Order #

99-JUN-0042

- Sample Set 99-JUN-0042 was analyzed by EPA 8260 with 5030 purge method.
- > QC for this set was 99-JUN-0272.
- > The continuing calibration check for 2,2 dichloropropane and carbon tetrachloride had a 27% and 30% drift from the original calibration curve on 6/22/99 on MS5. The method acceptance criteria are a 20 % drift. Results for these compounds should be considered estimates. There is an unknown impact to laboratory data.
- > The results for acetone on MS5 are considered estimates, as this system does not produce reliable results. There is an unknown impact to laboratory data.
- > Some results for reported compounds have been flagged as estimates. This is because the concentration of the anlayte was outside the calibration curve.

Analyst:

Mary Ann Ogle



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014009 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-1

Collection Date: 6/16/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

st Code: MS8260_W	Test Method:	SW-846 8260		Analyst:	MAO12
	Resul	Re _L	porting Limit	Flag	
Dichlorodifluoromethane	< 300 u	g/L 30	00 ug/L	0	
Chloromethane	< 300 u	g/L 3 (00 ug/L	0	
Vinyl chloride	< 300 u	g/L 30	00 ug/L	0	
Bromomethane	< 300 u	_ g/L 3 (00 ug/L	0	
Chloroethane	< 300 u	- g/L 3 (00 ug/L	0	
Trichlorofluoromethane			00 ug/L	0	
Acrolein	< 300 u	g/L 3 (00 ug/L	0	
1,1-Dichloroethene		-	00 ug/L	0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	,		00 ug/L	0	
Acetone		·	00 ug/L	1	
Methyl iodide	· ·	=	00 ug/L	0	
Carbon disulfide		- 	00 ug/L	o	
Methylene chloride	,	- .	00 ug/L	0	
Acrylonitrile			00 ug/L	0	
MTBE	,	=	00 ug/L	0	
trans-1,2-Dichloroethene	· ·	-	00 ug/L	0	
Isopropyl ether	,		-	_	
1,1-Dichloroethane			<u> </u>	0	
Vinyl acetate		-	-	0	
2,2-Dichloropropane	,		•	0	
cis-1,2-Dichloroethene		_	00 ug/L	0	
2-Butanone			00 ug/L	0	
Chloroform		-	00 ug/L	0	
1,1-Dichloropropene		-	00 ug/L	0	
1,1,1-Trichloroethane		-	00 ug/L	0	
Carbon tetrachloride		-	00 ug/L	0	
Bromochloromethane		=	00 ug/L	0	
		-	00 ug/L	2	
Benzene		-	00 ug/L	2	
1,2-Dichloroethane		•	00 ug/L	0	
Trichloroethene		g/L 3(00 ug/L	0	
1,2-Dichloropropane	< 300 บ	g/L 3(00 ug/L	0	
Dibromomethane	< 300 u	g/L 3 (00 ug/L	0	
Bromodichloromethane	< 300 u	g/L 30	00 ug/L	0	
2-Chloroethyl vinyl ether	< 300 u	g/L 3 (00 ug/L	0	
cis-1,3-Dichloropropene	< 300 u	g/L 30	00 ug/L	0	
4-Methyl-2-pentanone (MIBK)	< 300 u	g/L 3 (00 ug/L,	0	
Toluene	290 u	g/L 30	00 ug/L	2	
trans-1,3-Dichloropropene	< 300 u	g/L 3 (00 ug/L	0	
1,1,2-Trichloroethane	< 300 u	g/L 3 (00 ug/L	0	
1,3-Dichloropropane	< 300 u	g/L 3 (00 ug/L	0	
Tetrachloroethene	< 300 u	g/L 3(00 ug/L	0	
2-Hexanone	< 300 u	g/L 34	00 ug/L	0	
Dibromochloromethane	< 300 u	g/L 30	00 ug/L	0	
1,2-Dibromoethane (EDB)	< 300 u	g/L 31	00 ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014009

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-1

Collection Date: 6/16/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

st Code: MS8260_W	Test Method: SW-84	6 8260	Analyst: MAO1256
	Result	Reporting Limit	Flag
Chlorobenzene	< 300 ug/L	300 ug/L	0
Isopropyibenzene	< 300 ug/L	300 ug/L	0
1,1,1,2-tetrachloroethane	< 300 ug/L	300 ug/L	0
Ethylbenzene	< 300 ug/L	300 ug/L	0
m-p-Xylene	< 600 ug/L	600 ug/L	0
o-Xylene	< 300 ug/L	300 ug/L	0
Styrene	< 300 ug/L	300 ug/L	0
Bromoform	< 300 ug/L	300 ug/L	0
1,4-Dichlorobutane	< 300 ug/L	300 ug/L	0
1,1,2,2-Tetrachloroethane	< 300 ug/L	300 ug/L	0
1,2,3-Trichloropropane	< 300 ug/L	300 ug/L	0
n-Propyl benzene	< 300 ug/L	300 ug/L	0
Bromobenzene	< 300 ug/L	300 ug/L	0
1,3,5-trimethylbenzene	< 300 ug/L	300 ug/L	0
2-Chlorotoluene	< 300 ug/L	300 ug/t.	0
4-Chlorotoluene	< 300 ug/L	300 ug/L	0
t-Butylbenzene	< 300 ug/L	300 ug/L	0
1,2,4-Trimethylbenzene	< 300 ug/L	300 ug/L	0
sec-Butylbenzene	< 300 ug/L	300 ug/L	0
p-Isopropyttoluene	< 300 ug/L	300 ug/L	0
1,3-Dichlorobenzene	< 300 ug/L	300 ug/L	0
1,4-Dichlorobenzene	< 300 ug/L	300 ug/L	0
n-Butylbenzene	< 300 ug/L	300 ug/L	0
1,2-Dichlorobenzene	< 300 ug/L	300 ug/L	C C
1,2-Dibromo-3-chloropropane	< 300 ug/L	300 ug/L	0
1,2,4-Trichlorobenzene	< 300 ug/L	300 ug/L	0
Hexachlorobutadiene	< 300 ug/L	300 ug/L	0
Naphthalene	5700 ug/L	300 ug/L	0
1,2,3-Trichlorobenzene	< 300 ug/L	300 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

DATA FILE:: 18Y01 | FIELD ID:: Bramlett 1 | LAB ID:: 99-JUN-0042

Tentatively Identified Compound Report

	Probable	Estimated	Library Match		T :3	Identification		G
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
Indene		840	97	22.95	Х			
methyl naphthalene		740	87	29.23	х			
								
		· · · · · · · · · · · · · · · · · · ·						
	-	<u> </u>						
			 					:

				"			_	
					··-		1	
	1							
								<u> </u>
	<u> </u>	 						
			 				~~	

Internal Standard	-
	RT
Pentafluorobenzene	8,99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates	
	% Recovery
Dibromofluoromethane	92%
Toluene D-8	102%
1,4-Bromofluorobenze	93%

USEPA - 8260 G.C. Conditions 25 m x 0.2 mm x 1.12um / HP-624 He, 0.4 ml/min, 35 C hold 6 mins, 35 C to 180 C @ 6.5 C/min, 180 to 210 C @ 2.5 C/min, hold 3 min



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014010 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: **MW-2**

Collection Date: 6/16/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method: SW-	846 8260	Analyst: MAO125C
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L -	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/L	3.6 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	1
Methyl iodide	< 3.0 ug/L	3.0 ug/L	0
Carbon disulfide	< 3.0 ug/L	3.0 ug/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	0
Acrylonitrile	< 3.0 ug/L	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	0
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	1
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chloroform	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachloride	< 3.0 ug/L		
Bromochloromethane	•		1
Benzene	< 3.0 ug/L 89 ug/L	3.0 ug/L	0
1,2-Dichloroethane	•	3.0 ug/L	0
Trichloroethene	_	3.0 ug/L	0
1,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/L	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0
Toluene	< 3.0 ug/L	3.0 ug/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Tetrachloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Hexanone	< 3.0 ug/L	3.0 ug/L	0
Dibromochloromethane	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromoethane (EDB)	< 3.0 ug/L	3.0 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014010

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-2

Collection Date: 6/16/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Me	tho	d: SW-846 8260			Analyst:	MAO125C
		Result			ing Limit	_Flag_	
Chlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
Isopropylbenzene	<	3.0	ug/L	3.0	ug/L	0	
1,1,1,2-tetrachloroethane	<	3.0	ug/L	3.0	ug/L	0	
Ethylbenzene		15	ug/L	3.0	ug/L	0	
m-p-Xylene	<	6.0	ug/L	6.0	ug/L	0	
o-Xylene		6.8	ug/L	3.0	ug/L	0	
Styrene	<	3.0	ug/L	3.0	ug/L	0	
Bromoform	<	3.0	ug/L	3.0	ug/L	0	
1,4-Dichlorobutane	<	3.0	ug/L	3.0	ug/L	0	
1,1,2,2-Tetrachioroethane	<	3.0	ug/L	3.0	ug/L	0	
1,2,3-Trichloropropane	<	3.0	ug/L	3.0	ug/L	0	
n-Propyl benzene	<	3.0	ug/L	3.0	ug/L	0	
Bromobenzene	<	3.0	ug/L	3.0	ug/L	0	
1,3,5-trimethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
2-Chlorotoluene	<	3.0	ug/L	3.0	ug/L	0	
4-Chlorotoluene	<	3.0	ug/L	3.0	ug/L	0	
t-Butylbenzene	<	3.0	ug/L	3.0	ug/L	0	
1,2,4-Trimethylbenzene		3.2	ug/L	3.0	ug/L	0	
sec-Butylbenzene	<	3.0	ug/L	3.0	ug/L	0	
p-Isopropyltoluene	<	3.0	ug/L	3.0	ug/L	0	
1,3-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
1,4-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
n-Butylbenzene	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dibromo-3-chloropropane	<	3.0	ug/L	3.0	ug/L	0	
1,2,4-Trichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
Hexachlorobutadiene	<	3.0	ug/L	3.0	ug/L	Ō	
Naphthalene		150	ug/L	3.0	ug/L	0	
1,2,3-Trichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

1204 Whisewest 7/16/99

				3		
ATA FILE::	22Y01	FIELD ID::	Bramlett M	LAB ID::	99-JUN-0042	
**- 1						

	Probable	Estimated	Library Match	Retention		Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
						•		
Indane		90	87	22.48	Х			
methyl Indan		7.5	87	25.51	X			
benzothiophene		14	91	27.1	х			
methyl naphthalene		73	93	29.53	Х			
dimethyl naphthalene		7.8	95	31.01	Х			
dimethyl naphthalene		12	95	31.28	Х			
		·						
							j	
								-

Internal Standard	
	RT
Pentafluorobenzene	8.99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates	
1	% Recovery
Dibromofluoromethane	95%
Toluene D-8	99%
1,4-Bromofluorobenze	84%

USEPA - 8260 G.C. Conditions 25 m x 0.2 mm x 1.12um / HP-624 He, 0.4 ml/min, 35 C hold 6 mins, 35 C to 180 C @ 6.5 C/min, 180 to 210 C @ 2.5 C/min, hold 3 min



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014011

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-3

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

st Code: MS8260_W	Test Method: SW-846 8	260	Analyst: MAO12
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 6.0 ug/L	6.0 ug/L	0
Chloromethane	< 6.0 ug/L	6.0 ug/L	0
Vinyl chloride	< 6.0 ug/L	6.0 ug/L	0
Bromomethane	< 6.0 ug/L	6.0 ug/L	0
Chloroethane	< 6.0 ug/L	6.0 ug/L	0
Trichlorofluoromethane	< 6.0 ug/L	6.0 ug/L	O
Acrolein	< 6.0 ug/L	6.0 ug/L	0
1,1-Dichloroethene	< 6.0 ug/L	6.0 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 6.0 ug/L	6.0 ug/L	0
Acetone	< 6.0 ug/L	6.0 ug/L	1
Methyl iodide	< 6.0 ug/L	6.0 ug/L	0
Carbon disuffide	< 6.0 ug/L	6.0 ug/L	0
Methylene chloride	< 6.0 ug/L	6.0 ug/L	0
Acrylonitrile	< 6.0 ug/L	6.0 ug/L	0
MTBE	< 6.0 ug/L	6.0 ug/L	0
trans-1,2-Dichloroethene	< 6.0 ug/L	6.0 ug/L	0
Isopropyl ether	< 6.0 ug/L	6.0 ug/L	ō
1,1-Dichloroethane	< 6.0 ug/L	6.0 ug/L	o
Vinyl acetate	< 6.0 ug/L	6.0 ug/t.	0
2,2-Dichloropropane	< 6.0 ug/L	6.0 ug/L	0
cis-1,2-Dichloroethene	< 6.0 ug/L	6.0 ug/L	Ō
2-Butanone	< 6.0 ug/L	6.0 ug/L	0
Chloroform	< 6.0 ug/L	6.0 ug/L	0
1,1-Dichloropropene	< 6.0 ug/L	6.0 ug/L	0
1,1,1-Trichloroethane	< 6.0 ug/L	•	0
Carbon tetrachloride	< 6.0 ug/L	•	•
Bromochloromethane	· ·	_	0
Benzene	•	6.0 ug/L	0
1,2-Dichloroethane	49 ug/L	6.0 ug/L	0
Trichloroethene	< 6.0 ug/L	6.0 ug/L	0
1,2-Dichloropropane	< 6.0 ug/L	6.0 ug/L	0
Dibromomethane	< 6.0 ug/L	6.0 ug/L	0
Bromodichloromethane	< 6.0 ug/L	6.0 ug/L	0
2-Chloroethyl vinyl ether	< 6.0 ug/L	6.0 ug/L	0
• •	< 6.0 ug/L	6.0 ug/L	0
cis-1,3-Dichloropropene	< 6.0 ug/L	6.0 ug/L	0
4-Methyl-2-pentanone (MIBK) Toluene	< 6.0 ug/L	6.0 ug/L	0
	11 ug/L	6.0 ug/L	0
trans-1,3-Dichloropropene	< 6.0 ug/L	6.0 ug/L	0
1,1,2-Trichloroethane	< 6.0 ug/L	6.0 ug/L	, 0
1,3-Dichloropropane Tetrachloroethene	< 6.0 ug/L	6.0 ug/L	0
2-Hexanone	< 6.0 ug/L	6.0 ug/L	0
	< 6.0 ug/L	6.0 ug/L	0
Dibromochloromethane	< 6.0 ug/L	6.0 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Fax: 704-875-5038 Phone: 704-875-5209

Sample ID #: 99014011

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-3

6/15/99

Collection Date:

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

To	est Code: MS8260_W	Test I	Metho	od: \$W-84	£6 8260			Analyst:	MAO125C
			R	esult	_	Report	ing Limit	Flag	
	Chlorobenzene	<	6.0	ug/L		6.0	ug/L	0	
	Isopropylbenzene	<	6.0	ug/L		6.0	ug/L	0	
	1,1,1,2-tetrachloroethane	<	6.0	ug/L		6.0	ug/L	0	
	Ethylbenzene		28	ug/L		6.0	ug/L	0	
	m-p-Xylene		9.4	ug/L		12	ug/L	0	
	o-Xylene		8.6	ug/L		6.0	ug/L	0	
	Styrene	<	6.0	ug/L		6.0	ug/L	0	
	Bromoform	<	6.0	ug/L		6.0	ug/L	0	
	1,4-Dichlorobutane	<	6.0	ug/L		6.0	ug/L	0	
	1,1,2,2-Tetrachloroethane	<	6.0	ug/L		6.0	ug/L	0	
	1,2,3-Trichtoropropane	<	6.0	ug/L		6.0	ug/L	0	
	n-Propyl benzene	<	6.0	ug/L		6.0	ug/L	0	
	Bromobenzene	<	6.0	ug/L		6.0	ug/L	0	
1	1,3,5-trimethylbenzene	<	6.0	ug/L		6.0	ug/L	0	
,	2-Chlorotoluene	<	6.0	ug/L		6.0	ug/L	0	
	4-Chlorotoluene	<	6.0	ug/L		6.0	ug/L	0	
	t-Buty/benzene	<	6.0	ug/L		6.0	ug/L	0	
	1,2,4-Trimethylbenzene		8.8	ug/L		6.0	ug/L	0	
	sec-Butylbenzene	<	6.0	ug/L		6.0	ug/L	0	
	p-Isopropyltoluene	<	6.0	ug/L		6.0	ug/L	0	
	1,3-Dichlorobenzene	<	6.0	-		6.0	ug/L	Ö	
	1,4-Dichlorobenzene	<	6.0	ug/L		6.0	ug/L	0	
	n-Butylbenzene	<	6.0	ug/L		6.0	ug/L	0	
	1,2-Dichtorobenzene	<	6.0	ug/L		6.0	ug/L	0	
	1,2-Dibromo-3-chioropropane	<	6.0	ug/L		6.0	ug/L	0	
	1,2,4-Trichlorobenzene	<	6.0	=		6.0	ug/L	0	
	Hexachlorobutadiene	<		•		6.0	ug/L	0	
	Naphthalene		690	•		300	ug/L	0	
	1,2,3-Trichlorobenzene	<	6.0	-		6.0	ug/L	0	
				-a-			- 	~	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

			4		:	4
DATA FILE::	22Y02	FIELD ID::	Bramlett v. v3	I I AR ID	99-JUN-0042	`
DATATILL	22 1 02	1 1660 10	Digitilett MAAA		33-0011-0042	

	Probable	Estimated	Library Match	Retention		Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Numbe
Indene		18	94	22.95	х	····		
					-			
		· <u>·····</u>			-			
			 					
				_				
							<u> </u>	

Internal Standard	
	RT
Pentafluorobenzene	8.99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates	
	% Recovery
Dibromofluoromethane	93%
Toluene D-8	103%
1,4-Bromofluorobenze	91%

USEPA - 8260 G.C. Conditions 25 m x 0.2 mm x 1.12um / HP-624 He, 0.4 ml/min, 35 C hold 6 mins, 35 C to 180 C @ 6.5 C/min, 180 to 210 C @ 2.5 C/min, hold 3 min



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: MW-4

Collection Date: 6/17/99 Site : BRAMLETT ST Type of Sample : GROUNDWATER

١	7OC	IN	WA	TER	BY	GC/MS	_	8260
41			***			~~::::	_	0200

est Code: MS8260_W	Test Method: SW-846 8	3260	Analyst: MAO12
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	O.
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/L	3.0 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	a
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Triffuoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	0
Methyl iodide	< 3.0 ug/L	3.0 ug/L	0
Carbon disulfide	< 3.0 ug/L	3.0 ug/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	0
Acrylonitrile	< 3.0 ug/L	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	0
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chloroform	< 3.0 ug/L	3.0 ug/L	ō
1,1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	Ŏ
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	Ō
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	0
Bromochloromethane	< 3.0 ug/L	3.0 ug/L	o o
Benzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichioropropane	< 3.0 ug/L	3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/L	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0
Toluene	< 3.0 ug/L	3.0 ug/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Tetrachloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Hexanone	< 3.0 ug/L	3.0 ug/L	0
Dibromochloromethane	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromoethane (EDB)	< 3.0 ug/L	3.0 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014012

Job # : 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-4

Collection Date: 6/17/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Chlorobenzene	< <	3.0	esult	Repor	tina Limit	F/2.11	
Chlorobenzene		3.0			any Larae	Flag	
	<		ug/L	3.0	ug/L	0	
Isopropyibenzene		3.0	ug/L	3.0	ug/L	0	
1,1,1,2-tetrachloroethane	<	3.0	ug/L	3.0	ug/L	0	
Ethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
m-p-Xylene	<	6.0	ug/L	6.0	ug/L	0	
o-Xylene	<	3.0	ug/L	3.0	ug/L	0	
Styrene	<	3.0	ug/L	3.0	ug/L	0	
Bromoform	<	3.0	ug/L	3.0	ug/L	0	
1,4-Dichlorobutane	<	3.0	ug/L	3.0	ug/L	0	
1,1,2,2-Tetrachloroethane	<	3.0	ug/L	3.0	ug/L	0	
1,2,3-Trichtoropropane	<	3.0	ug/L	3.0	ug/L	0	
n-Propyl benzene	<	3.0	ug/L	3.0	ug/L	0	
Bromobenzene	<	3.0	ug/L	3.0	ug/L	0	
1,3,5-trimethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
2-Chlorotoluene	<	3.0	ug/L	3.0	ug/L	0	
4-Chlorotoluene	<	3.0	ug/L	3.0	ug/L	0	
t-Butylbenzene	<	3.0	ug/L	3.0	ug/L	0	
1,2,4-Trimethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
sec-Butylbenzene	<	3.0	ug/L	3.0	ug/L	0	
p-isopropyitoluene	<	3.0	ug/L	3.0	ug/L	0	
1,3-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
1,4-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
n-Butylbenzene	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dibromo-3-chloropropane	<	3.0	ug/L	3.0	ug/L	0	
1,2,4-Trichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
Hexachlorobutadiene	<	3.0	-	3.0	ug/L	0	
Naphthalene	<	3.0	-	3.0	ug/L	0	
1,2,3-Trichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

I - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

Report Generated 7/14/99 07:55:18

-4						
	ATA FILE::	23Y09	FIELD ID::	Bramlett I	LAB ID:: 99-JUN-0042	

	Probable	Estimated	Library Match	Retention		Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs								
			_		-			
]	

Internal Standard	
	RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21.55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40.87

Surrogates	
	% Recovery
Dibromofluoromethane	111%
Toluene D-8	100%
1,4-Bromofluorobenze	92%

USEPA - 8260 G.C. Conditions 105 m x 0.53 mm x 1.0 um / Restek 502.2 He, 0.5 ml/min, 35 C hold 10 mins, 35 C to 180 C @ 4 C/min, 180 to 200 C @ 10 C/min, hold 5 min



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014013

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-5

Collection Date: 6/14/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER	BY GC/MS	- 8260
---------------------	----------	--------

Test Code: MS8260_W	Test Method: SW-84	6 8260	Analyst: MAO125C
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/L	3.0 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	0
Methyl iodide	< 3.0 ug/L	3.0 ug/L	0
Carbon disulfide	< 3.0 ug/L	3.0 ug/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	Ö
Acrylonitrile	< 3.0 ug/L	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	0
trans-1,2-Dichtoroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	•	
1,1-Dichloroethane	< 3.0 ug/L		0
Vinyl acetate	•	3.0 ug/L	0
2,2-Dichloropropane	-	3.0 ug/L	0
cis-1,2-Dichloroethene		3.0 ug/L	0
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chloroform	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichtoropropene	< 3.0 ug/L	3.0 ug/L	0
	< 3.0 ug/L	3.0 ug/L	0
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	0
Bromochloromethane	< 3.0 ug/L	3.0 ug/l.	0
Benzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichtoropropane	< 3.0 ug/L	3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/L	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0
Toluene	< 3.0 ug/L	3.0 ug/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloroethane	< 3.0 ug/i.	3.0 ug/L	0
1,3-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Tetrachloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Hexanone	< 3.0 ug/L	3.0 ug/L	0
2-Hexanone Dibromochloromethane	-		0 0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: MW-5

Collection Date: 6/14/99 Site : BRAMLETT ST Type of Sample : GROUNDWATER

VOC IN WATER BY GC/MS - 8260

est Code: MS8260_W	Test Method: \$	W-846 8260	Analyst: MAO1250
	Result	Reporting Lin	nit Flag
Chlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Isopropylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,1,1,2-tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
Ethylbenzene	< 3.0 ug/L	3.0 ug/L	0
m-p-Xylene	< 6.0 ug/L	6.0 ug/L	0
o-Xylene	< 3.0 ug/L	3.0 ug/L	0
Styrene	< 3.0 ug/L	3.0 ug/L	a
Bromoform	< 3.0 ug/L	3.0 ug/L	0
1,4-Dichlorobutane	< 3.0 ug/L	3.0 ug/L	0
1,1,2,2-Tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
1,2,3-Trichloropropane	< 3.0 ug/L	3.0 ug/L	0
n-Propyl benzene	< 3.0 ug/L	3.0 ug/L	0
Bromobenzene	< 3.0 ug/L	3.0 ug/L	0
1,3,5-trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
2-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
4-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
t-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,2,4-Trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
sec-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
p-Isopropyttoluene	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichlorobenzene	< 3.0 ug/L	. 3.0 ug/L	0
1,4-Dichlorobenzene	< 3.0 ug/l	. 3.0 ug/L	0
n-Butylbenzene	< 3.0 ug/l	. 3.0 ug/L	0
1,2-Dichlorobenzene	< 3.0 ug/L	. 3.0 ug/L	. 0
1,2-Dibromo-3-chloropropane	< 3.0 ug/L	. 3.0 ug/L	. 0
1,2,4-Trichlorobenzene	< 3.0 ug/l	. 3.0 ug/L	. 0
Hexachlorobutadiene	< 3.0 ug/l	. 3.0 ug/L	. 0
Naphthalene	< 3.0 ug/t	. 3.0 ug/L	. 0
1,2,3-Trichiorobenzene	< 3.0 ug/t		

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Droy Whissnant 1/16/99

		:			:	
=					65 1111 65 15	
DATA FILE::	23Y10	FIELD ID::	Bramlett 775	LAB ID::	99-JUN-0042	

	Probable	Estimated	Library Match	Retention		Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs								
	<u> </u>							·
			- -					
			f		-	<u> </u>		<u> </u>
								
								
							-	
· · · · · · · · · · · · · · · · · · ·								
				-				
								:
			ļ <u>.</u> .					
		<u></u>				<u> </u>		
<u></u>	 		ļ. <u></u>					
		_						
	 							

Internal Standard	
	RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21.55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40.87

Surrogates	
	% Recovery
Dibromofluoromethane	110%
Toluene D-8	99%
1,4-Bromofluorobenze	93%
1,4-Bromofluorobenze	93%

USEPA - 8260 G.C. Conditions 105 m x 0.53 mm x 1.0 um / Restek 502.2 He, 0.5 ml/min, 35 C hold 10 mins, 35 C to 180 C @ 4 C/min, 180 to 200 C @ 10 C/min, hold 5 min



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: MW-6

Collection Date: 6/16/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

est Code: MS8260_W	Test Method: SW-846 82	260	Analyst: MAO12
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 15 ug/L	15 ug/L	0
Chloromethane	< 15 ug/L	15 ug/L	0
Vinyl chloride	< 15 ug/L	15 ug/L	0
Bromomethane	< 15 ug/L	15 ug/L	0
Chloroethane	< 15 ug/L	15 ug/L	0
Trichlorofluoromethane	< 15 ug/L	15 ug/L	0
Acrolein	< 15 ug/L	15 ug/L	0
1,1-Dichloroethene	< 15 ug/L	15 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 15 ug/L	15 ug/L	0
Acetone	< 15 ug/L	15 ug/L	1
Methyl iodide	< 15 ug/L	15 ug/L	0
Carbon disuffide	< 15 ug/L	15 ug/L	0
Methylene chloride	< 15 ug/L	15 ug/L	0
Acrylonitrile	< 15 ug/L	15 ug/L	0
MTBE	< 15 ug/L	15 ug/L	0
trans-1,2-Dichloroethene	< 15 ug/L	15 ug/L	0
Isopropyl ether	< 15 ug/L	15 ug/L	0
1,1-Dichloroethane	< 15 ug/L	15 ug/L	0
Vinyl acetate	< 15 ug/L	15 ug/L	0
2,2-Dichloropropane	< 15 ug/L	15 ug/L	1
cis-1,2-Dichloroethene	< 15 ug/L	15 ug/L	0
2-Butanone	< 15 ug/L	15 ug/L	0
Chloroform	< 15 ug/L	15 ug/L	0
1,1-Dichloropropene	< 15 ug/L	15 ug/L	0
1,1,1-Trichtoroethane	< 15 ug/L	15 ug/L	0
Carbon tetrachloride	< 15 ug/L	15 ug/L	1
Bromochloromethane	< 15 ug/L	15 ug/L	0
Benzene	21 ug/L	15 ug/L	0
1,2-Dichloroethane	< 15 ug/L	15 ug/L	0
Trichloroethene	< 15 ug/L	15 ug/L,	0
1,2-Dichloropropane	< 15 ug/L	15 ug/L	0
Dibromomethane	< 15 ug/L	15 ug/L	0
Bromodichloromethane	< 15 ug/L	15 ug/L	0
2-Chloroethyl vinyl ether	< 15 ug/L	15 ug/L	0
cis-1,3-Dichloropropene	< 15 ug/L	15 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 15 ug/L	15 ug/L	0
Toluene	35 ug/L	15 ug/L	0
trans-1,3-Dichloropropene	< 15 ug/L	15 ug/L	0
1,1,2-Trichloroethane	< 15 ug/L	15 ug/L	0
1,3-Dichloropropane	< 15 ug/L	15 ug/L	0
Tetrachloroethene	< 15 ug/L	15 ug/L	0
2-Hexanone	< 15 ug/L	15 ug/L	0
Dibromochloromethane	< 15 ug/L	15 ug/L	0
1,2-Dibromoethane (EDB)	< 15 ug/L	15 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: MW-6

Collection Date: 6/16/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test M	letho	d: SW-846 82	60			Analyst:	MAO125C
		Re	suit	Rep	ortin	g Limit	Flag	
Chtorobenzene	<	15	ug/L	1:	5 t	ıg/L	0	
Isopropylbenzene	<	15	ug/L	1:	5 ι	ıg/L	0	
1,1,1,2-tetrachloroethane	<	15	ug/L	1	5 i	ıg/L	0	
Ethylbenzene		15	ug/L	1:	5 I	Jg/L	0	
m-p-Xylene		19	ug/L	30	0 1	ug/L	2	
o-Xylene		11	ug/L	1:	5 i	ug/L	2	
Styrene	<	15	ug/L	1:	5 1	ug/L	0	
Bromoform	<	15	ug/L	1:	5 (ug/L	0	
1,4-Dichtorobutane	<	15	ug/L	1:	5 (ug/L	0	
1,1,2,2-Tetrachloroethane	<	15	ug/L	1	5 (ug/L	0	
1,2,3-Trichloropropane	<	15	ug/L	1	5 1	ug/L	0	
n-Propyl benzene	<	15	ug/L	1	5 1	ug/L	0	
Bromobenzene	<	15	ug/L	1	5	ug/L	0	
1,3,5-trimethylbenzene	<	15	ug/L	1	5	ug/L	0	
2-Chlorotoluene	<	15	ug/L	1	5	ug/L	0	
4-Chlorotoluene	<	15	ug/L	1	5	ug/L	0	
t-Butytbenzene	<	15	ug/L	1	5	ug/L	0	
1,2,4-Trimethylbenzene	<	15	ug/L	1	5	ug/L	0	
sec-Butylbenzene	<	15	ug/L	1	5	ug/L	0	
p-Isopropyltoluene	<	15	ug/L	1	5	ug/L	0	
1,3-Dichlorobenzene	<	15	ug/L	1	5	ug/L	0	
1,4-Dichlorobenzene	<	15	ug/L	1	5	ug/L	0	
n-Butylbenzene	<	15	ug/L	1	5	ug/L	0	
1,2-Dichlorobenzene	<	15	ug/L	1	5	ug/L	0	
1,2-Dibromo-3-chloropropane	<	15	ug/L	1	5	ug/L	0	
1,2,4-Trichlorobenzene	<	15		1	5	ug/L	0	
Hexachlorobutadiene	<	15	-	1		ug/L	0	
Naphthalene		450	•			ug/L	0	
1,2,3-Trichlorobenzene	<	15	-	1		ug/L	0	
			→ -			• -	-	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Data Verified and Approved By, Date

<u></u>				;
DATA FILE::	22Y06	FIELD ID::	Bramlett 1005	LAB ID:: 99-JUN-0042

	Probable	Estimated	Library Match	Retention	<u> </u>	Identification	-	
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs						 		· · · · · · · · · · · · · · · · · · ·
					<u> </u>			_
		<u> </u>						
			ļ !					
 	 							
	<u> </u>							
						·		

Internal Standard	
	RT
Pentafluorobenzene	8.99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates	
	% Recovery
Dibromofluoromethane	90%
Toluene D-8	100%
1,4-Bromofluorobenze	84%

USEPA - 8260 G.C. Conditions 25 m x 0.2 mm x 1.12um / HP-624 He, 0.4 ml/min, 35 C hold 6 mins, 35 C to 180 C @ 6.5 C/min, 180 to 210 C @ 2.5 C/min, hold 3 min



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014014

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-7

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

и	 /-	_	 	-	 _	ъ.	В	_	•			•

est Code: MS8260_W	Test Method: SW-846 82	260	Analyst: MAO12
•	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 30 ug/L	30 ug/L	0
Chloromethane	< 30 ug/L	30 ug/L	0
Viny! chloride	< 30 ug/L	30 ug/L	0
Bromomethane	< 30 ug/L	30 ug/L	0
Chloroethane	< 30 ug/L	30 ug/L	0
Trichlorofluoromethane	< 30 ug/L	30 ug/L	0
Acrolein	< 30 ug/L	30 ug/L	0
1,1-Dichloroethene	< 30 ug/L	30 ug/L	Ó
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 30 ug/L	30 ug/L	0
Acetone	< 30 ug/L	30 ug/L	1
Methyl iodide	< 30 ug/L	30 ug/L	0
Carbon disulfide	< 30 ug/L	30 ug/L	0
Methylene chloride	< 30 ug/L	30 ug/L	0
Acrytonitrile	< 30 ug/L	30 ug/L	Ō
MTBE	< 30 ug/L	30 ug/L	0
trans-1,2-Dichloroethene	< 30 ug/L	30 ug/L	Ō
Isopropyl ether	< 30 ug/L	30 ug/L	ō
1,1-Dichloroethane	< 30 ug/L	30 ug/L	0
Vinyl acetate	< 30 ug/L	30 ug/L	Ō
2,2-Dichloropropane	< 30 ug/L	30 ug/L	1
cis-1,2-Dichloroethene	< 30 ug/L	30 ug/L	0
2-Butanone	< 30 ug/L	30 ug/L	0
Chloroform	< 30 ug/L	30 ug/L	0
1,1-Dichloropropene	< 30 ug/L	30 ug/L	0
1,1,1-Trichloroethane	< 30 ug/L	30 ug/L	0
Carbon tetrachloride	< 30 ug/L	30 ug/L	1
Bromochloromethane	< 30 ug/L	30 ug/L	0
Benzene	•	•	_
1,2-Dichloroethane		30 ug/L	0
Trichloroethene	< 30 ug/L < 30 ug/L	30 ug/L	0
1,2-Dichloropropane		30 ug/L 30 ug/L	0
Dibromomethane	<u> </u>	30 ug/L	0
Bromodichloromethane	•	30 ug/L	0
2-Chloroethyl vinyl ether	<u> </u>	30 ug/L	0
cis-1,3-Dichloropropene		30 ug/L	0
4-Methyl-2-pentanone (MIBK)	•	30 ug/L	0
Toluene	· ·	30 ug/L	0
trans-1,3-Dichloropropene	• • •	30 ug/L	0
1,1,2-Trichloroethane	< 30 ug/L < 30 ug/L	30 ug/L 30 ug/L	0
1,3-Dichloropropane	< 30 ug/L	•	0
Tetrachloroethene	< 30 ug/L	30 ug/L	0
2-Hexanone	< 30 ug/L	30 ug/L	0
Dibromochloromethane	< 30 ug/L	30 ug/L 30 ug/L	0
1,2-Dibromoethane (EDB)	< 30 ug/L	30 ug/L 30 ug/L	0 0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014014

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: MW-7

Test

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

st Code: MS8260_W	Test Method: SW-846 826	30	Analyst: MAO125C
	Result	Reporting Limit	Flag
Chlorobenzene	< 30 ug/L	30 ug/L	0
Isopropylbenzene	< 30 ug/L	30 ug/L	0
1,1,1,2-tetrachloroethane	< 30 ug/L	30 ug/L	0
Ethylbenzene	350 ug/L	30 ug/L	0
m-p-Xylene	170 ug/L	60 ug/L	0
o-Xylene	140 ug/L	30 ug/L	0
Styrene	< 30 ug/L	30 ug/L	O
Bromoform	< 30 ug/L	30 ug/L	0
1,4-Dichlorobutane	< 30 ug/L	30 ug/L	a
1,1,2,2-Tetrachloroethane	< 30 ug/L	30 ug/L	0
1,2,3-Trichloropropane	< 30 ug/L	30 ug/L	0
n-Propyl benzene	< 30 ug/L	30 ug/L	0
Bromobenzene	< 30 ug/L	30 ug/L	0
1,3,5-trimethylbenzene	< 30 ug/L	30 ug/L	O
2-Chlorotoluene	< 30 ug/L	30 ug/L	0
4-Chlorotoluene	< 30 ug/L	30 ug/L	0
t-Butylbenzene	< 30 ug/L	30 ug/L	0
1,2,4-Trimethylbenzene	57 ug/L	30 ug/L	0
sec-Butylbenzene	< 30 ug/L	30 ug/L	0
p-Isopropyltotuene	< 30 ug/L	30 ug/L	0
1,3-Dichlorobenzene	< 30 ug/L	30 ug/L	0
1,4-Dichlorobenzene	< 30 ug/L	30 ug/L	0
n-Butylbenzene	< 30 ug/L	30 ug/L	O
1,2-Dichlorobenzene	< 30 ug/L	30 ug/L	0
1,2-Dibromo-3-chloropropane	< 30 ug/L	30 ug/L	0
1,2,4-Trichlorobenzene	< 30 ນໆ/L	30 ug/L	0
Hexachlorobutadiene	< 30 ug/L	30 ug/L	0
Naphthalene	1400 ug/L	30 ug/L	0
1,2,3-Trichlorobenzene	< 30 ug/L	30 ug/L	0
	-	-	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

DATA FILE:: 22Y07 FIELD ID:: BramlettV7 LAB ID:: 99-JUN-0042

Tentatively Identified Compound Report

	Probable	Estimated	Library Match	Retention		Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual	-	Scan
Compound	Weight _	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
Indane		860	87	22.49	х			
Indene		53	90	22.94	х			
methyl naphthalene		51	93	29.53	X	· · · · · · · · · · · · · · · · · · ·		
					·····		_	
·								
					<u> </u>			
							-	
·								
	<u></u>			<u></u>				
	<u> </u>							
	<u> </u>							
	<u> </u>							
	<u> </u>							
				· ·				
								
					ļ			
					i			

Internal Standard	
	RT
Pentafluorobenzene	8.99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates	
	% Recovery
Dibromofluoromethane	92%
Toluene D-8	106%
1,4-Bromofluorobenze	87%

USEPA - 8260 G.C. Conditions 25 m x 0.2 mm x 1.12um / HP-624 He, 0.4 ml/min, 35 C hold 6 mins, 35 C to 180 C @ 6.5 C/min, 180 to 210 C @ 2.5 C/min, hold 3 min



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014016 Job #: 99-JUN-0042 Cu

Customer ID: G. FRANKLIN

Sample Description: MW-8

Collection Date: 6/15/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN V	VATER	BY GC	/MS - 8260
----------	-------	-------	------------

Test Code: MS8260_W	Test Method: SW-846 8260)	Analyst: MAO125C
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 30 ug/L	30 ug/L	0
Chloromethane	< 30 ug/L	30 ug/L	0
Vinyl chloride	< 30 ug/L	30 ug/L	0
Bromomethane	< 30 ug/L	30 ug/L	0
Chloroethane	< 30 ug/L	30 ug/L	6
Trichlorofluoromethane	< 30 ug/L	30 ug/L	0
Acrolein	< 30 ug/L	30 ug/L	0
1,1-Dichloroethene	< 30 ug/L	30 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 30 ug/L	30 ug/L	0
Acetone	< 30 ug/L	30 ug/L	1
Methyl iodide	< 30 ug/L	30 ug/L	0
Carbon disulfide	< 30 ug/L	30 ug/L	0
Methylene chloride	< 30 ug/L	30 ug/L	0
Acrylonitrile	< 30 ug/L	30 ug/L	0
MTBE	< 30 ug/L	30 ug/L	0
trans-1,2-Dichloroethene	< 30 ug/L	30 ug/L	0
Isopropyt ether	< 30 ug/L	30 ug/L	0
1,1-Dichloroethane	< 30 ug/L	30 ug/L	o
Vinyl acetate	< 30 ug/L	30 ug/L	0
2,2-Dichloropropane	< 30 ug/L	30 ug/L	1
cis-1,2-Dichloroethene	< 30 ug/L	30 ug/L	0
2-Butanone	< 30 ug/L	30 ug/L	0
Chloroform	< 30 ug/L	30 ug/L	0
1,1-Dichloropropene	< 30 ug/L	30 ug/L	0
1,1,1-Trichloroethane	< 30 ug/L	30 ug/L	0
Carbon tetrachloride	< 30 ug/L	30 ug/L	1
Bromochloromethane	< 30 ug/L	30 ug/L	0
Benzene	340 ug/L	30 ug/L	0
1,2-Dichloroethane	< 30 ug/L	30 ug/L	0
Trichloroethene	< 30 ug/L	30 ug/L	0
1,2-Dichloropropane	< 30 ug/L	30 ug/L	0
Dibromomethane	< 30 ug/L	30 ug/L	0
Bromodichloromethane	< 30 ug/L	30 ug/L	0
2-Chloroethyl vinyl ether	< 30 ug/L	30 ug/L	0
cis-1,3-Dichloropropene	< 30 ug/L	30 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 30 ug/L	30 ug/L	0
Toluene	< 30 ug/L	30 ug/L	0
trans-1,3-Dichloropropene	< 30 ug/L	30 ug/L	0
1,1,2-Trichloroethane	< 30 ug/L	30 ug/L	0
1,3-Dichloropropane	< 30 ug/L	30 ug/L	0
Tetrachioroethene	< 30 ug/L	30 ug/L	0
2-Hexanone	< 30 ug/L	30 ug/L	0
Dibromochloromethane	< 30 ug/L	30 ug/L	0
1,2-Dibromoethane (EDB)	< 30 ug/L	30 ug/L	0



Test

Duke Power's Analytical Laboratory

Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014016 Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-8

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

t Code: MS8260_W	Test Method:	SW-846 8260		Analyst:	MAO125C
	Result	Repor	ting Limit	Flag	
Chlorobenzene	< 30 ug	/L 30	ug/L	0	
Isopropylbenzene	< 30 ug	/L 30	ug/L	0	
1,1,1,2-tetrachioroethane	< 30 ug	/L 30	ug/L	0	
Ethylbenzene	140 ug	/L 30	ug/L	0	
m-p-Xylene	75 ug	/L 60	ug/L	0	
o-Xylene	40 ug	/L 30	ug/L	0	
Styrene	< 30 ug	/L 30	ug/L	0	
Bromoform	< 30 ug	/L 30	ug/L	0	
1,4-Dichlorobutane	< 30 ug	/L 30	ug/L	0	
1,1,2,2-Tetrachloroethane	< 30 ug	/L 30	ug/L	0	
1,2,3-Trichloropropane	< 30 ug	/L 30	ug/L	0	
n-Propyl benzene	< 30 ug	/L 30	ug/L	0	
Bromobenzene	< 30 ug	/L 30	ug/L	0	
1,3,5-trimethy/benzene	< 30 ug	/L 30	ug/L	0	
2-Chlorotoluene	< 30 uç	/L 30	ug/L	0	
4-Chlorotoluene	< 30 ug	/L 30	ug/L	0	
t-Butylbenzene	< 30 ug		ug/L	0	
1,2,4-Trimethylbenzene	24 uç	/L 30	ug/L	2	
sec-Butylbenzene	< 30 ug	/L 30	ug/L	0	
p-Isopropyltoluene	< 30 սց	/L 30	ug/L	0	
1,3-Dichlorobenzene	< 30 ບຸ	/L 30	ug/L	0	
1,4-Dichlorobenzene	< 30 ug	/L 30	ug/L	0	
n-Butylbenzene	< 30 uç	/L 30	ug/L	0	
1,2-Dichlorobenzene	< 30 uç	/L 30	ug/L	0	
1,2-Dibrorno-3-chloropropane	< 30 uç	/L 30	ug/L	0	
1,2,4-Trichlorobenzene	< 30 ug	/L 30	ug/L	0	
Hexachlorobutadiene	< 30 ug	/L 30	ug/L	0	
Naphthalene	1400 ug	/L 30	ug/L	0	
1,2,3-Trichlorobenzene	< 30 uç	/L 30	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Down Whisenant 7/16/99

	:			;		
*				——————————————————————————————————————		
DATA FILE::	22Y08	FIELD ID::	Bramlett Mass	LAB ID::	99-JUN-0042	
			Diamiott ings			

	Probable	Estimated	Library Match			Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Numbe
Indane		410	76	22.49	X			
· · ·								
	_		[
			<u> </u>					
<u>-</u>			<u></u>					
			<u>-</u>					
			<u> </u>					
<u>.</u>								. ,
	1				_			

Internal Standard	
	RT
Pentafluorobenzene	8.99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates	
	% Recovery
Dibromofluoromethane	92%
Toluene D-8	102%
1,4-Bromofluorobenze	84%

USEPA - 8260 G.C. Conditions

25 m x 0.2 mm x 1.12um / HP-624 He, 0.4 ml/min, 35 C hold 6 mins, 35 C to 180 C @ 6.5 C/min, 180 to 210 C @ 2.5 C/min, hold 3 min



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014017

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-9

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 82

st Code: MS8260_W	Test Method: SW-846	8260	Analyst: MAQ12
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 15 ug/L	15 ug/L	0
Chloromethane	< 15 ug/L ·	1 5 ug/L	0
Vinyl chtoride	< 15 ug/L	15 ug/L	0
Bromomethane	< 15 ug/L	15 ug/L	0
Chloroethane	< 15 ug/L	15 ug/L	0
Trichloroffuoromethane	< 15 ug/L	15 ug/L	0
Acrolein	< 15 ug/L	15 ug/L	0
1,1-Dichloroethene	< 15 ug/L	15 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 15 ug/L	15 ug/L	0
Acetone	< 15 ug/L	15 ug/L	1
Methyl iodide	< 15 ug/L	15 ug/L	0
Carbon disulfide	< 15 ug/L	15 ug/L	0
Methylene chloride	< 15 ug/L	15 ug/L	0
Acrylonitrile	< 15 ug/L	15 ug/L	0
MTBE	< 15 ug/L	15 ug/L	0
trans-1,2-Dichloroethene	< 15 ug/L	15 ug/L	0
Isopropyl ether	< 15 ug/L	15 ug/L	0
1,1-Dichloroethane	< 15 ug/L	15 ug/L	0
Vinyl acetate	< 15 ug/L	15 ug/L	0
2,2-Dichloropropane	< 15 ug/L	15 ug/L	1
cis-1,2-Dichloroethene	< 15 ug/L	15 ug/L	0
2-Butanone	< 15 ug/L	15 ug/L	o
Chloroform	< 15 ug/L	15 ug/L	0
1,1-Dichloropropene	< 15 ug/L	15 ug/L	0
1,1,1-Trichloroethane	< 15 ug/L	15 ug/L	a
Carbon tetrachloride	< 15 ug/L	15 ug/L	1
Bromochloromethane	< 15 ug/L	15 ug/L	0
Benzene	< 15 ug/L	15 ug/L	o o
1,2-Dichloroethane	< 15 ug/L	15 ug/L	0
Trichloroethene	< 15 ug/L	15 ug/L	0
1,2-Dichloropropane	< 15 ug/L	15 ug/L	0
Dibromomethane	< 15 ug/L	15 ug/L	o o
Bromodichloromethane	< 15 ug/L	15 ug/L	0
2-Chloroethyl vinyl ether	< 15 ug/L	15 ug/L	0
cis-1,3-Dichloropropene	< 15 ug/L	15 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 15 ug/L	15 ug/L	0
Toluene	< 15 ug/L	15 ug/L	0
trans-1,3-Dichloropropene	< 15 ug/L	15 ug/L	0
1,1,2-Trichloroethane	< 15 ug/L	15 ug/L	0
1,3-Dichloropropane	< 15 ug/L	15 ug/L	0
Tetrachloroethene	< 15 ug/L	15 ug/L	0
2-Hexanone	< 15 ug/L	15 ug/L	0
Dibromochloromethane	< 15 ug/L	15 ug/L	o o
1,2-Dibromoethane (EDB)	< 15 ug/L	15 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014017

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-9

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test	Code: MS8260_W	Test M	etho	d: SW-840	8260			Analyst:	MAO125C
			Re	sult		Report	ing Limit	Flag	
	Chlorobenzene	<	15	ug/L		15	ug/L	0	
	Isopropylbenzene	<	15	ug/L		15	ug/L	0	
	1,1,1,2-tetrachloroethane	<	15	ug/L		15	ug/L	0	
	Ethylbenzene	<	15	ug/L		15	ug/L	0	
	m-p-Xylene	<	30	ug/L		30	ug/L	0	
	o-Xylene	<	15	ug/L		15	υg/L	0	
	Styrene	<	15	ug/L		15	ug/L	0	
	Bromoform	<	15	ug/L		15	ug/L	0	
	1,4-Dichlorobutane	<	15	ug/L		15	ug/L	0	
	1,1,2,2-Tetrachloroethane	<	15	ug/L		15	ug/L	0	
	1,2,3-Trichloropropane	<	15	ug/L		15	ug/L	0	
	n-Propyl benzene	<	15	ug/L		15	ug/L	0	
	Bromobenzene	<	15	ug/L		15	ug/L	0	
	1,3,5-trimethylbenzene	<	15	ug/L		15	ug/L	0	
)	2-Chlorotoluene	<	15	ug/L		15	ug/L	0	
	4-Chlorotoluene	<	15	ug/L		15	ug/L	0	
	t-Butylbenzene	<	15	ug/L		15	ug/L	0	
	1,2,4-Trimethylbenzene	<	15	ug/L		15	ug/L	0	
	sec-Buty/benzene	<	15	ug/L		15	ug/L	0	
	p-Isopropyttoluene	<	15	ug/L		15	ug/L	0	
	1,3-Dichlorobenzene	<	15	ug/L		15	ug/L	0	
	1,4-Dichlorobenzene	<	15	ug/L		15	ug/L	0	
	n-Butylbenzene	<	15	ug/L		15	ug/L	0	
	1,2-Dichlorobenzene	<	15	ug/L		15	ug/L	0	
	1,2-Dibromo-3-chloropropane	<	15	ug/L		15	ug/L	0	
	1,2,4-Trichlorobenzene	<	15	ug/L		15	ug/L	0	
	Hexachlorobutadiene	<	15	ug/L		15	ug/L	0	
	Naphthalene		120	ug/L		15	ug/L	0	
	1,2,3-Trichlorobenzene	<	15	ug/L		15	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Thory Whisenant 7/16/99

-	\						•
_	DATA FILE.	22Y09	FIELD ID::	Bramlett V9	LAB ID::	99-JUN-0042	
_	DATA FILE::	22109	FIELD ID.	Digitilicit	 LAD ID	33-3014-0042	

	Probable	Estimated	Library Match	Retention		Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs							ļ	
		<u> </u>					!	
		· · · · · · · · · · · · · · · · · · ·						
								<u> </u>
								
					<u> </u>			
								···
		 						
	ļ <u></u> -							
								
		ļ <u></u>		<u> </u>	· - · ·			
		<u></u>						<u> </u>
	ĺ							

Internal Standard	
	RT
Pentafluorobenzene	8.99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates	
	% Recovery
Dibromofluoromethane	94%
Toluene D-8	103%
1,4-Bromofluorobenze	84%

USEPA - 8260 G.C. Conditions

25 m x 0.2 mm x 1.12um / HP-624 He, 0.4 ml/min, 35 C hold 6 mins, 35 C to 180 C @ 6.5 C/min, 180 to 210 C @ 2.5 C/min, hold 3 min



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014018

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-10

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

i	V	OC.	IN	WA.	TFR	RY	GC/MS	<u>- 8260</u>
ı	ı۳,	\smile	114	***		6 1	COMMO	- 0200

Test Code: MS8260_W	Test Method: SW-846 8260)	Analyst: MAO125C
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/L	3.0 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	0
Methyl iodide	< 3.0 ug/L	3.0 ug/L	0
Carbon disulfide	< 3.0 ug/L	3.0 ug/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	0
Acrylonitrile	< 3.0 ug/L	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	0
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chloroform	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	0
Bromochloromethane	< 3.0 ug/L	3.0 ug/L	0
Benzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/L	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0
Toluene	< 3.0 ug/L	3.0 ug/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Tetrachioroethene	< 3.0 ug/L	3.0 ug/L	0
2-Hexanone	< 3.0 ug/L	3.0 ug/L	0
Dibromochloromethane	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromoethane (EDB)	< 3.0 ug/L	3.0 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014018

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-10

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method	: SW-846 8260)		Analyst:	MAO125C
	Res	Report	ing Limit	Flag		
Chlorobenzene	< 3.0	ug/L	3.0	ug/L	0	
Isopropylbenzene	< 3.0	ug/L	3.0	ug/L	0	
1,1,1,2-tetrachloroethane	< 3.0	ug/L	3.0	ug/L	0	
Ethylbenzene	< 3.0	ug/L	3.0	ug/L	0	
m-p-Xylene	< 6.0	ug/L	6.0	ug/L	0	
o-Xylene	< 3.0	ug/L	3.0	ug/L	0	
Styrene	< 3.0	ug/L	3.0	ug/L	0	
Bromoform	< 3.0	ug/L	3.0	ug/L	0	
1,4-Dichlorobutane	< 3.0	ug/L	3.0	ug/L	O-	
1,1,2,2-Tetrachloroethane	< 3.0	ug/L	3.0	ug/L	0	
1,2,3-Trichloropropane	< 3.0	ug/L	3.0	ug/L	0	
n-Propyl benzene	< 3.0	ug/L	3.0	ug/L	0	
Bromobenzene	< 3.0	ug/L	3.0	ug/L	0	
1,3,5-trimethylbenzene	< 3.0	ug/L	3.0	ug/L	0	
2-Chlorotoluene	< 3.0	ug/L	3.0	ug/L	0	
4-Chlorotoluene	< 3.0	ug/L	3.0	ug/L	0	
t-Butylbenzene	< 3.0	ug/L	3.0	ug/L	0	
1,2,4-Trimethylbenzene	< 3.0	ug/L	3.0	ug/L	0	
sec-Butylbenzene	< 3.0	ug/L	3.0	ug/L	0	
p-isopropyltoluene	< 3.0	ug/L	3.0	ug/L	0	
1,3-Dichlorobenzene	< 3.0	ug/L	3.0	ug/L	0	
1,4-Dichlorobenzene	< 3.0	ug/L	3.0	ug/L	0	
n-Butylbenzene	< 3.0	ug/L	3.0	ug/L	0	
1,2-Dichlorobenzene	< 3.0	ug/L	3.0	ug/L	0	
1,2-Dibromo-3-chloropropane	< 3.0	ug/L	3.0	ug/L	0	
1,2,4-Trichlorobenzene	< 3.0	ug/L	3.0	ug/L	0	
Hexachlorobutadiene	< 3.0	ug/L	3.0	ug/L	0	
Naphthalene	< 3.0	ug/L	3.0	ug/L	0	
1,2,3-Trichlorobenzene	< 3.0	ug/L	3.0	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

	:			;
DATA FILE::	23Y11	FIELD ID::	Bramlet W10	LAB ID:: 99-JUN-0042
OATATICE	20111		Diamott militi	

	Probable	Estimated	Library Match	Retention		Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs			_					
	!			_				
								
	1				· · · · · ·	<u> </u>		
		· · · · · · · · · · · · · · · · · · ·		<u>.</u>	<u>.</u>			l
	 			·				
								
		· · · <u>-</u> -						
	 							
			 					
								
	<u> </u>							
	<u> </u>	** · · · · · · · · · · · · · · · · · ·						
<u> </u>		_						· · · · · · · · · · · · · · · · · · ·
<u> </u>							•	

Internal Standard	
][RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21.55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40.87

Recovery
107%
98%
92%

USEPA - 8260 G.C. Conditions 105 m x 0.53 mm x 1.0 um / Restek 502.2 He, 0.5 ml/min, 35 C hold 10 mins, 35 C to 180 C @ 4 C/min, 180 to 200 C @ 10 C/min, hold 5 min



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014019 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-11

Collection Date: 6/15/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

est Code: MS8260_W	Test Method: SW-846 82	860	Analyst: MAO12
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/i_	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/L	3.0 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	0
Methyl iodide	< 3.0 ug/L	3.0 ug/L	0
Carbon disulfide	< 3.0 ug/L	3.0 ug/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	0
Acrytonitrile	< 3.0 ug/L	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	0
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chloroform	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	0
Bromochloromethane	< 3.0 ug/L	3.0 ug/L	0
Benzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/L	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0
Toluene	< 3.0 ug/L	3.0 ug/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichtoropropane	< 3.0 ug/L	3.0 ug/L	0
Tetrachloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Hexanone	< 3.0 ug/L	3.0 ug/L	0
Dibromochloromethane	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromoethane (EDB)	< 3.0 ug/L	3.0 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Fax: 704-875-5038

Phone: 704-875-5209

Sample ID #: 99014019

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-11

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method: SW-846 826	0	Analyst: MAO125C
	Result	Reporting Limit	Flag
Chlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Isopropylbenzene	< 3.0 ug/L -	3.0 ug/L	0
1,1,1,2-tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
Ethylbenzene	< 3.0 ug/L	3.0 ug/L	0
m-p-Xylene	< 6.0 ug/L	6.0 ug/L	0
o-Xylene	< 3.0 ug/L	3.0 ug/L	0
Styrene	< 3.0 ug/L	3.0 ug/L	0
Bromoform	< 3.0 ug/L	3.0 ug/L	O
1,4-Dichlorobutane	< 3.0 ug/L	3.0 ug/L	0
1,1,2,2-Tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
1,2,3-Trichloropropane	< 3.0 ug/L	3.0 ug/L	o
n-Propyl benzene	< 3.0 ug/L	3.0 ug/L	0
Bromobenzene	< 3.0 ug/L	3.0 ug/L	0
1,3,5-trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
2-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
4-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
t-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,2,4-Trimethylbenzene	< 3.0 ug/L	3.0 ug/L	О .
sec-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
p-fsopropyltoluene	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,4-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
n-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromo-3-chioropropane	< 3.0 ug/L	3.0 ug/L	O
1,2,4-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Hexachlorobutadiene	< 3.0 ug/L	3.0 ug/L	0
Naphthalene	< 3.0 ug/L	3.0 ug/L	0
1,2,3-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

DATA FILE:: 23Y12 FIELD ID:: Bramlett 100V/11 LAB ID:: 99-JUN-0042

Tentatively Identified Compound Report

	Probable	Estimated	Library Match	Retention		Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs								
								
						!		
		<u> </u>					·	
<u> </u>			 		 			-
			· · · · · · · · · · · · · · · · · · ·				 	
								
		<u> </u>						
					1			

Internal Standard	
i	RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21.55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40.87

Surrogates	
	% Recovery
Dibromofluoromethane	111%
Toluene D-8	99%
1,4-Bromofluorobenze	91%

USEPA - 8260 G.C. Conditions 105 m x 0.53 mm x 1.0 um / Restek 502.2 He, 0.5 ml/min, 35 C hold 10 mins, 35 C to 180 C @ 4 C/min, 180 to 200 C @ 10 C/min, hold 5 min



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID # : 99014020 Job # : 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-12

Collection Date: 6/15/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

est Code: MS8260_W	Test Me	Analyst:	MAO1250				
		Re	suit	Report	ting Limit	Flag	
Dichlorodifluoromethane	<	3.0	ug/L	3.0	ug/L	0	
Chloromethane	<	3.0	ug/L	3.0	ug/L	0	
Vinyl chloride	<	3.0	ug/L	3.0	ug/L	0	
Bromomethane	<	3.0	ug/L	3.0	ug/L	0	
Chloroethane	<	3.0	ug/L	3.0	ug/L	0	
Trichlorofluoromethane	<	3.0	ug/L	3.0	ug/L	0	
Acrolein	<	3.0	ug/L	3.0	ug/L	0	
1,1-Dichloroethene	<	3.0	ug/L	3.0	ug/L	0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	<	3.0	ug/L	3.0	ug/L	0	
Acetone	<	3.0	ug/L	3.0	ug/L	1	
Methyl iodide	<	3.0	ug/L	3.0	ug/L	0	
Carbon disulfide	<	3.0	ug/L	3.0	ug/L	0	
Methylene chloride	<	3.0	ug/L	3.0	ug/L	0	
Acrylonitrile		3.0	ug/L	3.0	ug/L	0	
MTBE		3.0	ug/L	3.0	ug/L	0	
trans-1,2-Dichloroethene		3.0	ug/L	3.0	ug/L	0	
Isopropyl ether		3.0	ug/L	3.0	ug/L	0	
1,1-Dichloroethane		3.0	ug/L	3.0	ug/L	o	
Vinyl acetate		3.0	ug/L	3.0	ug/L	0	
2,2-Dichloropropane		3.0	ug/L	3.0	ug/L	1	
cis-1,2-Dichloroethene		3.0	ug/L	3.0	ug/L	0	
2-Butanone		3.0	ug/L	3.0	ug/L	0	
Chloroform		3.0	ug/L	3.0	ug/L	0	
1,1-Dichloropropene		3.0	ug/L	3.0	ug/L	0	
1,1,1-Trichloroethane		3.0	ug/L	3.0	ug/L	0	
Carbon tetrachloride		3.0	ug/L	3.0	ug/L	1	
Bromochloromethane		3.0	ug/L	3.0	ug/L	0	
Benzene		3.0	ug/L	3.0	ug/L	0	
1,2-Dichloroethane		3.0	ug/L	3.0	ug/L	0	
Trichloroethene		3.0	ug/L	3.0	ug/L	0	
1,2-Dichloropropane		3.0	ug/L	3.0	ug/L	0	
Dibromomethane	<	3.0	ug/L	3.0	ug/L	0	
Bromodichioromethane	<	3.0	ug/L	3.0	_	0	
2-Chloroethyl vinyl ether	~	3.0	ug/L	3.0	ug/L	_	
cis-1,3-Dichloropropene		3.0	ug/L	3.0	ug/L	0	
4-Methyl-2-pentanone (MIBK)			ug/L	3.0	ug/L	0	
Toluene			ug/L		ug/L	0	
trans-1,3-Dichloropropene			-	3.0	ug/L	•	
1,1,2-Trichtoroethane		3.0	ug/L ug/L	3.0	ug/L	0	
1,3-Dichloropropane		3.0	-	3.0	ug/L	0	
Tetrachloroethene		3.0	ug/L ug/L	3.0	ug/L	0	
2-Hexanone			-	3.0	ug/L	0	
Dibromochloromethane	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dibromoethane (EDB)	< <	3.0	ug/L ug/L	3.0 3.0	ug/L ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014020

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: MW-12

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Te	st Code: MS8260_W	Test N	ietho	d: SW-846	8260		Analyst:	MAO125C
			Re	sult	Repor	ting Limit	Flag	
	Chlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
	Isopropyibenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,1,1,2-tetrachloroethane	<	3.0	ug/L	3.0	ug/L	0	
	Ethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	m-p-Xylene	<	6.0	ug/L	6.0	ug/L	0	
	o-Xylene	<	3.0	ug/L	3.0	ug/L	0	
	Styrene	<	3.0	ug/L	3.0	ug/L	0	
	Bromoform	<	3.0	ug/L	3.0	ug/L	0	
	1,4-Dichlorobutane	<	3.0	ug/L	3.0	ug/L	0	
	1,1,2,2-Tetrachloroethane	<	3.0	ug/L	3.0	ug/L	0	
	1,2,3-Trichloropropane	<	3.0	ug/L	3.0	ug/L	0	
	n-Propyl benzene	<	3.0	ug/L	3.0	ug/L	0	
	Bromobenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,3,5-trimethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	2-Chlorotoluene	<	3.0	ug/L	3.0	ug/L	0	
	4-Chlorotoluene	<	3.0	ug/L	3.0	ug/L	0	
	t-Butylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,2,4-Trimethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	sec-Butylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	p-Isopropyltoluene	<	3.0	ug/L	3.0	ug/L	0	
	1,3-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,4-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
	n-Butylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,2-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,2-Dibromo-3-chloropropane	<	3.0	ug/L	3.0	ug/L	0	
	1,2,4-Trichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
	Hexachlorobutadiene	<	3.0	ug/L	3.0	ug/L	0	
	Naphthalene	<	3.0	ug/L	3.0	ug/L	0	
	1,2,3-Trichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

		_		•
				1 4 4 5 4 5
DATA FILE::	22Y12	FIELD ID::	Bramlett 12	LAB ID:: 99-JUN-0042

					Identification			1
	Probable	Estimated	Library Match	Retention	T ·1			Scan
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs								
		-		_				
				-				
				·				
·								
		<u></u>						
								
		·						
			<u> </u>		!			· · · · · · · · · · · · · · · · · · ·
	<u> </u>	<u></u>						
							_	
					<u> </u>	<u> </u>		
	ļ <u>-</u>	<u> </u>						
					<u> </u>			
					<u> </u>			
					ļ			
			<u> </u>			<u> </u>		<u> </u>

Internal Standard	
•	RT
Pentafluorobenzene	8.99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

% Recovery
98%
98%
84%

USEPA - 8260 G.C. Conditions 25 m x 0.2 mm x 1.12um / HP-624 He, 0.4 ml/min, 35 C hold 6 mins, 35 C to 180 C @ 6.5 C/min, 180 to 210 C @ 2.5 C/min, hold 3 min



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: MW-13

Collection Date: 6/15/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

est Code: MS8260_W	Test Method: SW-846 82	Analyst: MAO12	
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/t.	3.0 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	ō
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L		_
Methyl iodide	< 3.0 ug/L	•	1
Carbon disulfide	< 3.0 ug/L	3.0 ug/L	0
Methylene chloride	_	3.0 ug/L	0
Acrylonitrile		3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	0
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	29 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	1
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
	< 3.0 ug/L	3.0 ug/L	0
Chloroform	< 3.0 ug/L	3.0 ug/L	0
1.1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	1
Bromochloromethane	< 3.0 ug/L	3.0 ug/L	O
Benzene	6.2 ug/L	3.0 ug/L	0
1,2-Dichloroethane	3.7 ug/L	3.0 ug/L	0
Trichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/L	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0
Toluene	< 3.0 ug/L	3.0 ug/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Tetrachloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Hexanone	< 3.0 ug/L	3.0 ug/L	0
Dibromochloromethane	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromoethane (EDB)	< 3.0 ug/L	3.0 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014021

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: MW-13

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

est Code: MS8260_W	Test N	letho	d: SW-846 8	3260		Analyst:	MAO1250
	Result		Reporting Limit		_Flag_		
Chlorobenzene	<	3.0 ug/L		3.0	ug/L	0	
Isopropylbenzene	<	3.0	ug/L	3.0	ug/L	0	
1,1,1,2-tetrachloroethane	<	3.0	ug/L	3.0	ug/L	0	
Ethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
m-p-Xytene	<	6.0	ug/L	6.0	ug/L	0	
o-Xylene	<	3.0	ug/L	3.0	ug/L	0	
Styrene	<	3.0	ug/L	3.0	ug/L	0	
Bromoform	<	3.0	ug/L	3.0	ug/L	0	
1,4-Dichlorobutane	<	3.0	ug/L	3.0	ug/L	0	
1,1,2,2-Tetrachloroethane	<	3.0	ug/L	3.0	ug/L	0	
1,2,3-Trichloropropane	<	3.0	ug/L	3.0	ug/L	0	
n-Propyl benzene	<	3.0	ug/L	3.0	ug/L	0	
Bromobenzene	<	3.0	ug/L	3.0	ug/L	0	
1,3,5-trimethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
2-Chlorotoluene	<	3.0	ug/L	3.0	ug/L	0	
4-Chlorotoluene	<	3.0	ug/L	3.0	ug/L	0	
t-Buty/benzene	<	3.0	ug/L	3.0	ug/L	0	
1,2,4-Trimethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
sec-Buty/benzene	<	3.0	ug/L	3.0	ug/L	0	
p-Isopropyttoluene	<	3.0	ug/L	3.0	ug/L	0	
1,3-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
1,4-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L -	0	
n-Butylbenzene	<	3.0	-	3.0	ug/L	0	
1,2-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dibromo-3-chloropropane	<	3.0	•	3.0	ug/L	0	
1,2,4-Trichlorobenzene	<	3.0	-	3.0	ug/L	0	
Hexachlorobutadiene	<	3.0	-	3.0	ug/L	0	
Naphthalene	<	3.0	=	3.0	ug/L	0	
1,2,3-Trichlorobenzene	<	3.0	•	3.0	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

		•		;	
			<u>. </u>		
DATA FILE::	22713	FIELD ID::	Bramlett 13	LAB ID:: 99-JUN-0042	
DATA FILE	22110		Diamile (1914-19	LAD ID 33-0014-0042	

	Probable	Estimated	Library Match	Retention		Identification]
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs								
		<u> </u>						
		<u> </u>	ļ					
							<u> </u>	
				<u> </u>				
	 	<u> </u>					<u> </u>	
						<u> </u>		
					<u> </u>			
								
-		<u> </u>						- ,

Internal Standard	
	RT .
Pentafluorobenzene	8,99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates	
	% Recovery
Dibromofluoromethane	94%
Toluene D-8	103%
1,4-Bromofluorobenze	85%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014022

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-14

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

٢	7OC	IN	WA	ER.	BY	GC7MS	- 8260
---	------------	----	----	-----	----	--------------	--------

Test Code: MS8260_W	Test Method: SW-8	Analyst: MAO125C	
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L .	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/L	3.0 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	1
Methyl iodide	< 3.0 ug/L	3.0 ug/L	0
Carbon disulfide	< 3.0 ug/t_	3.0 ug/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	0
Acrylonitrile	< 3.0 ug/l.	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	0
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	1
cis-1,2-Dichloroethene	15 ug/L	3.0 ug/L	ò
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chloroform	3.0 ug/L	3.0 ug/L	o O
1,1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	1
Bromochloromethane .	< 3.0 ug/L	3.0 ug/L	O
Benzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichloroethene	100 ug/L	3.0 ug/L	0
1,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/L	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0
Toluene	< 3.0 ug/L	3.0 ug/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	
1,3-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0 0
Tetrachloroethene	2.3 ug/L	3.0 ug/L	
2-Hexanone	2.3 ug/L < 3.0 ug/L	3.0 ug/L 3.0 ug/L	2 0
Dibromochloromethane	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromoethane (EDB)	< 3.0 ug/L	3.0 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014022

99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-14

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Te	st Code: MS8260_W	Test M	letho	d: SW-846	8260		Analyst:	MAO125C
			Re	sult	Repor	ting Limit	Flag	
	Chlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
	Isopropylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,1,1,2-tetrachloroethane	<	3.0	ug/L	3.0	ug/L	0	
	Ethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	m-p-Xylene	<	6.0	ug/L	6.0	ug/L	0	
	o-Xylene	<	3.0	ug/L	3.0	ug/L	0	
	Styrene	<	3.0	ug/L	3.0	ug/L	0	
	Bromoform	<	3.0	ug/L	3.0	ug/L	0	
	1,4-Dichlorobutane	<	3.0	ug/L	3.0	ug/L	0	
	1,1,2,2-Tetrachloroethane	<	3.0	ug/L	3.0	ug/L	0	
	1,2,3-Trichloropropane	<	3.0	ug/L	3.0	ug/L	O	
	n-Propyl benzene	<	3.0	ug/L	3.0	ug/L	0	
	Bromobenzene	<	3.0	ug/L	3.0	ug/L	O	
	1,3,5-trimethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	2-Chlorotoluene	<	3.0	ug/L	3.0	ug/L	0	
	4-Chlorotoluene	<	3.0	ug/L	3.0	ug/L	0	
	t-Butylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,2,4-Trimethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	sec-Butylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	p-Isopropyttoluene	<	3.0	ug/L	3.0	ug/L	Û	
	1,3-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,4-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	O	
	n-Butylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,2-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,2-Dibromo-3-chloropropane	<	3.0	ug/L	3.0	ug/L	0	
	1,2,4-Trichtorobenzene	<	3.0	ug/L	3.0	ug/L	0	
	Hexachlorobutadiene	<	3.0	ug/L	3.0	ug/L	0	
	Naphthalene	<	3.0	ug/L	3.0	ug/L	0	
	1,2,3-Trichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

			t .			1	
						00 11111 0040	
D,	ATA FILE::	22Y14	FIELD ID::	Bramlett IvrvV14	LAB ID::	99-JUN-0042	

					· · · · · · · · · · · · · · · · · · ·		-	
	Probable	Estimated	Library Match			Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
-								
no TICs								· · · · · · · · · · · · · · · · · · ·
	<u> </u>							
	- ·- · -							
	<u> </u>	<u> </u>			<u> </u>			
				· · · - · · · · · · · · · · · · · · · ·				
				_				
	 							
	<u> </u>			· · · · · · · · · · · · · · · · · · ·				
			<u> </u>					
								
	 	<u> </u>						
		<u>. </u>						
					<u> </u>			
					<u> </u>			
					l			

Internal Standard	
	RT
Pentafluorobenzene	8.99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates	
	% Recovery
Dibromofluoromethane	90%
Toluene D-8	99%
1,4-Bromofluorobenze	85%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014023 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: WW-15

Collection Date: 6/16/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method: SW-846 8260)	Analyst: MAO125C
	Result	Reporting Limit	_Flag
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/L	3.0 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	1
Methyl iodide	< 3.0 ug/L	3.0 ug/L	0
Carbon disulfide	< 3.0 ug/L	3.0 ug/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	0
Acrylonitrile	< 3.0 ug/L	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	0
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	1
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chloroform	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	1
Bromochloromethane	< 3.0 ug/L	3.0 ug/L	0
Benzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloropropane	< 3.0 ug/i.	3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/t_	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0
Toluene	< 3.0 ug/L	3.0 ug/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Tetrachloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Hexanone	< 3.0 ug/L	3.0 ug/L	0
Dibromochloromethane	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromoethane (EDB)	< 3.0 ug/L	3.0 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014023

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: MW-15

Collection Date: 6/16/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method: SW-846 8260	<u> </u>	Analyst: MAO125C
	Result	Reporting Limit	Flag
Chlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Isopropyibenzene	< 3.0 ug/L	3.0 ug/L	0
1,1,1,2-tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
Ethylbenzene	< 3.0 ug/L	3.0 ug/L	0
m-p-Xylene	< 6.0 ug/L	6.0 ug/L	0
o-Xylene	< 3.0 ug/l.	3.0 ug/L	o `
Styrene	< 3.0 ug/L	3.0 ug/L	0
Bromoform	< 3.0 ug/L	3.0 ug/L	o
1,4-Dichlorobutane	< 3.0 ug/L	3.0 ug/L	0
1,1,2,2-Tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
1,2,3-Trichloropropane	< 3.0 ug/L	3.0 ug/L	0
n-Propyl benzene	< 3.0 ug/L	3.0 ug/L	0
Bromobenzene	< 3.0 ug/L	3.0 ug/L	0
1,3,5-trimethy/benzene	< 3.0 ug/L	3.0 ug/L	0
2-Chiorotoluene	< 3.0 ug/L	3.0 ug/L	0
4-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
t-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,2,4-Trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
sec-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
p-Isopropyttoluene	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,4-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
n-Butyibenzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromo-3-chloropropane	< 3.0 ug/L	3.0 ug/L	O
1,2,4-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Hexachlorobutadiene	< 3.0 ug/L	3.0 ug/L	0
Naphthalene	5.9 ug/L	3.0 ug/L	0
1,2,3-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

Report Generated 7/14/99 07:55:18

		•		:		
AATA EILE:	22716	FIELD ID::	Bramlett M5	LAB ID::	99-JUN-0042	
DATA FILE::	ZZIIJ	1 1660 10	Digitilett M.	<u> </u>	00 0011 0012	

								1
	Probable	Estimated	Library Match	Retention		Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)_	Match	Interpretation	RT	Number
no TICs								
				· · · · · · · · · · · · · · · · · · ·				
		l 		·····				
						<u>-</u>		
	<u></u>							
				· <u></u>				<u> </u>
						· · · - · · · · · · · · · · · · · · · ·		
								ļ
								ļ
				<u>-</u>				

Internal Standard	
	RT
Pentafluorobenzene	8.99
D4-1,4-Diffuorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates	
	% Recovery
Dibromofluoromethane	95%
Toluene D-8	101%
1,4-Bromofluorobenze	83%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: MW-16

Collection Date: 6/16/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method: SW-846 8	Test Method: SW-846 8260		
	Result	Reporting Limit	_Flag_	
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0	
Chloromethane	< 3.0 ug/L.	3.0 ug/L	0	
Vinyl chloride	< 3.0 ug/l.	3.0 ug/L	0	
Bromomethane	< 3.0 ug/L	3.0 ug/L	0	
Chloroethane	< 3.0 ug/L	3.0 ug/L	0	
Trichlorofluoromethane	< 3.0 ug/L	3.0 ug/L	0	
Acrolein	< 3.0 ug/L	3.0 ug/L	0	
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0	
Acetone	< 3.0 ug/L	3.0 ug/L	1	
Methyl iodide	< 3.0 ug/L	3.0 ug/L	0	
Carbon disulfide	< 3.0 ug/L	3.0 ug/L	0	
Methylene chloride	< 3.0 ug/L	3.0 ug/L	0	
Acrylonitrile	< 3.0 ug/L	3.0 ug/L	0	
MTBE	< 3.0 ug/L	3.0 ug/L	0	
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0	
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0	
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0	
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0	
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/t.	1	
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0	
2-Butanone	< 3.0 ug/L	3.0 ug/L	0	
Chloroform	< 3.0 ug/L	3.0 ug/L	0	
1,1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0	
1,1,1-Trichtoroethane	< 3.0 ug/L	3.0 ug/L	0	
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	1	
Bromochloromethane	< 3.0 ug/L	3.0 ug/L	0	
Benzene	< 3.0 ug/L	3.0 ug/L	0	
1,2-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0	
Trichloroethene	< 3.0 ug/L	3.0 ug/L	0	
1,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0	
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0	
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	o	
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/L	0	
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0	
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0	
Toluene	< 3.0 ug/L	3.0 ug/L	0	
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0	
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0	
1,3-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0	
Tetrachloroethene	< 3.0 ug/L	3.0 ug/L	O	
2-Hexanone	< 3.0 ug/L	3.0 ug/L	0	
Dibromochloromethane	< 3.0 ug/L	3.0 ug/L	0	
1,2-Dibromoethane (EDB)	< 3.0 ug/L	3.0 ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014024

99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description:

MW-16

Collection Date:

6/16/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method:	SW-846 8260	Analyst:	MA0125C
	Result	Reporti	ng Limit Flag	
Chlorobenzene	< 3.0 ug/l	3.0	ug/L 0	
Isopropylbenzene	< 3.0 ug/l	. 3.0	ug/L 0	
1,1,1,2-tetrachloroethane	< 3.0 ug/l	3.0	ug/L 0	
Ethylbenzene	< 3.0 ug/l	. 3.0	ug/L 0	
m-p-Xylene	< 6.0 ug/l	. 6.0	ug/L 0	
o-Xylene	< 3.0 ug/l	. 3.0	ug/L 0	
Styrene	< 3.0 ug/L	. 3.0	ug/L 0	
Bromoform	< 3.0 ug/l	. 3.0	ug/L 0	
1,4-Dichlorobutane	< 3.0 ug/l	. 3.0	ug/L 0	
1,1,2,2-Tetrachloroethane	< 3.0 ug/l	. 3.0	ug/L 0	
1,2,3-Trichloropropane	< 3.0 ug/l	. 3.0	ug/L 0	
n-Propyl benzene	< 3.0 ug/l	. 3.0	ug/L 0	
Bromobenzene	< 3.0 ug/l	. 3.0	ug/L 0	
1,3,5-trimethylbenzene	< 3.0 ug/l	. 3.0	ug/L 0	
2-Chlorotoluene	< 3.0 ug/l	. 3.0	ug/L 0	
4-Chlorotoluene	< 3.0 ug/l	. 3.0	ug/L 0	
t-Butylbenzene	< 3.0 ug/l	. 3.0	ug/L 0	
1,2,4-Trimethylbenzene	< 3.0 ug/l	. 3.0	ug/L 0	
sec-Butylbenzene	< 3.0 ug/l	3.0	ug/L 0	
p-Isopropyltoluene	< 3.0 ug/l	3.0	ug/L 0	
1,3-Dichlorobenzene	< 3.0 ug/l	3.0	ug/L 0	
1,4-Dichlorobenzene	< 3.0 ug/l	. 3.0	ug/L 0	
n-Butylbenzene	< 3.0 ug/l	. 3.0	ug/L 0	
1,2-Dichlorobenzene	< 3.0 ug/l	. 3.0	ug/L 0	
1,2-Dibromo-3-chloropropane	< 3.0 ug/l		ug/L 0	
1,2,4-Trichtorobenzene	< 3.0 ug/l	. 3.0	ug/L 0	
Hexachiorobutadiene	< 3.0 ug/l		ug/L 0	
Naphthalene	< 3.0 ug/l		ug/L 0	
1,2,3-Trichlorobenzene	< 3.0 ug/l		ug/L 0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

				:		
DATA FILE::	22Y16	FIELD ID::	Bramlett 111√/16	LAB ID::	99-JUN-0042	

	Probable	Estimated	Library Match	Retention		Identification		<u> </u>
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs								
						!		
				<u></u>				
					<u>.</u> .			
						<u></u> i		
				<u></u>		****		
						-		

Internal Standard	
(1	RT
Pentafluorobenzene	8.99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates	
	% Recovery
Dibromofluoromethane	89%
Toluene D-8	94%
1,4-Bromofluorobenze	82%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014025 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-17

Collection Date: 6/15/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

47AZ-IKI	WATED	DV CCAR	2 0766
IVUC IN	AAWIEK	BY GC/M	3 - AZBU

Test Code: MS8260_W	Test Method: SW-846 8260			Analyst: MAO125C		
	Res	sult .	Report	ing Limit	Flag	
Dichlorodifluoromethane	< 150	ug/L	150	ug/L	0	
Chloromethane		ug/L	150	ug/L	0	
Vinyl chloride		ug/L	150	ug/L	0	
Bromomethane	< 150	ug/L	150	ug/L	0	
Chloroethane	< 150	ug/L	150	ug/L	0	
Trichlorofluoromethane	< 150	ug/L	150	ug/L	0	
Acrolein	< 150	ug/L	150	ug/L	0	
1,1-Dichloroethene	< 150	ug/L	150	ug/L	0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 150	ug/L	150	ug/L	0	
Acetone	< 150	ug/L	150	ug/L	1	
Methyl iodide	< 150	ug/L	150	ug/L	0	
Carbon disulfide	< 150	ug/L	150	ug/L	0	
Methylene chloride	< 150	ug/L	150	ug/L	0	
Acrylonitrile	< 150	ug/L	150	ug/L	0	4
MTBE	< 150	ug/L	150	ug/L	0	
trans-1,2-Dichloroethene	< 150	ug/L	150	ug/L	0	
Isopropyl ether	< 150	ug/L	150	ug/L	0	
1,1-Dichloroethane	< 150	บg/L	150	ug/L	٥	
Vinyl acetate	< 150	ug/L	150	ug/L	0	
2,2-Dichloropropane	< 150	ug/L	150	ug/L	0	
cis-1,2-Dichloroethene	< 150	ug/L	150	ug/L	0	
2-Butanone	< 150	ug/L	150	ug/L	0	
Chloroform	< 150	ug/L	150	ug/L	0	
1,1-Dichloropropene	< 150	ug/L	150	ug/L	0	
1,1,1-Trichloroethane	< 150	ug/L	150	ug/L	0	
Carbon tetrachloride	< 150	ug/L	150	ug/L	0	
Bromochloromethane	< 150	ug/L	150	ug/L	0	
Benzene	120	ug/L	150	ug/L	2	
1,2-Dichloroethane	< 150	ug/L	150	ug/L	0	
Trichloroethene	< 150	ug/L	150	ug/L	0	
1,2-Dichloropropane	< 150	ug/L	150	ug/L	o	
Dibromomethane	< 150	ug/L	150	ug/L	0	
Bromodichloromethane	< 150	ug/L	150	ug/L	0	
2-Chloroethyl vinyl ether	< 150	ug/L	150	ug/L	0	
cis-1,3-Dichloropropene	< 150	ug/L	150	ug/L	0	
4-Methyl-2-pentanone (MIBK)	< 150	ug/L	150	ug/L	0	
Toluene	360	ug/L	150	ug/L	0	
trans-1,3-Dichtoropropene	< 150	ug/L	150	ug/L	0	
1,1,2-Trichloroethane	< 150	ug/L	150	ug/L	0	
1,3-Dichloropropane	< 150	ug/L	150	ug/L	0	
Tetrachloroethene	< 150	ug/L	150	ug/L	0	
2-Hexanone	< 150	ug/L	150	ug/L	0	
Dibromochloromethane	< 150	ug/L	150	ug/L	0	
1,2-Dibromoethane (EDB)	< 150	ug/L	150	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209

Fax: 704-875-5038

Sample ID #: 99014025 99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: MW-17

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Me	etho	1: SW-846	8260			Analyst:	MAO125C
		Res	sult		Report	ing Limit	Flag	
Chlorobenzene	< '	150	ug/L		150	ug/L	0	
Isopropylbenzene	< .	150	ug/L		150	ug/L	0	
1,1,1,2-tetrachloroethane	< '	150	ug/L		150	ug/L	0	
Ethylbenzene		150	ug/L		150	ug/L	0	
m-p-Xylene		400	ug/L		300	ug/L	0	
o-Xylene		180	ug/L		150	ug/L	0	
Styrene	< -	150	ug/L		150	ug/L	0	
Bromoform	<	150	ug/L		150	ug/L	0	
1,4-Dichlorobutane	<	150	ug/L		150	ug/L	0	
1,1,2,2-Tetrachloroethane	<	150	ug/L		150	ug/L	0	
1,2,3-Trichloropropane	<	150	ug/L		150	ug/L	0	
n-Propyl benzene	<	150	ug/Ł		150	ug/L	0	
Bromobenzene	<	150	ug/L		150	ug/L	0	
1,3,5-trimethylbenzene	<	150	ug/L		150	ug/L	0	
2-Chlorotoluene	<	150	ug/L		150	ug/L	0	
4-Chlorotoluene	<	150	ug/L		150	ug/L	a	
t-Butylbenzene	<	150	ug/L		150	ug/L	0	
1,2,4-Trimethylbenzene	<	150	ug/L		150	ug/L	0	
sec-Butylbenzene	<	150	ug/L		150	ug/L	0	
p-Isopropyltoluene	<	150	ug/L		150	ug/L	0	
1,3-Dichlorobenzene	<	150	ug/L		150	ug/L	0	
1,4-Dichlorobenzene	<	150	ug/L		150	ug/L	0	
n-Butylbenzene	<	150	ug/L		150	ug/L	0	
1,2-Dichlorobenzene	<	150	ug/L		150	ug/L	0	
1,2-Dibromo-3-chloropropane	<	150	ug/L		150	ug/L	0	
1,2,4-Trichlorobenzene	<	150	ug/L		150	ug/L	0	
Hexachlorobutadiene	<	150	ug/L		150	ug/L	0	
Naphthalene	6	400	ug/L		150	ug/L	0	
1,2,3-Trichlorobenzene	<	150	ug/L		150	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Visit us on the IntraNet at http://dewww/essenv/lab_srv/



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014027 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-19

Collection Date: 6/16/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER B	Y GC/MS - 8260
-----------------------	----------------

est Code: MS8260_W	Test Method: SW-846 82	Analyst: MAO12	
	Result	Reporting Limit	_Flag_
Dichlorodifluoromethane	< 150 ug/L	150 ug/L	0
Chloromethane	< 150 ug/L	150 ug/L	0
Vinyt chloride	< 150 ug/L	150 ug/L	0
Bromomethane	< 150 ug/L	150 ug/L	0
Chloroethane	< 150 ug/L	150 ug/L	0
Trichlorofluoromethane	< 150 ug/L	150 ug/L	0
Acrolein	< 150 ug/L	150 ug/L	0
1,1-Dichloroethene	< 150 ug/L	150 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 150 ug/L	150 ug/L	0
Acetone	< 150 ug/L	150 ug/L	1
Methyl iodide	< 150 ug/L	150 ug/L	0
Carbon disuffide	< 150 ug/L	150 ug/L	0
Methylene chloride	< 150 ug/L	150 ug/L	0
Acrylonitrile	< 150 ug/L	150 ug/L	0
MTBE	< 150 ug/L	150 ug/L	0
trans-1,2-Dichloroethene	< 150 ug/L	150 ug/L	0
Isopropyl ether	< 150 ug/L	150 ug/L	0
1,1-Dichloroethane	< 150 ug/L	150 ug/L	0
Vinyl acetate	< 150 ug/L	150 ug/L	0
2,2-Dichloropropane	< 150 ug/L	150 ug/L	0
cis-1,2-Dichloroethene	< 150 ug/L	150 ug/L	0
2-Butanone	< 150 ug/L	150 ug/L	0
Chloroform	< 150 ug/L	150 ug/L	0
1,1-Dichloropropene	< 150 ug/L	150 ug/L	0
1,1,1-Trichloroethane	< 150 ug/L	150 ug/L	0
Carbon tetrachloride	< 150 ug/L	150 ug/L	0
Bromochloromethane	< 150 ug/L	150 ug/L	0
Benzene	140 ug/L	150 ug/L	2
1,2-Dichloroethane	< 150 ug/L	150 ug/L	0
Trichloroethene	< 150 ug/L	150 ug/L	0
1,2-Dichloropropane	< 150 ug/L	150 ug/L	0
Dibromomethane	< 150 ug/L	150 ug/L	0
Bromodichloromethane	< 150 ug/L	150 ug/L	0
2-Chloroethyl vinyl ether	< 150 ug/L	150 ug/L	0
cis-1,3-Dichloropropene	< 150 ug/L	150 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 150 ug/L	150 ug/L	0
Toluene	190 ug/L	150 ug/L	0
trans-1,3-Dichtoropropene	< 150 ug/L	150 ug/L	0
1,1,2-Trichloroethane	< 150 ug/L	150 ug/L	0
1,3-Dichloropropane	< 150 ug/L	150 ug/L	0
Tetrachloroethene	< 150 ug/L	150 ug/L	0
2-Hexanone	< 150 ug/L	150 ug/L	0
Dibromochloromethane	< 150 ug/L	150 ug/L	0
1,2-Dibromoethane (EDB)	< 150 ug/L	150 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014027

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: MW-19

Collection Date: 6/16/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Result Reporting Limit Flag	Test Code: MS8260_W	Test Method: SW-846 8260		Analyst: MAO125C
Isopropylbenzene		Result	Reporting Limit	Flag
1,1,1,2-tetrachloroethane < 150	Chlorobenzene	< 150 ug/L	150 ug/L	0
Ethylbenzene	tsopropylbenzene	< 150 ug/L	150 ug/L	0
m-p-Xylene	1,1,1,2-tetrachloroethane	< 150 ug/L	150 ug/L	0
o-Xylene < 150	Ethylbenzene	120 ug/L	150 ug/L	2
Styrene	m-p-Xylene	< 300 ug/L	300 ug/L	0
Bromoform	o-Xylene	< 150 ug/L	150 ug/L	0
1,4-Dichlorobutane	Styrene	< 150 ug/L	150 ug/L	0
1,1,2,2-Tetrachloroethane < 150	Bromoform	< 150 ug/L	150 ug/L	O
1,2,3-Trichloropropane < 150	1,4-Dichlorobutane	< 150 ug/L	150 ug/L	0
n-Propyl benzene	1,1,2,2-Tetrachloroethane	< 150 ug/L	150 ug/L	0
Bromobenzene	1,2,3-Trichloropropane	< 150 ug/L	150 ug/L	0
1,3,5-trimethylbenzene < 150 ug/L	n-Propyl benzene	< 150 ug/L	150 ug/L	0
2-Chlorotoluene < 150 ug/L	Bromobenzene	< 150 ug/L	150 ug/L	0
4-Chlorotoluene < 150 ug/L	1,3,5-trimethylbenzene	< 150 ug/L	150 ug/L	0
t-Butylbenzene	2-Chlorotoluene	< 150 ug/L	150 ug/L	0
1,2,4-Trimethylbenzene < 150 ug/L	4-Chlorotoluene	< 150 ug/L	150 ug/L	0
sec-Butylbenzene < 150 ug/L	t-Butylbenzene	< 150 ug/L	150 ug/L	6
p-Isopropyttoluene < 150 ug/L 150 ug/L 0 1,3-Dichlorobenzene < 150 ug/L 150 ug/L 0 1,4-Dichlorobenzene < 150 ug/L 150 ug/L 0 n-Butylbenzene < 150 ug/L 150 ug/L 0 1,2-Dichlorobenzene < 150 ug/L 150 ug/L 0 1,2-Dibromo-3-chloropropane < 150 ug/L 150 ug/L 0 1,2-Trichlorobenzene < 150 ug/L 150 ug/L 0 Hexachlorobutadiene < 150 ug/L 150 ug/L 0 Naphthalene 3100 ug/L 150 ug/L 0	1,2,4-Trimethylbenzene	< 150 ug/L	150 ug/L	0
1,3-Dichlorobenzene < 150 ug/L	sec-Butylbenzene	< 150 ug/L	150 ug/L	0
1,4-Dichlorobenzene < 150 ug/L	p-Isopropyttoluene	< 150 ug/L	150 ug/L	0
n-Butylbenzene < 150 ug/L	1,3-Dichlorobenzene	< 150 ug/L	150 ug/L	0
1,2-Dichlorobenzene < 150 ug/L	1,4-Dichlorobenzene	< 150 ug/L	150 ug/L	0
1,2-Dibromo-3-chloropropane < 150 ug/L	n-Butylbenzene	< 150 ug/L	150 ug/L	0
1,2,4-Trichlorobenzene < 150 ug/L	1,2-Dichlorobenzene	< 150 ug/L	150 ug/L	0
Hexachlorobutadiene < 150 ug/L 150 ug/L 0 Naphthalene 3100 ug/L 150 ug/L 0	1,2-Dibromo-3-chloropropane	< 150 ug/L	150 ug/L	0
Naphthalene 3100 ug/L 150 ug/L 0	1,2,4-Trichlorobenzene	< 150 ug/L	150 ug/L	0
Naphthalene 3100 ug/L 150 ug/L 0	Hexachlorobutadiene	< 150 ug/L	150 ug/L	0
	Naphthalene	3100 ug/L	_	0
	1,2,3-Trichlorobenzene	< 150 ug/L	=	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Tentatively Identified Compound Report

	Probable	Estimated	Library Match			Identification		1	
- ·	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan	
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number	
Indene		380	87	22.95	x				
methyl naphthalene		370	93	29.23	X				
							i		
<u> </u>									
									
· · · · · · · · · · · · · · · ·									

Internal Standard	
	RT
Pentafluorobenzene	8.99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates	
	% Recovery
Dibromofluoromethane	89%
Toluene D-8	104%
1,4-Bromofluorobenze	86%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: MW-20

Collection Date: 6/15/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

st Code: MS8260_W	Test Method: SW-846 8260	0	Analyst:	MAO12
	Result	Reporting Limit	Flag	
Dichlorodifluoromethane	< 150 ug/L	150 ug/L	0	
Chloromethane	< 150 ug/L	150 ug/L	0	
Vinyl chloride	< 150 ug/L	150 ug/L	0	
Bromomethane	< 150 ug/L	150 ug/L	0	
Chloroethane	< 150 ug/L	150 ug/L	a	
Trichlorofluoromethane	< 150 ug/L	150 ug/L	0	
Acrolein	< 150 ug/L	150 ug/L	0	
1,1-Dichloroethene	< 150 ug/L	150 ug/L	0	
,1,2-Trichloro-1,2,2-Trifluoroethane	< 150 ug/L	150 ug/L	0	
Acetone	< 150 ug/L	150 ug/L	1	
Methyl iodide	< 150 ug/L	150 ug/L	0	
Carbon disutfide	< 150 ug/L	150 ug/L	0	
Methylene chloride	< 150 ug/L	150 ug/L	0	
Acrylonitrile	< 150 ug/L	150 ug/L	0	
MTBE	< 150 ug/L	150 ug/L	0	
trans-1,2-Dichloroethene	< 150 ug/L	150 ug/L	0	
Isopropyl ether	< 150 ug/L	150 ug/L	0	
1,1-Dichloroethane	< 150 ug/L	150 ug/L	0	
Vinyl acetate	< 150 ug/L	150 ug/L	0	
2,2-Dichloropropane	< 150 ug/L	150 ug/L	0	
cis-1,2-Dichloroethene	< 150 ug/L	150 ug/L	0	
2-Butanone	< 150 ug/L	150 ug/L	0	
Chloroform	< 150 ug/L	150 ug/L	0	
1,1-Dichloropropene	< 150 ug/L	150 ug/L	0	
1,1,1-Trichloroethane	< 150 ug/L	150 ug/L	0	
Carbon tetrachloride	< 150 ug/L	150 ug/L	0	
Bromochloromethane	< 150 ug/L	150 ug/L	0	
Benzene	860 ug/L	150 ug/L	0	
1,2-Dichloroethane	< 150 ug/L	150 ug/L	ō	
Trichloroethene	< 150 ug/L	150 ug/L	0	
1,2-Dichloropropane	< 150 ug/L	150 ug/L	0	
Dibromomethane	< 150 ug/L	150 ug/L	0	
Bromodichloromethane	< 150 ug/L	150 ug/L	0	
2-Chloroethyl vinyl ether	< 150 ug/L	150 ug/L	0	
cis-1,3-Dichloropropene	< 150 ug/L	150 ug/L	0	
4-Methyl-2-pentanone (MIBK)	< 150 ug/L	150 ug/L	a	
Toluene	140 ug/L	150 ug/L	2	
trans-1,3-Dichloropropene	< 150 ug/L	150 ug/L	0	
1,1,2-Trichioroethane	< 150 ug/L	150 ug/L	0	
1,3-Dichloropropane	< 150 ug/L	150 ug/L	ō	
Tetrachloroethene	< 150 ug/L	150 ug/L	o	
2-Hexanone	< 150 ug/L	150 ug/L	0	
Dibromochloromethane	< 150 ug/L	150 ug/L	0	
1,2-Dibromoethane (EDB)	< 150 ug/L	150 ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#:

99014028

Job#:

99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-20

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method: SW-846 8260		Analyst: MAO125C
	Result	Reporting Limit	_Flag_
Chlorobenzene	< 150 ug/L	150 ug/L	0
Isopropylbenzene	< 150 ug/L	150 ug/L	0
1,1,1,2-tetrachloroethane	< 150 ug/L	150 ug/L	O
Ethylbenzene	290 ug/L	150 ug/L	0
m-p-Xylene	170 ug/L	300 ug/L	2
o-Xylene	< 150 ug/L	150 ug/L	0
Styrene	< 150 ug/L	150 ug/L	0
Bromoform	< 150 ug/L	150 ug/L	0
1,4-Dichlorobutane	< 150 ug/L	150 ug/L	0
1,1,2,2-Tetrachloroethane	< 150 ug/L	150 ug/L	0
1,2,3-Trichloropropane	< 150 ug/L	150 ug/L	0
n-Propyl benzene	< 150 ug/L	150 ug/L	0
Bromobenzene	< 150 ug/L	150 ug/L	0
1,3,5-trimethy/benzene	< 150 ug/L	150 ug/L	0
2-Chlorotoluene	< 150 ug/L	150 ug/L	0
4-Chlorotoluene	< 150 ug/L	150 ug/L	o
t-Butylbenzene	< 150 ug/L	150 ug/L	0
1,2,4-Trimethylbenzene	< 150 ug/L	150 ug/L	0
sec-Butylbenzene	< 150 ug/L	150 ug/L	0
p-Isopropyltoluene	< 150 ug/L	150 ug/L	0
1,3-Dichlorobenzene	< 150 ug/L	150 ug/L	0
1,4-Dichlorobenzene	< 150 ug/L	150 ug/L	0
n-Butylbenzene	< 150 ug/L	150 ug/L	0
1,2-Dichlorobenzene	< 150 ug/L	150 ug/L	0
1,2-Dibromo-3-chloropropane	< 150 ug/L	150 ug/L	0
1,2,4-Trichlorobenzene	< 150 ug/L	150 ug/L	0
Hexachlorobutadiene	< 150 ug/L	150 ug/L	0
Naphthalene	4200 ug/L	150 ug/L	0
1,2,3-Trichlorobenzene	< 150 ug/L	150 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

Report Generated 7/14/99 07:55:18

_ 🕳	:			:		
DATA FILE::	23Y20	FIELD ID::	Bramlett wwV20	LAB ID::	99-JUN-0042	

	Probable	Estimated	Library Match	Retention		Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
Indene		480	94	22.96	Х			
		ļ. <u> </u>						
				. <u></u>				· · · · · · · · · · · · · · · · · · ·
	<u> </u>							·
<u></u>			. <u>-</u> .					
							:	
							<u>.</u>	
					_			
								<u>-</u>

Internal Standard					
	RT				
Pentafluorobenzene	8.99				
D4-1,4-Difluorobenzene	10.53				
Chlorobenzene D-5	16.75				
D-4 1,4-Dichlorobenzene	21.89				

Surrogates	
	% Recovery
Dibromofluoromethane	92%
Toluene D-8	102%
1,4-Bromofluorobenze	83%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014035 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-21

Collection Date: 6/16/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

est Code: MS8260_W	Test Method: SW-846 8	3260	Analyst: MAO12
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 75 ug/L	75 ug/L	0
Chloromethane	< 75 ug/L	75 ug/L	0
Vinyl chloride	< 75 ug/L	75 ug/L	0
Bromomethane	< 75 ug/L	75 ug/L	0
Chloroethane	< 75 ug/L	75 ug/L	0
Trichlorofluoromethane	< 75 ug/L	75 ug/L	0
Acrolein	< 75 ug/L	75 ug/L	0
1,1-Dichloroethene	< 75 ug/L	75 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 75 ug/L	75 ug/L	0
Acetone	< 75 ug/L	75 ug/L	1
Methyl iodide	< 75 ug/L	75 ug/L	
Carbon disulfide	< 75 ug/L		0
Methylene chloride	< 75 ug/L	•	0
Acrylonitrile	<u> </u>	75 ug/L	0
MTBE	•	75 ug/L	0
trans-1,2-Dichloroethene	•	75 ug/L	0
Isopropyl ether		75 ug/L	0
1,1-Dichloroethane	< 75 ug/L	75 ug/L	0
Vinyl acetate	< 75 ug/L	75 ug/L	0
2,2-Dichloropropane	< 75 ug/L	75 ug/L	0
cis-1,2-Dichloroethene	< 75 ug/L	75 ug/L	0
2-Butanone	< 75 ug/L	75 ug/L	0
Chloroform	< 75 ug/L	75 ug/L	0
	< 75 ug/L	75 ug/L	0
1,1-Dichloropropene	< 75 ug/L	75 ug/L	0
1,1,1-Trichloroethane	< 75 ug/L	75 ug/L	0
Carbon tetrachloride	< 75 ug/L	75 ug/L	0
Bromochloromethane	< 75 ug/L	75 ug/L	0
Benzene	840 ug/L	75 ug/L	0
1,2-Dichloroethane	< 75 ug/L	75 ug/L	0
Trichloroethene	< 75 ug/L	75 ug/L	0
1,2-Dichloropropane	< 75 ug/L	75 ug/L	0
Dibromomethane	< 75 ug/L	75 ug/L	0
Bromodichloromethane	< 75 ug/L	75 ug/L	O
2-Chloroethyl vinyl ether	< 75 ug/L	75 ug/L	0
cis-1,3-Dichtoropropene	< 75 ug/L	75 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 75 ug/L	75 ug/L	0
Toluene	610 ug/L	75 ug/L	0
trans-1,3-Dichloropropene	< 75 ug/L	75 ug/L	0
1,1,2-Trichloroethane	< 75 ug/L	75 ug/L	0
1,3-Dichloropropane	< 75 ug/L	75 ug/L	0
Tetrachloroethene	< 75 ug/L	75 ug/L	0
2-Hexanone	< 75 ug/L	75 ug/L	0
Dibromochloromethane	< 75 ug/L	75 ug/L	o
1,2-Dibromoethane (EDB)	< 75 ug/L	75 ug/L	0



Test

Duke Power's Analytical Laboratory

Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014035

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-21

Collection Date: 6/16/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

t Code: MS8260_W	Test Method:	SW-846 8260		Analyst:	MAO125C
	Resul	Repor	ting Limit_	Flag	
Chlorobenzene	< 75 ug	/L 75	ug/L	0	
Isopropylbenzene	< 75 ug	/L . 75	ug/L	0	
1,1,1,2-tetrachloroethane	< 75 uç	/L 75	ug/L	0	
Ethylbenzene	150 սզ	/L 75	ug/L	0	
m-p-Xylene	280 սց	/L 150	ug/L	0	
o-Xylene	130 ug	/L 75	ug/L	0	
Styrene	< 75 uç	/L 75	ug/L	0	
Bromoform	< 75 ug	/L 75	ug/L	0	
1,4-Dichlorobutane	< 75 ug	/L 75	ug/L	0	
1,1,2,2-Tetrachloroethane	< 75 uç	/L 75	ug/L	0	
1,2,3-Trichtoropropane	< 75 uç	/L 75	ug/L	0	
n-Propyl benzene	< 75 ug	/L 75	ug/L	0	
Bromobenzene	< 75 uç	/L 75	ug/L	0	
1,3,5-trimethylbenzene	< 75 uş	/L 75	ug/L	0	
2-Chlorotoluene	< 75 uş	/L 75	ug/L	0	
4-Chiorotoluene	< 75 u	/L 75	ug/L	0	
t-Butylbenzene	< 75 uş	√L 75	ug/L	0	
1,2,4-Trimethylbenzene	67 ug	γL 75	ug/L	2	
sec-Butylbenzene	< 75 ug	/L 75	ug/L	0	
p-isopropyttoluene	< 75 uş	γL 75	ug/L	0	
1,3-Dichlorobenzene	< 75 ug	/L 75	ug/L	0	
1,4-Dichlorobenzene	< 7 5 ug	/L 75	ug/L	0	
n-Butylbenzene	< 7 5 ug	/L 75	ug/L	0	
1,2-Dichlorobenzene	< 75 uş	/L 75	ug/L	0	
1,2-Dibromo-3-chloropropane	< 75 uş	y/L 75	ug/L	0	
1,2,4-Trichlorobenzene	< 75 u	γL 75	ug/L	0	
Hexachlorobutadiene	< 75 u	y/L 75	ug/L	0	
Naphthalene	3000 u	yL 75	ug/L	0	
1,2,3-Trichlorobenzene	< 75 u	/L 75	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Day Whisenast 7/16/99

ATA FILE:: 23Y21 FIELD ID:: Bramlett M. 21 LAB ID:: 99-JUN-0042

Tentatively Identified Compound Report

	72 1 11		I T D D C C D	D				
	Probable Molecular	Estimated Concentration	Library Match Probability		Libuana	Identification Manual		Scan
Compound	4			Rime (RT)	Library		DW	
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
ladana	T .	700	- A4 - I	00.05				
Indene	-	720	91	22,95	×			
	 		i					
	†	!		•				
			<u> </u>					
							-	
								
								`
	·	<u> </u>				<u>-</u>		
								
	<u> </u>		<u> </u>		-			
							į	

Internal Standard	
	RT
Pentafluorobenzene	8.99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates							
	% Recovery						
Dibromofluoromethane	93%						
Toluene D-8	102%						
1,4-Bromofluorobenze	86%						



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014036 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-22

Collection Date: 6/14/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

est Code: MS8260_W	Test Method: SW-846 8	260	Analyst: MAO12
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/t.	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/l.	3.0 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	1
Methyl iodide	< 3.0 ug/L	3.0 ug/L	0
Carbon disulfide	< 3.0 ug/L	3.0 ug/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	0
Acrylonitrile	< 3.0 ug/L	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	0
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chloroform	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichtoropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	0
Bromochloromethane	< 3.0 ug/L	3.0 ug/L	0
Benzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/L	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0
Toluene	< 3.0 ug/L	3.0 ug/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Tetrachloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Hexanone	< 3.0 ug/L	3.0 ug/L	0
Dibromochloromethane	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromoethane (EDB)	< 3.0 ug/L	3.0 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014036

Job#: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-22

Collection Date: 6/14/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method: SW-846 826	60	Analyst: MAO125C
	Result	Reporting Limit	Flag
Chlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Isopropylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,1,1,2-tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
Ethylbenzene	< 3.0 ug/L	3.0 ug/L	0
m-p-Xylene	< 6.0 ug/L	6.0 ug/L	0
o-Xylene	< 3.0 ug/L	3.0 ug/L	0
Styrene	< 3.0 ug/L	3.0 ug/L	0
Bromoform	< 3.0 ug/L	3.0 ug/L	0
1,4-Dichlorobutane	< 3.0 ug/L	3.0 ug/L	0
1,1,2,2-Tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
1,2,3-Trichloropropane	< 3.0 ug/L	3.0 ug/L	0
n-Propyl benzene	< 3.0 ug/L	3.0 ug/L	0
Bromobenzene	< 3.0 ug/L	3.0 ug/L	0
1,3,5-trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
2-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
4-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
t-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,2,4-Trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
sec-Butytbenzene	< 3.0 ug/L	3.0 ug/L	0
p-Isopropyltotuene	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,4-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
n-Butylbenzene	< 3.0 ug/L	3.0 ug/L	o O
1,2-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromo-3-chloropropane	< 3.0 ug/L	3.0 ug/L	0
1,2,4-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Hexachlorobutadiene	< 3.0 ug/L	3.0 ug/L	0
Naphthalene	< 3.0 ug/L	3.0 ug/L	0
1,2,3-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

May Whise nat 7/16/99
Detal Verified and Approved By, Date

					,
-					
DATA FILE::	24Y22	FIELD ID::	Bramlett 22	LAB ID::	99-JUN-0042

	Probable	Estimated	Library Match	Retention	1	Identification		1
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
j								
no TICs		· · · · · · · · · · · · · · · · · · ·				u.u.u.		<u> </u>
								<u> </u>
								 -
								-
· · · · · · · · · · · · · · · · · · ·	<u> </u>		<u> </u>				·	
								
					-			

Internal Standard					
	RT				
Pentafluorobenzene	8.99				
D4-1,4-Difluorobenzene	10.53				
Chlorobenzene D-5	16.75				
D-4 1,4-Dichlorobenzene	21.89				

Surrogates	
	% Recovery
Dibromofluoromethane	98%
Toluene D-8	110%
1,4-Bromofluorobenze	93%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: MW-24

Collection Date: 6/14/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

st Code: MS8260_W	Test M	etho	d: SW-846 8	1260		Analyst:	MAO12
		Re	sult	Repor	ting Limit	Flag	
Dichlorodifluoromethane	<u> </u>	3.0	ug/L	3.0	ug/L	0	
Chloromethane	<	3.0	ug/L	3.0	ug/L	0	
Vinyt chloride	<	3.0	ug/L	3.0	ug/L	0	
Bromomethane	<	3.0	ug/i.	3.0	ug/L	0	
Chloroethane	<	3.0	ug/L	3.0	ug/L	0	
Trichlorofluoromethane	<	3.0	ug/L	3.0	ug/L	0	
Acrolein	<	3.0	ug/L	3.0	ug/L	0	
1,1-Dichloroethene	<	3.0	ug/L	3.0	ug/L	0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	<	3.0	ug/L	3.0	ug/L	0	
Acetone	<	3.0	ug/L	3.0	ug/L	1	
Methyl iodide	<	3.0	ug/L	3.0	ug/L	0	
Carbon disulfide	<	3.0	ug/L	3.0	ug/L	0	
Methylene chloride	<	3.0	ug/L	3.0	ug/L	0	
Acrylonitrile	<	3.0	ug/L	3.0	ug/L	0	
MTBE	<	3.0	ug/L	3.0	ug/L	0	
trans-1,2-Dichloroethene	<	3.0	ug/L	3.0	ug/L	0	
Isopropyl ether	<	3.0	ug/L	3.0	ug/L	0	
1,1-Dichloroethane	<	3.0	ug/L	3.0	ug/L	0	
Vinyl acetate	<	3.0	ug/L	3.0	ug/L	0	
2,2-Dichloropropane	<	3.0	ug/L	3.0	ug/L	G	
cis-1,2-Dichloroethene	<	3.0	ug/L	3.0	ug/L	0	
2-Butanone	<	3.0	ug/L	3.0	ug/L	0	
Chloroform	<	3.0	ug/L	3.0	ug/L	0	
1,1-Dichloropropene	<	3.0	ug/L	3.0	ug/L	0	
1,1,1-Trichloroethane	<	3.0	ug/L	3.0	ug/L	0	
Carbon tetrachloride	<	3.0	ug/L	3.0	ug/L	0	
Bromochloromethane	<	3.0	ug/L	3.0	ug/L	0	
Benzene	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dichloroethane	<	3.0	ug/L	3.0	ug/L	0	
Trichloroethene	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dichloropropane	<	3.0	ug/L	3.0	ug/L	O	
Dibromomethane	<	3.0	ug/L	3.0	ug/L	0	
Bromodichloromethane	<	3.0	ug/L	3.0	ưg/L	0	
2-Chloroethyl vinyl ether	<	3.0	ug/L	3.0	ug/L	0	
cis-1,3-Dichloropropene	<	3.0	ug/L	3.0	ug/L	0	
4-Methyl-2-pentanone (MIBK)	<	3.0	ug/L	3.0	ug/L	0	
Toluene	<	3.0	ug/L	3.0	ug/L	0	
trans-1,3-Dichloropropene	<	3.0	ug/L	3.0	ug/L	0	
1,1,2-Trichloroethane	<	3.0	ug/L	3.0	ug/L	0	
1,3-Dichloropropane	<	3.0	ug/L	3.0	ug/L	0	
Tetrachloroethene	<		ug/L	3.0	ug/L	0	
2-Hexanone	<	3.0	ug/L	3.0	ug/L	0	
Dibromochloromethane	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dibromoethane (EDB)	<	3.0	ug/L	3.0	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014037

99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-24

Collection Date: 6/14/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method: SW	-846 8260	Analyst: MAO125C
	Result	Reporting Limit	Flag
Chlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Isopropylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,1,1,2-tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
Ethylbenzene	< 3.0 ug/L	3.0 ug/L	0
m-p-Xylene	< 6.0 ug/L	6.0 ug/L	0
o-Xylene	< 3.0 ug/L	3.0 ug/L	0
Styrene	< 3.0 ug/L	3.0 ug/L	0
Bromoform	< 3.0 ug/L	3.0 ug/L	G
1,4-Dichlorobutane	< 3.0 ug/L	3.0 ug/L	0
1,1,2,2-Tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
1,2,3-Trichloropropane	< 3.0 ug/L	3.0 ug/L	0
n-Propyl benzene	< 3.0 ug/L	3.0 ug/L	0
Bromobenzene	< 3.0 ug/L	3.0 ug/L	0
1,3,5-trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
2-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
4-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
t-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,2,4-Trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
sec-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
p-isopropyltoluene	< 3.0 ug/L	3.0 ug/L	o
1,3-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,4-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
n-Butytbenzene	< 3.0 ug/L	3.0 ug/L	O
1,2-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromo-3-chloropropane	< 3.0 ug/L	3.0 ug/L	O
1,2,4-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Hexachlorobutadiene	< 3.0 ug/L	3.0 ug/L	0
Naphthalene	< 3.0 ug/L	3.0 ug/L	0
1,2,3-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Troy Whisenant 7/16/99

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

Report Generated 7/14/99 07:55:18

			•	
	ILE:: 24Y24	FIELD ID:: Bramlett IV	124 LAB ID::	99-JUN-0042
DAIAI				00 0011 00 1E

	Probable	Estimated	Library Match	Retention		Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs								
		<u> </u>						
								
						-		
					,			
						·		
								
						. <u> </u>		
				-				
				·				
								
								
								
	· · · · · · · · · · · · · · · · · · ·	· · · ·					-	<u> </u>
Į į								

Internal Standard	
	RT
Pentafluorobenzene	8.99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates	
	% Recovery
Dibromofluoromethane	100%
Toluene D-8	112%
1,4-Bromofluorobenze	91%
	51.75



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014038 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: MW-23

Collection Date: 6/14/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

est Code: MS8260_W	Test Method: SW-846 8	3260	Analyst: MAO125
	Result	Reporting Limit	_Flag_
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/L	3.0 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichioro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	1
Methyl iodide	< 3.0 ug/L	3.0 ug/L	0
Carbon disulfide	< 3.0 ug/L	3.0 ug/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	0
Acrylonitrile	< 3.0 ug/L	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	0
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chloroform	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	0
Bromochloromethane	< 3.0 ug/L	3.0 ug/L	0
Benzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	. < 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/L	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0
Toluene	< 3.0 ug/L	3.0 ug/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Tetrachioroethene	< 3.0 ug/L	3.0 ug/L	0
2-Hexanone	< 3.0 ug/L	3.0 ug/L	0
Dibromochloromethane	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromoethane (ED8)	< 3.0 ug/L	3.0 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014038

99-JUN-0042 Job #:

Customer ID: G. FRANKLIN

Sample Description: MW-23

Collection Date: 6/14/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Result Reporting Limit Flag Chlorobenzene < 3.0 ug/L 3.0 ug/L 0 Isopropylbenzene < 3.0 ug/L 3.0 ug/L 0 1,1,1,2-tetrachloroethane < 3.0 ug/L 3.0 ug/L 0 Ethylbenzene < 3.0 ug/L 3.0 ug/L 0 m-p-Xylene < 6.0 ug/L 6.0 ug/L 0 o-Xylene < 3.0 ug/L 3.0 ug/L 0 Styrene < 3.0 ug/L 3.0 ug/L 0 Bromoform < 3.0 ug/L 3.0 ug/L 0 1,4-Dichlorobutane < 3.0 ug/L 3.0 ug/L 0 1,2,3-Trichloropropane < 3.0 ug/L 3.0 ug/L 0	MAO125C
Isopropylbenzene	
1,1,1,2-tetrachloroethane < 3.0 ug/L 3.0 ug/L 0 Ethylbenzene < 3.0 ug/L 3.0 ug/L 0 m-p-Xylene < 6.0 ug/L 6.0 ug/L 0 o-Xylene < 3.0 ug/L 3.0 ug/L 0 Styrene < 3.0 ug/L 3.0 ug/L 0 Bromoform < 3.0 ug/L 3.0 ug/L 0 1,4-Dichlorobutane < 3.0 ug/L 3.0 ug/L 0 1,1,2,2-Tetrachloroethane < 3.0 ug/L 3.0 ug/L 0	
Ethylbenzene < 3.0 ug/L	
m-p-Xylene	
o-Xylene < 3.0 ug/L	
Styrene < 3.0 ug/L 3.0 ug/L 0 Bromoform < 3.0 ug/L	
Bromoform < 3.0 ug/L 3.0 ug/L 0 1,4-Dichlorobutane < 3.0 ug/L	
1,4-Dichlorobutane < 3.0 ug/L 3.0 ug/L 0 1,1,2,2-Tetrachloroethane < 3.0 ug/L 3.0 ug/L 0	
1,1,2,2-Tetrachloroethane < 3.0 ug/L 3.0 ug/L 0	
1,2,3-Trichloropropane < 3.0 ug/L 3.0 ug/h 0	
n-Propyl benzene < 3.0 ug/L 3.0 ug/L 0	
Bromobenzene < 3.0 ug/L 3.0 ug/L 0	
1,3,5-trimethy/benzene < 3.0 ug/L 3.0 ug/L 0	
2-Chiorotoluene < 3.0 ug/L 3.0 ug/L 0	
4-Chlorotoluene < 3.0 ug/L 3.0 ug/L 0	
t-Buty/benzene < 3.0 ug/L 3.0 ug/L 0	
1,2,4-Trimethy/benzene < 3.0 ug/L 3.0 ug/L 0	
sec-Butylbenzene < 3.0 ug/L 3.0 ug/L 0	
p-Isopropyttoluene < 3.0 ug/L 3.0 ug/L 0	
1,3-Dichlorobenzene < 3.0 ug/L 3.0 ug/L 0	
1,4-Dichlorobenzene < 3.0 ug/L 3.0 ug/L 0	
n-Butylbenzene < 3.0 ug/L 3.0 ug/L 0	
1,2-Dichlorobenzene < 3.0 ug/L 3.0 ug/L 0	
1,2-Dibromo-3-chloropropane < 3.0 ug/L 3.0 ug/L 0	
1,2,4-Trichlorobenzene < 3.0 ug/L 3.0 ug/L 0	
Hexachiorobutadiene < 3.0 ug/L 3.0 ug/L 0	
Naphthalene < 3.0 ug/L 3.0 ug/L 0	
1,2,3-Trichlorobenzene < 3.0 ug/L 3.0 ug/L 0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Nanative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

		<u> </u>		<u></u>	
DATA FILE::	24Y23	FIELD ID::	Bramlett 23	LAB ID:: 99-JUN-00	

	Probable	Estimated	Library Match		1	Identification		<u> </u>
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
		(-8-7		, , , , , , , , , , , , , , , , , , , ,				
no TICs								
				·				
							 	
		-						
								<u> </u>
								·
			·					
				. ,				
					<u> </u>			···
<u> </u>								

Internal Standard	
	RT
Pentafluorobenzene	8.99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates	
	% Recovery
Dibromofluoromethane	102%
Toluene D-8	110%
1,4-Bromofluorobenze	91%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: MW-25

Collection Date: 6/15/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ткт		_	\mathbf{T}	GC/MS	_	THE CO
1	viji.	IN	VVAI	r R	- T	LIL MIN	-	K/hii

est Code: MS8260_W	Test Method: SW-846 8	3260	Analyst: MAO125
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/L	3.0 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	1
Methyl iodide	< 3.0 ug/L	3.0 ug/L	0
Carbon disulfide	< 3.0 ug/L	3.0 ug/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	0
Acrylonitrile	< 3.0 ug/L	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	0
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chioroform	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	q
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	0
Bromochioromethane	< 3.0 ug/L	3.0 ug/L	0
Benzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/L	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0
Toluene	< 3.0 ug/L	3.0 ug/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Tetrachloroethene	< 3.0 ug/L		0
2-Hexanone	< 3.0 ug/L	•	
Dibromochloromethane	< 3.0 ug/L	•	0
1,2-Dibromoethane (EDB)	< 3.0 ug/L	3.0 ug/L 3.0 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014039

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: MW-25

Collection Date:

n: 14144-23 : 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test M	letho	d: SW-846	8260			Analyst:	MAO125C
		Re	sult		Report	ing Limit	Flag	
Chlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
Isopropylbenzene	<	3.0	ug/L		3.0	ug/L	0	
1,1,1,2-tetrachloroethane	<	3.0	ug/L		3.0	ug/L	0	
Ethylbenzene	<	3.0	ug/L		3.0	ug/L	0	
m-p-Xylene	<	6.0	ug/L		6.0	ug/L	0	
o-Xylene	<	3.0	ug/L		3.0	ug/L	0	
Styrene	<	3.0	ug/L		3.0	ug/L	0	
Bromoform	<	3.0	ug/L		3.0	ug/L	O	
1,4-Dichlorobutane	<	3.0	ug/L		3.0	ug/L	0	
1,1,2,2-Tetrachloroethane	<	3.0	ug/L		3.0	ug/L	0	
1,2,3-Trichloropropane	<	3.0	ug/L		3.0	ug/L	0	
n-Propyl benzene	<	3.0	ug/L		3.0	ug/L	0	
Bromobenzene	<	3.0	ug/L		3.0	ug/L	0	
1,3,5-trimethylbenzene	<	3.0	ug/L		3.0	ug/L	0	
2-Chiorotoluene	<	3.0	ug/L		3.0	ug/L	0	
4-Chlorotoluene	<	3.0	ug/L		3.0	ug/L	0	
t-Butylbenzene	<	3.0	ug/L		3.0	ug/L	0	
1,2,4-Trimethylbenzene	<	3.0	ug/L		3.0	ug/L	0	
sec-Butylbenzene	<	3.0	ug/L		3.0	ug/L	0	
p-Isopropyltoluene	<	3.0	ug/L		3.0	ug/L	0	
1,3-Dichlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
1,4-Dichlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
n-Butylbenzene	<	3.0	ug/L		3.0	ug/L	0	
1,2-Dichlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
1,2-Dibromo-3-chloropropane	<	3.0	ug/L		3.0	ug/L	0	
1,2,4-Trichlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
Hexachlorobutadiene	<	3.0	ug/L		3.0	ug/L	0	
Naphthalene	<	3.0	ug/L		3.0	ug/L	0	
1,2,3-Trichlorobenzene	<	3.0	ug/L		3.0	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Day Whisemant 7/16/99

 				· · · · · · · · · · · · · · · · · · ·		_
DATA FILE::	24Y25	FIELD ID::	Bramlett Mv-25	LAB ID::	99-JUN-0042	
						

		••						
	Probable	Estimated	Library Match	Retention		Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual	. —	Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs								
		,						

Internal Standard	
	RT
Pentafluorobenzene	8.99
D4-1,4-Difluorobenzene	10.53
Chlorobenzene D-5	16.75
D-4 1,4-Dichlorobenzene	21.89

Surrogates	
	% Recovery
Dibromofluoromethane	101%
Toluene D-8	105%
1,4-Bromofluorobenze	90%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014040

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: SW-1

Collection Date: 6/17/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC.	IN WA	TER BY	GC/MS	- 8260

est Code: MS8260_W	Test Method: SW-846 8	8260	Analyst: MAO1250
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L .	3.0 ug/L	O
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/L	3.0 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethene	< 3.0 ug/t.	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	0
Methyl iodide	< 3.0 ug/t.	3.0 ug/L	0
Carbon disulfide	< 3.0 ug/L	3.0 ug/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	0
Acrylonitrile	< 3.0 ug/L	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	Ô
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chloroform	< 3.0 ug/L	3.0 ug/L	Ō
1,1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	0
Bromochloromethane	< 3.0 ug/L	3.0 ug/L	0
Benzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichloroethene	< 3.0 ug/L	. 3.0 ug/L	0
1,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/L	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0
Toluene	< 3.0 ug/L		
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L 3.0 ug/L	0 0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichloropropane	< 3.0 ug/L	•	0
Tetrachloroethene	< 3.0 ug/L		
2-Hexanone	< 3.0 ug/L	y -	0
Dibromochloromethane	< 3.0 ug/L	•	0
1,2-Dibromoethane (EDB)	< 3.0 ug/L	3.0 ug/L 3.0 ug/L	0 0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Fax: 704-875-5038

Phone: 704-875-5209

Sample ID #: 99014040

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: SW-1

Collection Date: 6/17/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Te	st Code: MS8260_W	Test M	letho	d: SW-846	8260		Analyst:	MA0125C
			Re	sult	Repor	ting Limit	Flag	
	Chlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
	Isopropylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,1,1,2-tetrachloroethane	<	3.0	ug/L	3.0	ug/L	0	
	Ethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	m-p-Xylene	<	6.0	ug/L	6.0	ug/L	0	
	o-Xylene	<	3.0	ug/L	3.0	ug/L	0	
	Styrene	<	3.0	ug/L	3.0	ug/L	0	
	Bromoform	<	3.0	ug/L	3.0	ug/L	0	
	1,4-Dichlorobutane	<	3.0	ug/L	3.0	ug/L	0	
	1,1,2,2-Tetrachloroethane	<	3.0	ug/L	3.0	ug/L	0	
	1,2,3-Trichloropropane	<	3.0	ug/L	3.0	ug/L	0	
	n-Propyl benzene	<	3.0	ug/L	3.0	ug/L	0	
	Bromobenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,3,5-trimethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	2-Chlorotoluene	<	3.0	ug/L	3.0	ug/L	0	
	4-Chlorotoluene	<	3.0	ug/L	3.0	ug/L	0	
	t-Butylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,2,4-Trimethylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	sec-Butylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	p-Isopropyltoluene	<	3.0	ug/L	3.0	ug/L	0	
	1,3-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,4-Dichlorobenzene	<	3.0	ug/L	3.0	ug/L	G	
	n-Butylbenzene	<	3.0	ug/L	3.0	ug/L	0	
	1,2-Dichlorobenzene		3.0	ug/L	3.0	ug/L	0	
	1,2-Dibromo-3-chloropropane	` <	3.0	ug/L	3.0	ug/L	0	
	1,2,4-Trichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	
	Hexachlorobutadiene	<	3.0	ug/L	3.0	ug/L	0	
	Naphthalene	<	3.0	ug/L	3.0	ug/L	0	
	1,2,3-Trichlorobenzene	<	3.0	ug/L	3.0	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Data Verified and Approved By, Date

		:	:		
DATA FILE::	22Y06	FIELD ID::	LAB ID::	99-JUN-0042	

	Probable	Estimated	Library Match	Retention		Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs								

							i	
								

Internal Standard	
	RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21.55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40.87

Surrogates	
	% Recovery
Dibromofluoromethane	108%
Toluene D-8	97%
1,4-Bromofluorobenze	94%

USEPA - 8260 G.C. Conditions 105 m x 0.53 mm x 1.0 um / Restek 502.2 He, 0.5 ml/min, 35 C hold 10 mins, 35 C to 180 C @ 4 C/min, 180 to 200 C @ 10 C/min, hold 5 min



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014041

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: SW-2

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Collection Date: 6/17/99

st Code: MS8260_W	Test Method: SW-846 82	.60	Analyst: MAO12
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/L	3.0 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	0
Methyl iodide	< 3.0 ug/L	3.0 ug/i.	0
Carbon disulfide	< 3.0 ug/L	3.0 ug/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	0
Acrylonitrile	< 3.0 ug/L	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	0
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chloroform	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	0
Bromochloromethane	< 3.0 ug/L	3.0 ug/L	0
Benzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloroethane	< 3.0 ug/i_	3.0 ug/L	0
Trichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/L	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0
Toluene	< 3.0 ug/L	3.0 ug/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Tetrachloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Hexanone	< 3.0 ug/L	3.0 ug/L	0
Dibromochloromethane	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromoethane (EDB)	< 3.0 ug/L	3.0 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014041

99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: SW-2

Collection Date: 6/17/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Te	st Code: MS8260_W	Test M	letho	od: SW-846	8260			Analyst:	MAO125C
			Re	esult	Rej	port	ing Limit	Flag	
	Chlorobenzene	<	3.0	ug/L	3.	.0	ug/L	0	
	Isopropylbenzene	<	3.0	ug/L	3.	.0	ug/L	0	
	1,1,1,2-tetrachloroethane	<	3.0	ug/L	3.	.0	ug/L	0	
	Ethylbenzene	<	3.0	ug/L	3	.0	ug/L	0	
	m-p-Xylene	<	6.0	ug/L	6.	.0	ug/L	0	
	o-Xylene	<	3.0	ug/L	3	.0	ug/L	0	
	Styrene	<	3.0	ug/L	3.	.0	ug/L	0	
	Bromoform	<	3.0	ug/L	3	.0	ug/L	0	
	1,4-Dichlorobutane	<	3.0	ug/L	3.	.0	ug/L	0	
	1,1,2,2-Tetrachloroethane	<	3.0	ug/L	3	.0	ug/L	0	
	1,2,3-Trichloropropane	<	3.0	ug/L	3.	.0	ug/L	0	
	n-Propyl benzene	<	3.0	ug/L	3	.0	ug/L	0	
	Bromobenzene	<	3.0	ug/L	3.	.0	ug/L	0	
ì	1,3,5-trimethylbenzene	<	3.0	ug/L	3	.0	ug/L	0	
	2-Chiorotoluene	<	3.0	ug/L	3	.0	ug/L	0	
	4-Chlorotoluene	<	3.0	ug/L	3	.0	ug/L	0	
	t-Butylbenzene	<	3.0	ug/L	3	.0	ug/L	0	
	1,2,4-Trimethylbenzene	<	3.0	ug/L	3	.0	ug/L	0	
	sec-Butylbenzene	<	3.0	ug/L	3.	.0	ug/L	0	
	p-Isopropyitoluene	<	3.0	ug/L	3	.0	ug/L	0	
	1,3-Dichlorobenzene	<	3.0	ug/L	3	.0	ug/L	0	
	1,4-Dichlorobenzene	<	3.0	ug/L	3	.0	ug/L	0	
	n-Butylbenzene	<	3.0	ug/L	3	.0	ug/L	Ò	
	1,2-Dichlorobenzene	<	3.0	ug/L	3	.0	ug/L	0	
	1,2-Dibromo-3-chloropropane	<	3.0	ug/L	3	.0	ug/L	0	
	1,2,4-Trichlorobenzene	<	3.0	ug/L	3	.0	ug/L	0	
	Hexachlorobutadiene	<	3.0	ug/L	3	.0	ug/L	0	
	Naphthalene	<	3.0	ug/L	3	.0	ug/L	0	
	1,2,3-Trichlorobenzene	<	3.0	ug/L	3	.0	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

		:		•
DATA FILE::	22Y07	FIELD ID::	Bramlett 5772	i LAB ID:: 99-JUN-0042

Tentatively Identified Compound Report

			T 1 N / 1	D / //		T.1 4: 6:		
	Probable	Estimated	Library Match		f :1	Identification		Scan
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual	DM	
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
					T			
no TICs								-
								<u> </u>

				····				
						<u> </u>		
				_				
	-							
					i			
	": 1.	-						

Internal Standard	
	RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21.55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40.87

Surrogates	
	% Recovery
Dibromofluoromethane	112%
Toluene D-8	95%
1,4-Bromofluorobenze	92%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014042 Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: SW-3

Collection Date: 6/17/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOCTN	WATER	BY	GC/MS	- 8260
	 -			

st Code: MS8260_W	Test Method: SW-846 8	3260	Analyst: MAO12
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/L	3.0 ug/L	0
Acrolein	< 3.0 ug/l.	3.0 ug/L	0
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	0
Methyl iodide	< 3.0 ug/L	3.0 ug/L	0
Carbon disulfide	< 3.0 ug/L	3.0 uig/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	0
Acrylonitrite	< 3.0 ug/L	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	O
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chloroform	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachioride	< 3.0 ug/L	3.0 ug/L	0
Bromochloromethane	< 3.0 ug/L	3.0 ug/L	O O
Benzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichloroethene	< 3.0 ug/L	3.0 ug/L	Ō
1,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	ō
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/t.	3.0 ug/L	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	Ō
Toluene	< 3.0 ug/L	3.0 ug/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Tetrachloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Hexanone	< 3.0 ug/L	3.0 ug/L	0
Dibromochloromethane	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromoethane (EDB)	< 3.0 ug/L	3.0 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014042 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: SW-3

Collection Date: 6/17/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method: S	W-846 8260	Analyst	: MAO125C
	Result	Reporti	ng Limit Flag	
Chlorobenzene	< 3.0 ug/L	3.0	ug/L 0	
Isopropylbenzene	< 3.0 ug/L	3.0	ug/L. 0	
1,1,1,2-tetrachloroethane	< 3.0 ug/L	3.0	ug/L 0	
Ethylbenzene	< 3.0 ug/L	3.0	ug/L 0	
m-p-Xylene	< 6.0 ug/L	6.0	ug/L C	
o-Xylene	< 3.0 ug/L	3.0	ug/L 0	
Styrene	< 3.0 ug/L	3.0	ug/L 0	
Bromoform	< 3.0 ug/L	3.0	ug/L 0	
1,4-Dichlorobutane	< 3.0 ug/L	3.0	ug/L 0	
1,1,2,2-Tetrachloroethane	< 3.0 ug/L	3.0	ug/L 0	
1,2,3-Trichloropropane	< 3.0 ug/L	3.0	ug/L G	
n-Propyl benzene	< 3.0 ug/L	3.0	ug/L 0	
Bromobenzene	< 3.0 ug/L	3.0	ug/L 0	
1,3,5-trimethylbenzene	< 3.0 ug/L	3.0	ug/L 0	
2-Chlorototuene	< 3.0 ug/L	3.0	ug/L 0	
4-Chlorotoluene	< 3.0 ug/L	3.0	ug/L 0	
t-Butylbenzene	< 3.0 ug/L	3.0	ug/L 0	
1,2,4-Trimethylbenzene	< 3.0 ug/L	3.0	ug/L 0	
sec-Butylbenzene	< 3.0 ug/L	3.0	ug/L 0	
p-Isopropyltoluene	< 3.0 ug/L	3.0	ug/L 0	
1,3-Dichlorobenzene	< 3.0 ug/L	3.0	ug/L 0	
1,4-Dichlorobenzene	< 3.0 ug/L	3.0	ug/L 0	
n-Butylbenzene	< 3.0 ug/L	3.0	ug/L 0	
1,2-Dichlorobenzene	< 3.0 ug/L	3.0	ug/L 0	
1,2-Dibromo-3-chloropropane	< 3.0 ug/L	3.0	ug/L 0	
1,2,4-Trichlorobenzene	< 3.0 ug/L	3.0	ug/L 0	
Hexachlorobutadiene	< 3.0 ug/L	3.0	ug/L 0	
Naphthalene	< 3.0 ug/L	3.0	ug/L 0	
1,2,3-Trichlorobenzene	< 3.0 ug/L	3.0	ug/L 0	

Description of Flags:

0 - No Discrepancies Noted 3 - Detected in Blank

1 - See Case Narrative 4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration 5 - For Information Only

2 701 10 hiseneut 7/16/99

DATA FILE:: 22Y08 FIELD ID:: Bramlett Sw3 LAB ID:: 99-JUN-0042

Tentatively Identified Compound Report

			Tru 3 (1)	T	i	T 1		1
	Probable	Estimated	Library Match		T -1	Identification		Q
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs								
					•			
						, .		
				<u>=</u>				
			<u> </u>					
						*		
			! !					
								=

Internal Standard	
	RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21.55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40.87

Surrogates	· · · · · · · · · · · · · · · · · · ·
	% Recovery
Dibromofluoromethane	104%
Toluene D-8	96%
1,4-Bromofluorobenze	94%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014043 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: SW-4

Collection Date: 6/17/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

	VOC:	IN	WA"	FR	RV	GC/MS	_	8260
ı	A OC	11.4	TTM	Ľ	Фſ	CINIO	-	020U

Test Code: MS8260_W	Test Method: SW-846 8260		Analyst: MAO125			
	Resu	<u>tt </u>	Report	ing Limit	Flag	
Dichlorodifluoromethane	< 3.0 u	g/L	3.0	ug/L	0	
Chloromethane	< 3.0 u	g/L	3.0	ug/L	0	
Vinyl chloride	< 3.0 u	g/L	3.6	ug/L	0	
Bromomethane	< 3.0 u	g/L	3.0	ug/L	0	
Chloroethane	< 3.0 u	g/L	3.0	ug/L	0	
Trichlorofluoromethane	< 3.0 u	g/L	3.0	ug/L	0	
Acrolein	< 3.0 u	g/L	3.0	ug/L	0	
1,1-Dichloroethene	< 3.0 u	g/L	3.0	ug/L	0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 u	g/L	3.0	ug/L	G	
Acetone	< 3.0 u	g/L	3.0	ug/L	O	
Methyl iodide	< 3.0 u	g/L	3.0	ug/L	0	
Carbon disulfide	< 3.0 u	ıg/L	3.0	ug/L	0	
Methylene chloride	< 3.0 u	g/L	3.0	ug/L	0	
Acrylonitrile	< 3.0 u	ıg/L	3.0	ug/L	0	
MTBE	< 3.0 u	g/L	3.0	ug/L	0	
trans-1,2-Dichloroethene	< 3.0 u	ıg/L	3.0	ug/L	0	
Isopropyl ether	< 3.0 u	ıg/L	3.0	ug/L	0	
1,1-Dichloroethane	< 3.0 u	ıg/L	3.0	ug/L	0	
Vinyl acetate	< 3.0 u	ıg/L	3.0	ug/L	0	
2,2-Dichloropropane	< 3.0 น	ıg/L	3.0	ug/L	0	
cis-1,2-Dichloroethene	< 3.0 u	g/L	3.0	ug/L	G	
2-Butanone		ig/L	3.0	ug/L	0	
Chloroform	< 3.0 u	g/L	3.0	ug/L	0	
1,1-Dichloropropene		ig/L	3.0	ug/L	0	
1,1,1-Trichloroethane		ig/L	3.0	ug/L	0	
Carbon tetrachloride		ig/L	3.0	ug/L	0	
Bromochloromethane		ig/L	3.0	ug/L	0	
Benzene		ıg/L	3.0	ug/L	0	
1,2-Dichloroethane		ıg/L	3.0	ug/L	0	
Trichloroethene		ıg/L	3.0	ug/L	0	
1,2-Dichloropropane		ıg/L	3.0	ug/L	0	
Dibromomethane		ıg/L	3.0	ug/L	0	
Bromodichloromethane		ig/L	3.0	ug/L	0	
2-Chloroethyl vinyl ether		ıg/L	3.0	ug/L	o o	
cis-1,3-Dichloropropene		ıg/L	3.0	ug/L	0	
4-Methyl-2-pentanone (MIBK)		ıg/L	3.0	ug/L	0	
Toluene		ig/L	3.0	ug/L	o	
trans-1,3-Dichloropropene		ıg/L	3.0	ug/L	o	
1,1,2-Trichloroethane		ıg/L	3.0	ug/L	0	
1,3-Dichloropropane		.g/L	3.0	ug/L	0	
Tetrachloroethene		ıg/L	3.0	ug/L	0	
2-Hexanone		ıg/L	3.0	ug/L	0	
Dibromochloromethane		ıg/L	3.0	ug/L	0	
1,2-Dibromoethane (EDB)		ıg/L	3.0	ug/L	a	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014043

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: SW-4

Collection Date: 6/17/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method: SW-84	6 8260	Analyst: MAO125C
	Result	Reporting Limit	Flag
Chlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Isopropylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,1,1,2-tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
Ethylbenzene	< 3.0 ug/L	3.0 ug/L	0
m-p-Xylene	< 6.0 ug/L	6.0 ug/L	0
o-Xylene	< 3.0 ug/L	3.0 ug/L	0
Styrene	< 3.0 ug/L	3.0 ug/L	0
Bromoform	< 3.0 ug/L	3.0 ug/L	0
1,4-Dichlorobutane	< 3.0 ug/L	3.0 ug/L	0
1,1,2,2-Tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
1,2,3-Trichloropropane	< 3.0 ug/L	3.0 ug/L	0
n-Propyl benzene	< 3.0 ug/L	3.0 ug/L	0
Bromobenzene	< 3.0 ug/L	3.0 ug/L	0
1,3,5-trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
2-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
4-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
t-Butylbenzene	< 3.0 ug/L	3.0 ug/L	o
1,2,4-Trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
sec-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
p-Isopropyttoluene	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,4-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
n-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromo-3-chloropropane	< 3.0 ug/L	3.0 ug/L	0
1,2,4-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Hexachlorobutadiene	< 3.0 ug/L	3.0 ug/L	0
Naphthalene	< 3.0 ug/L	3.0 ug/L	0
1,2,3-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
	•	•	•

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Casé Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Visit us on the IntraNet at http://dewww/essenv/lab_srv/ DATA FILE:: 24Y10 | FIELD ID:: Bramlett SvV4 | LAB ID:: 99-JUN-0042

Tentatively Identified Compound Report

			I Charles Markel		I "			<u> </u>
	Probable Molecular	Estimated Concentration	Library Match Probability	Retention Rime (RT)	Library	Identification Manual		Scan
Compound	4		•	(Minutes)	Match	Interpretation	RT	Number
Compound	Weight	(ug/L)	(%)	(Minutes)	Mach	Interpretation	101	Trumber
no TICs	Ī							
110 1103				<u> </u>				
	-	<u> </u>						
		<u></u>						
						-		
<u> </u>								
		- -						
					!			
		· ·						
						· · · · · · · · · · · · · · · · · · ·		_

Internal Standard	
	RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21,55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40,87

Surrogates	
	% Recovery
Dibromofluoromethane	109%
Toluene D-8	100%
1,4-Bromofluorobenze	92%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014046

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: SW-5

Collection Date: 6/17/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method: SW-846 8260				Analyst:	MA0125C	
		Re	sult	Report	ting Limit	_Flag	
Dichlorodifluoromethane	<	3.0	ug/L	3.0	ng/L	0	
Chloromethane	<	3.0	ug/L	3.0	ug/L	0	
Vinyl chloride	<	3.0	ug/L	3.0	ug/L	0	
Bromomethane	<	3.0	u g/L .	3.0	ug/L	0	
Chloroethane	<	3.0	ug/L	3.0	ug/L	0	
Trichlorofluoromethane	<	3.0	ug/L	3.0	ug/L	0	
Acrolein	<	3.0	ug/L	3.0	ug/L	0	
1,1-Dichloroethene	<	3.0	ug/L	3.0	ug/L	0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	<	3.0	ug/L	3.0	ug/L	0	
Acetone	<	3.0	ug/L	3.0	ug/L	0	
Methyl iodide	<	3.0	ug/L	3.0	ug/L	a	
Carbon disulfide	<	3.0	ug/L	3.0	ug/L	0	
Methylene chloride	<	3.0	ug/L	3.0	ug/L	0	
Acrylonitrile	<	3.0	ug/L	3.0	ug/L	0	
MTBE	<	3.0	ug/L	3.0	ug/L	0	
trans-1,2-Dichloroethene	<	3.0	ug/L	3.0	ug/L	0	
Isopropyl ether	<	3.0	ug/L	3.0	ug/L	0	
1,1-Dichloroethane	<	3.0	ug/L	3.0	ug/L	0	
Vinyl acetate	<	3.0	ug/L	3.0	ug/L	0	
2,2-Dichloropropane	<	3.0	ug/L	3.0	ug/L	0	
cis-1,2-Dichloroethene	<	3.0	ug/L	3.0	ug/L	0	
2-Butanone	<	3.0	ug/L	3.0	ug/L	0	
Chloroform	<	3.0	ug/L	3.0	ug/L	0	
1,1-Dichloropropene	<	3.0	ug/L	3.0	ug/L	0	
1,1,1-Trichloroethane	<	3.0	ug/L	3.0	ug/L	0	
Carbon tetrachloride	<	3.0	ug/L	3.0	ug/L	0	
Bromochloromethane	<	3.0	ug/L	3.0	ug/L	0	
Benzene	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dichloroethane	<	3.0	ug/L	3.0	ug/L	0	
Trichloroethene	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dichloropropane	<	3.0	ug/L	3.0	ug/L	a	
Dibromomethane	<	3.0	ug/L	3.0	ug/L	0	
Bromodichloromethane	<	3.0	ug/L	3.0	ug/L	0	
2-Chloroethyl vinyl ether	<	3.0	ug/L	3.0	ug/L	0	
cis-1,3-Dichloropropene	<	3.0	ug/L	3.0	ug/L	0	
4-Methyl-2-pentanone (MIBK)	<	3.0	ug/L	3.0	ug/L	0	
Toluene	<	3.0	ug/L	3.0	ug/L	0	
trans-1,3-Dichloropropene	<	3.0	ug/L	3.0	ug/L	0	
1,1,2-Trichloroethane	<	3.0	ug/L	3.0	ug/L	0	
1,3-Dichloropropane	<	3.0	ug/L	3.0	ug/L	0	
Tetrachloroethene	<	3.0	ug/L	3.0	ug/L	0	
2-Hexanone	<	3.0	ug/L	3.0	ug/L	0	
Dibromochloromethane			ug/L	3.0	ug/L	0	
1,2-Dibromoethane (EDB)	<	3.0	ug/L	3.0	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014046

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: SW-5

Collection Date: 6/17/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Te	st Code: MS8260_W	Test M	leth	od: SW-84 6	8260			Analyst:	MAO125C
		Result				Reporting Limit		Flag	
	Chlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
	Isopropylbenzene	<	3.0	ug/L	;	3.0	ug/L	0	
	1,1,1,2-tetrachloroethane	<	3.0	ug/L	:	3.0	ug/L	0	
	Ethylbenzene	<	3.0	ug/L	;	3.0	ug/L	0	
	m-p-Xylene	<	6.0	ug/L	(6.0	ug/L	0	
	o-Xylene	<	3.0	ug/L	;	3.0	ug/L	0	
	Styrene	<	3.0	ug/L	;	3.0	ug/L	0	
	Bromoform	<	3.0	ug/L	:	3.0	ug/L	0	
	1,4-Dichlorobutane	<	3.0	ug/L	;	3.0	ug/L	0	
	1,1,2,2-Tetrachloroethane	<	3.0	ug/L	;	3.0	ug/L	0	
	1,2,3-Trichloropropane	<	3.0	ug/L	;	3.0	ug/L	0	
	n-Propyl benzene	<	3.0	ug/L	:	3.0	ug/L	0	
	Bromobenzene	<	3.0	ug/L	;	3.0	ug/L	0	
	1,3,5-trimethylbenzene	<	3.0	ug/L	;	3.0	ug/L	0	
	2-Chlorotoluene	<	3.0	ug/L	•	3.0	ug/L	0	
	4-Chlorotoluene	<	3.0	ug/L	;	3.0	ug/L	0	
	t-Butylbenzene	<	3.0	ug/L	;	3.0	ug/L	0	
	1,2,4-Trimethylbenzene	<	3.0	ug/L	;	3.0	ug/L	0	
	sec-Butylbenzene	<	3.0	ug/L	:	3.0	ug/L	0	
	p-Isopropyttotuene	<	3.0	ug/L	:	3.0	ug/L	0	
	1,3-Dichlorobenzene	<	3.0	-		3.0	ug/L	0	
	1,4-Dichlorobenzene	<	3.0	fug/L	:	3.0	ug/L	0	
	n-Butylbenzene	<	3.0		:	3.0	ug/L	0	
	1,2-Dichlorobenzene	<	3.0	ug/L	:	3.0	ug/L	0	
	1,2-Dibromo-3-chloropropane	<	3.0	ug/L	:	3.0	ug/L	0	
	1,2,4-Trichlorobenzene	<	3.0	ug/L	•	3.0	ug/L	0	
	Hexachlorobutadiene	<	3.0	-	;	3.0	ug/L	0	
	Naphthalene	<	3.0	_		3.0	ug/L	o	
	1,2,3-Trichlorobenzene	<	3.0	ug/L	:	3.0	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

Report Generated 7/14/99 07:55:18

DATA FILE:: 24Y11 FIELD ID:: Bramlett SvV5 LAB ID:: 99-JUN-0042

Tentatively Identified Compound Report

					· · · · · · · · · · · · · · · · · · ·			1
	Probable	Estimated	Library Match			Identification		-
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs								
								
				<u> </u>				
		<u>-</u>	<u></u>					
							 	
		_						

Internal Standard	
	RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21.55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40.87

Surrogates	_
	% Recovery
Dibromofluoromethane	108%
Toluene D-8	100%
1,4-Bromofluorobenze	92%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014047

99-JUN-0042 Job#:

Customer ID: G. FRANKLIN

Sample Description: SW-7

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Collection Date: 6/17/99

Test Code: MS8260_W	Test Method: SW-846 826	50	Analyst: MAO125C
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/L	3.0 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	0
Methyl iodide	< 3.0 ug/L	3.0 ug/L	0
Carbon disulfide	< 3.0 ug/L	3.0 ug/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	0
Acrylonitrile	< 3.0 ug/L	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	0
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chloroform	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	0
Bromochloromethane	< 3.0 ug/L	3.0 ug/L	0
Benzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/L	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0
Toluene	< 3.0 ug/L	3.0 ug/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Tetrachloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Hexanone	< 3.0 ug/L	3.0 ug/L	0
Dibromochloromethane	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromoethane (ED8)	< 3.0 ug/L	3.0 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014047

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: SW-7

Collection Date: 6/17/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method: SW-846 82	260	Analyst: MAO125C
	Result	Reporting Limit	Flag
Chlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Isopropylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,1,1,2-tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
Ethylbenzene	< 3.0 ug/L	3.0 ug/L	0
m-p-Xylene	< 6.0 ug/L	6.0 ug/L	o
o-Xylene	< 3.0 ug/L	3.0 ug/L	0
Styrene	< 3.0 ug/L	3.0 ug/L	0
Bromoform	< 3.0 ug/L	3.0 ug/L	0
1,4-Dichlorobutane	< 3.0 ug/L	3.0 ug/L	0
1,1,2,2-Tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
1,2,3-Trichioropropane	< 3.0 ug/L	3.0 ug/L	0
n-Propyl benzene	< 3.0 ug/L	3.0 ug/L	0
Bromobenzene	< 3.0 ug/L	3.0 ug/L	0
1,3,5-trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
2-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
4-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
t-Butylbenzene	< 3.0 ug/L	3.0 ug/L	O
1,2,4-Trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
sec-Butyibenzene	< 3.0 ug/L	3.0 ug/L	0
p-Isopropyltoluene	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,4-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
n-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromo-3-chloropropane	< 3.0 ug/L	3.0 ug/L	0
1,2,4-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Hexachlorobutadiene	< 3.0 ug/L	3.0 ug/L	0
Naphthalene	< 3.0 ug/L	3.0 ug/L	0
1,2,3-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
	-	J	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

			;	<u> </u>		:	
DATA FILE::	24Y12	FIELD ID::	Bramlett Svv/		LAB ID::	99-JUN-0042	

Tentatively Identified Compound Report

	Probable	Estimated	Library Match			Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs								
						·		
		<u></u>						

Internal Standard	
1	RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21.55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40.87

Surrogates	
	% Recovery
Dibromofluoromethane	111%
Toluene D-8	101%
1,4-Bromofluorobenze	93%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014048 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: SW-8

Collection Date: 6/17/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

st Code: MS8260_W	Test M	etho	d: SW-846 8	260		Analyst:	MAO125
		Re	sult	Repor	ting Limit	Flag	
Dichlorodifluoromethane	<	3.0	ug/L	3.0	ug/L	0	
Chloromethane	<	3.0	ug/L	3.0	ug/L	0	
Vinyl chloride	<	3.0	ug/L	3.0	ug/L	0	
Bromomethane	<	3.0	ug/L	3.0	ug/L	0	
Chloroethane	<	3.0	ug/L	3.0	ug/L	0	
Trichlorofluoromethane	<	3.0	ug/L	3.0	ug/L	0	
Acrolein	<	3.0	ug/L	3.0	ug/L	0	
1,1-Dichloroethene	<	3.0	ug/L	3.0	ug/L	0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	<	3.0	ug/L	3.0	ug/L	0	
Acetone	<	3.0	ug/L	3.0	ug/L	0	
Methyl iodide	<	3.0	ug/L	3.0	ug/L	0	
Carbon disulfide	<	3.0	ug/L	3.0	ug/L	0	
Methylene chloride	<	3.0	ug/L	3.0	ug/L	0	
Acrylonitrile	<	3.0	ug/L	3.0	ug/L	o	
MTBE	<		ug/L	3.0	ug/L	o	
trans-1,2-Dichloroethene	<	3.0	ug/L	3.0	ug/L	0	
Isopropyl ether	<	3.0	ug/L	3.0	ug/L	0	
1,1-Dichloroethane	<	3.0	ug/L	3.0	ug/L	0	
Vinyl acetate	<	3.0	ug/L	3.0	ug/L	0	
2,2-Dichloropropane	<	3.0	ug/L	3.0	ug/L	o	
cis-1,2-Dichloroethene	<	3.0	ug/L	3.0	ug/L	0	
2-Butanone	<		ug/L	3.0	ug/L	0	
Chloroform	<		ug/L	3.0	ug/L	0	
1,1-Dichloropropene	<	3.0	ug/L	3.0	ug/L	0	
1,1,1-Trichloroethane	<		ug/L	3.0	ug/L	0	
Carbon tetrachloride	<	3.0	ug/L	3.0	ug/L	ā	
Bromochloromethane	<		ug/L	3.0	ug/L	0	
Benzene	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dichloroethane	<		ug/L	3.0	ug/L	0	
Trichloroethene	`	3.0	ug/L	3.0	ug/L	0	
1,2-Dichloropropane	~	3.0	ug/L	3.0	ug/L	0	
Dibromomethane	~		ug/L	3.0	ug/L	0	
Bromodichloromethane	` `		ug/L	3.0	ug/L	0	
2-Chloroethyl vinyl ether	~		ug/L	3.0	ug/L	0	
cis-1,3-Dichtoropropene			ug/L	3.0	ug/L	0	
4-Methyl-2-pentanone (MIBK)	~	3.0	ug/L	3.0	ug/L ug/L	0	
Toluene		3.0	-	3.0	ug/L ug/L	0	
trans-1,3-Dichloropropene	<		•	3.0	ug/L ug/L	0	
1,1,2-Trichloroethane		3.0	•	3.0		0	
1,3-Dichloropropane			-	3.0	_	0	
Tetrachloroethene			=	3.0		0	
2-Hexanone			ug/L ug/L	3.0	-	0	
Dibromochloromethane	<			3.0		0	
1,2-Dibromoethane (EDB)			ug/L	3.0	=	o	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014048

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: SW-8

Collection Date: 6/17/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method: SW-846 8260)	Analyst: MAO125C
	Result	Reporting Limit	Flag
Chlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Isopropylbenzene	< 3.0 ug/L	3.0 ug/L	G
1,1,1,2-tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
Ethylbenzene	< 3.0 ug/L	3.0 ug/L	0
m-p-Xylene	< 6.0 ug/L	6.0 ug/L	0
o-Xylene	< 3.0 ug/L	3.0 ug/L	o
Styrene	< 3.0 ug/L	3.0 ug/L	0
Bromoform	< 3.0 ug/L	3.0 ug/L	0
1,4-Dichlorobutane	< 3.0 ug/L	3.0 ug/L	0
1,1,2,2-Tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
1,2,3-Trichtoropropane	< 3.0 ug/L	3.0 ug/L	0
n-Propyl benzene	< 3.0 ug/L	3.0 ug/L	0
Bromobenzene	< 3.0 ug/L	3.0 ug/L	0
1,3,5-trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
2-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
4-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
t-Butylbenzene	< 3.0 ug/L	3.0 ug/L	O
1,2,4-Trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
sec-Butylbenzene	< 3.0 ug/L	3.0 ug/L	O
p-Isopropyttoluene	< 3.0 ug/L	3.0 ug/L	O
1,3-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	o ·
1,4-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0 .
n-Butylbenzene	< 3.0 ug/L	3.0 ug/L	C
1,2-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromo-3-chloropropane	< 3.0 ug/L	3.0 ug/L	0
1,2,4-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Hexachlorobutadiene	< 3.0 ug/L	3.0 ug/L	O
Naphthalene	< 3.0 ug/L	3.0 ug/L	O
1,2,3-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

Deta Verified and Approved By, Date

DATA FILE:: 24Y13 FIELD ID:: Bramlett 38 LAB ID:: 99-JUN-0042

Tentatively Identified Compound Report

		1			· · · · · · · · · · · · · · · · · · ·			1
	Probable	Estimated	Library Match			Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs		<u> </u>						
		·						
							i	
							_	
								
		·						
		·						
								
		·						

Internal Standard	
•	RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21.55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40.87

Surrogates	
	% Recovery
Dibromofluoromethane	107%
Toluene D-8	100%
1,4-Bromofluorobenze	93%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014049 Job #: 99-JUN-0042 Customer ID: G. FRANKLIN

Sample Description: SW-9

Collection Date: 6/17/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

st Code: MS8260_W	Test Method: SW-846 83	260	Analyst: MAO12
	Result	Reporting Limit	Flag
Dichforodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L -	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/L	3.0 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	0
Methyl iodide	< 3.0 ug/L	3.0 ug/L	0
Carbon disulfide	< 3.0 ug/L	3.0 ug/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	0
Acrylonitrile	< 3.0 ug/L	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	0
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chloroform	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	0
Bromochloromethane	< 3.0 ug/L	-	
Benzene	< 3.0 ug/L	•	0
1,2-Dichloroethane	< 3.0 ug/L		0
Trichloroethene	< 3.0 ug/L	•	0
1,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L 3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	-	0
Bromodichloromethane	< 3.0 ug/L	•	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	·	0
cis-1,3-Dichloropropene	< 3.0 ug/L	_ _	0
4-Methyl-2-pentanone (MIBK)	< 3.0 ug/L	•	0
Toluene	< 3.0 ug/L	3.0 ug/L 3.0 ua/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L		0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L 3.0 ug/L	0
1,3-Dichloropropane	< 3.0 ug/L	_	0
Tetrachloroethene	< 3.0 ug/L	•	0
2-Hexanone	< 3.0 ug/L	3.0 ug/L 3.0 ug/i.	0
Dibromochloromethane	< 3.0 ug/L	•	0
1,2-Dibromoethane (EDB)	< 3.0 ug/L	3.0 ug/L 3.0 ug/L	0 0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014049

99-JUN-0042

Customer ID: G, FRANKLIN

Sample Description: SW-9

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Collection Date: 6/17/99

Test Code: MS8260_W	Test M	etho	d: SW-846	8260			Analyst:	MAO125C
		Re	sult		Report	ing Limit	Flag	
Chlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
Isopropylbenzene	<	3.0	ug/L		3.0	ug/L	0	
1,1,1,2-tetrachloroethane	<	3.0	ug/L		3.0	ug/L	0	
Ethylbenzene	<	3.0	ug/L		3.0	ug/L	0	
m-p-Xylene	<	6.0	ug/L		6.0	ug/L	0	
o-Xylene	<	3.0	ug/L		3.0	ug/L	0	
Styrene	<	3.0	ug/L		3.0	ug/L	0	
Bromoform	<	3.0	ug/L		3.0	ug/L	0	
1,4-Dichlorobutane	<	3.0	ug/L		3.0	ug/L	o .	
1,1,2,2-Tetrachloroethane	<	3.0	ug/L		3.0	ug/L	0	
1,2,3-Trichloropropane	<	3.0	ug/L		3.0	ug/L	0	
n-Propyl benzene	<	3.0	ug/L		3.0	ug/L	0	
Bromobenzene	<	3.0	ug/L		3.0	ug/L	0	
1,3,5-trimethylbenzene	<	3.0	ug/L		3.0	ug/L	0	
2-Chlorotoluene	<	3.0	ug/L		3.0	ug/L	0	
4-Chlorotoluene	<	3.0	ug/L		3.0	ug/L	0	
t-Butylbenzene	<	3.0	ug/L		3.0	ug/L	0	
1,2,4-Trimethylbenzene	<	3.0	ug/L		3.0	ug/L	0	
sec-Butylbenzene	<	3.0	ug/L		3.0	ug/L	0	
p-Isopropyttoluene	<	3.0	ug/L		3.0	ug/L	0	
1,3-Dichlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
1,4-Dichlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
n-Butylbenzene	<	3.0	ug/L		3.0	ug/L	0	
1,2-Dichlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
1,2-Dibromo-3-chloropropane	<	3.0	ug/L		3.0	ug/L	0 .	
1,2,4-Trichlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
Hexachlorobutadiene	<	3.0	ug/L		3.0	ug/L	0	
Naphthalene	<	3.0	_		3.0	ug/L	0	
1,2,3-Trichlorobenzene	<	3.0	ug/L		3.0	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

DATA FILE:: 23Y13 FIELD ID:: Bramlett 379 LAB ID:: 99-JUN-0042

Tentatively Identified Compound Report

	Probable	Estimated	Library Match			Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
			· · · · · · · · · · · · · · · · · · ·					
no TICs			 					
					}			
								
· · · · · · · · · · · · · · · · · · ·					<u> </u>			<u></u>
···								
							-	
							•	
		<u> </u>						
			<u> </u>	··				
						-		
		ļ		· - · · · · · · · · · · · · · · · · · · ·	<u>.</u>			×
								<u> </u>

Internal Standard	
	RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21.55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40.87

Surrogates	
	% Recovery
Dibromofluoromethane	108%
Toluene D-8	99%
1,4-Bromofluorobenze	92%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014050

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: SW-10

Collection Date: 6/17/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 826

Fest Code: MS8260_W	Test M	letho	d: SW-846 8	3260		Analyst:	MAO125
		Re	sult	Repor	ting Limit	Flag	
Dichlorodifluoromethane	<	3.0	ug/L	3.0	ug/L	0	
Chloromethane	<	3.0	ug/L	3.0	ug/L	0	
Vinyl chloride	<	3.0	ug/L	3.0	ug/L	0	
Bromomethane	<	3.0	ug/L	3.0	ug/L	0	
Chloroethane	<	3.0	ug/L	3.0	ug/L	0	
Trichlorofluoromethane	<	3.0	ug/L	3.0	ug/L	0	
Acrolein	<	3.0	ug/L	3.0	ug/L	0	
1,1-Dichloroethene	<	3.0	ug/L	3.0	ug/L	0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	<	3.0	ug/L	3.0	ug/L	0	
Acetone	<	3.0	ug/L	3.0	ug/L	0	
Methyl iodide	<	3.0	ug/L	3.0	ug/L	0	
Carbon disulfide	<	3.0	ug/L	3.0	ug/L	0	
Methylene chloride	<	3.0	ug/L	3.0	ug/L	0	
Acrylonitrile	<	3.0	ug/L	3.0	ug/L	0	
MTBE	<	3.0	ug/L	3.0	ug/L	0	
trans-1,2-Dichloroethene	<	3.0	ug/L	3.0	ug/L	0	
Isopropyl ether	<		ug/L	3.0	ug/L	0	
1,1-Dichloroethane	<		ug/L	3.0	ug/L	o	
Vinyt acetate	<	3.0	ug/L	3.0	ug/L	0	
2,2-Dichloropropane	<	3.0	ug/L	3.0	ug/L	0	
cis-1,2-Dichloroethene	<		ug/L	3.0	ug/L	0	
2-Butanone	<	3.0	ug/L	3.0	ug/L	ō	
Chloroform	<		ug/L	3.0	ug/L	o	
1,1-Dichloropropene	<		ug/L	3.0	ug/L	0	
1,1,1-Trichloroethane	<	3.0	ug/L	3.0	ug/L	0	
Carbon tetrachloride	<		ug/L	3.0	ug/L	0	
Bromochloromethane	<	3.0	ug/L	3.0	ug/L	0	
Benzene	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dichloroethane	<		ug/L	3.0	ug/L	Ŏ	
Trichloroethene	<	3.0	ug/L	3.0	ug/L	Ö	
1,2-Dichloropropane	<		ug/L	3.0	ug/L	0	
Dibromomethane	<		ug/L	3.0	ug/L	o o	
Bromodichloromethane	<		ug/L	3.0	ug/L	0	
2-Chioroethyl vinyl ether	<		ug/L	3.0	ug/L	0	
cis-1,3-Dichloropropene	<	3.0	ug/L	3.0	ug/L	0	
4-Methyl-2-pentanone (MIBK)	<		ug/L	3.0	ug/L	ō	
Toluene	<		ug/L	3.0	ug/L	0	
trans-1,3-Dichloropropene	<	3.0	ug/L	3.0	ug/L	0	
1,1,2-Trichloroethane	<		ug/L	3.0	ug/L	0	
1,3-Dichloropropane	<		nd\r nd\r	3.0	ug/L	0	
Tetrachloroethene		3.0	ug/L	3.0	ug/L	0	
2-Hexanone		3.0	ug/L	3.0	ug/L ug/L	0	
Dibromochioromethane		3.0	ug/L	3.0	ug/L	0	
1,2-Dibromoethane (EDB)	<		ug/L	3.0	ug/L ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014050

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: SW-10

Collection Date: 6/17/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Me	etho	d: SW-846	8260			Analyst:	MAO125C
		Re	sult	<u> </u>	Report	ing Limit	Flag	
Chlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
Isopropytbenzene	<	3.0	ug/L		3.0	ug/L	0	
1,1,1,2-tetrachioroethane	<	3.0	ug/L		3.0	ug/L	0	
Ethylbenzene	<	3.0	ug/L		3.0	ug/L	0	
m-p-Xytene	<	6.0	ug/L		6.0	ug/L	0	
. o-Xylene	<	3.0	ug/L		3.0	ug/L	0	
Styrene	<	3.0	ug/L		3.0	ug/L	0	
Bromoform	<	3.0	ug/L		3.0	ug/L	0	
1,4-Dichlorobutane	<	3.0	ug/L		3.0	ug/L	0	
1,1,2,2-Tetrachloroethane	<	3.0	ug/L		3.0	ug/L	0	
1,2,3-Trichloropropane	<	3.0	ug/L		3.0	ug/L	0	
n-Propyl benzene	<	3.0	ug/L		3.0	ug/L	0	
Bromobenzene	<	3.0	ug/L		3.0	ug/L	0	
1,3,5-trimethylbenzene	<	3.0	ug/L		3.0	ug/L	0	
2-Chiorotoluene	<	3.0	ug/L		3.0	ug/L	0	
4-Chlorotoluene	<	3.0	ug/L		3.0	ug/L	0	
t-Butylbenzene	<	3.0	ug/L		3.0	ug/L	0	
1,2,4-Trimethylbenzene	<	3.0	ug/L		3.0	ug/L	0	
sec-Butylbenzene	<	3.0	ug/L		3.0	ug/L	0	
p-Isopropyltoluene	<	3.0	ug/L		3.0	ug/L	0	
1,3-Dichlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
1,4-Dichlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
n-Butylbenzene	<	3.0	ug/L		3.0	ug/L	0	
1,2-Dichlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
1,2-Dibromo-3-chloropropane	<	3.0	ug/L		3.0	ug/L	0	
1,2,4-Trichlorobenzene	<	3.0	ug/L		3.0	ug/L	0	
Hexachlorobutadiene	<	3.0	ug/L		3.0	ug/L	0	
Naphthalene	<	3.0	ug/L		3.0	ug/L	0	
1,2,3-Trichlorobenzene	<	3.0	ug/L		3.0	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

DATA FILE:: 23Y14 FIELD ID:: Bramlett 0 LAB ID:: 99-JUN-0042

Tentatively Identified Compound Report

	Probable	Estimated	Library Match			Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs			}					
							-	
		1			<u>-</u>			
							,	
			· · · · · · · · · · · · · · · · · · ·					

Internal Standard	· · · · · · · · · · · · · · · · · · ·
	RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21.55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40.87

Surrogates	
	% Recovery
Dibromofluoromethane	111%
Toluene D-8	102%
1,4-Bromofluorobenze	92%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: TRIP BLANK

Collection Date: 6/17/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

st Code: MS8260_W	Test Me	etho	d: SW-846 8	260		Analyst:	MAO125
		Re	sult	Report	ting Limit	Flag	
Dichlorodifluoromethane	<	3.0	ug/L	3.0	ug/L	0	
Chloromethane	<	3.0	ug/L	3.0	ug/L	0	
Vinyl chloride	<	3.0	ug/L	3.0	ug/L	0	
Bromomethane	<	3.0	ug/L	3.0	ug/L	0	
Chloroethane	<	3.0	ug/L	3.0	ug/L	0	
Trichlorofluoromethane	<	3.0	ug/L	3.0	ug/L	0	
Acrolein	<	3.0	ug/L	3.0	ug/L	0	
1,1-Dichloroethene	<	3.0	ug/L	3.0	ug/L	0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	<	3.0	ug/L	3.0	ug/L	0	
Acetone	<	3.0	ug/L	3.0	ug/L	0	
Methyl iodide	<	3.0	ug/L	3.0	ug/L	0	
Carbon disulfide	. <	3.0	ug/L	3.0	ug/L	0	
Methylene chloride	<	3.0	ug/L	3.0	ug/L	0	
Acrylonitrile	<	3.0	ug/L	3.0	ug/L	0	
MTBE	<	3.0	ug/L	3.0	ug/L	0	
trans-1,2-Dichloroethene	<	3.0	ug/L	3.0	ug/L	0	
Isopropyl ether	<	3.0	ug/L	3.0	ug/L	0	
1,1-Dichloroethane	<	3.0	ug/L	3.0	ug/L	0	
Vinyl acetate	. <	3.0	ug/L	3.0	ug/L	0	
2,2-Dichloropropane	<	3.0	ug/L	3.0	ug/L	0	
cis-1,2-Dichloroethene	<	3.0	ug/L	3.0	ug/L	0	
2-Butanone	<	3.0	ug/L	3.0	ug/L	0	
Chloroform	<	3.0	ug/L	3.0	ug/L	0	
1,1-Dichloropropene	<	3.0	ug/L	3.0	ug/L	0	
1,1,1-Trichloroethane	<	3.0	ug/L	3.0	ug/L	0	
Carbon tetrachloride	<	3.0	ug/L	3.0	ug/L	0	
Bromochloromethane	<	3.0	ug/L	3.0	ug/L	a	
Benzene	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dichloroethane	<	3.0	ug/L	3.0	ug/L	0	
Trichloroethene	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dichloropropane	<	3.0	ug/L	3.0	ug/L	0	
Dibromomethane	<	3.0	ug/L	3.0	ug/L	0	
Bromodichloromethane	<	3.0	ug/L	3.0	ug/L	0	
2-Chloroethyl vinyl ether	<	3.0	ug/L	3.0	ug/L	0	
cis-1,3-Dichloropropene	<	3.0	ug/L	3.0	ug/L	0	
4-Methyl-2-pentanone (MIBK)	<	3.0	ug/L	3.0	ug/L	0	
Toluene	<	3.0	ug/L	3.0	ug/L	0	
trans-1,3-Dichloropropene	<	3.0	ug/L	3.0	ug/L	0	
1,1,2-Trichloroethane	<	3.0		3.0	ug/L	0	
1,3-Dichloropropane	<	3.0	ug/L	3.0	ug/L	0	
Tetrachloroethene	<	3.0		3.0	ug/L	0	
2-Hexanone	<	3.0	ug/L	3.0	ug/L	0	
Dibromochloromethane	<	3.0	ug/L	3.0	ug/L	0	
1,2-Dibromoethane (EDB)	<	3.0	ug/L	3.0	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014051

99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: TRIP BLANK

Collection Date: 6/17/99 Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Result Reporting Limit Flag	Test Code: MS8260_W	Test Method: SW-846 8260		Analyst: MAO125C
Isopropylbenzene		Result	Reporting Limit	Flag
1,1,1,2-tetrachloroethane 3.0 ug/L 3.0 ug/L 0 Ethylbenzene 3.0 ug/L 3.0 ug/L 0 m-p-Xylene 6.0 ug/L 3.0 ug/L 0 o-Xylene 3.0 ug/L 3.0 ug/L 0 Styrene 3.0 ug/L 3.0 ug/L 0 Bromoform 3.0 ug/L 3.0 ug/L 0 1,4-Dichlorobutane 3.0 ug/L 3.0 ug/L 0 1,1,2,2-Tetrachlorocethane 3.0 ug/L 3.0 ug/L 0 1,2,3-Trichloropropane 3.0 ug/L 3.0 ug/L 0 n-Propyl benzene 3.0 ug/L 3.0 ug/L 0 Bromobenzene 3.0 ug/L 3.0 ug/L 0 1,3,5-trimethylbenzene 3.0 ug/L 3.0 ug/L 0 2-Chlorotoluene 3.0	Chlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Ethylbenzene	Isopropylbenzene	< 3.0 ug/L	3.0 ug/L	0
m-p-Xylene	1,1,1,2-tetrachloroethane	< 3.0 ug/L	3.0 ug/L	O
o-Xylene < 3.0	Ethylbenzene	< 3.0 ug/L	3.0 ug/L	0
Styrene	m-p-Xylene	< 6.0 ug/L	6.0 ug/L	0
Bromoform	o-Xylene	< 3.0 ug/L	3.0 ug/L	o
1,4-Dichlorobutane < 3.0	Styrene	< 3.0 ug/L	3.0 ug/L	0
1,1,2,2-Tetrachloroethane < 3.0	Bromoform	< 3.0 ug/L	3.0 ug/L	o
1,2,3-Trichloropropane < 3.0	1,4-Dichlorobutane	< 3.0 ug/L	3.0 ug/L	0
n-Propyl benzene	1,1,2,2-Tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
n-Propyl benzene < 3.0 ug/L	1,2,3-Trichloropropane	< 3.0 ug/L	3.0 ug/L	0
Bromobenzene	π-Propyl benzene	< 3.0 ug/L	-	0
1,3,5-trimethylbenzene < 3.0 ug/L	Bromobenzene	< 3.0 ug/L	•	0
2-Chlorotoluene < 3.0 ug/L	1,3,5-trimethylbenzene	< 3.0 ug/L	•	0
4-Chlorotoluene < 3.0 ug/L	2-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
t-Butylbenzene < 3.0 ug/L	4-Chlorotoluene	< 3.0 ug/L	-	0
1,2,4-Trimethylbenzene < 3.0 ug/L	t-Butylbenzene	< 3.0 ug/L	-	0
sec-Butylbenzene < 3.0 ug/L	1,2,4-Trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
p-Isopropyltoluene < 3.0 ug/L	sec-Butylbenzene	< 3.0 ug/L	•	0
1,3-Dichlorobenzene < 3.0 ug/L	p-Isopropyltoluene	< 3.0 ug/L	3.0 ug/L	0
1,4-Dichlorobenzene < 3.0 ug/L	1,3-Dichlorobenzene	< 3.0 ug/L	-	0
n-Butylbenzene < 3.0 ug/L	1,4-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichlorobenzene < 3.0 ug/L	n-Butylbenzene	< 3.0 ug/L	-	a
1,2-Dibromo-3-chloropropane < 3.0 ug/L	1,2-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,2,4-Trichlorobenzene < 3.0 ug/L	1,2-Dibromo-3-chloropropane	< 3.0 ug/L	-	
Hexachlorobutadiene < 3.0 ug/L	1,2,4-Trichlorobenzene	< 3.0 ug/L	-	
Naphthalene < 3.0 ug/L 3.0 ug/L 0	Hexachlorobutadiene		= '	-
464711	Naphthalene	< 3.0 ug/L	•	
	1,2,3-Trichlorobenzene		-	-

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - Sec Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

ATA FILE:: 22Y09 FIELD ID			
70 10 11 11 11 11 11 11 11 11 11 11 11 11	D:: Bramlett Tellank	k LAB ID:: 99-JUI	N_0042
		N 50-001	11-00-7Z

Tentatively Identified Compound Report

N-11								
	Probable	Estimated	Library Match	Retention		Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs								
				<u> </u>				
						-		
			·					
					7			

Internal Standard	
	RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21.55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40.87

Surrogates	
	% Recovery
Dibromofluoromethane	108%
Toluene D-8	97%
1,4-Bromofiuorobenze	94%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014052

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: FIELD BLANK

Collection Date: 6/17/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

_							
B //	\cap	I	M/A	гсв	DV	COMIC	- 8260
IV.	$\overline{}$		TTA.		01	GC/IVI	- 0Z0U

Test Code: MS8260_W	Test Method: SW-846 82	260	Analyst: MAO1250
	Result	Reporting Limit	Flag
Dichlorodifluoromethane	< 3.0 ug/L	3.0 ug/L	0
Chloromethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl chloride	< 3.0 ug/L	3.0 ug/L	0
Bromomethane	< 3.0 ug/L	3.0 ug/L	0
Chloroethane	< 3.0 ug/L	3.0 ug/L	0
Trichlorofluoromethane	< 3.0 ug/L	3.0 ug/L	0
Acrolein	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloro-1,2,2-Triffuoroethane	< 3.0 ug/L	3.0 ug/L	0
Acetone	< 3.0 ug/L	3.0 ug/L	0
Methyl iodide	< 3.0 ug/L	3.0 ug/L	0
Carbon disulfide	, < 3.0 ug/L	3.0 ug/L	0
Methylene chloride	< 3.0 ug/L	3.0 ug/L	a
Acrylonitrile	< 3.0 ug/L	3.0 ug/L	0
MTBE	< 3.0 ug/L	3.0 ug/L	0
trans-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	o
Isopropyl ether	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloroethane	< 3.0 ug/L	3.0 ug/L	0
Vinyl acetate	< 3.0 ug/L	3.0 ug/L	0
2,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
cis-1,2-Dichloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Butanone	< 3.0 ug/L	3.0 ug/L	0
Chloroform	< 3.0 ug/L	3.0 ug/L	0
1,1-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,1-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
Carbon tetrachloride	< 3.0 ug/L	3.0 ug/L	0
Bromochloromethane	< 3.0 ug/L	3.0 ug/L	0
Benzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloroethane	< 3.0 ug/L	3.0 ug/L	a
Trichloroethene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Dibromomethane	< 3.0 ug/L	3.0 ug/L	0
Bromodichloromethane	< 3.0 ug/L	3.0 ug/L	0
2-Chloroethyl vinyl ether	< 3.0 ug/L	3.0 ug/L	0
cis-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
4-Methyi-2-pentanone (MIBK)	< 3.0 ug/L	3.0 ug/L	0
Toluene	< 3.0 ug/L	3.0 ug/L	0
trans-1,3-Dichloropropene	< 3.0 ug/L	3.0 ug/L	0
1,1,2-Trichloroethane	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichloropropane	< 3.0 ug/L	3.0 ug/L	0
Tetrachloroethene	< 3.0 ug/L	3.0 ug/L	0
2-Hexanone	< 3.0 ug/L	3.0 ug/L	0
Dibromochloromethane	< 3.0 ug/L	3.0 ug/L	0
1,2-Dibromoethane (EDB)	< 3.0 ug/L	3.0 ug/L	0



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014052

Job #: 99-JUN-0042

Customer ID: G. FRANKLIN

Sample Description: FIELD BLANK

Collection Date: 6/17/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W	Test Method: SW-846 8260		Analyst: MAO125C
	Result	Reporting Limit	Flag
Chiorobenzene	< 3.0 ug/L	3.0 ug/L	0
Isopropylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,1,1,2-tetrachloroethane	< 3.0 ug/L	3.0 ug/L	0
Ethylbenzene	< 3.0 ug/L	3.0 ug/L	0
m-p-Xylene	< 6.0 ug/L	6.0 ug/L	0
o-Xylene	< 3.0 ug/L	3.0 ug/L	0
Styrene	< 3.0 ug/L	3.0 ug/L	0
Bromoform	< 3.0 ug/L	3.0 ug/L	0
1,4-Dichlorobutane	< 3.0 ug/L	3.0 ug/L	0
1,1,2,2-Tetrachloroethane	< 3.0 ug/L	3.0 ug/L	o
1,2,3-Trichloropropane	< 3.0 ug/L	3.0 ug/L	0
n-Propyl benzene	< 3.0 ug/L	3.0 ug/L	0
Bromobenzene	< 3.0 ug/L	3.0 ug/L	0
1,3,5-trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
2-Chlorototuene	< 3.0 ug/L	3.0 ug/L	0
4-Chlorotoluene	< 3.0 ug/L	3.0 ug/L	0
t-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,2,4-Trimethylbenzene	< 3.0 ug/L	3.0 ug/L	0
sec-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
p-Isopropyltoluene	< 3.0 ug/L	3.0 ug/L	0
1,3-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
1,4-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
n-Butylbenzene	< 3.0 ug/L	3.0 ug/L	0
1,2-Dichlorobenzene	< 3.0 ug/L	3.0 ug/L	o .
1,2-Dibromo-3-chloropropane	< 3.0 ug/L	3.0 ug/L	0 .
1,2,4-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0
Hexachlorobutadiene	< 3.0 ug/L	3.0 ug/L	O
Naphthalene	< 3.0 ug/L	3.0 ug/L	O
1,2,3-Trichlorobenzene	< 3.0 ug/L	3.0 ug/L	0

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Namative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

						·	
ATA FILE::	22Y10	FIELD ID::	Bramlett F	Blank	LAB ID::	99-JUN-0042	

Tentatively Identified Compound Report

	Probable	Estimated	Library Match	Retention		Identification		<u></u>
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual	-	Scan
Compound	Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
no TICs								
<u> </u>								
		<u> </u>						
	 							
	ļ							
	<u> </u>							
<u> </u>								
<u> </u>				· · · · · ·				
	ļ							
	ļ <u>.</u>							
			· 		-			
								<u> </u>
								i

Internal Standard	
	RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21.55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40.87

Surrogates	
	% Recovery
Dibromofluoromethane	109%
Toluene D-8	100%
1,4-Bromofluorobenze	94%



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #: 99014057 Job #: 99-JUN-0042 Customer ID:

Sample Description: BRAMLETTE ST MW-3D

Collection Date: 6/15/99 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

est Code: MS8260_W	Test Method:	SW-846 8260			Analyst:	MAO125
	Resu	ttRe	eporti	ng Limit	Flag	
Dichlorodifluoromethane	< 300 u	g/L 3	00	ug/L	0	
Chloromethane	< 300 u	g/L 3	00	ug/L	G	
Vinyl chloride	< 300 u	g/L 3	00	ug/L	0	
Bromomethane	< 300 u	g/L 3	00	ug/L	0	
Chloroethane	< 300 u	g/L 3	00	ug/L	0	
Trichlorofluoromethane	< 300 u	g/L 3	00	ug/L	0	
Acrolein	< 300 u	g/L 3	00	ug/L	0	
1,1-Dichloroethene	< 300 u	g/L 3	00	ug/L	0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 300 u	g/L 3	00	ug/L	0	
Acetone	< 300 u	g/L 3	00	ug/L	0	
Methyl iodide	< 300 u	g/L 3	00	ug/L	0	
Carbon disulfide			00	ug/L	0	
Methylene chloride	< 300 u	g/L 3	00	ug/L	0	
Acrylonitrile			00	ug/L	0	
MTBE	< 300 u	g/L 3	00	ug/L	0	
trans-1,2-Dichloroethene	< 300 u	g/L 3	100	ug/L	0	
Isopropyi ether	< 300 u	g/L 3	00	ug/L	0	
1,1-Dichloroethane	< 300 u	g/L 3	00	ug/L	0	
Vinyl acetate	< 300 u	g/L 3	100	ug/L	0	
2,2-Dichloropropane	< 300 u	g/L 3	00	ug/L	0	
cis-1,2-Dichloroethene	< 300 ti	g/L 3	00	ug/L	0	
2-Butanone	< 300 u	ıg/L 3	00	ug/L	0	
Chloroform	< 300 u	ıg/L 3	100	ug/L	0	
1,1-Dichloropropene	< 300 u	g/L 3	100	ug/L	0	
1,1,1-Trichloroethane	< 300 u	19/L 3	100	ug/L	0	
Carbon tetrachioride	< 300 u	ıg/L 3	100	ug/L	0	
Bromochloromethane	< 300 U	ıg/L 3	300	ug/L	0	
Benzene	990 u	ıg/L 3	300	ug/L	0	
1,2-Dichloroethane	< 300 u	ig/L 3	100	ug/L	0	
Trichloroethene	< 300 u	ıg/L 3	300	ug/L	0	
1,2-Dichloropropane	< 300 ι	ıg/L 3	300	ug/L	0	
Dibromomethane	< 300 t	ıg/L 3	300	ug/L	0	
Bromodichloromethane	< 300 u	ıg/L 3	300	ug/L	0	
2-Chloroethyl vinyl ether	< 300 u	ıg/L 3	800	ug/L	0	
cis-1,3-Dichloropropene	< 300 u	1g/L 3	300	ug/L	0	
4-Methyl-2-pentanone (MIBK)	< 300 υ	ıg/L 3	300	ug/L	0	
Toluene	< 300 L	ıg/L 3	300	ug/L	0	
trans-1,3-Dichloropropene	< 300 ເ	ıg/L 3	300	ug/L	0	
1,1,2-Trichloroethane		=	300	ug/L	0	
1,3-Dichloropropane		ıg/L 3	300	ug/L	0	
Tetrachloroethene		•	300	ug/L	0	
2-Hexanone		-	300	ug/L	0	
Dibromochloromethane		-	300	ug/L	0	
1,2-Dibromoethane (EDB)	< 300 (ıg/L :	300	ug/L	0	



Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Sample ID#: 99014057

99-JUN-0042 Job#:

Customer ID:

Sample Description: BRAMLETTE ST MW-3D

Collection Date: 6/15/99

Site: BRAMLETT ST

Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code:	MS8260_W	Test N	/letho	d: SW-846	8260		Analyst:	MAO125C
			Re	sult	Repor	ting Limit	_Flag_	
C	hlorobenzene	<	300	ug/L	300	ug/L	0	
Iso	propylbenzene	<	300	ug/L	300	ug/L	0	
1,1,1,2	-tetrachioroethane	<	300	ug/L	300	ug/L	0	
E	Ethylbenzene		430	ug/L	300	ug/L	0	
	m-p-Xylene	<	600	ug/L	600	ug/L	0	
	o-Xylene	<	300	ug/L	300	ug/L	0	
	Styrene	<	300	ug/L	300	ug/L	0	
	Bromoform	<	300	ug/L	300	ug/L	0	
1,4-	-Dichlorobutane	<	300	ug/L	300	ug/L	0	
1,1,2,2	-Tetrachloroethane	<	300	ug/L	300	ug/L	0	
1,2,3-	-Trichloropropane	<	300	ug/L	300	ug/L	o	
n-F	Propyl benzene	<	300	ug/L	300	ug/L	0	
8	romobenzene	<	300	ug/L	300	ug/L	0	
1,3,5	-trimethylbenzene	<	300	ug/L	300	ug/L	0	
2-	-Chlorotoluene	<	300	ug/L	300	ug/L	0	
4-	Chlorototuene	<	300	ug/L	300	ug/L	0	
t-	Butylbenzene	<	300	ug/L	300	ug/L	0	
1,2,4-	Trimethylbenzene	<	300	ug/L	300	ug/L	0	
sec	c-Butylbenzene	<	300	ug/L	300	ug/L	0	
p-ts	sopropyltoluene	<	300	ug/L	300	ug/L	0	
1,3-1	Dichlorobenzene	<	300	ug/L	300	ug/L	0	
1,4-	Dichlorobenzene	<	300	ug/L	300	ug/L	0	
n-	-Butylbenzene	<	300	ug/L	300	ug/L	0	
1,2-	Dichlorobenzene	<	300	ug/L	300	ug/L	0	
1,2-Dibro	omo-3-chloropropane	<	300	ug/L	300	ug/L	0	
1,2,4	-Trichlorobenzene	<	300	ug/L	300	ug/L	0	
Hex	achlorobutadiene	<	300	ug/L	300	ug/L	0	
	Naphthalene		5600	ug/L	300	ug/L	2	
1,2,3	-Trichlorobenzene	<	300	ug/L	300	ug/L	0	

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

DATA FILE::	24Y14	FIELD ID::	Bramlett	2 🗅	LAB ID::	99-JUN-0042	
		1122010		SU		99-JUN-0042	

Tentatively Identified Compound Report

Probable Molecular Weight	Estimated Concentration	Library Match Probability	Retention				
Weight	l (uo/L)	-	Rime (RT)	Library	Identification Manual		Scan
	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
	610	94	52.1	х			
				····			
					- 		
						T-1	
				<u></u>			
							
		610	610 94	610 94 52.1	610 94 52.1 x	610 94 52.1 x	610 94 52.1 x

Internal Standard	
	RT
Pentafluorobenzene	17.95
D4-1,4-Difluorobenzene	21.55
Chlorobenzene D-5	32.23
D-4 1,4-Dichlorobenzene	40.87

Surrogates	
	% Recovery
Dibromofluoromethane	108%
Toluene D-8	103%
1,4-Bromofluorobenze	94%



Group Environment, Health and Safety



0.90 meq/L

Sugar, 1-1

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

tation Name: BRAMLETT ST	ENG_ROBERTS	Job Numbe	r: 99-Jl	JN-0042
Sample ID # : 99014009	LabProf ID:	Customer ID:	G. FRANKL	IN
Sample Description: MW-1				
Collection Date: 16-Jun-99 14:20:00	Location : MW-1	Type of Sample :	GROUNDW	ATER
-	Analysis Results			
ACIDITY	ACIDITY		93.68	mg-CaCO:
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY		0.91	meq/L
AMMONIA (COLORIMETRIC)	AMMONIA		3.13	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM		0.117	mg/i
CADMIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/i
CALCIUM BY ICP (DIGESTED)	CALCIUM		18.472	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE		16.4	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER		< 0.005	mg/l
IRON BY ICP (DIGESTED)	IRON		43.980	mg/l
LEAD BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		9.154	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE		0.930	mg/L
MERCURY (CVAA) -WATER-	MERCURY		< 0.10(ug/L)
NICKEL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/l
OIL AND GREASE IN WATER	Oil and Grease		1.2	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		6.450	mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM		15.080	mg/i
SULFATE (UV-VIS)	SULFATE		< 1.0	mg/L
TIN BY ICP (DIGESTED)	TIN		< 0.050	mg/l
TOTAL CYANIDE	CYANIDE TEST COMPLETED		2.000	····
TOTAL ORGANIC CARBON	тос		3.89	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	TP		< 0.005	mg-P/L
TOTAL SUSPENDED SOLIDS (EPA)	TSS		52.0	mg/L
ZINC BY ICP (DIGESTED)	ZINC		0.009	mg/l
				-
Sample ID # : 99014010	LabProf ID:	Customer ID:	G. FRANKI	_IN
Sample Description: MW-2		_		
Collection Date: 16-Jun-99 11:10:00	Location : MW-2	Type of Sample :	GROUNDV	VATER
	Analysis Results			
ACIDITY	ACIDITY		12.99	mg-CaC0

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

ALKALINITY

ALKALINITY (TOTAL INFLECTION POINT)



Group Environment, Health and Safety

en 1809 Environment, treatth & Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

ition Name: BRAMLETT ST		ENG_ROBERTS	Job Number: 99-	UN-0042
Sample ID#:	99014010	LabProf ID:	Customer ID: G. FRANK	LIN
Sample Description:	: MW-2			
Collection Date:	16-Jun-99 11:10:00	Location : MW-2	Type of Sample: GROUNDWATER	
		Analysis Results		
AMMO	ONIA (COLORIMETRIC)	AMMONIA	1.10	mg-N/L
ARSE	NIC BY ICP (DIGESTED)	ARSENIC	< 0.100	mg/l
BARIL	JM BY ICP (DIGESTED)	BARIUM	0.193	mg/l
CADMI	UM BY ICP (DIGESTED)	CADMIUM	< 0.030	mg/l
CALCI	UM BY ICP (DIGESTED)	CALCIUM	29.175	mg/l
CHLO	RIDE (COLORIMETRIC)	CHLORIDE	7.4	mg/L
CHROM	NUM BY ICP (DIGESTED)	CHROMIUM	< 0.040	_
СОРР	ER BY ICP (DIGESTED)	COPPER	< 0.005	mg/l
iRoi	N BY ICP (DIGESTED)	IRON	14.676	mg/l
LEAI	D BY ICP (DIGESTED)	LEAD	< 0.090	mg/l
MAGNE	SIUM BY ICP (DIGESTED)	MAGNESIUM	13.969	mg/l
MANGAI	NESE BY ICP (DIGESTED)	MANGANESE	1.257	mg/L
MERO	CURY (CVAA) -WATER-	MERCURY	0.17	(ug/L)
NICKEL BY ICP (DIGESTED)		NICKEL	< 0.040	mg/l
OIL AND GREASE IN WATER		Oil and Grease	< 1.0	mg/L
POTASSIUM BY ICP (DIGESTED)		POTASSIUM	2.860	mg/l
SELENIUM BY ICP (DIGESTED)		SELENIUM	< 0.125	mg/L
SODI	UM BY ICP (DIGESTED)	SODIUM	23.340	mg/l
:	SULFATE (UV-VIS)	SULFATE	1.3	mg/L
TIN	BY ICP (DIGESTED)	Tin	< 0.050	-
	TOTAL CYANIDE	CYANIDE TEST COMPLETED		•
тот	AL ORGANIC CARBON	тос	4.39	mg/L
TOTAL PHO	SPHORUS (COLORIMETRIC)	ТР	0.006	_
TOTAL S	USPENDED SOLIDS (EPA)	TSS	< 4.0	_
ZIN	C BY ICP (DIGESTED)	ZINC	0.032	mg/l
Sample ID#:	99014011	LabProf ID:	Customer ID: G. FRANK	CLIN
Sample Description	n: MW-3			
Collection Date:	15-Jun-99 15:20:00	Location : MW-3	Type of Sample: GROUND	WATER
		Analysis Results		
	ACIDITY	ACIDITY	126.8	mg-Ca
ALKALINITY	(TOTAL INFLECTION POINT)	ALKALINITY	0.80	meq/L
AMM	ONIA (COLORIMETRIC)	AMMONIA	1.8	t mg-N/L
	NIC BY ICO (DICCOTED)			

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

ARSENIC

< 0.100 mg/l

ARSENIC BY ICP (DIGESTED)



Group Environment, Health and Safety



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Station Name: BRAMLETT ST **ENG_ROBERTS** 99-JUN-0042 Job Number: Sample ID #: 99014011 LabProf ID: Customer ID: G. FRANKLIN Sample Description: **MW-3** Location: MW-3 Collection Date: 15-Jun-99 15:20:00 Type of Sample: GROUNDWATER Analysis Results ----BARIUM BY ICP (DIGESTED) BARIUM 0.372 mg/l CADMIUM BY ICP (DIGESTED) CADMIUM < 0.030 mg/l CALCIUM BY ICP (DIGESTED) CALCIUM 209.370 mg/l CHLORIDE (COLORIMETRIC) CHLORIDE 12.7 mg/L CHROMIUM BY ICP (DIGESTED) CHROMIUM < 0.040 mg/l COPPER BY ICP (DIGESTED) COPPER < 0.005 ma/l IRON BY ICP (DIGESTED) IRON 10.672 mg/l LEAD BY ICP (DIGESTED) LEAD < 0.090 mg/l MAGNESIUM BY ICP (DIGESTED) MAGNESIUM 24.990 mg/i MANGANESE BY ICP (DIGESTED) MANGANESE 0.914 mg/L MERCURY (CVAA) -WATER-MERCURY ug/L < 0.10 **NICKEL BY ICP (DIGESTED)** NICKEL < 0.040 mg/l OIL AND GREASE IN WATER Oil and Grease < 1.0 mg/L POTASSIUM BY ICP (DIGESTED) **POTASSIUM** 14.360 mg/l SELENIUM BY ICP (DIGESTED) SELENIUM < 0.125 mg/L SODIUM BY ICP (DIGESTED) SODIUM 19.150 mg/i SULFATE (UV-VIS) **SULFATE** 102.5 mg/L TIN BY ICP (DIGESTED) TIN < 0.050 mg/l **TOTAL CYANIDE** CYANIDE TEST COMPLETED **TOTAL ORGANIC CARBON** TOC 17.85 mg/L **TOTAL PHOSPHORUS (COLORIMETRIC)** TP mg-P/L TOTAL SUSPENDED SOLIDS (EPA) **TSS** mg/L 22.0 ZINC BY ICP (DIGESTED) ZINC 0.024 mg/i Sample ID #: LabProf ID: 99014012 Customer ID: G. FRANKLIN Sample Description: MW-4 Location: MW-4 Type of Sample: GROUNDWATER Collection Date: 17-Jun-99 08:49:00 Analysis Results

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

CYANIDE TEST COMPLETED

TOTAL CYANIDE



Group Environment, Health and Safety



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

tation Name: BRAMLETT ST	ENG_ROBERTS	Job Number:	99-JI	UN-0042
Sample ID # : 99014013	LabProf ID:	Customer ID: G.	FRANKI	.IN
Sample Description: MW-5 Collection Date: 14-Jun-99 15:35:00	Location : MW-5	Type of Sample: GF	ROUNDV	VATER
·	Analysis Results			
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY		0.52	meq/L
AMMONIA (COLORIMETRIC)	AMMONIA		0.23	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC	•	< 0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM		0.129	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM	•	< 0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM		27.585	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE		11.0	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/i
COPPER BY ICP (DIGESTED)	COPPER		< 0.005	mg/l
IRON BY ICP (DIGESTED)	IRON		8.707	mg/l
LEAD BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		5.983	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE		1.216	mg/L
MERCURY (CVAA) -WATER-	MERCURY		0.10	ug/L)
NICKEL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/l
OIL AND GREASE IN WATER	Oil and Grease		< 1.0	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		1.900	mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM		9.570	mg/l
SULFATE (UV-VIS)	SULFATE		25.2	mg/L
TIN BY ICP (DIGESTED)	Tin		< 0.050	mg/l
TOTAL CYANIDE	CYANIDE TEST COMPLETED			
TOTAL ORGANIC CARBON	тос		4.56	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	TP		0.007	mg-P/l
TOTAL SUSPENDED SOLIDS (EPA)	TSS		< 4.0	mg/L
ZINC BY ICP (DIGESTED)	ZINC		0.011	mg/i

Sample ID #: 99014014 LabProf ID: Customer ID: G. FRANKLIN

Sample Description: MW-7

Collection Date: 15-Jun-99 09:35:00 Location : MW-6 Type of Sample : GROUNDWATER

----- Analysis Results -----

ACIDITY

ALKALINITY (TOTAL INFLECTION POINT)

AMMONIA (COLORIMETRIC)

 ACIDITY
 71.42 mg-CaCO3/L

 ALKALINITY
 5.76 meq/L

 AMMONIA
 0.79 mg-N/L

Visit us on the IntraNet at http://dewww/essenv/lab_srv/



Group Environment, Health and Safety



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

ation Name: BRAMLETT ST	ENG_ROBERTS	Job Number: 99-J	UN-004
Sample ID #: 99014014	LabProf ID:	Customer ID: G. FRANKI	.≀N
Sample Description: MW-7 Collection Date: 15-Jun-99 09:35:00	Location : MW-67 719199	Type of Sample: GROUNDV	VATER
	Analysis Results		
ARSENIC BY ICP (DIGESTED)	ARSENIC	< 0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM	0.201	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM	< 0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM	103.940	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE	26.2	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM	< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER	< 0.005	mg/l
IRON BY ICP (DIGESTED)	IRON	18.003	mg/i
LEAD BY ICP (DIGESTED)	LEAD	< 0.090	mg/i
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM	12.739	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE	0.565	mg/L
MERCURY (CVAA) -WATER-	MERCURY	0.10	ug/L
NICKEL BY ICP (DIGESTED)	NICKEL	< 0.040	mg/l
OIL AND GREASE IN WATER	Oil and Grease	< 1.0	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM	9.590	mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM	< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM	16.680	mg/i
SULFATE (UV-VIS)	SULFATE	< 1.0	mg/L
TIN BY ICP (DIGESTED)	TIN	< 0.050	mg/i
TOTAL CYANIDE	CYANIDE TEST COMPLETED		
TOTAL ORGANIC CARBON	тос	6.64	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	TP	0.013	mg-P/
TOTAL SUSPENDED SOLIDS (EPA)	TSS	6.0	
ZINC BY ICP (DIGESTED)	ZINC	0.007	mg/l
Sample ID # : 99014015 Sample Description: MW-6	LabProf ID:	Customer ID: G. FRANK	LIN

Type of Sample: GROUNDWATER Location: MW-7 Collection Date: 16-Jun-99 09:15:00 ----- Analysis Results ALKALINITY (TOTAL INFLECTION POINT) ALKALINITY 0.86 meq/L AMMONIA (COLORIMETRIC) AIMONIA 43.41 mg-N/L ARSENIC BY ICP (DIGESTED) ARSENIC mg/i < 0.100 BARIUM BARIUM BY ICP (DIGESTED) mg/l 0.086 CADMIUM BY ICP (DIGESTED) CADMIUM < 0.030 mg/l

Visit us on the IntraNet at http://dewww/essenv/lab_srv/



Group Environment, Health and Safety



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

tation Name: BRAMLE	IT ST	ENG_ROBERTS	Job Numbe	r: 99~J(JN-0042
				·	
Sample ID # : 99014	015	LabProf ID:	Customer ID:	G. FRANKL	IN
Sample Description: MW	<i>1-</i> 6				
Collection Date: 16-Jun	-99 09:15:00	Location: MW-74 7114 lag	Type of Sample :	GROUNDW	/ATER
		Analysis Results			
CALCIUM BY IO	CP (DIGESTED)	CALCIUM		12.669	mg/l
CHLORIDE (CC	DLORIMETRIC)	CHLORIDE		15.1	mg/L
CHROMIUM BY I	ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPPER BY IC	P (DIGESTED)	COPPER		< 0.005	mg/l
IRON BY ICP	(DIGESTED)	IRON		18.286	mg/l
LEAD BY ICP	(DIGESTED)	LEAD		< 0.090	mg/l
MAGNESIUM BY	ICP (DIGESTED)	MAGNESIUM		4.810	mg/l
MANGANESE BY	ICP (DIGESTED)	MANGANESE		2.110	mg/L
MERCURY (C)	VAA) -WATER-	MERCURY		0.12/	ug/L)
NICKEL BY ICI	P (DIGESTED)	NICKEL		< 0.040	mg/l
OIL AND GREA	ASE IN WATER	Oil and Grease		1.3	mg/L
POTASSIUM BY	ICP (DIGESTED)	POTASSIUM		4.620	mg/l
SELENIUM BY I	CP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY IC	P (DIGESTED)	SODIUM		12.020	mg/l
SULFATE	(UV-VIS)	SULFATE		5.2	mg/L
TIN BY ICP ((DIGESTED)	TIN		< 0.050	mg/l
TOTAL C	CYANIDE	CYANIDE TEST COMPLETED			
TOTAL ORGA	NIC CARBON	тос		4.86	mg/L
TOTAL PHOSPHORU	JS (COLORIMETRIC)	TP		< 0.005	mg-P/L
TOTAL SUSPEND	ED SOLIDS (EPA)	TSS		10.0	mg/L
ZINC BY ICP	(DIGESTED)	ZINC		< 0.005	mg/i
Sample ID # : 99014	016	LabProf ID:	Customer ID:	C EDANKI	······································
Sample Description: MV		cauriorio.	Customer 10.	G. FRANKL	71.4
	n-99 09:45:00	Location : MW-8	Type of Sample :	GROUNDV	VATER
		Analysis Results			
ACII	DITY	ACIDITY		61.13	mg-CaCO
ALKALINITY (TOTAL	INFLECTION POINT)	ALKALINITY		0.85	meq/L
AMMONIA (CO	DLORIMETRIC)	AMMONIA		59.21	mg-N/L
ARSENIC BY K	CP (DIGESTED)	ARSENIC		< 0.100	mg/l
BARIUM BY IC	CP (DIGESTED)	BARIUM		0.458	mg/l
CADMIUM BY I	CP (DIGESTED)	CADMIUM		< 0.030	mg/i
CALCUBARY					-

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

CALCIUM

CHLORIDE

14.945 mg/i

14.7 mg/L

CALCIUM BY ICP (DIGESTED)

CHLORIDE (COLORIMETRIC)



Group Environment, Health and Safety



12.2 mg/L

< 0.040 mg/l

< 0.005 mg/l

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

ation Name: BRAMLETT ST	ENG_ROBERTS	Job Numbe	r: 99-JI	JN-0042
Sample ID #: 99014016	LabProf ID:	Customer ID:	G. FRANKL	IN
Sample Description: MW-8				
Collection Date: 15-Jun-99 09:45:00	Location : MW-8	Type of Sample :	GROUNDW	VATER
	Analysis Results			
CHROMIUM BY ICP (DIGESTED)	CHROMIUM		0.047	mg/l
COPPER BY ICP (DIGESTED)	COPPER		0.028	mg/l
IRON BY ICP (DIGESTED)	. IRON		42.957	mg/l
LEAD BY ICP (DIGESTED)	LEAD		0.130	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		7.390	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE		1.270	mg/L
MERCURY (CVAA) -WATER-	MERCURY		0.37	ug/j
NICKEL BY ICP (DIGESTED)	NICKEL		0.046	mg/l
OIL AND GREASE IN WATER	Oil and Grease		1.3	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		7.750	mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM		11.670	mg/l
SULFATE (UV-VIS)	SULFATE		1.0	mg/L
TIN BY ICP (DIGESTED)	TIN		< 0.050	mg/l
TOTAL CYANIDE	CYANIDE TEST COMPLETED			-
TOTAL ORGANIC CARBON	тос		6.46	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	чт		< 0.005	mg-P/L
TOTAL SUSPENDED SOLIDS (EPA)	TSS		3074.0	mg/L
ZINC BY ICP (DIGESTED)	ZINC		0.168	mg/l
				<u> </u>
Sample ID # : 99014017	LabProf ID:	Customer ID:	G. FRANKI	LIN
Sample Description: MW-9 Collection Date: 15-Jun-99 11:25:00	Location : MW-9	Type of Sample :	GROUND	WATER
	Analysis Results			
ACIDITY	ACIDITY		2.42	mg-CaCi
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY		0.88	meq/L
AMMONIA (COLORIMETRIC)	AMMONIA		1.20	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	_
BARIUM BY ICP (DIGESTED)	BARIUM		0.115	_
				=
CADMIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

CHLORIDE

CHROMIUM

COPPER

CHLORIDE (COLORIMETRIC)

CHROMIUM BY ICP (DIGESTED)

COPPER BY ICP (DIGESTED)



Group Environment, Health and Safety



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Station Name: BRAMLETT ST **ENG_ROBERTS** 99-JUN-0042 Job Number: LabProf ID: Customer ID: G. FRANKLIN Sample ID #: 99014017 Sample Description: MW-9 Location: MW-9 Type of Sample: GROUNDWATER Collection Date: 15-Jun-99 11:25:00 Analysis Results IRON BY ICP (DIGESTED) IRON 0.419 mg/l LEAD BY ICP (DIGESTED) LEAD < 0.090 mg/l MAGNESIUM BY ICP (DIGESTED) **MAGNESIUM** 3.272 mg/l MANGANESE BY ICP (DIGESTED) **MANGANESE** 5.922 mg/L MERCURY (CVAA) -WATER-MERCURY /ug/Ď < 0.10 **NICKEL BY ICP (DIGESTED)** NICKEL < 0.040 mg/i OIL AND GREASE IN WATER Oil and Grease 1.0 mg/L POTASSIUM BY ICP (DIGESTED) **POTASSIUM** 7.550 mg/l SELENIUM BY ICP (DIGESTED) SELENIUM. < 0.125 mg/L SODIUM BY ICP (DIGESTED) SODIUM 16,060 ma/l SULFATE (UV-VIS) SULFATE 20.4 mg/L TIN BY ICP (DIGESTED) TIN < 0.050 mg/l **TOTAL CYANIDE** CYANIDE TEST COMPLETED **TOTAL ORGANIC CARBON** TOC 0.79 mg/L TOTAL PHOSPHORUS (COLORIMETRIC) ΤP 0.016 mg-P/L TOTAL SUSPENDED SOLIDS (EPA) TSS mg/L ZINC BY ICP (DIGESTED) ZINC < 0.005 ma/l Sample ID #: 99014018 LabProf ID: Customer ID: G. FRANKLIN Sample Description: MW-10 Location: MW-10 Type of Sample: GROUNDWATER Collection Date: 15-Jun-99 15:15:00 Analysis Results **ACIDITY** ACIDITY 39.20 mg-CaCO3/L ALKALINITY (TOTAL INFLECTION POINT) **ALKALINITY** 0.49 meg/L AMMONIA (COLORIMETRIC) **AMMONIA** mg-N/L < 0.02 ARSENIC BY ICP (DIGESTED) ARSENIC < 0.100 mg/l BARIUM BY ICP (DIGESTED) **BARIUM** 0.060 mg/l CADMIUM BY ICP (DIGESTED) CADMIUM < 0.030 mg/i CALCIUM BY ICP (DIGESTED) CALCIUM 6.298 mg/l CHLORIDE (COLORIMETRIC) CHLORIDE 9.6 mg/L CHROMIUM BY ICP (DIGESTED) CHROMIUM < 0.040 mg/l COPPER BY ICP (DIGESTED) COPPER < 0.005 mg/i IRON BY ICP (DIGESTED) IRON 1.562 mg/l

Visit us on the IntraNet at http://dewww/essenv/lab srv/

LEAD

< 0.090 mg/l

LEAD BY ICP (DIGESTED)



Group Environment, Health and Safety



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Station Name: BRAMLETT ST **ENG ROBERTS** Job Number: 99-JUN-0042 Sample ID#: 99014018 LabProf ID: Customer ID: G. FRANKLIN Sample Description: MW-10 Location: MW-10 Type of Sample: GROUNDWATER Collection Date: 15-Jun-99 15:15:00 Analysis Results MAGNESIUM BY ICP (DIGESTED) MAGNESIUM 3.539 mg/l MANGANESE BY ICP (DIGESTED) MANGANESE 0.452 mg/L MERCURY (CVAA) -WATER-MERCURY 0.12 (ug/L **NICKEL BY ICP (DIGESTED)** NICKEL < 0.040 mg/l OIL AND GREASE IN WATER Oil and Grease < 1.0 mg/L POTASSIUM BY ICP (DIGESTED) **POTASSIUM** 3.220 mg/l SELENIUM BY ICP (DIGESTED) SELENIUM < 0.125 mg/L SODIUM BY ICP (DIGESTED) SODIUM 12.490 mg/l SULFATE (UV-VIS) SULFATE 83.9 mg/L TIN BY ICP (DIGESTED) TIN < 0.050 mg/l **TOTAL CYANIDE** CYANIDE TEST COMPLETED **TOTAL ORGANIC CARBON** TOC 1.16 mg/L **TOTAL PHOSPHORUS (COLORIMETRIC)** TP 0.010 mg-P/L **TOTAL SUSPENDED SOLIDS (EPA)** TSS 7.0 mg/L ZINC BY ICP (DIGESTED) ZINC 0.005 mg/l

Sample ID#: 99014019 LabProf ID: Customer ID: G. FRANKLIN

Sample Description: MW-11

Collection Date: 15-Jun-99 11:30:00 Location : MW-11 Type of Sample : GROUNDWATER

7,7

----- Analysis Results

ACIDITY ACIDITY mg-CaCO3/L ALKALINITY (TOTAL INFLECTION POINT) **ALKALINITY** 0.13 meg/L AMMONIA (COLORIMETRIC) AMMONIA 0.05 mg-N/L ARSENIC BY ICP (DIGESTED) ARSENIC < 0.100 mg/l BARIUM BY ICP (DIGESTED) **BARIUM** 0.058 mg/l CADMIUM BY ICP (DIGESTED) CADMIUM < 0.030 mg/l **CALCIUM BY ICP (DIGESTED)** CALCIUM 0.538 mg/l CHLORIDE (COLORIMETRIC) CHLORIDE 7.7 mg/L **CHROMIUM BY ICP (DIGESTED)** CHROMIUM < 0.040 mg/l COPPER BY ICP (DIGESTED) COPPER < 0.005 mg/i **IRON BY ICP (DIGESTED)** IRON 0.211 mg/l LEAD BY ICP (DIGESTED) LEAD < 0.090 mg/l MAGNESIUM BY ICP (DIGESTED) MAGNESIUM 0.508 mg/l MANGANESE BY ICP (DIGESTED) MANGANESE 0.081 mg/L

> Visit us on the IntraNet at http://dewww/essenv/lab_srv/



Group Environment, Health and Safety



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

alion Name. Br	RAMLETT ST	ENG_ROBERTS	Job Numbe	er: 99-JI	JN-0042
Sample ID#:	99014019	LabProf ID:	Customer ID:	G. FRANKL	IN
Sample Description	u MW-11				
Collection Date:	15-Jun-99 11:30:00	Location : MW-11	Type of Sample :	GROUNDV	VATER
		Analysis Results			
MER	CURY (CVAA) -WATER-	MERCURY		0.10	(ug/L)
NICK	(EL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/l
OIL A	AND GREASE IN WATER	Oil and Grease		< 1.0	mg/L
POTAS	SIUM BY ICP (DIGESTED)	POTASSIUM		2.490	mg/l
SELEN	NIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODI	IUM BY ICP (DIGESTED)	SODIUM		12.390	mg/l
	SULFATE (UV-VIS)	SULFATE		6.2	mg/L
Tit	N BY ICP (DIGESTED)	TIN		< 0.050	mg/l
	TOTAL CYANIDE	CYANIDE TEST COMPLÉTED			_
. тот	AL ORGANIC CARBON	тос		0.44	mg/L
TOTAL PHO	OSPHORUS (COLORIMETRIC)	TP		< 0.005	mg-P/L
TOTAL S	SUSPENDED SOLIDS (EPA)	TSS		8.0	mg/L
					-
ZIN	IC BY ICP (DIGESTED)	ZINC	· · · · · · · · · · · · · · · · · · ·	< 0.005	mg/l
ZIN Sample ID#:	99014020	ZINC LabProf ID:	Customer ID:		
	99014020		Customer ID:		
Sample ID#:	99014020		Customer ID:	G. FRANKI	
Sample ID # : Sample Description	99014020 n: MW-1 2	LabProf ID:		G. FRANKI	
Sample ID # : Sample Description	99014020 n: MW-1 2	LabProf ID: Location : MW-12		G. FRANKI	LIN VATER
Sample ID # : Sample Description Collection Date:	99014020 n: MW-12 15-Jun-99 11:05:00	LabProf ID: Location: MW-12 Analysis Results		G. FRANKI	LIN VATER
Sample ID # : Sample Description Collection Date:	99014020 n: MW-12 15-Jun-99 11:05:00 ACIDITY	LabProf ID: Location: MW-12 Analysis Results ACIDITY		G. FRANKI GROUNDV	.IN VATER mg-CaCO:
Sample ID # : Sample Description Collection Date: ALKALINIT	99014020 n: MW-12 15-Jun-99 11:05:00 ACIDITY Y (TOTAL INFLECTION POINT)	LabProf ID: Location: MW-12 Analysis Results ACIDITY ALKALINITY		G. FRANKI GROUNDV 3.56 0.12	VATER mg-CaCO
Sample ID # : Sample Description Collection Date: ALKALINIT AMN ARSE	99014020 n: MW-12 15-Jun-99 11:05:00 ACIDITY Y (TOTAL INFLECTION POINT) HONIA (COLORIMETRIC)	LabProf ID: Location: MW-12 Analysis Results ACIDITY ALKALINITY AMMONIA		G. FRANKI GROUNDV 3.56 0.12 0.13	Mg-CaCO: meq/L mg-N/L
Sample ID # : Sample Description Collection Date: ALKALINIT AMM ARSE	99014020 n: MW-12 15-Jun-99 11:05:00 ACIDITY Y (TOTAL INFLECTION POINT) HONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED)	LabProf ID: Location : MW-12 Analysis Results ACIDITY ALKALINITY AMMONIA ARSENIC		G. FRANKI GROUNDV 3.56 0.12 0.13 < 0.100	mg-CaCO: meq/L mg-N/L mg/I
Sample ID # : Sample Description Collection Date: ALKALINIT AMM ARSE BARI CADM	99014020 n: MW-12 15-Jun-99 11:05:00 ACIDITY Y (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED)	LabProf ID: Location: MW-12 Analysis Results ACIDITY ALKALINITY AMMONIA ARSENIC BARIUM		3.56 0.12 0.13 < 0.100 0.056	mg-CaCO meq/L mg-N/L mg/I
Sample ID # : Sample Description Collection Date: ALKALINIT AMM ARSE BAR CADM	99014020 n: MW-12 15-Jun-99 11:05:00 ACIDITY Y (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED) IUM BY ICP (DIGESTED)	LabProf ID: Location: MW-12 Analysis Results ACIDITY ALKALINITY AMMONIA ARSENIC BARIUM CADMIUM		3.56 0.12 0.13 < 0.100 0.056 < 0.030	mg-CaCO: meq/L mg-N/L mg/I mg/I mg/I
Sample ID # : Sample Description Collection Date: ALKALINIT AMN ARSE BAR CADN CALC	99014020 n: MW-12 15-Jun-99 11:05:00 ACIDITY Y (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED) MIUM BY ICP (DIGESTED) CIUM BY ICP (DIGESTED)	LabProf ID: Location: MW-12 Analysis Results ACIDITY ALKALINITY AMMONIA ARSENIC BARIUM CADMIUM CALCIUM		3.56 0.12 0.13 < 0.100 0.056 < 0.030 8.932	mg-CaCO: meq/L mg-N/L mg/I mg/I mg/I mg/I
Sample ID # : Sample Description Collection Date: ALKALINIT AMM ARSE BAR CADM CALC CHICO	99014020 n: MW-12 15-Jun-99 11:05:00 ACIDITY Y (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED) IUM BY ICP (DIGESTED) CIUM BY ICP (DIGESTED) CIUM BY ICP (DIGESTED) ORIDE (COLORIMETRIC)	LabProf ID: Location: MW-12 Analysis Results ACIDITY ALKALINITY AMMONIA ARSENIC BARIUM CADMIUM CALCIUM CHLORIDE		3.56 0.12 0.13 < 0.100 0.056 < 0.030 8.932 4.8	mg-CaCO: meq/L mg-N/L mg/I mg/I mg/I mg/I mg/I
Sample ID # : Sample Description Collection Date: ALKALINIT AMM ARSE BAR CADM CALC CHRO COP	99014020 n: MW-12 15-Jun-99 11:05:00 ACIDITY Y (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED) IUM BY ICP (DIGESTED) CIUM BY ICP (DIGESTED) ORIDE (COLORIMETRIC) MIUM BY ICP (DIGESTED) ORIDE (COLORIMETRIC)	LabProf ID: Location: MW-12 Analysis Results ACIDITY ALKALINITY AMMONIA ARSENIC BARRUM CADMIUM CALCIUM CHLORIDE CHROMIUM		G. FRANKI GROUNDV 3.56 0.12 0.13 < 0.100 0.056 < 0.030 8.932 4.8 < 0.040	mg-CaCO: meq/L mg-N/L mg/I mg/I mg/I mg/I mg/I mg/I
Sample ID # : Sample Description Collection Date: ALKALINIT AMM ARSE BAR CADM CALC CHICO COP	99014020 n: MW-12 15-Jun-99 11:05:00 ACIDITY Y (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED) IUM BY ICP (DIGESTED) CIUM BY ICP (DIGESTED) ORIDE (COLORIMETRIC) MIUM BY ICP (DIGESTED) PER BY ICP (DIGESTED)	LabProf ID: Location: MW-12 Analysis Results ACIDITY ALKALINITY AMMONIA ARSENIC BARRUM CADMIUM CALCIUM CHLORIDE CHROMIUM COPPER		3.56 0.12 0.13 < 0.100 0.056 < 0.030 8.932 4.8 < 0.040 < 0.005	mg-CaCO: meq/L mg-N/L mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l
Sample ID # : Sample Description Collection Date: ALKALINIT AMM ARSE BAR CADM CALC CHCO CHCO LEA	99014020 n: MW-12 15-Jun-99 11:05:00 ACIDITY Y (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED) MIUM BY ICP (DIGESTED) ORIDE (COLORIMETRIC) MIUM BY ICP (DIGESTED) PER BY ICP (DIGESTED) ON BY ICP (DIGESTED) ON BY ICP (DIGESTED)	LabProf ID: Location: MW-12 Analysis Results ACIDITY ALKALINITY AMMONIA ARSENIC BARIUM CADMIUM CALCIUM CHLORIDE CHROMIUM COPPER IRON		3.56 0.12 0.13 < 0.100 0.056 < 0.030 8.932 4.8 < 0.040 < 0.005	mg-CaCO: meq/L mg-N/L mg/I mg/I mg/I mg/I mg/I mg/I mg/I mg/I

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

MERCURY

NICKEL

< 0.10 /ug/L)

< 0.040 mg/l

MERCURY (CVAA) -WATER-

NICKEL BY ICP (DIGESTED)



Group Environment, Health and Safety



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Station Name: BRAMLETT ST	ENG_ROBERTS	Job Numbe	r: 99-JŪ	JN-0042
Sample ID # : 99014020	LabProf ID:	Customer ID:	G. FRANKL	IN
Sample Description: MW-12				
Collection Date: 15-Jun-99 11:05:00	Location : MW-12	Type of Sample :	GROUNDW	/ATER
	Analysis Results			
OIL AND GREASE IN WATER	Oil and Grease		< 1.0	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		2.410	mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM		9.420	mg/l
SULFATE (UV-VIS)	SULFATE		81.2	mg/L
TIN BY ICP (DIGESTED)	TIN		< 0.050	mg/l
TOTAL CYANIDE	CYANIDE TEST COMPLETED		. 0.000	
TOTAL ORGANIC CARBON	тос		2.02	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	TP		0.015	mg-P/L
TOTAL SUSPENDED SOLIDS (EPA)	TSS		11.0	mg/L
ZINC BY ICP (DIGESTED)	ZINC		0.037	mg/l
Sample ID #: 99014021 Sample Description: MW-13	LabProf ID:	Customer ID:	G. FRANKL	IN
Collection Date: 15-Jun-99 09:40:00	Location: MW-13 Analysis Results	Type of Sample :	GROUNDW	/ATER
ACIDITY	ACIDITY		43.60	mg-CaCO3
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY		0.27	meq/L
AMMONIA (COLORIMETRIC)	AMMONIA		< 0.02	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC			mg/l
BARIUM BY ICP (DIGESTED)	BARIUM		0.095	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM		2.388	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE		8.8	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER		< 0.005	mg/l
IRON BY ICP (DIGESTED)	IRON		0.710	mg/l
LEAD BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		1.272	mg/l
			1.098	mg/L
MANGANESE BY ICP (DIGESTED)	MANGANESE			
MANGANESE BY ICP (DIGESTED) MERCURY (CVAA) -WATER-			,	
•	MANGANESE MERCURY NICKEL		0.13	ug/L
MERCURY (CVAA) -WATER-	MERCURY		0.13 < 0.040	

POTASSIUM

4.380 mg/l

POTASSIUM BY ICP (DIGESTED)



Station Name: BRAMLETT ST

Duke Power's Analytical Laboratory

Group Environment, Health and Safety



99-JUN-0042

0.274 mg/L

0.15 (ug/L

< 1.0 mg/L

3.450 mg/l

6.290 mg/l

< 0.125 mg/L

Job Number:

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

ENG_ROBERTS

Sample ID#:	99014021	LabProf ID:	Customer ID:	G. FRANKI	.in
Sample Description	n: MW-13				
Collection Date:	15-Jun-99 09:40:00	Location : MW-13	Type of Sample :	GROUNDV	VATER
		Analysis Results			
SELE	NIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SOC	NUM BY ICP (DIGESTED)	SODIUM		6.600	mg/l
	SULFATE (UV-VIS)	SULFATE		10.8	•
T	IN BY ICP (DIGESTED)	TIN		< 0.050	_
	TOTAL CYANIDE	CYANIDE TEST COMPLETED			J
TO ⁻	TAL ORGANIC CARBON	тос		0.90	mg/L
TOTAL PH	IOSPHORUS (COLORIMETRIC)	TP		0.008	mg-P/L
TOTAL	SUSPENDED SOLIDS (EPA)	TSS		29.0	mg/L
ZII	NC BY ICP (DIGESTED)	ZINC		0.007	mg/l
Sample Description Collection Date:	on: MW-14 15-Jun-99 09:35:00	Location : MW-14	Type of Sample :	GROUNDV	VATER
		Analysis Results			
	ACIDITY	ACIDITY		4.46	mg-CaCO3
ALKALINIT	ACIDITI			1.45	
	TY (TOTAL INFLECTION POINT)	ALKALINITY		0.21	meq/L
		ALKALINITY AMMONIA			meq/L mg-N/L
AM	TY (TOTAL INFLECTION POINT)			0.21	-
AMI	TY (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC)	AMMONIA		0.21 < 0.02	mg-N/L mg/l
AMI ARS BAR	TY (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED)	AMMONIA ARSENIC		0.21 < 0.02 < 0.100	mg-N/L mg/l
AMI ARS BAR CADI	TY (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED) RIUM BY ICP (DIGESTED)	AMMONIA ARSENIC BARIUM		0.21 < 0.02 < 0.100 0.102	mg-N/L mg/l mg/l mg/l
AMM ARS BAR CADI CALI	TY (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED) RIUM BY ICP (DIGESTED) MIUM BY ICP (DIGESTED)	AMMONIA ARSENIC BARIUM CADMIUM		0.21 < 0.02 < 0.100 0.102 < 0.030	mg-N/L mg/l mg/l mg/l
AMI ARS BAR CADI CALI CHL	TY (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED) RIUM BY ICP (DIGESTED) MIUM BY ICP (DIGESTED) CIUM BY ICP (DIGESTED)	AMMONIA ARSENIC BARIUM CADMIUM CALCIUM		0.21 < 0.02 < 0.100 0.102 < 0.030 5.374	mg-N/L mg/l mg/l mg/l mg/l
AMM ARS BAR CADI CALI CHL CHRO	TY (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED) RIUM BY ICP (DIGESTED) MIUM BY ICP (DIGESTED) CIUM BY ICP (DIGESTED) ORIDE (COLORIMETRIC)	AMMONIA ARSENIC BARIUM CADMIUM CALCIUM CHLORIDE		0.21 < 0.02 < 0.100 0.102 < 0.030 5.374 5.1	mg-N/L mg/l mg/l mg/l mg/l mg/L
AMM ARS BAR CADI CALC CHL CHRC	TY (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED) KIUM BY ICP (DIGESTED) MIUM BY ICP (DIGESTED) CIUM BY ICP (DIGESTED) ORIDE (COLORIMETRIC)	AMMONIA ARSENIC BARIUM CADMIUM CALCIUM CHLORIDE CHROMIUM		0.21 < 0.02 < 0.100 0.102 < 0.030 5.374 5.1 < 0.040	mg-N/L mg/l mg/l mg/l mg/l mg/L mg/l mg/l
AMM ARS BAR CADI CALC CHL CHRC COP	TY (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED) HIUM BY ICP (DIGESTED) CIUM BY ICP (DIGESTED) ORIDE (COLORIMETRIC) OMIUM BY ICP (DIGESTED) PER BY ICP (DIGESTED)	AMMONIA ARSENIC BARIUM CADMIUM CALCIUM CHLORIDE CHROMIUM COPPER		0.21 < 0.02 < 0.100 0.102 < 0.030 5.374 5.1 < 0.040 < 0.005	mg-N/L mg/l mg/l mg/l mg/l mg/L mg/l mg/l
AMM ARS BAR CADI CALC CHL CHRC COP IRC	TY (TOTAL INFLECTION POINT) MONIA (COLORIMETRIC) ENIC BY ICP (DIGESTED) KIUM BY ICP (DIGESTED) MIUM BY ICP (DIGESTED) CIUM BY ICP (DIGESTED) ORIDE (COLORIMETRIC) DMIUM BY ICP (DIGESTED) PER BY ICP (DIGESTED) ON BY ICP (DIGESTED)	AMMONIA ARSENIC BARIUM CADMIUM CALCIUM CHLORIDE CHROMIUM COPPER IRON		0.21 < 0.02 < 0.100 0.102 < 0.030 5.374 5.1 < 0.040 < 0.005 2.261	mg-N/L mg/l mg/l mg/l mg/l mg/L mg/l mg/l mg/l

Visit us on the IntraNet at http://dewww/essenv/lab/srv/

MANGANESE

MERCURY

NICKEL

Oil and Grease

POTASSIUM

SELENIUM

SODIUM

MANGANESE BY ICP (DIGESTED)

MERCURY (CVAA) -WATER-

NICKEL BY ICP (DIGESTED)

OIL AND GREASE IN WATER

POTASSIUM BY ICP (DIGESTED)

SELENIUM BY ICP (DIGESTED)

SODIUM BY ICP (DIGESTED)



Station Name: BRAMLETT ST

Duke Power's Analytical Laboratory

Group Environment, Health and Safety



99-JUN-0042

0.290 mg/l

5.178 mg/i

< 0.10 /ug/L

< 1.0 mg/L

12.450 mg/l

< 0.040

< 0.125

16.600

17.8

< 0.050 mg/l

mg/L

mg/l

mg/L

mg/i

mg/L

< 0.090 mg/l

Job Number:

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

ENG ROBERTS

ation Hame. Di		LNG_NOBER 13	JOD MUITIDE	1. 33-00	J14-0042
Sample ID # :	99014022	LabProf ID:	Customer ID:	G. FRANKL	
Sample Description	n: MW-14				
Collection Date:	15-Jun-99 09:35:00	Location : MW-14	Type of Sample:	GROUNDW	ATER
		Analysis Results			
	SULFATE (UV-VIS)	SULFATE		19.2	mg/L
TI	N BY ICP (DIGESTED)	TIN		< 0.050	mg/l
	TOTAL CYANIDE	CYANIDE TEST COMPLETED			
тот	TAL ORGANIC CARBON	тос		0.87	mg/L
TOTAL PH	OSPHORUS (COLORIMETRIC)	ΉP		< 0.005	mg-P/L
TOTAL :	SUSPENDED SOLIDS (EPA)	тşs		141.0	mg/L
ZIN	IC BY ICP (DIGESTED)	ZINC		0.008	mg/l
Sample ID # : Sample Descriptio	99014023 n: MW-1 5	LabProf ID:	Customer ID:	G. FRANKL	.in
Collection Date:	16-Jun-99 14:10:00	Location : MW-15	Type of Sample :	GROUNDV	VATER
	••	Analysis Results			
	ACIDITY	ACIDITY		12.81	mg-CaCO3
ALKALINIT	Y (TOTAL INFLECTION POINT)	ALKALINITY		0.70	meq/L
AMA	MONIA (COLORIMETRIC)	AMMONIA		0.65	mg-N/L
ARSI	ENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BAR	IUM BY ICP (DIGESTED)	BARIUM		0.072	mg/l
CAD	MIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l
CALC	CIUM BY ICP (DIGESTED)	CALCIUM		18.909	mg/ l
CHL	ORIDE (COLORIMETRIC)	CHLORIDE		4.8	mg/L
CHRO	MIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
СОР	PER BY ICP (DIGESTED)	COPPER		< 0.005	mg/l

TIN

Visit us on the IntraNet at http://dewww/essenv/lab_srv/

IRON

LEAD

MAGNESIUM

MANGANESE

MERCURY

NICKEL

Oil and Grease

POTASSIUM

SELENIUM

SODIUM

SULFATE

IRON BY ICP (DIGESTED)

LEAD BY ICP (DIGESTED)

MAGNESIUM BY ICP (DIGESTED)

MANGANESE BY ICP (DIGESTED)

MERCURY (CVAA) -WATER-

NICKEL BY ICP (DIGESTED)

OIL AND GREASE IN WATER

POTASSIUM BY ICP (DIGESTED)

SELENIUM BY ICP (DIGESTED)

SODIUM BY ICP (DIGESTED)

SULFATE (UV-VIS)

TIN BY ICP (DIGESTED)



Group Environment, Health and Safety



ation Name: BR	AMLETT ST	ENG_ROBERTS	Job Numbe	r: 99-JI	UN-004
			······, ···		
Sample ID # :	99014023	LabProf ID:	Customer ID:	G. FRANKI	.IN
Sample Description:	MW-15				
Collection Date:	16-Jun-99 14:10:00	Location : MW-15	Type of Sample :	GROUNDV	VATER
		Analysis Results			
-	TOTAL CYANIDE	CYANIDE TEST COMPLETED			
TOTA	L ORGANIC CARBON	тос		0.73	mg/L
TOTAL PHO	SPHORUS (COLORIMETRIC)	ТР		0.021	mg-P
TOTAL SU	JSPENDED SOLIDS (EPA)	TSS		8.0	mg/L
ZINC	BY ICP (DIGESTED)	ZINC		0.014	mg/l
Sample ID # :	99014024	LabProf ID:	Customer ID:	G. FRANKI	.in
Sample Description:	MW-16				
Collection Date:	16~Jun-99 09:28:00	Location : MW-16	Type of Sample :	GROUNDV	VATER
		Analysis Results			
ALKALINITY	(TOTAL INFLECTION POINT)	ALKALINITY		0.66	meq/
AMMO	ONIA (COLORIMETRIC)	AMMONIA		0.56	mg-N
ARSEN	(IC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BARIL	IM BY ICP (DIGESTED)	BARIUM		0.077	mg/l
CADMI	UM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l
CALCII	UM BY ICP (DIGESTED)	CALCIUM		99.021	mg/l
CHLO	RIDE (COLORIMETRIC)	CHLORIDE		7.0	mg/L
CHROM	IUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPP	ER BY ICP (DIGESTED)	COPPER		0.006	mg/l
IRON	N BY ICP (DIGESTED)	IRON		7.046	mg/l
LEAG	BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGNE	SIUM BY ICP (DIGESTED)	MAGNESIUM		7.411	mg/l
MANGAN	IESE BY ICP (DIGESTED)	MANGANESE		0.125	mg/L
MERC	CURY (CVAA) -WATER-	MERCURY		0.12	(ug/L
NICKI	EL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/l
OIL AI	ND GREASE IN WATER	Oil and Grease		< 1.0	mg/L
POTASS	SIUM BY ICP (DIGESTED)	POTASSIUM		6.250	mg/l
SELEN	IUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODI	JM BY ICP (DIGESTED)	SODIUM		6.790	
\$	SULFATE (UV-VIS)	SULFATE		151.3	_
TIN	BY ICP (DIGESTED)	TIN		< 0.050	_
	TOTAL CYANIDE	CYANIDE TEST COMPLETED)		_
тот	AL ORGANIC CARBON	тос		4.70	mg/L
TOTAL DUO	SPHORUS (COLORIMETRIC)	TP		< 0.005	_



Group Environment, Health and Safety



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Fax: 704-875-5038 Phone: 704-875-5209

ation Name: BRAMLETT ST	ENG_ROBERTS	Job Numbe	er: 99-JI	JN-0042
				
Sample ID # : 99014024	LabProf ID:	Customer ID:	G. FRANKL	.IN
Sample Description: MW-16				
Collection Date: 16-Jun-99 09:28:00	Location : MW-16	Type of Sample :	GROUNDV	VATER
	Analysis Results			
TOTAL SUSPENDED SOLIDS (EPA)	TSS		306.0	mg/L
ZINC BY ICP (DIGESTED)	ZINC		0.288	mg/l
		, <u>, , , , , , , , , , , , , , , , , , </u>		
Sample ID # : 99014025 Sample Description: MW-17	LabProf ID:	Customer ID:	G. FRANKL	.IN
Collection Date: 15-Jun-99 10:50:00	Location : MW-17	Type of Sample:	GROUNDV	VATER
	Analysis Results			
ACIDITY	ACIDITY		3.98	mg-CaCO:
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY		0.46	meq/L
AMMONIA (COLORIMETRIC)	AMMONIA		1.44	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM		0.233	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/i
CALCIUM BY ICP (DIGESTED)	CALCIUM		6.404	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE		11.9	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER		0.053	mg/l
IRON BY ICP (DIGESTED)	IRON		49.403	mg/l
LEAD BY ICP (DIGESTED)	LEAD		< 0.090	mg/i
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		7.197	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE		0.799	mg/L
MERCURY (CVAA) -WATER-	MERCURY		0.94	(ug/L)
NICKEL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/l
OIL AND GREASE IN WATER	Oil and Grease		1.8	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		9.860	mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM		10.490	_
SULFATE (UV-VIS)	SULFATE			_
TIN BY ICP (DIGESTED)	TIN		< 0.050	
TOTAL CYANIDE	CYANIDE TEST COMPLETE	≣D		3
TOTAL ORGANIC CARBON	тос		3.24	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	ТР			mg-P/L
TOTAL SUSPENDED SOLIDS (EPA)	TSS			mg/L



Group Environment, Health and Safety



5.0 mg/L

Station Name: Bl	RAMLETT ST	ENG_ROBERTS	Job Numbe	er: 99-J	UN-0042
			-		
Sample ID # : Sample Description	99014025 n: MW-17	LabProf ID:	Customer ID:	G. FRANKI	.in
Collection Date:	15-Jun-99 10:50:00	Location : MW-17	Type of Sample :	GROUNDV	VATER
		Analysis Results			
ZIN	IC BY ICP (DIGESTED)	ZINC		0.113	mg/l
Sample ID # .	00044000				
Sample ID # : Sample Description	99014026 n: MW-1 8	LabProf ID:	Customer ID:	G. FRANKL	-IN
Collection Date:	16-Jun-99 14:00:00	Location : MW-18	Type of Sample :	GROUNDV	VATER
		Analysis Results			
	ACIDITY	ACIDITY		66.16	mg-CaCO
ALKALINIT	Y (TOTAL INFLECTION POINT)	ALKALINITY		0.58	meq/L
AMM	IONIA (COLORIMETRIC)	AMMONIA		0.27	mg-N/L
ARSE	ENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BARI	IUM BY ICP (DIGESTED)	BARIUM		0.167	mg/l
CADN	MIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l
CALC	CIUM BY ICP (DIGESTED)	CALCIUM		20,004	mg/l
CHLC	ORIDE (COLORIMETRIC)	CHLORIDE		11.8	mg/L
CHRO	MIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPI	PER BY ICP (DIGESTED)	COPPER		< 0.005	mg/l
IRC	ON BY ICP (DIGESTED)	IRON		5.685	mg/l
LEA	ND BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGNE	ESIUM BY ICP (DIGESTED)	MAGNESIUM		4.935	mg/l
MANGA	NESE BY ICP (DIGESTED)	MANGANESE		0.931	-
MER	CURY (CVAA) -WATER-	MERCURY		< 0.10 (ug/L)
NICH	(EL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/l
OIL A	AND GREASE IN WATER	Oil and Grease		< 1.0	mg/L
POTAS	SSIUM BY ICP (DIGESTED)	POTASSIUM		1.380	mg/i
SELE	NIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SOD	IUM BY ICP (DIGESTED)	SODIUM		18.630	mg/l
	SULFATE (UV-VIS)	SULFATE		7.5	_
TII	N BY ICP (DIGESTED)	Tin		< 0.050	J
	TOTAL CYANIDE	CYANIDE TEST COMPLETED	ı		-
TOT	FAL ORGANIC CARBON	тос		3.29	mg/L
TOTAL PH	OSPHORUS (COLORIMETRIC)	TP			mg-P/L
TOTAL S	SUSPENDED SOLIDS (EPA)	TSS			ma/l



Group Environment, Health and Safety



tation Name: BRAMLETT ST	ENG_ROBERTS	Job Numbe	er: 99-J1	JN-0042
Sample ID #: 99014026 Sample Description: MW-18	LabProf ID:	Customer ID:	G. FRANKL	.in
Collection Date: 16-Jun-99 14:00:00	Location : MW-18	Type of Sample :	GROUNDV	VATER
	Analysis Results			
ZINC BY ICP (DIGESTED)	ZINC		< 0.005	mg/l
Sample ID # : 99014027	LabProf ID:	Customer ID:	G. FRANKL	.in
Sample Description: MW-19 Collection Date: 16-Jun-99 14:00:00	Location : MW-19	Type of Sample :	GROUNDV	VATER
	Analysis Results			
ACIDITY	ACIDITY		7.71	mg-CaCO3
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY		0.76	meq/L
AMMONIA (COLORIMETRIC)	AMMONIA		3.10	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM		0.138	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM		17.698	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE		16.7	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER		< 0.005	mg/l
IRON BY ICP (DIGESTED)	IRON		42.737	mg/l
LEAD BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		9.140	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE		0.890	mg/L
MERCURY (CVAA) -WATER-	MERCURY		0.12	ug/L
NICKEL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/l
OIL AND GREASE IN WATER	Oil and Grease		1.6	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		6.660	mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM		14.260	mg/i
SULFATE (UV-VIS)	SULFATE		< 1.0	mg/L
TIN BY ICP (DIGESTED)	TIN		< 0.050	
TOTAL CYANIDE	CYANIDE TEST COMPLETED)		
TOTAL ORGANIC CARBON	тос		4.03	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	ТР			mg-P/L
TOTAL SUSPENDED SOLIDS (EPA)	TSS			mg/L



Group Environment, Health and Safety



9.0 mg/L

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

Station Name: BRAMLETT ST **ENG ROBERTS** Job Number: 99-JUN-0042 Sample ID #: 99014027 LabProf ID: Customer ID: G. FRANKLIN Sample Description: MW-19 Location: MW-19 Type of Sample: GROUNDWATER Collection Date: 16-Jun-99 14:00:00 Analysis Results ZINC BY ICP (DIGESTED) ZINC 0.015 mg/l Sample ID #: 99014028 LabProf ID: Customer ID: G. FRANKLIN Sample Description: MW-20 Location: MW-20 Type of Sample: GROUNDWATER Collection Date: 15-Jun-99 14:50:00 Analysis Results ACIDITY **ACIDITY** 57.21 mg-CaCO3/L ALKALINITY (TOTAL INFLECTION POINT) ALKALINITY meq/L AMMONIA (COLORIMETRIC) **AMMONIA** mg-N/L ARSENIC BY ICP (DIGESTED) **ARSENIC** < 0.100 mg/l BARIUM BY ICP (DIGESTED) BARIUM 0.120 mg/l CADMIUM BY ICP (DIGESTED) CADMIUM < 0.030 mg/l CALCIUM BY ICP (DIGESTED) CALCIUM 12.119 mg/l CHLORIDE (COLORIMETRIC) CHLORIDE 20.5 mg/L CHROMIUM BY ICP (DIGESTED) **CHROMIUM** < 0.040 mg/l COPPER BY ICP (DIGESTED) COPPER < 0.005 mg/l IRON BY ICP (DIGESTED) IRON 17.582 mg/l LEAD BY ICP (DIGESTED) LEAD < 0.090 mg/l MAGNESIUM BY ICP (DIGESTED) MAGNESIUM 3.657 mg/l MANGANESE BY ICP (DIGESTED) MANGANESE 0.274 mg/L MERCURY (CVAA) -WATER-**MERCURY** ug/L 0.11 NICKEL BY ICP (DIGESTED) NICKEL < 0.040 mg/l OIL AND GREASE IN WATER Oil and Grease 1.4 ma/L POTASSIUM BY ICP (DIGESTED) **POTASSIUM** 2.510 mg/i SELENIUM BY ICP (DIGESTED) **SELENIUM** < 0.125 mg/L SODIUM BY ICP (DIGESTED) SODIUM 35.460 mg/l SULFATE (UV-VIS) SULFATE mg/L 3.5 TIN BY ICP (DIGESTED) TIN < 0.050 mg/l **TOTAL CYANIDE** CYANIDE TEST COMPLETED TOTAL ORGANIC CARBON TOC 5.08 mg/L TOTAL PHOSPHORUS (COLORIMETRIC) < 0.005 TP mg-P/L

TSS

TOTAL SUSPENDED SOLIDS (EPA)



Group Environment, Health and Safety



ation Name: BRAMLETT ST	ENG_ROBERTS	Job Numbe	er: 99-Jl	JN-0042
				
Sample ID # : 99014028	LabProf ID:	Customer ID:	G. FRANKL	.in
Sample Description: MW-20				
Collection Date: 15-Jun-99 14:50:00	Location: MW-20	Type of Sample :	GROUNDW	VATER
	Analysis Results			
ZINC BY ICP (DIGESTED)	ZINC		< 0.005	mg/l
Sample ID # : 99014035	LabProf ID:	Customer ID:	G. FRANKL	.IN
Sample Description: MW-21				
Collection Date: 16-Jun-99 09:20:00	Location : MW-21	Type of Sample :	GROUNDV	VATER
	Analysis Results			
ACIDITY	ACIDITY		9.02	mg-CaCO3
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY		0.81	meq/L
AMMONIA (COLORIMETRIC)	AMMONIA		2.93	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM		0.445	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM		96.192	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE		30.0	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER		0.023	mg/l
IRON BY ICP (DIGESTED)	IRON		44.730	mg/l
LEAD BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		17.938	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE		0.861	mg/L
MERCURY (CVAA) -WATER-	MERCURY		0.53	(ug/L,
NICKEL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/l
OIL AND GREASE IN WATER	Oil and Grease		1.3	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		13.870	mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM		20.160	mg/l
SULFATE (UV-VIS)	SULFATE		3.8	mg/L
TIN BY ICP (DIGESTED)	TIN		< 0.050	mg/l
TOTAL CYANIDE	CYANIDE TEST COMPLETED			_
TOTAL ORGANIC CARBON	тос		23.00	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	TP ·		0.013	
TOTAL SUSPENDED SOLIDS (EPA)	TSS		746.0	-



Group Environment, Health and Safety



9.0 mg/L

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

tation Name: B	RAMLETT ST	ENG_ROBERTS	Job Numbe	er: 99-JL	JN-0042
Sample ID # :	99014035	LabProf ID:	Customer ID:	G. FRANKL	IN
Sample Descriptio	n: MW-21				
Collection Date:	16-Jun-99 09:20:00	Location : MW-21	Type of Sample :	GROUNDW	ATER
		Analysis Results			
ZIM	NC BY ICP (DIGESTED)	ZINC		0.217	mg/l
Sample ID # :	99014036	LabProf ID:	Customer ID:	G. FRANKL	IN
Sample Descriptio	n: MW-22				
Collection Date:	14-Jun-99 16:40:00	Location : MW-22	Type of Sample :	GROUNDW	/ATER
		Analysis Results			
	ACIDITY	ACIDITY		32.04	mg-CaCO3
ALKALINIT	TY (TOTAL INFLECTION POINT)	ALKALINITY		0.48	meq/L
AM	MONIA (COLORIMETRIC)	AMMONIA		0.04	mg-N/L
ARS	ENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BAR	RIUM BY ICP (DIGESTED)	BARIUM		0.097	mg/l
CADI	MIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/i
CALC	CIUM BY ICP (DIGESTED)	CALCIUM		12.765	mg/l
CHL	ORIDE (COLORIMETRIC)	CHLORIDE		28.5	mg/L
CHRC	OMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COP	PPER BY ICP (DIGESTED)	COPPER		< 0.005	mg/l
IR	ON BY ICP (DIGESTED)	IRON		0.378	mg/l
LE	AD BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGN	ESIUM BY ICP (DIGESTED)	MAGNESIUM		3.736	mg/l
MANG	ANESE BY ICP (DIGESTED)	MANGANESE		0.674	mg/L
ME	RCURY (CVAA) -WATER-	MERCURY		0.11	(ug/L)
NIC	KEL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/l
OIL	AND GREASE IN WATER	Oil and Grease		< 1.0	mg/L
POTA	SSIUM BY ICP (DIGESTED)	POTASSIUM		3.530	mg/i
SELE	ENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
sot	DIUM BY ICP (DIGESTED)	SODIUM		12.970	mg/l
	SULFATE (UV-VIS)	SULFATE		4.7	mg/L
ī	TIN BY ICP (DIGESTED)	TIN		< 0.050	mg/l
	TOTAL CYANIDE	CYANIDE TEST COMPLETED)		
тс	OTAL ORGANIC CARBON	тос		0.32	mg/L
TOTAL PI	HOSPHORUS (COLORIMETRIC)	TP		0.006	mg-P/L

TSS -

TOTAL SUSPENDED SOLIDS (EPA)



Group Environment, Health and Safety



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

ation Name: BRAMLETT ST	ENG_ROBERTS	Job Numbe	er: 99-JU	JN-0042
Sample ID # : 99014036	LabProf ID:	Customer ID:	G. FRANKL	IN
Sample Description: MW-22 Collection Date: 14-Jun-99 16:40:00	Location : MW-22	Type of Sample :	GROUNDW	/ATER
	Analysis Results			
ZINC BY ICP (DIGESTED)	ZINC		< 0.005	mg/i
Sample ID # : 99014037	LabProf ID:	Customer ID:	G. FRANKL	.IN
Sample Description: MW-24 Collection Date: 14-Jun-99 15:55:00	Location: MW-284 7/19/99	Type of Sample :	GROUNDW	/ATER
	Analysis Results			
ACIDITY	ACIDITY		1.42	mg-CaCO3
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY		0.76	meq/L
AMMONIA (COLORIMETRIC)	AMMONIA		0.09	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM		0.119	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM		8.327	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE		22.0	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER		0.017	mg/l
IRON BY ICP (DIGESTED)	IRON		6.274	mg/l
LEAD BY ICP (DIGESTED)	LEAD		< 0.090	mg/i
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		5.042	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE		0.864	mg/L
MERCURY (CVAA) -WATER-	MERCURY		< 0.10	(ug/L)
NICKEL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/l
OIL AND GREASE IN WATER	Oil and Grease		7.3	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		5.350	mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM		21.240	mg/l
SULFATE (UV-VIS)	SULFATE		20.9	mg/L
TIN BY ICP (DIGESTED)	TIN		< 0.050	mg/l
TOTAL CYANIDE	CYANIDE TEST COMPLÉTES	•		
TOTAL ORGANIC CARBON	тос		4.54	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	TP		0.011	mg-P/L
TOTAL CHORENOED COLIDO (CDA)				

TSS

107.0 mg/L

TOTAL SUSPENDED SOLIDS (EPA)



Group Environment, Health and Safety



17.0 mg/L

tation Name: BRAMLETT ST	ENG_ROBERTS	Job Number:	99~J(JN-0042
Sample ID # : 99014037 Sample Description: MW-24	LabProf ID:	Customer ID: G. FRANKLIN		IN
Collection Date: 14-Jun-99 15:55:00	Location : MW-23	Type of Sample: GRO	NDNUC	/ATER
·· ··	Analysis Results			
ZINC BY ICP (DIGESTED)	ZINC		0.017	mg/l
C				
Sample ID #: 99014038 Sample Description: MW-23	LabProf ID:	Customer ID: G. F	RANKL	IN
Collection Date: 14-Jun-99 16:45:00	Location: MW-243 1/19/41	Type of Sample: GRO	NDNUC	/ATER
·· ·-	Analysis Results			
ACIDITY	ACIDITY		2.82	mg-CaCO
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY			meg/L
AMMONIA (COLORIMETRIC)	AMMONIA	<		mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC	<	0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM		0.083	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM	<	0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM		4.833	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE		21.3	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM	<	0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER	<	0.005	_
IRON BY ICP (DIGESTED)	IRON		0.920	mg/l
LEAD BY ICP (DIGESTED)	LEAD	<	0.090	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		3.037	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE		0.033	-
MERCURY (CVAA) -WATER-	MERCURY		0.11	(ug/L)
NICKEL BY ICP (DIGESTED)	NICKEL	<	0.040	mg/l
OIL AND GREASE IN WATER	Oil and Grease	•	< 1.0	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		2.410	-
SELENIUM BY ICP (DIGESTED)	SELENIUM	<	0.125	-
SODIUM BY ICP (DIGESTED)	SODIUM		17.490	_
SULFATE (UV-VIS)	SULFATE		18.2	_
TIN BY ICP (DIGESTED)	TIN	<	0.050	_
TOTAL CYANIDE	CYANIDE TEST COMPLETED			-
TOTAL ORGANIC CARBON	TOC		0.41	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	ТР	<		mg-P/L
TOTAL SUSPENDED SOLIDS (EPA)	TSS			ma/L



Group Environment, Health and Safety



ation Name: BRAMLETT ST	ENG_ROBERTS	Job Numbe	er: 99-JU	JN-0042
Sample ID # : 99014038	LabProf ID:	Customer ID:	G. FRANKL	in
Sample Description: MW-23				
Collection Date: 14-Jun-99 16:45:00	Location : MW-24	Type of Sample :	GROUNDW	/ATER
	Analysis Results			
ZINC BY ICP (DIGESTED)	ZINC		< 0.005	mg/l
Sample ID # : 99014039	LabProf ID:	Customer ID:	G. FRANKL	.IN
Sample Description: MW-25				
Collection Date: 15-Jun-99 15:25:00	Location : MW-25	Type of Sample :	GROUNDW	VATER
	Analysis Results			
ACIDITY	ACIDITY		47.76	mg-CaCO3
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY		1.33	meg/L
AMMONIA (COLORIMETRIC)	AMMONIA		1.20	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM		0.105	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM		11.456	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE		23.6	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER		< 0.005	mg/l
IRON BY ICP (DIGESTED)	IRON		5.681	mg/l
LEAD BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		7.001	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE		0.346	mg/L
MERCURY (CVAA) -WATER-	MERCURY		0.55	(ug/L)
NICKEL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/l
OIL AND GREASE IN WATER	Oil and Grease		< 1.0	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		6.530	mg/i
SELENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM		16.130	mg/l
SULFATE (UV-VIS)	SULFATE		19.0	mg/L
TIN BY ICP (DIGESTED)	TIN		< 0.050	mg/l
TOTAL CYANIDE	CYANIDE TEST COMPLETED)		
TOTAL ORGANIC CARBON	тос		1.95	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	ΤP		0.022	mg-P/L
TOTAL SUSPENDED SOLIDS (EPA)	rss		31.0	mg/L



Group Environment, Health and Safety



6.0 mg/L

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

Station Name: BRAMLETT ST	ENG_ROBERTS	Job Number: 99-J	JN-0042
Sample ID # : 99014039 Sample Description: MW-25	LabProf ID:	Customer ID: G. FRANKLIN	
Collection Date: 15-Jun-99 15:25:00	Location : MW-25	Type of Sample : GROUNDV	VATER
·-	Analysis Results		
ZINC BY ICP (DIGESTED)	ZINC	0.005	mg/l
Sample ID # : 99014040	LabProf ID:	Customer ID: G. FRANKI	tNI
Sample Description: SW-1	Labrio ID.	Customer ID. G. FTOMAK	TIM
Collection Date: 17-Jun-99 09:00:00	Location : SW1	Type of Sample : GROUNDV	VATER
·· ·-	Analysis Results		
ACIDITY	ACIDITY	7.03	mg-CaCO
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY	0.97	meq/L
AMMONIA (COLORIMETRIC)	AMMONIA	< 0.02	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC	< 0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM	0.070	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM	< 0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM	23.864	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE	9.5	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM	< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER	0.005	mg/l
IRON BY ICP (DIGESTED)	IRON	0.636	mg/l
LEAD BY ICP (DIGESTED)	LEAD	< 0.090	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM	3.509	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE	0.016	mg/L
MERCURY (CVAA) -WATER-	MERCURY	< 0.10	(ug/L)
NICKEL BY ICP (DIGESTED)	NICKEL	< 0.040	mg/l
OIL AND GREASE IN WATER	Oil and Grease	< 1.0	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM	3.850	mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM	< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM	8.100	mg/l
SULFATE (UV-VIS)	SULFATE	40.2	mg/L
TIN BY ICP (DIGESTED)	TIN	< 0.050	mg/l
TOTAL CYANIDE	CYANIDE TEST COMPLETED)	
TOTAL ORGANIC CARBON	тос	5.81	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	TP	0.022	mg-P/L
TOTAL SUSPENDED SOLIDS (EPA)	TSS	6.0	mg/L



Group Environment, Health and Safety



20.0 mg/L

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

tation Name: BRAMLETT ST		ENG_ROBERTS	Job Numbe	r: 99-J l	JN-0042
Sample ID # : 99014040		LabProf ID:	Customer ID:	G. FRANKL	.IN
Sample Description:	SW-1				
Collection Date:	17-Jun-99 09:00:00	Location : SW1	Type of Sample :	GROUNDW	ATER
		Analysis Results			
ZINC	BY ICP (DIGESTED)	ZINC		0.032	mg/l
Comple ID # .	00044044				
Sample ID#:	99014041	LabProf ID:	Customer ID:	G. FRANKL	.IN
Sample Description: Collection Date:	: SW-2 17-Jun-99 09:10:00	Location : SW2	Type of Sample :	GROUNDW	VATER
		Analysis Results			
	ACIDITY	ACIDITY		2.02	mg-CaCO:
ALKALINITY	(TOTAL INFLECTION POINT)	ALKALINITY		0.25	meq/L
АММО	ONIA (COLORIMETRIC)	AMMONIA		0.07	mg-N/L
ARSE	NIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BARIL	JM BY ICP (DIGESTED)	BARIUM		0.033	mg/l
CADMI	IUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l
CALCI	UM BY ICP (DIGESTED)	CALCIUM		3.675	mg/l
CHLO	RIDE (COLORIMETRIC)	CHLORIDE		3.6	mg/L
CHRON	NUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPP	ER BY ICP (DIGESTED)	COPPER		0.006	mg/l
IROI	N BY ICP (DIGESTED)	IRON		2.691	mg/l
LEA	D BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGNE	SIUM BY ICP (DIGESTED)	MAGNESIUM		1.077	mg/l
MANGAI	NESE BY ICP (DIGESTED)	MANGANESE		0.070	mg/L
MERC	CURY (CVAA) -WATER-	MERCURY		< 0.10	(ug/L)
NICK	EL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/l
OIL A	ND GREASE IN WATER	Oil and Grease		< 1.0	mg/L
POTAS	SIUM BY ICP (DIGESTED)	POTASSIUM		1.790	mg/l
SELEN	IIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODI	UM BY ICP (DIGESTED)	SODIUM		3.180	mg/l
;	SULFATE (UV-VIS)	SULFATE		5.7	mg/L
TIN	BY ICP (DIGESTED)	TIN		< 0.050	mg/l
	TOTAL CYANIDE	CYANIDE TEST COMPLETED	•		
тот	AL ORGANIC CARBON	тос		2.98	mg/L
TOTAL PHO	OSPHORUS (COLORIMETRIC)	TP		0.030	mg-P/L
***	WEBENDED COLIDE (CDA)				-

TSS

TOTAL SUSPENDED SOLIDS (EPA)



Group Environment, Health and Safety



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005 Phone: 704-875-5209 Fax: 704-875-5038

ation Name: BRAMLETT ST	ENG_ROBERTS	Job Number: 99~	JUN-0042
Sample ID # : 99014041	LabProf ID:	Customer ID: G. FRANK	LIN
Sample Description: SW-2			
Collection Date: 17-Jun-99 09:10:00	Location : SW2	Type of Sample: GROUND	WATER
	Analysis Results		
ZINC BY ICP (DIGESTED)	ZINC	0.012	mg/l
Sample ID # : 99014042	LabProf ID:	Customer ID: G. FRANK	LIN
Sample Description: SW-3			
Collection Date: 17-Jun-99 10:38:00	Location: SW3	Type of Sample: GROUND	WATER
	Analysis Results		
ACIDITY	ACIDITY	3.30	mg-CaCO3
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY	0.25	meq/L
AMMONIA (COLORIMETRIC)	AMMONIA	0.07	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC	< 0.100	mg/i
BARIUM BY ICP (DIGESTED)	BARIUM	0.032	. mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM	< 0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM	3.388	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE	3.6	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM	< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER	< 0.005	mg/l
IRON BY ICP (DIGESTED)	IRON	2.730	mg/l
LEAD BY ICP (DIGESTED)	LEAD	< 0.090	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM	1.069	mg/i
MANGANESE BY ICP (DIGESTED)	MANGANESE	0.074	mg/L
MERCURY (CVAA) -WATER-	MERCURY	0.10	
NICKEL BY ICP (DIGESTED)	NICKEL	< 0.040	mg/l
OIL AND GREASE IN WATER	Oil and Grease	< 1.0) mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM	1.770) mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM	< 0.12	5 mg/L
SODIUM BY ICP (DIGESTED)	SODIUM	2.670	mg/l
SULFATE (UV-VIS)	SULFATE	4.0) mg/L
TIN BY ICP (DIGESTED)	TIN	< 0.050) mg/l
TOTAL CYANIDE	CYANIDE TEST COMPLETED)	
TOTAL ORGANIC CARBON	тос	2.9	5 mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	TP	0.03	0 mg-P/L
TOTAL SUSPENDED SOLIDS (EPA)	TSS	19.	0 mg/L



Group Environment, Health and Safety



24.0 mg/L

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

tation Name: B	BRAMLETT ST ENG_ROBERTS Job Number:		T ST ENG_ROBERTS Job Number: 99-JUN-0042		
Sample ID # : Sample Description	99014042 on: SW-3	LabProf ID:	Customer ID: G. FRANKLIN		.IN
Collection Date:	17-Jun-99 10:38:00	Location : SW3	Type of Sample :	GROUNDW	VATER
		Analysis Results			
ZII	NC BY ICP (DIGESTED)	ZINC		0.014	mg/l
Sample ID#:	99014043	LabProf ID:	Customer ID:	G. FRANKL	IN
Sample Description	on: SW-4				
Collection Date:	17-Jun-99 10:45:00	Location : SW4	Type of Sample :	GROUNDV	VATER
		Analysis Results			
	ACIDITY	ACIDITY		2.98	mg-CaCO3
ALKALINIT	TY (TOTAL INFLECTION POINT)	ALKALINITY		0.24	meq/L
AMI	MONIA (COLORIMETRIC)	AMMONIA		0.08	mg-N/L
ARS	ENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BAF	RIUM BY ICP (DIGESTED)	BARIUM		0.034	mg/l
CAD	MIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l
CAL	CIUM BY ICP (DIGESTED)	CALCIUM		3.596	mg/l 1
CHL	ORIDE (COLORIMETRIC)	CHLORIDE		4.8	mg/L
CHRO	OMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COF	PPER BY ICP (DIGESTED)	COPPER		0.014	mg/l
IR	ON BY ICP (DIGESTED)	IRON		2.838	mg/l
LE	AD BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGN	RESIUM BY ICP (DIGESTED)	MAGNESIUM		1.089	mg/l
MANG	ANESE BY ICP (DIGESTED)	MANGANESE		0.078	mg/L
ME	RCURY (CVAA) -WATER-	MERCURY		0.10	(ug/L)
NIC	CKEL BY ICP (DIGESTED)	NICKEL		< 0.040	\ /
OIL	AND GREASE IN WATER	Oil and Grease		< 1.0	mg/L
POTA	SSIUM BY ICP (DIGESTED)	POTASSIUM		1.870	mg/l
SELI	ENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
so	DIUM BY ICP (DIGESTED)	SODIUM		3.470	_
	SULFATE (UV-VIS)	SULFATE		3.5	=
ר	TIN BY ICP (DIGESTED)	TIN		< 0.050	-
	TOTAL CYANIDE	CYANIDE TEST COMPLETE	o		
тс	OTAL ORGANIC CARBON	тос		3.97	mg/L
TOTAL P	HOSPHORUS (COLORIMETRIC)	TP			mg-P/L

TSS

TOTAL SUSPENDED SOLIDS (EPA)



Group Environment, Health and Safety



ation Name: BRAMLETT ST	ENG_ROBERTS	Job Numbe	er: 99-JI	JN-0042
2				
Sample ID # : 99014043	LabProf ID:	Customer ID:	G. FRANKL	.IN
Sample Description: SW-4 Collection Date: 17-Jun-99 10:45:00	Location : SW4	Type of Sample :	GROUNDV	ATER
	Analysis Results			
ZINC BY ICP (DIGESTED)	ZINC		0.032	mg/l
•				
Sample ID #: 99014046	LabProf ID:	Customer ID:	G. FRANKL	.IN
Sample Description: SW-5				
Collection Date: 17-Jun-99 11:00:00	Location : SW5	Type of Sample :	GROUNDV	VATER
	Analysis Results			
ACIDITY	ACIDITY		6.36	mg-CaCO3
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY		0.51	meq/L
AMMONIA (COLORIMETRIC)	AMMONIA		0.25	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM		0.107	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM		23.939	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE		13.6	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER		0.007	mg/l
IRON BY ICP (DIGESTED)	IRON		2.414	mg/l
LEAD BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		3.333	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE		0.107	mg/L
MERCURY (CVAA) -WATER-	MERCURY		0.13	ug/L)
NICKEL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/l
OIL AND GREASE IN WATER	Oil and Grease		< 1.0	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		4.250	mg/I
SELENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM		12.790	mg/l
SULFATE (UV-VIS)	SULFATE		9.0	mg/L
TIN BY ICP (DIGESTED)	TIN		< 0.050	mg/i
TOTAL CYANIDE	CYANIDE TEST COMPLETED			
TOTAL ORGANIC CARBON	TOC		3.21	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	TP		0.017	mg-P/L
TOTAL SUSPENDED SOLIDS (EPA)	TSS		11.0	mg/L



Group Environment, Health and Safety



8 21 4

ation Name: BRAMLETT ST	ENG_ROBERTS	Job Number:	99-JI	UN-0042
Sample ID # : 99014046	LabProf ID:	Customer ID: G.	FRANKL	 _IN
Sample Description: SW-5				
Collection Date: 17-Jun-99 11:00:00	Location : SW5	Type of Sample: GI	ROUNDV	VATER
	Analysis Results			
ZINC BY ICP (DIGESTED)	ZINC		0.019	mg/l
Sample ID # : 99014047 Sample Description: SW-7	LabProf ID:	Customer ID: G.	FRANKL	.IN
Collection Date: 17-Jun-99 12:10:00	Location : SW7	Type of Sample: Gl	ROUNDV	VATER
	Analysis Results			
ACIDITY	ACIDITY		20.36	mg-CaCO3
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY		0.89	meq/L
AMMONIA (COLORIMETRIC)	AMMONIA		0.07	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC	•	< 0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM		0.208	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM	•	< 0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM	:	276.764	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE		3.6	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER		0.017	mg/l
IRON BY ICP (DIGESTED)	IRON		2.671	mg/l
LEAD BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		12.589	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE		0.955	mg/L
MERCURY (CVAA) -WATER-	MERCURY		0.13	(ug/L)
NICKEL BY ICP (DIGESTED)	NICKEL	•	< 0.040	mg/l
OIL AND GREASE IN WATER	Oil and Grease		< 1.0	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		9.800	mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM		5.810	mg/l
SULFATE (UV-VIS)	SULFATE		82.0	mg/L
TIN BY ICP (DIGESTED)	TIN		< 0.050	mg/l
TOTAL CYANIDE	CYANIDE TEST COMPLETED)		
TOTAL ORGANIC CARBON	тос		17.60	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	ТР		0.028	mg-P/L
TOTAL SUSPENDED SOLIDS (EPA)	TSS		71.0	mg/L



Group Environment, Health and Safety



ation Name: BRAMLETT ST	ENG_ROBERTS	Job Numbe	er: 99-JI	UN-0042
Sample ID # : 99014047	LabProf ID:	Customer ID:	C EDANIZI	IM
Sample Description: SW-7	Labridi ID.	Castomer ID.	G. FRANKI	-117
Collection Date: 17-Jun-99 12:10:00	Location : SW7	Type of Sample :	GROUNDV	VATER
	Analysis Results			
ZINC BY ICP (DIGESTED)	ZINC		0.190	mg/l
Sample ID # : 99014048	LabProf ID:	Customer ID:	G. FRANKI	JN
Sample Description: SW-8				
Collection Date: 17-Jun-99 12:45:00	Location : SW8	Type of Sample :	GROUNDV	VATER
	Analysis Results			
ACIDITY	ACIDITY		2.76	mg-CaCO3
ALKALINITY (TOTAL INFLECTION POI	IT) ALKALINITY		0.85	meq/L
AMMONIA (COLORIMETRIC)	AMMONIA		0.37	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM		0.131	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM		69.629	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE		12.5	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER		0.005	mg/l
IRON BY ICP (DIGESTED)	IRON		6.828	mg/l
LEAD BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		8.245	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE		0.353	mg/L
MERCURY (CVAA) -WATER-	MERCURY		0.12	(ug/L)
NICKEL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/i
OIL AND GREASE IN WATER	Oil and Grease		< 1.0	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		6.820	mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM		9.670	mg/ł
SULFATE (UV-VIS)	SULFATE		80.4	mg/L
TIN BY ICP (DIGESTED)	TIN		< 0.050	mg/l
TOTAL CYANIDE	CYANIDE TEST COMPLETED)		
TOTAL ORGANIC CARBON	TOC		7.93	mg/L
TOTAL PHOSPHORUS (COLORIMET	IC) TP		0.019	mg-P/L
TOTAL SUSPENDED SOLIDS (EPA	TS\$		23.0	mg/L



Group Environment, Health and Safety



tation Name: BRAMLETT ST	ENG_ROBERTS	Job Number:	99-JI	JN-0042
Sample ID # : 99014048	LabProf ID:	Customer ID: G	. FRANKL	IN
Sample Description: SW-8				
Collection Date: 17-Jun-99 12:45:00	Location : SW8	Type of Sample: 0	SROUNDW	ATER
	Analysis Results			
ZINC BY ICP (DIGESTED)	ZINC		0.102	mg/l
Sample ID #: 99014049 Sample Description: SW-9	LabProf ID:	Customer ID: G	i, FRANKL	IN
Collection Date: 17-Jun-99 11:35:00	Location : SW9	Type of Sample: 0	ROUNDW	/ATER
 	Analysis Results			
ACIDITY	ACIDITY		9.30	mg-CaCO3
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY		0.85	meq/L
AMMONIA (COLORIMETRIC)	AMMONIA		0.30	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM		0.098	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM		45.511	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE		10.8	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER		0.005	mg/l
IRON BY ICP (DIGESTED)	IRON		2.484	mg/i
LEAD BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		5.845	rng/l
MANGANESE BY ICP (DIGESTED)	MANGANESE		0.190	mg/L
MERCURY (CVAA) -WATER-	MERCURY		0.12	
NICKEL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/l
OIL AND GREASE IN WATER	Oil and Grease		< 1.0	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		5.120	mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM		7.860	mg/l
SULFATE (UV-VIS)	SULFATE		26.7	mg/L
TIN BY ICP (DIGESTED)	TIN		< 0.050	mg/l
TOTAL CYANIDE	CYANIDE TEST COMPLETED	ı		•
TOTAL ORGANIC CARBON	тос		20.40	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	ТР		0.021	mg-P/L
TOTAL SUSPENDED SOLIDS (EPA)	TSS		12.0	mg/L



Group Environment, Health and Safety



W. Although St.

ation Name: BRAMLETT ST	ENG_ROBERTS	Job Numbe	er: 99-Jl	JN-0042
Sample ID # : 99014049	LabProf ID:	Customer ID:	C EDANKI	IM
Sample Description: SW-9	Cabrio ID.	Customer ID.	G. FRANKL	.114
Collection Date: 17-Jun-99 11:35:00	Location : SW9	Type of Sample :	GROUNDW	ATER
•••	Analysis Results			
ZINC BY ICP (DIGESTED)	ZINC		0.024	mg/l
Sample ID # : 99014050	LabProf ID:	Customer ID:	G. FRANKL	IN
Sample Description: SW-10				
Collection Date: 17-Jun-99 13:35:00	Location : SW-10	Type of Sample :	GROUNDW	ATER
-· 	Analysis Results			
ACIDITY	ACIDITY		5.92	mg-CaCO3
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY		0.89	meq/L
AMMONIA (COLORIMETRIC)	AMMONIA		0.30	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM		0.118	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM		60.075	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE		10.2	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER		0.006	mg/l
IRON BY ICP (DIGESTED)	IRON		1.521	mg/l
LEAD BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		7.365	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE		0.213	mg/L
MERCURY (CVAA) -WATER-	MERCURY		< 0.10(ug/L)
NICKEL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/l
OIL AND GREASE IN WATER	Oil and Grease		< 1.0	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		5.720	mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM		7.830	mg/l
SULFATE (UV-VIS)	SULFATE		17.9	mg/L
TIN BY ICP (DIGESTED)	TIN		< 0.050	mg/l
TOTAL CYANIDE	CYANIDE TEST COMPLETED)		
TOTAL ORGANIC CARBON	тос		11.65	mg/L
TOTAL SUSPENDED SOLIDS (EPA)	TSS		10.0	mg/L
ZINC BY ICP (DIGESTED)	ZINC		0.020	mg/l



Group Environment, Health and Safety



9 Apr 12 1 + 2

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248

South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Station Name: BRAMLETT ST	ENG_ROBERTS	Job Numbe	r: 99-J	UN-0042
		· · · · · · · · · · · · · · · · · · ·		
Sample ID # : 99014052	LabProf ID:	Customer ID:	G. FRANKI	LIN
Sample Description: FIELD BLANK				
Collection Date: 17-Jun-99 15:15:00	Location : FIELD BLK	Type of Sample :	GROUNDV	VATER
 	Analysis Results			
ACIDITY	ACIDITY		1.42	mg-CaCO3/I
ALKALINITY (TOTAL INFLECTION POINT)	ALKALINITY		< 0.01	meg/L
AMMONIA (COLORIMETRIC)	AMMONIA		< 0.02	mg-N/L
ARSENIC BY ICP (DIGESTED)	ARSENIC		< 0.100	mg/l
BARIUM BY ICP (DIGESTED)	BARIUM		< 0.005	mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM		< 0.030	mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM		0.068	mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE		< 1.0	mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM		< 0.040	mg/l
COPPER BY ICP (DIGESTED)	COPPER		< 0.005	mg/l
IRON BY ICP (DIGESTED)	IRON		0.010	mg/l
LEAD BY ICP (DIGESTED)	LEAD		< 0.090	mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM		< 0.030	mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE		< 0.005	mg/L
MERCURY (CVAA) -WATER-	MERCURY		< 0.10	(ug/L)
NICKEL BY ICP (DIGESTED)	NICKEL		< 0.040	mg/I
OIL AND GREASE IN WATER	Oil and Grease		< 1.0	mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM		< 0.250	mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM		< 0.125	mg/L
SODIUM BY ICP (DIGESTED)	SODIUM		< 1.500	mg/l
SULFATE (UV-VIS)	SULFATE		< 1.0	mg/L
TIN BY ICP (DIGESTED)	TIN		< 0.050	mg/l
TOTAL CYANIDE	CYANIDE TEST COMPLETED	•		-
TOTAL ORGANIC CARBON	тос		0.11	mg/L
TOTAL PHOSPHORUS (COLORIMETRIC)	TP		< 0.005	mg-P/L
ZINC BY ICP (DIGESTED)	ZINC		< 0.005	mg/l

Sample ID #: 99014057 LabProf ID: Customer ID:

Sample Description: BRAMLETTE ST MW-3D

Collection Date: 15-Jun-99 14:45:00 Location : MW-3D Type of Sample : GROUNDWATER

----- Analysis Results -----

ALKALINITY (TOTAL INFLECTION POINT)

AMMONIA (COLORIMETRIC)

ARSENIC BY ICP (DIGESTED)

ARSENIC

ALKALINITY

ALKALINITY

AMMONIA

0.41 mg-N/L

ARSENIC

< 0.100 mg/l

Visit us on the IntraNet at http://dewww/essenv/lab_srv/



Group Environment, Health and Safety



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005
Phone: 704-875-5209 Fax: 704-875-5038

ation Name: BRAMLETT ST	ENG_ROBERTS	Job Number: 99	-JUN-0042
Sample ID # : 99014057	LabProf ID:	Customer ID:	
Sample Description: BRAMLETTE ST MW-3D	Labi idi ib.	Obstanti ib.	
Collection Date: 15-Jun-99 14:45:00	Location : MW-3D	Type of Sample: GROUN	DWATER
	Analysis Results		
BARIUM BY ICP (DIGESTED)	BARIUM	0.11	1 mg/l
CADMIUM BY ICP (DIGESTED)	CADMIUM	< 0.03	0 mg/l
CALCIUM BY ICP (DIGESTED)	CALCIUM	12.79	7 mg/l
CHLORIDE (COLORIMETRIC)	CHLORIDE	19	.8 mg/L
CHROMIUM BY ICP (DIGESTED)	CHROMIUM	< 0.04	0 mg/l
COPPER BY ICP (DIGESTED)	COPPER	< 0.00	5 mg/l
IRON BY ICP (DIGESTED)	IRON	13.68	9 mg/l
LEAD BY ICP (DIGESTED)	LEAD	< 0.09	00 mg/l
MAGNESIUM BY ICP (DIGESTED)	MAGNESIUM	6.62	9 mg/l
MANGANESE BY ICP (DIGESTED)	MANGANESE	0.20	11 mg/L
MERCURY (CVAA) -WATER-	MERCURY	0.1	0 ug/L
NICKEL BY ICP (DIGESTED)	NICKEL	< 0.04	
OIL AND GREASE IN WATER	Oil and Grease	1	.7 mg/L
POTASSIUM BY ICP (DIGESTED)	POTASSIUM	2.84	10 mg/l
SELENIUM BY ICP (DIGESTED)	SELENIUM	< 0.12	25 mg/L
SODIUM BY ICP (DIGESTED)	SODIUM	24.78	80 mg/l
SULFATE (UV-VIS)	SULFATE	8	.0 mg/L
TIN BY ICP (DIGESTED)	TIN	< 0.09	50 mg/l
TOTAL CYANIDE	CYANIDE TEST COMPLETED	•	
TOTAL PHOSPHORUS (COLORIMETRIC)	ТР	0.0	21 mg-P/
TOTAL SUSPENDED SOLIDS (EPA)	TSS	6	.0 mg/L
ZINC BY ICP (DIGESTED)	ZINC	< 0.0)5 mg/l

Drug Whitenant 7/16/9;

Visit us on the IntraNet at http://dewww/essenv/lab srv/

Job;	99-JUN-0042	Sample	श्री हो हैं .	Test (Code: ACIDITY	
D	Test Code	Site	Location	Degit (Vices	Status	Sél
99014009	ACIDITY	BRAMLETT ST	MW-1	GROUNDWATER	Validated :	
99014010	ACIDITY	BRAMLETTST	MW-23	GROUNDWATER	Validated	Ī
99014011	ACIDITY ^ *	BRAMLETT ST	MW-375	GROUNDWATER ::	Validated :::	
99014013		BRAMLETA ST.	MW-5	GROUNDWATER	Test Pendi	X
99014014	ACIDITY	BRAMLETT'ST	MW-6	GROUNDWATER	Validated	
99014015		BRAMLEIDSIN	MWEA &	GROUNDWATER	Test Pendi	X
99014016	ACDITY OF T	BRAMERIJ ST	MVV-8	GROUNDWATER	Validated ***	Ī
990(40)772	AGIODAY	BRANDER IN SUCH	MWA97 #	GROUNDWATER	Validated \$ 158	
990140185	COUNTY :	BRAMBERISIA	MW-10 *	GROUNDWATER 🧼	Validated:	
990(40)194	ACIDITY : 5	BRAMESFESIE	MW-11%	GROUNDWATER	Validation 🔗	Ī
99014020	ACIDITY	BRAMBEINSTA	MW-12.	GROUNDWATER :	Validated	
99014021	ACIDITY :	BRAMLETTST	MW-13	GROUNDWATER	Validated :	
99014022	ACIDITY	BRAMLETTAST	MW-14:	GROUNDWATER	Validated : 5	
99014023	ACIDITY	BRAMLETT'ST	MW-15	GROUNDWATER	Validated ***	Ī
99014024		BRAMLETTST	MW-16	GROUNDWATER -	Test Pendi	X
99014025	ACIDITY	BRAMLETTIST	MW-17	GROUNDWATER	Validated	Ī
99014026	ACIDITY	BRAMLETT ST	MW-18	GROUNDWATER	Validated	
99014027	ACIDITY	BRAMLETTST	MW-19	GROUNDWATER	Validated	
99014028	ACIDITY	BRAMLETT ST	MW-20	GROUNDWATER	Validated	Ī
99014035	ACIDITY	BRAMLETT ST	MW-21	GROUNDWATER	Validated	
99014036	ACIDITY	BRAMLETT ST.	MW-22 -	GROUNDWATER	Validated	Ī
99014037	ACIDITY : 13	BRAMLETT ST	MW-23	GROUNDWATER	Validated	
99014038	AGIDITY	BRAMLETTIST	MW-24	GROUNDWATER	Validated **	Ī
99014039	ACIDITY	BRAMLETTIST	MW-25	GROUNDWATER A	Valtacel 💸	
99014040	ACIDITY (See	BRAMUEINESIN	SWA 📳	GROUNDWAVER:	YEM BEEL A	
99014041	ACIDITY SEE	BRAMLETTST	SW2	GROUNDWATER	Validated 🕶	
99014042	ACIDITY: 50	BRAMLETTST	SW3	GROUNDWATER	Validated	
99014043	ACIDITY	BRAMLETTST	SW4 😘	GROUNDWATER	Validated	Ī
99014046	ACIDITY	BRAMLETTSTA	SW5-	GROUNDWATER	Validated *	
99014047	ACIDITY	BRAMLETTIST	SW7	GROUNDWATER	Validated	
99014048	ACIDITY	BRAMLETT ST	SW8	GROUNDWATER	Validated	
99014049	ACIDITY	BRAMILEURST	SW9	GROUNDWATER	Validated ·	
99014050	ACIDITY	BRAMLETAST	SW-10	GROUNDWATER	Validated	
99014052	ACIDITY	BRAMLETT ST 4	FIELD	GROUNDWATER	Validated	
99014057		BRAMLETT/ST	MW-3D	GROUNDWATER	Test Pendi	X

accept, not completed on requested by
The marked (X) splan above (R.D. Marehard and pt)

are to high pt ~ 8.3

7/14/99 T. Whiserant

reviously Form 35226

))

)))

135 **TOTAL # OF CONTAINERS BOINAYS** OIL & GREASE J972 15 Emergency Rush (24-48 Hrs.)* Cu,Fe,K, Mg,Mn,Na, Ni,Pb, Se, Sn,Zn Container Type:() Glass () Plastic Date Results Requested: **Turnaround Requested** Cq, Ct, Ca, As, Ba, Additional Charges Will Apply ☐ Routine (2 weeks) SST ☐ Rush (1 week) COL '70S **YTIGIDA** לרג' Preservative Added NH3 CF' 07<u>28</u> A93 6PA 8260 ന 3 ന ð n က ന COMP G H2SO4 Required HN03 None Other 0 Analysis **GRAB** 9 1257 Date/Time Jate/Time Daté/Time Analysis P.O. # Signature Collection Information Venctored Samples Hom (18/100 10915 826066-91-7 0940 1130 0-16-48 1410 6-15-49 1515 Vendor Vendor 1535 Wall 2835 0995 50 1166-51-9 517990849 (7.5 Time Sample Class Seal/Lock Operfied By 15d 6-10-91 5-16-99 6-15-99 1881 7.15.99 Date Comments -0042 and mark Mylang Copy 2 - Client Copy AB Accepted, By Date Accepted By Mail Code: MGO3A3 Resp. Center To: 0897 41C.243 495505 503606 503580 2508X ऽक्टर्धि 1 Person 503401 508515 422502 Ohless 503614 933225 302 247 Time Sample Description or ID 0702MGPGVLBRMST Report to/Ph GLF/4844 60%1 SOS Logged By (Ini.) O # SMIT 55/31/2 Date/Time Copy 1- AL Files Date/Time Project Name: GREENVILLE BRAMLETT ST **≷** 3 Date/Time WW TEMP -9MM Duke Power's Analytical Laboratory 777 MW-15 MW-3 MW-10 MW-13 **MW-14** MW-16 MW4 **MW-5 MW-12** MW-11 MW-1 6-MM MW-8 1339 Hagers Ferry Road Huntersville, NC 28078 Phone: (704) 875-5209/875-5245 Sample Matrix NC SC Scoround Water ONPDES Durinking Water UNST ON Grown Kinemans Other 🗆 Project ID: MGPBRAM Lab PROFS# MNS Bldg. # 7405 MGO3A2 Business Unit: 20018 Activity ID: ALLACTV Original - AL Files Sealed Cocked by Fax: (704) 875-5038 Religquished)by: Relinquished by: 623 **Drinking Water** oco, 1022 4010 RCRA Waste Process: Sample # CLIENT: **EWI2***

Teviously Form 35228

とう からない いいいい こうこうしょう こうこう CHAIN OF COSTOD 1 RECL

Container Type:() Glass () Plastic YTIGIDA Preservative Added H2S04 Required HN03 Other None sisylenA <u>8</u> Analysis P.O. # Venclored Samples ME Vendor Vendor Sample Class AB Date 11MS#84-111N-0042 Mail Code: MGO3A3 Resp. Center To: 0897 Logged By (Ini.) Time CLIENT: 0702MGPGVLBRMST Report to/Ph. GLF/4844
Project Name: GREENVILLE BRAMLETT ST Mail Code: Duke Power's Analytical Laboratory 1339 Hagers Ferry Road Huntersville, NC 28078 Phone: (704) 875-5209/875-5245 Project ID: MGPBRAM Activity ID: ALLACTV MNS Bldg. # 7405 MGO3A2 Business Unit: 20018 Fax: (704) 875-5038 **LWI2**#

TOTAL # OF CONTAINERS CYANIDE OIF & GREASE nZ,n2 ,92 ,dq,iN Cu,Fe,K, Mg,Mn,Na, Turnaround Requested As, Ba, Ca, Cd, Cr, SSI COC 'tos לרג' **CHN** כר' **EPA 8270** 6PA 8260 က က က 6 က က m က က ന က က ന COMP **BARD** Date/Jime R H Grong Signature Karas PHConn RACIN Collection Information Į 5597 61790900 1525 038 0121 4621-9 Time 1050 01/2010/10 10 CN 148 \$ 2 2 0431 1241-5 17-99 1100 6-15/99 2-14-8 5-17-99 -17-96 16.32 66513 Date Accepted By 50846 50846 90953 \$2517**8** \$203188 Sample Description or ID 527:54 503:154 35380 8 १८५६ 3545 C ક્સરાસ્ટ 5532 17505 5036 7 Date/Time MW-28-22-2 MW-19 MW-20 MW-21 MW-24 MV-18 **MW-22** MW-25 MW-17 SW4 **SW-5** SW-6 **SW-2** SW-3 SW-1 **SW-7** Lab PROFS# 1845 1845 4035 4045 4047 428 西田 Process: Sample # 1000 (*

Emergency Rush (24-48 Hrs.)* Date Results Requested: · Additional Charges Will Apply 13 Saguance Date/Time 6 /18/hg DA PACE. Comments: ★ ペイ Seal/Lock Obened By: る。気 15051 6/18/19 Date/Time TEMP Sample Matrix NC SC Scoround Water Country Other UST "The Sealed/l@cked by: Drinking Water RCRA Waste

□ Routine (2 weeks)

8

Ø

かられ

ccepted (

d O

B

Date/Time/

Relinquished by:

Relinguished by

Date/Time

☐ Rush (1 week)

Copy 2 - Client Copy Copy 1- AL Files Original - AL Files Mute Form 89962 (9-97) Previously Form 35226

AND ANALYSIS REQUEST FORM CHAIN OF COSTODY KECO

CYANIDE OIL & GREASE nZ,n2, 92, dq,iV Си, Fe, К, Мg, Мn, Иа, Container Type:()Glass ()Plastic As, Ba, Ca, Cd, Cr, SST COL SO4, ACIDITY לרג' Preservative Added **EHN** Cr' 0728 A93 0928 A93 COMP H2SO4 Required HN03 Other None sisylsnA <u>e</u> **BARD** Analysis Signature P.O. # Musser Venclored Samples Collection Information ķ 4 Vendor Vendor (2.45 1135 (235 6/14/1400 Re 5 Ample 6.17.49 0955 Time Sample Class 7115 6129 61799 4-1-9 64219 5-15-49 Date AB US 2400-Date Mail Code: MGO3A3 571855 Resp. Center To: 0897 503न। Time NUI-66 # SMIT SOFIOS Sample Description or ID 503867 \$13615 CLIENT: 0702MGPGVLBRMST Report to/Ph GLF/4844
Project Name: GREENVILLE BRAMLETT ST Mail Code Logged By (Ini.) MW- 18 QC SAMPLE h FIELD BLANK **TRIP BLANK** $M \times 2$ Duke Power's Analytical Laboratory SW-10 SW-8 SW-9 1339 Hagers Ferry Road Huntersville, NC 28078 Phone: (704) 875-5209/875-5245 Fax: (704) 875-5038 Project ID: MGPBRAM MNS Bldg. # 7405 MGO3A2 Lab PROFS# Business Unit: 20018 Activity ID: ALLACTY を記 1851 1851 4057 5516 Process: Sample # **EWI2**#

TOTAL # OF CONTAINERS

ov: Date/Time / I A	ccepted Bv.	Date/Time	Turnaround Requested
18/8/	Miles Boxes 6/18/65 0740	0500 55/8/10	C Routine (2 weeks)
Date/Time / Ac	Accepted By:	Date/Time	
Chor I Muserant 6/1899 150 - Kaird	Laid X Xuger Phe	12/29 (ves	☐ Emergency Rush (24-48 Hrs.)*
Date/Time St	Seal/Lock Opened By: Date/Time	Date/Time	Date Results Requested: Additional Charges Will Apply
Sample Matrix NC D SC D TEMP:	Comments:		
NPDES			
OSTU			

Copy 2 - Client Copy Copy 1- AL Files Original - AL Files

Tel: 704-875-9092 Fax: 704-875-9091

July 02, 1999

Mr. Troy Whisenant Duke Power 13339 Hagers Ferry Road Huntersville, NC 28078

RE: Pace Project Number: 926937

Client Project ID: 99-JUN-0042

Dear Mr. Whisenant:

all Howard

Enclosed are the results of analyses for sample(s) received by the laboratory on June 18, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

For Ron Kerr Project Manager

Enclosures

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 1

Duke Power

13339 Hagers Ferry Road Huntersville, NC 28078

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Attn: Mr. Troy Whisenant Phone: (704)875-5204

Solid results are reported on a wet weight basis

Pace Sample No:

92503226

Date Collected:

06/16/99

Matrix: Water

Client Sample ID:

MW-1 / 4009

Date Received:

06/18/99

Parameters

Results

0.016

Units

PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide, Total, Water

Cyanide

Method: EPA 335.3 mg/l

0.002

06/25/99 TTB

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 2

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503234

Date Collected:

06/16/99

Matrix: Water

Client Sample ID:

Date Received:

06/18/99

Parameters

MW-2 / 4010

Results

0.012

PRL

0.002

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Method: EPA 335.3

Units

mg/l

06/25/99 TTB

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 3

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503242

Date Collected:

06/15/99

Matrix: Water

Client Sample ID:

MW-3 / 4011

Date Received:

06/18/99

Parameters

Units

PRL

0.002

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Results

0.012

Method: EPA 335.3

mg/l

06/25/99 TTB

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 4

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503325

Date Collected:

06/17/99

Matrix: Water

Client Sample ID:

MW-4 / 4012

Date Received:

06/18/99

Parameters

Results

Units

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide, Total, Water

Method: EPA 335.3

Prep Method: EPA 335.3

Cyanide

ND

mg/l

0.002

PRL

06/25/99 TTB

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 5

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503341

Date Collected:

06/14/99

Matrix: Water

Client Sample ID:

MW-5 / 4013

Date Received:

06/18/99

Parameters

Results

PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide, Total, Water

Method: EPA 335.3

Units

Prep Method: EPA 335.3

Cyanide

ND

mg/1 0.002 06/22/99 AST

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 6

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503408

Date Collected:

06/15/99

Matrix: Water

Client Sample ID:

MW-7 / 4014

Date Received:

06/18/99

Parameters

Results

Units

PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide, Total, Water

Method: EPA 335.3

06/22/99 AST

Prep Method: EPA 335.3

Cyanide

0.012

mg/1 0.002

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 7

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503440

Date Collected:

06/16/99

Matrix: Water

Client Sample ID:

MW-6 / 4015

Date Received:

06/18/99

Parameters

Results

Units PRL Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide, Total, Water

Method: EPA 335.3

Prep Method: EPA 335.3

Cyanide

ND

mg/l

0.002

06/25/99 TTB

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 8

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503481

Date Collected:

PRL

mg/1 0.01

06/15/99

Matrix: Water

Client Sample ID:

MW-8 / 4016

Date Received:

06/18/99

Parameters

Results

0.22

Units

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Method: EPA 335.3

Prep Method: EPA 335.3

06/22/99 AST 57-12-5

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 9

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503515

Date Collected:

06/15/99

Matrix: Water

Client Sample ID:

MW-9/ 4017

Date Received:

06/18/99

Parameters

Results

Units

PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

0.0051

Method: EPA 335.3

mg/1

0.002

06/22/99 AST

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99 PAGE: 10

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503549

Date Collected:

06/15/99

Client Sample ID:

MW-10 / 4018

Date Received:

06/18/99

Matrix: Water

Parameters

Units

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide, Total, Water

Method: EPA 335.3

Prep Method: EPA 335.3

Cyanide

ND

Results

mg/1

0.002

PRL

06/22/99 AST

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 11

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503556

Date Collected:

06/15/99

Client Sample ID:

MW-11 / 4019

Date Received:

06/18/99

Matrix: Water

Parameters

Units

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide, Total, Water

Method: EPA 335.3

Prep Method: EPA 335.3

Cyanide

0.0031

Results

mg/1

0.002

06/22/99 AST

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99 PAGE: 12

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503564

Date Collected:

06/15/99

Matrix: Water

Client Sample ID:

MW-12 / 4020

Date Received:

06/18/99

Parameters

Results

PRL Units

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide, Total, Water

Method: EPA 335.3

Prep Method: EPA 335.3

Cyanide

0.0088

mg/l

0.002

06/22/99 AST

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 13

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503580

Date Collected:

06/15/99

Analyzed Analyst CAS#

Matrix: Water

Client Sample ID:

MW-13 / 4021

Date Received:

06/18/99

Parameters

Results

Units PRL

Footnotes

Wet Chemistry

Cyanide, Total, Water

Method: EPA 335.3

Prep Method: EPA 335.3

Cyanide

ND

mg/l

0.002

06/22/99 AST

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 14

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503606

Date Collected:

06/15/99

Matrix: Water

Client Sample ID:

MW-14 / 4022

Date Received:

06/18/99

Parameters

Results

Units PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

ND

Method: EPA 335.3 mg/1

0.002

06/22/99 AST

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99 PAGE: 15

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503614

Date Collected:

06/15/99

Client Sample ID:

MW-15 / 4023

Date Received:

06/18/99

Matrix: Water

Parameters

Results

0.0052

PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Method: EPA 335.3

Units

mg/l 0.002

06/22/99 AST

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99 PAGE: 16

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503630

Date Collected:

06/16/99

Client Sample ID:

MW-16 / 4024

Date Received:

06/18/99

Matrix: Water

Parameters

Results

PRL Units

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

0.071

Method: EPA 335.3

mg/1 0.004

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 17

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503655

Date Collected:

06/15/99

Client Sample ID:

MW-17 / 4025

Date Received:

06/18/99

Matrix: Water

Parameters

Results

Units

PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide, Total, Water

Method: EPA 335.3

Prep Method: EPA 335.3

Cyanide

0.044

mg/l

0.002

06/22/99 AST

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 18

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503671

Date Collected:

06/16/99

Client Sample ID:

MW-18 / 4026

Date Received:

06/18/99

Matrix: Water

Parameters

Results

0.0057

PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Method: EPA 335.3 mg/l

Units

0.002

06/25/99 TTB

Prep Method: EPA 335.3 57-12-5

Laboratory Certification IDs NC Wastewater 12 NC Drinking Water 37706

99006

SC

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 19

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503713

Date Collected:

06/16/99

Matrix: Water

Client Sample ID:

MW-19 / 4027

Date Received:

06/18/99

Parameters

Results

0.017

Units PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Method: EPA 335.3

0.002 mg/l

06/25/99 TTB

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99 PAGE: 20

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503721

Date Collected:

06/15/99

Analyzed Analyst CAS#

Matrix: Water

Client Sample ID:

MW-20 / 4028

Date Received:

06/18/99

Parameters

Results

0.0031

PRL

0.002

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Method: EPA 335.3

mg/l

Units

06/22/99 AST

Prep Method: EPA 335.3

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99 PAGE: 21

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503739

Date Collected:

06/16/99

Matrix: Water

Client Sample ID:

MW-21 / 4035

Date Received:

06/18/99

Parameters

Results

0.0094

PRL Units

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Method: EPA 335.3

mg/1 0.002

06/25/99 TTB

Prep Method: EPA 335.3 57-12-5

Laboratory Certification IDs NC Wastewater 12 NC Drinking Water 37706 SC 99006

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 22

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503747

Date Collected:

0.002

06/14/99

Matrix: Water

Client Sample ID:

MW-22 / 4036

Date Received:

06/18/99

Parameters

Results

ND

Units

PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Method: EPA 335.3

mg/l

06/22/99 AST

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 23

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503754

Date Collected:

06/14/99

Matrix: Water

Client Sample ID:

MW-24 / 4037

Date Received:

06/18/99

Parameters

Results

ND

Units

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Method: EPA 335.3

mg/l

0.002

PRL

06/22/99 AST

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 24

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503762

Date Collected:

06/14/99

Matrix: Water

Client Sample ID:

MW-23 / 4038

Date Received:

06/18/99

Parameters

Results

PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide, Total, Water

Method: EPA 335.3

mg/l

Units

Prep Method: EPA 335.3

Cyanide

ND

0.002

06/22/99 AST

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99 PAGE: 25

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No: Client Sample ID: 92503770

Date Collected:

06/15/99

Matrix: Water

Parameters

MW-25 / 4039

Date Received:

06/18/99

Results

Units

PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide, Total, Water

Method: EPA 335.3

Prep Method: EPA 335.3

Cyanide

ND

mg/l

0.002

06/22/99 AST

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 26

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503788

Date Collected:

06/17/99

Matrix: Water

Client Sample ID:

SW-1 / 4040

Date Received:

06/18/99

Parameters

Results

ND

Units PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Method: EPA 335.3

mg/l

0.002

06/25/99 TTB

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 27

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503838

Date Collected:

06/17/99

Matrix: Water

Client Sample ID:

SW-2 / 4041

Date Received:

06/18/99

Parameters

PRL

0.002

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide, Total. Water

Method: EPA 335.3

Prep Method: EPA 335.3

Cyanide

ND

Results

mg/l

Units

06/25/99 TTB

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 28

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503846

Date Collected:

06/17/99

Matrix: Water

Client Sample ID:

SW-3 / 4042

Date Received:

06/18/99

Parameters

Results

ND

Units PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Method: EPA 335.3 mg/l

0.002

06/25/99 TTB

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 29

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503853

Date Collected:

06/17/99

Client Sample ID:

SW-4 / 4043

Date Received:

06/18/99

Matrix: Water

Parameters

Results

ND

Units

PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Method: EPA 335.3

mg/l

0.002

06/25/99 TTB

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99 PAGE: 30

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503861

Date Collected:

06/17/99

Matrix: Water

Client Sample ID:

SW-5 / 4046

Date Received:

06/18/99

Parameters

Units

PRL

0.002

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Results

0.011

Method: EPA 335.3 mg/l

06/30/99 DJD

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 31

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503879

Date Collected:

06/17/99

Matrix: Water

Client Sample ID:

SW-7 / 4047

Date Received:

06/18/99

Parameters

Results

0.0038

Units PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Method: EPA 335.3

mg/l

0.002

06/30/99 DJD

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 32

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503887

Date Collected:

06/17/99

Client Sample ID:

SW-8 / 4048

Date Received:

06/18/99

Matrix: Water

Parameters

Results

Units

PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

0.0043

Method: EPA 335.3 mg/l

0.002

06/30/99 DJD

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 33

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503895

Date Collected:

06/17/99

Matrix: Water

Client Sample ID:

SW-9 / 4049

Date Received:

06/18/99

Parameters

Results

PRL Units

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Method: EPA 335.3

0.0033

mg/l 0.002

06/30/99 DJD

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 34

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503903

Date Collected:

06/17/99

Matrix: Water

Client Sample ID:

SW-10 / 4050

Date Received:

06/18/99

Parameters

Results

PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

0.0033

Method: EPA 335.3 mg/l

Units

0.002

06/30/99 DJD

Pace Analytical Services, Inc. 9800 Kincey Avenue. Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 35

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503911

Date Collected:

06/17/99

Matrix: Water

Client Sample ID:

FIELD BLANK/4052

Date Received:

06/18/99

Parameters

Results

PRL

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

ND

Method: EPA 335.3 mg/l

Units

0.002

06/30/99 DJD

Prep Method: EPA 335.3 57-12-5

Laboratory Certification (Ds

90090

213

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 36

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Pace Sample No:

92503929

Date Collected:

06/15/99

Matrix: Water

Client Sample ID:

MW-3D / 4057

Date Received:

06/18/99

Parameters

Results

0.0021

Units

PRL

0.002

Analyzed Analyst CAS#

Footnotes

Wet Chemistry

Cyanide

Cyanide, Total, Water

Method: EPA 335.3 mg/1

06/22/99 AST

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99 PAGE: 37

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

PARAMETER FOOTNOTES

ND Not Detected
NC Not Calculable
PRL Pace Reporting Limit

> Tel: 704-875-9092 Fax: 704-875-9091

QUALITY CONTROL DATA

DATE: 07/02/99

PAGE: 38

Duke Power

13339 Hagers Ferry Road Huntersville, NC 28078

Pace Project Number: 926937

Client Project ID: 99-JUN-0042

Attn: Mr. Troy Whisenant Phone: (704)875-5204

QC Batch ID: 14100

Analysis Method: EPA 335.3

QC Batch Method: EPA 335.3

Analysis Description: Cyanide, Total, Water

Associated Pace Samples:

92503341

92503747 92503754 92503762

METHOD BLANK: 92504554

Associated Pace Samples:

92503341

92503747

92503754

92503762

Method B1ank

Units

Result

PRL

Footnotes

<u>P</u>arameter anide

mg/l

0.002

MATRIX SPIKE: 92504588

Units

Spike

Spike

Spike

Parameter

92499540 Conc.

Result

* Rec Footnotes

Cyanide

mg/l

0.00001300 0.0200

0.01146

Matrix

57.2 1

LABORATORY CONTROL SAMPLE: 92504562

Parameter

Units

LCS

Result

Spike * Rec Footnotes

Cyanide

mg/1

0.0200 0.01871

93.5

SAMPLE DUPLICATE: 92504570

Parameter

Units

92499490

Dup. Result

RPD

Footnotes

Cyanide

mg/1

Spike

Conc

ND

NC

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

QUALITY CONTROL DATA

DATE: 07/02/99

PAGE: 39

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

SAMPLE DUPLICATE: 92504596					
			Dup.		
Parameter	Units	92499847	Result	RPD	Footnotes
•••••				• • • • •	
Cyanide	mg/1	ND	ND	NC	

> Tel: 704-875-9092 Fax: 704-875-9091

QUALITY CONTROL DATA

DATE: 07/02/99 PAGE: 40

Duke Power

13339 Hagers Ferry Road Huntersville, NC 28078

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Attn: Mr. Troy Whisenant Phone: (704)875-5204

QC Batch ID: 14115

Analysis Method: EPA 335.3

Associated Pace Samples:

QC Batch Method: EPA 335.3

92503408 92503481

92503580

92503515

92503549

Analysis Description: Cyanide, Total, Water 92503556

> 92503606 92503614

92503655

92503721 92503770

92503564

92503929

METHOD BLANK: 92505171 Associated Pace Samples:

92503408 92503606

Units

92503481 92503614 92503515 92503655 92503549 92503721 92503556 92503770

92503564 92503929 92503580

Method

B1ank

Result

Parameter

PRL

Footnotes

Cyanide

mg/1

ND

Spike

Conc.

0.002

MATRIX SPIKE: 92505189

Units

92504802

Spike Conc.

Matrix Spike Result

Spike

★ Rec Footnotes

Cyanide

Parameter

mg/1

0.0009880 0.0200

0.0006290 -1.80 1

LABORATORY CONTROL SAMPLE: 92505197

Parameter

Units

LCS Result Spike

* Rec Footnotes

Cyanide

mg/1

0.0200 0.01601

80.0

SAMPLE DUPLICATE: 92505205

Units

92503408

Dup. Result

RPD

6

Footnotes

yani de

mg/1

Parameter

0.01200

0.01200

Laboratory Certification IDs NC Wastewater 12 **NC Drinking Water** 37706 SC

99006

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc. Laboratory Certification IDs KY Drinking Water 90090 TN UST List VA Drinking Water 213

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

QUALITY CONTROL DATA

DATE: 07/02/99

PAGE: 41

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

SAMPLE DUPLICATE: 92505213					
			Dup.		
Parameter	Units	92503929	Result	RPD	Footnotes
Cyanide	mg/l	0.002100	0.002800	29	

> Tel: 704-875-9092 Fax: 704-875-9091

QUALITY CONTROL DATA

DATE: 07/02/99

PAGE: 42

Duke Power

13339 Hagers Ferry Road Huntersville, NC 28078

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

Attn: Mr. Troy Whisenant Phone: (704)875-5204

QC Batch ID: 14262

Analysis Method: EPA 335.3 Associated Pace Samples:

92503226

92503671

QC Batch Method: EPA 335.3

Analysis Description: Cyanide, Total, Water 92503234

92503242 92503739

92503440

92503630

METHOD BLANK: 92511559

Associated Pace Samples:

92503226 92503739

92503234

92503242

92503440

92503630

92503671

92503713

arameter

Units

Blank Result

Method

92503713

PRL

Footnotes

Cyanide

mg/l

ND

0.002

MATRIX SPIKE: 92511567

Units

Spike

Matrix Spike Spike

Result

★ Rec Footnotes

Cyanide

Parameter

mg/l

92510395 Conc.

0.002481

Spike

Conc.

0.0200 0.01480 61.6 1

LABORATORY CONTROL SAMPLE: 92511575

Parameter

Units

LCS

Result

Spike

Cyanide

mq/l

0.0200 0.01986

99.3

SAMPLE DUPLICATE: 92511583

Units

99006

Dup. 92502137

Result

RPD

* Rec Footnotes

Footnotes

Cyanide

SC

Parameter

mg/l

0.005700

0.005600

Laboratory Certification IDs **NC Wastewater** 12 NC Drinking Water 37706

REPORT OF LABORATORY ANALYSIS

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 43

OUALITY CONTROL DATA

Pace Project Number: 926937

Client Project ID: 99-JUN-0042

Attn: Mr. Troy Whisenant Phone: (704)875-5204

13339 Hagers Ferry Road

Huntersville, NC 28078

QC Batch ID: 14276

Duke Power

Associated Pace Samples:

Analysis Method: EPA 335.3

QC Batch Method: EPA 335.3

Analysis Description: Cyanide, Total. Water

92503325

92503788

92503838

92503846

92503853

METHOD BLANK: 92512078 Associated Pace Samples: 92503325 92503846 92503788 92503838 92503853 Method **Blank** Parameter Units Result PRI **Footnotes** yanide mg/l 0.002 ND

MATRIX SPIKE: 92512086 Matrix Spike Spike Spike Parameter Units 92501865 Conc. Result ★ Rec Footnotes

Cyanide mg/1 0.002960 0.0200 0.02192 94.8

LABORATORY CONTROL SAMPLE: 92512094

Parameter Units

Spike Conc. Spike

* Rec Footnotes

Cyanide mg/l 0.0200 0.01974 98.7

SAMPLE DUPLICATE: 92512102

Units

92503275

ND

Dup. Result

ND

RPD

Footnotes

Cyanide

mg/l

LCS

Result

NC

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

QUALITY CONTROL DATA

DATE: 07/02/99

PAGE: 44

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

SAMPLE DUPLICATE: 92512110					
			Dup.		
Parameter	Units	92503788	Result	RPD	Footnotes
•••••				• • • • •	
Cyanide	mq/l	ND	ND	NC	

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99

PAGE: 45

QUALITY CONTROL DATA

Duke Power

13339 Hagers Ferry Road Huntersville, NC 28078

Pace Project Number: 926937

Client Project ID: 99-JUN-0042

Attn: Mr. Troy Whisenant Phone: (704)875-5204

QC Batch ID: 14481

Analysis Method: EPA 335.3 Associated Pace Samples:

92503861

QC Batch Method: EPA 335.3

Analysis Description: Cyanide, Total, Water

92503879 92503887 92503895 92503903

92503911

METHOD BLANK: 92518364

Associated Pace Samples:

rameter

92503861 92503879 92503887 92503895 92503903 92503911

Method

B1ank

Result PRL

Footnotes

Cyanide mg/1ND 0.002

Units

MATRIX SPIKE: 92518372 Matrix

Spike Spike Spike Parameter Units 92503861 * Rec Footnotes Conc. Result

Cyanide mg/1 0.01074 0.0200 0.02867 89.6

LABORATORY CONTROL SAMPLE: 92518398

Spike LCS Spike Parameter Units

Conc. Result * Rec Footnotes

Cyanide mg/10.0200 0.01827 91.3

LABORATORY CONTROL SAMPLE: 92518414

Spike LCS Spike

Parameter Units Conc. Result ★ Rec Footnotes

Cyanide 0.0200 0.01859 mg/193.0

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

QUALITY CONTROL DATA

DATE: 07/02/99

PAGE: 46

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

SAMPLE DUPLICATE: 92518380			·	·	
Parameter	Units	92503861	Dup. Result	RPD	Footnotes
Cyanide	mg/l	0.01100	0.01100	2	*****
SAMPLE DUPLICATE: 92518406			<u>,</u>		
Parameter	Units	92515741	Dup. Result	RPD	Footnotes
Cyanide	mg/1	0.002400	ND	NC	

Pace Analytical Services, Inc. 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

> Tel: 704-875-9092 Fax: 704-875-9091

DATE: 07/02/99 PAGE: 47

Pace Project Number: 926937 Client Project ID: 99-JUN-0042

QUALITY CONTROL DATA PARAMETER FOOTNOTES

Consistent with EPA guidelines unrounded concentrations are displayed and have been used to calculate % Rec and RPD values.

ND Not Detected
NC Not Calculable
PRL Pace Reporting Limit
RPD Relative Percent Difference

[1] The spike recovery was outside acceptance limits for the MS and /or MSD due to matrix interference. The LCS and/or

LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM brm 89962 (9-97) Previously Form 35226 Container Type: (Glass (Wastic 13 **Duke Power's Analytical Laboratory** LAB USE® MNS Bldg. # 7405 (MG03A2) CIMS # 00-FEB-0188 Sample Class M6P Preservative Added14 13339 Hagers Ferry Road Huntersville, NC 28078 HNO₃ Logged By (Ini.) Time Phone: (704) 875-5209/875-52451 Date **Vendored Samples** H₂SO₄ Fax: (704) 875-5038 0758 02/11/00 CONTAINERS" lce VV CLIENT : TIM HOUSINGER Report to/Ph. TIM HUNGERER Vendor Analysis Other Project Name: BRANLETTE MGP Mail Code: MGC3A3 None Business Unit*: Resp. Center To: 0899 Analysis Required¹⁵ Project IDs: MGPBRAM P.O. # (2017) Vendor 8260 (WATER) Activity ID6:_____ Ē Process7: COMP" 82.70 TOTAL Collection Information¹² 8260 GRAB16 Lab Sample Description Sample #8 PROFS #10 or ID" Time Signature Date 3-4- deep 2000 3973 HA# 1 2/0/20 0945 (WATER) 3/10/00 1030" MW-3D-DRUM 2000 3974 Turnaround Requested21 Accepted Bx: Date/Time Date/Time Relinquished/by/ Routine (2 weeks) 02/11/00 8700 Hamse 2/1/00 @ 0650 ☑ Rush (1 week) Accepted By: Date/Time Date/Time Relinquished by: ☐ Emergency Rush (24-48 Hrs.)* Date Results Requested: Seal/Lock Opened By: Date/Time Seal/Locked by20 Date/Time *Additional Charges Will Apply Sample Matrix²² NC Ø SC □ TEMP:²³

Original - AL Files²⁵

RCRA Waste
Other

Ground Water

Drinking Water

Copy 1- AL Files

3,30

NPDES Q

UST 🗅

Copy 2 - Client Copy

Comments:24

See Instructions on the back of this form.



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

> Phone: 704-875-5209 Fax: 704-875-5038

But the state of t ting the state of

20003973 Job #: 00-FEB-0188 Customer ID: TIM HUNSUCKER Sample ID #:

BRAMLETT HA #1-SOIL Sample Description:

Site: BRAMLETT ST Collection Date: 2/10/00 Type of Sample: SOIL

SVOC IN SOIL BY (GC/MS - 8270
-------------------	--------------

Test Code: MS8270_S	Test	Metho	od: SW-84	6 8270		Analyst: RGW7794
		Resu	ılt	Reportir	ng Limit	Flag
Pyridine	<	130	mg/Kg	130	mg/Kg	1
n-Nitrosodimethylamine	<	130	mg/Kg	130	mg/Kg	1
Aniline	<	130	mg/Kg	130	mg/Kg	1
Phenol	<	130	mg/Kg	130	mg/Kg	1
bis(2-Chloroethyl)ether	<	130	mg/Kg	130	mg/Kg	1
2-Chlorophenol	<	130	mg/Kg	130	mg/Kg	1
1,3-Dichlorobenzene	<	130	mg/Kg	130	mg/Kg	1
1,4-Dichlorobenzene	<	130	mg/Kg	130	mg/Kg	1
Benzyl alcohol	<	130	mg/Kg	130	mg/Kg	1
1,2-Dichlorobenzene	<	130	mg/Kg	130	mg/Kg	1
2-Methylphenol	<	130	mg/Kg	130	mg/Kg	1
bis(2-Chloroisopropyl)ether	<	130	mg/Kg	130	mg/Kg	1
4-Methylphenol	<	130	mg/Kg	130	mg/Kg	1
Hexachloroethane	<	130	mg/Kg	130	mg/Kg	1
n-Nitrosodi-n-propylamine	<	130	mg/Kg	130	mg/Kg	1
Nitrobenzene	<	130	mg/Kg	130	mg/Kg	1
Isophorone	<	130	mg/Kg	130	mg/Kg	1
2-Nitrophenol	<	130	mg/Kg	130	mg/Kg	1
2,4-Dimethylphenol	<	130	mg/Kg	130	mg/Kg	1
bis(2-Chloroethoxy)methane	<	130	mg/Kg	130	mg/Kg	1
2,4-Dichlorophenol	<	130	mg/Kg	130	mg/Kg	1
Benzoic acid	<	130	mg/Kg	130	mg/Kg	1
1,2,4-Trichlorobenzene	<	130	mg/Kg	130	mg/Kg	1
Naphthalene		660	mg/Kg	130	mg/Kg	1
4-Chloroaniline	<	130	mg/Kg	130	mg/Kg	1
Hexachlorobutadiene	<	130	mg/Kg	130	mg/Kg	1
4-Chloro-3-methylphenol	<	130	mg/Kg	130	mg/Kg	1
2-Methylnaphthalene		240	mg/Kg	130	mg/Kg	1
Hexachlorocyclopentadiene	<	130	mg/Kg	130	mg/Kg	1
2,4,6-Trichlorophenol	<	130	mg/Kg	130	mg/Kg	1
2,4,5-Trichlorophenol	<	130	mg/Kg	130	mg/Kg	1
2-Chloronaphthalene	•	130	mg/Kg	130	mg/Kg	1
2-Nitroaniline	•	130	mg/Kg	130	mg/Kg	1
Dimethylphthalate	•	130	mg/Kg	130	mg/Kg	1
Acenaphthylene		140	mg/Kg	130	mg/Kg	1
2,6-Dinitrotoluene	•	130	mg/Kg	130	mg/Kg	1
3-Nitroaniline	•	130	mg/Kg	130	mg/Kg	1
Acenaphthene	•	130	mg/Kg	130	mg/Kg	1
2,4-Dinitrophenol	•	130	mg/Kg	130	mg/Kg	1
4-Nitrophenol	•	130	mg/Kg	130	mg/Kg	1



Duke Power's Analytical Laboratory

Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample ID #:

20003973

Job #: 00-FEB-0188

Customer ID: TIM HUNSUCKER

Sample Description:

BRAMLETT HA #1-SOIL

Collection Date: 2/10/00

Site: BRAMLETT ST

Type of Sample: SOIL

SVOC	IN	SOIL	. BY GC	/MS - 8270

Test Code: MS8270_S	Test Me	thod: SW-846 8	270		Analyst:	RGW7794
	Re	esult	Reportin	g Limit	_Flag_	
Dibenzofuran	13	30 mg/Kg	130	mg/Kg	1	
2,4-Dinitrotoluene	< 13	30 mg/Kg	130	mg/Kg	1	
Diethylphthalate	< 13	30 mg/Kg	130	mg/Kg	1	
Fluorene	19	90 mg/Kg	130	mg/Kg	1	
4-Chlorophenylphenylether	< 13	30 mg/Kg	130	mg/Kg	1	
4-Nitroaniline	< 13	30 mg/Kg	130	mg/Kg	1	
2-Methyl-4,6-dinitrophenol	< 13	30 mg/Kg	130	mg/Kg	1	
n-Nitrosodiphenylamine	< 10	30 mg/Kg	130	mg/Kg	1	
1,2-Diphenylhydrazine	< 1:	30 mg/Kg	130	mg/Kg	1	
4-Bromophenylphenylether	< 1:	30 mg/Kg	130	mg/Kg	1	
Hexachlorobenzene	< 1:	30 mg/Kg	130	mg/Kg	1	
Pentachlorophenol	< 1:	30 mg/Kg	130	mg/Kg	1	
Phenanthrene Phena	6	00 mg/Kg	130	mg/Kg	1	
Anthracene	1:	90 mg/Kg	130	mg/Kg	1	
di-n-Butylphthalate	< 1	30 mg/Kg	130	mg/Kg	1	
Fluoranthene	3	40 mg/Kg	130	mg/Kg	1	
Benzidine	< 6	30 mg/Kg	630	mg/Kg	1	
Pyrene	3	40 mg/Kg	130	mg/Kg	1	
Butylbenzylphthalate	< 1	30 mg/Kg	130	mg/Kg	1	
3,3-Dichlorobenzidine	< 1	30 mg/Kg	130	mg/Kg	1	
Benzo(a)anthracene	1	40 mg/Kg	130	mg/Kg	1	
Chrysene	1	40 mg/Kg	130	mg/Kg	1	
bis(2-Ethylhexyl)phthalate	< 1	30 mg/Kg	130	mg/Kg	1	
di-n-Octylphthalate	< 1	30 mg/Kg	130	mg/Kg	1	
Benzo(b)fluoranthene	< 1	30 mg/Kg	130	mg/Kg	1	
Benzo(k)fluoranthene	2	:00 mg/Kg	130	mg/Kg	1	
Benzo(a)pyrene	1	30 mg/Kg	130	mg/Kg	1	
Indeno(1,2,3-c,d)pyrene		75 mg/Kg	38	mg/Kg	1	
Dibenzo(a,h)anthracene	< 1	130 mg/Kg	130	mg/Kg	1	
Benzo(g,h,i)perylene		41 mg/Kg	38	mg/Kg	1	

VOC IN SOIL BY GC/MS - 8260

Test Code: MS8260_S	Test Method: SW-846	Analyst: MAO125C	
	Result	Reporting Limit	_Flag_
Dichlorodifluoromethane	< 550 ug/Kg	550 ug/Kg	1
Chloromethane	< 550 ug/Kg	550 ug/Kg	1
Vinyl chloride	< 550 ug/Kg	550 ug/Kg	1
Bromomethane	< 550 ug/Kg	550 ug/Kg	1
Chloroethane	< 550 ug/Kg	550 ug/Kg	1



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248
South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

SECTION OF THE PROPERTY OF THE CONTRACTOR STANDARD STANDARD STANDARD

20003973 Customer ID: TIM HUNSUCKER Sample ID #: Job #: 00-FEB-0188

BRAMLETT HA #1-SOIL Sample Description:

Type of Sample: SOIL Site: BRAMLETT ST Collection Date: 2/10/00

VOC IN SOIL BY GC/MS - 8260

Test Code: MS8260_S	Test Method: SW-846 8	3260A	Analyst: MAO125C
	Result	Reporting Limit	Flag
Trichlorofluoromethane	< 550 ug/Kg	550 ug/Kg	1
Acrolein	< 550 ug/Kg	550 ug/Kg	1
1,1-Dichloroethene	< 550 ug/Kg	550 ug/Kg	• 1
1,1,2-Trichloro-1,2,2-Trifluoroethane	< 550 ug/Kg	550 ug/Kg	1
Acetone	< 550 ug/Kg	550 ug/Kg	1
Methyl iodide	< 550 ug/Kg	550 ug/Kg	1
Carbon disulfide	< 550 ug/Kg	550 ug/Kg	1
Methylene chloride	< 550 ug/Kg	550´ ug/Kg	1
Acrylonitrile	< 550 ug/Kg	550 ug/Kg	1
MTBE	< 550 ug/Kg	550 ug/Kg	1
trans-1,2-Dichloroethene	< 550 ug/Kg	550 ug/Kg	1
Isopropyl ether	< 550 ug/Kg	550 ug/Kg	1
1,1-Dichloroethane	< 550 ug/Kg	550 ug/Kg	1
Vinyl acetate	< 550 ug/Kg	550 ug/Kg	1
2,2-Dichloropropane	< 550 ug/Kg	550 ug/Kg	1
cis-1,2-Dichloroethene	< 550 ug/Kg	550 ug/Kg	1
2-Butanone	< 550 ug/Kg	550 ug/Kg	1
Chloroform	< 550 ug/Kg	550 ug/Kg	1
1,1-Dichloropropene	< 550 ug/Kg	550 ug/Kg	1
1,1,1-Trichloroethane	< 550 ug/Kg	550 ug/Kg	1
Carbon tetrachloride	< 550 ug/Kg	550 ug/Kg	1
Bromochloromethane	< 550 ug/Kg	550 ug/Kg	1
Benzene	1900 ug/Kg	550 ug/Kg	1
1,2-Dichloroethane	< 550 ug/Kg	550 ug/Kg	1
Trichloroethene	< 550 ug/Kg	550 ug/Kg	1
1,2-Dichloropropane	< 550 ug/Kg	550 ug/Kg	1
Dibromomethane	< 550 ug/Kg	550 ug/Kg	1
Bromodichloromethane	< 550 ug/Kg	550 ug/Kg	1
2-Chloroethyl vinyl ether	< 550 ug/Kg	550 ug/Kg	1
cis-1,3-Dichloropropene	< 550 ug/Kg	550 ug/Kg	1
4-Methyl-2-pentanone (MiBK)	< 550 ug/Kg	550 ug/Kg	1 .
Toluene	6300 ug/Kg	550 ug/Kg	1
trans-1,3-Dichloropropene	< 550 ug/Kg	550 ug/Kg	1
1,1,2-Trichloroethane	< 550 ug/Kg	550 ug/Kg	1
1,3-Dichloropropane	< 550 ug/Kg	550 ug/Kg	1
Tetrachloroethene	< 550 ug/Kg	550 ug/Kg	1
2-Hexanone	< 550 ug/Kg	550 ug/Kg	1
Dibromochloromethane	< 550 ug/Kg	550 ug/Kg	1
1,2-Dibromoethane (EDB)	< 550 ug/Kg	550 ug/Kg	1
Chlorobenzene	< 550 ug/Kg	550 ug/Kg	1



Duke Power's Analytical Laboratory

Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

> Phone: 704-875-5209 Fax: 704-875-5038

Contraction of the Contraction o Sample ID #: 20003973 Job #: 00-FEB-0188

Customer ID: TIM HUNSUCKER

BRAMLETT HA #1-SOIL Sample Description:

VOC IN SOIL BY GC/MS - 8260

n-Butylbenzene

1,2-Dichlorobenzene

1,2-Dibromo-3-chloropropane

1,2,4-Trichlorobenzene

Hexachlorobutadiene

Naphthalene

Site: BRAMLETT ST Collection Date: 2/10/00 Type of Sample: SOIL

550

550

550

550

550

550

ug/Kg

ug/Kg

ug/Kg

ug/Kg

ug/Kg

ug/Kg

1

1

2

Test Code: MS8260_S	Test Method: 5	SW-846 8260A	Ana	lyst: MAO1250
	Result	Reporting	Limit Flag	
Isopropylbenzene	< 550 ug/K	g · 550	ug/Kg 1	
1,1,1,2-tetrachloroethane	< 550 ug/K	g 550	ug/Kg 1	
Ethylbenzene	3000 ug/K	g 550	ug/Kg 1	
m-p-Xyiene	12000 ug/K	g 1100	ug/Kg 1	
o-Xylene	5400 ug/K	g 550	ug/Kg 1	
Styrene	2200 ug/K	g 550	ug/Kg 1	
Bromoform	< 550 ug/K	g 550	ug/Kg 1	
1,4-Dichlorobutane	< 550 ug/K	g 550	ug/Kg 1	
1,1,2,2-Tetrachloroethane	< 550 ug/K	g 550	ug/Kg 1	
1,2,3-Trichloropropane	< 550 ug/K	g 550	ug/Kg 1	
n-Propyl benzene	< 550 ug/K	g 550	ug/Kg 1	
Bromobenzene	< 550 ug/K	g 550	ug/Kg 1	
1,3,5-trimethylbenzene	3700 ug/K	g 550	ug/Kg 1	
2-Chlorotoluene	< 550 ug/K	ig 550	ug/Kg 1	
4-Chlorotoluene	< 550 ug/K	ig 550	ug/Kg 1	
t-Butylbenzene	< 550 ug/k	(g 550	ug/Kg 1	
1,2,4-Trimethylbenzene	11000 ug/K	(g 550	ug/Kg 1	
sec-Butylbenzene	< 550 ug/k	(g 550	ug/Kg 1	
p-lsopropyitoluene	< 550 ug/k	(g 550	ug/Kg 1	
1,3-Dichlorobenzene	< 550 ug/k	(g 550	ug/Kg 1	
1,4-Dichlorobenzene	< 550 ug/k	(g 550	ug/Kg 1	

ug/Kg

ug/Kg

550 ug/Kg

550 ug/Kg

550 ug/Kg

240000 ug/Kg

550



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209

Fax: 704-875-5038

THE TOTAL OF THE SECOND PARTY OF THE LANGUE AND THE SERVICE OF THE SERVIC

Sample ID #:

20003973

Job #: 00-FEB-0188

Customer ID: TIM HUNSUCKER

Sample Description:

BRAMLETT HA #1-SOIL

Collection Date: 2/10/00

Site: BRAMLETT ST

Type of Sample: SOIL

VOC IN SOIL BY GC/MS - 8260

Test Code: MS8260_S

Test Method: SW-846 8260A

Analyst: MAO125C

Result

Reporting Limit

1,2,3-Trichlorobenzene

< 550 ug/Kg

550 ug/Kg

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

1 - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

6 - Holding Time or Analytical Time exceeded (See Case Narretive for additional information)

Juny Whisenart 2/23/00 Date Reported By, Date



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

> Phone: 704-875-5209 Fax: 704-875-5038

TO PROCEED TO THE PROCESS OF THE PRO

20003974 Sample ID #: Job #: 00-FEB-0188 Customer ID: TIM HUNSUCKER

BRAMLETT MW-3D DRUM-WATER Sample Description:

Collection Date: 2/10/00 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260			
Test Code: MS8260_W	Test Method:	SW-846 8260	Analyst: MAO125C
	Result	Reporting Limit	Flag

resembling.	-200	Allalyst, InAC123C
Result	Reporting Limit	Flag
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/l.	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
< 3.0 ug/L	3.0 ug/L	1
	< 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L < 3.0 ug/L	< 3.0



North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

20003974

Job #: 00-FEB-0188

Customer ID: TIM HUNSUCKER

Sample Description:

Sample ID #:

BRAMLETT MW-3D DRUM-WATER

Collection Date: 2/10/00 Site: BRAMLETT ST

Type of Sample: GROUNDWATER

Ì	VOC	IN	WA	TER	BY	GC/M\$	- 8260

Test Code: MS8260_W	Test Metho	od: SW-8	46 8260		Analyst: (MAO125C
	Resu	ılt	Reportin	g Limit	Flag	
Tetrachloroethene	< 3.0	ug/L	3.0	ug/L	1	
2-Hexanone	< 3.0	ug/L	3.0	ug/L	1	
Dibromochloromethane	< 3.0	ug/L	3.0	ug/L	1	
1,2-Dibromoethane (EDB)	< 3.0	ug/L	3.0	ug/L	1	
Chlorobenzene	< 3.0	ug/L	3.0	ug/L	1	
Isopropylbenzene	< 3.0	ug/L	3.0	ug/L	1	
1,1,1,2-tetrachioroethane	< 3.0	ug/L	3.0	ug/L	1	
Ethylbenzene	2.7	ug/L	3.0	ug/L	2	
m-p-Xylene	11	ug/L	6.0	ug/L	1	
o-Xylene	7.5	ug/L	3.0	ug/L	1	
Styrene	< 3.0	ug/L	3.0	ug/L	1	
Bromoform	< 3.0	ug/L	3.0	ug/L	1	
1,4-Dichlorobutane	< 3.0	ug/L	3.0	ug/L	1	
1,1,2,2-Tetrachloroethane	< 3.0	ug/L	3.0	ug/L	1	
1,2,3-Trichloropropane	< 3.0	ug/L	3.0	ug/L	1	
n-Propyl benzene	< 3.0	ug/L	3.0	ug/L	1	
Bromobenzene	< 3.0	ug/L	3.0	ug/L	1	
1,3,5-trimethylbenzene	5.1	ug/L	3.0	ug/L	1	
2-Chlorotoluene	< 3.0	ug/L	3.0	ug/L	1	
4-Chlorotoluene	< 3.0	ug/L	3.0	ug/L	1	
t-Butylbenzene	< 3.0	ug/L	3.0	ug/L	1	
1,2,4-Trimethylbenzene	11	ug/L	3.0	ug/L	1	
sec-Butylbenzene	< 3.0	ug/L	3.0	ug/L	1	
p-Isopropyltoluene	< 3.0	ug/L	3.0	ug/L	1	
1,3-Dichlorobenzene	< 3.0	ug/L	3.0	ug/L	1	
1,4-Dichlorobenzene	< 3.0	ug/L	3.0	ug/L	1	
n-Butylbenzene	< 3.0	ug/L	3.0	ug/L	1	
1,2-Dichlorobenzene	< 3.0	ug/L	3.0	ug/L	1	
1,2-Dibromo-3-chloropropane	< 3.0	ug/L	3.0	ug/L	1	
1,2,4-Trichlorobenzene	< 3.0	ug/L	3.0	ug/L	1	
Hexachlorobutadiene	< 3.0	ug/L	3.0	ug/L	1	
Naphthalene Naphthalene	180	ug/L	3.0	ug/L	1	



Duke Power's Analytical Laboratory

Group Environment, Health and Safety

North Carolina Department of Environment and Natural Resources (DENR) Certification # 248 South Carolina Department of Health and Environmental Control (DHEC) Laboratory Identification # 99005

Phone: 704-875-5209 Fax: 704-875-5038

Sample Description: BRAMLETT MW-3D DRUM-WATER

Collection Date: 2/10/00 Site: BRAMLETT ST Type of Sample: GROUNDWATER

VOC IN WATER BY GC/MS - 8260

Test Code: MS8260_W Test Method: SW-846 8260 Analyst: MAO125C

Result Reporting Limit Flag

1,2,3-Trichlorobenzene < 3.0 ug/L 3.0 ug/L 1

Description of Flags:

0 - No Discrepancies Noted

3 - Detected in Blank

I - See Case Narrative

4 - Estimated Concentration also Detected in Blank

2 - Estimated Concentration

5 - For Information Only

6 - Holding Time or Analytical Time exceeded (See Case Narrative for additional information)

> Troy Whisenart 2/23/00 Data Reported By, Date

DATA FILE:: 17FEB08 FIELD ID:: Bramlett HA #1 Soil LAB ID:: 00-FEB-0188

Tentatively Identified Compound Report

	Probable	Estimated	Library Match	Retention	l	Identification		
	Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Compound	Weight	(ug/kg)	(%)	(Minutes)	Match	Interpretation	RT	Number
ethenyl toluene		3300	96	21.36	x			
benzofuran		3900	87	21.72	х			
trimethyl benzene		3000	97	22.12	X			
Indane		3100	94	22.52	х			
Indene		34000	96	22.99	×			
methyl benzofuran		2500	90	24.36	×			
methyl benzofuran		8700	87	24.6	х			
unknown		2900		25.54		<u> </u>		
methyl Indene		11000	93	25.67	x			
methyl Indene		9900	91	25.91	x			
benzothiopene		4600	93	27.13	Х			
methyl naphthalene		48000	93	29.26	х			
methyl naphthalene		26000	93	29.55	X			
biphenyl		4700	94	30.49	х			
dimethyl naphthalene		8400	96	31.03	Х			
dimethyl naphthalene		9100	98	31.3	×			
dimethyl naphthalene		5000	96	31.37	х			
dimethyl naphthalene		3900	96	31.75	X			
acenaphthylene		3100	74	32.22	×			

Internal Standard	
	RT
Pentafluorobenzene	9.05
D4-1,4-Difluorobenzene	10.59
Chlorobenzene D-5	16.79
D-4 1,4-Dichlorobenzene	21.91

Surrogates	
	% Recovery
Dibromofluoromethane	99%
Toluene D-8	112%
1,4-Bromofluorobenze	102%

USEPA - 8260 G.C. Conditions 25 m x 0.2 mm x 1.12um / HP-624 He, 0.4 ml/min, 35 C hold 6 mins, 35 C to 180 C @ 6.5 C/min, 180 to 210 C @ 2.5 C/min, hold 3 min

DATA FILE:: 17FEB07 | FIELD ID:: Bramlett MW-3D Drum Water | LAB ID:: 00-FEB-0188

Tentatively Identified Compound Report

Probable	Estimated	Library Match	Retention		Identification		<u> </u>
Molecular	Concentration	Probability	Rime (RT)	Library	Manual		Scan
Weight	(ug/L)	(%)	(Minutes)	Match	Interpretation	RT	Number
	19	93	22.52	Х			
	5.7	76	22.99	Х			
	5.7	91	27.13	х			1
	49	93	29.26	х			·
	49	93	29.55	Х			
	18	98	30.82	х			
	23	98	31.03	X			
	10	74	31.37	x			
			-				
		Molecular (ug/L) Weight (ug/L) 19 5.7 5.7 49 49 18 23	Molecular Weight Concentration (ug/L) Probability (%) 19 93 5.7 76 5.7 91 49 93 49 93 18 98 23 98	Molecular Weight Concentration (ug/L) Probability (%) Rime (RT) (Minutes) 19 93 22.52 5.7 76 22.99 5.7 91 27.13 49 93 29.26 49 93 29.55 18 98 30.82 23 98 31.03	Molecular Weight Concentration (ug/L) Probability (%) Rime (RT) (Minutes) Library Match 19 93 22.52 x 5.7 76 22.99 x 5.7 91 27.13 x 49 93 29.26 x 49 93 29.55 x 18 98 30.82 x 23 98 31.03 x	Molecular Weight Concentration (ug/L) Probability (%) Rime (RT) (Minutes) Library Manual Interpretation 19 93 22.52 x 5.7 76 22.99 x 5.7 91 27.13 x 49 93 29.26 x 49 93 29.55 x 18 98 30.82 x 23 98 31.03 x	Molecular Weight Concentration (ug/L) Probability (%) Rime (RT) (Minutes) Library Manual Interpretation RT 19 93 22.52 x ————————————————————————————————————

Internal Standard	
	RT
Pentafluorobenzene	9.05
D4-1,4-Difluorobenzene	10.59
Chlorobenzene D-5	16.79
D-4 1,4-Dichlorobenzene	21.91

Surrogates	
	% Recovery
Dibromofluoromethane	100%
Toluene D-8	110%
1,4-Bromofluorobenze	97%

USEPA - 8260 G.C. Conditions 25 m × 0.2 mm × 1.12um / HP-624 He, 0.4 ml/min, 35 C hold 6 mins, 35 C to 180 C @ 6.5 C/min, 180 to 210 C @ 2.5 C/min, hold 3 min



A Duke Energy Company

(This document must accompany release of analytical results)

LIMS Work Order #

 $00 ext{-}FEB ext{-}0188$

- Sample Set 99-FEB-0188 was analyzed by EPA 8260 with 5030 purge method.
- QC for this set was 00-FEB-0263.
- > The results for acetone for all samples should be considered estimates.
- A TIC report was generated for all samples.
- The results for some compounds were outside the calibration range and are flagged as estimates.

Analyst: Mary Ann Ogle



Semi-Volatile Organics Case Narrative

A Duke Energy Company

(This document must accompany release of analytical results)

LIMS JOB # 00-FEB-0188

» Reference QC Job#: 00-FEB-0209

- » The matrix spike and matrix spike duplicate was not analyzed due to matrix interfence. All analytes were within acceptable laboratory qc requirements for the lab control sample. Sample results should be considered as estimates.
- » The following compounds cannot be accurately quantitated using EPA Method 8270; Aniline, Benzoic Acid, and Benzidine. In addition Hexachlorocyclopentadiene is a difficult compound to consistently extract from water samples. Any concentrations reported for these compounds should be regarded as approximations.

Analyst:

Rodney G. Wike



8260 Case Narrative

A Duke Energy Company

(This document must accompany release of analytical results)

L.I.M.S. Work Order #

00-FEB-0188

- Sample Set 99-FEB-0188 was analyzed by EPA 8260 with 5030 purge method.
- > QC for this set was 00-FEB-0263.
- > The results for acetone for all samples should be considered estimates.
- > A TIC report was generated for all samples.
- > The results for some compounds were outside the calibration range and are flagged as estimates.

Analyst:

Mary Ann Ogle