

DIVISION OF ENVIRONMENTAL MANAGEMENT
Certification for the Submittal of a Corrective Action Plan
Under 15A NCAC 2L .0106(c)

Responsible Party: North Carolina Department of Transportation
Address: c/o Thomas C. Niver 801 Summit Ave., Suite 2
City: Greensboro State: NC Zip Code: 27405

Site Name: NCDOT Asphalt Priority Site #6-48 (Lee Paving)
Address: S.R. 1714 (Sugar Lake Rd.)
City: Pittsboro County: Chatham Zip Code: 27312

Groundwater Section Incident Number: 17584

I, James Y. Wang, a Professional Engineer Licensed Geologist (circle one) for S&ME, Inc. (firm or company of employment), do hereby certify that the information indicated below is enclosed as part of the required Corrective Action Plan (CAP) and that to the best of my knowledge the data, site assessments, engineering plans and other associated materials are correct and accurate.

(Each item must be Initialed by hand by the certifying licensed professional).

1. JW A listing of the names and addresses of those individuals required to be notified to meet the notification requirements of 15A NCAC 2L .0114(a) is enclosed. Copies of letters and certified mail receipts are also enclosed.
2. JW A Professional Engineer or Licensed Geologist has prepared, reviewed, and certified all applicable parts of the CAP in accordance with 15A NCAC 2L .0103(e).
3. JW A site assessment is attached or on file at the appropriate Regional Office which provides the information required by 15A NCAC 2L .0106(g).
4. JW A description of the proposed corrective action and supporting justification is enclosed.
5. JW Specific plans and engineering details are enclosed and propose the use of the best available technology for the restoration of groundwater quality to the levels of the groundwater standards prescribed in 15A NCAC 2L .0202.
6. JW A schedule for the implementation and operation of the CAP is enclosed.

(OVER)

CORRECTIVE ACTION PLAN

For

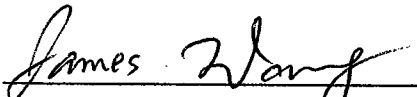
**North Carolina Department of Transportation
Former Asphaltic Material Testing Laboratory Sites
Site #6-48 (Lee Paving)
Pittsboro, Chatham County, North Carolina**

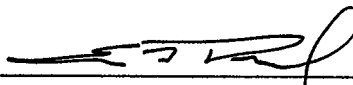
Prepared for:

Thomas C. Niver, P.G., CHMM
Safety and Loss Control Division
North Carolina Department of Transportation
801 Summit Avenue, Suite 2
Greensboro, North Carolina 27405

Prepared by:

S&ME, Inc.
3118 Spring Forest Road
Raleigh, North Carolina 27616
S&ME Project No. 1040-98-107


James Y. Wang, Ph.D., P.E.
Project Professional


Ernest P. Parker, Jr., P.E., P.G.
Senior Environmental Consultant

June 30, 2000

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
1.0 INTRODUCTION	1
1.1 PURPOSE OF CORRECTIVE ACTION PLAN.....	1
1.2 SUMMARY OF PREVIOUS INVESTIGATIONS / REPORTS	2
1.2.1 Site Description	2
1.2.2 Site Geology and Hydrogeology	3
1.2.3 Assessment of Soil and Groundwater Contamination.....	4
2.0 DATA COLLECTION FOR CORRECTIVE ACTION PLAN	6
2.1 LIMITED SOIL ASSESSMENT	6
2.2 EVALUATION OF BEDROCK GEOLOGY.....	6
2.2.1 Fracture Mapping.....	7
2.2.2 Video Logging	7
2.3 EVALUATION OF GROUNDWATER CONTAMINATION.....	10
2.3.1 Groundwater Flow	10
2.3.2 Horizontal Plume Extent.....	10
2.3.3 Vertical Plume Extent	11
2.4 SURFACE WATER SAMPLING	13
2.5 SUMMARY OF CONCEPTUAL CONTAMINANT TRANSPORT PATHWAYS.....	14
2.6 WATER SUPPLY WELL SURVEY.....	15
3.0 EXPOSURE ASSESSMENT	16
3.1 PHYSICAL AND CHEMICAL CHARACTERISTICS OF TARGET CONTAMINANTS.....	16
3.2 POTENTIAL PATHWAYS FOR HUMAN EXPOSURE.....	17
4.0 DEVELOPMENT OF CORRECTIVE ACTION PLAN	18
4.1 EVALUATION OF AIR SPARGING / VAPOR EXTRACTION	18
4.1.1 Screening of Air Sparging / Vapor Extraction Effectiveness.....	18
4.1.2 Air Sparging / Vapor Extraction Field Tests.....	19
4.2 EVALUATION OF PUMP-AND-TREAT	21
4.2.1 Field Activities for Aquifer Test	22
4.2.2 Analysis of Aquifer Test Data.....	23
5.0 PROPOSED CORRECTIVE ACTION PLAN.....	25
5.1 PROPOSED AIR SPARGING / VAPOR EXTRACTION SYSTEM.....	25
5.1.1 System Design.....	25
5.1.2 Operation and Maintenance Plans.....	26
5.2 PROPOSED PUMP-AND-TREAT SYSTEM.....	27
5.2.1 System Design.....	27
5.2.2 Operation and Maintenance Plans.....	29
5.3 PROPOSED MONITORING PLAN.....	29
6.0 LIMITATIONS.....	31
7.0 PERMITS.....	31

8.0 SCHEDULE.....	32
9.0 COST.....	33
10.0 REFERENCES	34

LIST OF TABLES

Table 1.	Evaluation of Soil Contamination Detected in CSA
Table 2.	Historical Groundwater Quality Data
Table 3.	Well Construction / Water Level Data
Table 4.	Packer Sampling of Supply Well and DMW-3
Table 5.	Summary of Adjacent Property Owners and Supply Wells
Table 6.	Physical and Chemical Properties of Target Contaminants
Table 7.	Air Sparging / Vapor Extraction Field Tests
Table 8.	Aquifer Test – Water Level Data
Table 9.	Aqtesolv Data Input
Table 10.	WHPA Data Input
Table 11.	Estimated Time Frame to Achieve Cleanup Goals

LIST OF FIGURES

Figure 1-1	Site Location Map
Figure 1-2	Site Plan
Figure 1-3	Cross Section Location Map
Figure 1-4	Geologic Cross-Section A-A'
Figure 1-5	Geologic Cross-Section B-B'
Figure 1-6	Geologic Cross-Section C-C'
Figure 2-1	Locations of Soil Assessment
Figure 2-2	Bedrock Fractures (Northern Quarry Wall)
Figure 2-3	Bedrock Fractures (Northwestern Quarry Wall)
Figure 2-4	Cross Section with Video Logging Observation
Figure 2-5	Potentiometric Map – Saprolite Aquifer (February 1999)
Figure 2-6	Potentiometric Map – Saprolite Aquifer (April 2000)
Figure 2-7	Water Quality Data in CAP Sampling
Figure 2-8	Surface Water Sampling
Figure 2-9	Adjacent Properties Map
Figure 4-1	Location of AS / VE Field Tests
Figure 4-2	Model Predicted Capture Zone
Figure 5-1	Target Remediation Area
Figure 5-2	Process And Instrumentation Diagram (AS/VE System)
Figure 5-3	Remediation System Layout
Figure 5-4	AS / VE Point Construction Detail
Figure 5-5	Pump-And-Treat System Process And Instrumentation Diagram

APPENDIX

Appendix I	NCDENR and NCDOT Letters of Agreement
Appendix II	Preliminary Site Screening Report and Tables and Figures in the CSA Report
Appendix III	County Record for Septic System and Well Construction Logs
Appendix IV	Laboratory Analytical Reports
Appendix V	Aquifer Test Modeling Input and Output

EXECUTIVE SUMMARY

In 1989, the North Carolina Department of Transportation (NCDOT) began an assessment of asphaltic materials testing laboratory sites within the state. Pursuant to Memorandum of Agreements (MOAs) (January 1989, April 1, 1996, and July 1, 1996) signed by the NCDOT and the North Carolina Department of Environment, Health and Natural Resources (NCDENR), 72 asphalt laboratory sites were assessed for the following contaminants only: carbon tetrachloride, trichloroethene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), and their degradation compounds. The assessments of these sites and the NCDENR review were completed in 1997. Based on the findings of site assessments, the NCDOT identified and recommended rankings for asphalt plant sites that may require environmental remediation. These rankings were subsequently approved by the NCDENR. In 1998, the NCDOT proceeded with the Corrective Action Plan (CAP) phase.

On behalf of the NCDOT, S&ME, Inc. (S&ME) is submitting this CAP to propose remedial actions for the chlorinated hydrocarbon contamination at the NCDOT asphalt laboratory site #6-48 (Lee Paving) located east of Pittsboro in Chatham County, North Carolina. The target contaminants at the subject site are TCE, 1,1,1-TCA, and their degradation products including cis-1,2-dichloroethene (cis-1,2-DCE), 1,1-dichloroethene (1,1-DCE), and 1,1-dichloroethane (1,1-DCA).

The subject site is the current location of a Lee Paving Company's asphalt production facility. A former asphaltic materials testing laboratory located on the site was utilized by the NCDOT. In 1989, 1,1,1-TCA and TCE were detected in the on-site supply well by the NCDOT. A Comprehensive Site Assessment (CSA) report for the chlorinated hydrocarbon contamination, prepared by Geraghty & Miller, Inc. (G&M), was submitted to the NCDENR in June, 1997. In addition, a site-specific water-supply well survey report prepared by G&M was submitted to the NCDENR on June 15, 1998. S&ME was authorized by the NCDOT in September 1998 to commence the data collection for the development of this CAP.

Based on the data collected during the CSA and CAP assessments, site conditions pertinent to the development of the CAP for the subject site are summarized:

- Results of soil assessments did not indicate areas representing a continuing source of target contaminants for groundwater contamination.
- The target groundwater plume appears to have two components: a saprolite component and a bedrock component. The vertical plume extent is currently defined.
- With the exception of the on-site supply well, groundwater samples collected from several selected water supply wells located within a 1,500-foot radius of the impacted area did not contain detectable concentrations of target contaminants.

Air sparging/soil vapor extraction and pump-and-treat are proposed as the remedial option for the saprolite aquifer and the bedrock aquifer, respectively. Field pilot tests have been conducted to evaluate and develop a remedial plan. A monitoring program for the proposed corrective action plan has also been designed to validate that the proposed remedial plan is effective in remediating the subject site and protective of the public and the environment.

1.0 INTRODUCTION

1.1 PURPOSE OF CORRECTIVE ACTION PLAN

In 1989, the North Carolina Department of Transportation (NCDOT) began an assessment of 72 asphaltic materials testing laboratory sites within the state. Pursuant to Memorandum of Agreements (MOAs) (January 1989, April 1, 1996, and July 1, 1996) signed by the NCDOT and the North Carolina Department of Environment, Health, and Natural Resources (NCDENR), the 72 sites were assessed for the following contaminants only: carbon tetrachloride, trichloroethene (TCE), 1,1,1-trichloroethane (1,1,1-TCA), and their degradation compounds including chloroform, methylene chloride, methyl chloride, cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), 1,1-dichloroethene (1,1-DCE), 1,1-dichloroethane (1,1-DCA), vinyl chloride, and chloroethane (Appendix I). The assessments of these sites and the NCDENR's review were completed in 1997 in accordance with a mandate by the Joint Legislative Transportation Oversight Committee.

Based on the findings of the site assessments, the NCDOT identified and recommended rankings for the laboratory sites that may require environmental remediation. These rankings were subsequently approved by the NCDENR. In 1998, the NCDOT proceeded with the Corrective Action Plan (CAP) phase at 7 sites with the highest recommended priority. In a meeting on October 22, 1998, an agreement was reached between the NCDOT and the NCDENR on the scope of work for the CAP field work effort and administrative options for the preparation of CAPs at the subject asphalt plant sites. A copy of the letter of agreement is also included in Appendix I.

On behalf of the NCDOT, S&ME, Inc. (S&ME) is submitting this CAP to address the remediation of chlorinated hydrocarbon contamination at the NCDOT asphalt priority site #6-48 (Lee Paving) located east of Pittsboro in Chatham County, North Carolina (Figure 1-1). The target contaminants at the subject site are carbon tetrachloride, TCE, 1,1,1-TCA, and the degradation products as listed above. This CAP has been prepared in general accordance with 15A NCAC 2L Section .0106, the *Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater, Volume I* (NCDENR, Division of Water Quality,

Groundwater Section, May 1998), and the October 22, 1998 agreement between the NCDOT and the NCDENR.

1.2 SUMMARY OF PREVIOUS INVESTIGATIONS / REPORTS

The subject site is the current location of a Lee Paving Company's asphalt production facility in Pittsboro, Chatham County, North Carolina. According to the assessment report and NCDOT personnel, an asphaltic materials testing laboratory was located on the site and was utilized by the NCDOT. One or more of the following chlorinated solvents including carbon tetrachloride, TCE and 1,1,1-TCA were used in the laboratory. A preliminary site survey conducted by the NCDOT in 1989 reported the detection of 1,1,1-TCA and TCE in the on-site supply well at 318 micrograms per liter ($\mu\text{g/L}$) and 617 $\mu\text{g/L}$, respectively. Carbon tetrachloride was also detected at 3.19 microgram per kilogram ($\mu\text{g/kg}$) in a soil sample. A Comprehensive Site Assessment (CSA) report for the chlorinated hydrocarbon contamination, prepared for the NCDOT by Geraghty & Miller, Inc. (G&M), was submitted to the NCDENR in June 1997 (G&M CSA Report). In addition, a site-specific water-supply well survey report was prepared by G&M and submitted to the NCDENR on June 15, 1998 (G&M Well Survey Report). To collect groundwater quality data for the preparation of this CAP, S&ME conducted two rounds of groundwater sampling of the existing monitoring wells on September 28-29, 1998 and April 10-11, 2000. All tables and figures provided in the G&M CSA Report are included in Appendix II. This section summarizes the background information of the subject site and the findings of the CSA.

1.2.1 Site Description

The subject site is located off S.R. 1714 (Sugar Lake Road) in Pittsboro, Chatham County, North Carolina (Figure 1-1). The asphalt plant is bordered by undeveloped land to the east and south and by rural residential areas to the north and west. Nearby surface water bodies include an abandoned rock quarry located approximately 700 feet to the south and a southerly flowing creek located approximately 500 feet to the east. The Haw River is located approximately 1.5 miles southwest of the site. The site topography is generally sloping gently to the south with a relatively steep slope descending to the creek near the eastern property boundary.

Two asphalt testing laboratories were identified at the site: one former and one current (Figure 1-2). The former NCDOT testing laboratory has been demolished and, as stated in the CSA report, the current laboratory is no longer used by the NCDOT. The on-site supply well is located approximately 250 feet southeast of the current laboratory. Bottled water is currently supplied to the facility for drinking. Approximate locations of the septic tank and drain field associated with the former asphalt testing laboratory are also presented in Figure 1-2.

1.2.2 Site Geology and Hydrogeology

The regional geology and the site geology have been characterized in the G&M CSA Report and are summarized in this section. The subject site is located within the Piedmont Physiographic and Geologic Province of North Carolina. The Piedmont Province consists of several northeast-trending geologic belts. Based on the Geologic Map of North Carolina (North Carolina Geological Survey, 1985), the site is located in the Carolina Slate Belt. The regional geology is characterized by unconsolidated to consolidated sediments overlying the bedrock consisting of volcanic and sedimentary rocks that are metamorphosed to lower greenschist facies (Butler and Secor, 1991).

The G&M CSA Report characterized the site geology based on the boring logs generated from the installation of monitoring wells. The locations of the cross-sections and the geologic cross-sections, prepared by G&M for the CSA report, are included in this report (Figures 1-3 to 1-6). The G&M CSA Report identified the subsurface material at the subject site as clayey silt overlying the bedrock. The boring logs of two deep monitoring wells (48DW-1 and 48DW-2) indicated that the top of bedrock was encountered between 26 feet below ground surface (bgs) at DW-2 and 42 feet bgs at DW-1. Further discussion of site-specific geology will be presented in Section 2.2 with additional geologic data collected during the development of this CAP.

Groundwater in this region may exist in two units: an overburden unit overlying the bedrock (saprolite aquifer) and a fractured bedrock unit (bedrock aquifer). The G&M CSA Report indicates that groundwater in both the saprolite aquifer and the bedrock aquifer flows towards southeast. The hydraulic conductivity for the saprolite aquifer was estimated in the CSA based on the slug test results of 48MW-4 and 48MW-5. The average hydraulic conductivity was reported to be 2.39×10^{-3} centimeter per second (cm/sec) or 6.76 feet per day (ft/day). This

estimated hydraulic conductivity seems to be higher than what is expected for the clayey silt formation. Based on the water level observed on April 29, 1997, the hydraulic gradient in the saprolite aquifer was reported in the CSA to be 0.061 ft/ft. Using an assumed effective porosity of 0.4 for clayey silt and the G&M hydraulic conductivity value, the average linear groundwater flow velocity in the saprolite was calculated in the G&M CSA Report as 3.64×10^{-4} cm/sec or 1.03 ft/day. A conceptual hydrogeologic model for the subject site is presented in Section 2.5 with additional hydrogeologic information collected in the development of this CAP.

1.2.3 Assessment of Soil and Groundwater Contamination

All tables and figures provided in the G&M CSA Report are included in Appendix II. Findings of soil and groundwater contamination reported in the G&M CSA Report are summarized in this section. Eighteen (18) soil samples were collected during the CSA from eleven (11) different locations adjacent to each wall of the current laboratory building and in the vicinity of the former laboratory. Among the 11 sampling locations, only samples collected from one location (between the truck scale and the current laboratory building) contained detectable concentrations of four target chlorinated compounds: 1,1,1-TCA, TCE, 1,1-DCA, and chloroform (Table 1).

The G&M CSA Report determined the action levels for the detected target compounds using an Organic Leachate Model provided in the 1993 "*Groundwater Section Guidelines*". Based on this approach, the CSA report stated that the detected target contaminant concentrations in the soil assessment were below the calculated action levels. However, the 1998 "*Groundwater Section Guidelines*" (1998 Guidelines) provide a list of Maximum Soil Contaminant Concentrations (MSCC) (Table 4 in the 1998 Guidelines) and a soil-to-groundwater transport model for calculating MSCC (Figure 4 in the 1998 Guidelines). The MSCC for 1,1-DCA provided in the 1998 Guidelines is 4 mg/kg (soil-to-groundwater) and 1,560 mg/kg (residential). The MSCC for 1,1,1-TCA, TCE, and chloroform can be calculated using the soil-to-groundwater transport model provided in the 1998 Guidelines:

$$C_{\text{soil}} = C_{\text{gw}} [k_s + (\theta_w + \theta_a H') / P_b] df$$

where C_{soil} : maximum soil contaminant concentration

C_{gw} : applicable groundwater target concentration (per 2L Standards)

- k_s : soil-water partition coefficient = $k_{oc}f_{oc}$
 k_{oc} : soil organic carbon-water partition coefficient
 f_{oc} : organic carbon fraction in subsurface vadose soil (0.1% per 1998 Guidelines)
 θ_w : water-filled soil porosity – vadose soil ($0.3 L_{water}/L_{soil}$ per 1998 Guidelines)
 θ_a : air-filled soil porosity – vadose soil ($0.13 L_{air}/L_{soil}$ per 1998 Guidelines)
 P_b : dry bulk density (1.5 kg/L per 1998 Guidelines)
 H' : Henry's Law constant
df : dilution factor (20 per 1998 Guidelines)

As indicated in Table 1, the concentrations of the target contaminants detected in the CSA soil assessment, with the exception of chloroform, are below the calculated soil-to-groundwater MSCC. Chloroform is a degradation product of carbon tetrachloride which is one of the three potential chlorinated solvents investigated at all NCDOT asphalt priority sites. Carbon tetrachloride and its degradation products, including chloroform, have not been detected in any soil samples collected from any other locations at the subject site. Therefore, chloroform detected in the CSA soil assessment may have a source other than the NCDOT asphalt testing activity. In addition, carbon tetrachloride, chloroform and other degradation products of carbon tetrachloride have not been detected in groundwater in any previous groundwater assessment event (Table 2) indicating a lack of correlation between the presence of chloroform in one soil sampling location and the groundwater quality at the subject site. As concluded in the G&M CSA Report, soil at the subject sites is not expected to represent a continuing source of target contaminants for groundwater contamination.

The CSA groundwater assessment revealed that groundwater at the site has been impacted with 1,1,1-TCA, TCE, and their degradation products including cis-1,2-DCE, 1,1-DCE, and 1,1-DCA. To prepare this CAP, S&ME conducted two rounds of site-wide groundwater sampling, one in September 1998 and one in April 2000, in which all existing monitoring wells were sampled. As indicated in the historical groundwater quality data (Table 2), three target contaminants (1,1,1-TCA, TCE, and 1,1-DCE) have been detected at the subject site at levels exceeding the 15A NCAC 2L Groundwater Quality Standards (2L Standards). Section 2.3 will further discuss the findings of the groundwater assessment.

2.0 DATA COLLECTION FOR CORRECTIVE ACTION PLAN

Based on the findings of the previous site assessments, S&ME identified additional data that were required for the development of a CAP for the subject site. S&ME collected these data to complete the assessment of site conditions and provide a conceptual model for the evaluation of remedial alternatives. This section describes the collection of additional data by S&ME and the evaluation of site conditions.

2.1 LIMITED SOIL ASSESSMENT

S&ME conducted a limited soil assessment of the septic tank drain field associated with the former laboratory. The objective of this soil assessment was to verify that the septic system does not represent a continuing source of target chlorinated compounds. S&ME personnel located the septic tank and the associated drain field based on a sketch obtained from the Chatham County Health Department (Appendix III). The sketch indicates that the septic drain field for both the former laboratory and the current laboratory is located in the area between the current laboratory and monitoring well 48MW-8 (Figure 2-1). Five soil samples were collected from this area using hand augers. Three of these samples were collected from approximately 2 feet directly beneath a drain line, while the other two samples were collected approximately 5 feet away from the drain line at a depth of 4 feet bgs. Only one soil sample (HA-4) contained detectable target contaminants including TCE (0.016 mg/kg) and 1,1-DCA (0.004 mg/kg). Both concentrations are below the aforementioned MSCC of 0.019 mg/kg for TCE and 4 mg/kg for 1,1-DCA. The results of this limited soil assessment suggest that the soil at the septic drain field may not represent a continuing source of target contaminants for further groundwater contamination.

2.2 EVALUATION OF BEDROCK GEOLOGY

The results of the previous groundwater assessments indicate that contaminated groundwater has migrated into the bedrock. To better understand the complex bedrock geology at the subject site, S&ME mapped the fracture system at outcrops found in the creek east of the site and in the quarry located to the south of the site. Down-hole video logging was then conducted at the on-

site supply well and two deep monitoring wells (DW-1 and DW-2). The relative elevations of the nearby creek and quarry were also determined to help integrate these geologic data.

2.2.1 Fracture Mapping

S&ME mapped bedrock fractures found on one rock outcrop in the creek and at the walls of the quarry. Figures 2-2 and 2-3 are photographs of the quarry walls. Figure 2-2 shows the northern face of the quarry. Fractures in the photograph are highlighted in blue lines. The reflection in the water surface shows the fractures as they appear unmarked. This photograph shows that there are a number of fairly vertical fractures along with a lesser number of sub-horizontal fractures. The horizontal fractures appear to occur within the transition zone between saprolite and bedrock. Figure 2-2 also shows the variability of the fracture density within the bedrock. The vertical fracture spacing ranges from approximately 5 to 6 feet along the right side of the photograph to approximately 6 inches in the highly fractured zone just to the left of the center of the photograph. Some seepage is evident in the photograph from the darker areas of the rock face above the water surface.

Figure 2-3 shows the northwestern corner of the quarry. Several east-west vertical fractures are visible along with a nearly horizontal fracture located approximately 1/3 of the way from the ground surface to the water surface. The horizontal fracture appears to wrap around to the north face of the quarry.

The orientation of over 50 fractures was measured. Four distinct sets of fractures were observed: (1) a set of north-striking vertical fractures, (2) a set of east-striking vertical fractures, (3) a set of northeast-striking vertical fractures and (4) a set of sub-horizontal fractures dipping at approximately 20 degrees from horizontal.

2.2.2 Video Logging

Video logging was initially performed at three deep open-rock wells (DW-1, DW-2, and the supply well). The deep monitoring well DW-1 is a bedrock well that has shown no impact in previous groundwater sampling events, while the on-site supply well and DW-2 are bedrock wells

that have been impacted with target contaminants. Coupled with the relative elevations of the creek and the quarry, observations of video logging are incorporated into the cross-section map presented in Figure 2-4. The well construction details for all monitor wells at the subject site are presented in Table 3.

- **DW-1**

The water level in DW-1 was measured at 25.8 feet below the top of casing (TOC) on February 8, 1999. The video log of DW-1 showed the bottom of the casing to be 61.3 feet below the TOC. The total well depth is 98.7 feet as measured from the TOC. The video log showed no major fractures to be visible in the walls of the borehole. The camera was retrieved and a 2-inch Rediflo® pump was lowered to the bottom of the well. The well was pumped until all of the water had been removed to the pump inlet. The pumping rate ranged between 2.4 to 3.6 gallon per minute (gpm). The well was again video logged and no water-bearing fractures were observed. There was no water inflow or dripping water observed. No change in the water level was noted in the adjacent well MW-2 during the pumping of DW-1.

Additional testing of this well is not recommended based on the results of video logging. The well only serves to demonstrate that the bedrock in certain areas of the site appears to be unfractured or that the fractures have been filled and are nonconductive. The lack of apparent recharge and significant fractures supports the observation previously reported in the G&M CSA Report that the water level recovery in this well was very slow.

- **On-site supply well**

In the supply well, the video log showed that the depth to water in the well was 31.9 feet below the TOC. The bottom of the casing was 35.3 feet below the TOC. The well is open from the bottom of the casing to the bottom of the well at 84.3 feet below the TOC. A fracture was noted at approximately 59 feet below the TOC and the top of the pump was encountered at 78 feet below the TOC.

The pump discharge line was disconnected from the pressure tank and connected to a straight run of poly pipe with an attached water meter. The pump was started and the drop of water level was observed with the video camera. When the water level dropped below the bottom of the casing, a large inflow of water was noted issuing into the well from behind the well casing. Based on the

boring logs provided in the G&M CSA Report, this water appeared to enter the well at the elevation between the relative elevations reported for the top of bedrock at DW-1 and DW-2 (Figure 2-4). Pumping continued for approximately 1 hour and the water level in the well continued to drop, finally dropping below 57 feet below the TOC. A strong inflow of water was noted at 57.5 feet where a near-vertical joint was observed. Using a compass attached at the tip of the video camera, the fracture orientation was identified as north-striking. Pumping was discontinued at this point. The pumping rate during the test was approximately 15.3 gpm. With the observation of sediment particles disturbance at a deeper depth, an additional flow was suspected in a second fracture located at approximately 74 feet below the TOC.

The water level in a nearby well MW-1 was monitored during the test and dropped from 31.43 feet below the TOC at the beginning of the test to 33.18 feet below the TOC at the termination of pumping.

In summary, three apparent water-bearing zones were identified in this well: a zone near the bottom of the well casing at 35.3 feet below the TOC, a zone at approximately 59 feet below the TOC, and a zone at approximately 74 feet below the TOC. There may be a minor recharge at the bottom of the well.

- **DW-2**

DW-2 is a deep well located to the southeast of the former laboratory that has shown impact of target contaminants in previous groundwater assessments. The video log showed the depth to water at 29.5 feet below the TOC and the bottom of the casing at 42.2 feet below the TOC. The total well depth is 66 feet below the TOC. The well was dewatered using a Rediflo® pump operated at a pumping rate of approximately 3.6 to 2.7 gpm. Only one water inflow was observed in a fracture identified at 61.3 feet below the TOC. Inflow was estimated at 0.4 gpm by timing the rate of water level recovery in the well after the pump was turned off. The water level in a nearby well (MW-11) was measured during the test and was found to be unchanged during the pumping of DW-2.

DW-2 intercepts one hydraulically conductive fracture near the bottom of the well at approximately 61.3 feet below the TOC. The yield of this well is very low and again shows the variability of bedrock conditions when compared to the supply well.

In summary, results of video logging at three bedrock wells suggest that, at least in the east-west direction, the extent of fracturing in the bedrock is highly variable. The video logs also support the observation of north-striking vertical fractures demonstrated in the fracture mapping. The large flow observed at the bottom of the casing in the supply well suggests that the saprolite-bedrock interface may serve as a major contaminant transport pathway.

2.3 EVALUATION OF GROUNDWATER CONTAMINATION

2.3.1 Groundwater Flow

S&ME conducted two rounds of site-wide groundwater sampling (February 1999 and April 2000). The water level data are presented in Table 3 and potentiometric contour maps of the saprolite aquifer are developed for both events (Figures 2-5 and 2-6). Two temporary piezometers (PZ-1 and PZ-2) were installed in February 1999 in the area between 48MW-11 and the creek to assist the determination of groundwater flow. No water level data were collected from these piezometers in the April 2000 event. The potentiometric data collected from these two events suggest a southeasterly groundwater flow in the saprolite aquifer.

2.3.2 Horizontal Plume Extent

Table 2 presents a summary of the historical groundwater quality data. The data collected by S&ME in September 1998 and April 2000 for the preparation of this CAP are presented in Figure 2-7. With the exception of MW-3 and MW-4, the majority of the target contaminant plume appears to exist in areas southeast of the former laboratory. This distribution pattern is consistent with the southeast groundwater flow direction indicated by the potentiometric data. A southwest migration of contaminants beyond MW-3 and MW-4 is not anticipated because migration in this direction is counter to the groundwater flow direction. This assumption is also supported by the non-detectable contaminant concentrations in monitoring wells MW-7, MW-8, and MW-9,

In response to a request of the Groundwater Section, Raleigh Regional Office (RaRO), S&ME installed a Type II monitor well (48MW-14) in April 2000 to the south of the subject site (Figure 1-2). The objective of this well was to assess if there is a southern migration of the target

contaminant plume in the saprolite/bedrock interface. The well was installed in the southern shoulder of Sugar Lake Road within the NCDOT right-of-way. The soil boring was terminated at the auger refusal. The total depth of this 2-inch PVC well is 27.5 feet bgs with a 5-foot screen section installed from 27.5 to 22.5 feet bgs. The boring log and the well construction record are provided in Appendix III. This well was sampled on April 26, 2000 and the analytical data are presented in Table 2. None of the target chlorinated contaminants were detected in this sample above the method detection limit. Based on the finding of no detectable target contaminants in this well, no significant southern plume migration in the saprolite/bedrock transition zone is currently anticipated.

2.3.3 Vertical Plume Extent

The on-site supply well and a deep monitoring well (DW-2) have both been found contaminated with the target contaminants at concentrations in excess of the 2L Standards. This is indicative that contaminated groundwater has migrated into the bedrock aquifer. Section 2.5 will present a conceptual hydrogeologic model to further discuss the potential contaminant transport at the subject site.

A Type III bedrock well (DW-3) was installed in July 1999 to further characterize the target plume in the bedrock aquifer. DW-3 was installed approximately 150 feet southeast of the on-site supply well (Figure 1-2). The location and the depth of this well were selected in an attempt to intercept the north-striking fractures expected to orient between the supply well and the quarry. The well construction record is provided in Appendix III.

A 10-inch borehole was advanced to 31 feet bgs with the top of the bedrock first encountered at 30.7 feet bgs. The soils above the bedrock are silty clay ranging from the ground surface to 15 feet bgs, followed by clayey silt between 15 feet to 25 feet bgs, and sandy silt from 25 feet bgs to the top of the bedrock. An 8-inch PVC surface casing was set to 31 feet bgs and the annular space was grouted to the surface. A 6-inch borehole was then advanced to the well terminal depth of 125 feet bgs.

The borehole was video logged to identify the fractures intercepted at this location. The depth to water was observed to be 27.9 feet below the TOC. The bedrock formation appears to be

metamorphosed andesitic to granitic rock. Discrete fractures were identified at 32.4 feet bgs, 72.9 feet bgs and 93.6 feet bgs. Another fracture was suspected between 115 feet bgs to 125 feet bgs. The fracture orientation was identified as a north-south direction. The relative depths of these fractures are presented in Figure 2-4. The first fracture encountered at 32.4 feet bgs appears to occur within the saprolite-bedrock interface, which was also observed in the supply well and on the quarry wall. The fractures at 72.9 feet bgs and below 115 feet bgs are deeper than the deepest fracture previously observed in the supply well. This well, therefore, is expected to provide adequate data for the characterization of the target plume in the bedrock aquifer. The sampling of this well will be discussed in the next section.

DW-3 is screened only at the bottom to provide a monitoring point for the lower portion of the bedrock aquifer. Upon the completion of video logging and packer sampling, the well was completed with a 2-inch PVC screen set across 115 feet to 125 feet bgs and a 2-inch PVC riser pipe extending from 115 feet bgs to the ground surface. The annular space was filled with #2 filter sand from 125 feet to 113 feet bgs followed by a 2-foot bentonite seal. The remainder of the annular space was grouted to the surface.

Due to the presence of multiple discrete fractures in the supply well and DW-3, packer sampling was conducted in May and July 1999 in these two wells to gather groundwater quality data that can more accurately reflect the vertical distribution of contaminants in the bedrock aquifer. Results of packer sampling at these two wells are presented in Table 4.

Groundwater samples were collected from three sampling intervals in the supply well. Although a small water inflow near the bottom of the supply well was suspected during video logging, packer sampling indicated that there was no conductive fracture present in this well below 80 feet bgs. Among the target contaminants detected in the supply well, only TCE and 1,1-DCE were present at concentrations exceeding the 2L Standards. Because the concentrations of both compounds did not decrease with respect to depth, the vertical plume extent could not be determined at this sampling point.

Based on the video log of DW-3, four discrete sampling intervals were identified in this well for the packer sampling. The concentrations of target contaminants detected in this well are significantly lower than those observed in the supply well. TCE is the only target contaminant

present in excess of the 2L Standards. A decreasing trend of contaminant concentrations, including the TCE concentration, with respect to the sampling depth is demonstrated at this sampling point. The TCE concentration detected in the sample collected from the bottom portion of the well, between 115 feet bgs to 125 feet bgs, was below the 2L Standard suggesting a vertical plume extent. The sampling results of DW-3 in the April 2000 event also confirm the vertical extent of the contaminant plume with the TCE concentration below the 2L Standard (Table 2).

2.4 SURFACE WATER SAMPLING

In order to assess the potential impact of the target plume on the surface water bodies and to determine background and downgradient surface water quality, water samples were collected from the creek and the quarry. Water samples were collected in the quarry in February 1999 near the north face where the concentrated fracture set had been observed. Discrete water samples were collected at four depths: 1 ft, 6 ft, 12 ft, and 27 ft below the water surface. The total depth of the quarry near the north face is approximately 30 feet. S&ME personnel observed groundwater seeps along several fractures above the water surface. However, the seepage rate was too low for sampling. None of the target contaminants were detected above the laboratory detection limit in any sample collected from the quarry.

Water samples in the creek were collected in February 1999 and February 2000 at three locations: approximately 500 feet upstream relative to the subject site; immediately upstream of the culvert crossing under Sugar Lake Road; and a downstream location just southwest of the southwestern corner of the quarry. The sampling locations and analytical results are presented in Figure 2-8. In both events, only the sample collected at the culvert contained detectable concentrations of target contaminants. TCE was detected in the 1999 event at 6.4 $\mu\text{g/L}$ and in the 2000 event at 2.0 $\mu\text{g/L}$. 1,1,1-TCA was detected only in the 1999 event at 1.7 $\mu\text{g/L}$. This creek, after merging with several other creeks, eventually discharges into Haw River, approximately 1.5 miles southwest of the subject site (Figure 1-1). The section of Haw River where the creek discharges is classified as a Class WS-I surface water body. The surface water quality standard (2B Standards) for TCE is 3.08 $\mu\text{g/L}$ for surface-water bodies classified as WS-I.

As discussed in Section 2.2 with the video logging observations and the relative elevations presented in Figure 2-4, groundwater in the saprolite aquifer is expected to flow primarily within the saprolite-bedrock interface and may discharge into the creek. The results of creek sampling support this proposed hydrogeologic component. The creek sampling data also suggest that the target plume has not adversely impacted the water quality in the creek downstream of the quarry.

2.5 SUMMARY OF CONCEPTUAL CONTAMINANT TRANSPORT PATHWAYS

Based on the available site assessment data discussed above, a conceptual hydrogeologic and contaminant transport model for the subject site is developed and described below:

- ◆ The area surrounding the on-site supply well and MW-1 is considered as the target source area for the proposed corrective actions.
- ◆ The groundwater plume in the estimated target source area appears to have two components: the saprolite component and the bedrock component. Groundwater flow and contaminant transport in each component are controlled by the specific geologic features associated with the formation.
- ◆ Groundwater movement in the saprolite aquifer is expected to occur primarily at the saprolite-bedrock interface where the flow is controlled predominately by the nearly horizontal feature acting as a preferential transport pathway. The potentiometric map indicates a southeasterly flow in the saprolite aquifer (Figures 2-5 and 2-6). The detection of the target contaminants in monitoring well MW-11 combining with the non-detection of these compounds in well MW-14 also support the proposed southeasterly contaminant transport in the saprolite aquifer.
- ◆ The small stream located to the east is the likely discharge feature for groundwater flowing in the saprolite aquifer. This proposed hydraulic boundary is consistent with the elevations indicated in Figure 2-4 and the potentiometric map presented in Figures 2-5 and 2-6. This is also supported by the detection of contaminants in the surface water sampling of the creek.

- ◆ Groundwater flow and contaminant transport in the bedrock is constrained to within discrete fractures. The fracture system in the area does not appear to be extensive based on the video logs of wells DW-1 and DW-2, as well as the observation made at the quarry as described in Section 2.2.

2.6 WATER SUPPLY WELL SURVEY

The area surrounding the subject site is predominantly rural residential and undeveloped. Water supply wells located on properties within a 1,500-foot radius of the site were surveyed by Geraghty & Miller, Inc. during the CSA (Figure 2-9 and Table 5). Four residential supply wells (# 7, 9, 53, and 62 in Figure 2-9) were sampled by Geraghty and Miller on October 2, 1997. Target contaminants were not detected above the laboratory quantitation limits in any sample and the sampling report was submitted to NCDENR on June 15, 1998.

During the preparation of this CAP, S&ME personnel sampled two additional residential wells (# 2 and 23 in Figure 2-9) on June 17, 1999 and also well #6 in Figure 2-9 on September 21, 1999. No target contaminants were detected above the laboratory quantitation limits in any of these samples. The laboratory analytical reports for the two 1999 sampling events are provided in Appendix IV.

3.0 EXPOSURE ASSESSMENT

As indicated in Section 1.1, previous MOAs between the NCDENR and the NCDOT stated that the target contaminants to be addressed in the CSA and the CAP at NCDOT asphalt priority sites are carbon tetrachloride, TCE, 1,1,1-TCA, and their degradation products. At this subject site, chlorinated solvents were utilized in the past in the NCDOT asphaltic materials testing lab. As presented in the previous section, the target chlorinated contaminants detected in the soil samples did not exceed regulatory action levels, with the exception of chloroform detected at one location. The historical groundwater quality data presented in Table 2 indicate that carbon tetrachloride and its degradation products including chloroform, methylene chloride, and chloromethane were not detected in any monitoring well above the quantitation limits. Therefore, the potential human exposure is expected to be primarily through the exposure to groundwater contaminated with TCE, 1,1,1-TCA, and their degradation products including cis-1,2-DCE, 1,1-DCE, 1,1-DCA, chloroethane, and vinyl chloride.

3.1 PHYSICAL AND CHEMICAL CHARACTERISTICS OF TARGET CONTAMINANTS

Physical and chemical characteristics of the chlorinated aliphatic hydrocarbons considered as the target contaminants of concern at this site are presented in Table 6. Also included in this table is the maximum concentration of each compound detected during the CSA and CAP investigations. In the pure form, the target chlorinated compounds may move downward in a subsurface environment because of their specific gravities. However, the maximum detected concentration of each compound presented in Table 6 represents less than 0.1% of the respective solubilities in water. Following the 1% rule defined in "*DNAPL Site Evaluation*" (Cohen and Mercer, 1993), the concentrations of the target contaminants detected at this site do not provide evidence of dense non-aqueous phase liquids (DNAPL). In addition, a vertical plume extent has been defined and a presence of target contaminants as DNAPL is not suggested. The potential human exposure to the target contaminants is, therefore, expected to be only through the dissolved phase of target compounds present in the groundwater.

The persistence of the target chlorinated compounds in an aquifer is dependent upon the environmental conditions under which they exist. Chemical transformation and

aerobic/anaerobic biodegradation of target chlorinated hydrocarbons have been documented in many publications. The end products of a complete degradation of each target contaminant are non-hazardous substances including ethene, carbon dioxide, water, and chloride.

3.2 POTENTIAL PATHWAYS FOR HUMAN EXPOSURE

An exposure pathway consists of the following elements: contaminant source, release mechanism, transport medium, exposure point, and exposure route. All of these elements must be present for an exposure pathway to be considered complete or operable. A complete exposure pathway simply indicates that the potential for presentation of a contaminant to a receptor exists. The potential for an adverse effect is a function of both the exposure pathway and the level of exposure presented to a receptor. Potential pathways for human exposure typically include inhalation, skin contact, and ingestion of contaminants present in the groundwater.

As reported in the G&M CSA Report, the subject facility is currently provided with bottled water for drinking. This measure eliminates the potential for direct human exposure through consumption. The primary potential exposure pathways for the on-site personnel, therefore, are skin contact, inhalation, and/or accidental ingestion of contaminated groundwater. The depth to groundwater at this site has been reported to be from approximately 8 feet bgs to more than 30 feet bgs. Underground utility lines tend to be buried less than 5 feet bgs and, therefore, the utility work may not pose significant exposure hazard to the personnel. However, future excavation in the contaminated areas and groundwater sampling are identified as activities that may potentially expose workers. Employees of the asphalt plant or other contracted laborers performing underground work and/or groundwater monitoring should be advised of the potential hazards. Monitoring and personal protective gear may be considered to minimize potential exposure.

As indicated in Section 2.4, the target groundwater plume appears to have a potential to discharge to the creek. The area between the site and the creek is undeveloped and no supply wells are located in this area. It is expected that a groundwater monitoring program can be developed and implemented to provide sufficient protection to the population in the surrounding area.

4.0 DEVELOPMENT OF CORRECTIVE ACTION PLAN

The primary objective of this Corrective Action Plan (CAP) is to protect the human health and the environment from the potential impact of the target plume present at the subject site. The target contaminants of concern to be addressed in this CAP are TCE, 1,1,1-TCA, cis-1,2-DCE, 1,1-DCE, 1,1-DCA, chloroethane, and vinyl chloride. This CAP has been prepared following the guidelines specified in 15A NCAC 2L Section .0106 paragraph (c). Based on the site conditions and the conceptual contaminant transport pathways presented in Section 2, air sparging/vapor extraction and pump-and-treat are evaluated for their potential as the remedial option for the saprolite aquifer and the bedrock aquifer, respectively. This section presents the field tests conducted to collect data for the evaluation and development of the remedial plan. The evaluation of air sparging and vapor extraction has been conducted based on the guidance provided in the 1995 USEPA report *"How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites: A Guide for Corrective Action Plan Reviewers"* (USEPA Guide).

4.1 EVALUATION OF AIR SPARGING / VAPOR EXTRACTION

4.1.1 Screening of Air Sparging / Vapor Extraction Effectiveness

Air sparging has been considered as an applicable remedial approach at many sites contaminated with volatile organic compounds (VOCs). This technique involves the injection of air beneath the groundwater table to remove contaminants by stripping dissolved VOCs and promoting volatilization of trapped and adsorbed phase VOCs. In order to address the contaminants transported into the vadose zone, air sparging is often used in conjunction with vapor extraction to remove the stripped and volatilized contaminants. It is noted that the unsaturated soil at the subject site is not considered as the target for the corrective action based on previous site assessment data. Vapor extraction, therefore, is proposed only to help capture the target contaminants that are stripped out of the groundwater plume.

In accordance with the USEPA Guide, the following factors have been screened to evaluate the feasibility of applying air sparging and vapor extraction at the subject site:

- No free products of target contaminants have been detected in previous investigations.
- No nearby subsurface confined spaces have been identified.
- The contaminated groundwater targeted by the proposed air sparging is not in a confined aquifer.
- The CSA reported subsurface material overlying the bedrock at the site as clayey silt. The CSA also reported that the hydraulic conductivity was estimated at 2.39×10^{-3} cm/sec. The intrinsic permeability (k) can be calculated from the hydraulic conductivity (K) as following:

$$k = K \times [\text{water viscosity } \mu / (\text{water density } \rho \times \text{gravitational acceleration } g)]$$

The constant $\mu / \rho g$ equals 1.02×10^{-5} cm-sec at 20°C. Therefore, the calculated intrinsic permeability is 2.43×10^{-8} cm². At this approximate intrinsic permeability, the USEPA Guide suggests that air sparging/vapor extraction is generally effective.

- The USEPA Guide provides the Henry's Law Constant for common petroleum constituents such as benzene and toluene. The higher the Henry's Law Constant of a contaminant, the more readily the compound can be stripped out of the aqueous phase and, therefore, the more amenable it is to removal by air sparging. The Henry's Law Constant for toluene is 217 atmosphere (atm) per the USEPA Guide or 0.00674 atm-m³/mole, a unit commonly used and expressed in most reference materials. As presented in Table 6, all target contaminants, except 1,1-DCA, have Henry's Law Constant equivalent to or greater than that of toluene.
- As presented in Table 6, boiling points of the target contaminants are below 250°C.
- Also presented in Table 6, vapor pressures of all target contaminants are significantly higher than 0.5 mm-Hg, suggesting the target contaminants are amenable to air sparging/vapor extraction.

In following the USEPA Guide, the initial screening presented above suggest that air sparging/vapor extraction may have the potential to be an effective remediation alternative for the saprolite aquifer at the subject site.

4.1.2 Air Sparging / Vapor Extraction Field Tests

S&ME conducted separate field tests for air sparging and vapor extraction to further demonstrate the potential of these remediation alternatives. The area immediately downgradient of the supply

well and monitoring well 48MW-1 was selected for the field tests (Figure 4-1). The tests were conducted on a limited scale designed to collect only the physical characteristics of the aquifer in the target treatment area. While no chemical testing was performed in these field tests, data collected from the field tests still can facilitate the adequate conceptual design provided conservative assumptions of the contaminant mass removal are made.

As presented in Figure 4-1, one air sparging point (AS), one vapor extraction point (VE), and two piezometers (P1 and P2) were installed before the field tests. The soil boring for the sparging point was terminated at auger refusal when the top of the bedrock was encountered at 32.5 feet bgs. The total depth of the sparging point is 30 feet bgs with a 2.5-foot screen section (2-inch diameter) installed from 30 to 27.5 feet bgs. The sparging point was completed to the surface with a 1-inch PVC riser pipe.

The vapor extraction point was constructed with a 2-inch PVC to a total depth of 20 feet bgs. A 10-foot screen section was installed from 20 to 10 feet bgs. To capture the volatile contaminants in the unsaturated zone, the screen of the vapor extraction point was set at this depth which was approximately 10 feet above the water table.

Two 1-inch PVC piezometers (P1 and P2) were also installed to collect data useful in determining the effective radius created during the testing of the sparging and extraction points. The total depths of P1 and P2 are 29.5 feet bgs and 29 feet bgs, respectively, where the top of the bedrock was encountered. Each piezometer was installed with a 10-foot screen section set at the bottom and a PVC riser pipe extending to the surface.

The annular space of the sparging points and the extraction points as well as both piezometers was filled with #2 clean sand from the bottom of the borehole to 2 feet above the top of the screen section. The remaining annular space was then sealed with 2 feet of hydrated bentonite followed by neat cement grout to the surface.

Separate tests were conducted each for air sparging and vapor extraction. The field test data are presented in Table 7. An air compressor was used to inject filtered air into the sparging point. The air flow rate and injection pressure were regulated using a manifold to create three sets of flow and pressure conditions. The water levels in monitoring wells MW-1 and MW-11 rose

under two testing conditions. The pressure was also measured at the wellhead of each of the two piezometers P1 and P2. No water was present in these two piezometers and the wellhead pressure, therefore, was used as an indication of the influence of air sparging in the piezometers. Based on the observed water level increases in MW-1 and MW-11, the Radius of Influence (ROI) for the air sparging test is estimated to be 30 feet at the injection pressure of 40 lb/inch² (psi) and the air flow of 6 ft³/min (cfm). The ROI may increase to approximately 90 feet under the sparging pressure of 44 psi and the air flow of 8 cfm.

For the vapor extraction test, a portable vapor extraction system was used to create a vacuum in the extraction point. A sustainable vacuum of 1.7 psi (or 47 inch-H₂O) was measured at the wellhead of the extraction point during the 3-hour test. A relatively high and yet fairly constant air flow of 32.5 cfm was also measured at the extraction point during the test. The wellhead vacuum and the air flow both remained constant throughout the test suggesting that the soil in the testing area is permeable enough to provide the air flow under the testing conditions. No significant change of water level was observed in MW-1 and MW-2. The extraction point was screened only from 10 to 20 feet bgs while the water level at the subject site was between 28 and 31 feet bgs at the time of the test. It is likely that the horizontal permeability of the soil would allow the extraction system to draw air from a relatively large area without creating a significant influence on the water level 8 to 10 feet below the extraction zone. Although the ROI for vapor extraction was not directly indicated by this test, it is anticipated that the ROI may be fairly large based on the observation of a high sustainable flow under a low vacuum.

The data collected from these field tests are used in the conceptual design of an air sparging/vapor extraction system for the remediation of the saprolite aquifer. The conceptual design is presented in Section 5.

4.2 EVALUATION OF PUMP-AND-TREAT

Pump-and-treat is proposed as the remedial option for the bedrock aquifer at the subject site. Based on the conceptual contaminant transport model presented in Section 2.5, the presence and migration of contaminated groundwater in the bedrock is limited to movement within discrete fractures. The bedrock in the target remediation area does not appear to be extensively fractured. This hydrogeologic feature makes the implementation of most in-situ remediation alternatives

difficult to control and the remediation performance less predictable. Therefore, pump-and-treat, a conventional remediation technique, is evaluated for its potential as the remedial option for the bedrock aquifer. An aquifer test was conducted to provide technical data for the evaluation and the design of the remedial approach.

4.2.1 Field Activities for Aquifer Test

The water supply well was used as the pumping well in the aquifer test. The well casing is six inches in diameter and extends to approximately 35.3 feet below ground surface. The well is open rock to the total depth of 84.3 feet below ground surface. As described in Section 2.2, the downhole video log of this well indicated that the well intercepts several discrete water-producing fractures. However, the video log also indicated that the casing seal has failed and that water from the residual material is entering the well. Therefore, to conduct an aquifer test specifically targeting the fractures intercepted by this well, packers were used to isolate the fractures during the test.

Six monitoring wells were used as monitoring points in the aquifer test. These wells are MW-1, MW-2, MW-5, MW-10, MW-11, and DW-2. The well locations are identified in Figure 1-2. Monitoring wells MW-2 and MW-5 are located hydraulically upgradient to the pumping point, while MW-10 is located in a side-gradient area. Wells MW-1, MW-11, and DW-2 are downgradient monitoring points. The screened interval of each well and the distance between each monitoring point and the pumping point are presented in Table 8.

Two separate pumping tests were conducted, each for a discrete fracture zone previously identified in the video log. A 2-inch Grundfos® Rediflow pump equipped with a totalizing flowmeter was used in the tests. Monitoring wells MW-1, MW-11, and DW-2 were monitored continuously using transducers and a data logger to measure the water column in each well. The water levels in monitoring wells MW-2, MW-5 and MW-10 were manually measured every 30 minutes using a water level indicator.

Using a set of packers, the first test targeted a fracture zone from 56 to 66 feet below the TOC. The test began on May 9, 2000 and ended on May 10, 2000 with a duration of 1,321 minutes. The test was conducted at three pumping rates as follows: 2.5 gpm for the first 957 minutes, 4.0

gpm for the next 168 minutes, and 4.6 gpm for the final 196 minutes. Monitoring well DW-2, open from 43 to 66 feet bgs, exhibited the largest drawdown during this test (Table 8). The maximum water level drawdown observed in this well during this first test is 2.247 feet. The data collected from this well (DW-2) are used for the pump test analysis.

After allowing sufficient time for the water table to recover, the second test was conducted from May 11, 2000 to May 12, 2000 for a duration of 1,060 minutes. The lower fracture zone previously identified in the supply well, 75 to 85 feet below the TOC, was isolated during this test. The pump rate was maintained at a rate of 2.2 gpm for the entire test. The maximum water level drawdown in this test (1.673 feet) was again observed in DW-2 (Table 8). The pump test analysis was performed using the data collected from this well.

4.2.2 Analysis of Aquifer Test Data

The aquifer test data were analyzed using the model Aqtesolv[®] developed by HydroSOLVE, Inc. The basic input parameters and the model output results are presented in Table 9. After evaluating the data based on several analytical solutions, a transmissivity of 0.03828 square feet per minute (ft^2/min) calculated by the Hantush-Jacob Method for leaky aquifers using the data collected from the second test (the lower fracture zone) is believed to be the most representative of the site. The curve generated from this data set fits the type curve more closely than the first test. The transmissivity of 0.01954 ft^2/min calculated from the first test is believed to be low because of the influence of gravity drainage which did not occur in the test of the lower fracture zone. The complete modeling input and output data are provided in Appendix V.

Based on the field observed data, the ROI under the pumping rate used in our tests can be estimated to be at least 130 to 140 feet in the downgradient direction (DW-2 and MW-11) and approximately 135 feet in the upgradient direction (MW-2). We also used the USEPA Well Head Protection Area Delineation (WHPA) groundwater model to estimate the capture zones that can be generated under a more extended pumping period. The semi-analytical option of the General Particle Tracking Module of WHPA was used for this purpose. The basic input parameters for the WHPA model are presented in Table 10. The 1-year capture zones generated using this model are consistent with the drawdown observed at the site during the aquifer tests. The model predicted a zone of approximately 100 feet in width and 200 feet in length in the upgradient

direction (Figure 4-2). Although we observed a significant ROI in the downgradient direction during the tests, the model indicated a much smaller downgradient 1-year capture zone. This is because a pumping well will initially withdraw groundwater from all directions, but under an extended pumping condition the majority of the water is withdrawn from the upgradient area. The complete input and output data are provided in Appendix V.

flexible PVC air hose will connect the wellhead of each sparging point to a manifold where the flow rate can be monitored and controlled.

Three vapor extraction points (VE-1 to VE-3) are also proposed for vapor control (Figure 5-3). As discussed in Section 4.1, the vapor extraction field test suggested a fairly large ROI under the testing conditions. The proposed three-point extraction network is, therefore, considered a conservative design. The designed flow rate and wellhead vacuum are 30 scfm per point and 50-inch water, respectively. Each vapor extraction point (2-inch diameter) is proposed to be 20 feet deep with a 10-foot screen section. A 2-inch PVC pipe will connect the wellhead of each extraction point to the extraction system. Figure 5-4 presents a typical vapor extraction point construction detail.

The remediation system equipment will be housed in an equipment compound constructed on a concrete pad. To inject air into the air sparging points, a rotary screw air compressor will be selected to deliver at least 66 scfm of air at 40 psig. As presented in Figure 5-2, a condensate collection system and a filter system for particulate and oil removal will be installed before the injection manifold. For the vapor extraction system, a regenerative blower will be selected to provide at least a vacuum of 50-inch water and a total air flow of 90 scfm. The extracted air will pass through a moisture separator and vent to the atmosphere.

5.1.2 Operation and Maintenance Plans

A 7-day system start-up phase is proposed for the air sparging/vapor extraction system. The vapor extraction system will be started prior to the operation of the air sparging system. During the system start-up, air pressure and flow rate in the sparging system and vacuum and flow rate in the extraction system will be monitored, recorded, and adjusted daily to achieve the design conditions. Groundwater levels and dissolved oxygen levels in monitoring wells MW-1, MW-2, MW-5, MW-6, MW-10, and MW-11 will also be monitored on a daily basis during the system startup. Also included in the system startup is the daily sampling of the target contaminants in vapor samples collected at the vent pipe of the extraction system.

After the initial startup, a monthly monitoring of the system operation is proposed for the entire duration of corrective action. The monthly monitoring includes measuring and recording the flow rates and pressure/vacuum of the sparging/extraction system.

In addition to the monthly monitoring of the system operation, the monitoring of concentrations of target contaminants in the extracted soil vapor is also proposed. Vapor samples will be collected at the vent pipe of the extraction system. It is proposed to combine this vapor monitoring plan with the groundwater monitoring program which is presented in Section 5.3.

5.2 PROPOSED PUMP-AND-TREAT SYSTEM

The contaminated groundwater in the bedrock is constrained within discrete fractures. A pump-and-treat system is proposed to remediate the target plume in this hydrogeologic unit. The proposed system will consist of 1) two recovery wells; 2) an air stripping unit; and 3) a dual activated carbon polishing system. The treated groundwater will be discharged to a nearby creek under a NPDES general permit. Figure 5-5 presents a process and instrumentation diagram of the proposed system.

5.2.1 System Design

Recovery System

The drawdown of the water levels in MW-2 and MW-11 observed during the pump test suggests that both fracture zones at 56 to 66 feet bgs and 70 to 80 feet bgs are connected to the saprolite aquifer. The capture zone estimated from the aquifer test data is 130 feet in radius at a pumping rate of 2.5 gpm. With the vertical and horizontal connections of these fractures, one pumping well open to these fractures is proposed. The video log of the current supply well indicates that the integrity of the surface casing was compromised. S&ME recommends that the current supply well be properly abandoned and one new recovery well be installed at the subject site. The proposed recovery well location is presented in Figure 5-3.

The proposed recovery well will be constructed as a 4-inch open-rock well with the surface casing sealed at the top of the bedrock. This well will be installed to an approximate depth of 80 feet bgs. Video logging is proposed to confirm that the well intercepts the fracture zones as

expected. The annular space in the saprolite will be grouted to the surface with a locking well vault constructed at the ground surface. A 4-inch PVC conduit housing the 1½-inch PVC discharge pipe and electrical wires will connect the recovery well to the treatment system. The conduit will be buried in a trench with a minimum depth of 18 inches.

A total fluids submersible, stainless steel pump will be installed near the bottom of the recovery well to recover groundwater at a rate of 2.5 gpm. The pump will be powered by an electrical motor and controlled by the high-level and low level switches installed in the recovery well. A check valve and a ball valve will be installed in the discharge line.

Treatment System

The treatment system will consist of a holding tank, an air stripping unit, and dual activated carbon adsorbers (Figure 5-7). The system will have a design capacity to accommodate a flow range up to 10 gpm.

Groundwater will be pumped from the recovery well to a chemical resistant 250-gallon holding tank. Water in the holding tank will be transferred by a centrifugal transfer pump to an air stripping unit. The tank will be equipped with high-level and low-level pump control switches and a fail-safe high level alarm to terminate the operation of the pump in the recovery well.

A low-profile air stripper will be used to remove the majority of the target contaminants in the recovered groundwater. The hydraulic processing capacity of the unit will be 10 gpm. The stripped volatile compounds will be discharged to the atmosphere. The treated water will be transferred by a transfer pump to the activated carbon polishing units. A high back-pressure switch will also be installed to control the operation of the unit.

The effluent from the air stripper will be pumped through two granular activated carbon (GAC) adsorbers. These two units will be connected in series and have a design capacity to process 10 gpm. Sampling ports will be installed at the effluent of each unit to collect samples that will aid in determining if a breakthrough of the target contaminants occurs. The effluent from the carbon polishing system will be discharged to a nearby creek. A National Pollutant Discharge Elimination System (NPDES) permit will be obtained before the construction and operation of the proposed remediation system.

All components of the treatment system will be housed in an equipment compound constructed on a concrete pad. The pump-and-treat system will be electrically controlled, modular in design, and flexible to allow for future change or expansion. The control system will consist of tank-full sensors, low-level sensors, blower back pressure sensor, blower flow metering, and effluent discharge totalizer. The tank-full, low-level, and blower back pressure sensor will control the recovery pumps, transfer pumps, and blower on-off operations. The automated system controls will be equipped with fail-safe features, which will shut down the pump in the recovery well should any component fail.

5.2.2 Operation and Maintenance Plans

Upon receiving all necessary approvals and permits, the pump-and-treat system will be placed in service. During the system startup, the groundwater extraction rate will be adjusted and optimized and water levels in monitoring wells measured. A 7-day system startup is proposed. Upon the completion of the system startup, an influent sample and an effluent sample will be collected and analyzed for the target contaminants to demonstrate the system performance.

The regular operation and maintenance of the pump-and-treat system will include a monthly site visit to check the performance and evaluate the operation of the equipment. A semi-annual site inspection report will be submitted to the NCDOT. Discharge monitoring reports will be prepared and submitted to the appropriate agency under the conditions of the approved discharge permit. In addition to the monitoring of the system, a program for monitoring the groundwater quality at subject site will also be implemented. The proposed groundwater monitoring program is presented in Section 5.3.

5.3 PROPOSED MONITORING PLAN

The proposed monitoring program includes both the groundwater quality at the subject site and the surface water quality of the nearby creek.

To monitor the surface water quality, creek samples will be collected on a quarterly basis at the north end of the culvert where the creek flows under Sugar Lake Road. The creek samples will be submitted to a certified laboratory and analyzed for volatile organic chemicals (VOCs) using EPA Method 601. The following chlorinated compounds are the target chemicals to be monitored in this proposed CAP monitoring program: TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-DCE, 1,1,1-TCA, 1,1-DCA, vinyl chloride, chloroethane, and chloroform. This proposed surface water quality monitoring may be combined with the monitoring plan that will be required under the NPDES permit for the pump-and-treat system effluent.

The groundwater sampling will be conducted on a quarterly basis for two years after the start of the remediation system and changed to a semi-annual schedule for the remainder of the CAP implementation. For each groundwater sampling event, water levels in all monitoring wells will be measured. Dissolved oxygen will also be measured in MW-1, MW-2, MW-5, MW-6, MW-10, and MW-11. A groundwater sample will be collected from every monitoring well. All groundwater samples will be submitted to a certified laboratory and analyzed for the same target VOCs as listed above using EPA Method 601.

A semi-annual monitoring report will be prepared and submitted to the NCDENR for the duration of the monitoring program. The NPDES discharge monitoring report for the pump-and-treat system effluent will be submitted to the appropriate permitting agency. The monitoring program will continue until the concentrations of all target chlorinated contaminants listed above are below the 15A NCAC 2L Groundwater Quality Standards and 2B Surface Water Quality Standards at all monitoring points for four successive sampling events. At such time, the NCDOT will request for a permission to terminate the corrective actions. In the case that an asymptotic relationship between the standards and the actual groundwater quality is achieved, the NCDOT may request a variance to the remediation goals.

6.0 LIMITATIONS

The proposed remediation systems have been designed based on the data collected from the field tests. Due to the limited scale of the field tests, certain site conditions upon which the design parameters are estimated can potentially vary during the implementation of the CAP. Two such conditions include 1) the long-term groundwater recovery rate of the pump-and-treat system will be limited by the actual aquifer yield and 2) concentrations of the target contaminants in the extracted vapor and groundwater may reach asymptotic levels above the 2L Standards. Other limitations may arise as the operation of the remediation systems continues. At such time, S&ME will evaluate the performance of the remediation systems and make necessary adjustment or improvement.

7.0 PERMITS

Currently, two permits are deemed required to implement the proposed CAP. A well construction permit will be required for the proposed recovery well and a NPDES Permit will be required to discharge the treated water generated from the pump-and-treat system. S&ME will also contact the staff of the Underground Injection Construction to confirm that an UIC permit is not required for the proposed remediation systems.

S&ME has contacted the staff in the Division of Air Quality in the Raleigh Regional Office with regard to the proposed emissions of target contaminants to the atmosphere from the air stripper and the soil vapor extraction system. The potential release of VOCs from the proposed remediation systems is expected to be significantly below the applicability threshold of 5 tons per year required by the Air Quality Permit. The staff of the Division of Air Quality in the Raleigh Regional Office indicated that currently no Air Quality Permit is deemed required. A letter of notification for the proposed activities will be submitted to the Division of Air Quality.

8.0 SCHEDULE

Upon approval of the proposed CAP, the NCDOT will begin the implementation of the proposed corrective actions and monitoring program. It is estimated that prior to the system installation a 4-month period will be needed to develop specifications, complete the bidding process, and obtain all necessary permits. The system installation and startup is expected to last 5 weeks.

An estimated time frame to achieve the cleanup goals is presented in Table 11. It is assumed that the time required for the pump-and-treat system to achieve its cleanup goal could determine the end point of the remediation program. Based on the estimated volume of groundwater for treatment and the proposed pumping rate, the completion of the remediation program will require eight years.

9.0 COST

The cost associated with the implementation of the proposed CAP can be separated into two parts: 1) the cost for the first year's system installation, operation, and monitoring and 2) the cost for the annual operation and maintenance (O&M) and monitoring.

The cost for the first year CAP implementation includes the following:

• Specification Development / Bidding / Permitting	\$20,000
• Installation of Air Sparging / Vapor Extraction points	\$15,000
• Installation of Recovery Well	\$15,000
• Installation and Startup of Air Sparging / Vapor Extraction System	\$75,000
• Installation and Startup of Pump-and-Treat System	\$100,000
• Annual System O&M	\$45,000
• <u>Annual Monitoring Program</u>	<u>\$25,000</u>
Total Estimated 1 st Year Cost	\$295,000

The annual cost for the remainder of the CAP program :

• Annual System O&M	\$45,000
• <u>Annual Monitoring Program (Semi-Annual Monitoring/Reporting)</u>	<u>\$20,000</u>
Total Estimated Annual Cost	\$65,000

10.0 REFERENCES

Cohen, Robert M. and James W. Mercer, DNAPL Site Evaluation, published by Robert S. Kerr Environmental Research Laboratory, US EPA, Ada, OK, 1993.

US EPA, How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites: A Guide for Corrective Action Plan Reviewers, US EPA, 510-B-95-007, 1995.

Richard J. Lewis, Sr., Hawley's Condensed Chemical Dictionary, published by John Wiley & Sons, Inc., 1997.

Suthan S. Suthersan, Remediation Engineering: Design Concept, published by CRC Lewis Publishers, 1997.

Table 1. Evaluation of Soil Contamination Detected in CSA ⁽¹⁾
NCDOT Asphalt Site 6-48 (Lee Paving)
Pittsboro, Chatham County, NC
S&ME Project No. 1040-98-107

Chemical	Detected Concentration	Calculated Action Levels (G&M CSA Report) (Organic Leachate Model)	MSSC (Soil-to-Groundwater)	MSSC (Residential)
1,1,1-TCA	0.062 ~ 0.084	8.1491	1.398 ⁽²⁾	NA
TCE	0.0058 ~ 0.011	0.0328	0.019 ⁽²⁾	NA
1,1-DCA	0.0041 ~ 0.0046	45.472	4 ⁽³⁾	1560 ⁽³⁾
chloroform	0.0031	0.00021	0.001 ⁽²⁾	NA

(1) Soil contaminant concentrations reported in the CSA report (Geraghty & Miller, 1997). Concentrations presented in mg/kg.

(2) Soil-to-Groundwater MSSC (Maximum Soil Contaminant Concentration) is calculated using the transport model provided in the 1998 Groundwater Section Guidelines. Parameters used in the calculation for each compound are:

1,1,1-TCA : $C_{gw} = 0.2$ $f_{oc} = 135$ $H' = 0.16728$
TCE : $C_{gw} = 0.0028$ $f_{oc} = 94.3$ $H' = 0.422$
chloroform : $C_{gw} = 0.00019$ $f_{oc} = 43.65$ $H' = 0.0032$

(3) MSSC for 1,1-DCA is provided in the 1998 Groundwater Section Guidelines.

NA : Not Applicable

Table 2. Historical Groundwater Quality Data
 NCDOT Asphalt Site 6-48 (Lee Paving)
 Pittsboro, Chatham County, NC
 S&ME Project No. 1040-98-107

Analyte	2L Standards (µg/L)	MW-1		MW-2		MW-3		MW-4		MW-5					
		Dec-96	Sep-98	Apr-00	Dec-96	Sep-98	Apr-00	Jun-96	Sep-98	Apr-00	Dec-96	Sep-98			
1,1,1-TCA	200	96	140	110	BQL	BQL	17	6.1	4	12	2.8	BQL	BQL	BQL	BQL
TCE	2.8	64	140	94	BQL	BQL	5	0.77	BQL	BQL	BQL	BQL	BQL	BQL	BQL
cis-1,2-DCE	70	BQL	BQL	1.4	BQL	BQL	2	1.6	BQL	BQL	BQL	BQL	BQL	BQL	BQL
trans-1,2-DCE	70	BQL	BQL	BQL	BQL	BQL	BQL	0.9	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1-DCE	7	23	40	47	BQL	BQL	5	2.2	2	6	BQL	BQL	BQL	BQL	BQL
1,1-DCA	700	4	3	3.8	BQL	BQL	1	0.93	BQL	BQL	BQL	BQL	BQL	BQL	BQL
vinyl chloride	0.015	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
chloroethane	2800	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Total Target Compounds		187	323	253.2	BQL	BQL	45	12.5	6	18	2.8	BQL	BQL	BQL	BQL

Analyte	2L Standards (µg/L)	MW-6		MW-7		MW-8		MW-9		MW-10				
		Feb-97	Sep-98	Apr-00	Feb-97	Sep-98	Apr-00	Feb-97	Sep-98	Apr-00	Mar-97	Sep-98		
1,1,1-TCA	200	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
TCE	2.8	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
cis-1,2-DCE	70	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
trans-1,2-DCE	70	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1-DCE	7	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1-DCA	700	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
vinyl chloride	0.015	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
chloroethane	2800	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Total Target Compounds		BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

Analyte	2L Standards (µg/L)	MW-11		MW-12		MW-13		MW-14	
		Mar-97	Sep-98	Apr-00	Apr-97	Sep-98	Apr-00	Apr-97	Sep-98
1,1,1-TCA	200	84	240	94	BQL	BQL	BQL	BQL	BQL
TCE	2.8	470	890	300	BQL	BQL	BQL	BQL	BQL
cis-1,2-DCE	70	2	10	6.5	BQL	BQL	BQL	BQL	BQL
trans-1,2-DCE	70	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1-DCE	7	33	74	52	BQL	BQL	BQL	BQL	BQL
1,1-DCA	700	2	6	7.3	BQL	BQL	BQL	BQL	BQL
vinyl chloride	0.015	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
chloroethane	2800	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Total Target Compounds		591	1220	459.8	BQL	BQL	BQL	BQL	BQL

Analyte	2L Standards (µg/L)	DW-1		DW-2		DW-3		On-site Supply Well	
		Feb-97	Sep-98	Apr-00	Apr-97	Sep-98	Apr-00	Jul-99	Apr-00
1,1,1-TCA	200	BQL	BQL	BQL	41	53	64	BQL	BQL
TCE	2.8	BQL	BQL	BQL	250	470	420	2.1	1.5
cis-1,2-DCE	70	BQL	BQL	BQL	6	5	5.6	BQL	BQL
trans-1,2-DCE	70	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1-DCE	7	BQL	BQL	BQL	44	61	93	BQL	BQL
1,1-DCA	700	BQL	BQL	BQL	7	8	11	BQL	BQL
vinyl chloride	0.015	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
chloroethane	2800	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Total Target Compounds		BQL	BQL	BQL	348	597	593.6	2.1	1.5

* Only the target chlorinated contaminants are presented in this summary. Chemical concentrations (µg/L) exceeding 2L standards are highlighted.

Table 3. Well Construction / Water Level Data ⁽¹⁾
NCDOT Asphalt Site 6-48 (Lee Paving)
Pittsboro, Chatham County, NC
S&ME Project No. 1040-98-107

Well ID	Date of Installation	Measuring Point Elevation (ft)	Total Depth (ft bgs)	Surface Casing Depth (ft bgs)	Depth of Screened Zone (ft bgs)	Depth to Water (Apr. 97)	Water Table Elev. (Apr. 97)	Depth to Water (Feb. 99)	Water Table Elev. (Feb. 99)	Depth to Water (Apr. 00)	Water Table Elev. (Apr. 00)
48MW-1	11/14/1996	995.2	50	36	46-36	27.98	967.22	31.71	963.49	31.23	963.97
48MW-2	11/14/1996	993.8	50	40	50-40	25.62	968.18	29.16	964.64	28.49	965.31
48MW-3	11/14/1996	997.71	56	40	50-40	29.89	967.82	32.93	964.78	32.25	965.46
48MW-4	11/13/1996	998.21	36	26	36-26	15.81	982.4	20.49	977.72	18.89	979.32
48MW-5	11/12/1996	1001.68	43	33	43-33	22.07	979.61	24.28	977.4	23.13	978.55
48MW-6	01/15/1997	987.97	44	34	44-34	20.32	967.65	23.83	964.14	22.25	965.72
48MW-7	01/16/1997	986.02	34	24	34-24	8.04	977.98	11.77	974.25	10.39	975.63
48MW-8	01/16/1997	989.41	32	22	32-22	6.73	982.68	NA	NA	NA	NA
48MW-9	01/16/1997	990.91	22	11	22-11	8.51	982.4	NA	NA	NA	NA
48MW-10	03/03/1997	994.99	40	30	40-30	24.7	970.29	26.34	968.65	25.82	969.17
48MW-11	03/03/1997	988.48	29	19	29-19	21.34	967.14	25.25	963.23	24.82	963.66
48MW-12	04/17/1997	972.71	37.5	27.5	37.5-27.5	8.66	964.05	10.9	961.81	9.78	962.93
48MW-13	04/17/1997	967.76	32.5	22.5	32.5-22.5	7.37	960.39	7.04	960.72	7.14	960.62
48DW-1	01/15/1997	994.67	100	63	100-63*	31.05	963.62	87.15**	907.52**	1.73	992.94
48DW-2	04/24/1997	991.84	66	43	66-43*	24.73	967.11	28.41	963.43	27.89	963.95
48DW-3	07/26/1999	988.65	125	31	125-115	-	-	-	-	24.18	964.47

(1) Construction details for all monitor wells, with the exception of 48DW-3, are provided in Table 5-1 of the CSA report (Geraghty & Miller, 1997). 48DW-3 was installed by S&ME and the construction details of this well are provided in Appendix III of this report. All elevation data are referenced to an assumed datum of 1,000 feet.

* Open rock from the bottom of surface casing to the bottom of well.

** Water level did not recover from the pumping conducted at this well 8 days before the water level measurement.

NA : Monitor wells were found destroyed.

Table 4. Packer Sampling of Supply Well and DMW-3*
 NCDOT Asphalt Site 6-48 (Lee Paving)
 Pittsboro, Chatham County, NC
 S&ME Project No. 1040-98-107

Supply Well (May 1999)

Analyte	2L Standards (µg/L)	Packer Interval: 44 to 54 (ft)		Packer Interval: 56 to 66 (ft)		Packer Interval: 70 to 80 (ft)				
		Purged Volume (gal)	14	28	42	18	48	78	20	50
TCE	2.8	240	120	90	260	210	210	1500	780	790
1,1,1-TCA	200	180	130	120	130	120	90	170	180	150
cis-1,2-DCE	70	4	1.8	2.8	2.6	1.7	1.8	2.4	7.6	5.1
1,1-DCE	7	28	20	25	32	33	16	44	26	28
1,1-DCA	700	7.8	5.1	7.6	7.6	6.4	6.6	7.7	8.1	7.9

DW-3 (July 1999)

Analyte	2L Standards (µg/L)	Packer Interval: 28 to 38 (ft)		Packer Interval: 68 to 78 (ft)		Packer Interval: 90 to 100 (ft)		Packer Interval: 115 to 125 (ft)		
		Purged Volume 20 gal	90	17	18 gal	7.4	0.8	60 gal	5.4	2.1
TCE	2.8	90	17	18 gal	7.4	0.8	60 gal	5.4	2.1	60 gal
1,1,1-TCA	200	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
cis-1,2-DCE	70	0.7	0.7	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1-DCE	7	0.9	0.9	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1-DCA	700	0.9	0.9	BQL	BQL	BQL	BQL	BQL	BQL	BQL

* Only target contaminants are presented in this table. Concentrations are expressed in µg/L.

TABLE 5. Summary of Adjacent Property Owners and Supply Wells ⁽¹⁾
NCDOT Asphalt Site 6-48 (Lee Paving)
Pittsboro, Chatham County, NC
S&ME Project No. 1040-98-107

Property ID Number (See Fig. 2-9)	Registered Property Owner	Property Owner Address	Current Use	Well Sampled ⁽²⁾
1	Roy Stewart (Site Property)	P.O. Box 1109 Sanford, NC 27350	Commercial	No
2	Erskine Heatherley, Jr.	96 Deer Run Pittsboro, NC 27312	Residential	No
3	Patricia Ellis & Deborah Sasser	154 Deer Run Pittsboro, NC 27312	Residential	No
4	James E. McKendry	190 Deer Run Pittsboro, NC 27312	Residential	No
5	James L. Harris	459 Mays Chapel Rd. Pittsboro, NC 27312	Residential	No
6	Bradley E. Holloway	Mt. Gilead Woods Pittsboro, NC 27312	Residential	No
7	Sara Corden	577 Silver Berry Rd. Pittsboro, NC 27312	Residential	Yes
8	Raymond J. Ingram	521 Silver Berry Rd. Pittsboro, NC 27312	Residential	No
9	Mildred Cason	768 E. Perry Rd. Pittsboro, NC 27312	Residential	No
10	Mildred Cason	768 Perry Rd. Pittsboro, NC 27312	Residential	Yes
11	David P. Martinez	103 Rabbit Run Pittsboro, NC 27312	Residential	No
12	David P. Martinez & Graci J.	103 Rabbit Run Pittsboro, NC 27312	Residential	No
13	Roy F. & Aliene Keck	173 Rabbit Run Pittsboro, NC 27312	Residential	No
14	Dexter V. Perry Dexter V. Perry Trust	614 Sanderson Drive Durham, NC 27704	Residential	No
15	James D. & Ann B. Marlow	P.O. Box 193 Bynum, NC 27228	Residential	No

1. Inventory data provided in the CSA report (Geraghty & Miller, 1997).

2. --- : Property is outside the 1,500-foot radius or no water supply well present.

TABLE 5. (Cont'd) Summary of Adjacent Property Owners and Supply Wells ⁽¹⁾

Property ID Number (See Fig. 2-10)	Registered Property Owner	Property Owner Address	Current Use	Well Sampled ⁽²⁾
16	William F. & Deborah K. Lancaster	1026 Mt. Gilead Church Rd. Pittsboro, NC 27312	Residential	No
17	Claron N. Hatley c/o Susan Ickes & James Hatley	15 Ashwood Knoll Rochester, NY 14624	Residential	--
18	William Hatley	3109 Commonwealth Ave. Charlotte, NC 28205	Residential	--
19	Deborah McNeil Deaton	131 Crossing Ave. Belmont, NC 28012	Residential	--
20	Doris Earl McNeil	1824 Stoney Ridge Dr. Charlotte, NC 28214	Residential	No
21	Sugar Lake Land Company	981 Old Graham Rd. Pittsboro, NC 27312	Residential	--
22	Federal Paper BD Co. Inc.	P.O. Box 146 Southern Pines, NC 28388	Commercial	No
23	Timothy R. Mitchel	681 Mt. Gilead Church Rd. Pittsboro, NC 27312	Residential	No
24	Dennis C. & Phillis C. Campbell	Rt. 4 Box 588 Pittsboro, NC 27312	Residential	No
25	Alvis Page	1085 Mt. Gilead Church Rd. Pittsboro, NC 27312	Residential	No
26	James & Marjorie Burnette	419 Hardee Street Durham, NC 27703	Residential	No
27	Samuel Burnette	Route 4, Box 578 Pittsboro, NC 27312	Residential	No
28	Page Willene Bright	Route 4, Box 576 Pittsboro, NC 27312	Residential	No
29	Phillip W. Corn	P.O. Box 1002 Cary, NC 27512	Residential	No
30	Louise Heardon & Helen Toney	108 Cole Street Chapel Hill, NC 27516	Residential	No

TABLE 5. (Cont'd) Summary of Adjacent Property Owners and Supply Wells ⁽¹⁾

Property ID Number (See Fig. 2-10)	Registered Property Owner	Property Owner Address	Current Use	Well Sampled ⁽²⁾
31	Paul Dean & Virginia Bailey	101 Rabbit Run Pittsboro, NC 27312	Residential	No
32	Pat & Elward Horton	911 Whippoorwill Lane Chapel Hill, NC 27514	Residential	--
33	Paggy Jean Porter	464 Old Farrington Road Chapel Hill, NC 27514	Residential	--
34	Karl W. & Inger Rabe	114 Rabbit Run Pittsboro, NC 27312	Residential	--
35	Garry & Patricia Anderson	79 Silver Berry Road Pittsboro, NC 27312	Residential	--
36	Richard & Christine Fish	208 Rabbit Run Pittsboro, NC 27312	Residential	--
37	Tony Michael	Route 4, Silver Berry Road Pittsboro, NC 27312	Residential	--
38	David & Deborah Walton	167 Silver Berry Road Pittsboro, NC 27312	Residential	--
39	John & Cynthia Heuer	Route 4, Box 559-D Pittsboro, NC 27312	Residential	--
40	Richard & Christy Fish	208 Rabbit Run Pittsboro, NC 27312	Residential	--
41	Albert Lindsay	Route 4, Box 559-1 Pittsboro, NC 27312	Residential	--
42	Thomas & Helen Dean	300 Rabbit run Pittsboro, NC 27312	Residential	No
43	Gail Darden & Albert Lindsay	Route 4, Box 559-1 Pittsboro, NC 27312	Residential	--
44	Phillip Allen	483 Silver Berry Road Pittsboro, NC 27312	Residential	No
45	James Poole	376 Silver Berry Road Pittsboro, NC 27312	Residential	--

TABLE 5. (Cont'd) Summary of Adjacent Property Owners and Supply Wells ⁽¹⁾

Property ID Number (See Fig. 2-10)	Registered Property Owner	Property Owner Address	Current Use	Well Sampled ⁽²⁾
46	Carolyn Campbell, John Davis, John & Janet Campbell	502 Belmont Street Chapel Hill, NC 27514	Residential	--
47	Kimberly Gay Preble	21 Meadowbrook Drive Durham, NC 27712	Residential	--
48	Anna Lee Leonard	544 Silver Berry Road Pittsboro, NC 27312	Residential	--
49	David & Robyn Halliday	604 Silver Berry Road Pittsboro, NC 27312	Residential	--
50	Terry & Linda Lindsey	746 Silver Berry Road Pittsboro, NC 27312	Residential	--
51	Bobbi & Jean Riddle	94 Sweet Gum Pittsboro, NC 27312	Residential	--
52	Phreddie Delois Popp	Route 4, Box 394 Pittsboro, NC 27312	Residential	No
53	M.S. Brantley	7 Crosswinds Estates Pittsboro, NC 27312	Residential	Yes
54	Phreddie Delois Popp	Route 4, Box 394 Pittsboro, NC 27312	Residential	--
55	Mark Flynn	334 Deer Run Pittsboro, NC 27312	Residential	--
56	Michael & Patti Davis	458 Deer Run Pittsboro, NC 27312	Residential	--
57	Doris & Kathleen Flynn	287 Deer Run Pittsboro, NC 27312	Residential	No
58	William & Janet Wyatt	365 Deer Run Pittsboro, NC 27312	Residential	--
59	John & Jacqueline O'Gorman	421 Deer Run Pittsboro, NC 27312	Residential	--
60	Wayne Michael Wade	Route 4, Box 592 Pittsboro, NC 27312	Residential	No

TABLE 5. (Cont'd) Summary of Adjacent Property Owners and Supply Wells ⁽¹⁾

Property ID Number (See Fig. 2-10)	Registered Property Owner	Property Owner Address	Current Use	Well Sampled ⁽²⁾
61	Maria Russon	Route 5, Box 597 Pittsboro, NC 27312	Residential	No
62	Ronald & Phillis Graham	500 Sugar Lake Road Pittsboro, NC 27312	Residential	Yes
63	Daniel & Marion Munn	Route 4, Box 603-A Pittsboro, NC 27312	Residential	--
64	Robert Paul Kolin	580 Sugar Lake Road Pittsboro, NC 27312	Residential	--
65	Douglas Wakeman	624 Sugar Lake Road Pittsboro, NC 27312	Residential	--
66	Thomas & Saranne Wilson	562 Sugar Lake Road Pittsboro, NC 27312	Residential	--
67	Theadore & Julie Taydus	495 Sugar Lake Road Pittsboro, NC 27312	Residential	--
68	Archie & Shana Hankins	555 Sugar Lake Road Pittsboro, NC 27312	Residential	--
69	John Judd & Annette Reaves	P.O. Box 992 Pittsboro, NC 27312	Residential	--
70	Pat & Elward Horton	911 Whippoorwill Lane Chapel Hill, NC 27514	Residential	--

TABLE 6. Physical And Chemical Properties Of Target Contaminants ⁽¹⁾

NCDOT Asphalt Site 6-48 (Lee Paving)

Pittsboro, Chatham County, NC

S&ME Project No. 1040-98-107

Chemical	Molecular Weight	Specific Gravity	Vapor Pressure (mm Hg)	Solubility (mg/L)	15A NCAC 2L (µg/L)	Max. Detected ⁽²⁾ (µg/L)	Henry's Law Cons. (atm.m³/mol)	Boiling Point (°C)
1,1,1-TCA	133.4	1.325	124 (25°C)	950 (25°C)	200	240	0.0162	74.1
1,1-DCA	98.96	1.18	234 (25°C)	5060 (25°C)	700	8.1	0.00587	57.3
chloroethane	64.52	0.92	5740 (20°C)	5740 (20°C)	2800	BQL	0.011	12.3
TCE	131.39	1.456	72.6 (25°C)	1100 (25°C)	2.8	890	0.0091	87.2
cis-1,2-DCE	96.94	1.27	410 (30°C)	6300 (25°C)	70	10	0.00674	47.5
1,1-DCE	96.94	1.21	591 (25°C)	5000 (25°C)	7	74	0.021	31.5
vinyl chloride	62.5	0.91	2660 (25°C)	1100 (25°C)	0.015	BQL	2.78	-13.4

(1) Data sources: *Hawley's Condensed Chemical Dictionary* by Richard J. Lewis, Sr., 1997; *Remediation Engineering Design Concept* by Suthan S. Suthersan, 1997; and *Pocket Guide To Chemical Hazards* by USDHHS, Center for Disease Control and Prevention, 1997.

(2) The maximum concentration as detected in the CSA and CAP investigations. Groundwater quality data are presented in Table 2.

Table 7. Air Sparging / Vapor Extraction Field Tests
NCDOT Asphalt Site 6-48 (Lee Paving)
Pittsboro, Chatham County, NC
S&ME Project No. 1040-98-107

Air Sparging Test

Injection Pressure (psig)	40	44	30
Air Flow Rate (acfm)	6	8	4
Sparging Duration (min)	55	55	15
Water Level Rise (ft)			
MW-1	0.2	0.3	NA
MW-11	0.17	0.29	NA
Air Pressure (psig)			
at PZ-1	NA	NA	0.1
PZ-2	NA	NA	0.1

Vapor Extraction Test

Extraction Vacuum (psig)	1.7 (47-inch H ₂ O)
Air Flow Rate (acfm)	32.5
Extraction Time (min)	180

**Table 8. Aquifer Test - Water Level Data
 NCDOT Asphalt Site 6-48 (Lee Paving)
 Pittsboro, Chatham County, NC
 S&ME Project No. 1040-98-107**

Test 1			
Pumping Interval: 56-66 Feet Below Top of Casing			
Monitoring Point	Screen Interval (ft bgs)	Distance From Pumping Well (ft)	Maximum Drawdown Observed (ft)
MW-1	43-36	15	Unknown
DW-2	66-43	130	2.247
MW-11	29-19	140	0.447
MW-2	50-40	135	1.05
MW-5	43-33	220	0.06
MW-10	40-30	230	0.06

Test 2			
Pumping Interval: 70-80 Feet Below Top Of Casing			
Monitoring Point	Screen Interval (ft bgs)	Distance From Pumping Well (ft)	Maximum Drawdown Observed (ft)
MW-1	43-36	15	0.541
DW-2	66-43	130	1.673
MW-11	29-19	140	0.11
MW-2	50-40	135	0.64
MW-5	43-33	220	0.01
MW-10	40-30	230	0.03

Table 9. Aqtesolv Data Input
NCDOT Asphalt Site 6-48 (Lee Paving)
Pittsboro, Chatham County, NC
S&ME Project No. 1040-98-107

Test 1			
Test Well	Water Supply Well		
Observation Well	DW-2		
Aquifer Saturated Thickness	70	ft	
Pumping Rate	0.334	ft ³ / min	1 to 957 minutes
	0.535	ft ³ / min	957 to 1,125 minutes
	0.615	ft ³ / min	1,125 to 1,321 minutes
Test Well Data			
Wellbore Radius	0.25	ft	
Depth to Top of Screen	32.08	ft	
Depth to Screening Bottom	85	ft	
Observation Well Data			
Partially Penetration			
Depth to Top of Screen	28.33	ft	
Depth to Screen Bottom	66	ft	
Test 2			
All input parameters are the same except			
Pumping Rate	0.294	ft ³ / min	1 to 1,060 minutes

**Table 10. WHPA Data Input
 NCDOT Asphalt Site 6-48 (Lee Paving)
 Pittsboro, Chatham County, NC
 S&ME Project No. 1040-98-107**

Module :	General Particle Tracking Module
Aquifer Type :	Semi-confined
Transmissivity :	55.1 ft ² / day
Aquifer Porosity :	0.1
Hydraulic Gradient :	0.057
Angle of Ambient Flow :	330°
Confining Layer Thickness :	10 ft
Confining Layer Hydraulic Conductivity :	0.03 ft / day
Time of Simulation :	365 days
Time Value for Capture Zone :	365 days
Pumping Rate :	423 ft ³ / day
Well Radius :	0.2 ft
No Boundary Conditions	

Table 11. Estimated Time Frame to Achieve Cleanup Goals
NCDOT Asphalt Site 6-48 (Lee Paving)
Pittsboro, Chatham County, NC
S&ME Project No. 1040-98-107

Assuming the pump-and-treat system is the limiting factor in the completion of groundwater remediation, the remediation is complete when the pump-and-treat system achieves its cleanup goal.

Total volume required to cleanup contamination by pump-and-treat = 4 pore volumes

Approximate radius of target treatment area = 150 feet

Approximate saturated thickness of target treatment area = 50 feet

Porosity = 0.1

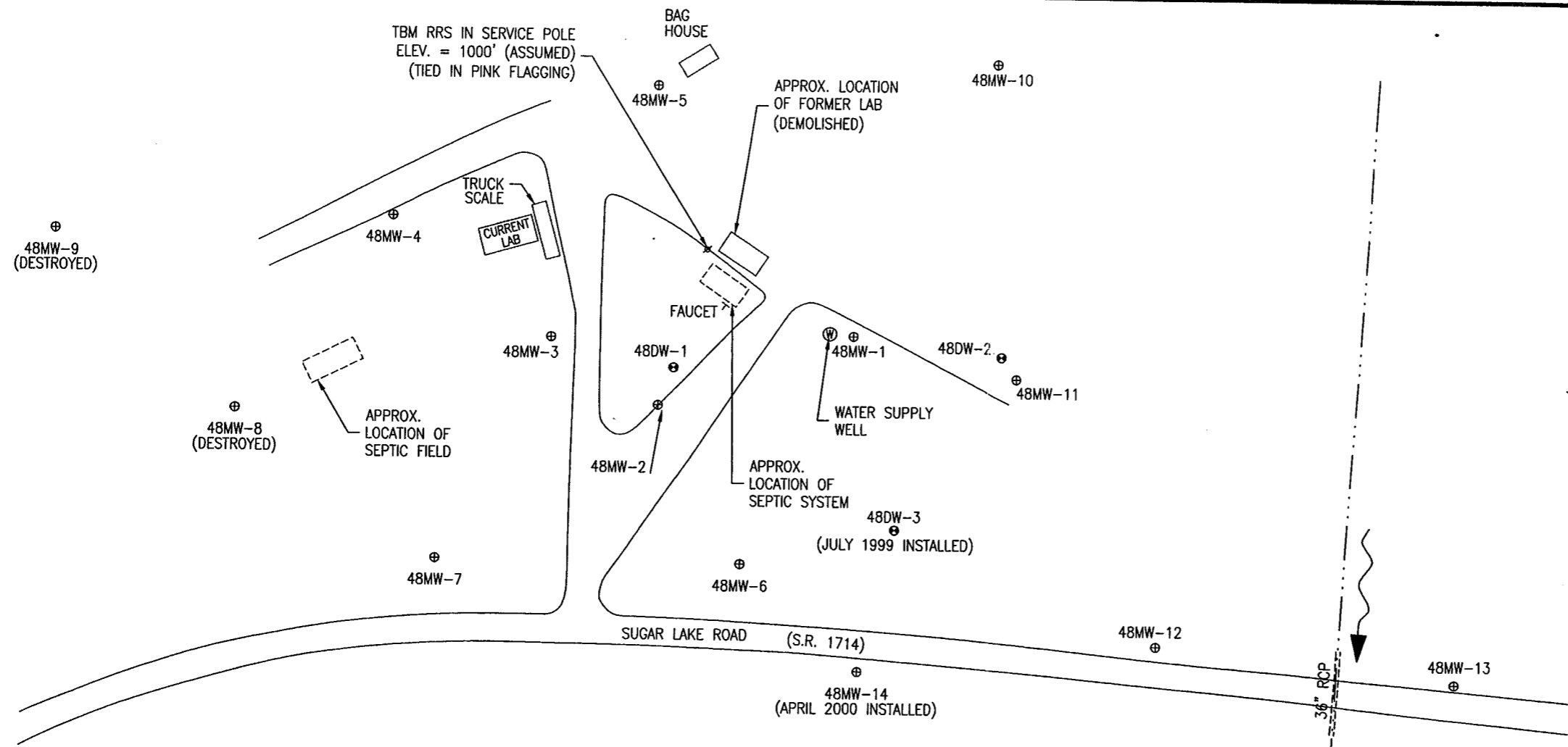
Total volume for treatment = treatment area x saturated thickness x porosity

$$\pi \times 150^2 \times 50 \times 0.1 = 353,429 \text{ ft}^3$$

$$= 2,643,648 \text{ gallons}$$

Four pore volumes = 10,574,592 gallons

At the proposed pumping rate of 2.5 gpm, the time required to pump 4 pore volumes = 8 years



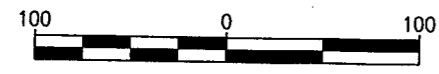
LEGEND


- ⊕ TYPE II MONITOR WELL
- ⊗ TYPE III MONITOR WELL
- Ⓜ APPROXIMATE LOCATION OF WATER SUPPLY WELL
- CREEK
- SURFACE WATER FLOW DIRECTION

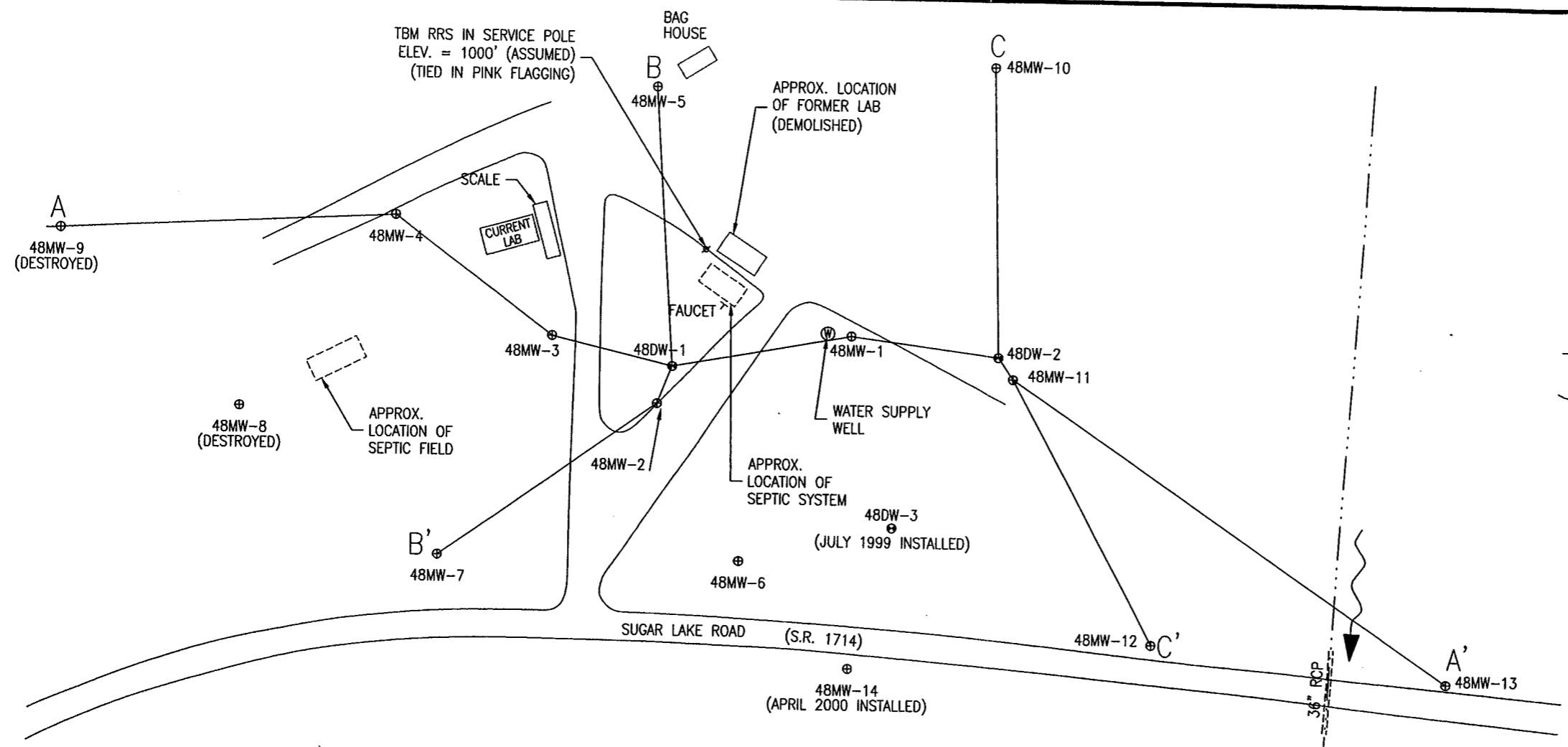
NOTE

SITE PLAN DEVELOPED FROM MAP PROVIDED IN THE CSA REPORT (GERAGHTY & MILLER, INC. 1997)

LOCATION OF 48MW-14 IS APPROXIMATE AND HAS NOT BEEN SURVEYED.



<p>SITE PLAN</p> <p>NCDOT SITE NO. 6-48</p> <p>PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA</p>		
 <p>S&ME ENVIRONMENTAL SERVICES ENGINEERING • TESTING</p>	<p>RALEIGH BRANCH 3118 SPRING FOREST ROAD P.O. BOX 58069 RALEIGH, N.C. 27658-8069 (919) 872-2660 FAX: (919) 790-9827</p>	
SCALE: 1" = 100'	DRAWN BY: EP	CHECKED BY: JW
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 1-2

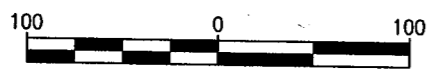



LEGEND

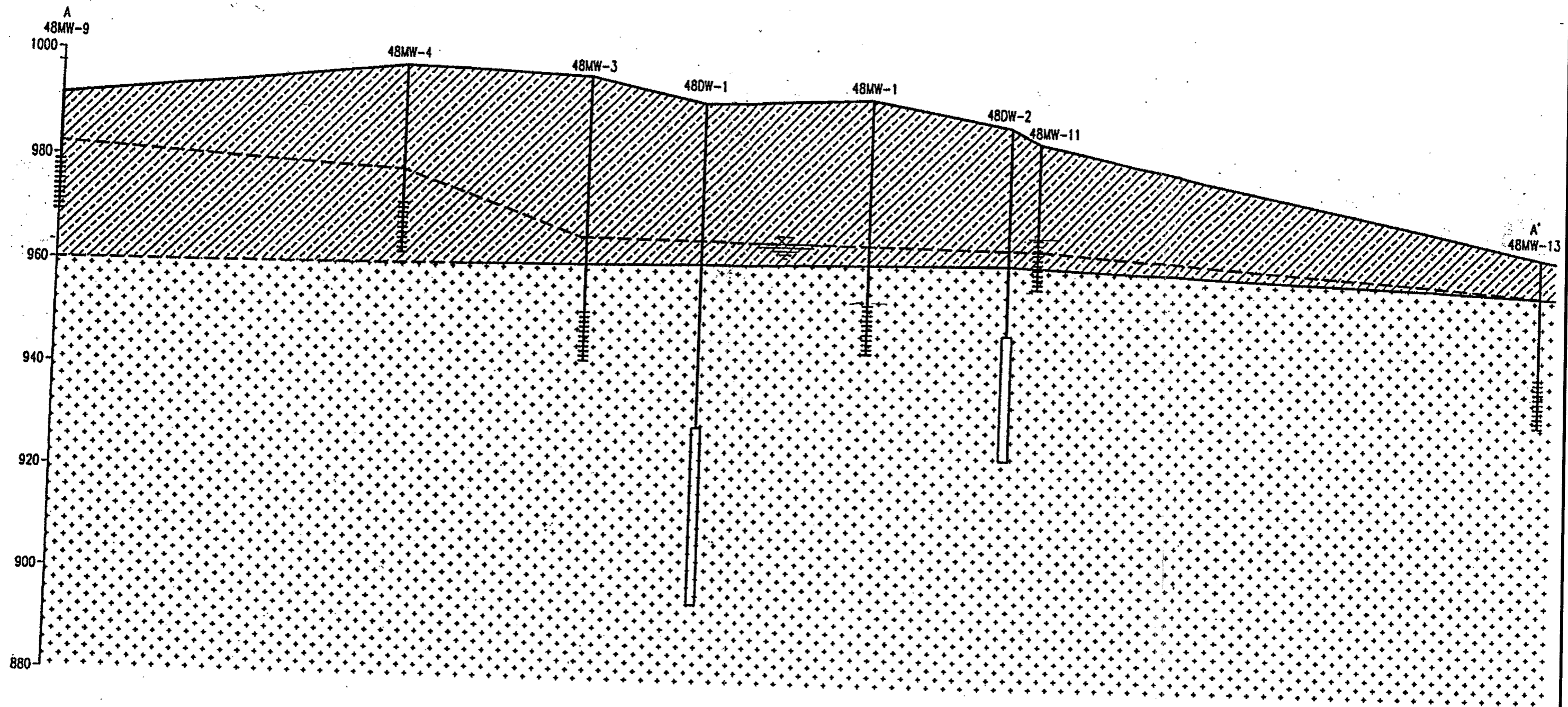
- ⊕ TYPE II MONITOR WELL
- ⊙ TYPE III MONITOR WELL
- Ⓜ APPROXIMATE LOCATION OF WATER SUPPLY WELL
- CREEK
- SURFACE WATER FLOW DIRECTION

NOTE






SITE PLAN DEVELOPED FROM MAP PROVIDED IN THE CSA REPORT (GERAGHTY & MILLER, INC. 1997)

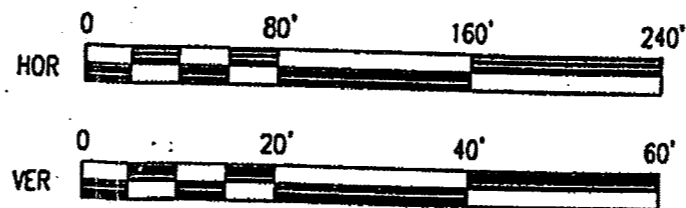


<p>CROSS SECTION LOCATION MAP</p> <p>NCDOT SITE NO. 6-48</p> <p>PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA</p>		
 <p>S&ME ENVIRONMENTAL SERVICES ENGINEERING • TESTING</p>	<p>RALEIGH BRANCH 3118 SPRING FOREST ROAD P.O. BOX 58069 RALEIGH, N.C. 27658-8069 (919) 872-2660 FAX: (919) 790-9827</p>	
SCALE: 1" = 100'	DRAWN BY: EP	CHECKED BY: JW
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 1-3



NOTE:
THIS FIGURE IS A REPRODUCTION OF FIGURE 8-2 IN THE CSA REPORT FURNISHED BY NCDOT. (GERAGHTY & MILLER, INC, 1997)

LEGEND	
 BEDROCK	 SCREENED ZONE
 SILT	 OPEN ROCK WELLS
 WATER LEVEL ELEV. MEASURED 4/29/97	

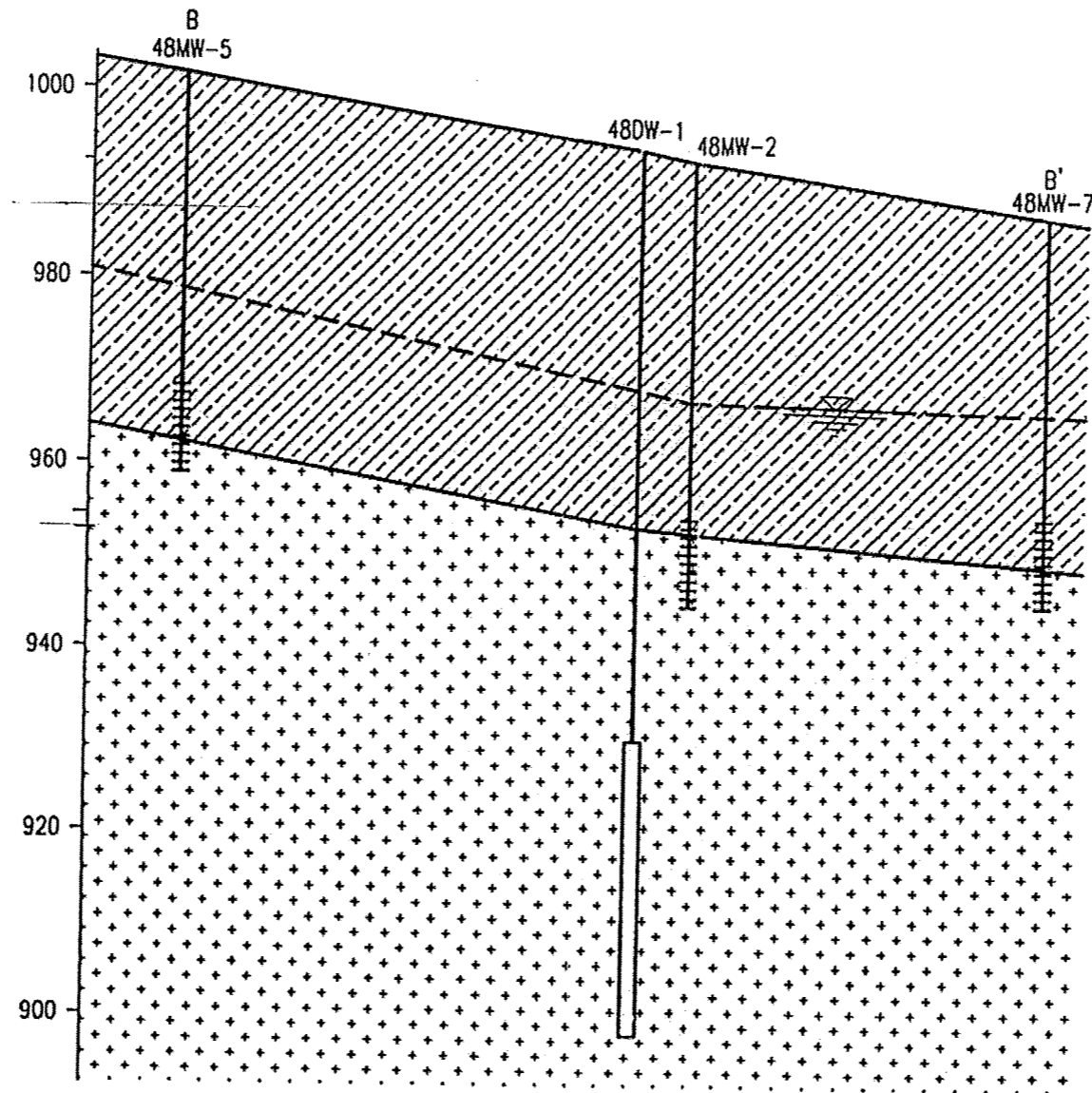


GEOLOGIC CROSS-SECTION A-A'
(WEST-EAST)
NCDOT SITE NO. 6-48
PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA



RALEIGH BRANCH
3118 SPRING FOREST ROAD
P.O. BOX 58069
RALEIGH, N.C. 27658-8069
(919) 872-2660
FAX: (919) 790-9827

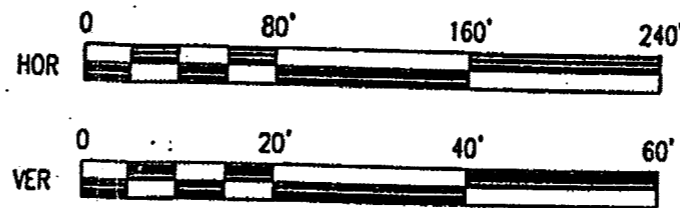
SCALE: AS NOTED	DRAWN BY: EP	CHECKED BY: JW
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 1-4



NOTE:

THIS FIGURE IS A REPRODUCTION OF FIGURE 8-3 IN THE CSA REPORT FURNISHED BY NCDOT. (GERAGHTY & MILLER, INC, 1997)

LEGEND	
	BEDROCK
	SILT
	SCREENED ZONE
	OPEN ROCK WELLS
	WATER LEVEL ELEV. MEASURED 4/29/97

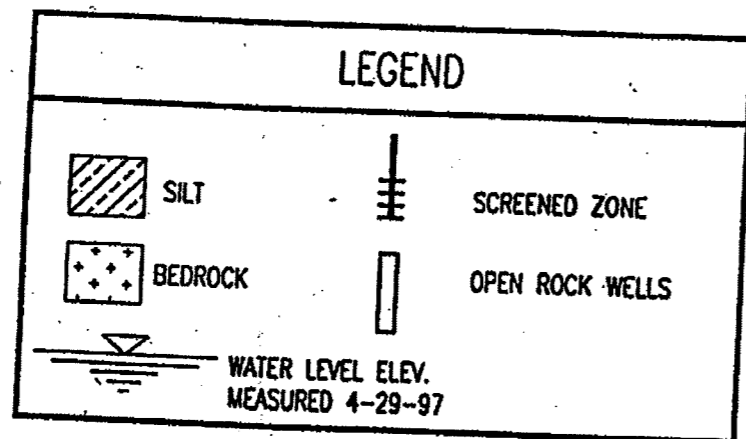
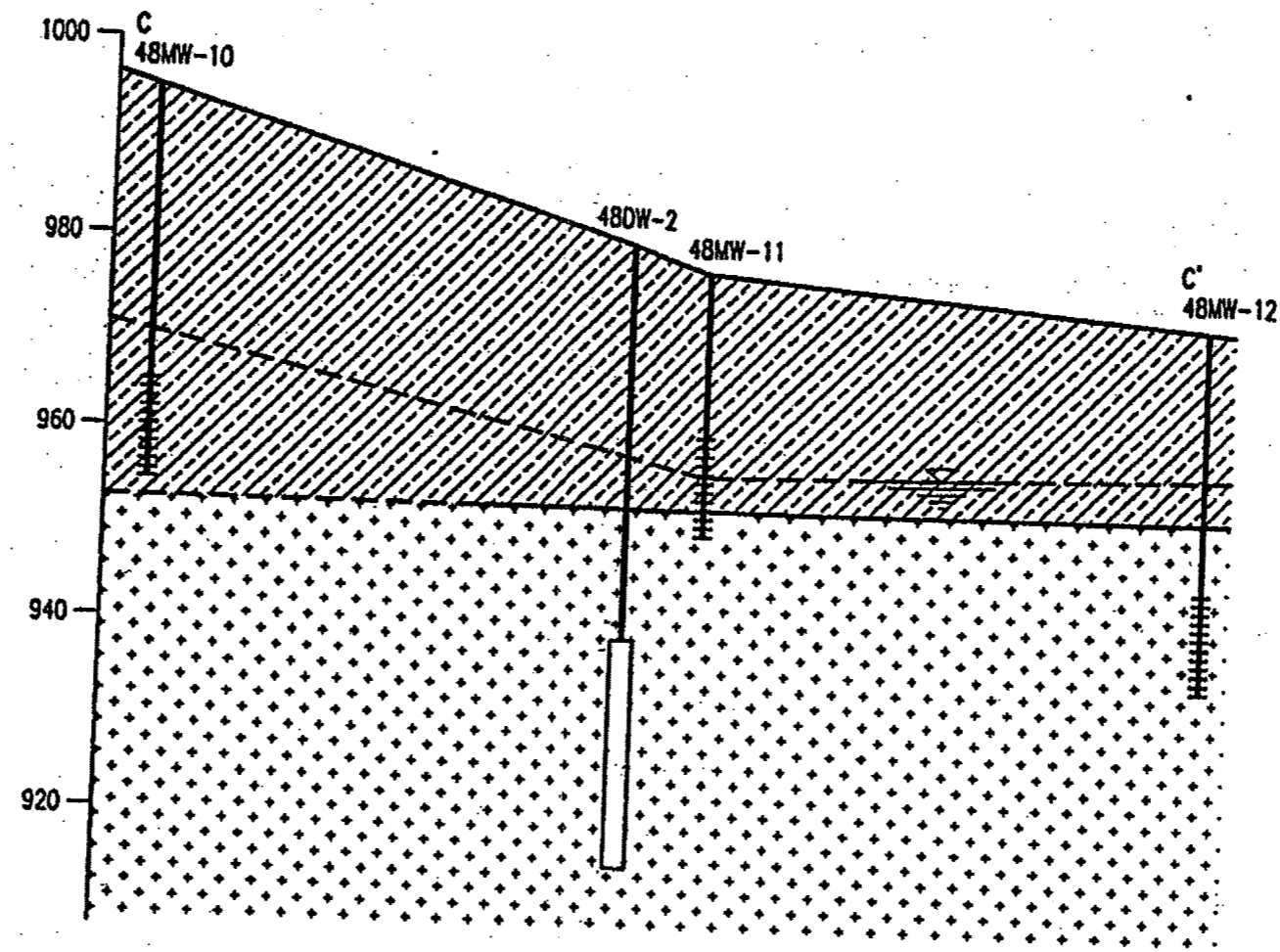


GEOLOGIC CROSS-SECTION B-B'
(NORTH-SOUTH)
NCDOT SITE NO. 6-48
PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA



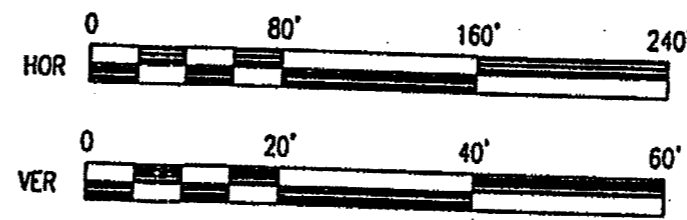
RALEIGH BRANCH
3118 SPRING FOREST ROAD
P.O. BOX 58069
RALEIGH, N.C. 27658-8069
(919) 872-2660
FAX: (919) 790-9827

SCALE: AS NOTED	DRAWN BY: EP	CHECKED BY: JW
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 1-5



NOTE:

THIS FIGURE IS A REPRODUCTION OF FIGURE 8-4 IN THE CSA REPORT FURNISHED BY NCDOT. (GERAGHTY & MILLER, INC, 1997)

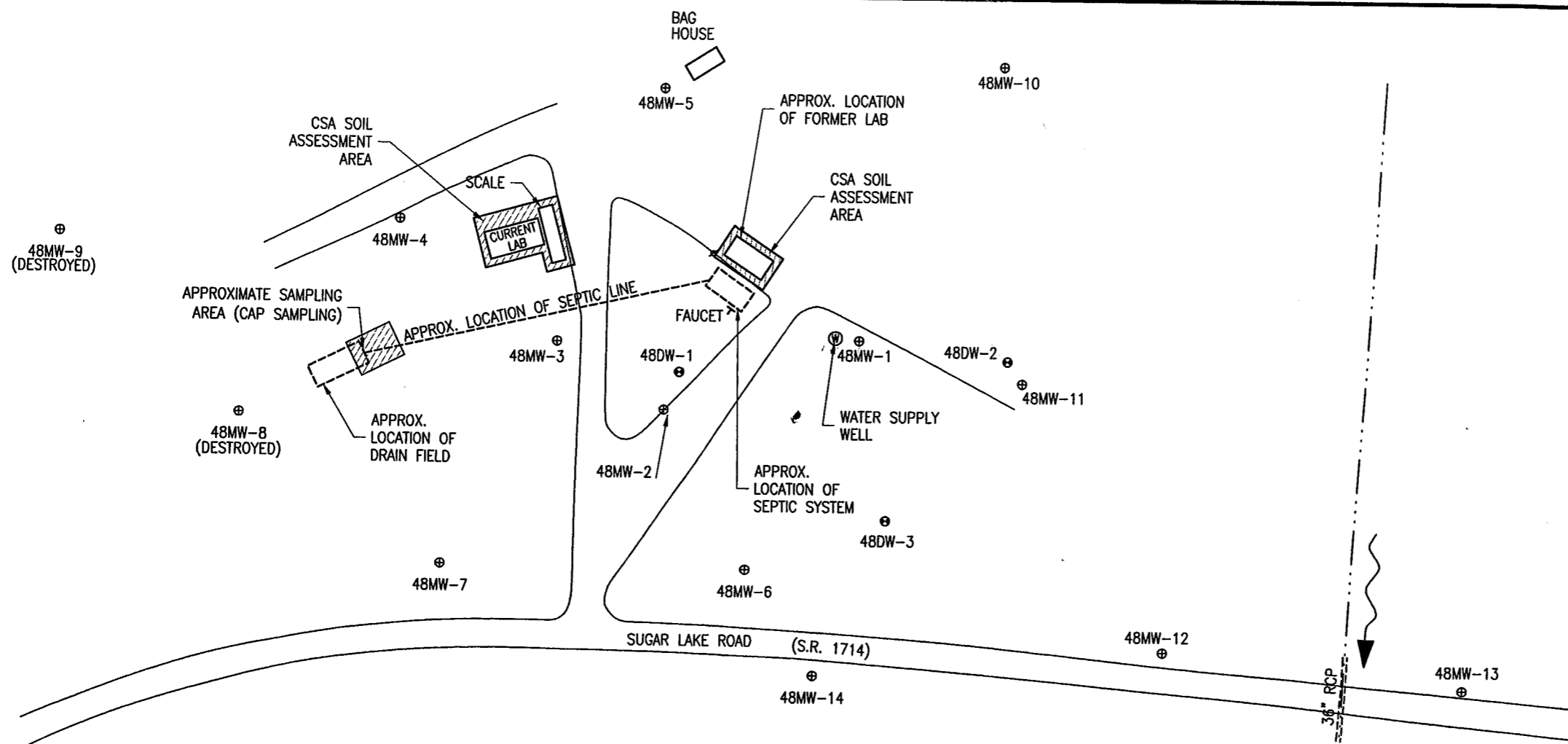


GEOLOGIC CROSS-SECTION C-C'
(NORTH-SOUTH)
NCDOT SITE NO. 6-48
PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA



RALEIGH BRANCH
3118 SPRING FOREST ROAD
P.O. BOX 58069
RALEIGH, N.C. 27658-8069
(919) 872-2660
FAX: (919) 790-9827

SCALE: AS NOTED	DRAWN BY: EP	CHECKED BY: JW
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 1-6

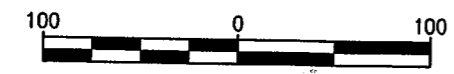



LEGEND

- ⊕ TYPE II MONITOR WELL
- ⊙ TYPE III MONITOR WELL
- Ⓜ APPROXIMATE LOCATION OF WATER SUPPLY WELL
- CREEK
- FLOW DIRECTION

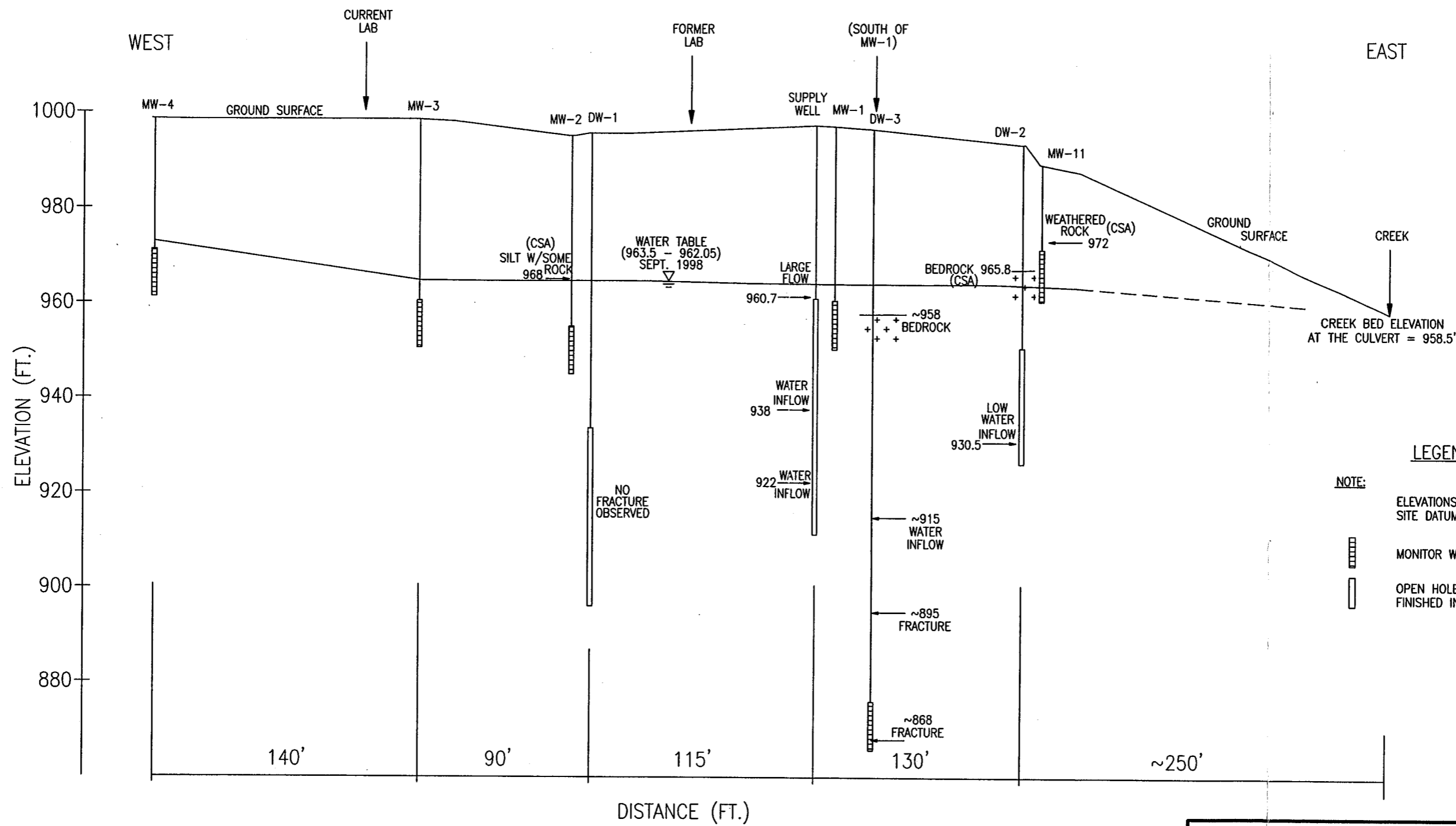
NOTES

SITE PLAN DEVELOPED FROM MAP PROVIDED IN THE CSA REPORT (GERAGHTY & MILLER, INC. 1997)
 CSA SOIL ASSESSMENTS INCLUDE 4 SAMPLES FOR FORMER LAB AND 7 SAMPLES FOR CURRENT LAB
 CAP SOIL ASSESSMENT INCLUDES 5 SAMPLES FOR SEPTIC SYSTEM



LOCATIONS OF SOIL ASSESSMENT NCDOT SITE NO. 6-48 PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA		
 S&ME ENVIRONMENTAL SERVICES ENGINEERING • TESTING	RALEIGH BRANCH 3118 SPRING FOREST ROAD P.O. BOX 58069 RALEIGH, N.C. 27658-8069 (919) 872-2660 FAX: (919) 790-9827	
SCALE: 1" = 100'	DRAWN BY: EP	CHECKED BY: JW
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 2-1

File:



LEGEND

NOTE:
ELEVATIONS ARE BASED ON ASSUMED SITE DATUM OF 1000.00 FT.

MONITOR WELL SCREEN INTERVAL
 OPEN HOLE AREA OF WELLS FINISHED IN BEDROCK

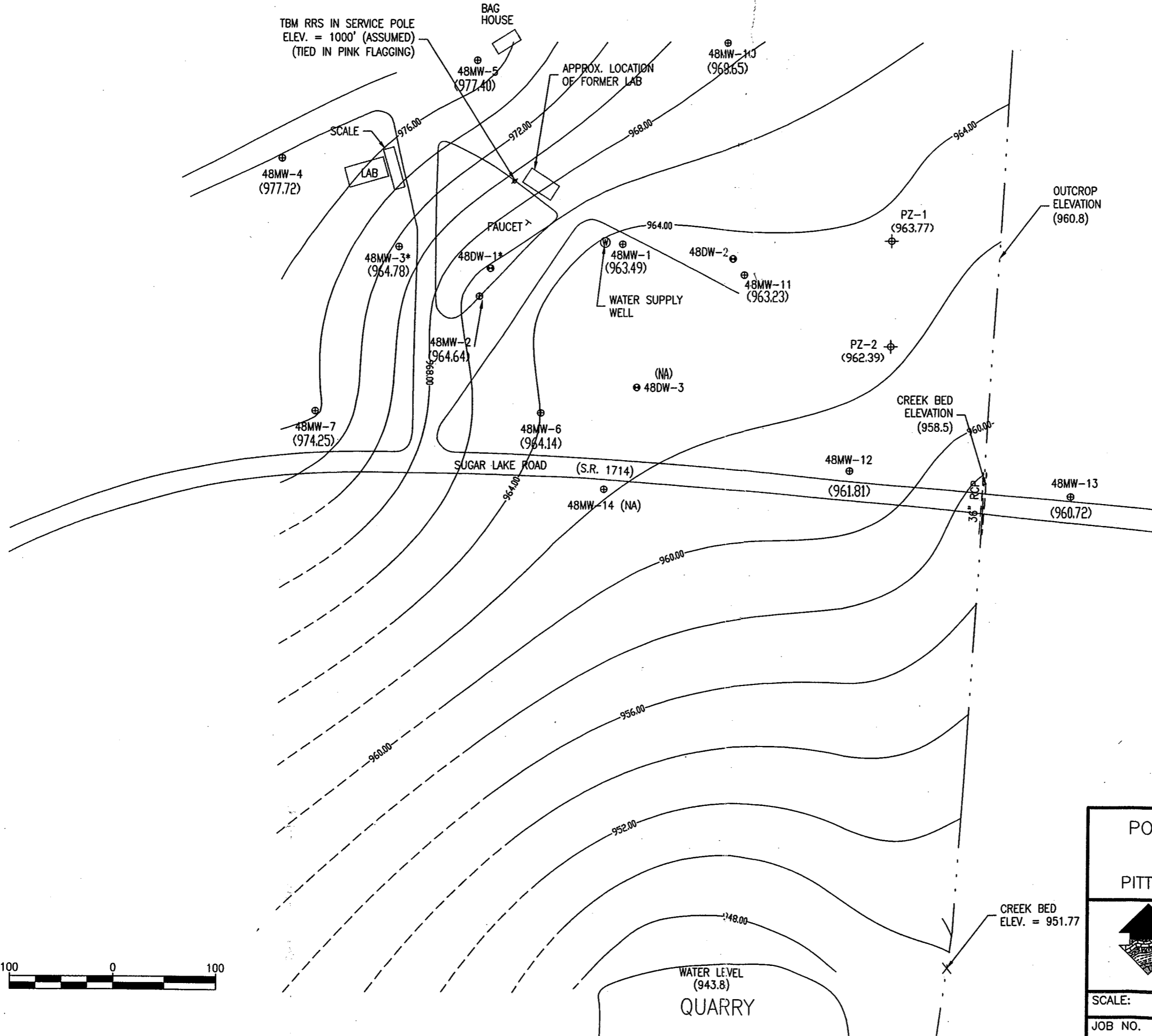
CROSS SECTION WITH VIDEO LOGGING OBSERVATION

NCDOT SITE NO. 6-48
PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA

S&ME
ENVIRONMENTAL SERVICES
ENGINEERING • TESTING

RALEIGH BRANCH
3118 SPRING FOREST ROAD
P.O. BOX 58069
RALEIGH, N.C. 27658-8069
(919) 872-2660
FAX: (919) 790-9827

SCALE: NTS	DRAWN BY: EP	CHECKED BY: JW	
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 2-4	




- LEGEND**
- ⊕ TYPE II MONITOR WELL
 - ⊙ TYPE III MONITOR WELL
 - ⊗ APPROXIMATE LOCATION OF WATER SUPPLY WELL
 - (960.8) POTENTIOMETRIC SURFACE ELEVATION (FT.)
 - ⊕ PZ = TEMPORARY PIEZOMETER

NOTE
* 48MW-3 IS NOT CONTOURED

ELEVATIONS ARE BASED ON ASSUMED SITE DATUM OF 1000.00 FT.

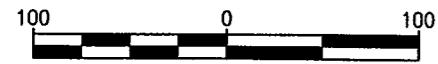
POTENTIOMETRIC MAP—SAPROLITE AQUIFER
(FEBRUARY 1999)
NCDOT SITE NO. 6-48
PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA



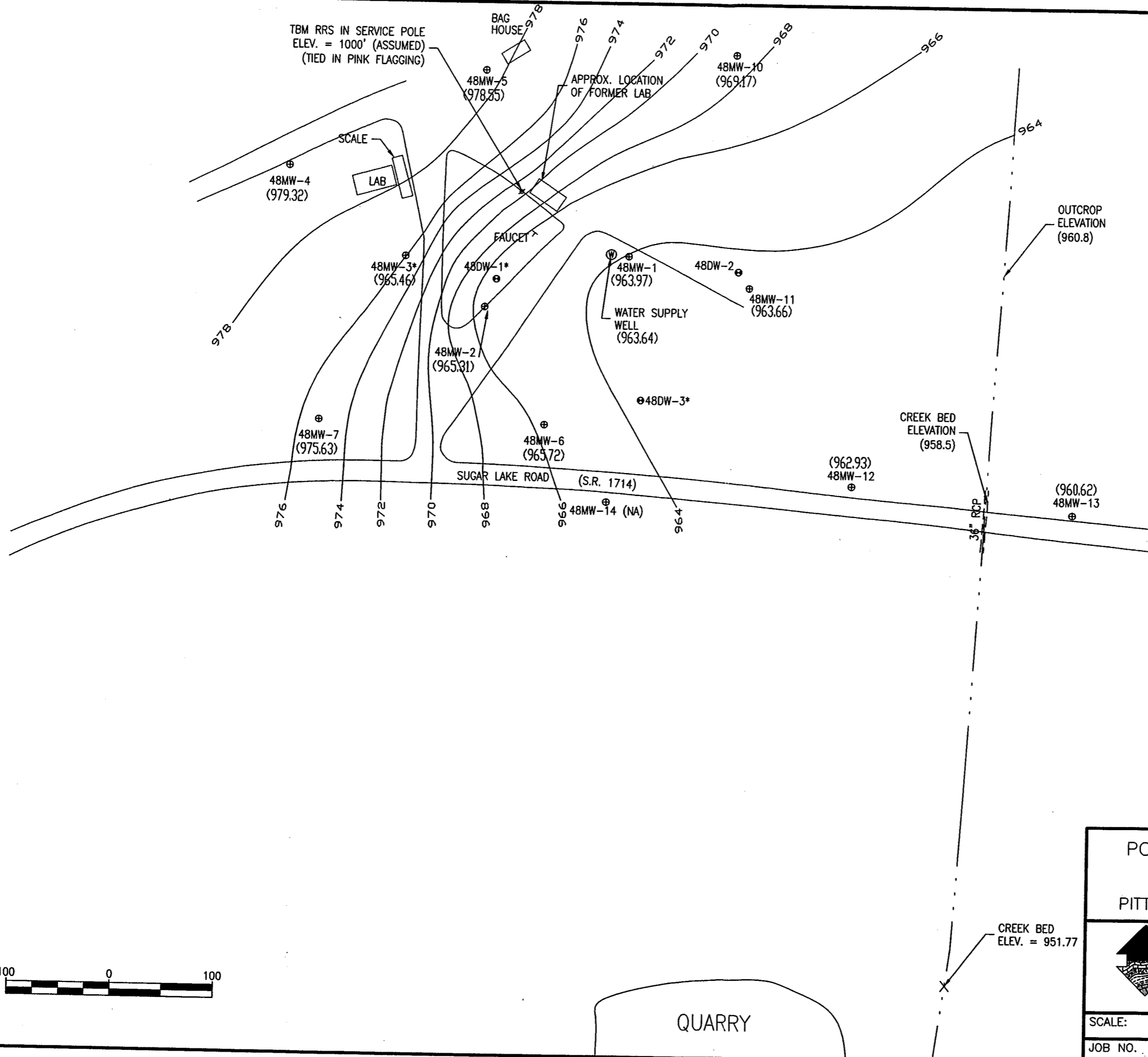
S&ME
ENVIRONMENTAL SERVICES
ENGINEERING • TESTING

RALEIGH BRANCH
3118 SPRING FOREST ROAD
P.O. BOX 58069
RALEIGH, N.C. 27658-8069
(919) 872-2660
FAX: (919) 790-9827

SCALE: 1" = 100'	DRAWN BY: EP	CHECKED BY: JW	
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 2-5	

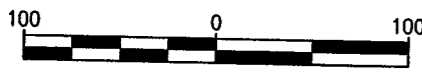



FILE

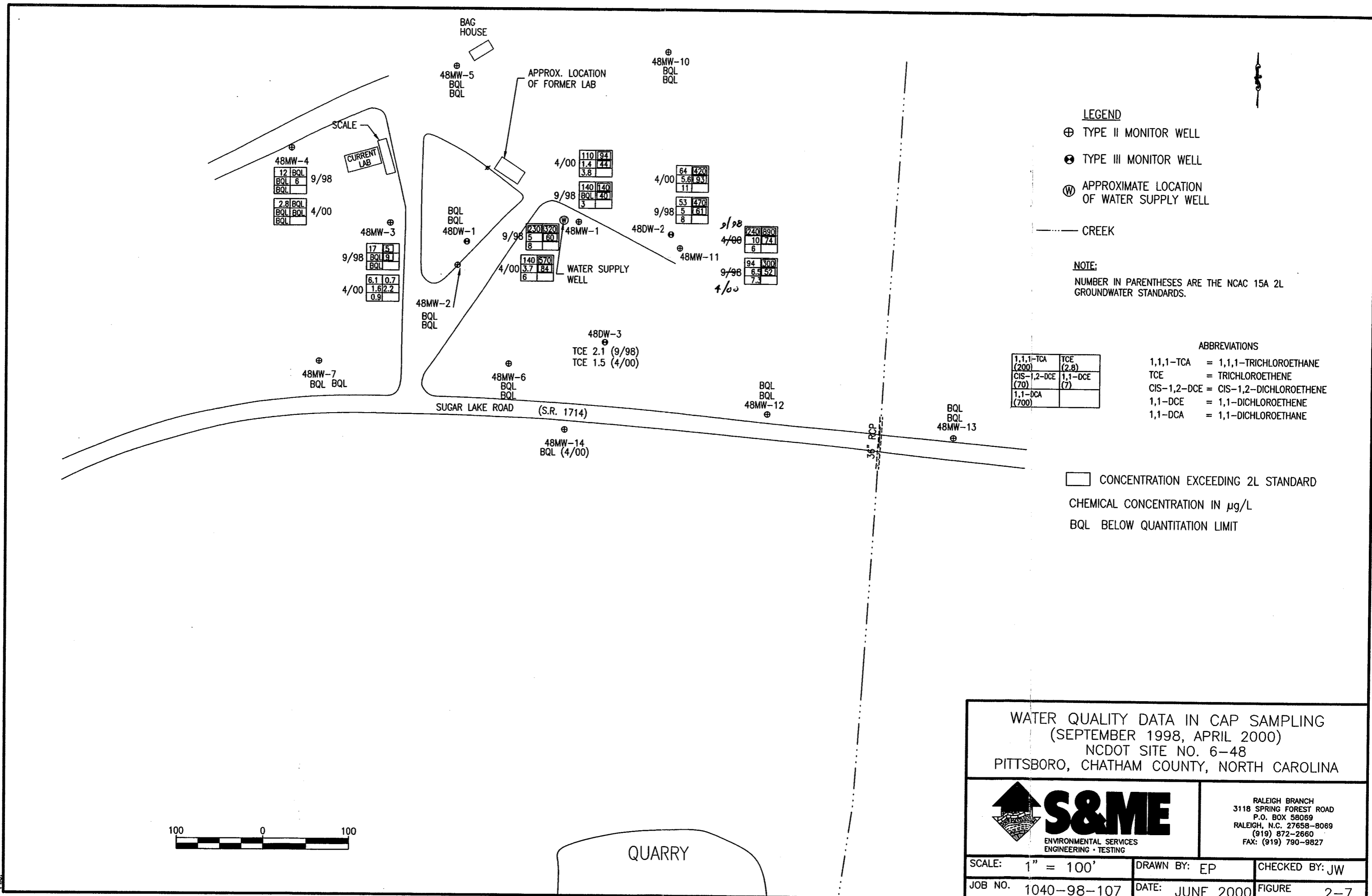


- LEGEND**
- ⊕ TYPE II MONITOR WELL
 - ⊗ TYPE III MONITOR WELL
 - Ⓜ APPROXIMATE LOCATION OF WATER SUPPLY WELL
 - (960.8) POTENTIOMETRIC SURFACE ELEVATION (FT.)

NOTE
 48MW-3 IS NOT CONTOURED
 ELEVATIONS ARE BASED ON ASSUMED SITE DATUM OF 1000.00 FT.



POTENTIOMETRIC MAP-SAPROLITE AQUIFER (APRIL 2000) NCDOT SITE NO. 6-48 PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA		
 S&ME ENVIRONMENTAL SERVICES ENGINEERING • TESTING	RALEIGH BRANCH 3118 SPRING FOREST ROAD P.O. BOX 58069 RALEIGH, N.C. 27658-8069 (919) 872-2660 FAX: (919) 790-9827	
SCALE: 1" = 100'	DRAWN BY: EP	CHECKED BY: JW
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 2-6



LEGEND

- ⊕ TYPE II MONITOR WELL
- ⊙ TYPE III MONITOR WELL
- ⊕ APPROXIMATE LOCATION OF WATER SUPPLY WELL
- CREEK


NOTE:
 NUMBER IN PARENTHESES ARE THE NCAC 15A 2L GROUNDWATER STANDARDS.

ABBREVIATIONS	
1,1,1-TCA (200)	TCE (2.8)
CIS-1,2-DCE (70)	1,1-DCE (7)
1,1-DCA (700)	

1,1,1-TCA = 1,1,1-TRICHLOROETHANE
 TCE = TRICHLOROETHENE
 CIS-1,2-DCE = CIS-1,2-DICHLOROETHENE
 1,1-DCE = 1,1-DICHLOROETHENE
 1,1-DCA = 1,1-DICHLOROETHANE

□ CONCENTRATION EXCEEDING 2L STANDARD
 CHEMICAL CONCENTRATION IN µg/L
 BQL BELOW QUANTITATION LIMIT

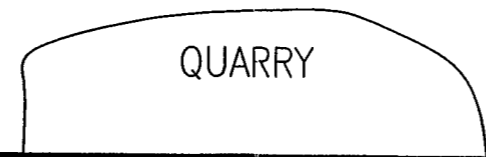
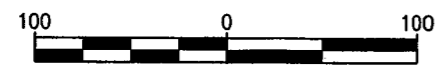
WATER QUALITY DATA IN CAP SAMPLING
 (SEPTEMBER 1998, APRIL 2000)
 NCDOT SITE NO. 6-48
 PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA

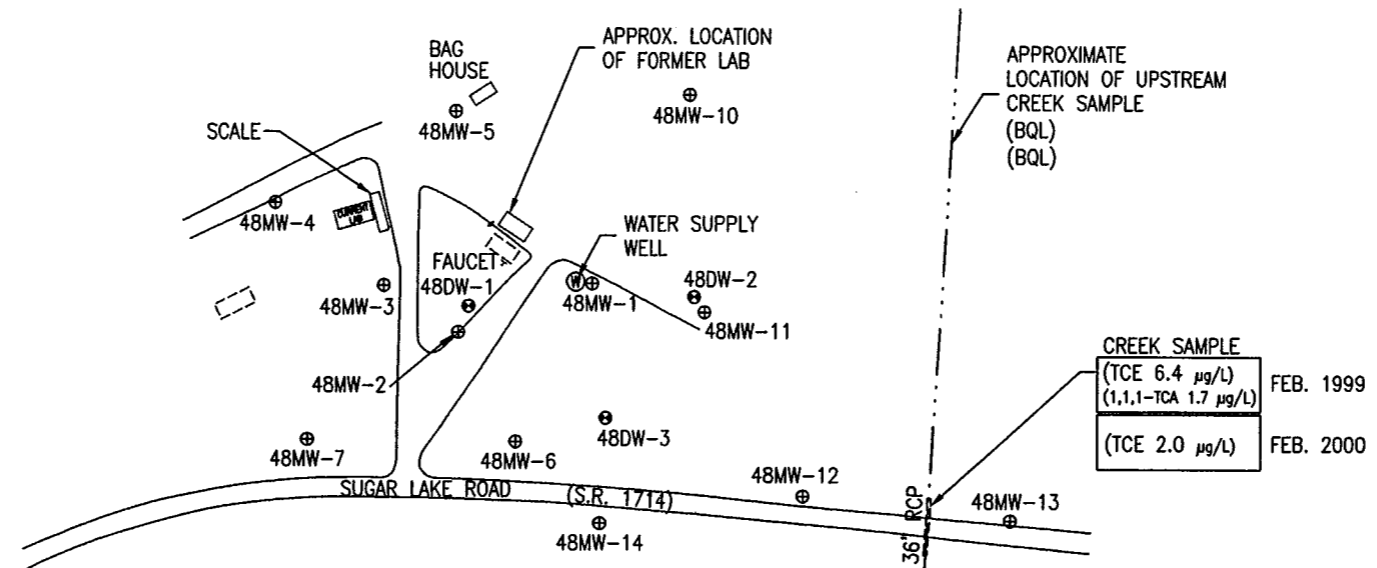


S&ME
 ENVIRONMENTAL SERVICES
 ENGINEERING • TESTING

RALEIGH BRANCH
 3118 SPRING FOREST ROAD
 P.O. BOX 58069
 RALEIGH, N.C. 27658-8069
 (919) 872-2660
 FAX: (919) 790-9827

SCALE: 1" = 100'	DRAWN BY: EP	CHECKED BY: JW
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 2-7

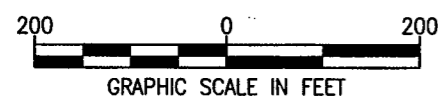





LEGEND

- ⊕ TYPE II MONITOR WELL
- ⊗ TYPE III MONITOR WELL
- ⊕ APPROXIMATE LOCATION OF WATER SUPPLY WELL
- CREEK

CHEMICAL CONCENTRATION IN µg/L



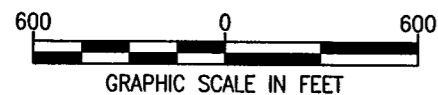
APPROXIMATE LOCATION OF DOWNSTREAM CREEK SAMPLE (BQL) (BQL)

<p>SURFACE WATER SAMPLING (FEB. 24, 1999 AND FEB. 21, 2000) NCDOT SITE NO. 6-48 PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA</p>		
 S&ME ENVIRONMENTAL SERVICES ENGINEERING • TESTING	<p>RALEIGH BRANCH 3118 SPRING FOREST ROAD P.O. BOX 58069 RALEIGH, N.C. 27658-8069 (919) 872-2660 FAX: (919) 790-9827</p>	
SCALE: 1" = 200'	DRAWN BY: EP	CHECKED BY: JW
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 2-8

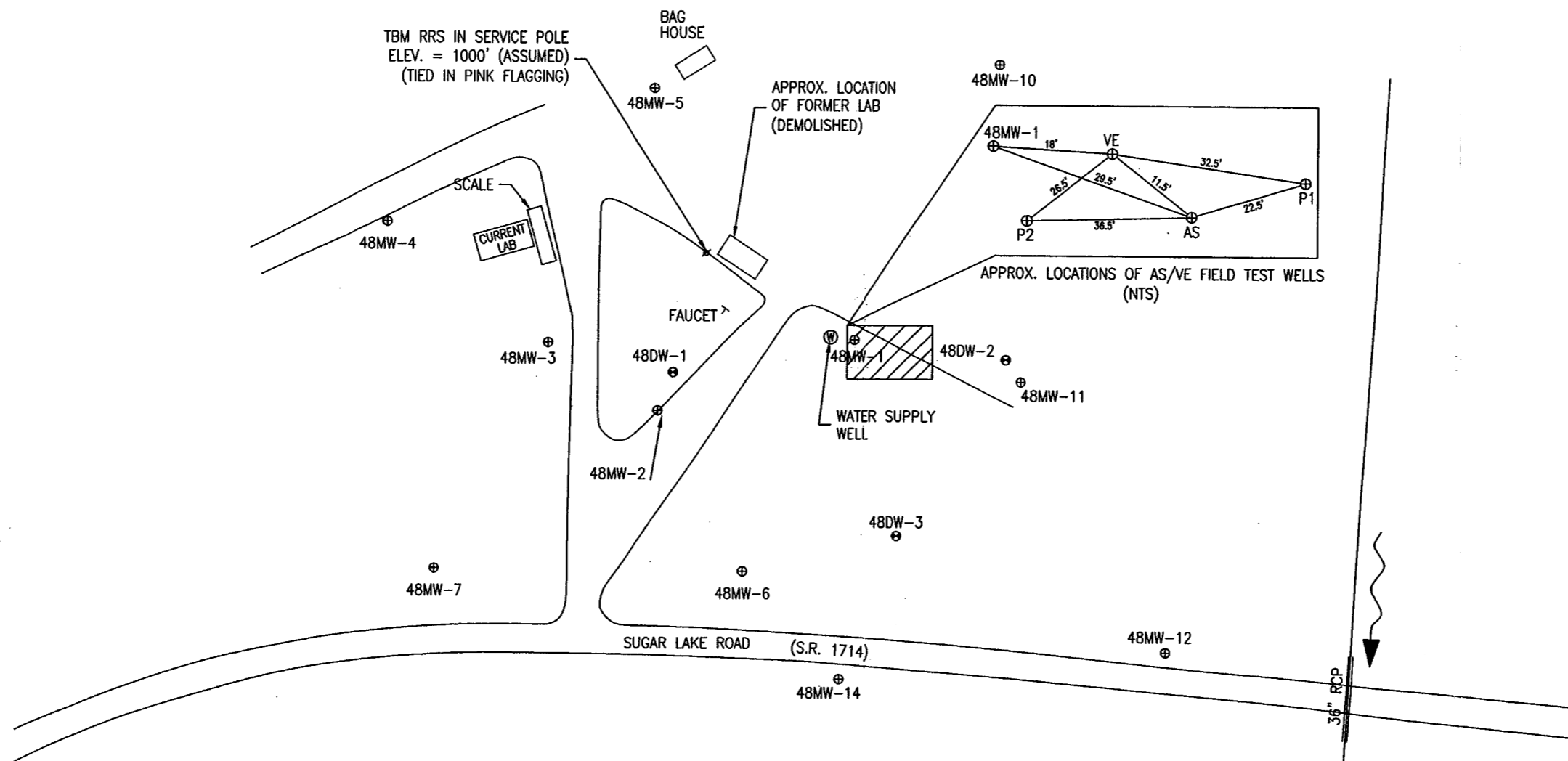


NOTE:
 HATCHED PROPERTIES HAVE BEEN SAMPLED
 PROPERTY #s 7,9,53,62 WERE SAMPLED IN OCTOBER 1997
 PROPERTY #s 2 AND 23 WERE SAMPLED IN JUNE 1999
 PROPERTY # 6 WAS SAMPLED IN SEPTEMBER 1999
 FIGURE TAKEN FROM GERAGHTY & MILLER, INC.
 "COMPREHENSIVE SITE ASSESSMENT, SITE NO. 48,
 LEE PAVING COMPANY, PITTSBORO, NORTH CAROLINA",
 JUNE 1997

* DENOTES PROPERTY WITH WATER SUPPLY WELL



ADJACENT PROPERTIES MAP SITE NO. 6-48 PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA		
		RALEIGH BRANCH 3118 SPRING FOREST ROAD P.O. BOX 58069 RALEIGH, N.C. 27658-8069 (919) 872-2680 FAX: (919) 790-9827
SCALE: 1" = 600'	DRAWN BY: EP	CHECKED BY: JW
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 2-9



TBM RRS IN SERVICE POLE
ELEV. = 1000' (ASSUMED)
(TIED IN PINK FLAGGING)

BAG HOUSE

APPROX. LOCATION
OF FORMER LAB
(DEMOLISHED)

48MW-10

48MW-1

P2

AS

P1

APPROX. LOCATIONS OF AS/VE FIELD TEST WELLS
(NTS)

SCALE

48MW-4

CURRENT LAB

48MW-3

FAUCET

48DW-1

48MW-1

48DW-2

48MW-11

WATER SUPPLY WELL

48MW-2

48DW-3

48MW-7

48MW-6

SUGAR LAKE ROAD (S.R. 1714)

48MW-12

48MW-14

36" RCP



LEGEND
P1,P2 = PIEZOMETERS
AS = AIR SPARGING WELL
VE = VAPOR EXTRACTION WELL

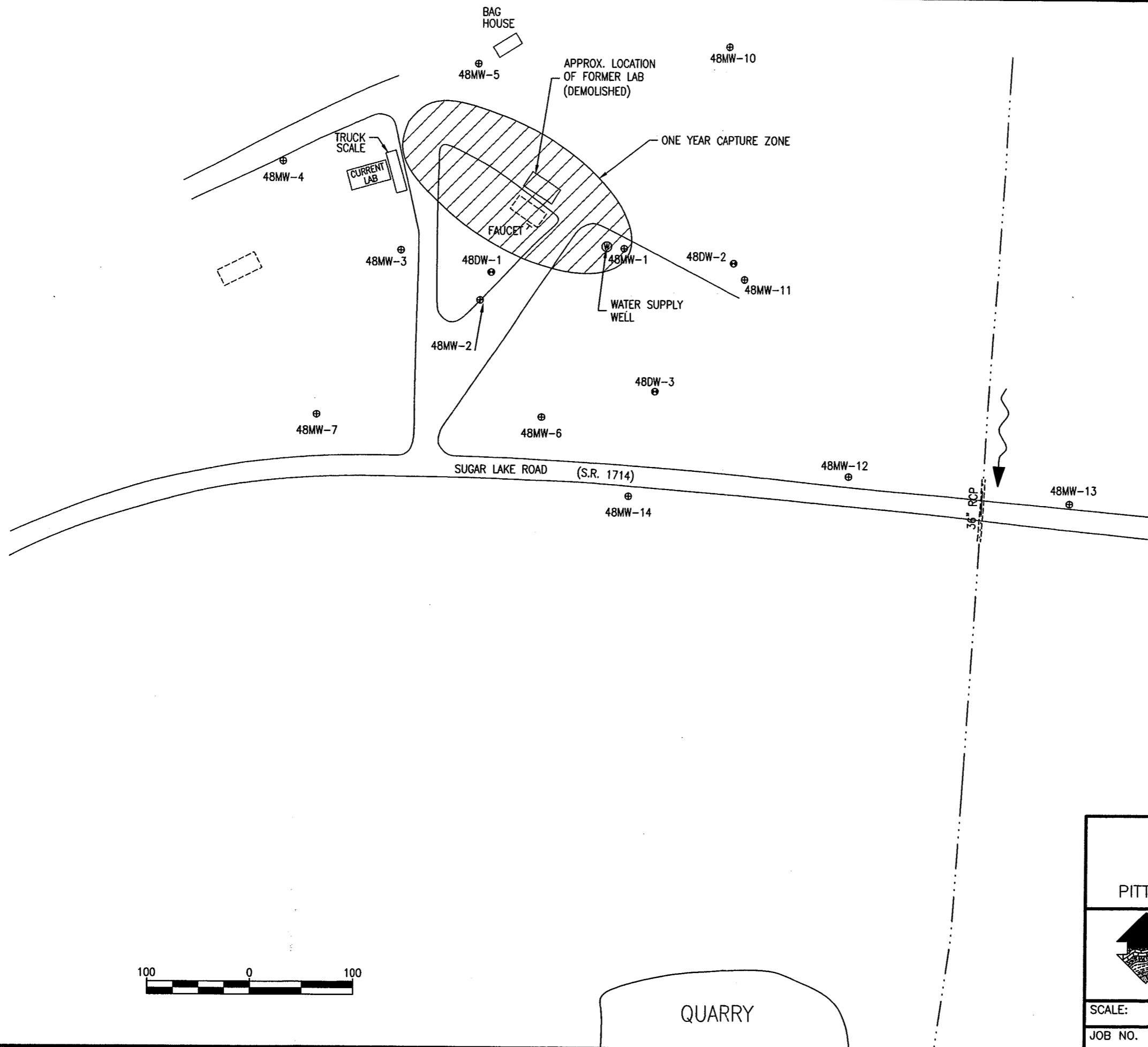
LOCATION OF AS/VE FIELD TESTS

NCDOT SITE NO. 6-48
PITTSBORO, CHATHAM COUNTY, NC



RALEIGH BRANCH
3118 SPRING FOREST ROAD
P.O. BOX 58069
RALEIGH, N.C. 27658-8069
(919) 872-2660
FAX: (919) 790-9827

SCALE: 1"=100'	DRAWN BY: EP	CHECKED BY: JYW
JOB NO. 1040-98-107	DATE: JUNE,2000	FIGURE 4-1



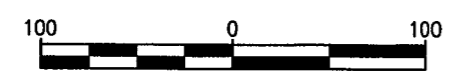
LEGEND


- ⊕ TYPE II MONITOR WELL
- ⊙ TYPE III MONITOR WELL
- Ⓜ APPROXIMATE LOCATION OF WATER SUPPLY WELL
- CREEK
- ~> SURFACE WATER FLOW DIRECTION

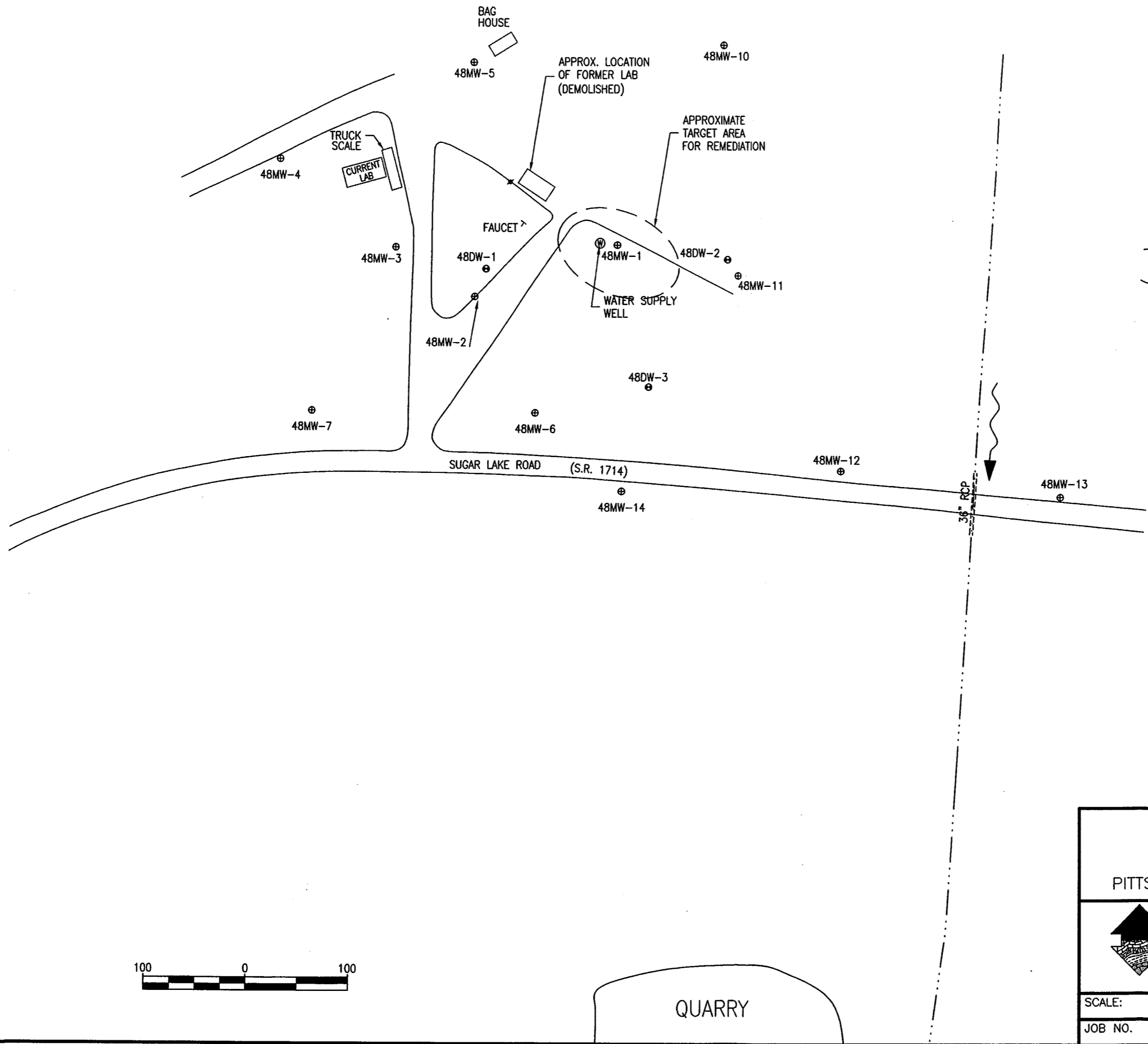
NOTE

SITE PLAN DEVELOPED FROM MAP PROVIDED IN THE CSA REPORT (GERAGHTY & MILLER, INC. 1997)

LOCATION OF 48MW-14 IS APPROXIMATE AND HAS NOT BEEN SURVEYED.



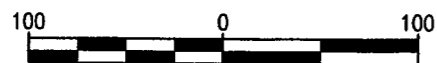
<p>MODEL PREDICTED CAPTURE ZONE (BY WHPA) NCDOT SITE NO. 6-48 PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA</p>		
 <p>S&ME ENVIRONMENTAL SERVICES ENGINEERING • TESTING</p>	<p>RALEIGH BRANCH 3118 SPRING FOREST ROAD P.O. BOX 58069 RALEIGH, N.C. 27658-8069 (919) 872-2660 FAX: (919) 790-9827</p>	
SCALE: 1" = 100'	DRAWN BY: EP	CHECKED BY: JW
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 4-2




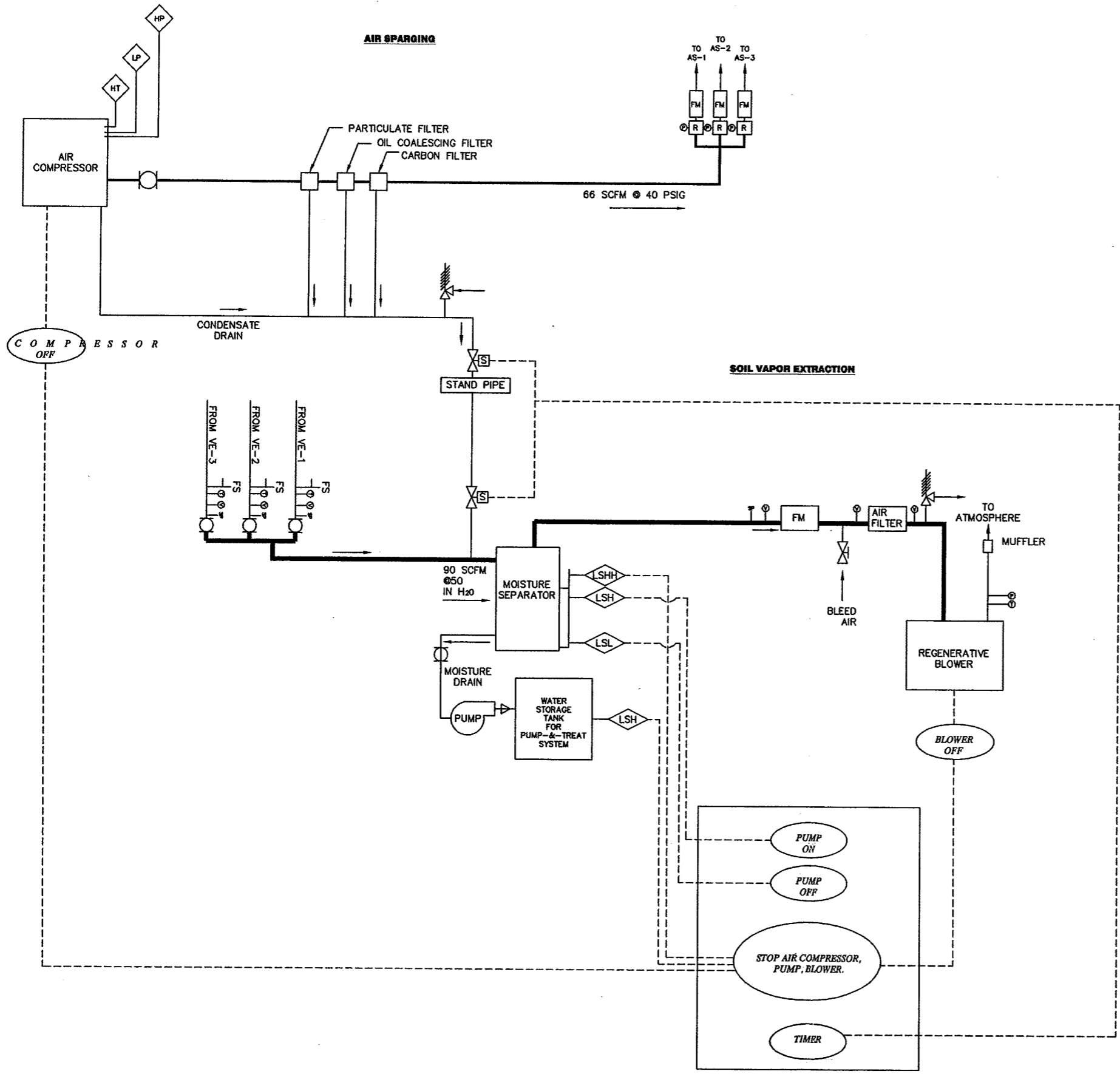
- LEGEND**
- ⊕ TYPE II MONITOR WELL
 - ⊙ TYPE III MONITOR WELL
 - Ⓜ APPROXIMATE LOCATION OF WATER SUPPLY WELL
 - CREEK
 - SURFACE WATER FLOW DIRECTION

NOTE
 SITE PLAN DEVELOPED FROM MAP PROVIDED IN THE CSA REPORT (GERAGHTY & MILLER, INC. 1997)

LOCATION OF 48MW-14 IS APPROXIMATE AND HAS NOT BEEN SURVEYED.



<p>TARGET REMEDIATION AREA</p> <p>NCDOT SITE NO. 6-48</p> <p>PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA</p>		
 <p>S&ME ENVIRONMENTAL SERVICES ENGINEERING • TESTING</p>	<p>RALEIGH BRANCH 3118 SPRING FOREST ROAD P.O. BOX 58069 RALEIGH, N.C. 27658-8069 (919) 872-2660 FAX: (919) 790-9827</p>	
SCALE: 1" = 100'	DRAWN BY: EP	CHECKED BY: JW
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 5-1



LEGEND

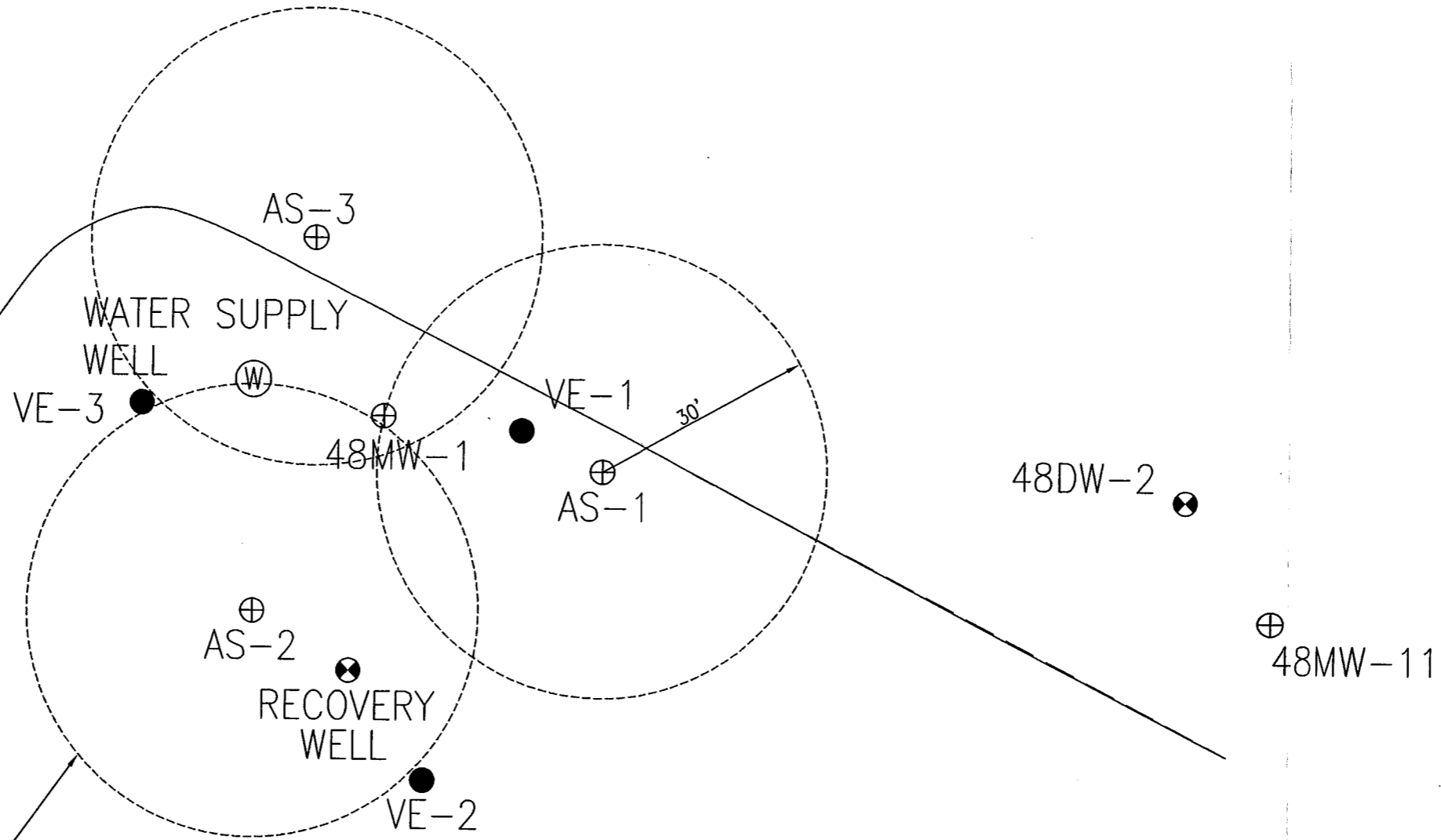
- ◇ HT HIGH TEMPERATURE SHUT-OFF
- ◇ LP LOW PRESSURE SHUT-OFF
- ◇ HP HIGH PRESSURE SHUT-OFF
- ◇ GATE VALVE
- ◇ BALL VALVE
- ◇ S SOLENOID VALVE
- ◇ R REGULATOR
- ◇ P PRESSURE GAUGE
- ◇ FM FLOW METER
- ◇ T FLOW SENSOR
- ◇ V VACUUM GAUGE
- ◇ LSL LEVEL SWITCH: LOW
- ◇ LSH LEVEL SWITCH: HIGH
- ◇ LSHH LEVEL SWITCH: HIGH-HIGH
- ◇ T TEMPERATURE GAUGE
- GIP GALVANIZED IRON PIPE
- SP SAMPLE PORT (RUBBER SEPTUM)
- ◇ VACUUM RELIEF VALVE
- ◇ PRESSURE RELIEF VALVE
- ◇ BACKFLOW VALVE

NO.	DATE	DESCRIPTION	BY:

PROCESS AND INSTRUMENTATION DIAGRAM (AS/VE SYSTEM)
NCDOT SITE NO. 6-48
PITTSBORO, NORTH CAROLINA

SCALE: NOT TO SCALE DRAWN BY: EP CHECKED BY:
 JOB NO: 1040-98-107 DATE: 6-00 DRAWING NO. 5-2

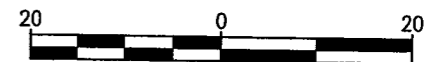
FAUCET



ESTIMATED ROI FOR AS

LEGEND

- ⊕ AS=AIR SPARGING POINT
- VE=VAPOR EXTRACTION POINT



REMEDIATION SYSTEM LAYOUT

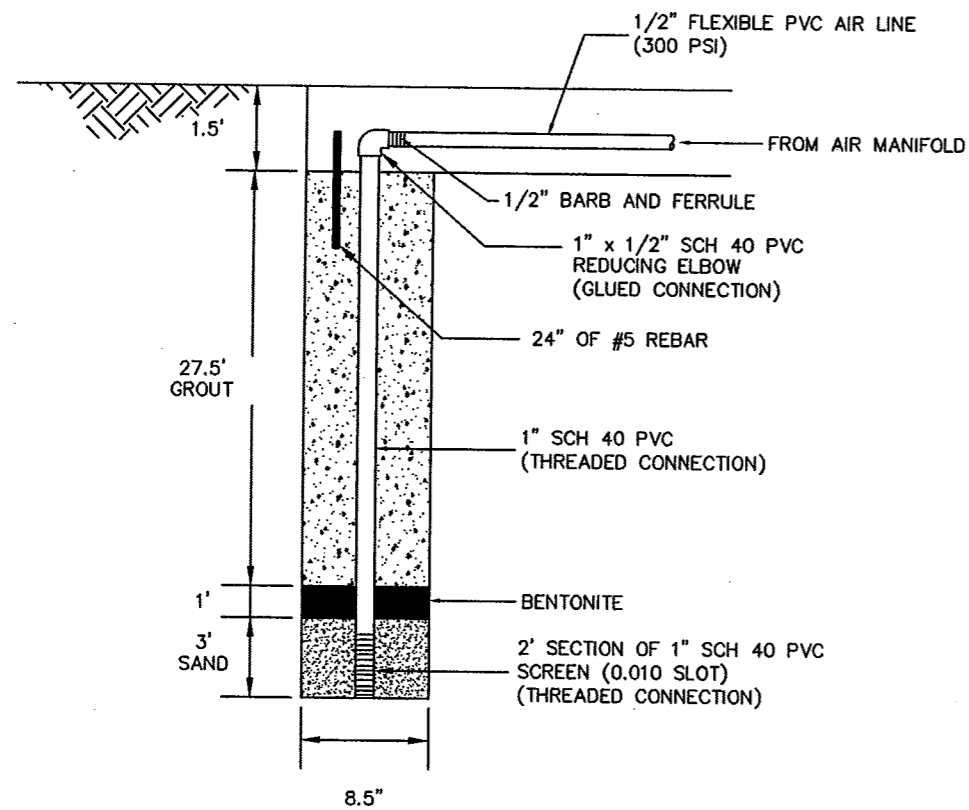
NCDOT SITE NO. 6-48
PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA



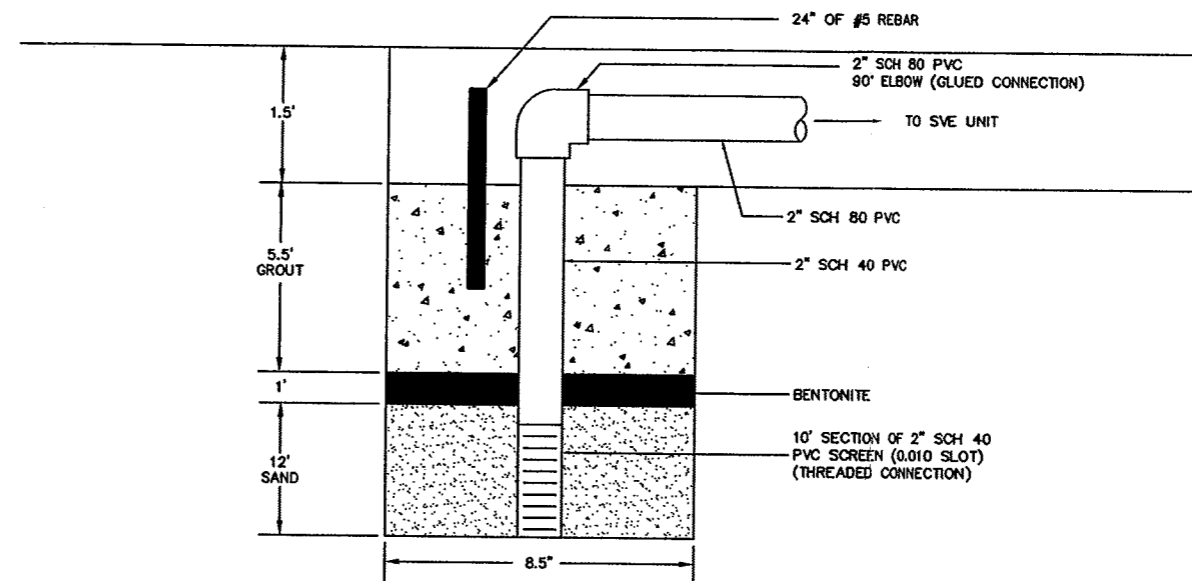
RALEIGH BRANCH
3118 SPRING FOREST ROAD
P.O. BOX 58069
RALEIGH, N.C. 27658-8069
(919) 872-2660
FAX: (919) 790-9827

SCALE: 1" = 20'	DRAWN BY: EP	CHECKED BY: JW
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 5-3

48DW-3




TYPICAL AIR SPARGING POINT DETAIL
NOT TO SCALE



TYPICAL VE POINT DETAIL
NOT TO SCALE

NO.	DATE	DESCRIPTION	BY:

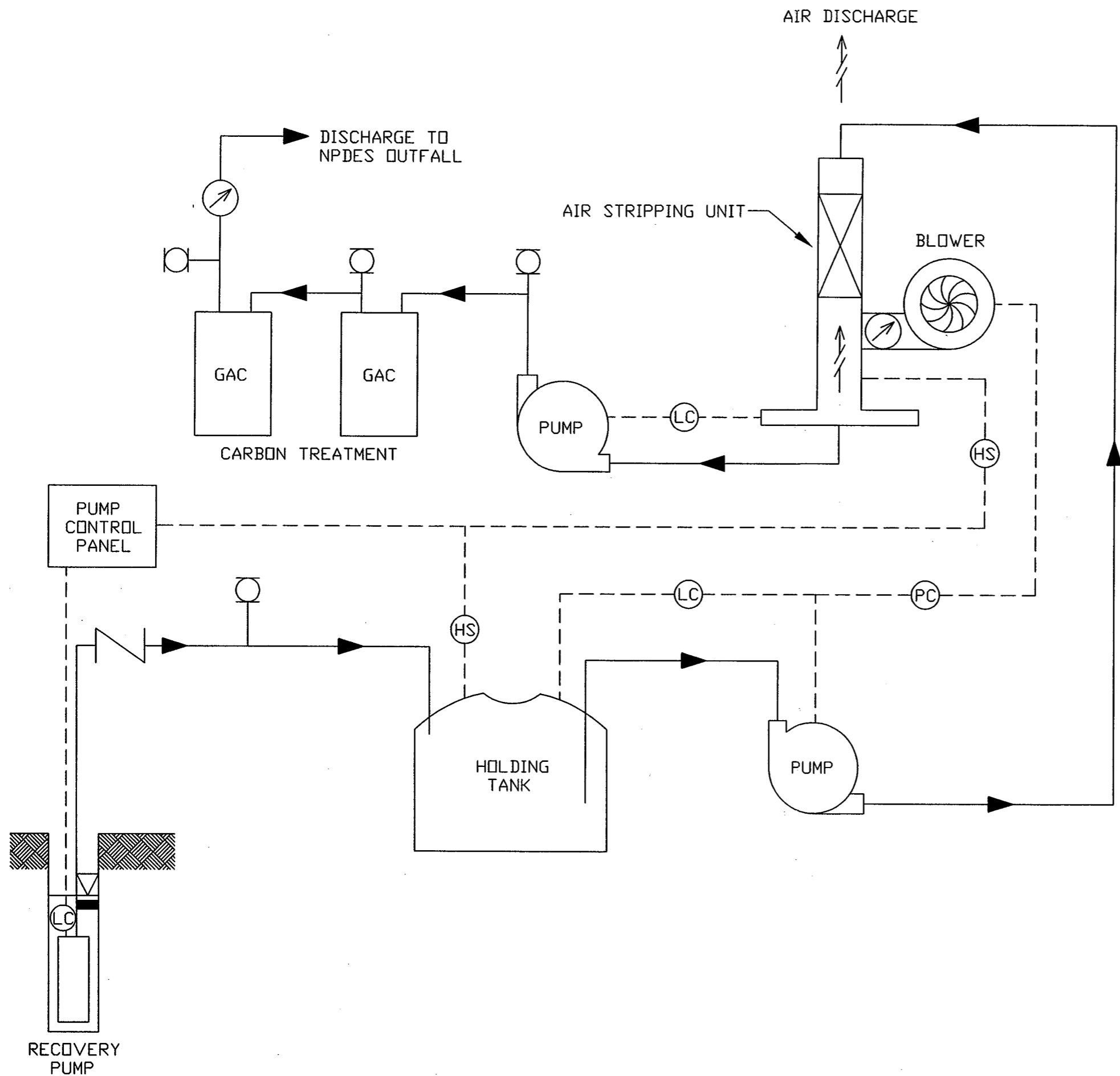


S&ME
ENVIRONMENTAL SERVICES
ENGINEERING & TESTING

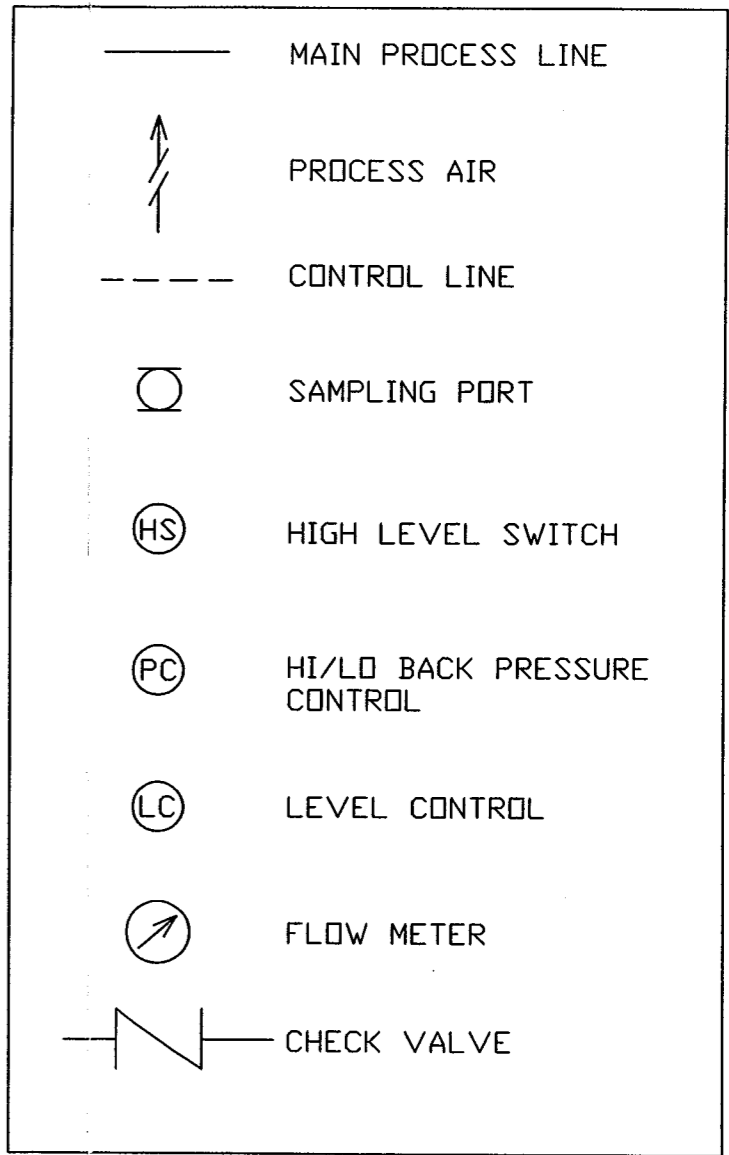
AS/VE POINT CONSTRUCTION DETAIL

NCDOT SITE NO. 6-48
PITTSBORO, NORTH CAROLINA

SCALE: NOT TO SCALE	DRAWN BY: SB	CHECKED BY:
JOB NO: 1040-98-107	DATE: 6-00	DRAWING NO. 5-4



LEGEND

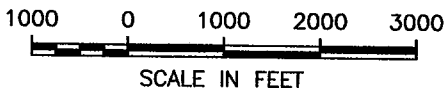
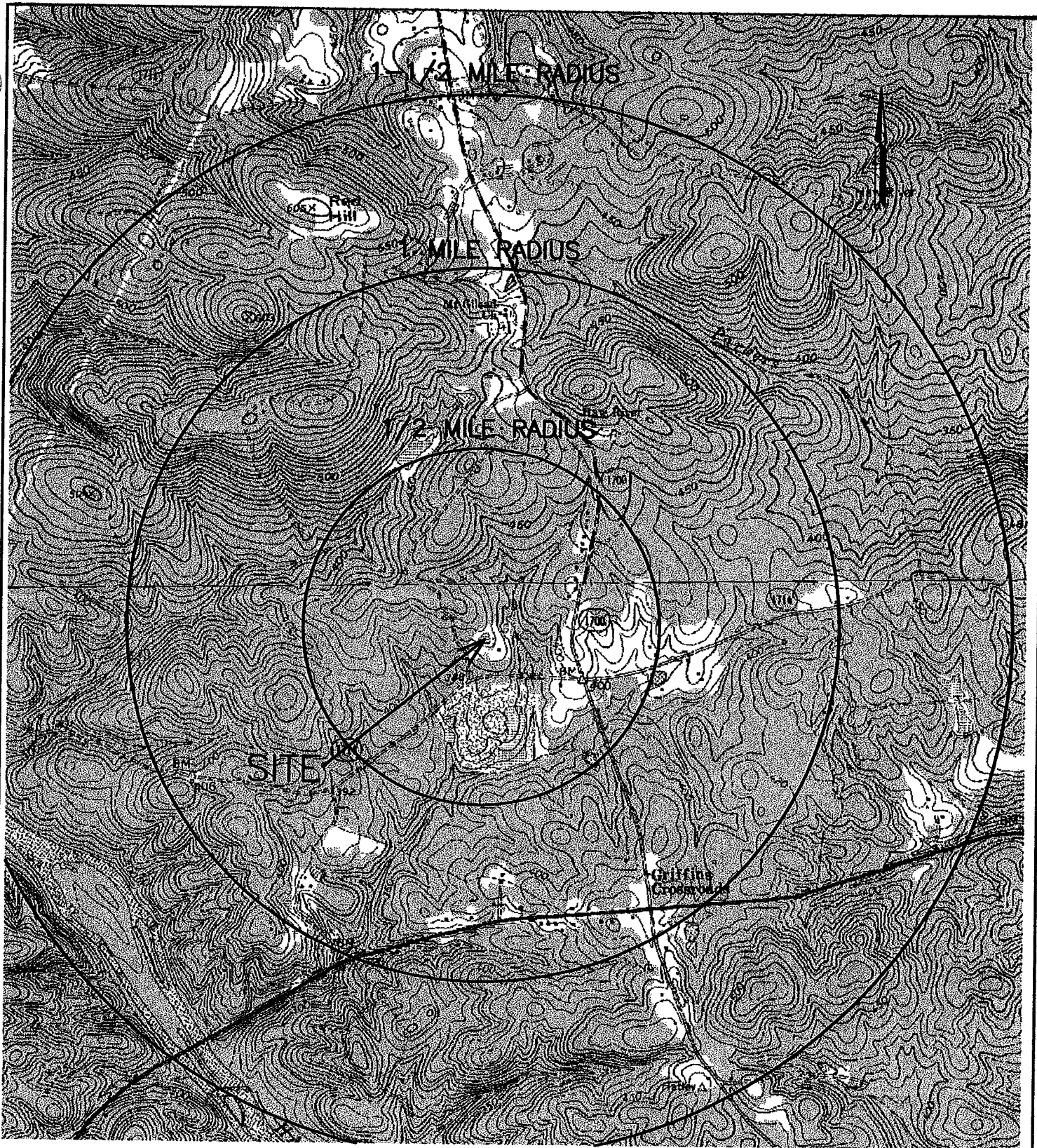


PUMP-AND-TREAT SYSTEM PROCESS AND INSTRUMENTATION DIAGRAM
 NCDOT SITE NO. 6-48
 PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA



RALEIGH BRANCH
 3118 SPRING FOREST ROAD
 P.O. BOX 58069
 RALEIGH, N.C. 27658-8069
 (919) 872-2660
 FAX: (919) 790-9827

SCALE: NTS	DRAWN BY: EP	CHECKED BY: JW
JOB NO. 1040-98-107	DATE: JUNE 2000	FIGURE 5-5



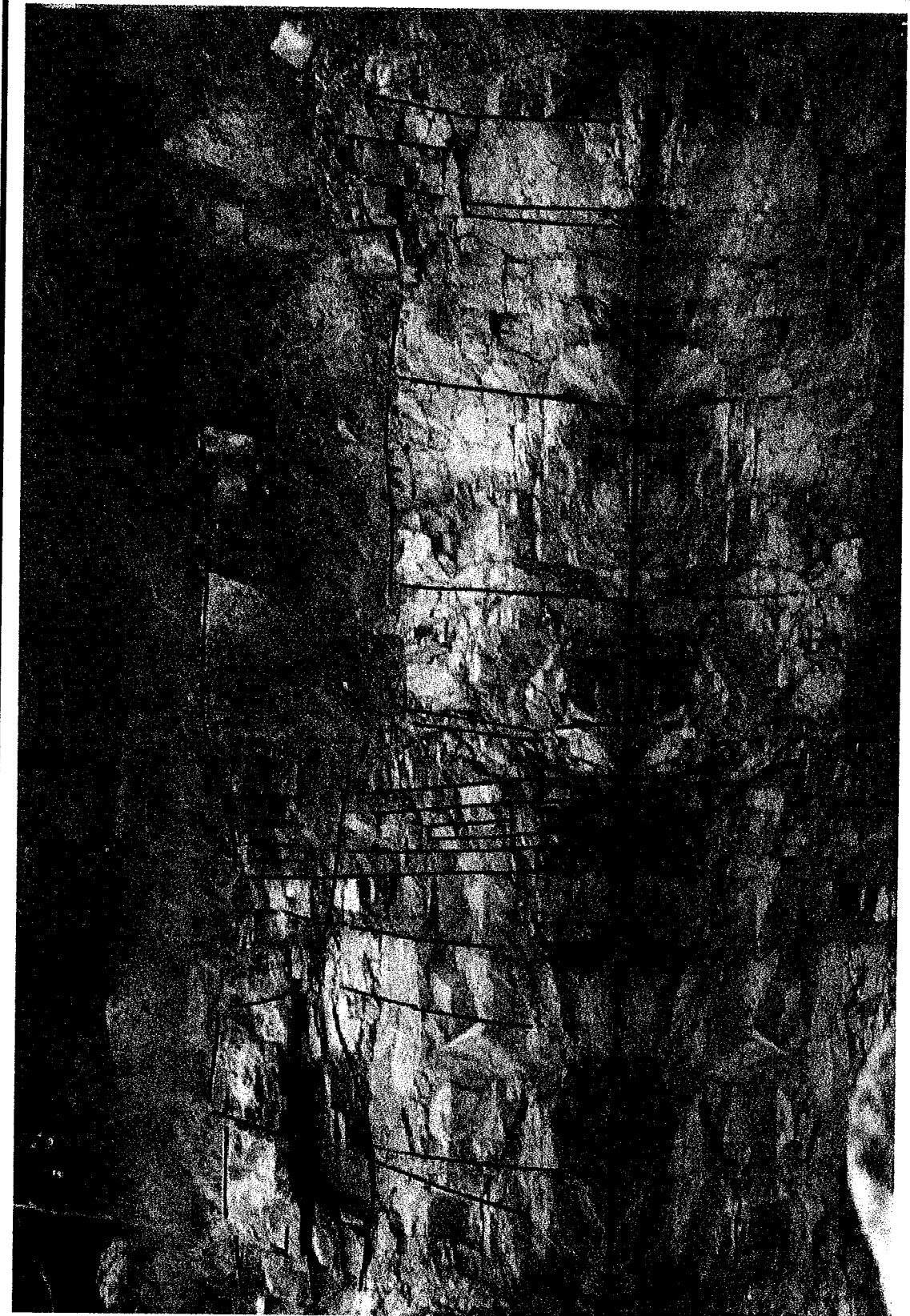
MERRY OAKS, NC USGS QUADRANGLE DATED 1969 (PHOTOREVISED 1981)
FARRINGTON, NC USGS QUADRANGLE DATED 1978 (PHOTOREVISED 1981)

SITE LOCATION MAP

SITE NO. 6-48
PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA



Job No. 1040-98-107
Scale: 1" = 2000'
Fig No. 1



BEDROCK FRACTURES
(NORTHERN QUARRY WALL)
NCDOT SITE NO. 6-48

PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA



Scale: NTS

Date: JUNE 2000

Job No. 1040-98-107

Approved By: JW

Drawn By: EP

Fig No. 2-2



BEDROCK FRACTURES
(NORTHWESTERN QUARRY WALL)
NCDOT SITE NO. 6-48
PITTSBORO, CHATHAM COUNTY, NORTH CAROLINA



S&ME
ENVIRONMENTAL SERVICES
ENGINEERING • TESTING

Scale: NTS
Date: JUNE 2000
Job No. 1040-98-107

Approved By: JW
Drawn By: EP
Fig No. 2-3

APPENDIX I

NCDENR AND NCDOT LETTERS OF AGREEMENT

STATE OF NORTH CAROLINA

WAKE COUNTY

NORTH CAROLINA DEPARTMENT OF NATURAL
RESOURCES AND COMMUNITY DEVELOPMENT

-AND -

NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION

THIS AGREEMENT is made and entered into by and between the
NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY
DEVELOPMENT (hereinafter referred to as NRCD) and the NORTH
CAROLINA DEPARTMENT OF TRANSPORTATION (hereinafter referred to as
DOT).

WITNESSETH:

THAT WHEREAS, as a result of finding of contamination of the
underground water at the Vulcan Material Company, Enka Plant in
Buncombe County, DOT recognizes that a possibility of
contamination of the water supply exists at a number of other
asphalt plant locations across the State.

NOW, THEREFORE, in order to identify the possible
contamination sites, NRCD and DOT agree:

- (1) That DOT will conduct, in consultation with NRCD, an
initial screening study of all potential contamination
sites according to site characteristics such as
proximity to surface waters, slope, soil permeability
etc., time and duration of site use, and chemicals
used;

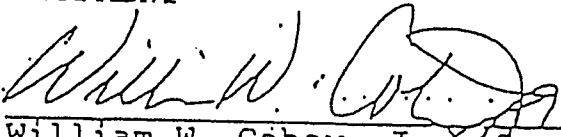
- (2) That DOT will survey the specific sites by taking soil and water samples and conducting appropriate laboratory analysis to determine the extent of contamination;
- (3) That DOT will develop, and submit to NRCDC for approval, specific site evaluation plans, and will begin the surveys of the sites upon approval by NRCDC;
- (4) That NRCDC recognizes, with the exception of the three DOT-owned sites, that the DOT neither owns, leases nor has control of the sites in question and is dependent upon the cooperation of the owners and lessees to conduct the surveys. (All current sites, with the exception of three DOT-owned sites, are leased or owned by asphalt companies. All abandoned sites are owned by quarry operators, private individuals, and others). DOT agrees to pursue the acquisition of permission for site access from current owners and lessees. In the event such permission is denied, NRCDC will, as a last resort, exercise its authority to secure administrative search warrants, if necessary, to gain access to the sites for investigative purposes.
- (5) Upon completion of the surveys and a determination of the contaminations levels, DOT will submit to NRCDC for its approval a priority listing for any remedial work necessary and remedial action plans for those sites. The Department of Transportation will not commence remediation until approved by NRCDC. Any action taken by the DOT in making surveys and making

priority listings for remedial work and preparing and submitting remedial action plans shall not affect the determination of liability or responsibility as to third parties.

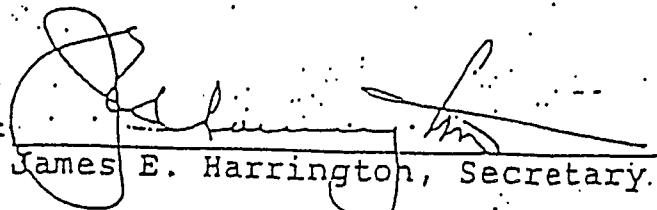
- (6) NRCDC will take no action in this matter that does, or may, constitute a conflict with its obligations to enforce water quality laws and regulations, as delegated to it by the United States Environmental Protection Agency. No actions taken pursuant to this Agreement, or information derived therefrom, shall preclude or bar DEM from initiating and pursuing any enforcement actions deemed necessary in regard to these sites.
- (7) Entering into this Memorandum of Agreement does not constitute an admission of liability on the part of DOT.

This the 10 day of January, 1989.

NORTH CAROLINA DEPARTMENT OF
NATURAL RESOURCES AND COMMUNITY
DEVELOPMENT

BY: 
William W. Cobey, Jr. Secretary

NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION

BY: 
James E. Harrington, Secretary



FILE COPY

42260-96-4-141N

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JAMES B. HUNT JR.
GOVERNOR

DIVISION OF HIGHWAYS
P.O. BOX 25201, RALEIGH, N.C. 27611-5201
April 24, 1996

GARLAND B. GARRETT JR.
SECRETARY

Arthur Mouberry
Chief, Groundwater Section
North Carolina Department of Environment, Health and Natural Resources
P.O. Box 29535
Raleigh, NC 27626-0535

Re: NCDOT Asphaltic Materials Testing Priority Sites
Interim Screening Investigation Letter of Agreement

Dear Mr. Mouberry,

On April 16, 1996 a meeting was held between the North Carolina Department of Environment, Health and Natural Resources (NCDEHNR) and the North Carolina Department of Transportation (NCDOT) to discuss an interim screening investigation at the subject asphalt sites. An agreement between NCDEHNR and NCDOT was reached on the scope of the work to be followed during the interim screening investigation. As discussed in the meeting, none of the subject sites are owned by the NCDOT. Site activity by NCDOT personnel was limited to ASTM asphalt extraction testing in the laboratories. Following the screening investigation, it is our understanding that for sites having no soil impacts (based on published guidance by NCDEHNR Groundwater Section), and no groundwater impacts (based on Title 15A, Subchapter 2L, NCAC), NCDOT will submit an interim screening investigation letter report of findings requesting no further action which will be reviewed and approved by NCDEHNR. NCDEHNR has agreed to respond in writing within two to three weeks upon receipt of each letter report. The following summarizes the scope of work that will be uniformly executed at each of the asphalt laboratory sites based on this meeting.

The objective of this interim screening investigation is to focus on the identification of contaminants in soil and groundwater associated with the asphaltic materials testing activities. These contaminants consist of chlorinated solvents such as Carbon Tetrachloride, Trichlorethylene, Trichlorethane, and related degradation compounds. The suspected area of contamination at each of the priority asphalt sites is within the vicinity of the former/current asphaltic materials testing labs. Soil and groundwater samples will be collected at each site as described below.

A soil-vapor survey using manual soil probes; and field soil-vapor screening instruments (i.e. a portable gas chromatograph) will be utilized to initially identify localized "hot spots" of chlorinated solvent contamination. Following the soil-vapor survey, an array of six to ten soil borings using direct push technology (DPT) will be installed at each site in the vicinity of the asphaltic materials testing lab.



For sites at which use of DPT is unsuccessful (i.e. based on local geology), conventional drilling methods will be employed. If conventional drilling methods are used, and a change in the sampling plan becomes necessary, NCDOT will initiate discussion with NCDEHNR Groundwater Section to determine a revised sampling arrangement. At all boring locations, adequate measures will be taken to avoid the transfer of contamination from one sampling zone to another.

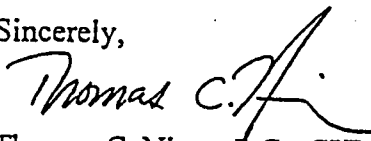
From these boring locations soil samples will be collected at shallow depths below the ground surface at two depth intervals. These soil borings will be installed at locations in the vicinity of the asphaltic laboratory building, which have been visually identified as suspect contamination areas and at the "hot spots" identified from the soil-vapor survey. Sampling depths will typically be from zero to five feet and five to ten feet below ground surface. Soil samples will be collected at each depth interval and shipped to an analytical laboratory for analysis of volatile organic compounds (VOC) using United States Environmental Protection Agency (EPA) test method 8021.

Eight to ten groundwater samples will be collected from the boring locations. These groundwater samples will be collected by advancing the probe approximately ten feet below the groundwater table. Samples will be obtained by methods that will minimize agitation. At two of the boring locations, down gradient of the suspected area of contamination, the sampling point will be further advanced to intermediate depths below the water table to characterize the vertical extent of contamination. Groundwater samples will be analyzed for VOC's by Standard Method 6230-D. Three temporary piezometers will be installed at selected locations to evaluate the hydraulic gradient at each of the sites.

An interim screening investigation letter report will follow each investigation if it is demonstrated that there are no unacceptable levels of groundwater contamination present based on the 2L groundwater quality standards or soil contamination based on published guidance by the NCDEHNR Groundwater Section. For sites that do not meet this criteria, additional investigations will be conducted and comprehensive site assessments will be prepared.

If after review of this letter of agreement you find it necessary to make changes please notify me immediately. We would like to begin the site investigations as quickly as possible, therefore your prompt response is requested. Should you have questions or comments I may be reached at (910)334-4273.

Sincerely,



Thomas C. Niver, P.G., CHMM
Environmental Engineer, Safety & Loss Control

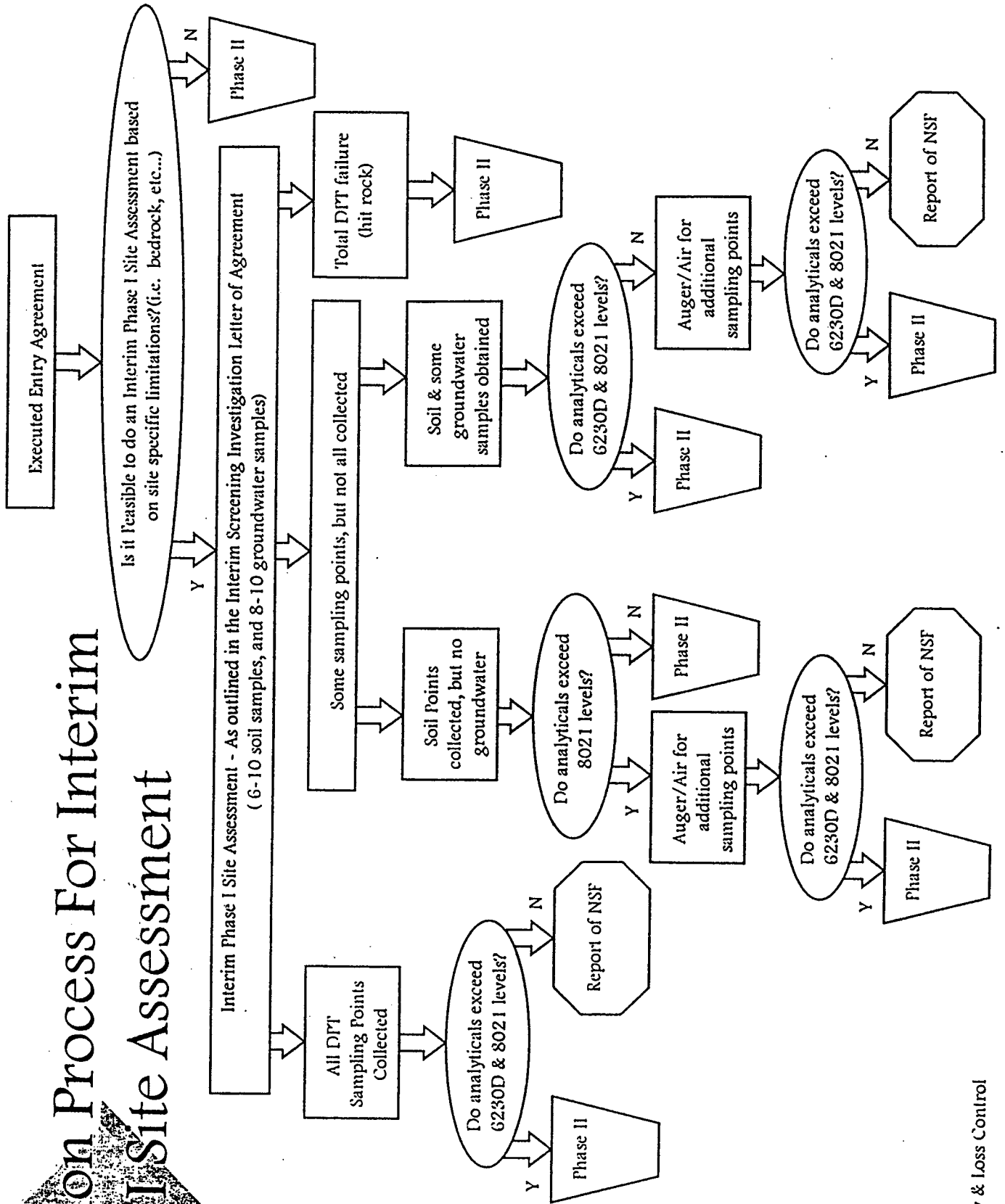
Accepted by:



Arthur Mouberry, P.E.
Chief, Groundwater Section

cc: Paul Roberts, NCDOT
Ted Bush, NCDEHNR
Jay Zimmerman, NCDEHNR
Frederic D. Rash, Geraghty & Miller, Inc.
Rudy Smithwick, Catlin & Associates, Inc.

Decision Process For Interim Phase I Site Assessment





STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JAMES B. HUNT JR.
GOVERNOR

DIVISION OF HIGHWAYS
P.O. BOX 25201, RALEIGH, N.C. 27611-5201

GARLAND B. GARRETT JR.
SECRETARY

July 3, 1996

Mr. Arthur Mouberry, P.E.
Groundwater Section Chief
North Carolina Department of Environment, Health, and Natural Resource
P.O. Box 29535
Raleigh, NC. 27626-0535

RE: Laboratory Analytical Methods for Phase II Investigation Letter of Agreement

Dear Mr. Mouberry,

On June 13, 1996 a meeting was held between the North Carolina Department of Environment, Health, and Natural Resources (DEHNR) and the North Carolina Department of Transportation (NCDOT). This meeting was held to discuss the execution of laboratory analytical methods for comprehensive site assessments (CSA's) at asphaltic materials testing priority sites 22-72. As discussed in the meeting, NCDOT is prepared to execute the second phase (Phase II) of investigation at several sites where the interim screening investigation has been completed, or did not provide conclusive information. This letter represents the agreement between DEHNR and NCDOT to use the proposed analytical methods, as defined below, to conduct CSA's at the asphaltic materials testing priority sites 22-72.

NCDOT Consultants will follow the Division of Water Quality (DWQ) Groundwater Section Guidelines For The Investigation and Remediation of Soils and Groundwater for the Phase II investigation. As stated within the guidelines, vertical and horizontal delineation of groundwater will use U.S. Environmental Protection Agency (EPA) Methods 601 and 602 for volatile organic compounds; for the vertical and horizontal delineation of soil, EPA Method 8021 will be used. Groundwater samples will be collected and analyzed for VOC's by Standard Method 6230-D, prior to plume delineation, for sites where groundwater analytical results were not obtained from the Interim Phase I Site Investigation.

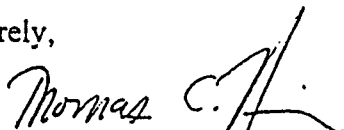
In addition, soil and groundwater may be collected and analyzed for VOC's by EPA Method 8260-B. These samples will be collected from locations centralized within the



contaminant plume for compound confirmation. If Standard Method 6230-D and/or EPA Method 8021 analytical results show concentrations of polycyclic aromatic compounds (PAH), soil and groundwater samples may be collected and analyzed. The soil samples will be analyzed by EPA Method 8270-B, and groundwater samples will be analyzed by EPA Method 625 for confirmation of semi-volatile compounds. for base neutral compounds only.

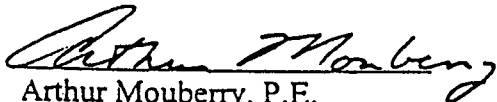
If after review of this letter of agreement you find it necessary to make changes. please notify me immediately. We have already initiated Phase II investigations at some sites, therefore your prompt response is appreciated. Should you have any questions or comments I may be reached at (910)334-4273.

Sincerely,



Thomas C. Niver, P.G., CHMM
Environmental Engineer. Safety & Loss Control

Accepted by:



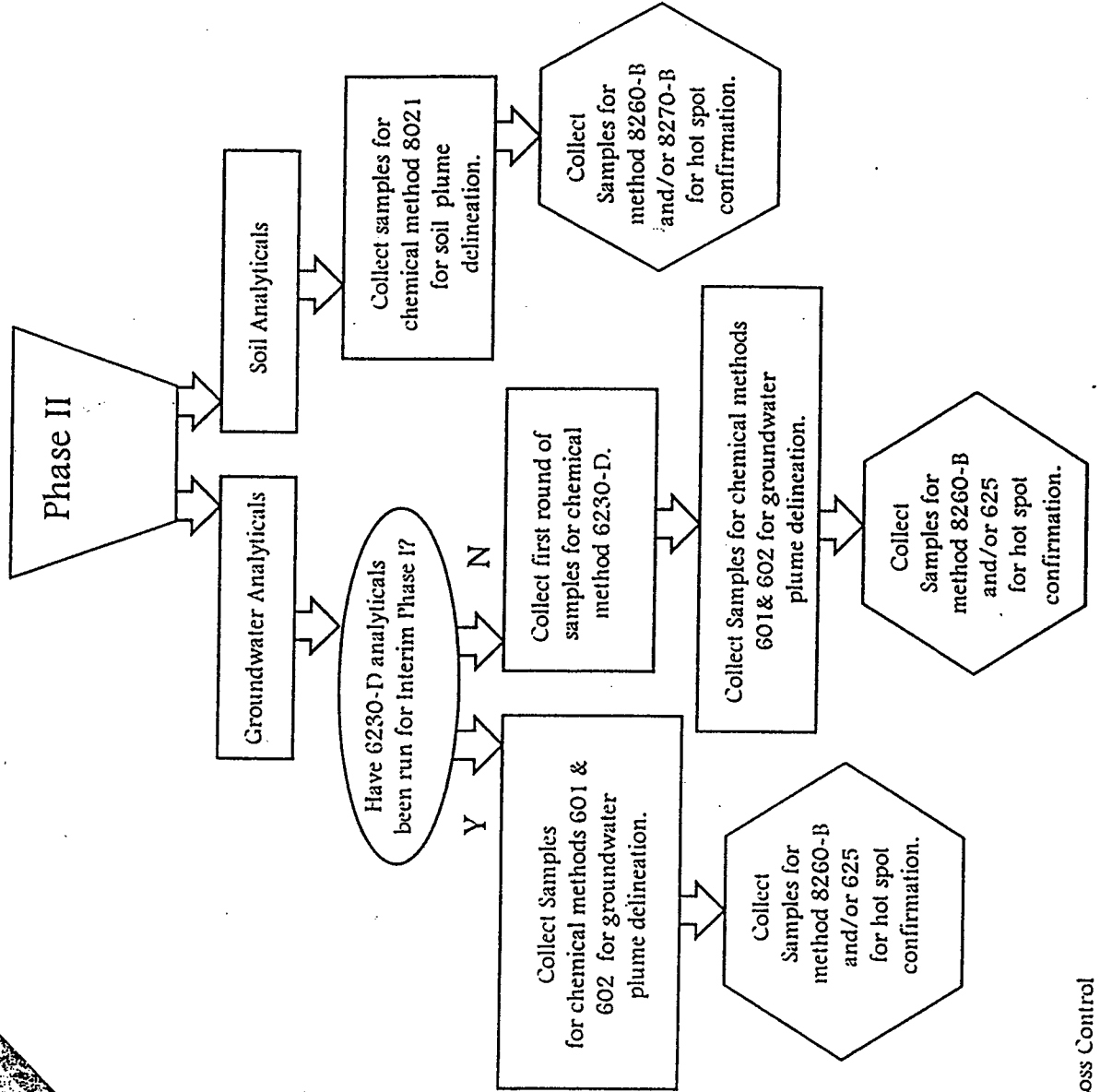
Arthur Mouberry, P.E.
Groundwater Section Chief

Enclosures

dmm\TCN

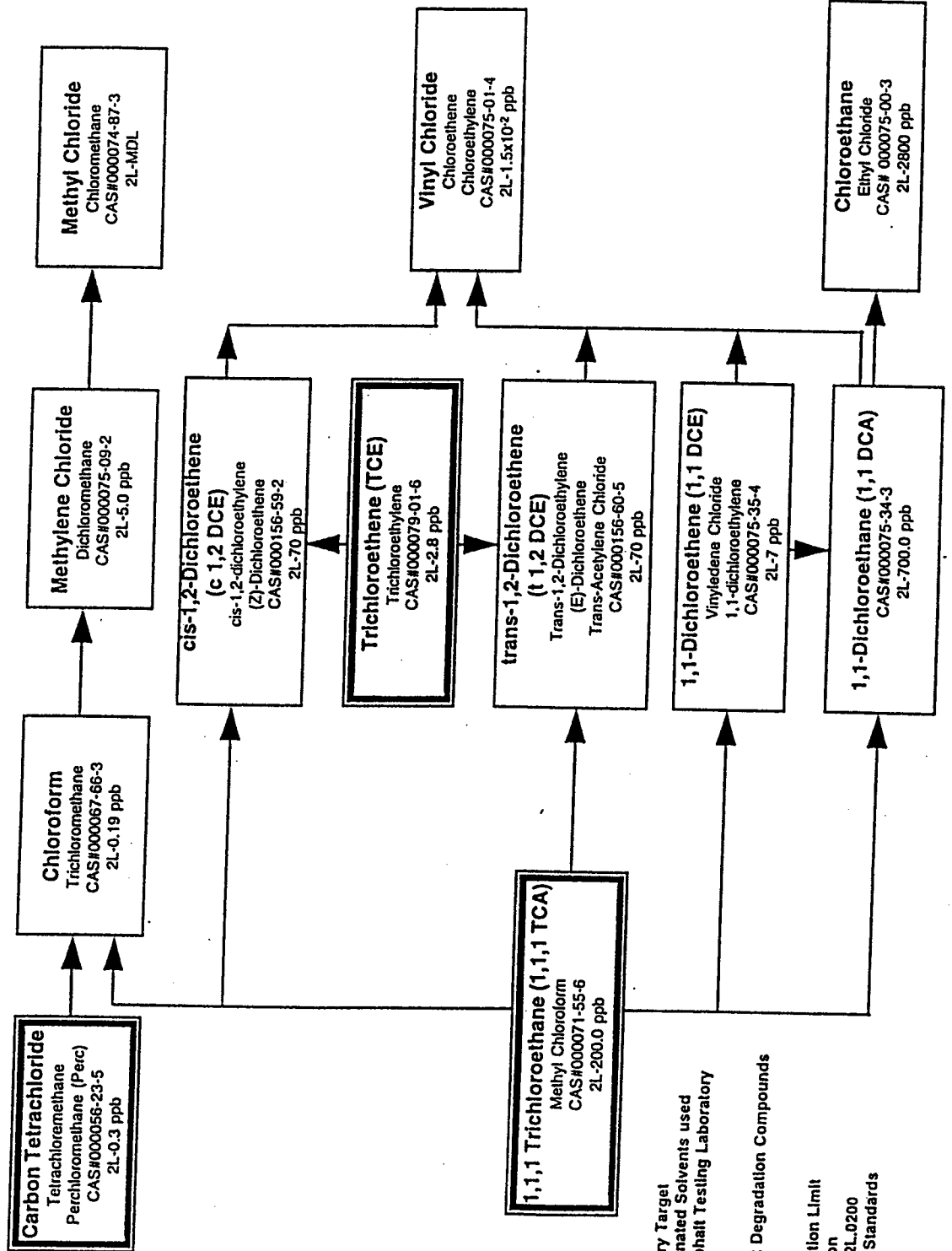
cc: Paul Roberts. North Carolina DOT
Duane MacEntee. North Carolina DOT
Ted Bush. North Carolina DEHNR
Frederic D. Rash. Geraghty & Miller. Inc.
Rudy Smithwick. Catlin & Associates. Inc.

Phase II Analyticals For Soil & Groundwater



NCDOT Target Chlorinated Solvent Transformation Pathways

Transformation Pathways for Various Volatile Target Chlorinated Solvents
in Soil-Groundwater Systems from Smith and
Dragun, 1984.



Primary Target
Chlorinated Solvents used
in Asphalt Testing Laboratory

Target Degradation Compounds

MDL = Method Detection Limit
ppb = parts per billion
2L = NCAC T15A-02L-0200
Ground Water Standards

Rev. 1/15/97



42260-98-10-565N

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JAMES B. HUNT JR.
GOVERNOR

P.O. BOX 25201, RALEIGH, N.C. 27611-5201

E. NORRIS TOLSON
SECRETARY

February 3, 1999

Arthur Mouberry
Chief, Groundwater Section
North Carolina Department of Environment and Natural Resources
Division of Water Quality
P.O. Box 29535
Raleigh, NC 27626-0535

Re: NCDOT Asphaltic Materials Testing Priority Sites
Corrective Action Planning Letter of Agreement
Sites #1-7, 67

Dear Mr. Mouberry,

On October 22, 1998 a meeting was held between the North Carolina Department of Environment and Natural Resources (NCDENR) and the North Carolina Department of Transportation (NCDOT) to discuss procedures and administrative options for the preparation of corrective action plans (CAPs) at the subject asphalt sites. An agreement between NCDENR and NCDOT was reached on administrative understandings and scopes of the work to be used during the CAP field work efforts. As discussed in the meeting, none of the subject sites are owned by the NCDOT. Site activity by NCDOT personnel was limited to ASTM asphalt extraction testing in the laboratories. This agreement will be adjusted as necessary to reflect future agreed upon understandings during the CAP process. The following summarizes the administrative agreements and scopes of work that will be uniformly executed at each of the referenced asphalt laboratory sites.

1. NCDENR, Division of Water Quality, Groundwater Section will respond in writing within 90 days upon receipt of each complete CAP submittal.
2. The comprehensive site assessments (CSAs) and corresponding NCDENR reviews of the CSAs for the referenced sites are accepted as written for all sites where there is not reason to believe that plume conditions have significantly changed. As agreed during the CSA phase of the projects, additional information may be necessary to complete the CSAs for some sites.



This additional information would be gathered during the CAP phase of any project where it is required.

3. Owners of some properties which require additional CSA information may not allow permanent monitoring points. Therefore, rapid assessment techniques using direct push technology (e.g. Geoprobe) to determine plume boundaries will be an available option in lieu of data from permanent monitoring points at these locations. Applications for long-term monitoring situations will be discussed with the NCDENR technical review person on a case-by-case basis.
4. Water supply wells can be used as monitoring points to assess the vertical extent of groundwater as long as the wells are constructed in accordance with the 2C Well Construction Standards and NCDOT and NCDENR agree that characteristics are sufficiently known to support the use of the wells.
5. The vertical extent of groundwater contamination can be established by isolating the contaminated fractures through borehole geophysics and discrete interval sampling as long as a lower fracture is demonstrated to be non-contaminated by "target chlorinated compounds". Applications for interval sampling situations will be discussed with the NCDENR technical review person on a case-by-case basis. It is understood by NCDOT and NCDENR that concurrence of both agencies is necessary to determine when a fracture is actually "isolated" and what is necessary to "demonstrate" that a lower fracture is not contaminated.
6. Upon completion of site specific data collection requirements for CAP preparation, it is our understanding that NCDENR and NCDOT will meet on a site by site basis to review the field data and discuss CAP remedy options on a as needed basis.
7. The elimination of health risks by the abandonment of water supply wells will increase the opportunity for CAP options to include cleanup to alternate groundwater standards [2L.0106(k)], natural attenuation [2L.0106(l)], or variance requests. In some cases deed recordations may be required on those properties with the intent of warning current and future owners of quality concerns with the groundwater on their property.
8. For sites where it can be demonstrated that no significant changes in site conditions have occurred since data collection, the historical analytical data generated during the previously accepted CSAs will be used to identify the type of contamination present in the drill cuttings/mud, purge water and aquifer pump test waters generated as a result of field environmental investigations and/or cleanup operations. This will also include the area of the zone of hydraulic influence from the aquifer test as well as dilution factors. The historical data will be evaluated to determine if the investigative derived waste (IDW) exhibits a characteristic that would classify the material as hazardous (based on 40 C.F.R. § 261.24) and thus subject to the regulation as a hazardous waste. If the evaluation concludes that the IDW may be contaminated by hazardous waste constituents and may exhibit a characteristic that would classify the material as hazardous, NCDOT will contact the Division of Waste Management, Hazardous Waste Section to determine regulatory status of the IDW. Should

the evaluation conclude that the IDW is non-hazardous, NCDOT will dispose of this material on-site in an area where shallow groundwater impacts are present and in a manner consistent with the requirements of Vol. 1 of the "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater". It is understood that there may be some situations where on-site disposal "in an area where shallow groundwater impacts are present" is not acceptable if that groundwater is overlain by clean soils.

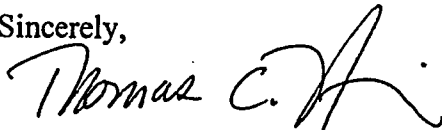
9. As part of the corrective action design effort, a groundwater sampling event will be conducted utilizing Standard Method 6230D to provide a more thorough and current indication of the chemical contaminants on each of the sites requiring corrective action on which the analytical data is greater than one year old. Standard Method 6230D will also be utilized during the CAP implementation phase.

NCDENR will not be in a position to fully "close out" a site unless there is reasonable assurance that no environmental pollutants remain at the site. This assurance applies to target compounds potentially related to the asphalt testing operations as well as any other constituents. NCDOT will continue monitoring until such time that NCDOT can demonstrate that all target compounds potentially related to NCDOT's asphalt testing operations remain below the applicable requirements for a period of four consecutive quarterly monitoring events. NCDOT will then request the issuance of a "no further action" letter for their portion of the site cleanup.

10. EPA method 8021 will be used for soil VOC analyses as performed in the CSA.

If after review of this letter of agreement you find it necessary to make changes please notify me immediately. We would like to continue the CAP process as quickly as possible, therefore your prompt response is requested. Should you have questions or comments I may be reached at (910)334-4273.

Sincerely,



Thomas C. Niver, P.G., CHMM
Environmental Engineer, Safety & Loss Control

Accepted by:



Arthur Mouberry, P.E.
Chief, Groundwater Section

cc: Ted Bush, NCDEHNR
Duane MacEntee, NCDOT
Mike Poplin, Vulcan Materials Company

APPENDIX II
PRELIMINARY SITE SCREENIGN REPORT
AND
TABLES AND FIGURES IN THE CSA REPORT

Site #48

ASPHALT PLANT SAMPLING FORM

Date A-27-89 Person Sampling Greg Kisse
 Current Owner Lee Paving Sample Type (Soil) (Water) 29KW, 29KS
 OSEP Code # (CN-PN-SN) Cnty/plnt/sample Chatham/Lee #3 / 29KW, 29KS
 Location of Plant Sugar Lake Road E. of Pittsboro off US-64.
 General Slope of Land (from sample point) 10%
 Soil Type (Loamy, Granular, Rocky, Clay, Sandy, Other) Clay
 Approximate Time & Durations of DOT site use 1968 - present

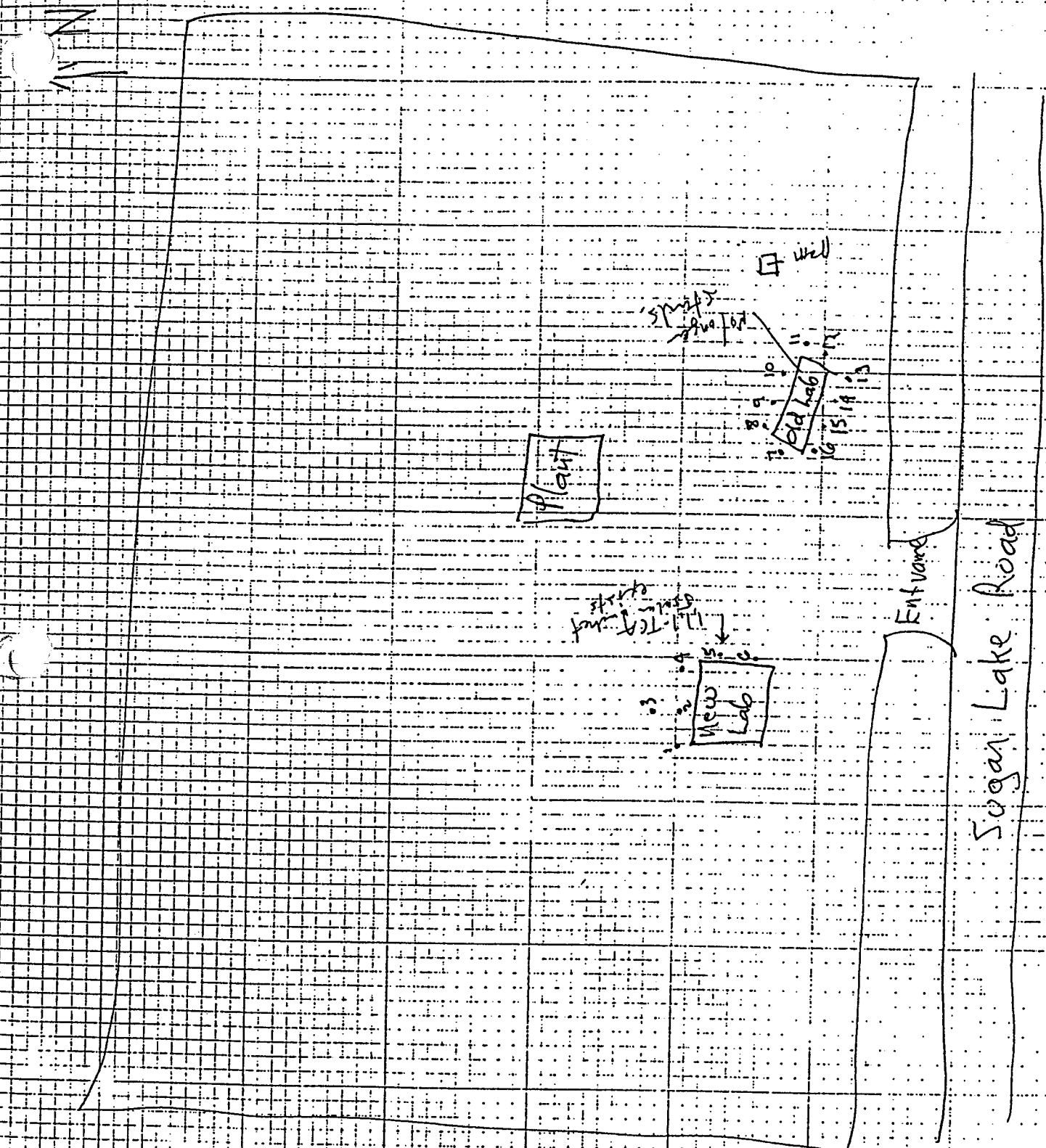
Previous or Simultaneous Use of site by other than DOT parties? Yes
Froehling, Robertson, Soils + Materials, Corp of Engineers, Law

In the event that multiple screening samples are conducted with a VOA or similar instrument, list the sample numbers and results here.

Sample #	Reading	Sample #	Reading	Sample #	Reading
<u>1</u>	<u>trace</u>	<u>7</u>	<u>< 1</u>	<u>13</u>	<u>trace</u>
<u>2</u>	<u>30 ppm</u>	<u>8</u>	<u>trace</u>	<u>14</u>	<u>5</u>
<u>3</u>	<u>trace</u>	<u>9</u>	<u>5</u>	<u>15</u>	<u>15</u>
<u>4</u>	<u>trace</u>	<u>10</u>	<u>15</u>	<u>16</u>	<u>trace</u>
<u>5</u>	<u>10 ppm</u>	<u>11</u>	<u>5</u>		
<u>6</u>	<u>15 ppm</u>	<u>12</u>	<u>trace</u>		

Comments: Well 300' from new lab site. Water pulled from well. Holes 5 & 6 hard to get to. Located between Lab and scales - about 20" of room to get between. Old lab has some low level contamination surrounding it. New lab contaminated beside door to lab and beside E wall near trico collection site
Webb lab results 4-28-89 318 ug/l T. Ethane and 617 T. Ethylene ug/l in water. (well 3.19 ppb C Tetrachloride in soil.

Note: A copy of any lab analysis should be attached to this form.



ave 64 to
 Gilthead Church Rd.
 to Sugar Lake Rd

Talk to Paul at Plant -
 operates control all in front w/
 former operator



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
P.O. BOX 25201
RALEIGH 27611-5201

JAMES G. MARTIN
GOVERNOR

DIVISION OF HIGHWAYS

JAMES E. HARRINGTON
SECRETARY

DATE 4-27-89

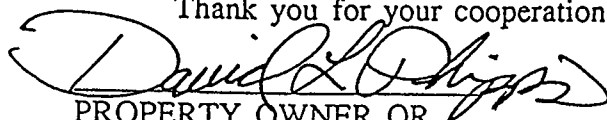
GEORGE E. WELLS, P.E.
STATE HIGHWAY ADMINISTRATOR

MEMORANDUM TO: TO WHOM IT MAY CONCERN

The Department of Transportation is conducting a survey of properties on which State asphalt testing laboratories were located to determine if any contaminants or other materials that may be potentially hazardous to the environment remain on any portion of these properties. The property which you now own may have been a site for one of the department's asphalt testing laboratories. By executing this letter, you, the undersigned owner, hereby grants permission for Department of Transportation personnel, or their authorized agents, to enter upon your property to the extent necessary to investigate the presence of contaminants or potentially hazardous substances. The investigation is limited solely to the taking of soil samples using hand-powered methods and the collection of water samples from on-site water supplies.

After completion of the site investigation and analysis of soil and water samples, the department agrees to share with you the results and conclusions of the investigation. If contaminants or potentially hazardous substances directly resulting from the past operations of these asphalt testing laboratories are detected, you will be advised as to the measures the Department will take to clean up or render harmless those contaminants or hazardous substances.

Thank you for your cooperation in this matter.


PROPERTY OWNER OR
COMPANY REPRESENTATIVE

Lee Paving
P.O. DRAWER 1109
SANFORD N.C. 27334-1109
ADDRESS
919-776-4338
TELEPHONE NO.

35

Sample Date (yy/mm/dd): 89/4/27
Division: 8 County: 52

Tester: GGK

Client Owner: Lee Paving

Address: Pittsboro, N. C.

Site Location: Sugar Lake Road E. of Pittsboro off U. S. 64

Sample Taken (y/n): Y
Sample Type (w/s): S
Sample #: 29ks

Soil Type: Clay

	mg/kg=ppm	mg/l=ppm	ug/kg=ppb	ug/l=ppb
Trichloroethylene (TCE):	<0.5	ppm		
Trichloroethane (TCA):	<0.5	ppb		
Carbon Tetrachloride (CCl4):	3.19	ppb		

Comments: Well 300' from new job site. Water pulled from well. Holes 5 & 6 hard to get to. Located between lab and scales about 20" of room to get between. Old lab has some low level contamination surrounding it. New lab contaminated beside door to lab and beside E wall near trico collection site.

NC DOT OSEP Asphalt Plant Sampling
(Plants with some contamination)

35 46

Sample Date (yy/mm/dd): 89/04/27
Division: 08 County: 52

Tester: GGK

Contract Owner: Lee Paving

Address: Pittsboro, N. C.

Site Location: Sugar Lake Road E. of Pittsboro off U. S. 64

Chatham / R.R.O.

Sample Taken (y/n): Y
Sample Type (w/s): s
Sample #: 29ks

Soil Type: Clay

mg/kg=ppm

mg/l=ppm

ug/kg=ppb

ug/l=ppb

Trichloroethylene (TCE): <0.5 ppm
Trichloroethane (TCA): <0.5 ppb
Carbon Tetrachloride (CCl4): 3.19 ppb

Comments: Well 300' from new job site. Water pulled from well. Holes 5 & 6 hard to get to. Located between lab and scales about 20" of room to get between. Old lab has some low level contamination surrounding it. New lab contaminated beside door to lab and beside E wall near trico collection site.

NORTH CAROLINA

GROUNDWATER CONTAMINATION INCIDENT MANAGEMENT

SITE PRIORITY RANKING SYSTEM

Groundwater Incident File # N/A Site Rank 117

Incident Name Lee Paving Co., Sugar Ranking Performed by WJ

Lake Road site Date Ranking Performed 29 Nov 89

Region/County RRD / Chatham

I. Contaminants Involved

Carbon tetrachloride (3,3,18)

(If more space is required, use back of form)

II. Exposure Assessment

Points
Awarded

A. Contaminated Drinking Water Supplies

1. Private, domestic supply well(s) containing substances in concentrations exceeding Class GA underground water quality standards; award to each impacted well the matrix value(s) from the Sax Toxicity - persistence matrix, shown in Attachment A to explanatory notes, for the contaminants found in each well, and sum the values from all impacted wells

2. Public or institutional water well containing substances in concentrations exceeding Class GA underground water quality standards; award to each impacted well the matrix value(s) from

54

the Sax Toxicity - persistence matrix, shown in Attachment A to the explanatory notes, for the contaminants found in each well, and sum the values from all impacted wells

0

3. If a water supply well identified in items II.A.1 and II.A.2 cannot be replaced by an existing public water supply source, award 5 points per irreplaceable well

15

B. Threat to Uncontaminated Drinking Water Wells

1. Private, domestic water supply well located within 1,500 feet downgradient hydrogeologically of the contaminant source; award 5 points per well
2. Public or institutional water supply well located within 1/2 mile downgradient hydrogeologically of the contaminant source; award 10 points per well
3. If any well identified in items II.B.1. and II.B.2. is located within 250 feet downgradient hydrogeologically of the contaminant source; award an additional 10 points per threatened well

0

0

0

III. Contaminant Hazard Assessment

- A. The assessment of hazard is based on Sax Toxicity and the persistence of the most hazardous substance detected in an investigation and the amount, estimated or actual, discharged

1. The highest matrix value for the contaminants involved in the incident from the Sax Toxicity-persistence matrix (shown in Attachment A to the explanatory notes)
2. The value for the amount discharged is based on gallons of material, where other volumetric or weight measures are used to characterize a material, the relationship 1 ton \approx 1 cubic yard \approx 4 drums \approx 220 gallons will be used to determine the number of gallons discharged and is assigned according to the following table:

18

no discharge	-	0
≤ 10 gallons	-	1
>10 but ≤ 100 gallons	-	2
>100 but ≤ 1000 gallons	-	5
>1000 gallons	-	10

10

IV. Source Assessment

A. Primary Source - Uncontrolled or unabated Primary Sources such as, but not limited to, dump sites, stockpiles, lagoons, land applications, septic tanks, landfills, underground or above ground storage tanks, and transportation accidents

1. Suspected or confirmed source remains in active use, continues to receive petroleum products, raw materials, wastewater or solid waste, and continues to discharge contaminants; award 20 points

0

2. Active use of suspected or confirmed source has been discontinued or the source resulted from a one-time release of contaminants, such as a spill resulting from a transportation accident, but the source continues to release contaminants into the environment as with a closed landfill or a transportation accident where no remediation of contaminated soil or product has been accomplished; award 10 points

10

B. Secondary Source

1. Free product thickness ≥ 1/4 inch detected on the water table in observation or monitoring well; award 50 points

0

2. Soil exhibits partial or full saturation with contaminant, or product vapors in excess of 100 ppm as measured by organic vapor detection equipment; award 20 points

0

V. Hydrogeological Assessment

A. Depth to Water Table - The depth is measured vertically from the deepest point of penetration of the contaminant to the highest

level of the seasonal high water table; if the depth is not known, it should be estimated from the best available data; and a value assigned from the following table:

<u>Depth</u>	<u>Assigned Value</u>
> 50 feet	0
< 50 to > 30 feet	2
< 30 to > 20 feet	4
< 20 to > 10 feet	6
Contaminant has reached groundwater	8
Contaminant has entered the fractured bedrock aquifer	10

10

B. Average Horizontal, Linear Groundwater Velocity - From the relationship for steady state, average velocity, $v = K/n \, dh/dl$, an estimate of movement of conservative contaminants may be made. The horizontal, saturated hydraulic conductivity (K) may be determined by aquifer test or estimated by field or laboratory tests or as a last resort, from generalized tables of aquifer materials, shown in Attachment A to the explanatory notes, $K = 1 \times 10^{-5}$ ft/day. The porosity (n) of aquifer materials may be determined from laboratory tests or estimated from aquifer test or generalized tables, shown in the Attachment A to the explanatory notes, $n = 0.44$. From the monitoring of water level elevations in wells penetrating the aquifer of concern or estimates based on interpretations of the topography of the site area, the gradient of the water table may be estimated, $dh/dl = 42/1320$ ft/ft. From the computed velocity a rank value may be assigned as follows:

7.31×10^{-7} ft/day

<u>Average Velocity ($\bar{v} = k/n \, dh/dl$)</u>	<u>Assigned Value</u>
< 2.74×10^{-3} ft/day	0
$\geq 2.74 \times 10^{-3}$ to < 1.0×10^{-2} ft/day	1
$\geq 1.0 \times 10^{-2}$ to 1.0×10^{-1} ft/day	3
$\geq 1.0 \times 10^{-1}$ to 1.0 ft/day	5
≥ 1.0 ft/day	10

0

VI. Site Rank (sum of assigned values)

117

5135 1 SW
(BY NUM)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Farrington

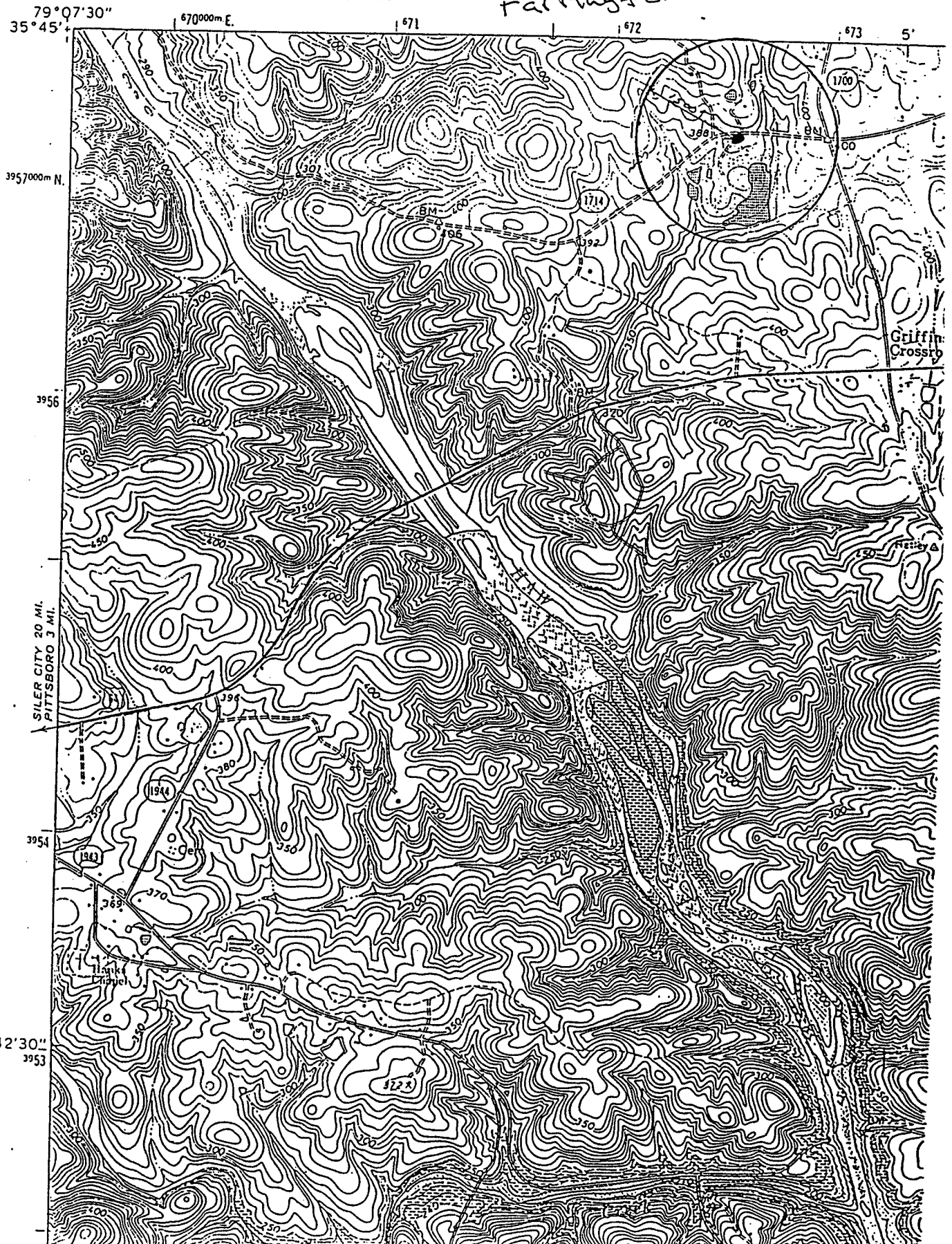


Table 2-1. Summary of Adjacent Property Owners, Site No. 48, Lee Paving Company, Pittsboro, North Carolina.

Property ID Number (See Fig. 2-3)	Registered Property Owner	Property Owner Address	Current Use
1	Roy Stewart (Site Property)	P.O. Box 1109 Sanford, NC 27350	Commercial
2	Erskine Heatherly, Jr.	Not Listed	Residential
3	Patricia Ellis & Deborah Sasser	154 Deer Run Pittsboro, NC 27312	Residential
4	James E. McKendry	190 Deer Run Pittsboro, NC 27312	Residential
5	James L. Harris	459 Mays Chapel Rd. Pittsboro, NC 27312	Residential
6	Bradley E. Holloway	Mt. Gilead Woods Pittsboro, NC 27312	Residential
7	Sara Corden	577 Silver Berry Rd. Pittsboro, NC 27312	Residential
8	Raymond J. Ingram	521 Silver Berry Rd. Pittsboro, NC 27312	Residential
9	Mildred Cason	768 E. Perry Rd. Pittsboro, NC 27312	Residential
10	Mildred Cason	768 E. Perry Rd. Pittsboro, NC 27312	Residential
11	David P. Martinez	103 Rabbit Run Pittsboro, NC 27312	Residential
12	David P. Martinez & Graci J.	103 Rabbit Run Pittsboro, NC 27312	Residential
13	Roy F. & Aliene Keck	173 Rabbit Run Pittsboro, NC 27312	Residential
14	Dexter V. Perry Dexter V. Perry Trust	614 Sanderson Drive Durham, NC 27704	Residential

Table 2-1. Summary of Adjacent Property Owners, Site No. 48, Lee Paving Company, Pittsboro, North Carolina.

Property ID Number (See Fig. 2-3)	Registered Property Owner	Property Owner Address	Current Use
15	James D. & Ann B. Marlow	P. O. Box 193 Bynum, NC 27228	Residential
16	William F. & Deborah K. Lancaster	1026 Mt. Gilead Church Rd. Pittsboro, NC 27312	Residential
17	Claron N. Hatley c/o Susan Ickes & James Hatley	15 Ashwood Knoll Rochester, NY 14624	Residential
18	William Hatley	3109 Commonwealth Ave. Charlotte, NC 28205	Residential
19	Deborah McNeil Deaton	131 Crossing Ave. Belmont, NC 28012	Residential
20	John Etna Byrd/ Doris Earl Byrd McNeil	5106 Wilkinson Charlotte, NC 28208	Residential
21	Sugar Lake Land Company	981 Old Graham Rd. Pittsboro, NC 27312	Residential
22	Federal Paper BD Co. Inc.	P.O. Box 146 Southern Pines, NC 28388	Commercial
23	Timothy R. Mitchel	771 Mt. Gilead Church Rd. Pittsboro, NC 27312	Residential
24	Dennis C. & Phillis C. Campbell	Rt. 4 Box 588 Pittsboro, NC 27312	Residential
25	Alvis Page	1085 Mt. Gilead Church Rd. Pittsboro, NC 27312	Residential
26	James & Marjorie Burnette	419 Hardee Street Durham, NC 27703	Residential
27	Samuel Burnette	Route 4, Box 578 Pittsboro, NC 27312	Residential
28	Page Willcne Bright	Route 4, Box 576 Pittsboro, NC 27312	Residential



Table 2-1. Summary of Adjacent Property Owners, Site No. 48, Lee Paving Company, Pittsboro, North Carolina.

Property ID Number (See Fig. 2-3)	Registered Property Owner	Property Owner Address	Current Use
29	Phillip W. Corn	PO Box 1002 Cary, NC 27512	Residential
30	Louise Heardon & Helen Toney	108 Cole Street Chapel Hill, NC 27516	Residential
31	Paul Dean & Virginia Bailey	101 Rabbit Run Pittsboro, NC 27312	Residential
32	Pat & Elward Horton	911 Whippoorwill Lane Chapel Hill, NC 27514	Residential
33	Paggy Jean Porter	464 Old Farrington Road Chapel Hill, NC 27514	Residential
34	Karl W. & Inger Rabe	114 Rabbit Run Pittsboro, NC 27312	Residential
35	Garry & Patricia Anderson	79 Silver Berry Road Pittsboro, NC 27312	Residential
36	Richard & Christine Fish	208 Rabbit Run Pittsboro, NC 27312	Residential
37	Tony Michael	Route 4, Silver Berry Road Pittsboro, NC 27312	Residential
38	David & Deborah Walton	167 Silver Berry Road Pittsboro, NC 27312	Residential
39	John & Cynthia Heuer	Route 4, Box 559-D Pittsboro, NC 27312	Residential
40	Richard & Christy Fish	208 Rabbit Run	Residential
41	Albert Lindsay	Route 4, Box 559-J Pittsboro, NC 27312	Residential
42	Thomas & Helen Dean	300 Rabbit Run Pittsboro, NC 27312	Residential

Table 2-1. Summary of Adjacent Property Owners, Site No. 48, Lee Paving Company, Pittsboro, North Carolina.

Property ID Number (See Fig. 2-3)	Registered Property Owner	Property Owner Address	Current Use
43	Gail Darden & Albert Lindsay	Route 4, Box 559-J Pittsboro, NC 27312	Residential
44	Phillip Allen	483 Silver Berry Road Pittsboro, NC 27312	Residential
45	James Poole	376 Silver Berry Road Pittsboro, NC 27312	Residential
46	Carolyn Cambell, John Davis, John & Janet Cambell	502 Belmont Street Chapel Hill, NC 27514	Residential
47	Kimberly Gay Preble	21 Meadowbrook Drive Durham, NC 27712	Residential
48	Anna Lee Leonard	544 Silver Berry Road Pittsboro, NC 27312	Residential
49	David & Robyn Halliday	604 Silver Berry Road Pittsboro, NC 27312	Residential
50	Terry & Linda Lindsey	746 Silver Berry Road Pittsboro, NC 27312	Residential
51	Bobbi & Jean Riddle	94 Sweet Gum Pittsboro, NC 27312	Residential
52	Phreddie Delois Popp	Route 4, Box 394 Pittsboro, NC 27312	Residential
53	Jonathan Riedling	7 Crosswinds Estates Pittsboro, NC 27312	Residential
54	Phreddie Delois Popp	Route 4, Box 394 Pittsboro, NC 27312	Residential
55	Mark Flynn	334 Deer Run Pittsboro, NC 27312	Residential
56	Michael & Patti Davis	458 Deer Run Pittsboro, NC 27312	Residential

Table 2-1. Summary of Adjacent Property Owners, Site No. 48, Lee Paving Company, Pittsboro, North Carolina.

Property ID Number (See Fig. 2-3)	Registered Property Owner	Property Owner Address	Current Use
57	Doris & Kathleen Flynn	287 Deer Run Pittsboro, NC 27312	Residential
58	William & Janet Wyatt	365 Deer Run Pittsboro, NC 27312	Residential
59	John & Jacqueline O'Gorman	421 Deer Run Pittsboro, NC 27312	Residential
60	Wayne Michael Wade	Route 4, Box 592 Pittsboro, NC 27312	Residential
61	Maria Russon	Route 5, Box 597 Pittsboro, NC 27312	Residential
62	Ronald & Phillis Graham	500 Sugar Lake Road Pittsboro, NC 27312	Residential
63	Daniel & Marion Munn	Route 4, Box 603-A Pittsboro, NC 27312	Residential
64	Robert Paul Kolin	580 Sugar Lake Road Pittsboro, NC 27312	Residential
65	Douglas Wakeman	624 Sugar Lake Road Pittsboro, NC 27312	Residential
66	Thomas & Saranne Wilson	562 Sugar Lake Road Pittsboro, NC 27312	Residential
67	Theadore & Julie Taydus	495 Sugar Lake Road Pittsboro, NC 27312	Residential
68	Archie & Shana Hankins	555 Sugar Lake Road Pittsboro, NC 27312	Residential
69	John Judd & Annette Reaves	PO Box 992 Pittsboro, NC 27312	Residential
70	Pat & Elward Horton	911 Whippoorwill Lane Chapel Hill, NC 27514	Residential

Source: Chatham County Tax Department.

Table 5-1. Monitor-Well Construction Details, Site No. 48, Lee Paving Company, Pittsboro, North Carolina.

Well Number	Date of Installation	Measuring Point Elevation (ft)	Total Drilled Depth (ft bls)	Surface Casing Depth (ft bls)	Depth of Screened Zone (ft bls)
48MW-1	11/14-11/15/96	995.20	50	36	46-36
48MW-2	11/14/96	993.80	50	40	50-40
48MW-3	11/16-11/14/96	997.71	56	40	50-40
48MW-4	11/13/96	998.21	36	26	36-26
48MW-5	11/12-11/13/96	1001.68	43	33	43-33
48MW-6	1/15/97	987.97	44	34	44-34
48MW-7	1/16/97	986.02	34	24	34-24
48MW-8	1/16/97	998.93	32	22	32-22
48MW-9	1/16/97	990.91	22	11	22-11
48MW-10	3/3/97	994.99	40	30	40-30
48MW-11	3/3/97	988.48	29	19	29-19
48MW-12	4/17/97	972.71	37.5	27.5	37.5-27.5
48MW-13	4/17-4/22/97	8/24/02	32.5	22.5	32.5-22.5
48DW-1	1/15-1/17/97	994.67	100	63*	100-63**
48DW-2	4/24-4/25/97	991.84	66	43*	66-43**

- ft Elevation referenced to an arbitrary datum of 1,000 feet.
- ft bls Feet below land surface.
- * Indicates that 6-inch steel casing was used as the surface casing.
- ** Indicates an open-rock well from the total depth drilled to the bottom of the surface casing.



Table 8-1. Summary of Soil-Vapor Survey Data, Site No. 48, Lee Paving Company, Sampled on August 28, 1996, Pittsboro, North Carolina.

Sample I.D.	Sample Depth (ft bls)	Soil-Vapor Concentration (ppm)
SV-1	3.5	0.0
SV-2	3.0	0.0
SV-3	3.0	0.0
SV-4	3.0	111.0
SV-5	3.0	86.0
SV-6	3.0	14.0
SV-7	3.0	14.0
SV-8	3.0	398.0
SV-9	3.5	71.0
SV-10	3.5	271.0
SV-11	3.5	314.0
SV-12	3.5	131.0
SV-13	3.0	128.0
SV-14	3.5	235.0
SV-15	3.0	199.0

Samples were collected using the Microseeps™ soil gas sampling system and screened using a Thermo Environmental Instruments Model 580B portable photoionization detector.

ft bls Feet below land surface.
 ppm Parts per million.



Table 8-2. Summary of Geoprobe™ Soil Analytical Data for Site No. 48, Lee Paving Company, Sampled on August 29, 1996, Pittsboro, North Carolina.

Constituents	Calculated Soil Clean-Up Level	Sample ID:		SS-2-4	SS-2-10	SS-3-4	SS-3-10	SS-4-4	REP-01-SS*	
		Lab ID:	Date Sampled:							
		SS-1-4	SS-1-10	14366	14367	14368	14369	14370	14378	
		8/29/96	8/29/96	8/29/96	8/29/96	8/29/96	8/29/96	8/29/96	8/29/96	
<u>Volatiles Organics (USEPA 8021) µg/kg dw</u>										
n-Butylbenzene	-	<1.4	<1.3	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	
sec-Butylbenzene	-	<1.4	<1.3	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	
tert-Butylbenzene	-	<1.4	<1.3	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	
Ethylbenzene	-	<1.4	<1.3	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	
p-Isopropyltoluene	-	<1.4	<1.3	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	
Naphthalene	-	<1.4	<1.3	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	
1,2,4-Trimethylbenzene	-	<1.4	<1.3	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	
1,3,5-Trimethylbenzene	-	<2.8	<2.7	<2.8	<2.9	<2.9	<2.9	<2.8	<2.8	
m/p-Xylene	-	<2.8	<2.7	<2.8	<2.9	<2.9	<2.9	<2.8	<2.8	
o-Xylene	-	<2.8	<2.7	<2.8	<2.9	<2.9	<2.9	<2.8	<2.8	
<u>Volatiles Organics (USEPA 8021) µg/kg dw</u>										
		SS-4-10	SS-5-1.5	SS-5-5 ⁹⁷	SS-6-1	SS-7-3	SS-8-4	SS-9-4		
		14371	14372	14373	14374	14375	14376	14377		
		8/29/96	8/29/96	8/29/96	8/29/96	8/29/96	8/29/96	8/29/96		
<u>Volatiles Organics (USEPA 8021) µg/kg dw</u>										
n-Butylbenzene	-	<1.5	<1.1	54	<1.3	<1.3	<1.2	<1.2	<1.2	
sec-Butylbenzene	-	<1.5	<1.1	14	<1.3	<1.3	<1.2	<1.2	<1.2	
tert-Butylbenzene	-	<1.5	<1.1	29	<1.3	<1.3	<1.2	<1.2	<1.2	
Ethylbenzene	-	<1.5	<1.1	1.4	<1.3	<1.3	<1.2	<1.2	<1.2	
p-Isopropyltoluene	-	<1.5	<1.1	29	<1.3	<1.3	<1.2	<1.2	<1.2	
Naphthalene	-	<1.5	<1.1	78	<1.3	<1.3	<1.2	<1.2	<1.2	
1,2,4-Trimethylbenzene	-	<1.5	<1.1	54	<1.3	<1.3	<1.2	<1.2	<1.2	
1,3,5-Trimethylbenzene	-	<3.0	<2.2	29	<2.6	<2.6	<2.3	<2.4	<2.4	
m/p-Xylene	-	<3.0	<2.2	5.8	<2.6	<2.6	<2.3	<2.4	<2.4	
o-Xylene	-	<3.0	<2.2	5.7	<2.6	<2.6	<2.3	<2.4	<2.4	

µg/kg dw Micrograms per kilogram on a dry weight basis.

* Field duplicate sample of sample collected at location SS-4-4.

< Constituent was not detected above the quantitation limit.



Table 8-3. Summary of Hand-Auger Analytical Data for Site No. 48, Lee Paving Company, Sampled on December 6, 1996, Pittsboro, North Carolina.

Constituents	Calculated Soil Cleanup Level	Sample ID:		48SS-10-04		48SS-10-08		48REP-01-SS*		48SS-11-04		48SS-11-08	
		Lab ID:	Date Sampled:	18086	12/6/96	18087	12/6/96	18087	12/6/96	18087	12/6/96	18088	12/6/96
Volatile Organics (USEPA 8021) µg/kg dw													
Benzene	-			5.4		6.3		5.7		<1.3		<1.4	
Chloroform	-			3.1		3.1		3.1		<1.3		<1.4	
1,1-Dichloroethane	45,473			4.6		4.1		4.2		<1.3		<1.4	
1,1-Dichloroethene	63			<1.4		<1.4		1.5		<1.3		<1.4	
1,2-Dichloropropane	-			3.4		<1.4J ¹		2.8J ¹		<1.3		<1.4	
trans-1,3-Dichloropropane	-			5.4		<1.4		<1.4		<1.3		<1.4	
Diisopropyl ether (DIPE)	-			<1.4		5.6		5.4		<1.3		<1.4	
Ethyl benzene	-			7.6		42		32		<1.3		<1.4	
Isopropylbenzene	-			8.9		46		41		<1.3		<1.4	
p-Isopropyltoluene	-			61		110		120		<1.3		<1.4	
Naphthalene	-			81		96		120		<1.3		<1.4	
Toluene	-			5.7		5.8		6.0		<1.3		<1.4	
1,1,1-Trichloroethane	8,149			84		62J ¹		16J ¹		<1.3		<1.4	
Trichloroethene	32.8			11		5.8J ¹		2.0J ¹		<1.3		<1.4	
Trichlorofluoromethane	-			3		4J ¹		1.9J ¹		<1.3		<1.4	
1,2,4-Trimethylbenzene	-			39		88		110		<1.3		<1.4	
1,3,5-Trimethylbenzene	-			26		110		120		<1.3		<1.4	
m/p-Xylene	-			21		10J ¹		83J ¹		<2.7		<2.8	
o-Xylene	-			22		97		81		<2.7		<2.8	

µg/kg dw Micrograms per kilogram on a dry weight basis.

* Field duplicate of soil sample collected at location 48SS-10-08.

< Constituent was not detected above the quantitation limit.

1 Constituent concentration is qualified as estimated (J) because the field duplicate sample criteria were not met.



Table 9-1. Summary of Groundwater Elevation Data for Site No. 48, Lee Paving Company, Pittsboro, North Carolina.

Well Number	North Top of Casing Elevation*	Date	Depth to Water (ft)	Groundwater Elevation*
48MW-1	995.20	12/4/96	31.39	963.81
		2/3/97	31.13	964.07
		3/6/97	31.31	963.89
		4/29/97	27.98	967.22
48MW-2	993.80	12/4/96	28.45	965.35
		2/3/97	28.17	965.63
		3/6/97	28.25	965.55
		4/29/97	25.62	968.18
48MW-3	997.71	12/4/96	32.33	965.38
		2/3/97	32.12	965.59
		3/6/97	32.38	965.33
		4/29/97	29.89	967.82
48MW-4	998.21	12/4/96	19.69	978.52
		2/3/97	18.64	979.57
		3/6/97	19.05	979.16
		4/29/97	15.81	982.40
48MW-5	1001.68	12/4/96	25.31	976.37
		2/3/97	23.10	978.58
		3/6/97	23.23	978.45
		4/29/97	22.07	979.61
48MW-6	987.97	2/3/97	21.95	966.02
		3/6/97	21.88	966.09
		4/29/97	20.32	967.65
		2/3/97	9.68	976.34
48MW-7	986.02	3/6/97	9.90	976.12
		4/29/97	8.04	977.98
		2/3/97	9.84	979.57
		3/6/97	10.22	979.19
48MW-8	989.41	4/29/97	6.73	982.68
		2/3/97	11.17	979.74
		3/6/97	11.59	979.32
		4/29/97	8.51	982.40
48MW-9	990.91	3/6/97	26.27	968.72
		4/29/97	24.70	970.29
		4/29/97	24.70	970.29



Table 9-1. Summary of Groundwater Elevation Data for Site No. 48, Lee Paving Company, Pittsboro, North Carolina.

Well Number	North Top of Casing Elevation*	Date	Depth to Water (ft)	Groundwater Elevation*
48MW-11	988.48	3/6/97	24.91	963.57
		4/29/97	21.34	967.14
48MW-12	972.71	4/29/97	8.66	964.05
48MW-13	967.74	4/29/97	7.37	960.37
48DW-1	994.67	2/3/97	70.35	924.32
		3/6/97	53.05	941.62
		4/29/97	31.05	963.62
48DW-2	991.84	4/29/97	24.73	967.11

* Elevations referenced to an arbitrary datum of 1,000 feet.



Table 9-2. Summary of Water-Supply Well PW-1 Groundwater Analytical Data for Site No. 48, Lee Paving Company, Sampled on August 29, 1996, Pittsboro, North Carolina.

Constituents	NCAC 2L Groundwater Standard	Sample ID: Lab ID: Date Sampled:	PW-1 14405 8/29/96
<u>Volatile Organics (SM 6230D) µg/L</u>			
1,1-Dichloroethane	700		6
1,1-Dichloroethene	7		29
Methyl tert-butyl ether	200		2
Toluene	1000		1
1,1,1-Trichloroethane	200		120
Trichloroethene	2.8		140

µg/L
NCAC 21
 Micrograms per liter.
 North Carolina Administrative Code, Title 15A, Chapter 2L, Groundwater Quality Standards, February 8, 1994.
 Constituent concentration exceeds the 15A NCAC 2L standard.

Table 9-3. Summary of Groundwater Analytical Data for Site No. 48, Lee Paving Company, Sampled on December 4, 5, and 6, 1996, Pittsboro, North Carolina.

Constituents	NCAC 2L Groundwater Standard	Sample ID:		48MW-2GW		48MW-3GW		48REP-01-GW*		48MW-4GW		48MW-5GW	
		Lab ID:	Date Sampled:	18095	12/5/96	18098	12/4/96	18100	12/5-6/96	18099	12/4/96	18097	12/6/96
Volatile Organics (SM 6230D) µg/L													
Benzene	1			<0.5		<0.5		1		<0.5		<0.5	
1,1-Dichloroethane	700		0.6	<0.5		1		<0.5		<0.5		<0.5	
1,1-Dichloroethene	7		4	<0.5		15		<0.5		<0.5		<0.5	
cis-1,2-Dichloroethene	70		23	<0.5		2		<0.5		<0.5		<0.5	
Ethylbenzene			<2.5	<0.5				3		<0.5		<0.5	
Isopropylbenzene	NS		<0.5	<0.5				1		<0.5		<0.5	
p-Isopropyltoluene	NS		<0.5	<0.5				14		<0.5		<0.5	
Methyl-tert butyl ether (MTBE)	200		3	<0.5				<0.5		<0.5		<0.5	
Naphthalene	21		0.7	<0.5		1		8		<0.5		<0.5	
n-Propylbenzene	NS		<0.5	<0.5				9		<0.5		<0.5	
Toluene	1,000		<0.5	0.9		0.8		1		<0.5		<0.5	
1,1,1-Trichloroethane	200		<0.5	<0.5		20		<0.5		<0.5		<0.5	
Trichloroethene	2.8		96	<0.5		7		<0.5		0.6		<0.5	
1,2,4-Trimethylbenzene	NS		64	<0.5				<0.5		4		<0.5	
1,3,5-Trimethylbenzene	NS		<0.5	<0.5				16		<0.5		<0.5	
m/p-Xylene	530		<0.5	<0.5				4		<0.5		<0.5	
o-Xylene	530		<0.5	<0.5				4		<0.5		<0.5	

µg/L
Micrograms per liter.
NCAC 2L North Carolina Administrative Code, Title 15A, Chapter 2L, Groundwater Quality Standards, February 8, 1994.
NS Numerical 15A NCAC 2L Standard has not been established; therefore, detectable concentrations of these substances in groundwater are considered to be in excess of North Carolina Water Quality Standards.
* Constituent concentration exceeds the 15A NCAC 2L Standard.
Field duplicate sample of groundwater sample 48MW-3GW.
< Constituent was not detected above the quantitation limit.
1 Constituent concentration is qualified as estimated (J) due to continuing calibration data outside QC limit.

Table 9-4. Summary of Groundwater Analytical Data for Site No. 48, Lee Paving Company, Sampled on March 6, 1997, Pittsboro, North Carolina.

Constituents	NCAC 2L Groundwater Standard	Sample ID: Lab ID: Date Sampled:	48MW-10 21223 3/6/97	48REP-01-GW* 21227 3/6/97	48MW-11 21224 3/6/97
<u>Volatile Organics</u> (USEPA 601) µg/L					
1,1-Dichloroethane	700		<1	<1	2
1,1-Dichloroethene	7		<1	<1	33
cis-1,2-Dichloroethene	70		<1	<1	2
Tetrachloroethene	0.7		<1	<1	2
1,1,1-Trichloroethane	200		<1	<1	84
Trichloroethene	2.8		<1	<1	470D
<u>Volatile Organics</u> (USEPA 602) µg/L					
			ND	ND	ND

µg/L Micrograms per liter.
 NCAC 2L North Carolina Administrative Code, Title 15A, Chapter 2L, Groundwater Quality Standards, February 8, 1994.
 * Constituent concentration exceeds the 15A NCAC 2L Standard.
 < Field duplicate sample of sample collected at 48MW-10.
 ND Constituent was not detected above the quantitation limit.
 D Constituents were not detected above the quantitation limits.
 Constituent concentration detected was quantitated using a secondary dilution.

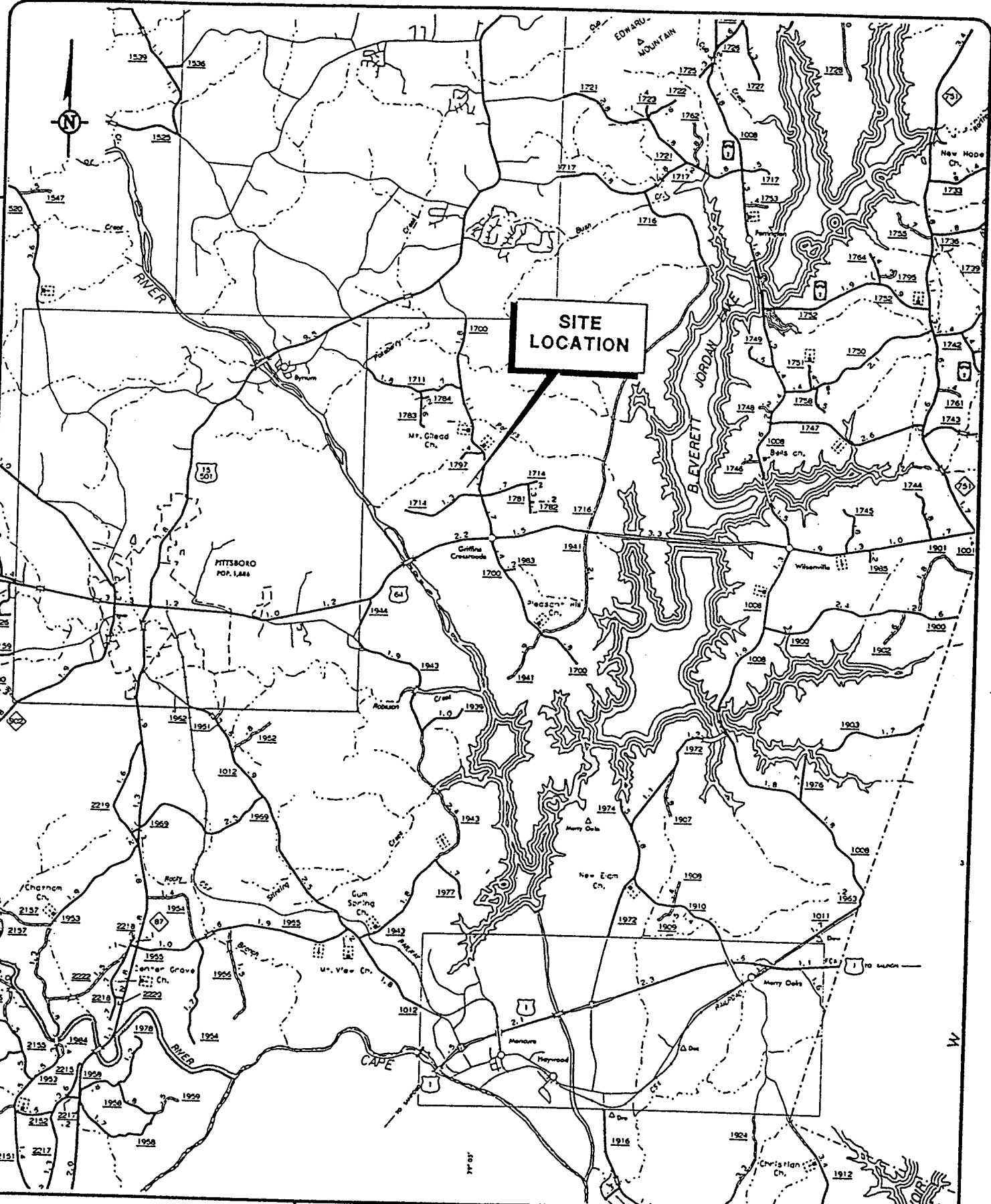
Table 9-5. Summary of Monitor-Well Analytical Data for Site No. 48, Lee Paving Company, Sampled on April 29, 1997, Pittsboro, North Carolina.

Constituents	NCAC 2L Groundwater Standard	Sample ID: Lab ID: Date Sampled:	48DW-2 23802 4/29/97	48MW-12 23801 4/29/97	48REP-01-GW* 23805 4/29/97	48MW-13 23800 4/29/97
<u>Volatile Organics</u> (USEPA Method 601) µg/L						
1,1-Dichloroethane	700		7	<1	<1	<1
1,1-Dichloroethene	7		44	<1	<1	<1
cis-1,2-Dichloroethene	70		6	<1	<1	<1
Tetrachloroethene	0.7		1	<1	<1	<1
1,1,1-Trichloroethane	200		41	<1	<1	<1
Trichloroethene	2.8		250D	<1	<1	<1
<u>Volatile Organics</u> (USEPA Method 602) µg/L						
			ND	ND	ND	ND

µg/L Micrograms per liter.
 NCAC 2L North Carolina Administrative Code, Title 15A, Chapter 2L, Groundwater Quality Standards, February 8, 1994.
 * Constituent concentration exceeds the 15A NCAC 2L Standard.
 < Field duplicate sample of sample collected at 48MW-12.
 ND Constituent was not detected above the quantitation limit.
 D Constituents were not detected above the quantitation limits.
 Constituent concentration detected was quantitated using a secondary dilution.



DWG DA APRIL 97 | PRJCT NO.: NC0360.061 | FILE NO.: 48 | DRAWING: 48 | CHECKED: | APPROVED: F. RASH | DRAFT: MEKLE



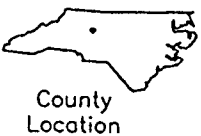
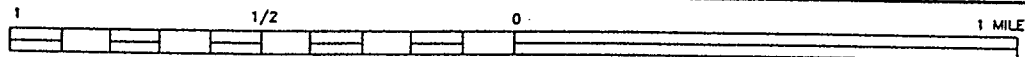
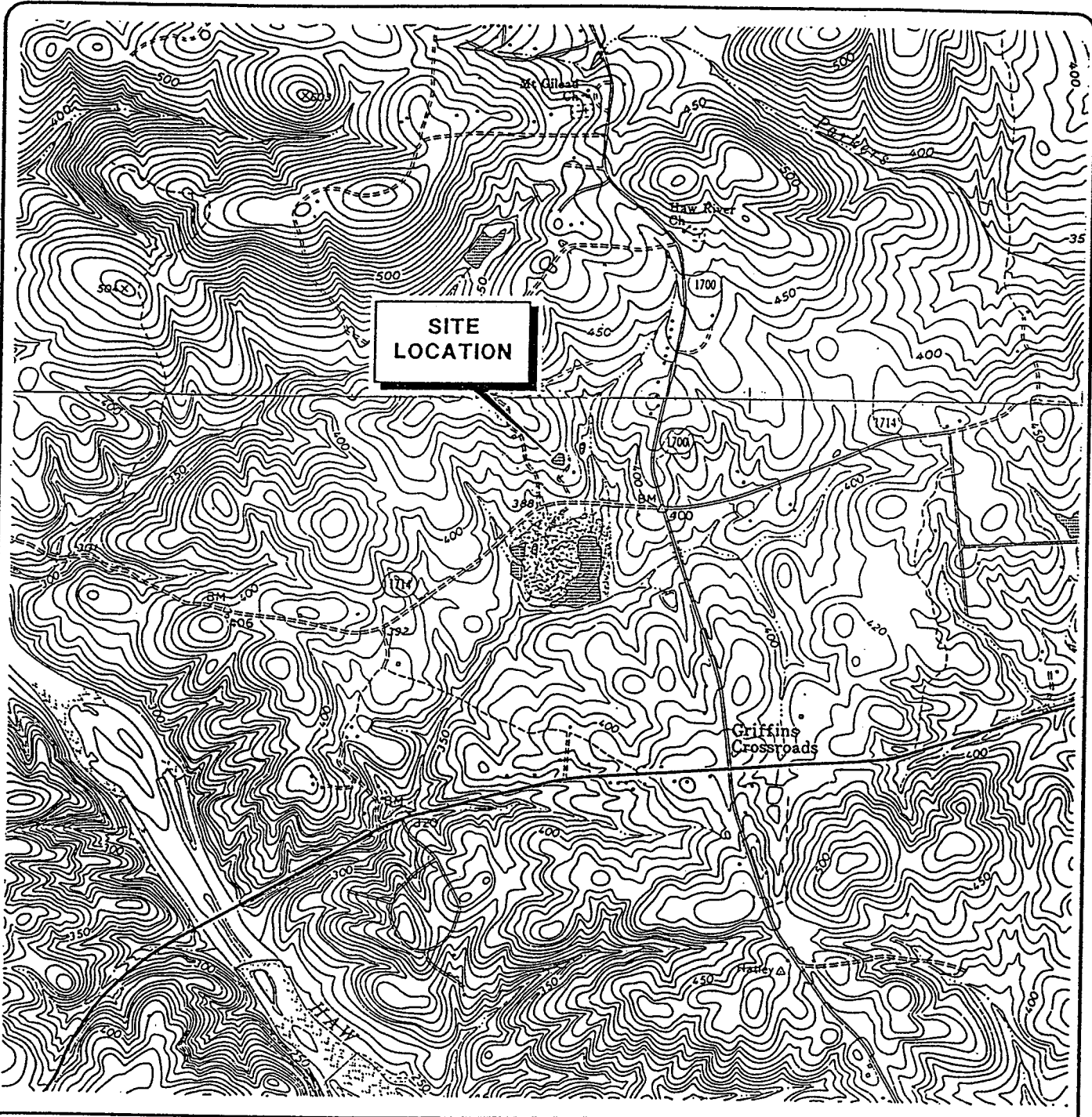
 **GERAGHTY & MILLER, INC.**
Environmental Services

COUNTY ROAD MAP
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
SITE #48
PITTSBORO, NORTH CAROLINA

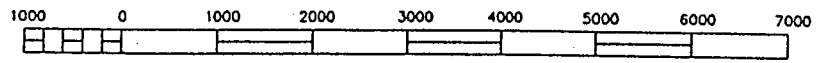
FIGURE
2-1

SCALE 1 INCH = 2.0 MILES

DW: E: 03SEPT96 | PRCT NO.: NC0360.191 | FILE NO.: SYM | DRAWING: 250-NC | CHECKED: M. HUDSON | APPROVED: F. RASH | DRAFTER: A. WARREN



County Location



SCALE 1:24000

Contour Interval 10 Feet Datum is Mean Sea Level
U.S.G.S. 7.5 Minute Series Farrington, N.C.
and Merry Oaks, N.C. Topographic Quadrangle

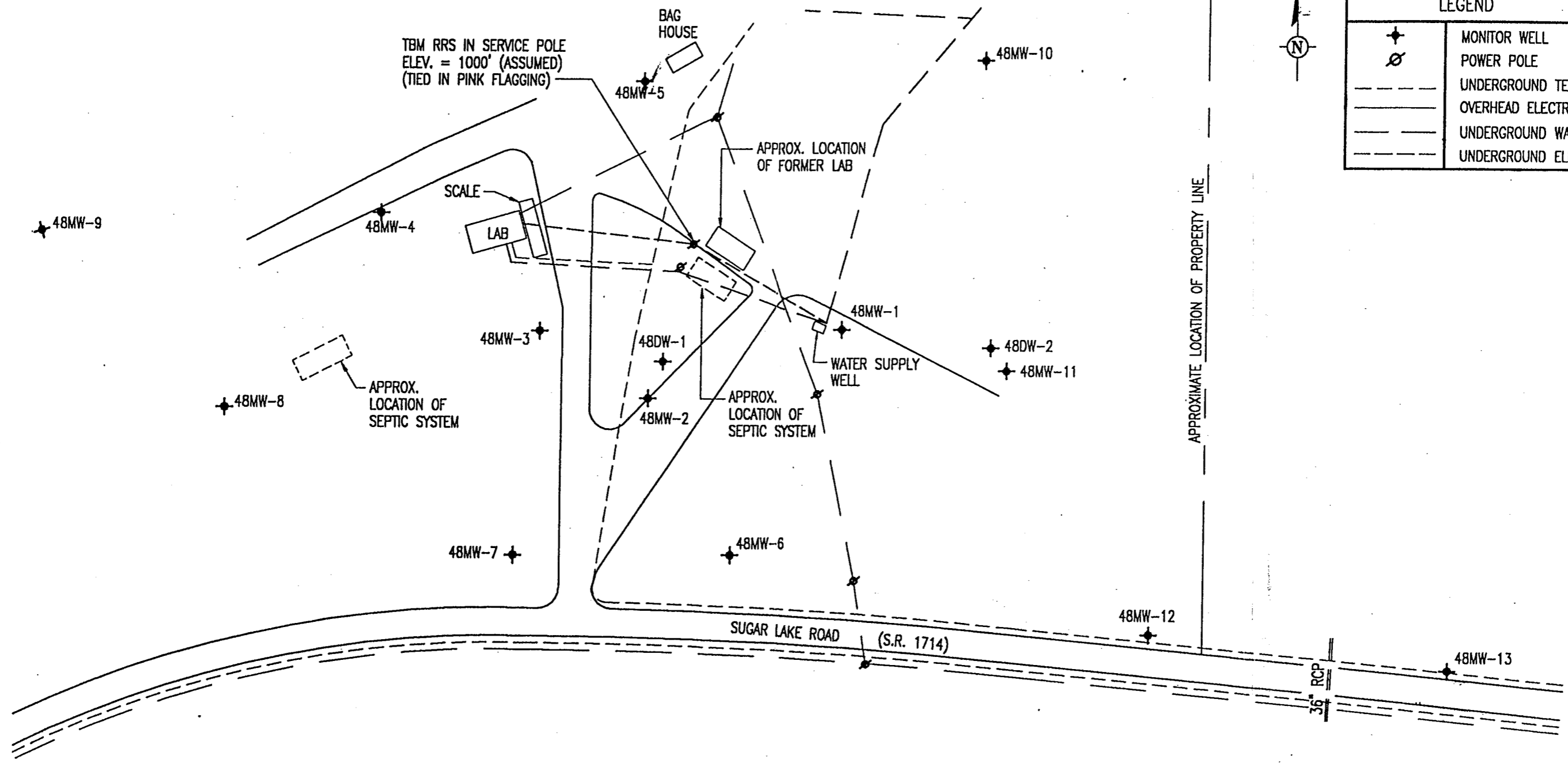


SITE LOCATION MAP

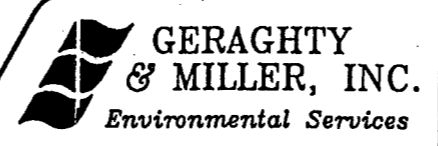
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
SITE #48
PITTSBORO, NORTH CAROLINA

FIGURE
2-4

DWG DATE: 5/14/97 | PROJECT NO.: 39575 | FILE NO.: 4900 | DRAWING: 48-SITE | CHECKED: K. TRIMBERGER | APPROVED: F. RASH | DRAFTER: D. GARRIGUES



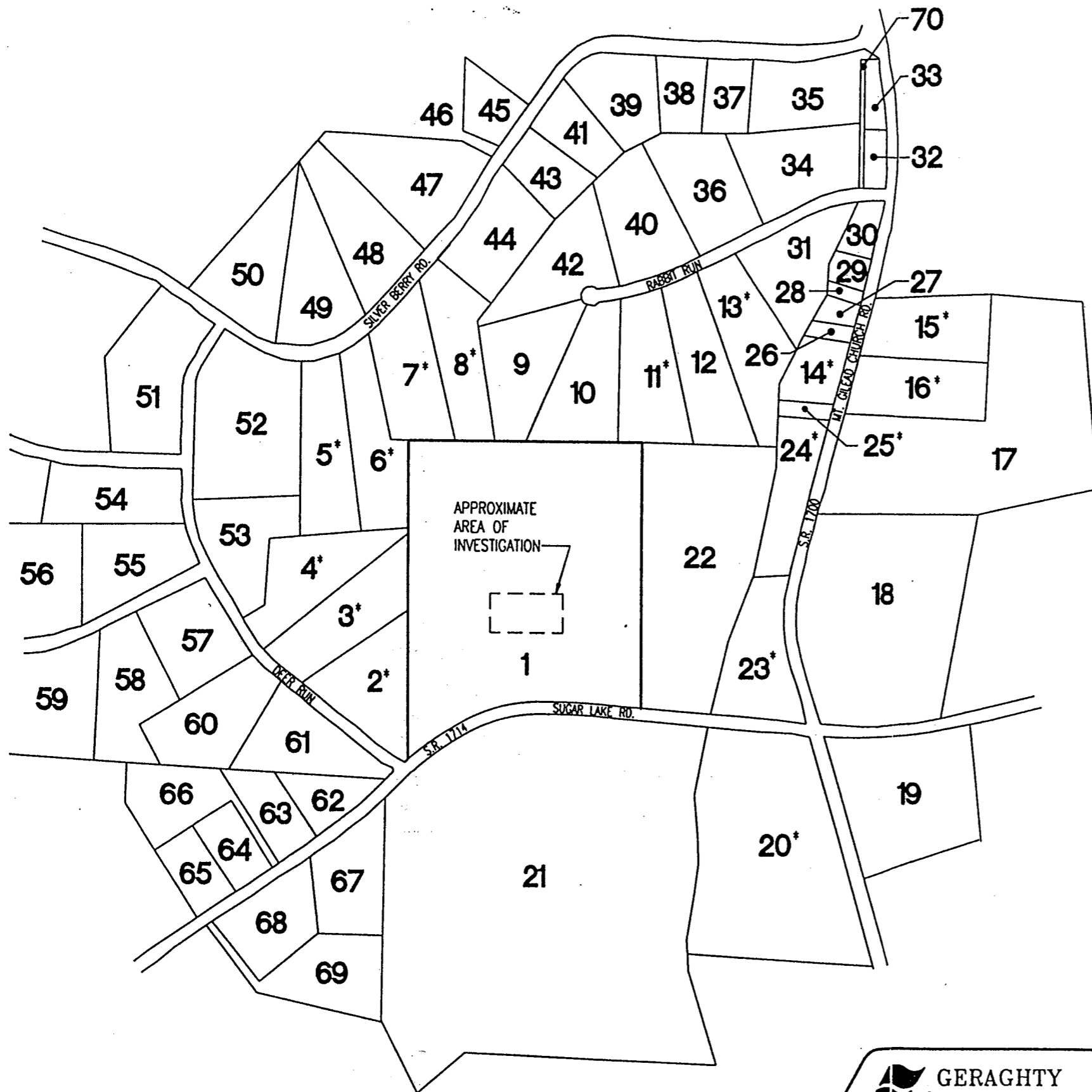
LEGEND	
⊕	MONITOR WELL
⊙	POWER POLE
---	UNDERGROUND TELEPHONE
—	OVERHEAD ELECTRIC
- - -	UNDERGROUND WATERLINE
- - -	UNDERGROUND ELECTRIC



SITE MAP
 NC DEPARTMENT OF TRANSPORTATION
 SITE NO. 48
 PITTSBORO, NORTH CAROLINA

FIGURE
2-2

DWG DATE: 5/22/97 | PRCT NO.: 39575 | FILE NO.: 4800 | DRAWING: 48-TAX | CHECKED: K. TRIMBERGER | APPROVED: F. RASH | DRAFTER: D. GARRIGUES



LEGEND			
1	ROY STEWART (SITE PROPERTY)	37	TONY MICHAEL
2	ERSKINE HEATHERLY, JR.	38	DAVID & DEBORAH WALTON
3	PATRICIA ELLIS & DEBORAH SASSER	39	JOHN & CYNTHIA HEUER
4	JAMES E. MCKENDRY	40	RICHARD & CHRISTY FISH
5	JAMES L. HARRIS	41	ALBERT LINDSAY
6	BRADLEY E. HOLLOWAY	42	THOMAS & HELEN DEAN
7	SARA CORDEN	43	GAIL DARDEN & ALBERT LINDSAY
8	RAYMOND J. INGRAM	44	PHILLIP ALLEN
9	MILDRED CASON	45	JAMES R. POOLE
10	MILDRED CASON	46	CAROLYN CAMPELL, JOHN DAVIS, JOHN & JANET CAMPELL
11	DAVID P. MARTINEZ	47	KIMBERLY GAY PREBLE
12	DAVID P. & GRACI J. MARTINEZ	48	ANNA LEE LEONARD
13	ROY F. & ALIENE KECK	49	DAVID & ROBYN HALLIDAY
14	DEXTER V. PERRY-DEXTER V. PERRY TRUST	50	TERRY & LINDA LINDSEY
15	JAMES D. & ANN B. MARLOW	51	BOBBI & JEAN RIDDLE
16	WILLIAM F. & DEBORAH K. LANCASTER	52	PHREDDIE DELOIS POPP
17	CLARON N. HATLEY	53	JONATHAN RIEDLING
18	WILLIAM HATLEY	54	PHREDDIE DELOIS POPP
19	DEBRAH MCNEIL DEATON	55	MARK FLYNN
20	JOHN ETNA BYRD/DORIS EARL BYRD MCNEIL	56	MICHAEL & PATTI DAVIS
21	SUGAR LAKE LAND COMPANY	57	DORIS & KATHLEEN FLYNN
22	FEDERAL PAPER BD CO. INC.	58	WILLIAM & JANET WYATT
23	TIMOTHY R. MITCHEL	59	JOHN & JACQUELINE O'GORMAN
24	DENNIS C. & PHYLLIS C. CAMPBELL	60	WAYNE MICHAEL WADE
25	ALVIS PAGE	61	MARIA RUSSON
26	JAMES & MARJORIE BURNETTE	62	RONALD & PHILLIS GRAHAM
27	SAMUEL BURNETTE	63	DANIEL & MARION MUNN
28	PAGE WILLENE BRIGHT	64	ROBERT PAUL KOLIN
29	PHILLIP W. CORN	65	DOUGLAS WAKEMAN
30	LOUISE HEARDON & HELEN TONEY	66	THOMAS & SARANNE WILSON
31	PAUL DEAN & VIRGINIA BAILEY	67	THEADORE & JULIE TAYDUS
32	PAT & ELWARD HORTON	68	ARCHIE & SHANA HANKINS
33	PEGGY JEAN PORTER	69	JOHN JUDD & ANNETTE REAVES
34	KARL W. & INGER RABE	70	PAT & ELWARD HORTON
35	GARRY & PATRICIA ANDERSON		
36	RICHARD & CHRISTINE FISH		

INFORMATION OBTAINED FROM CHATHAM COUNTY TAX MAP OFFICE

* DENOTES PROPERTY WITH WATER SUPPLY WELL



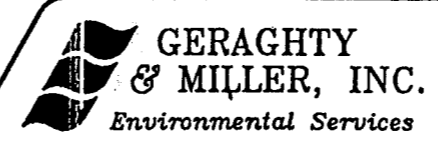
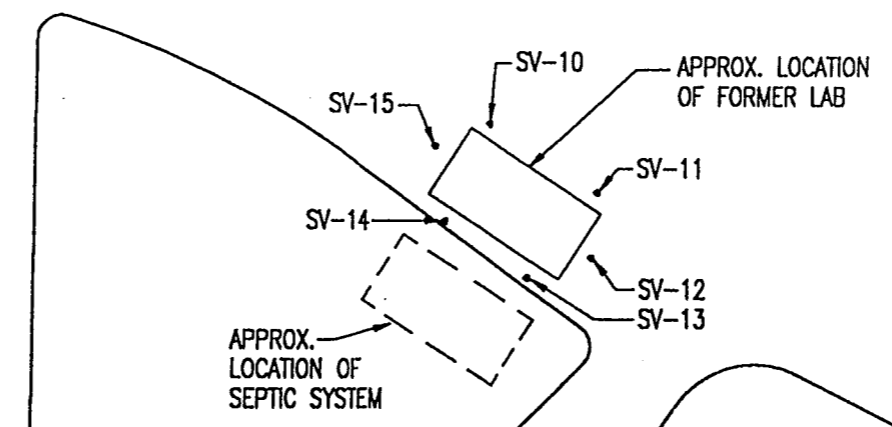
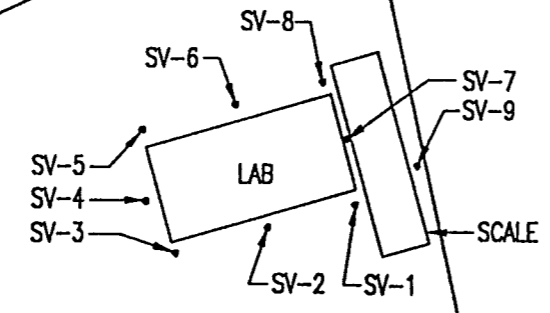
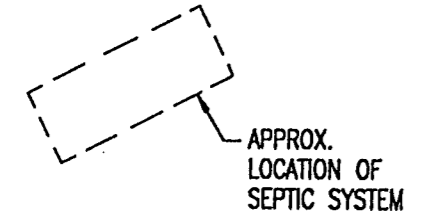
ADJACENT PROPERTIES MAP
 NC DEPARTMENT OF TRANSPORTATION
 SITE NO. 48
 PITTSBORO, NORTH CAROLINA

FIGURE
2-3

DWG DATE: 5/20/97 | PRJCT NO.: 39575 | FILE NO.: 4600 | DRAWING: 48-SSV | CHECKED: K. TRIMBERGER | APPROVED: F. RASH | DRAFTER: K. MEKLE



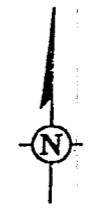
LEGEND	
•	SOIL-VAPOR SAMPLE LOCATIONS



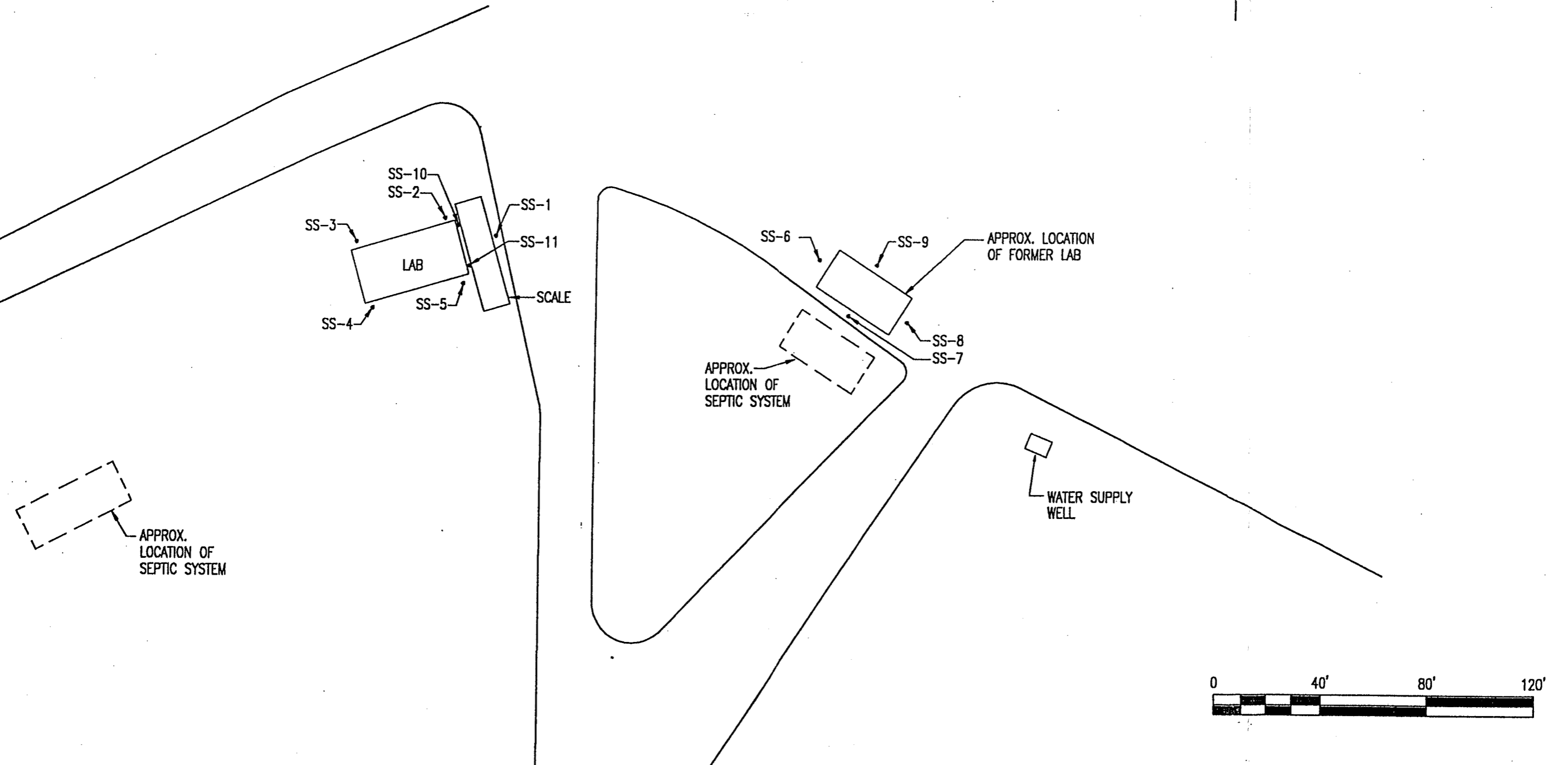
SOIL-VAPOR SAMPLE LOCATIONS
NC DEPARTMENT OF TRANSPORTATION
SITE NO. 48
PITTSBORO, NORTH CAROLINA

FIGURE
5-1

DWG DATE: 5/20/97 | PRJCT NO.: 39575 | FILE NO.: 4800 | DRAWING: 48-SSL | CHECKED: K. TRIMBERGER | APPROVED: F. RASH | DRAFTER: K. MEKLE



LEGEND	
•	SOIL SAMPLE LOCATIONS



SOIL SAMPLE LOCATIONS
NC DEPARTMENT OF TRANSPORTATION
SITE NO. 48
PITTSBORO, NORTH CAROLINA

FIGURE
5-2

DRAFTER: K. MEKLE

APPROVED: F. RASH

CHECKED: K. TRIMBERGER

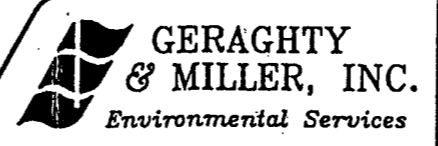
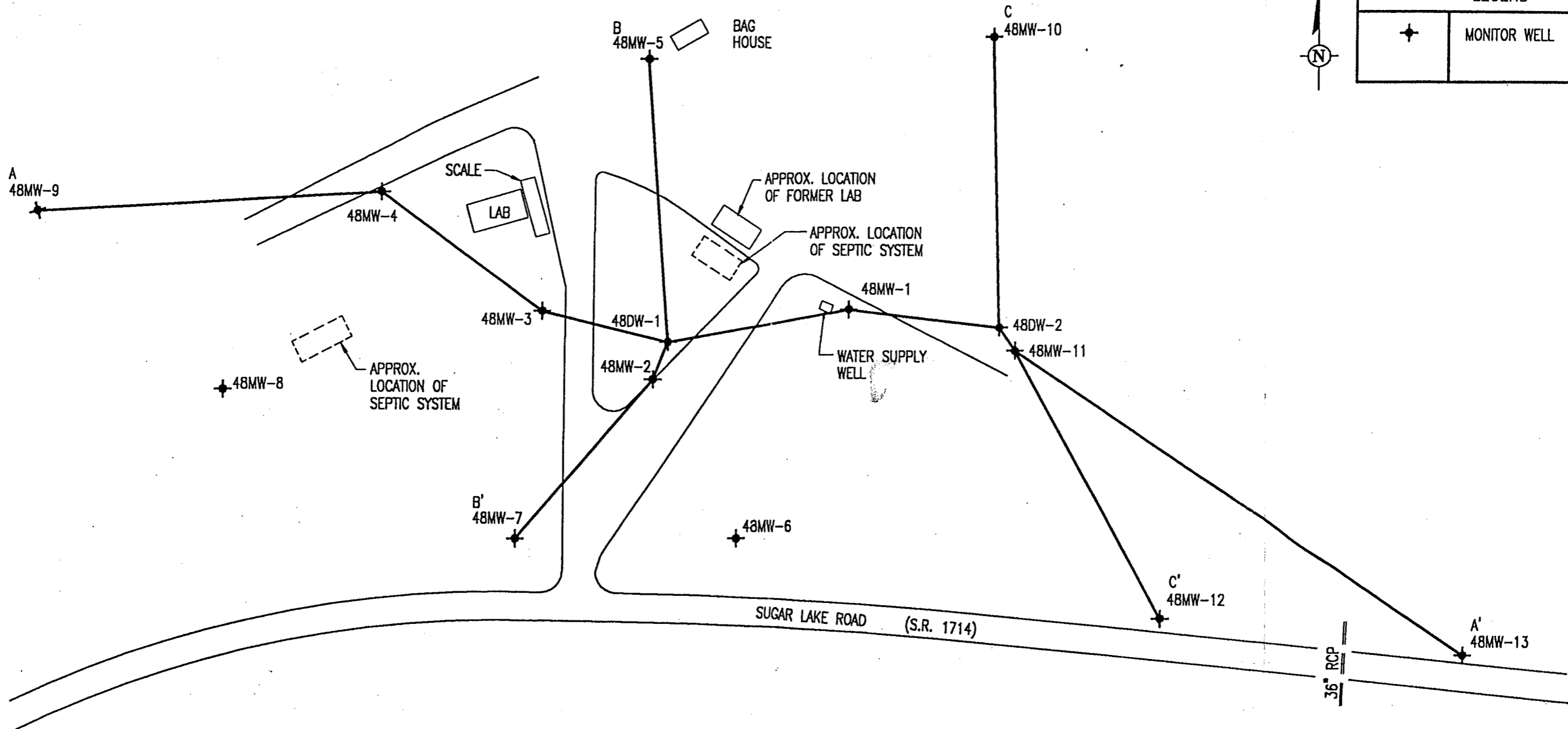
DRAWING 48-CROSS

FILE NO: 4800

PROJECT NO: 39575

DWG DATE: 5/20/97

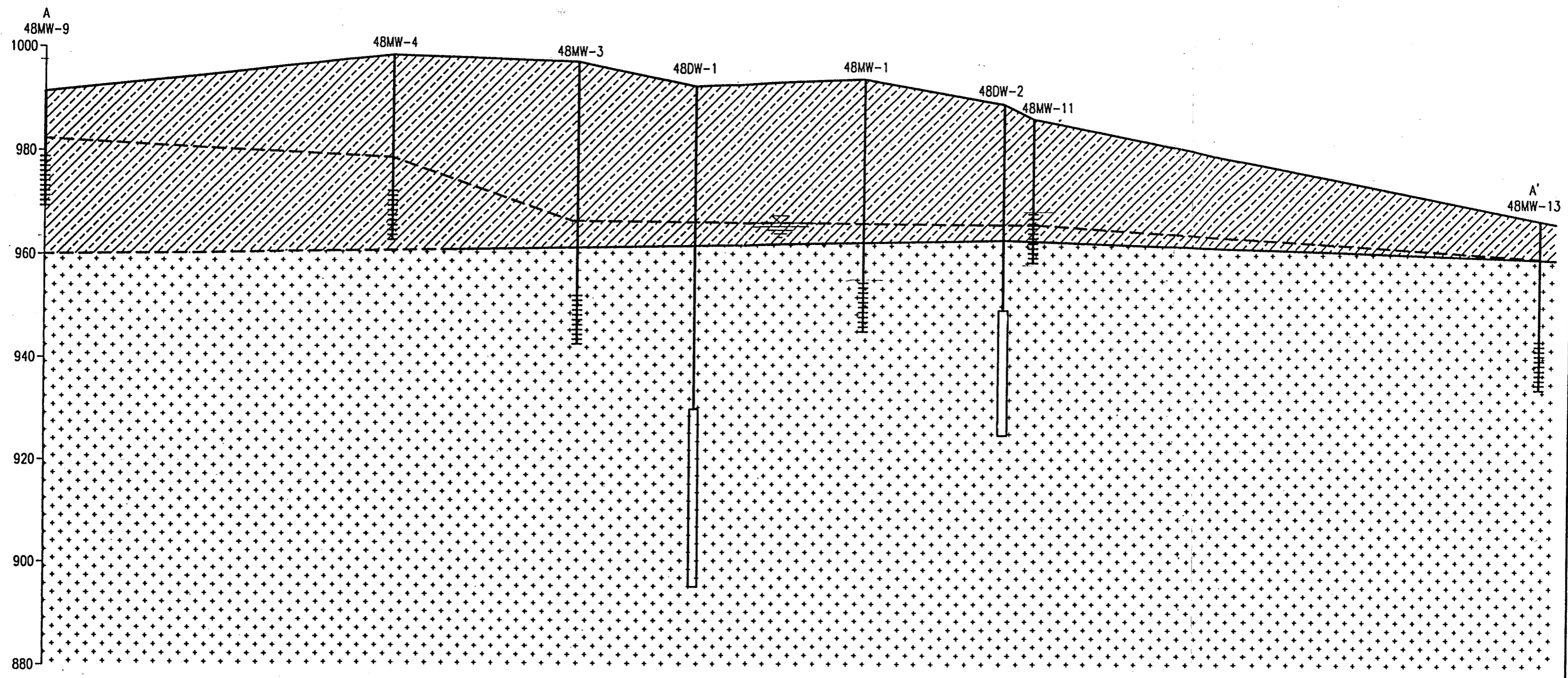
LEGEND	
+	MONITOR WELL





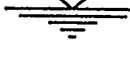


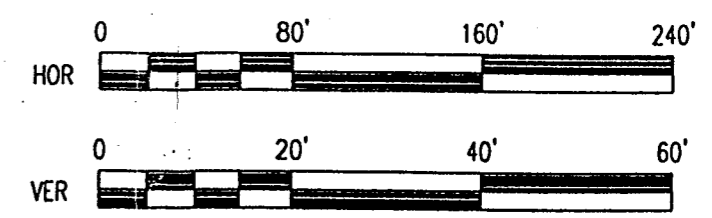
CROSS-SECTION LOCATION MAP
 NC DEPARTMENT OF TRANSPORTATION
 SITE NO. 48
 PITTSBORO, NORTH CAROLINA

FIGURE
8-1

DWG DATE: 5/20/97 | PRJCT NO.: 39575 | FILE NO.: 4900 | DRAWING: 48-A-A | CHECKED: K. TRIMBERGER | APPROVED: F. RASH | DRAFTER: K. MEIKLE



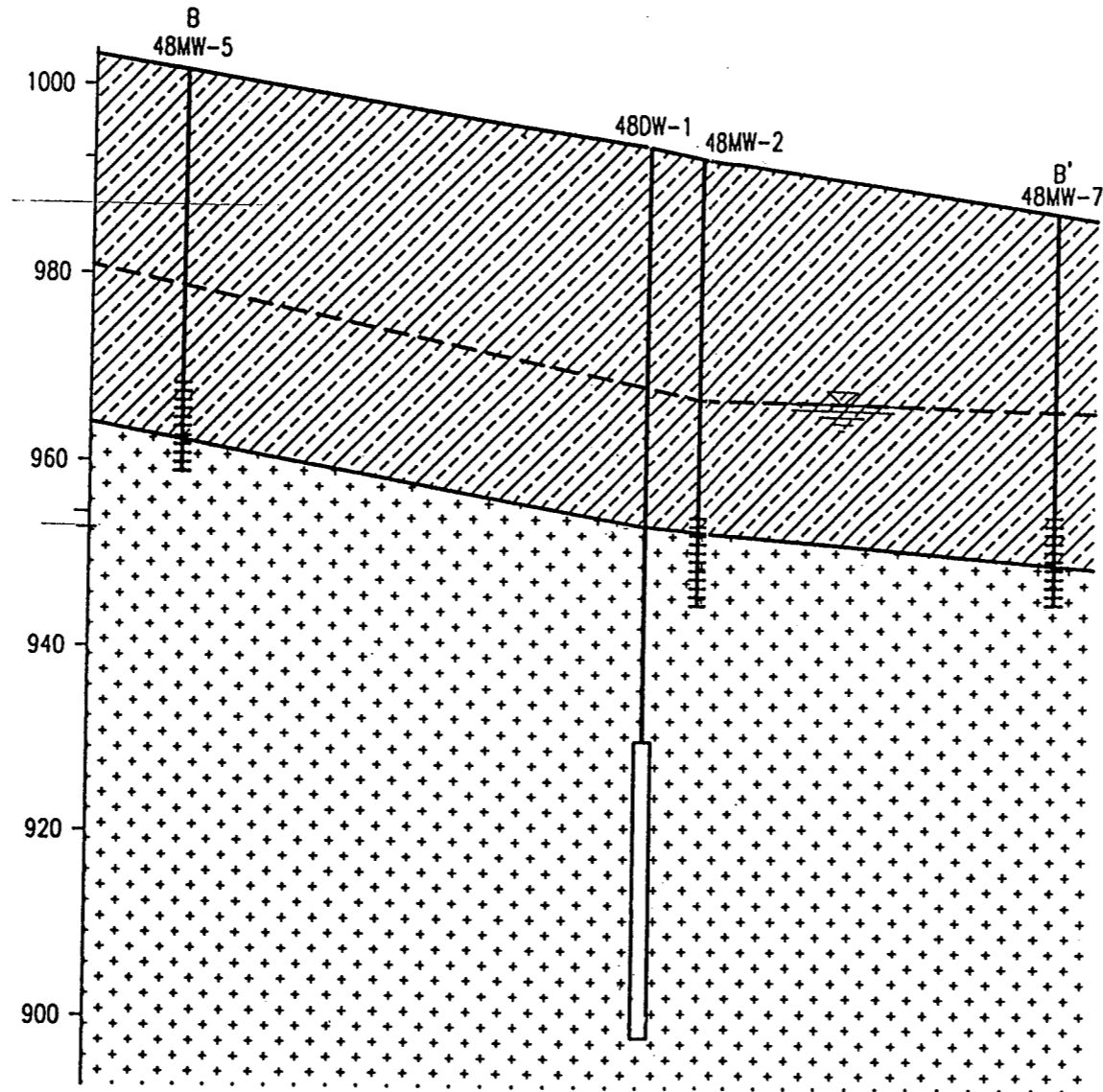
LEGEND	
 BEDROCK	 SCREENED ZONE
 SILT	 OPEN ROCK WELLS
 WATER LEVEL ELEV. MEASURED 4/29/97	








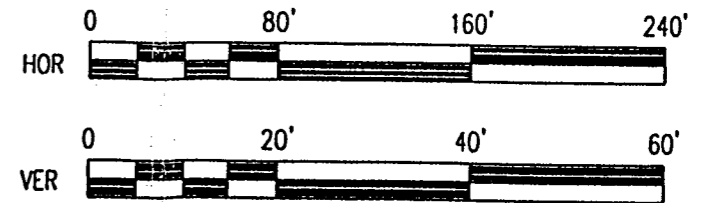
GEOLOGIC CROSS-SECTION A-A'
 NC DEPARTMENT OF TRANSPORTATION
 SITE NO. 48
 PITTSBORO, NORTH CAROLINA

FIGURE
8-2

DWG DATE: 5/20/97 | PRJCT NO.: 39575 | FILE NO.: 4800 | DRAWING: 48-8-8 | CHECKED: K. TRIMBERGER | APPROVED: F. RASH | DRAFTER: K. MEIKLE



LEGEND	
	BEDROCK
	SILT
	WATER LEVEL ELEV. MEASURED 4/29/97
	SCREENED ZONE
	OPEN ROCK WELLS

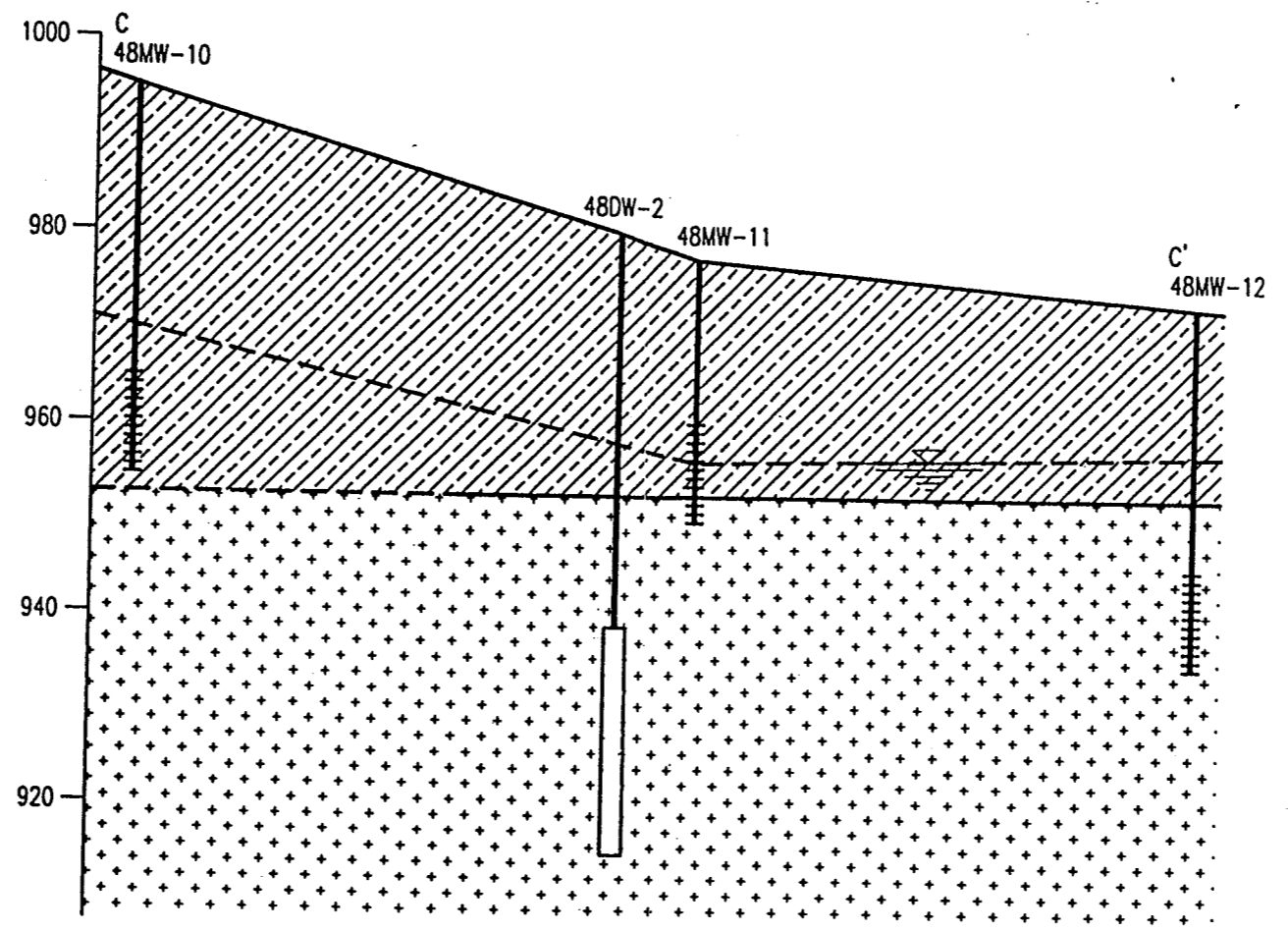








GERAGHTY & MILLER, INC.
 Environmental Services

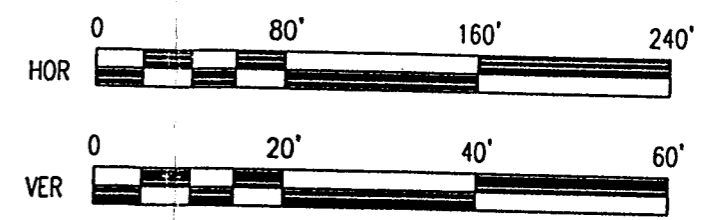
GEOLOGIC CROSS-SECTION B-B'
 NC DEPARTMENT OF TRANSPORTATION
 SITE NO. 48
 PITTSBORO, NORTH CAROLINA


FIGURE
8-3

DWG DATE: 5/22/97 | PROJECT NO.: 39575 | FILE NO.: 4800 | DRAWING: 48-C-C | CHECKED: K. TRIMBERGER | APPROVED: F. RASH | DRAFTER: K. MEKLE



LEGEND	
	SILT
	BEDROCK
	SCREENED ZONE
	OPEN ROCK WELLS
	WATER LEVEL ELEV. MEASURED 4-29-97



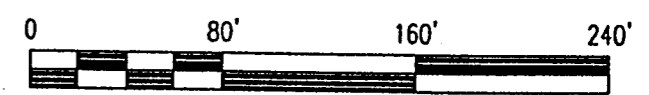
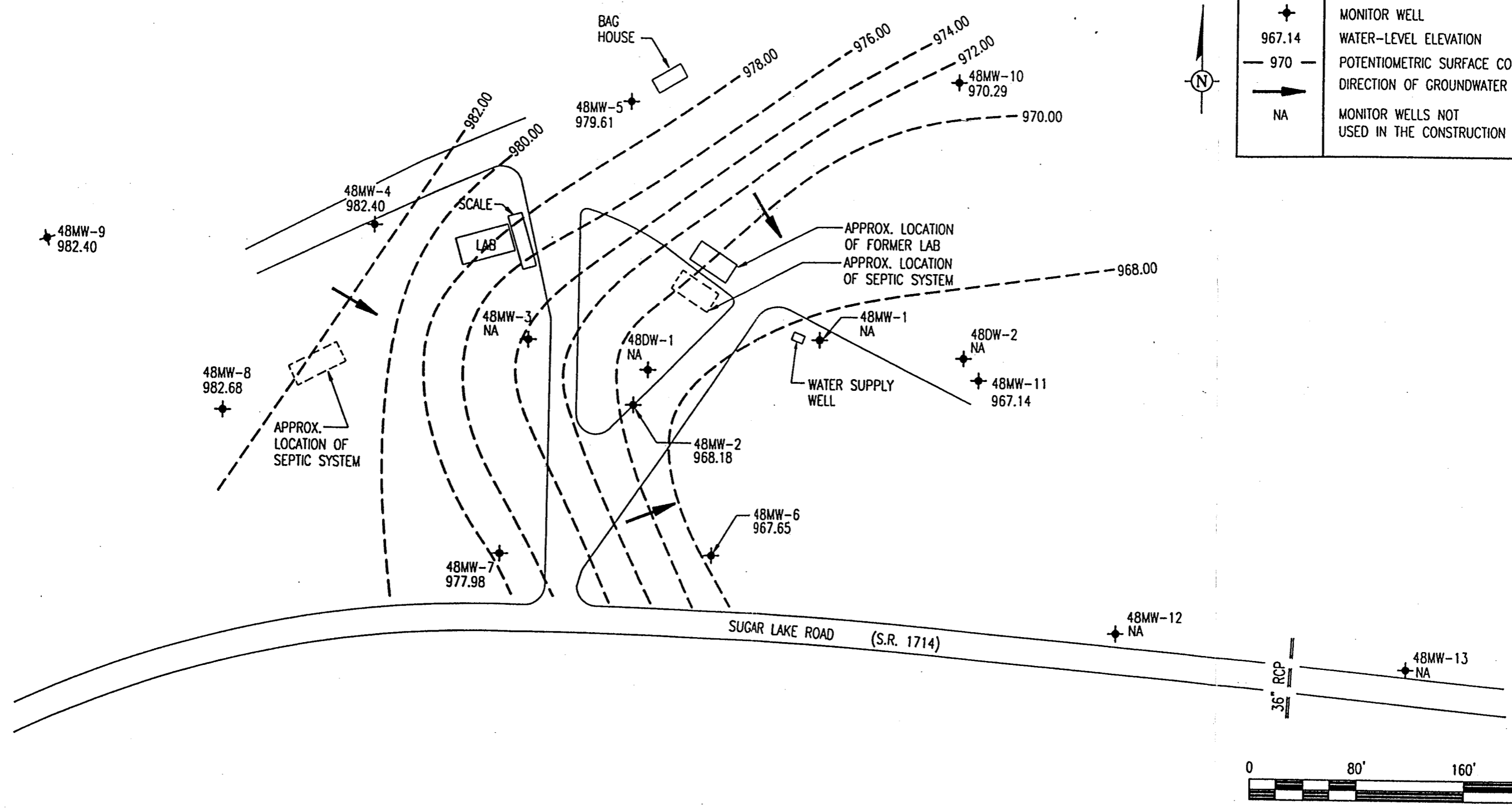
 **GERAGHTY & MILLER, INC.**
Environmental Services

GEOLOGIC CROSS-SECTION C-C'
NC DEPARTMENT OF TRANSPORTATION
SITE NO. 48
PITTSBORO, NORTH CAROLINA

FIGURE
8-4

DWG DATE: 6/4/97 | PRJCT NO.: 39575 | FILE NO.: 4800 | DRAWING: 48-POTB1 | CHECKED: K. TRIMBERGER | APPROVED: F. RASH | DRAFTER: K. MEKLE

LEGEND	
◆	MONITOR WELL
967.14	WATER-LEVEL ELEVATION
- 970 -	POTENTIOMETRIC SURFACE CONTOUR
→	DIRECTION OF GROUNDWATER FLOW
NA	MONITOR WELLS NOT USED IN THE CONSTRUCTION OF THIS MAP

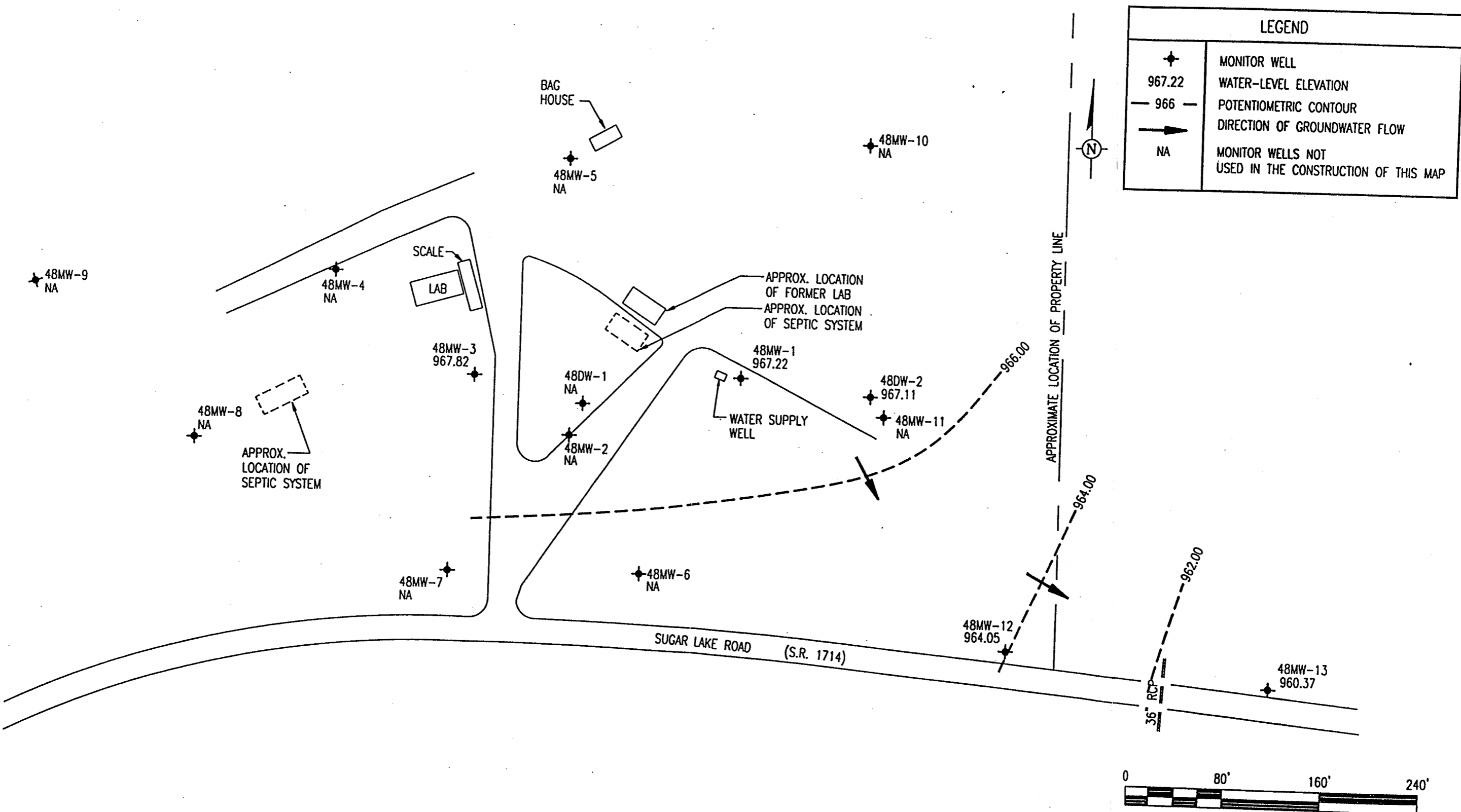



GERAGHTY & MILLER, INC.
 Environmental Services

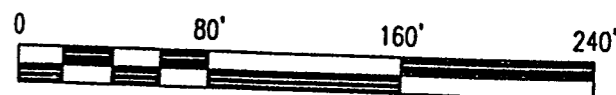
POTENTIOMETRIC CONTOUR MAP-SHALLOW WELLS
APRIL 29, 1997
 NC DEPARTMENT OF TRANSPORTATION
 SITE NO. 48
 PITTSBORO, NORTH CAROLINA

FIGURE
9-1

DWG DATE: 6/4/97 | PRJCT NO.: 39575 | FILE NO.: 4900 | DRAWING: 48-POT92 | CHECKED: K. TRIMBERGER | APPROVED: F. RASH | DRAFTER: K. MEKLE



LEGEND	
◆	MONITOR WELL
967.22	WATER-LEVEL ELEVATION
- 966 -	POTENTIOMETRIC CONTOUR
→	DIRECTION OF GROUNDWATER FLOW
NA	MONITOR WELLS NOT USED IN THE CONSTRUCTION OF THIS MAP

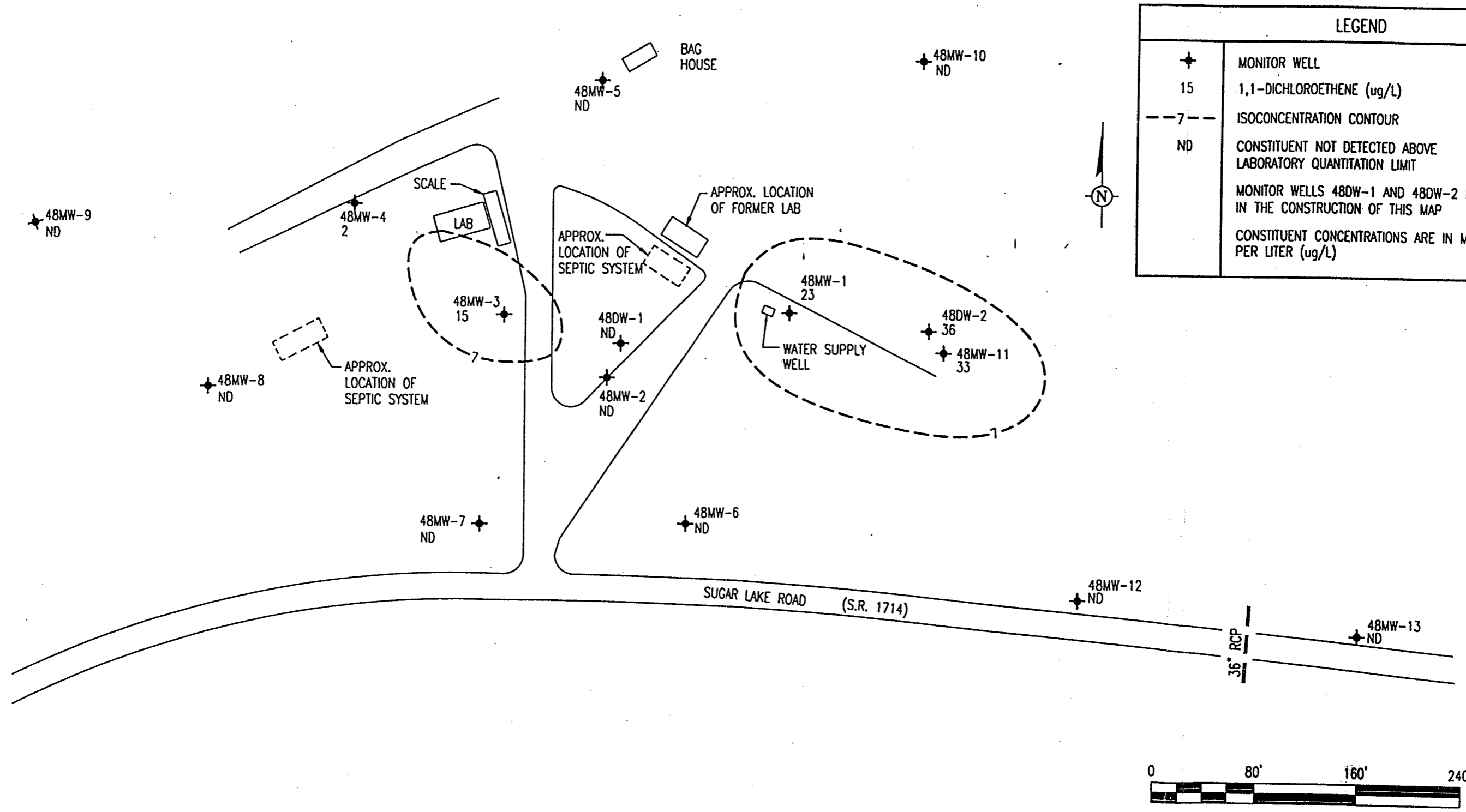


POTENTIOMETRIC CONTOUR MAP-BEDROCK WELLS
APRIL 29, 1997

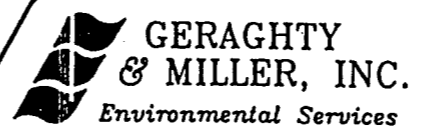
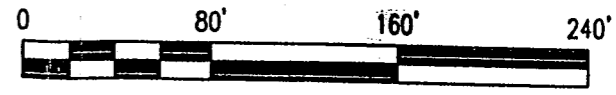
NC DEPARTMENT OF TRANSPORTATION
 SITE NO. 48
 PITTSBORO, NORTH CAROLINA

FIGURE
9-2

DWG DATE: 5/20/97 | PROJECT NO.: 39575 | FILE NO.: 4900 | DRAWING: 48-1500 | CHECKED: K. TRIMBERGER | APPROVED: F. RASH | DRAFTER: K. MENKLE



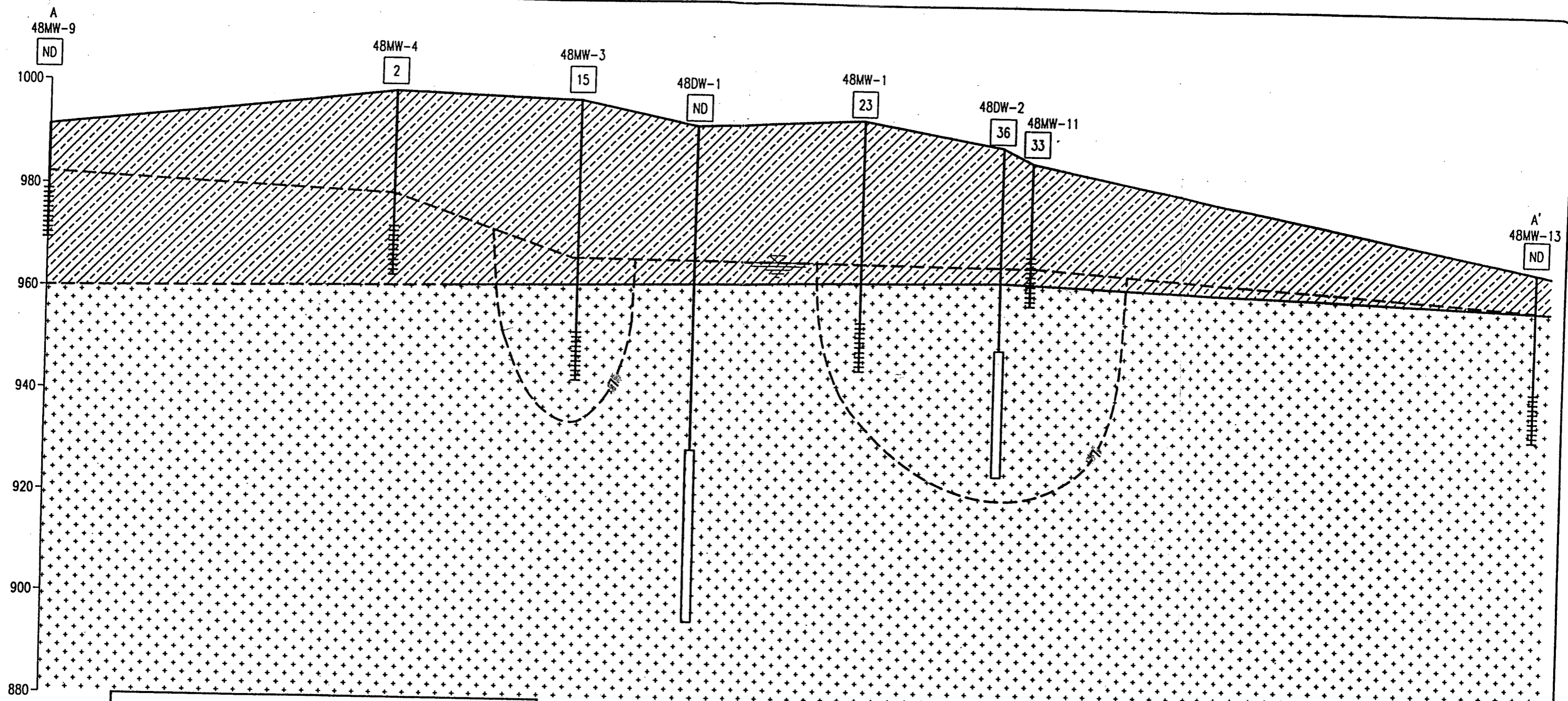
LEGEND	
+	MONITOR WELL
15	1,1-DICHLOROETHENE (ug/L)
- - - 7 - - -	ISOCONCENTRATION CONTOUR
ND	CONSTITUENT NOT DETECTED ABOVE LABORATORY QUANTITATION LIMIT
	MONITOR WELLS 48DW-1 AND 48DW-2 NOT USED IN THE CONSTRUCTION OF THIS MAP
	CONSTITUENT CONCENTRATIONS ARE IN MICROGRAMS PER LITER (ug/L)



**ISOCONCENTRATION MAP FOR 1,1-DICHLOROETHENE
 IN GROUNDWATER**
 NC DEPARTMENT OF TRANSPORTATION
 SITE NO. 48
 PITTSBORO, NORTH CAROLINA

FIGURE
9-3

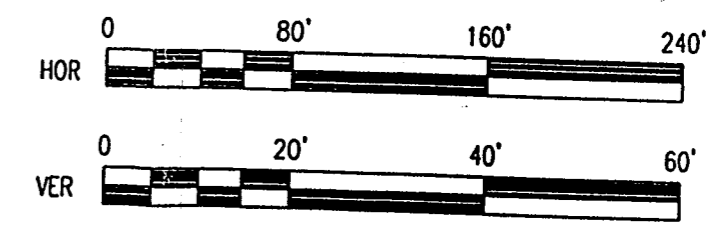
DWG DATE: 5/22/97 | PRJCT NO.: 39575 | FILE NO.: 4800 | DRAWING: 48-A-AD | CHECKED: K. TRIMBERGER | APPROVED: F. RASH | DRAFTER: K. MEIKLE



LEGEND

BEDROCK	SCREENED ZONE
SILT	OPEN ROCK WELLS
WATER LEVEL ELEV. MEASURED 4/29/97	
ISOCONCENTRATION CONTOUR (ug/L)	
GROUNDWATER CONCENTRATION (ug/L)	
CONSTITUENT NOT DETECTED	

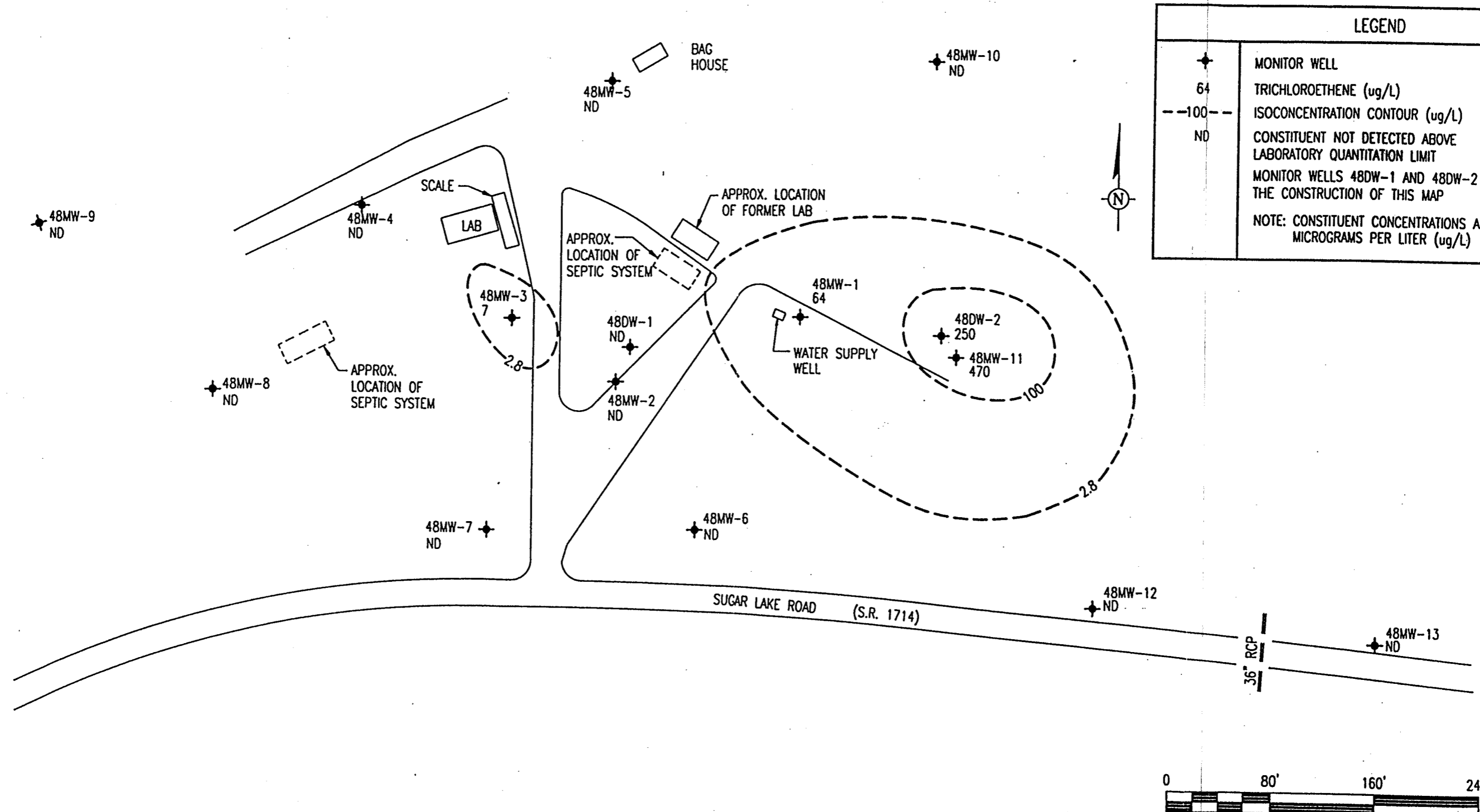
CONSTITUENT CONCENTRATIONS ARE IN MICROGRAMS PER LITER (ug/L)



**1,1-DICHLOROETHENE ISOCONCENTRATION CONTOUR
CROSS-SECTION**
 NC DEPARTMENT OF TRANSPORTATION
 SITE NO. 48
 PITTSBORO, NORTH CAROLINA

FIGURE
9-4

DWG DATE: 5/20/97 | PROJECT NO.: 39575 | FILE NO.: 4800 | DRAWING: 48-ISOT | CHECKED: K. TRIMBERGER | APPROVED: F. RASH | DRAFTER: K. MEIKLE



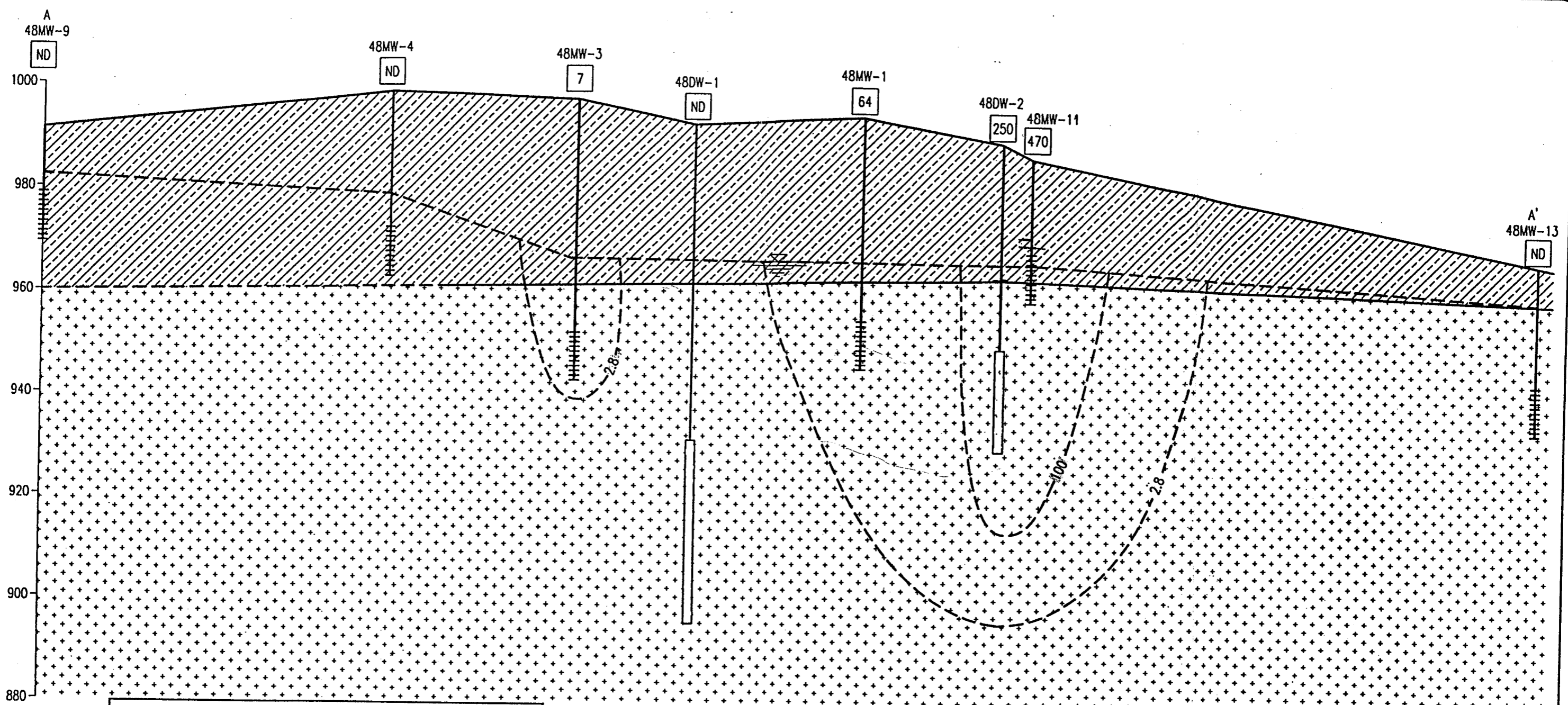
LEGEND	
◆	MONITOR WELL
64	TRICHLOROETHENE (ug/L)
---100---	ISOCONCENTRATION CONTOUR (ug/L)
ND	CONSTITUENT NOT DETECTED ABOVE LABORATORY QUANTITATION LIMIT
	MONITOR WELLS 48DW-1 AND 48DW-2 NOT USED IN THE CONSTRUCTION OF THIS MAP
	NOTE: CONSTITUENT CONCENTRATIONS ARE IN MICROGRAMS PER LITER (ug/L)


GERAGHTY & MILLER, INC.
 Environmental Services

**ISOCONCENTRATION MAP FOR TRICHLOROETHENE
 IN GROUNDWATER**
 NC DEPARTMENT OF TRANSPORTATION
 SITE NO. 48
 PITTSBORO, NORTH CAROLINA

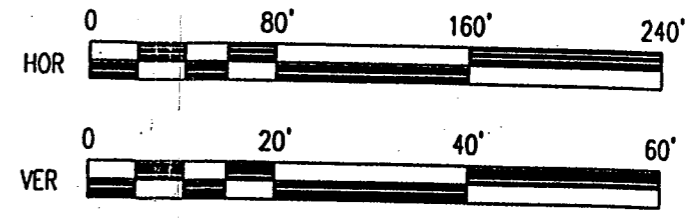
FIGURE
9-5

DWG DATE: 5/22/97 | PRJCT NO.: 39575 | FILE NO.: 4800 | DRAWING: 48-A-AT | CHECKED: K. TRIMBERGER | APPROVED: F. RASH | DRAFTER: K. MEIKLE



LEGEND	
	BEDROCK
	SILT
	WATER LEVEL ELEV. MEASURED 4/29/97
	ISOCONCENTRATION CONTOUR (ug/L)
	GROUNDWATER CONCENTRATION (ug/L)
	CONSTITUENT NOT DETECTED
	SCREENED ZONE
	OPEN ROCK WELLS

CONSTITUENT CONCENTRATIONS ARE IN MICROGRAMS PER LITER (ug/L)



GERAGHTY & MILLER, INC.
 Environmental Services

**TRICHLOROETHENE ISOCONCENTRATION CONTOUR
 CROSS-SECTION**
 NC DEPARTMENT OF TRANSPORTATION
 SITE NO. 48
 PITTSBORO, NORTH CAROLINA

FIGURE
9-6

APPENDIX III
COUNTY RECORD FOR SEPTIC SYSTEM
AND
WELL CONSTRUCTION LOGS OF 48DW-3

COMPLETION REPORT OF WELL No. 48 DMW-3

PROJECT: **NCDOT Site 6-48**
 PROJECT NO: **1040-98-107**
 PROJECT LOCATION: **Pittsboro, North Carolina**

WATER LEVEL: **27.96**

DRILLING CONTRACTOR: **Graham & Currie**
 DRILLING METHOD: **Air Rotary**
 DATE DRILLED: **7/27/99**

LATITUDE:
 LONGITUDE:
 TOP OF CASING ELEVATION:

DATUM:
 LOGGED BY: **KPJ**

STRATA			WELL DETAILS	DEPTH (ft.)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS	
DESCRIPTION	SYMBOL	DEPTH (ft.)						
Dark Brown Organic Sandy Silty Clay Orange Red Hard Slightly Silty Clay		0		0.00	GS	0.00	PROTECTIVE CASING Diameter: 8-inch Type: Flush-mount Interval: 0.0'-1.5' BLS	
Orange Tan Firm Silty Clay		5		0.20			RISER CASING Diameter: 2-inch Type: PVC Interval: 0.2'-115' BLS	
Light Brown to Tan Firm Slightly Silty Clay		10					OUTER CASING Diameter: 6-inch Type: PVC Interval: 0.0'-31' BLS	
Tan to Light Tan Loose Very Fine Very Slightly Sandy Clayey Silt		15					GROUT Type: Bentonite Grout Interval: 0.5-111' BLS	
Dark Tan to Brown Loose Fine Slightly Sandy Silt		25					SEAL Type: Bentonite Chips (3/8") Interval: 111'-113' BLS	
							FILTERPACK Type: #2 Filter Sand Interval: 113'-125' BLS	
						SCREEN Diameter: 2-inch Type: PVC Interval: 115'-125' BLS		
							LEGEND	
								FILTER PACK
								BENTONITE
								CEMENT GROUT
								CUTTINGS / BACKFILL
								STATIC WATER LEVEL
							TOC	TOP OF CASING
							GS	GROUND SURFACE
							BS	BENTONITE SEAL
							FP	FILTER PACK
							TSC	TOP OF SCREEN
							BSC	BOTTOM OF SCREEN
							TD	TOTAL DEPTH
							CG	CEMENT GROUT

MONITORING WELL PITTSBORO.GPJ S&ME.GDT 8/18/99



**COMPLETION REPORT OF
WELL No. 48 DMW-3**

STRATA			WELL DETAILS	DEPTH (ft.)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
DESCRIPTION	SYMBOL	DEPTH (ft.)					
		30					(See Page 1)
Rock as Andesite (Diabase Dike)		30.70					
		35					
		40					
		45					
		50					
		55					
		60					
		65					

LEGEND

- | | | | |
|--|---------------------|-----|------------------|
| | FILTER PACK | TOC | TOP OF CASING |
| | BENTONITE | GS | GROUND SURFACE |
| | CEMENT GROUT | BS | BENTONITE SEAL |
| | CUTTINGS / BACKFILL | FP | FILTER PACK |
| | STATIC WATER LEVEL | TSC | TOP OF SCREEN |
| | | BSC | BOTTOM OF SCREEN |
| | | TD | TOTAL DEPTH |
| | | CG | CEMENT GROUT |

MONITORING - PITTSBORO.GPJ S&ME.GDT 8/18/99



**COMPLETION REPORT OF
 WELL No. 48 DMW-3**

STRATA			WELL DETAILS	DEPTH (ft.)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
DESCRIPTION	SYMBOL	DEPTH (ft.)					
Rock as Andesite (Diabase Dike) (continued)		70 75 80 85 90 95 100 105					(See Page 1)

LEGEND

- | | | |
|---------------------|-----|------------------|
| FILTER PACK | TOC | TOP OF CASING |
| BENTONITE | GS | GROUND SURFACE |
| CEMENT GROUT | BS | BENTONITE SEAL |
| CUTTINGS / BACKFILL | FP | FILTER PACK |
| STATIC WATER LEVEL | TSC | TOP OF SCREEN |
| | BSC | BOTTOM OF SCREEN |
| | TD | TOTAL DEPTH |
| | CG | CEMENT GROUT |

MONITORING PITTSBORO.GPJ S&ME.GDT 8/18/99



**COMPLETION REPORT OF
 WELL No. 48 DMW-3**

STRATA			WELL DETAILS	DEPTH (ft.)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
DESCRIPTION	SYMBOL	DEPTH (ft.)					
							(See Page 1)
Rock as Andesite (Diabase Dike) (continued)		110 115 120 125		111.00 124.80 125.00	BSC TD		

LEGEND

- FILTER PACK
- BENTONITE
- CEMENT GROUT
- CUTTINGS / BACKFILL
- STATIC WATER LEVEL
- TOC TOP OF CASING
- GS GROUND SURFACE
- BS BENTONITE SEAL
- FP FILTER PACK
- TSC TOP OF SCREEN
- BSC BOTTOM OF SCREEN
- TD TOTAL DEPTH
- CG CEMENT GROUT

MONITORING - L. PITTSBORO.GPJ S&ME.GDT 8/19/99



**COMPLETION REPORT OF
WELL No. 48 DMW-3**

APPENDIX IV
LABORATORY ANALYTICAL REPORTS

Lab Report

Mr. James Wang Sample I.D. AB07421 (continued)

Page: 2

October 5, 1998



Data for HALOGENATED VOLATILES BY 601 (continued):

Component Name	Result	Component MDL
1,1-DICHLOROETHENE	40	1
TRANS-1,2-DICHLOROETHENE	Not detected	1
1,2-DICHLOROPROPANE	Not detected	1
CIS-1,3-DICHLOROPROPENE	Not detected	1
TRANS-1,3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1
METHYLENE CHLORIDE	Not detected	5
1,1,2,2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1,1,1-TRICHLOROETHANE	140	1
1,1,2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	140	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
CIS-1,2-DICHLOROETHENE	Not detected	1

Sample comments:

Project Name: NCDOT Asphalt
PO# 990414

If there are any questions regarding this data, please call.

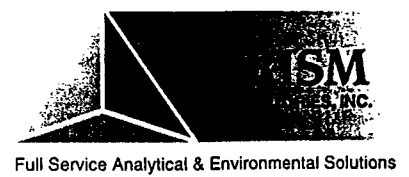
Angela D. Overcash
Laboratory Director

Lab Report

Mr. James Wang Sample I.D. AB07422 (continued)

Page: 2

October 5, 1998



Data for HALOGENATED VOLATILES BY 601 (continued):

Component Name	Result	Component MDL
1,1-DICHLOROETHENE	Not detected	1
TRANS-1,2-DICHLOROETHENE	Not detected	1
1,2-DICHLOROPROPANE	Not detected	1
CIS-1,3-DICHLOROPROPENE	Not detected	1
TRANS-1,3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1
METHYLENE CHLORIDE	Not detected	5
1,1,2,2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1,1,1-TRICHLOROETHANE	Not detected	1
1,1,2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	Not detected	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
CIS-1,2-DICHLOROETHENE	Not detected	1

Sample comments:

Project Name: NCDOT Asphalt
PO# 990414

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

Lab Report



From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519

October 5, 1998

To: Mr. James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
PO# 990414

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AB07419 Customer Code: S&ME-DOT
Login Group #: 8611D15 Customer Reference: NCDOT
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: 6-48 MW3
Sample collection date: 09/28/98 Time: 17:05
Lab submittal date: 09/30/98 Time: 10:45
Received by: TLM Validated by: ADO

Parameter: HALOGENATED VOLATILES BY 601
Method reference: 601 Unit: ug/L
Result: see below
Date started: 10/01/98 Date finished: 10/01/98
Time started: 01:41 Analyst: JMV

Parameter: SURROGATE RECOVERY FOR 601
Method reference: 601 Unit: %
Result: 73 % MDL or sensitivity: 50-150
Date started: 10/01/98 Date finished: 10/01/98
Time started: 01:41 Analyst: JMV

Data for HALOGENATED VOLATILES BY 601 ug/L:

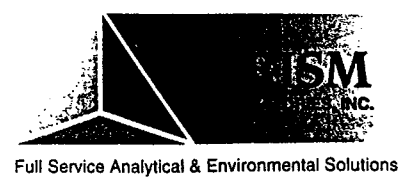
Component Name	Result	Component MDL
BROMODICHLOROMETHANE	Not detected	1
BROMOFORM	Not detected	1
BROMOMETHANE	Not detected	5
CARBON TETRACHLORIDE	Not detected	1
CHLOROENZENE	Not detected	1
CHLOROETHANE	Not detected	5
CHLOROFORM	Not detected	1
CHLOROMETHANE	Not detected	5
DIBROMOCHLOROMETHANE	Not detected	1
1,2-DICHLOROENZENE	Not detected	1
1,3-DICHLOROENZENE	Not detected	1
1,4-DICHLOROENZENE	Not detected	1
DICHLORODIFLUOROMETHANE	Not detected	5
1,1-DICHLOROETHANE	Not detected	1
1,2-DICHLOROETHANE	Not detected	1

Lab Report

Mr. James Wang Sample I.D. AB07419 (continued)

Page: 2

October 5, 1998



Data for HALOGENATED VOLATILES BY 601 (continued):


Component Name	Result	Component MDL
1,1-DICHLOROETHENE	9	1
TRANS-1,2-DICHLOROETHENE	Not detected	1
1,2-DICHLOROPROPANE	Not detected	1
CIS-1,3-DICHLOROPROPENE	Not detected	1
TRANS-1,3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1
METHYLENE CHLORIDE	Not detected	5
1,1,2,2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1,1,1-TRICHLOROETHANE	17	1
1,1,2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	5	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
CIS-1,2-DICHLOROETHENE	Not detected	1

Sample comments:

Project Name: NCDOT Asphalt

PO# 990414

If there are any questions regarding this data, please call.



Angela D. Overcash
Laboratory Director

Lab Report

Mr. James Wang Sample I.D. AB07428 (continued)
Page: 2
October 5, 1998

SM
INC.
Full Service Analytical & Environmental Solutions

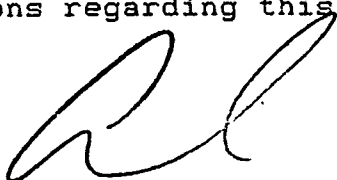
Data for HALOGENATED VOLATILES BY 601 (continued):

Component Name	Result	Component MDL
1,1-DICHLOROETHENE	6	1
TRANS-1,2-DICHLOROETHENE	Not detected	1
1,2-DICHLOROPROPANE	Not detected	1
CIS-1,3-DICHLOROPROPENE	Not detected	1
TRANS-1,3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1
METHYLENE CHLORIDE	Not detected	5
1,1,2,2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1,1,1-TRICHLOROETHANE	12	1
1,1,2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	Not detected	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
CIS-1,2-DICHLOROETHENE	Not detected	1

Sample comments:

Project Name: NCDOT Asphalt
PO# 990414

If there are any questions regarding this data, please call.



Angela D. Overcash
Laboratory Director

Lab Report

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519



October 5, 1998

To: Mr. James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
PO# 990414

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AB07427 Customer Code: S&ME-DOT
Login Group #: 8611D15 Customer Reference: NCDOT
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: 6-48 MW5
Sample collection date: 09/29/98 Time: 14:40
Lab submittal date: 09/30/98 Time: 10:45
Received by: TLM Validated by: ADO

Parameter: HALOGENATED VOLATILES BY 601
Method reference: 601 Unit: ug/L
Result: see below
Date started: 10/01/98 Date finished: 10/02/98
Time started: 09:14 Analyst: JMV

Parameter: SURROGATE RECOVERY FOR 601
Method reference: 601 Unit: %
Result: 86 % MDL or sensitivity: 50-150
Date started: 10/01/98 Date finished: 10/02/98
Time started: 09:14 Analyst: JMV

Data for HALOGENATED VOLATILES BY 601 ug/L:

Component Name	Result	Component MDL
BROMODICHLOROMETHANE	Not detected	1
BROMOFORM	Not detected	1
BROMOMETHANE	Not detected	5
CARBON TETRACHLORIDE	Not detected	1
CHLOROBENZENE	Not detected	1
CHLOROETHANE	Not detected	5
CHLOROFORM	Not detected	1
CHLOROMETHANE	Not detected	5
DIBROMOCHLOROMETHANE	Not detected	1
1,2-DICHLOROBENZENE	Not detected	1
1,3-DICHLOROBENZENE	Not detected	1
1,4-DICHLOROBENZENE	Not detected	1
DICHLORODIFLUOROMETHANE	Not detected	5
1,1-DICHLOROETHANE	Not detected	1
1,2-DICHLOROETHANE	Not detected	1

Lab Report

Mr. James Wang Sample I.D. AB07427 (continued)

Page: 2

October 5, 1998

SM
INC.
Full Service Analytical & Environmental Solutions

Data for HALOGENATED VOLATILES BY 601 (continued):

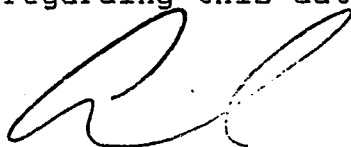
Component Name	Result	Component MDL
1,1-DICHLOROETHENE	Not detected	1
TRANS-1,2-DICHLOROETHENE	Not detected	1
1,2-DICHLOROPROPANE	Not detected	1
CIS-1,3-DICHLOROPROPENE	Not detected	1
TRANS-1,3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1
METHYLENE CHLORIDE	Not detected	5
1,1,2,2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1,1,1-TRICHLOROETHANE	Not detected	1
1,1,2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	Not detected	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
CIS-1,2-DICHLOROETHENE	Not detected	1

Sample comments:

Project Name: NCDOT Asphalt

PO# 990414

If there are any questions regarding this data, please call.



Angela D. Overcash
Laboratory Director

Lab Report

Mr. James Wang Sample I.D. AB07417 (continued)

Page: 2

October 5, 1998



Data for HALOGENATED VOLATILES BY 601 (continued):

Component Name	Result	Component MDL
1,1-DICHLOROETHENE	Not detected	1
TRANS-1,2-DICHLOROETHENE	Not detected	1
1,2-DICHLOROPROPANE	Not detected	1
CIS-1,3-DICHLOROPROPENE	Not detected	1
TRANS-1,3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1
METHYLENE CHLORIDE	Not detected	5
1,1,2,2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1,1,1-TRICHLOROETHANE	Not detected	1
1,1,2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	Not detected	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
CIS-1,2-DICHLOROETHENE	Not detected	1

Sample comments:

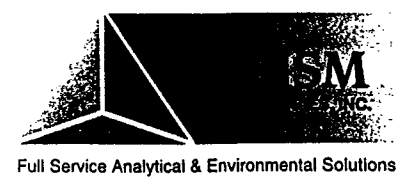
Project Name: NCDOT Asphalt
PO# 990414

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

Lab Report

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519



October 5, 1998

To: Mr. James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
PO# 990414

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AB07431 Customer Code: S&ME-DOT
Login Group #: 8611D15 Customer Reference: NCDOT
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: 6-48 MW9
Sample collection date: 09/29/98 Time: 14:10
Lab submittal date: 09/30/98 Time: 10:45
Received by: TLM Validated by: ADO

Parameter: HALOGENATED VOLATILES BY 601
Method reference: 601 Unit: ug/L
Result: see below
Date started: 10/01/98 Date finished: 10/02/98
Time started: 22:28 Analyst: JMV

Parameter: SURROGATE RECOVERY FOR 601
Method reference: 601 Unit: %
Result: 95 % MDL or sensitivity: 50-150
Date started: 10/01/98 Date finished: 10/02/98
Time started: 22:28 Analyst: JMV

Data for HALOGENATED VOLATILES BY 601 ug/L:

Component Name	Result	Component MDL
BROMODICHLOROMETHANE	Not detected	1
BROMOFORM	Not detected	1
BROMOMETHANE	Not detected	5
CARBON TETRACHLORIDE	Not detected	1
CHLOROENZENE	Not detected	1
CHLOROETHANE	Not detected	5
CHLOROFORM	Not detected	1
CHLOROMETHANE	Not detected	5
DIBROMOCHLOROMETHANE	Not detected	1
1,2-DICHLOROENZENE	Not detected	1
1,3-DICHLOROENZENE	Not detected	1
1,4-DICHLOROENZENE	Not detected	1
DICHLORODIFLUOROMETHANE	Not detected	5
1,1-DICHLOROETHANE	Not detected	1
1,2-DICHLOROETHANE	Not detected	1

Lab Report

Mr. James Wang Sample I.D. AB07418 (continued)

Page: 2

October 5, 1998



Data for HALOGENATED VOLATILES BY 601 (continued):

Component Name	Result	Component MDL
1,1-DICHLOROETHENE	Not detected	1
TRANS-1,2-DICHLOROETHENE	Not detected	1
1,2-DICHLOROPROPANE	Not detected	1
CIS-1,3-DICHLOROPROPENE	Not detected	1
TRANS-1,3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1
METHYLENE CHLORIDE	Not detected	5
1,1,2,2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1,1,1-TRICHLOROETHANE	Not detected	1
1,1,2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	Not detected	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
CIS-1,2-DICHLOROETHENE	Not detected	1

Sample comments:

Project Name: NCDOT Asphalt

PO# 990414

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

Lab Report

Mr. James Wang Sample I.D. AB07431 (continued)

Page: 2

October 5, 1998



Data for HALOGENATED VOLATILES BY 601 (continued):

Component Name	Result	Component MDL
1, 1-DICHLOROETHENE	Not detected	1
TRANS-1, 2-DICHLOROETHENE	Not detected	1
1, 2-DICHLOROPROPANE	Not detected	1
CIS-1, 3-DICHLOROPROPENE	Not detected	1
TRANS-1, 3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1
METHYLENE CHLORIDE	Not detected	5
1, 1, 2, 2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1, 1, 1-TRICHLOROETHANE	Not detected	1
1, 1, 2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	Not detected	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
CIS-1, 2-DICHLOROETHENE	Not detected	1

Sample comments:

Project Name: NCDOT Asphalt

PO# 990414

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

Lab Report

Mr. James Wang Sample I.D. AB07423 (continued)

Page: 2

October 5, 1998


Full Service Analytical & Environmental Solutions

Data for HALOGENATED VOLATILES BY 601 (continued):


Component Name	Result	Component MDL
1,1-DICHLOROETHENE	Not detected	1
TRANS-1,2-DICHLOROETHENE	Not detected	1
1,2-DICHLOROPROPANE	Not detected	1
CIS-1,3-DICHLOROPROPENE	Not detected	1
TRANS-1,3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1
METHYLENE CHLORIDE	Not detected	5
1,1,2,2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1,1,1-TRICHLOROETHANE	Not detected	1
1,1,2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	Not detected	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
CIS-1,2-DICHLOROETHENE	Not detected	1

Sample comments:

Project Name: NCDOT Asphalt

PO# 990414

If there are any questions regarding this data, please call.


Angela D. Overcash
Laboratory Director

Lab Report



Mr. James Wang Sample I.D. AB07420 (continued)
Page: 2
October 5, 1998

Data for HALOGENATED VOLATILES BY 601 (continued):

Component Name	Result	Component MDL
1,1-DICHLOROETHENE	74	1
TRANS-1,2-DICHLOROETHENE	Not detected	1
1,2-DICHLOROPROPANE	Not detected	1
CIS-1,3-DICHLOROPROPENE	Not detected	1
TRANS-1,3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1
METHYLENE CHLORIDE	Not detected	5
1,1,2,2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1,1,1-TRICHLOROETHANE	240	1
1,1,2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	890	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
CIS-1,2-DICHLOROETHENE	10	1

Sample comments:

Project Name: NCDOT Asphalt
PO# 990414

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

Lab Report

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519



October 5, 1998

To: Mr. James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
PO# 990414

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AB07424 Customer Code: S&ME-DOT
Login Group #: 8611D15 Customer Reference: NCDOT
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: 6-48 MW12
Sample collection date: 09/28/98 Time: 17:35
Lab submittal date: 09/30/98 Time: 10:45
Received by: TLM Validated by: ADO

Parameter: HALOGENATED VOLATILES BY 601

Method reference: 601 Unit: ug/L
Result: see below
Date started: 10/01/98 Date finished: 10/01/98
Time started: 06:25 Analyst: JMV

Parameter: SURROGATE RECOVERY FOR 601

Method reference: 601 Unit: %
Result: 82 % MDL or sensitivity: 50-150
Date started: 10/01/98 Date finished: 10/01/98
Time started: 06:25 Analyst: JMV

Data for HALOGENATED VOLATILES BY 601 ug/L:

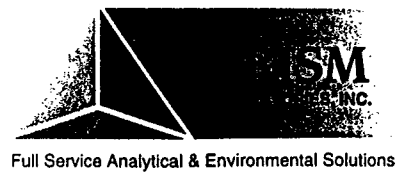
Component Name	Result	Component MDL
BROMODICHLOROMETHANE	Not detected	1
BROMOFORM	Not detected	1
BROMOMETHANE	Not detected	5
CARBON TETRACHLORIDE	Not detected	1
CHLOROBENZENE	Not detected	1
CHLOROETHANE	Not detected	5
CHLOROFORM	Not detected	1
CHLOROMETHANE	Not detected	5
DIBROMOCHLOROMETHANE	Not detected	1
1,2-DICHLOROBENZENE	Not detected	1
1,3-DICHLOROBENZENE	Not detected	1
1,4-DICHLOROBENZENE	Not detected	1
DICHLORODIFLUOROMETHANE	Not detected	5
1,1-DICHLOROETHANE	Not detected	1
1,2-DICHLOROETHANE	Not detected	1

Lab Report

Mr. James Wang Sample I.D. AB07424 (continued)

Page: 2

October 5, 1998



Data for HALOGENATED VOLATILES BY 601 (continued):

Component Name	Result	Component MDL
1,1-DICHLOROETHENE	Not detected	1
TRANS-1,2-DICHLOROETHENE	Not detected	1
1,2-DICHLOROPROPANE	Not detected	1
CIS-1,3-DICHLOROPROPENE	Not detected	1
TRANS-1,3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1
METHYLENE CHLORIDE	Not detected	5
1,1,2,2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1,1,1-TRICHLOROETHANE	Not detected	1
1,1,2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	Not detected	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
CIS-1,2-DICHLOROETHENE	Not detected	1

Sample comments:

Project Name: NCDOT Asphalt
PO# 990414

If there are any questions regarding this data, please call.

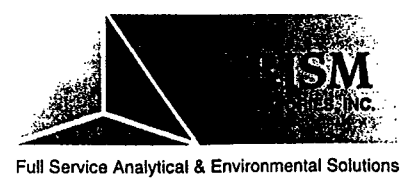
Angela D. Overcash
Laboratory Director

Lab Report

Mr. James Wang Sample I.D. AB07425 (continued)

Page: 2

October 5, 1998



Data for HALOGENATED VOLATILES BY 601 (continued):

Component Name	Result	Component MDL
1,1-DICHLOROETHENE	Not detected	1
TRANS-1,2-DICHLOROETHENE	Not detected	1
1,2-DICHLOROPROPANE	Not detected	1
CIS-1,3-DICHLOROPROPENE	Not detected	1
TRANS-1,3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1
METHYLENE CHLORIDE	Not detected	5
1,1,2,2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1,1,1-TRICHLOROETHANE	Not detected	1
1,1,2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	Not detected	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
CIS-1,2-DICHLOROETHENE	Not detected	1

Sample comments:

Project Name: NCDOT Asphalt
PO# 990414

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

Lab Report

Mr. James Wang Sample I.D. AB07430 (continued)

Page: 2

October 5, 1998



Data for HALOGENATED VOLATILES BY 601 (continued):

Component Name	Result	Component MDL
1,1-DICHLOROETHENE	Not detected	1
TRANS-1,2-DICHLOROETHENE	Not detected	1
1,2-DICHLOROPROPANE	Not detected	1
CIS-1,3-DICHLOROPROPENE	Not detected	1
TRANS-1,3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1
METHYLENE CHLORIDE	Not detected	5
1,1,2,2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1,1,1-TRICHLOROETHANE	Not detected	1
1,1,2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	Not detected	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
CIS-1,2-DICHLOROETHENE	Not detected	1

Sample comments:

Project Name: NCDOT Asphalt
PO# 990414

If there are any questions regarding this data, please call.

A handwritten signature in black ink, appearing to read 'AO', is positioned above the typed name of the Laboratory Director.

Angela D. Overcash
Laboratory Director

Lab Report

Mr. James Wang Sample I.D. AB07429 (continued)

Page: 2

October 5, 1998

SM
INC.
Full Service Analytical & Environmental Solutions

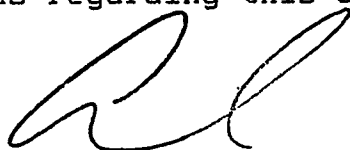
Data for HALOGENATED VOLATILES BY 601 (continued):

Component Name	Result	Component MDL
1,1-DICHLOROETHENE	61	1
TRANS-1,2-DICHLOROETHENE	Not detected	1
1,2-DICHLOROPROPANE	Not detected	1
CIS-1,3-DICHLOROPROPENE	Not detected	1
TRANS-1,3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1
METHYLENE CHLORIDE	Not detected	5
1,1,2,2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1,1,1-TRICHLOROETHANE	53	1
1,1,2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	470	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
CIS-1,2-DICHLOROETHENE	5	1

Sample comments:

Project Name: NCDOT Asphalt
PO# 990414

If there are any questions regarding this data, please call.



Angela D. Overcash
Laboratory Director

Lab Report

Mr. James Wang Sample I.D. AB07426 (continued)
Page: 2
October 5, 1998

SM
INC.
Full Service Analytical & Environmental Solutions

Data for HALOGENATED VOLATILES BY 601 (continued):

Component Name	Result	Component MDL
1,1-DICHLOROETHENE	60	1
TRANS-1,2-DICHLOROETHENE	Not detected	1
1,2-DICHLOROPROPANE	Not detected	1
CIS-1,3-DICHLOROPROPENE	Not detected	1
TRANS-1,3-DICHLOROPROPENE	Not detected	5
EDB	Not detected	1
METHYLENE CHLORIDE	Not detected	5
1,1,2,2-TETRACHLOROETHANE	Not detected	1
TETRACHLOROETHENE	Not detected	1
1,1,1-TRICHLOROETHANE	230	1
1,1,2-TRICHLOROETHANE	Not detected	1
TRICHLOROETHENE	320	1
TRICHLOROFLUOROMETHANE	Not detected	5
VINYL CHLORIDE	Not detected	5
CIS-1,2-DICHLOROETHENE	5	1

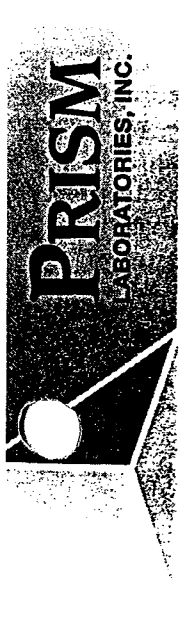
Sample comments:

Project Name: NCDOT Asphalt
PO# 990414

If there are any questions regarding this data, please call.



Angela D. Overcash
Laboratory Director



449 Springbrook Road Charlotte, NC 28217
 P.O. Box 240543 Charlotte, NC 28224-0543
 Phone: 704/529-6364 Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

Samples INTACT upon arrival?
 Received ON WET ICE? Temp _____ NO N/A
 PROPER PRESERVATIVES indicated?
 Received WITHIN HOLDING TIMES?
 CUSTODY SEALS INTACT?
 VOLATILES rec'd W/OUT HEADSPACE?
 PROPER CONTAINERS used?

State Certification Requested NC SC _____ Other _____ NA _____
 Water Chlorinated Yes _____ No _____ NA _____
 Sample Iced Upon Collection Yes _____ No _____

REPORT TO: Name TERMS COMPANY
 Address 3118 Springbrook Rd
 Name MCB
 Address _____
 Requested Due Date 10/1

Client SA M.F.
 Physical Address 3118 Springbrook Rd
 Phone (714) 802-2666 Fax (919) 790-9827
 P.O./Billing Reference 910414
 Project Name MCB Asphalt

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

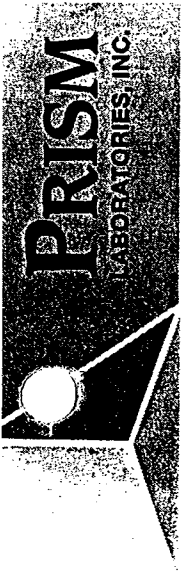
CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER		PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
				*TYPE SEE BELOW	NO. SIZE					
6-48 MW6	9/28/98	1650	H2O	VOA	3 400ml	HCL	X			
6-48 MW7		1700					X			
6-48 MW3		1705					X			
6-48 MW11		1725					X			
6-48 MW1		1720					X			
6-48 MW2		1710					X			
6-48 MW10		1730					X			
6-48 MW12		1735					X			
6-48 MW13		1740					X			
6-48 WSW	9/29/98	1500					X			

Sampler's Signature _____ Sampled By (Print Name) Brian Kelly Affiliation _____

Relinquished By: (Signature) _____	Received By: (Signature) _____	Date _____	Military/Hours _____
Relinquished By: (Signature) _____	Received By: (Signature) _____	Date _____	Additional Comments _____
Relinquished By: (Signature) _____	Received For Prism Laboratories By: _____	Date <u>10/1/98</u>	
Method of Shipment <u>Freight</u>		Log-In Group No. <u>261115</u>	

NPDES NC _____ UST: NC _____ GROUNDWATER: NC _____ DRINKING WATER: NC _____ SOLID WASTE: NC _____ OTHER: NC _____
 SC _____ SC _____ SC _____ SC _____ SC _____ SC _____
 OTHER _____ OTHER _____ OTHER _____ OTHER _____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space) SEE REVERSE FOR TERMS & CONDITIONS



Full Service Analytical & Environmental Solutions

Client: S+ME
 Physical Address: _____
 Phone: _____
 P.O.#/Billing Reference: 9790414
 Project Name: _____

PRESS DOWN FIRMLY - 3 COPIES

REPORT TO: Name _____
 Address _____
 BILL TO: Name _____
 Address _____
 Requested Due Date: RUSH

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

STATE OF NORTH CAROLINA
 Samples INTACT upon arrival? Y NO N/A
 Received ON WET ICE? Temp 2.0
 PROPER PRESERVATIVES indicated?
 Received WITHIN HOLDING TIMES?
 CUSTODY SEALS INTACT?
 VOLATILES rec'd W/OUT HEADSPACE?
 PROPER CONTAINERS used?

State Certification
 Requested NC _____ SC _____ Other _____ NA _____
 Water Chlorinated Yes _____ No _____ NA _____
 Sample Iced Upon Collection Yes _____ No _____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
				*TYPE SEE BELOW	NO.	SIZE					
6-18 MW 5	9/29/98	1440	H2O	VOA	3	40-ml	HTO	X			172
6-18 MW 4		1420						X			173
6-18 DW 2		1430						X			174
6-18 DMW 1		1415						X			175
6-18 MW 9		1410						X			176

Sampler's Signature: Brian Reber Sampled By (Print Name): Brian Reber Affiliation: _____

Relinquished By: (Signature)	Date	Military/Hours
Relinquished By: (Signature)	Date	
Relinquished By: (Signature)	Date	
Relinquished By: (Signature)	Date	
Method of Shipment: <u>Fedex</u>	Log-In Group No.:	

Additional Comments: Rush

NPDES NC _____ UST: _____ SC _____ OTHER _____
 GROUNDWATER: NC _____ SC _____ OTHER _____
 DRINKING WATER: NC _____ SC _____ OTHER _____
 SOLID WASTE: NC _____ SC _____ OTHER _____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)
 SEE REVERSE FOR TERMS & CONDITIONS

Lab Report

Full Service Analytical & Environmental Solutions

NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519

February 19, 1999

7012
X 55255

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Proj: NCDOT Pittsboro

Dear Mr. Wang:

Below are the results of analysis of 1 sample received for examination on February 4, 1999:

Sample I.D. AB18725 Customer Code: S&ME-DOT
Login Group #: 3606E5 Customer Reference: NCDOT
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: HA-1
Sample collection date: 02/03/99 Time: 10:45
Lab submittal date: 02/04/99 Time: 11:00

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT

CALCULATIONS BASED ON DRY WEIGHT	% DRY WT.	71	0.01

Multicomponent analysis: VOLATILE ORGANICS - 8021 LIST

BENZENE	ug/kg	Not detected	1
BROMOBENZENE	ug/kg	Not detected	1
BROMOCHLOROMETHANE	ug/kg	Not detected	2
BROMODICHLOROMETHANE	ug/kg	Not detected	1
BROMOFORM	ug/kg	Not detected	2
BROMOMETHANE	ug/kg	Not detected	5
N-BUTYLBENZENE	ug/kg	Not detected	2
SEC-BUTYLBENZENE	ug/kg	Not detected	2
TERT-BUTYLBENZENE	ug/kg	Not detected	2
CARBON TETRACHLORIDE	ug/kg	Not detected	1
CHLOROBENZENE	ug/kg	Not detected	5
CHLORODIBROMOMETHANE	ug/kg	Not detected	1
CHLOROETHANE	ug/kg	Not detected	5
CHLOROFORM	ug/kg	Not detected	2
CHLOROMETHANE	ug/kg	Not detected	5
2-CHLOROTOLUENE	ug/kg	Not detected	1
4-CHLOROTOLUENE	ug/kg	Not detected	1
1,2-DIBROMO-3-CHLOROPROPANE	ug/kg	Not detected	5
1,2-DIBROMOETHANE	ug/kg	Not detected	2
DIBROMOMETHANE	ug/kg	Not detected	1
1,2-DICHLOROBENZENE	ug/kg	Not detected	1
1,3-DICHLOROBENZENE	ug/kg	Not detected	1
1,4-DICHLOROBENZENE	ug/kg	Not detected	1
DICHLORODIFLUOROMETHANE	ug/kg	Not detected	5
1,1-DICHLOROETHANE	ug/kg	Not detected	1



Page: 2
 February 19, 1999
 James Wang Sample I.D. AB18725 (continued)

Full Service Analytical & Environmental Solutions

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT

Multicomponent analysis: VOLATILE ORGANICS - 8021		LIST (continued)	
1,2-DICHLOROETHANE	ug/kg	Not detected	1
1,1-DICHLOROETHENE	ug/kg	Not detected	1
CIS-1,2-DICHLOROETHENE	ug/kg	Not detected	1
TRANS-1,2-DICHLOROETHENE	ug/kg	Not detected	1
1,2-DICHLOROPROPANE	ug/kg	Not detected	1
1,3-DICHLOROPROPANE	ug/kg	Not detected	1
2,2-DICHLOROPROPANE	ug/kg	Not detected	1
1,1-DICHLOROPROPENE	ug/kg	Not detected	1
CIS-1,3-DICHLOROPROPENE	ug/kg	Not detected	1
TRANS-1,3-DICHLOROPROPENE	ug/kg	Not detected	1
ETHYLBENZENE	ug/kg	Not detected	1
HEXACHLOROBUTADIENE	ug/kg	Not detected	2
ISOPROPYLBENZENE	ug/kg	Not detected	2
P-ISOPROPYL TOLUENE	ug/kg	Not detected	2
METHYLENE CHLORIDE	ug/kg	Not detected	35
NAPHTHALENE	ug/kg	Not detected	5
N-PROPYLBENZENE	ug/kg	Not detected	1
STYRENE	ug/kg	Not detected	2
1,1,1,2-TETRACHLOROETHANE	ug/kg	Not detected	1
1,1,2,2-TETRACHLOROETHANE	ug/kg	Not detected	1
TETRACHLOROETHENE	ug/kg	Not detected	1
TOLUENE	ug/kg	Not detected	1
1,2,3-TRICHLOROBENZENE	ug/kg	Not detected	2
1,2,4-TRICHLOROBENZENE	ug/kg	Not detected	2
1,1,1-TRICHLOROETHANE	ug/kg	Not detected	1
1,1,2-TRICHLOROETHANE	ug/kg	Not detected	1
TRICHLOROETHENE	ug/kg	Not detected	1
TRICHLOROFLUOROMETHANE	ug/kg	Not detected	5
1,2,3-TRICHLOROPROPANE	ug/kg	Not detected	1
1,2,4-TRIMETHYLBENZENE	ug/kg	Not detected	2
1,3,5-TRIMETHYLBENZENE	ug/kg	Not detected	2
VINYL CHLORIDE	ug/kg	Not detected	5
TOTAL XYLENES	ug/kg	Not detected	3
SURROGATE RECOVERY - ELCD	ug/kg	87 %	50-150
SURROGATE RECOVERY - PID	ug/kg	81 %	50-150

Sample comments:

Project name: NCDOT Pittsboro

Page: 3
February 19, 1999



Please advise should you have questions concerning these data.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'A. Overcash', written in a cursive style.

Angela D. Overcash
Laboratory Director

Page: 2
 February 19, 1999
 James Wang Sample I.D. AB18726 (continued)

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT

Multicomponent analysis: VOLATILE ORGANICS - 8021		LIST (continued)	
1,2-DICHLOROETHANE	ug/kg	Not detected	1
1,1-DICHLOROETHENE	ug/kg	Not detected	1
CIS-1,2-DICHLOROETHENE	ug/kg	Not detected	1
TRANS-1,2-DICHLOROETHENE	ug/kg	Not detected	1
1,2-DICHLOROPROPANE	ug/kg	Not detected	1
1,3-DICHLOROPROPANE	ug/kg	Not detected	1
2,2-DICHLOROPROPANE	ug/kg	Not detected	1
1,1-DICHLOROPROPENE	ug/kg	Not detected	1
CIS-1,3-DICHLOROPROPENE	ug/kg	Not detected	1
TRANS-1,3-DICHLOROPROPENE	ug/kg	Not detected	1
ETHYLBENZENE	ug/kg	Not detected	1
HEXACHLOROBUTADIENE	ug/kg	Not detected	2
ISOPROPYLBENZENE	ug/kg	Not detected	2
P-ISOPROPYL TOLUENE	ug/kg	Not detected	2
METHYLENE CHLORIDE	ug/kg	Not detected	35
NAPHTHALENE	ug/kg	Not detected	5
N-PROPYLBENZENE	ug/kg	Not detected	1
STYRENE	ug/kg	Not detected	2
1,1,1,2-TETRACHLOROETHANE	ug/kg	Not detected	1
1,1,2,2-TETRACHLOROETHANE	ug/kg	Not detected	1
TETRACHLOROETHENE	ug/kg	Not detected	1
TOLUENE	ug/kg	Not detected	1
1,2,3-TRICHLOROBENZENE	ug/kg	Not detected	2
1,2,4-TRICHLOROBENZENE	ug/kg	Not detected	2
1,1,1-TRICHLOROETHANE	ug/kg	Not detected	1
1,1,2-TRICHLOROETHANE	ug/kg	Not detected	1
TRICHLOROETHENE	ug/kg	Not detected	1
TRICHLOROFLUOROMETHANE	ug/kg	Not detected	5
1,2,3-TRICHLOROPROPANE	ug/kg	Not detected	1
1,2,4-TRIMETHYLBENZENE	ug/kg	Not detected	2
1,3,5-TRIMETHYLBENZENE	ug/kg	Not detected	2
VINYL CHLORIDE	ug/kg	Not detected	5
TOTAL XYLENES	ug/kg	Not detected	3
SURROGATE RECOVERY - ELCD	ug/kg	91 %	50-150
SURROGATE RECOVERY - PID	ug/kg	84 %	50-150

Sample comments:

Project name: NCDOT Pittsboro

Page: 3
February 19, 1999

Full Service Analytical & Environmental Solutions

Please advise should you have questions concerning these data.

Respectfully submitted,



Angela D. Overcash
Laboratory Director

Lab Report

NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519



Full Service Analytical & Environmental Solutions

February 19, 1999

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Proj: NCDOT Pittsboro

Dear Mr. Wang:

Below are the results of analysis of 1 sample received for examination on February 4, 1999:

Sample I.D. AB18727 Customer Code: S&ME-DOT
Login Group #: 3606E5 Customer Reference: NCDOT
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: HA-3
Sample collection date: 02/03/99 Time: 11:55
Lab submittal date: 02/04/99 Time: 11:00

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
CALCULATIONS BASED ON DRY WEIGHT	% DRY WT.	73	0.01

Multicomponent analysis: VOLATILE ORGANICS - 8021 LIST

Compound	Units	Result	Limit
BENZENE	ug/kg	Not detected	1
BROMOBENZENE	ug/kg	Not detected	1
BROMOCHLOROMETHANE	ug/kg	Not detected	2
BROMODICHLOROMETHANE	ug/kg	Not detected	1
BROMOFORM	ug/kg	Not detected	2
BROMOMETHANE	ug/kg	Not detected	5
N-BUTYLBENZENE	ug/kg	Not detected	2
SEC-BUTYLBENZENE	ug/kg	Not detected	2
TERT-BUTYLBENZENE	ug/kg	Not detected	2
CARBON TETRACHLORIDE	ug/kg	Not detected	1
CHLOROBENZENE	ug/kg	Not detected	5
CHLORODIBROMOMETHANE	ug/kg	Not detected	1
CHLOROETHANE	ug/kg	Not detected	5
CHLOROFORM	ug/kg	Not detected	2
CHLOROMETHANE	ug/kg	Not detected	5
2-CHLOROTOLUENE	ug/kg	Not detected	1
4-CHLOROTOLUENE	ug/kg	Not detected	1
1,2-DIBROMO-3-CHLOROPROPANE	ug/kg	Not detected	5
1,2-DIBROMOETHANE	ug/kg	Not detected	2
DIBROMOMETHANE	ug/kg	Not detected	1
1,2-DICHLOROBENZENE	ug/kg	Not detected	1
1,3-DICHLOROBENZENE	ug/kg	Not detected	1
1,4-DICHLOROBENZENE	ug/kg	Not detected	1
DICHLORODIFLUOROMETHANE	ug/kg	Not detected	5
1,1-DICHLOROETHANE	ug/kg	Not detected	1

Lab Report

Page: 2

February 19, 1999

James Wang Sample I.D. AB18727 (continued)



TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT

Multicomponent analysis: VOLATILE ORGANICS - 8021 LIST (continued)			
1,2-DICHLOROETHANE	ug/kg	Not detected	1
1,1-DICHLOROETHENE	ug/kg	Not detected	1
CIS-1,2-DICHLOROETHENE	ug/kg	Not detected	1
TRANS-1,2-DICHLOROETHENE	ug/kg	Not detected	1
1,2-DICHLOROPROPANE	ug/kg	Not detected	1
1,3-DICHLOROPROPANE	ug/kg	Not detected	1
2,2-DICHLOROPROPANE	ug/kg	Not detected	1
1,1-DICHLOROPROPENE	ug/kg	Not detected	1
CIS-1,3-DICHLOROPROPENE	ug/kg	Not detected	1
TRANS-1,3-DICHLOROPROPENE	ug/kg	Not detected	1
ETHYLBENZENE	ug/kg	Not detected	1
HEXACHLOROBUTADIENE	ug/kg	Not detected	2
ISOPROPYLBENZENE	ug/kg	Not detected	2
P-ISOPROPYL TOLUENE	ug/kg	Not detected	2
METHYLENE CHLORIDE	ug/kg	Not detected	35
NAPHTHALENE	ug/kg	Not detected	5
N-PROPYLBENZENE	ug/kg	Not detected	1
STYRENE	ug/kg	Not detected	2
1,1,1,2-TETRACHLOROETHANE	ug/kg	Not detected	1
1,1,2,2-TETRACHLOROETHANE	ug/kg	Not detected	1
TETRACHLOROETHENE	ug/kg	Not detected	1
TOLUENE	ug/kg	Not detected	1
1,2,3-TRICHLOROBENZENE	ug/kg	Not detected	2
1,2,4-TRICHLOROBENZENE	ug/kg	Not detected	2
1,1,1-TRICHLOROETHANE	ug/kg	Not detected	1
1,1,2-TRICHLOROETHANE	ug/kg	Not detected	1
TRICHLOROETHENE	ug/kg	Not detected	1
TRICHLOROFLUOROMETHANE	ug/kg	Not detected	5
1,2,3-TRICHLOROPROPANE	ug/kg	Not detected	1
1,2,4-TRIMETHYLBENZENE	ug/kg	Not detected	2
1,3,5-TRIMETHYLBENZENE	ug/kg	Not detected	2
VINYL CHLORIDE	ug/kg	Not detected	5
TOTAL XYLENES	ug/kg	Not detected	3
SURROGATE RECOVERY - ELCD	ug/kg	106 %	50-150
SURROGATE RECOVERY - PID	ug/kg	100 %	50-150

Sample comments:

Project name: NCDOT Pittsboro

Lab Report

Page: 3
February 19, 1999

Full Service Analytical & Environmental Solutions

Please advise should you have questions concerning these data.

Respectfully submitted,



Angela D. Overcash
Laboratory Director

Lab Report

NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519

Full Service Analytical & Environmental Solutions

February 19, 1999

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Proj: NCDOT Pittsboro

Dear Mr. Wang:

Below are the results of analysis of 1 sample received for examination on February 4, 1999:

Sample I.D. AB18728 Customer Code: S&ME-DOT
Login Group #: 3606E5 Customer Reference: NCDOT
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: HA-4
Sample collection date: 02/03/99 Time: 13:50
Lab submittal date: 02/04/99 Time: 11:00

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT

CALCULATIONS BASED ON DRY WEIGHT	% DRY WT.	67	0.01

Multicomponent analysis: VOLATILE ORGANICS - 8021 LIST

BENZENE	ug/kg	Not detected	1
BROMOBENZENE	ug/kg	Not detected	1
BROMOCHLOROMETHANE	ug/kg	Not detected	2
BROMODICHLOROMETHANE	ug/kg	Not detected	1
BROMOFORM	ug/kg	Not detected	2
BROMOMETHANE	ug/kg	Not detected	5
N-BUTYLBENZENE	ug/kg	Not detected	2
SEC-BUTYLBENZENE	ug/kg	Not detected	2
TERT-BUTYLBENZENE	ug/kg	Not detected	2
CARBON TETRACHLORIDE	ug/kg	Not detected	1
CHLOROBENZENE	ug/kg	Not detected	5
CHLORODIBROMOMETHANE	ug/kg	Not detected	1
CHLOROETHANE	ug/kg	Not detected	5
CHLOROFORM	ug/kg	Not detected	2
CHLOROMETHANE	ug/kg	Not detected	5
2-CHLOROTOLUENE	ug/kg	Not detected	1
4-CHLOROTOLUENE	ug/kg	Not detected	1
1, 2-DIBROMO-3-CHLOROPROPANE	ug/kg	Not detected	5
1, 2-DIBROMOETHANE	ug/kg	Not detected	2
DIBROMOMETHANE	ug/kg	Not detected	1
1, 2-DICHLOROBENZENE	ug/kg	Not detected	1
1, 3-DICHLOROBENZENE	ug/kg	Not detected	1
1, 4-DICHLOROBENZENE	ug/kg	Not detected	1
DICHLORODIFLUOROMETHANE	ug/kg	Not detected	5
1, 1-DICHLOROETHANE	ug/kg	4	1

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT

Multicomponent analysis: VOLATILE ORGANICS - 8021 LIST (continued)			
1, 2-DICHLOROETHANE	ug/kg	Not detected	1
1, 1-DICHLOROETHENE	ug/kg	Not detected	1
CIS-1, 2-DICHLOROETHENE	ug/kg	Not detected	1
TRANS-1, 2-DICHLOROETHENE	ug/kg	Not detected	1
1, 2-DICHLOROPROPANE	ug/kg	Not detected	1
1, 3-DICHLOROPROPANE	ug/kg	Not detected	1
2, 2-DICHLOROPROPANE	ug/kg	Not detected	1
1, 1-DICHLOROPROPENE	ug/kg	Not detected	1
CIS-1, 3-DICHLOROPROPENE	ug/kg	Not detected	1
TRANS-1, 3-DICHLOROPROPENE	ug/kg	Not detected	1
ETHYLBENZENE	ug/kg	Not detected	1
HEXACHLOROBUTADIENE	ug/kg	Not detected	2
ISOPROPYLBENZENE	ug/kg	Not detected	2
P-ISOPROPYL TOLUENE	ug/kg	Not detected	2
METHYLENE CHLORIDE	ug/kg	Not detected	35
NAPHTHALENE	ug/kg	Not detected	5
N-PROPYLBENZENE	ug/kg	Not detected	1
STYRENE	ug/kg	Not detected	2
1, 1, 1, 2-TETRACHLOROETHANE	ug/kg	Not detected	1
1, 1, 2, 2-TETRACHLOROETHANE	ug/kg	Not detected	1
TETRACHLOROETHENE	ug/kg	Not detected	1
TOLUENE	ug/kg	Not detected	1
1, 2, 3-TRICHLOROBENZENE	ug/kg	Not detected	2
1, 2, 4-TRICHLOROBENZENE	ug/kg	Not detected	2
1, 1, 1-TRICHLOROETHANE	ug/kg	Not detected	1
1, 1, 2-TRICHLOROETHANE	ug/kg	Not detected	1
TRICHLOROETHENE	ug/kg	16	1
TRICHLOROFLUOROMETHANE	ug/kg	Not detected	5
1, 2, 3-TRICHLOROPROPANE	ug/kg	Not detected	1
1, 2, 4-TRIMETHYLBENZENE	ug/kg	Not detected	2
1, 3, 5-TRIMETHYLBENZENE	ug/kg	Not detected	2
VINYL CHLORIDE	ug/kg	Not detected	5
TOTAL XYLENES	ug/kg	Not detected	3
SURROGATE RECOVERY - ELCD	ug/kg	93 %	50-150
SURROGATE RECOVERY - PID	ug/kg	119 %	50-150

Sample comments:

Project name: NCDOT Pittsboro

Lab Report

Page: 3
February 19, 1999



Please advise should you have questions concerning these data.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'A. Overcash'.

Angela D. Overcash
Laboratory Director

Lab Report

NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519



Full Service Analytical & Environmental Solutions

February 19, 1999

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Proj: NCDOT Pittsboro

Dear Mr. Wang:

Below are the results of analysis of 1 sample received for examination on February 4, 1999:

Sample I.D. AB18729 Customer Code: S&ME-DOT
Login Group #: 3606E5 Customer Reference: NCDOT
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: HA-5
Sample collection date: 02/03/99 Time: 14:35
Lab submittal date: 02/04/99 Time: 11:00

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT

CALCULATIONS BASED ON DRY WEIGHT	% DRY WT.	67	0.01

Multicomponent analysis: VOLATILE ORGANICS - 8021 LIST

BENZENE	ug/kg	Not detected	1
BROMOBENZENE	ug/kg	Not detected	1
BROMOCHLOROMETHANE	ug/kg	Not detected	2
BROMODICHLOROMETHANE	ug/kg	Not detected	1
BROMOFORM	ug/kg	Not detected	2
BROMOMETHANE	ug/kg	Not detected	5
N-BUTYLBENZENE	ug/kg	Not detected	2
SEC-BUTYLBENZENE	ug/kg	Not detected	2
TERT-BUTYLBENZENE	ug/kg	Not detected	2
CARBON TETRACHLORIDE	ug/kg	Not detected	1
CHLOROBENZENE	ug/kg	Not detected	5
CHLORODIBROMOMETHANE	ug/kg	Not detected	1
CHLOROETHANE	ug/kg	Not detected	5
CHLOROFORM	ug/kg	Not detected	2
CHLOROMETHANE	ug/kg	Not detected	5
2-CHLOROTOLUENE	ug/kg	Not detected	1
4-CHLOROTOLUENE	ug/kg	Not detected	1
1,2-DIBROMO-3-CHLOROPROPANE	ug/kg	Not detected	5
1,2-DIBROMOETHANE	ug/kg	Not detected	2
DIBROMOMETHANE	ug/kg	Not detected	1
1,2-DICHLOROBENZENE	ug/kg	Not detected	1
1,3-DICHLOROBENZENE	ug/kg	Not detected	1
1,4-DICHLOROBENZENE	ug/kg	Not detected	1
DICHLORODIFLUOROMETHANE	ug/kg	Not detected	5
1,1-DICHLOROETHANE	ug/kg	Not detected	1

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT

Multicomponent analysis: VOLATILE ORGANICS - 8021 LIST (continued)			
1,2-DICHLOROETHANE	ug/kg	Not detected	1
1,1-DICHLOROETHENE	ug/kg	Not detected	1
CIS-1,2-DICHLOROETHENE	ug/kg	Not detected	1
TRANS-1,2-DICHLOROETHENE	ug/kg	Not detected	1
1,2-DICHLOROPROPANE	ug/kg	Not detected	1
1,3-DICHLOROPROPANE	ug/kg	Not detected	1
2,2-DICHLOROPROPANE	ug/kg	Not detected	1
1,1-DICHLOROPROPENE	ug/kg	Not detected	1
CIS-1,3-DICHLOROPROPENE	ug/kg	Not detected	1
TRANS-1,3-DICHLOROPROPENE	ug/kg	Not detected	1
ETHYLBENZENE	ug/kg	Not detected	1
HEXACHLOROBUTADIENE	ug/kg	Not detected	2
ISOPROPYLBENZENE	ug/kg	Not detected	2
P-ISOPROPYL TOLUENE	ug/kg	Not detected	2
METHYLENE CHLORIDE	ug/kg	Not detected	35
NAPHTHALENE	ug/kg	Not detected	5
N-PROPYLBENZENE	ug/kg	Not detected	1
STYRENE	ug/kg	Not detected	2
1,1,1,2-TETRACHLOROETHANE	ug/kg	Not detected	1
1,1,2,2-TETRACHLOROETHANE	ug/kg	Not detected	1
TETRACHLOROETHENE	ug/kg	Not detected	1
TOLUENE	ug/kg	Not detected	1
1,2,3-TRICHLOROBENZENE	ug/kg	Not detected	2
1,2,4-TRICHLOROBENZENE	ug/kg	Not detected	2
1,1,1-TRICHLOROETHANE	ug/kg	Not detected	1
1,1,2-TRICHLOROETHANE	ug/kg	Not detected	1
TRICHLOROETHENE	ug/kg	2	1
TRICHLOROFLUOROMETHANE	ug/kg	Not detected	5
1,2,3-TRICHLOROPROPANE	ug/kg	Not detected	1
1,2,4-TRIMETHYLBENZENE	ug/kg	Not detected	2
1,3,5-TRIMETHYLBENZENE	ug/kg	Not detected	2
VINYL CHLORIDE	ug/kg	Not detected	5
TOTAL XYLENES	ug/kg	Not detected	3
SURROGATE RECOVERY - ELCD	ug/kg	87 %	50-150
SURROGATE RECOVERY - PID	ug/kg	95 %	50-150

Sample comments:

Project name: NCDOT Pittsboro

Lab Report

Page: 3

February 19, 1999



Full Service Analytical & Environmental Solutions

Please advise should you have questions concerning these data.

Respectfully submitted,

Angela D. Overcash
Laboratory Director

CHAIN OF CUSTODY RECORD

PAGE 1 OF 4 QUO
 449 Springbrook Road ▲ Charlotte, NC 28217
 P.O. Box 240543 ▲ Charlotte, NC 28224-0543
 Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

REPORT TO: Name James Wang
 Address SAME, Inc.
 Name NC DOT
 Address _____
 Requested Due Date _____

Full Service Analytical & Environmental Solutions
 SAME (James Wang)

Client 3114 Spring Forest Rd
Raleigh, NC 27616
 Phone 919 872-2600 Fax 919 790-9827
 P.O.#/Billing Reference NC DOT Pittsboro
 Project Name NC DOT Pittsboro

LAB USE ONLY
 Samples INTACT upon arrival
 Received ON MELT ICE? Temp 4.6
 PROPER PRESERVATIVES indicated?
 Received WITHIN HOLDING TIMES?
 CUSTODY SEALS INTACT?
 VOLATILES AND WOOD HEADSPACE?
 PROPER CONTAINERS used?

State Certification
 Requested NC SC Other NA
 Water Chlorinated Yes No NA
 Sample Iced Upon Collection Yes No

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER		PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
				*TYPE SEE BELOW	NO.					
HA-1	2/3/99	1045	soil	GG	1	4oz	X			18725
HA-2	2/3/99	1110	soil	GG	1	4oz	X			18726
HA-3	2/3/99	1155	soil	GG	1	4oz	X			18727
HA-4	2/3/99	1350	soil	GG	1	4oz	X			18728
HA-5	2/3/99	1435	soil	GG	1	4oz	X			18729

Sampler's Signature David V. Dry Sampled By (Print Name) David V. Dry Affiliation SAME, Inc

Relinquished By: (Signature) <u>David V. Dry</u>	Received By: (Signature) <u>FedEX</u>	Date <u>2/3/99</u>	Military/Hours <u>1715</u>
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By: <u>Kathryn Buerer</u>	Date <u>2/4/99</u>	1100
Method of Shipment		Log-In Group No. <u>30665</u>	

Additional Comments
SAME Project number
1040-98-107
& custody seals. use soil

NPDES NC UST NC GROUNDWATER: NC DRINKING WATER: NC SOLID WASTE: NC
 SC OTHER SC OTHER SC OTHER

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

Lab Report



From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519

March 2, 1999

Surface water

To: James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AB20818 Customer Code: S&ME-DOT
Login Group #: 4352E7 Customer Reference: PITTSBOR
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: QUARRY 1
Sample collection date: 02/23/99 Time: 14:15
Lab submittal date: 02/24/99 Time: 10:10
Received by: KJE Validated by: ADO

Parameter: VOLATILE ORGANICS BY 6230D
Method reference: 6230D Unit: ug/L
Result: see below
Date started: 02/27/99 Date finished: 03/01/99
Time started: 03:47 Analyst: MJK

Data for VOLATILE ORGANICS BY 6230D ug/L:

Component Name	Result	Component MDL
DICHLORODIFLUOROMETHANE	Not detected	1.0
CHLOROMETHANE	Not detected	2.0
VINYL CHLORIDE	Not detected	1.0
BROMOMETHANE	Not detected	2.0
CHLOROETHANE	Not detected	2.0
TRICHLOROFLUOROMETHANE	Not detected	0.5
1,1-DICHLOROETHENE	Not detected	0.5
METHYLENE CHLORIDE	Not detected	5.0
trans-1,2-DICHLOROETHENE	Not detected	0.5
1,1-DICHLOROETHANE	Not detected	0.5
2,2-DICHLOROPROPANE	Not detected	0.5
cis-1,2-DICHLOROETHENE	Not detected	0.5
CHLOROFORM	Not detected	0.5
BROMOCHLOROMETHANE	Not detected	0.5
1,1,1-TRICHLOROETHANE	Not detected	0.5
1,1-DICHLOROPROPENE	Not detected	0.5
CARBON TETRACHLORIDE	Not detected	0.5
BENZENE	Not detected	0.5
1,2-DICHLOROETHANE	Not detected	0.5
TRICHLOROETHENE	Not detected	0.5
1,2-DICHLOROPROPANE	Not detected	0.5

Lab Report

James Wang Sample I.D. AB20818 (continued)
Page: 2
March 2, 1999



Full Service Analytical & Environmental Solutions

Data for VOLATILE ORGANICS BY 6230D (continued):

Component Name	Result	Component MDL
BROMODICHLOROMETHANE	Not detected	0.5
DIBROMOMETHANE	Not detected	0.5
TOLUENE	Not detected	0.5
1, 1, 2-TRICHLOROETHANE	Not detected	0.5
TETRACHLOROETHENE	Not detected	0.5
1, 3-DICHLOROPROPANE	Not detected	0.5
DIBROMOCHLOROMETHANE	Not detected	0.5
1, 2-DIBROMOETHANE (EDB)	Not detected	0.5
CHLOROBENZENE	Not detected	0.5
ETHYLBENZENE	Not detected	0.5
1, 1, 1, 2-TETRACHLOROETHANE	Not detected	0.5
TOTAL XYLENES	Not detected	1.0
STYRENE	Not detected	0.5
ISOPROPYLBENZENE	Not detected	0.5
BROMOFORM	Not detected	0.5
1, 1, 2, 2-TETRACHLOROETHANE	Not detected	0.5
1, 2, 3-TRICHLOROPROPANE	Not detected	0.5
n-PROPYLBENZENE	Not detected	0.5
BROMOBENZENE	Not detected	0.5
1, 3, 5-TRIMETHYLBENZENE	Not detected	1.0
2-CHLOROTOLUENE	Not detected	2.0
4-CHLOROTOLUENE	Not detected	2.0
tert-BUTYLBENZENE	Not detected	0.5
1, 2, 4-TRIMETHYLBENZENE	Not detected	1.0
sec-BUTYLBENZENE	Not detected	5.0
p-ISOPROPYLTOLUENE	Not detected	0.5
1, 3-DICHLOROBENZENE	Not detected	0.5
1, 4-DICHLOROBENZENE	Not detected	0.5
n-BUTYLBENZENE	Not detected	1.0
1, 2-DICHLOROBENZENE	Not detected	0.5
1, 2-DIBROMO-3-CHLOROPROPANE	Not detected	5.0
1, 2, 4-TRICHLOROBENZENE	Not detected	1.0
HEXACHLOROBUTADIENE	Not detected	1.0
NAPHTHALENE	Not detected	1.0
1, 2, 3-TRICHLOROBENZENE	Not detected	5.0
MTBE	Not detected	1.0
IPE	Not detected	1.0
SURROGATE RECOVERY - ELCD	56 %	(50-150)
SURROGATE RECOVERY - PID	121 %	(50-150)

Sample comments:

Project Name: NCDOT Pittsboro

Lab Report

James Wang Sample I.D. AB20818 (continued)
Page: 3
March 2, 1999



Full Service Analytical & Environmental Solutions

If there are any questions regarding this data, please call.

A handwritten signature in black ink, appearing to read 'A. Overcash', with a large, sweeping flourish at the end.

Angela D. Overcash
Laboratory Director

Lab Report

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519



Full Service Analytical & Environmental Solutions

March 2, 1999

To: James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AB20819 Customer Code: S&ME-DOT
Login Group #: 4352E7 Customer Reference: PITTSBORO
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: QUARRY 6
Sample collection date: 02/23/99 Time: 14:25
Lab submittal date: 02/24/99 Time: 10:10
Received by: KJE Validated by: ADO

Parameter: VOLATILE ORGANICS BY 6230D
Method reference: 6230D Unit: ug/L
Result: see below
Date started: 02/27/99 Date finished: 03/01/99
Time started: 04:49 Analyst: MJK

Data for VOLATILE ORGANICS BY 6230D ug/L:

Component Name	Result	Component MDL
DICHLORODIFLUOROMETHANE	Not detected	1.0
CHLOROMETHANE	Not detected	2.0
VINYL CHLORIDE	Not detected	1.0
BROMOMETHANE	Not detected	2.0
CHLOROETHANE	Not detected	2.0
TRICHLOROFLUOROMETHANE	Not detected	0.5
1,1-DICHLOROETHENE	Not detected	0.5
METHYLENE CHLORIDE	Not detected	5.0
trans-1,2-DICHLOROETHENE	Not detected	0.5
1,1-DICHLOROETHANE	Not detected	0.5
2,2-DICHLOROPROPANE	Not detected	0.5
cis-1,2-DICHLOROETHENE	Not detected	0.5
CHLOROFORM	Not detected	0.5
BROMOCHLOROMETHANE	Not detected	0.5
1,1,1-TRICHLOROETHANE	Not detected	0.5
1,1-DICHLOROPROPENE	Not detected	0.5
CARBON TETRACHLORIDE	Not detected	0.5
BENZENE	Not detected	0.5
1,2-DICHLOROETHANE	Not detected	0.5
TRICHLOROETHENE	Not detected	0.5
1,2-DICHLOROPROPANE	Not detected	0.5

Lab Report

James Wang Sample I.D. AB20819 (continued)
Page: 2
March 2, 1999



Full Service Analytical & Environmental Solutions

Data for VOLATILE ORGANICS BY 6230D (continued):

Component Name	Result	Component MDL
BROMODICHLOROMETHANE	Not detected	0.5
DIBROMOMETHANE	Not detected	0.5
TOLUENE	Not detected	0.5
1, 1, 2-TRICHLOROETHANE	Not detected	0.5
TETRACHLOROETHENE	Not detected	0.5
1, 3-DICHLOROPROPANE	Not detected	0.5
DIBROMOCHLOROMETHANE	Not detected	0.5
1, 2-DIBROMOETHANE (EDB)	Not detected	0.5
CHLOROBENZENE	Not detected	0.5
ETHYLBENZENE	Not detected	0.5
1, 1, 1, 2-TETRACHLOROETHANE	Not detected	0.5
TOTAL XYLENES	Not detected	1.0
STYRENE	Not detected	0.5
ISOPROPYLBENZENE	Not detected	0.5
BROMOFORM	Not detected	0.5
1, 1, 2, 2-TETRACHLOROETHANE	Not detected	0.5
1, 2, 3-TRICHLOROPROPANE	Not detected	0.5
n-PROPYLBENZENE	Not detected	0.5
BROMOBENZENE	Not detected	0.5
1, 3, 5-TRIMETHYLBENZENE	Not detected	1.0
2-CHLOROTOLUENE	Not detected	2.0
4-CHLOROTOLUENE	Not detected	2.0
tert-BUTYLBENZENE	Not detected	0.5
1, 2, 4-TRIMETHYLBENZENE	Not detected	1.0
sec-BUTYLBENZENE	Not detected	5.0
p-ISOPROPYLTOLUENE	Not detected	0.5
1, 3-DICHLOROBENZENE	Not detected	0.5
1, 4-DICHLOROBENZENE	Not detected	0.5
n-BUTYLBENZENE	Not detected	1.0
1, 2-DICHLOROBENZENE	Not detected	0.5
1, 2-DIBROMO-3-CHLOROPROPANE	Not detected	5.0
1, 2, 4-TRICHLOROBENZENE	Not detected	1.0
HEXACHLOROBUTADIENE	Not detected	1.0
NAPHTHALENE	Not detected	1.0
1, 2, 3-TRICHLOROBENZENE	Not detected	5.0
MTBE	Not detected	1.0
IPE	Not detected	1.0
SURROGATE RECOVERY - ELCD	58 %	(50-150)
SURROGATE RECOVERY - PID	124 %	(50-150)

Sample comments:

Project Name: NCDOT Pittsboro

Lab Report

James Wang Sample I.D. AB20819 (continued)

Page: 3

March 2, 1999



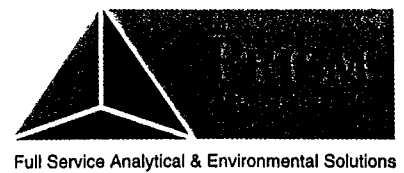
Full Service Analytical & Environmental Solutions

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

Lab Report

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519



March 2, 1999

To: James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AB20820 Customer Code: S&ME-DOT
Login Group #: 4352E7 Customer Reference: PITTSBOR
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: QUARRY 12
Sample collection date: 02/23/99 Time: 14:40
Lab submittal date: 02/24/99 Time: 10:10
Received by: KJE Validated by: ADO

Parameter: VOLATILE ORGANICS BY 6230D
Method reference: 6230D Unit: ug/L
Result: see below
Date started: 02/27/99 Date finished: 03/01/99
Time started: 05:55 Analyst: MJK

Data for VOLATILE ORGANICS BY 6230D ug/L:

Component Name	Result	Component MDL
DICHLORODIFLUOROMETHANE	Not detected	1.0
CHLOROMETHANE	Not detected	2.0
VINYL CHLORIDE	Not detected	1.0
BROMOMETHANE	Not detected	2.0
CHLOROETHANE	Not detected	2.0
TRICHLOROFLUOROMETHANE	Not detected	0.5
1,1-DICHLOROETHENE	Not detected	0.5
METHYLENE CHLORIDE	Not detected	5.0
trans-1,2-DICHLOROETHENE	Not detected	0.5
1,1-DICHLOROETHANE	Not detected	0.5
2,2-DICHLOROPROPANE	Not detected	0.5
cis-1,2-DICHLOROETHENE	Not detected	0.5
CHLOROFORM	Not detected	0.5
BROMOCHLOROMETHANE	Not detected	0.5
1,1,1-TRICHLOROETHANE	Not detected	0.5
1,1-DICHLOROPROPENE	Not detected	0.5
CARBON TETRACHLORIDE	Not detected	0.5
BENZENE	Not detected	0.5
1,2-DICHLOROETHANE	Not detected	0.5
TRICHLOROETHENE	Not detected	0.5
1,2-DICHLOROPROPANE	Not detected	0.5

Lab Report

James Wang Sample I.D. AB20820 (continued)

Page: 2

March 2, 1999



Full Service Analytical & Environmental Solutions

Data for VOLATILE ORGANICS BY 6230D (continued):

Component Name	Result	Component MDL
BROMODICHLOROMETHANE	Not detected	0.5
DIBROMOMETHANE	Not detected	0.5
TOLUENE	Not detected	0.5
1, 1, 2-TRICHLOROETHANE	Not detected	0.5
TETRACHLOROETHENE	Not detected	0.5
1, 3-DICHLOROPROPANE	Not detected	0.5
DIBROMOCHLOROMETHANE	Not detected	0.5
1, 2-DIBROMOETHANE (EDB)	Not detected	0.5
CHLOROBENZENE	Not detected	0.5
ETHYLBENZENE	Not detected	0.5
1, 1, 1, 2-TETRACHLOROETHANE	Not detected	0.5
TOTAL XYLENES	Not detected	1.0
STYRENE	Not detected	0.5
ISOPROPYLBENZENE	Not detected	0.5
BROMOFORM	Not detected	0.5
1, 1, 2, 2-TETRACHLOROETHANE	Not detected	0.5
1, 2, 3-TRICHLOROPROPANE	Not detected	0.5
n-PROPYLBENZENE	Not detected	0.5
BROMOBENZENE	Not detected	0.5
1, 3, 5-TRIMETHYLBENZENE	Not detected	1.0
2-CHLOROTOLUENE	Not detected	2.0
4-CHLOROTOLUENE	Not detected	2.0
tert-BUTYLBENZENE	Not detected	0.5
1, 2, 4-TRIMETHYLBENZENE	Not detected	1.0
sec-BUTYLBENZENE	Not detected	5.0
p-ISOPROPYLTOLUENE	Not detected	0.5
1, 3-DICHLOROBENZENE	Not detected	0.5
1, 4-DICHLOROBENZENE	Not detected	0.5
n-BUTYLBENZENE	Not detected	1.0
1, 2-DICHLOROBENZENE	Not detected	0.5
1, 2-DIBROMO-3-CHLOROPROPANE	Not detected	5.0
1, 2, 4-TRICHLOROBENZENE	Not detected	1.0
HEXACHLOROBUTADIENE	Not detected	1.0
NAPHTHALENE	Not detected	1.0
1, 2, 3-TRICHLOROBENZENE	Not detected	5.0
MTBE	Not detected	1.0
IPE	Not detected	1.0
SURROGATE RECOVERY - ELCD	65 %	(50-150)
SURROGATE RECOVERY - PID	120 %	(50-150)

Sample comments:

Project Name: NCDOT Pittsboro

Lab Report

James Wang Sample I.D. AB20820 (continued)
Page: 3
March 2, 1999



Full Service Analytical & Environmental Solutions

If there are any questions regarding this data, please call.

A handwritten signature in black ink, appearing to read 'A. Overcash', written in a cursive style.

Angela D. Overcash
Laboratory Director

Lab Report



Full Service Analytical & Environmental Solutions

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519

March 2, 1999

To: James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AB20821 Customer Code: S&ME-DOT
Login Group #: 4352E7 Customer Reference: PITTSBOR
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: QUARRY 27
Sample collection date: 02/23/99 Time: 14:50
Lab submittal date: 02/24/99 Time: 10:10
Received by: KJE Validated by: ADO

Parameter: VOLATILE ORGANICS BY 6230D
Method reference: 6230D Unit: ug/L
Result: see below
Date started: 02/27/99 Date finished: 03/01/99
Time started: 06:56 Analyst: MJK

Data for VOLATILE ORGANICS BY 6230D ug/L:

Component Name	Result	Component MDL
DICHLORODIFLUOROMETHANE	Not detected	1.0
CHLOROMETHANE	Not detected	2.0
VINYL CHLORIDE	Not detected	1.0
BROMOMETHANE	Not detected	2.0
CHLOROETHANE	Not detected	2.0
TRICHLOROFLUOROMETHANE	Not detected	0.5
1,1-DICHLOROETHENE	Not detected	0.5
METHYLENE CHLORIDE	Not detected	5.0
trans-1,2-DICHLOROETHENE	Not detected	0.5
1,1-DICHLOROETHANE	Not detected	0.5
2,2-DICHLOROPROPANE	Not detected	0.5
cis-1,2-DICHLOROETHENE	Not detected	0.5
CHLOROFORM	Not detected	0.5
BROMOCHLOROMETHANE	Not detected	0.5
1,1,1-TRICHLOROETHANE	Not detected	0.5
1,1-DICHLOROPROPENE	Not detected	0.5
CARBON TETRACHLORIDE	Not detected	0.5
BENZENE	Not detected	0.5
1,2-DICHLOROETHANE	Not detected	0.5
TRICHLOROETHENE	Not detected	0.5
1,2-DICHLOROPROPANE	Not detected	0.5

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543

Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

James Wang Sample I.D. AB20821 (continued)
Page: 2
March 2, 1999



Full Service Analytical & Environmental Solutions

Data for VOLATILE ORGANICS BY 6230D (continued):

Component Name	Result	Component MDL
BROMODICHLOROMETHANE	Not detected	0.5
DIBROMOMETHANE	Not detected	0.5
TOLUENE	Not detected	0.5
1, 1, 2-TRICHLOROETHANE	Not detected	0.5
TETRACHLOROETHENE	Not detected	0.5
1, 3-DICHLOROPROPANE	Not detected	0.5
DIBROMOCHLOROMETHANE	Not detected	0.5
1, 2-DIBROMOETHANE (EDB)	Not detected	0.5
CHLOROBENZENE	Not detected	0.5
ETHYLBENZENE	Not detected	0.5
1, 1, 1, 2-TETRACHLOROETHANE	Not detected	0.5
TOTAL XYLENES	Not detected	1.0
STYRENE	Not detected	0.5
ISOPROPYLBENZENE	Not detected	0.5
BROMOFORM	Not detected	0.5
1, 1, 2, 2-TETRACHLOROETHANE	Not detected	0.5
1, 2, 3-TRICHLOROPROPANE	Not detected	0.5
n-PROPYLBENZENE	Not detected	0.5
BROMOBENZENE	Not detected	0.5
1, 3, 5-TRIMETHYLBENZENE	Not detected	1.0
2-CHLOROTOLUENE	Not detected	2.0
4-CHLOROTOLUENE	Not detected	2.0
tert-BUTYLBENZENE	Not detected	0.5
1, 2, 4-TRIMETHYLBENZENE	Not detected	1.0
sec-BUTYLBENZENE	Not detected	5.0
p-ISOPROPYLTOLUENE	Not detected	0.5
1, 3-DICHLOROBENZENE	Not detected	0.5
1, 4-DICHLOROBENZENE	Not detected	0.5
n-BUTYLBENZENE	Not detected	1.0
1, 2-DICHLOROBENZENE	Not detected	0.5
1, 2-DIBROMO-3-CHLOROPROPANE	Not detected	5.0
1, 2, 4-TRICHLOROBENZENE	Not detected	1.0
HEXACHLOROBUTADIENE	Not detected	1.0
NAPHTHALENE	Not detected	1.0
1, 2, 3-TRICHLOROBENZENE	Not detected	5.0
MTBE	Not detected	1.0
IPE	Not detected	1.0
SURROGATE RECOVERY - ELCD	54 %	(50-150)
SURROGATE RECOVERY - PID	98 %	(50-150)

Sample comments:

Project Name: NCDOT Pittsboro

Lab Report

James Wang Sample I.D. AB20821 (continued)

Page: 3

March 2, 1999



Full Service Analytical & Environmental Solutions

If there are any questions regarding this data, please call.

A handwritten signature in black ink, appearing to read 'AO' or similar initials, written in a cursive style.

Angela D. Overcash
Laboratory Director

Lab Report

James Wang Sample I.D. AB20822 (continued)

Page: 2

March 2, 1999



Full Service Analytical & Environmental Solutions

Data for VOLATILE ORGANICS BY 6230D (continued):

Component Name	Result	Component MDL
BROMODICHLOROMETHANE	Not detected	0.5
DIBROMOMETHANE	Not detected	0.5
TOLUENE	Not detected	0.5
1, 1, 2-TRICHLOROETHANE	Not detected	0.5
TETRACHLOROETHENE	Not detected	0.5
1, 3-DICHLOROPROPANE	Not detected	0.5
DIBROMOCHLOROMETHANE	Not detected	0.5
1, 2-DIBROMOETHANE (EDB)	Not detected	0.5
CHLOROBENZENE	Not detected	0.5
ETHYLBENZENE	Not detected	0.5
1, 1, 1, 2-TETRACHLOROETHANE	Not detected	0.5
TOTAL XYLENES	Not detected	1.0
STYRENE	Not detected	0.5
ISOPROPYLBENZENE	Not detected	0.5
BROMOFORM	Not detected	0.5
1, 1, 2, 2-TETRACHLOROETHANE	Not detected	0.5
1, 2, 3-TRICHLOROPROPANE	Not detected	0.5
n-PROPYLBENZENE	Not detected	0.5
BROMOBENZENE	Not detected	0.5
1, 3, 5-TRIMETHYLBENZENE	Not detected	1.0
2-CHLOROTOLUENE	Not detected	2.0
4-CHLOROTOLUENE	Not detected	2.0
tert-BUTYLBENZENE	Not detected	0.5
1, 2, 4-TRIMETHYLBENZENE	Not detected	1.0
sec-BUTYLBENZENE	Not detected	5.0
p-ISOPROPYLTOLUENE	Not detected	0.5
1, 3-DICHLOROBENZENE	Not detected	0.5
1, 4-DICHLOROBENZENE	Not detected	0.5
n-BUTYLBENZENE	Not detected	1.0
1, 2-DICHLOROBENZENE	Not detected	0.5
1, 2-DIBROMO-3-CHLOROPROPANE	Not detected	5.0
1, 2, 4-TRICHLOROBENZENE	Not detected	1.0
HEXACHLOROBUTADIENE	Not detected	1.0
NAPHTHALENE	Not detected	1.0
1, 2, 3-TRICHLOROBENZENE	Not detected	5.0
MTBE	Not detected	1.0
IPE	Not detected	1.0
SURROGATE RECOVERY - ELCD	62 %	(50-150)
SURROGATE RECOVERY - PID	111 %	(50-150)

Sample comments:

Project Name: NCDOT Pittsboro

Lab Report

James Wang Sample I.D. AB20822 (continued)
Page: 3
March 2, 1999

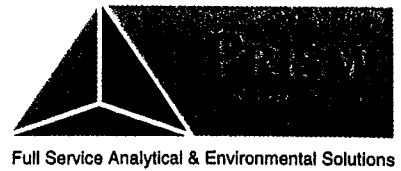


Full Service Analytical & Environmental Solutions

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

Lab Report



From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519

March 2, 1999

To: James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AB20823 Customer Code: S&ME-DOT
Login Group #: 4352E7 Customer Reference: PITTSBOR
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: CULVERT
Sample collection date: 02/23/99 Time: 15:40
Lab submittal date: 02/24/99 Time: 10:10
Received by: KJE Validated by: ADO

Parameter: VOLATILE ORGANICS BY 6230D
Method reference: 6230D Unit: ug/L
Result: see below
Date started: 02/27/99 Date finished: 03/01/99
Time started: 09:04 Analyst: MJK

Data for VOLATILE ORGANICS BY 6230D ug/L:

Component Name	Result	Component MDL
DICHLORODIFLUOROMETHANE	Not detected	1.0
CHLOROMETHANE	Not detected	2.0
VINYL CHLORIDE	Not detected	1.0
BROMOMETHANE	Not detected	2.0
CHLOROETHANE	Not detected	2.0
TRICHLOROFLUOROMETHANE	Not detected	0.5
1,1-DICHLOROETHENE	Not detected	0.5
METHYLENE CHLORIDE	Not detected	5.0
trans-1,2-DICHLOROETHENE	Not detected	0.5
1,1-DICHLOROETHANE	Not detected	0.5
2,2-DICHLOROPROPANE	Not detected	0.5
cis-1,2-DICHLOROETHENE	Not detected	0.5
CHLOROFORM	Not detected	0.5
BROMOCHLOROMETHANE	Not detected	0.5
1,1,1-TRICHLOROETHANE	1.7	0.5
1,1-DICHLOROPROPENE	Not detected	0.5
CARBON TETRACHLORIDE	Not detected	0.5
BENZENE	Not detected	0.5
1,2-DICHLOROETHANE	Not detected	0.5
TRICHLOROETHENE	6.4	0.5
1,2-DICHLOROPROPANE	Not detected	0.5

Lab Report

James Wang Sample I.D. AB20823 (continued)

Page: 2

March 2, 1999



Full Service Analytical & Environmental Solutions

Data for VOLATILE ORGANICS BY 6230D (continued):

Component Name	Result	Component MDL
BROMODICHLOROMETHANE	Not detected	0.5
DIBROMOMETHANE	Not detected	0.5
TOLUENE	Not detected	0.5
1, 1, 2-TRICHLOROETHANE	Not detected	0.5
TETRACHLOROETHENE	Not detected	0.5
1, 3-DICHLOROPROPANE	Not detected	0.5
DIBROMOCHLOROMETHANE	Not detected	0.5
1, 2-DIBROMOETHANE (EDB)	Not detected	0.5
CHLOROBENZENE	Not detected	0.5
ETHYLBENZENE	Not detected	0.5
1, 1, 1, 2-TETRACHLOROETHANE	Not detected	0.5
TOTAL XYLENES	Not detected	1.0
STYRENE	Not detected	0.5
ISOPROPYLBENZENE	Not detected	0.5
BROMOFORM	Not detected	0.5
1, 1, 2, 2-TETRACHLOROETHANE	Not detected	0.5
1, 2, 3-TRICHLOROPROPANE	Not detected	0.5
n-PROPYLBENZENE	Not detected	0.5
BROMOBENZENE	Not detected	0.5
1, 3, 5-TRIMETHYLBENZENE	Not detected	1.0
2-CHLOROTOLUENE	Not detected	2.0
4-CHLOROTOLUENE	Not detected	2.0
tert-BUTYLBENZENE	Not detected	0.5
1, 2, 4-TRIMETHYLBENZENE	Not detected	1.0
sec-BUTYLBENZENE	Not detected	5.0
p-ISOPROPYLTOLUENE	Not detected	0.5
1, 3-DICHLOROBENZENE	Not detected	0.5
1, 4-DICHLOROBENZENE	Not detected	0.5
n-BUTYLBENZENE	Not detected	1.0
1, 2-DICHLOROBENZENE	Not detected	0.5
1, 2-DIBROMO-3-CHLOROPROPANE	Not detected	5.0
1, 2, 4-TRICHLOROBENZENE	Not detected	1.0
HEXACHLOROBUTADIENE	Not detected	1.0
NAPHTHALENE	Not detected	1.0
1, 2, 3-TRICHLOROBENZENE	Not detected	5.0
MTBE	Not detected	1.0
IPE	Not detected	1.0
SURROGATE RECOVERY - ELCD	64 %	(50-150)
SURROGATE RECOVERY - PID	125 %	(50-150)

Sample comments:

Project Name: NCDOT Pittsboro

Lab Report

James Wang Sample I.D. AB20823 (continued)

Page: 3

March 2, 1999



Full Service Analytical & Environmental Solutions

If there are any questions regarding this data, please call.

A handwritten signature in black ink, appearing to read 'A. Overcash', written in a cursive style.

Angela D. Overcash
Laboratory Director

Lab Report



Full Service Analytical & Environmental Solutions

From: NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519

March 2, 1999

To: James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AB20824 Customer Code: S&ME-DOT
Login Group #: 4352E7 Customer Reference: PITTSBORO
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: DOWNSTREAM
Sample collection date: 02/23/99 Time: 15:20
Lab submittal date: 02/24/99 Time: 10:10
Received by: KJE Validated by: ADO

Parameter: VOLATILE ORGANICS BY 6230D
Method reference: 6230D Unit: ug/L
Result: see below
Date started: 02/27/99 Date finished: 03/01/99
Time started: 10:10 Analyst: MJK

Data for VOLATILE ORGANICS BY 6230D ug/L:

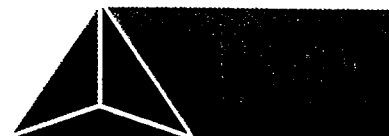
Component Name	Result	Component MDL
DICHLORODIFLUOROMETHANE	Not detected	1.0
CHLOROMETHANE	Not detected	2.0
VINYL CHLORIDE	Not detected	1.0
BROMOMETHANE	Not detected	2.0
CHLOROETHANE	Not detected	2.0
TRICHLOROFLUOROMETHANE	Not detected	0.5
1,1-DICHLOROETHENE	Not detected	0.5
METHYLENE CHLORIDE	Not detected	5.0
trans-1,2-DICHLOROETHENE	Not detected	0.5
1,1-DICHLOROETHANE	Not detected	0.5
2,2-DICHLOROPROPANE	Not detected	0.5
cis-1,2-DICHLOROETHENE	Not detected	0.5
CHLOROFORM	Not detected	0.5
BROMOCHLOROMETHANE	Not detected	0.5
1,1,1-TRICHLOROETHANE	Not detected	0.5
1,1-DICHLOROPROPENE	Not detected	0.5
CARBON TETRACHLORIDE	Not detected	0.5
BENZENE	Not detected	0.5
1,2-DICHLOROETHANE	Not detected	0.5
TRICHLOROETHENE	Not detected	0.5
1,2-DICHLOROPROPANE	Not detected	0.5

Lab Report

James Wang Sample I.D. AB20824 (continued)

Page: 2

March 2, 1999



Full Service Analytical & Environmental Solutions

Data for VOLATILE ORGANICS BY 6230D (continued):

Component Name	Result	Component MDL
BROMODICHLOROMETHANE	Not detected	0.5
DIBROMOMETHANE	Not detected	0.5
TOLUENE	Not detected	0.5
1, 1, 2-TRICHLOROETHANE	Not detected	0.5
TETRACHLOROETHENE	Not detected	0.5
1, 3-DICHLOROPROPANE	Not detected	0.5
DIBROMOCHLOROMETHANE	Not detected	0.5
1, 2-DIBROMOETHANE (EDB)	Not detected	0.5
CHLOROBENZENE	Not detected	0.5
ETHYLBENZENE	Not detected	0.5
1, 1, 1, 2-TETRACHLOROETHANE	Not detected	0.5
TOTAL XYLENES	Not detected	1.0
STYRENE	Not detected	0.5
ISOPROPYLBENZENE	Not detected	0.5
BROMOFORM	Not detected	0.5
1, 1, 2, 2-TETRACHLOROETHANE	Not detected	0.5
1, 2, 3-TRICHLOROPROPANE	Not detected	0.5
n-PROPYLBENZENE	Not detected	0.5
BROMOBENZENE	Not detected	0.5
1, 3, 5-TRIMETHYLBENZENE	Not detected	1.0
2-CHLOROTOLUENE	Not detected	2.0
4-CHLOROTOLUENE	Not detected	2.0
tert-BUTYLBENZENE	Not detected	0.5
1, 2, 4-TRIMETHYLBENZENE	Not detected	1.0
sec-BUTYLBENZENE	Not detected	5.0
p-ISOPROPYLTOLUENE	Not detected	0.5
1, 3-DICHLOROBENZENE	Not detected	0.5
1, 4-DICHLOROBENZENE	Not detected	0.5
n-BUTYLBENZENE	Not detected	1.0
1, 2-DICHLOROBENZENE	Not detected	0.5
1, 2-DIBROMO-3-CHLOROPROPANE	Not detected	5.0
1, 2, 4-TRICHLOROBENZENE	Not detected	1.0
HEXACHLOROBUTADIENE	Not detected	1.0
NAPHTHALENE	Not detected	1.0
1, 2, 3-TRICHLOROBENZENE	Not detected	5.0
MTBE	Not detected	1.0
IPE	Not detected	1.0
SURROGATE RECOVERY - ELCD	71 %	(50-150)
SURROGATE RECOVERY - PID	130 %	(50-150)

Sample comments:

Project Name: NCDOT Pittsboro

Lab Report

James Wang Sample I.D. AB20824 (continued)
Page: 3
March 2, 1999

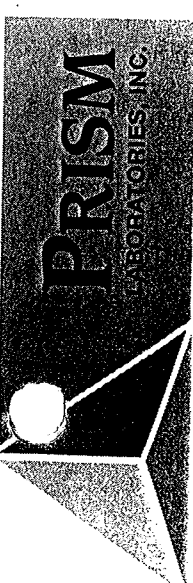


Full Service Analytical & Environmental Solutions

If there are any questions regarding this data, please call.

Angela D. Overcash
Laboratory Director

CHAIN OF CUSTODY RECORD



Full Service Analytical & Environmental Solutions
 Client: SAME Inc (James Wang)
 Physical Address: 3118 Spring Forest Rd.
Kelleyville, NY 12116
 Phone: 719 872-2660 Fax: 719 790-9827
 P.O.#/Billing Reference: NC DOT Pittsburgh
 Project Name: NC DOT Pittsburgh

449 Springbrook Road ▲ Charlotte, NC 28217
 P.O. Box 240543 ▲ Charlotte, NC 28224-0543
 Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

REPORT TO: Name: James Wang (SAME)
 Address: 3118 Spring Forest Rd.
 Name: NC DOT
 Address: 72 hr Turnaround
 Requested Due Date: _____

LAB USE ONLY

Samples INTACT upon arrival? YES NO N/A
 Received ON WET ICE? Temp: -0.1
 PROPER PRESERVATIVES indicated?
 Received WITHIN HOLDING TIMES?
 CUSTODY SEALS INTACT?
 VOLATILES rec'd W/OUT HEADSPACE?
 PROPER CONTAINERS used?

State Certification Requested NC SC _____ Other _____ NA _____
 Water Chlorinated Yes _____ No NA _____
 Sample Iced Upon Collection Yes No _____

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB NO. ID NO.
				*TYPE SEE BELOW	NO.	SIZE					
Quarry 1'	2/23/99	1415	H ₂ O	VOA	3	40mL	HCl	12300			
Quarry 6'		1425									
Quarry 12'		1440									
Quarry 27'		1450									
Wastream		1555									
Conduit		1540									
Downstream		1520									

Sampler's Signature: David V. Day Sampled By (Print Name): David V. Day Affiliation: SAME, Inc.

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
<u>David V. Day</u>	<u>FedEx</u>	<u>2/23/99</u>	<u>1800</u>
Relinquished By: (Signature)	Received By: (Signature)	Date	
		<u>2/24/99</u>	<u>1010</u>
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	Log-In Group No.
	<u>James Wang</u>	<u>2/24/99</u>	<u>435357</u>
Method of Shipment			

Additional Comments

NPDES NC _____ UST: NC _____ SC _____ OTHER _____
 SC _____ GROUNDWATER: NC _____ SC _____ OTHER _____
 OTHER _____ DRINKING WATER: NC _____ SC _____ OTHER _____
 SOLID WASTE: NC _____ SC _____ OTHER _____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

Lab Report

NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519



April 19, 1999

*Supply well
(not packer)*

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Dear Mr. Wang:

Below are the results of analysis of 1 sample received for examination on April 8, 1999:

Sample I.D. AB25444 Customer Code: S&ME-DOT
Login Group #: A0412E5 Customer Reference: NCDOTPIT
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: SW-37
Sample collection date: 04/07/99 Time: 14:25
Lab submittal date: 04/08/99 Time: 10:30

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
-------------------	-------	----------------	--------------------

Multicomponent analysis: VOLATILE ORGANICS BY 6230D

DICHLORODIFLUOROMETHANE	ug/L	Not detected	1.0
CHLOROMETHANE	ug/L	Not detected	2.0
VINYL CHLORIDE	ug/L	Not detected	1.0
BROMOMETHANE	ug/L	Not detected	2.0
CHLOROETHANE	ug/L	Not detected	2.0
TRICHLOROFLUOROMETHANE	ug/L	Not detected	0.5
1,1-DICHLOROETHENE	ug/L	27	0.5
METHYLENE CHLORIDE	ug/L	Not detected	5.0
trans-1,2-DICHLOROETHENE	ug/L	Not detected	0.5
1,1-DICHLOROETHANE	ug/L	3.8	0.5
2,2-DICHLOROPROPANE	ug/L	Not detected	0.5
cis-1,2-DICHLOROETHENE	ug/L	1.0	0.5
CHLOROFORM	ug/L	Not detected	0.5
BROMOCHLOROMETHANE	ug/L	Not detected	0.5
1,1,1-TRICHLOROETHANE	ug/L	120	0.5
1,1-DICHLOROPROPENE	ug/L	Not detected	0.5
CARBON TETRACHLORIDE	ug/L	Not detected	0.5
BENZENE	ug/L	Not detected	0.5
1,2-DICHLOROETHANE	ug/L	Not detected	0.5
TRICHLOROETHENE	ug/L	460	0.5
1,2-DICHLOROPROPANE	ug/L	Not detected	0.5
BROMODICHLOROMETHANE	ug/L	Not detected	0.5
DIBROMOMETHANE	ug/L	Not detected	0.5
TOLUENE	ug/L	Not detected	0.5
1,1,2-TRICHLOROETHANE	ug/L	Not detected	0.5
TETRACHLOROETHENE	ug/L	1.4	0.5

Lab Report

Page: 2

April 19, 1999

James Wang Sample I.D. AB25444 (continued)



Full Service Analytical & Environmental Solutions

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT

Multicomponent analysis: VOLATILE ORGANICS BY 6230D (continued)			
1,3-DICHLOROPROPANE	ug/L	Not detected	0.5
DIBROMOCHLOROMETHANE	ug/L	Not detected	0.5
1,2-DIBROMOETHANE (EDB)	ug/L	Not detected	0.5
CHLOROBENZENE	ug/L	Not detected	0.5
ETHYLBENZENE	ug/L	Not detected	0.5
1,1,1,2-TETRACHLOROETHANE	ug/L	Not detected	0.5
TOTAL XYLENES	ug/L	Not detected	1.0
STYRENE	ug/L	Not detected	0.5
ISOPROPYLBENZENE	ug/L	Not detected	0.5
BROMOFORM	ug/L	Not detected	0.5
1,1,2,2-TETRACHLOROETHANE	ug/L	Not detected	0.5
1,2,3-TRICHLOROPROPANE	ug/L	Not detected	0.5
n-PROPYLBENZENE	ug/L	Not detected	0.5
BROMOBENZENE	ug/L	Not detected	0.5
1,3,5-TRIMETHYLBENZENE	ug/L	Not detected	1.0
2-CHLOROTOLUENE	ug/L	Not detected	2.0
4-CHLOROTOLUENE	ug/L	Not detected	2.0
tert-BUTYLBENZENE	ug/L	Not detected	0.5
1,2,4-TRIMETHYLBENZENE	ug/L	Not detected	1.0
sec-BUTYLBENZENE	ug/L	Not detected	5.0
p-ISOPROPYLTOLUENE	ug/L	Not detected	5.0
1,3-DICHLOROBENZENE	ug/L	Not detected	0.5
1,4-DICHLOROBENZENE	ug/L	Not detected	0.5
n-BUTYLBENZENE	ug/L	Not detected	1.0
1,2-DICHLOROBENZENE	ug/L	Not detected	0.5
1,2-DIBROMO-3-CHLOROPROPANE	ug/L	Not detected	5.0
1,2,4-TRICHLOROBENZENE	ug/L	Not detected	1.0
HEXACHLOROBUTADIENE	ug/L	Not detected	1.0
NAPHTHALENE	ug/L	Not detected	1.0
1,2,3-TRICHLOROBENZENE	ug/L	Not detected	5.0
MTBE	ug/L	Not detected	2.0
IPE	ug/L	Not detected	2.0

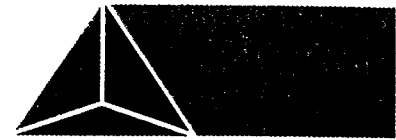
Sample comments:

PO#: 9.6600698 (1040-98-107)

Project name: NCDOT-Asphalt Site, Pittsboro

Lab Report

Page: 3
April 19, 1999



Full Service Analytical & Environmental Solutions

Please advise should you have questions concerning these data.

Respectfully submitted,

Angela D. Overcash
Laboratory Director

Lab Report

Page: 2

April 19, 1999

James Wang Sample I.D. AB25445 (continued)



Full Service Analytical & Environmental Solutions

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT

Multicomponent analysis: VOLATILE ORGANICS BY 6230D (continued)			
1,3-DICHLOROPROPANE	ug/L	Not detected	0.5
DIBROMOCHLOROMETHANE	ug/L	Not detected	0.5
1,2-DIBROMOETHANE (EDB)	ug/L	Not detected	0.5
CHLOROBENZENE	ug/L	Not detected	0.5
ETHYLBENZENE	ug/L	Not detected	0.5
1,1,1,2-TETRACHLOROETHANE	ug/L	Not detected	0.5
TOTAL XYLENES	ug/L	Not detected	1.0
STYRENE	ug/L	Not detected	0.5
ISOPROPYLBENZENE	ug/L	Not detected	0.5
BROMOFORM	ug/L	Not detected	0.5
1,1,2,2-TETRACHLOROETHANE	ug/L	Not detected	0.5
1,2,3-TRICHLOROPROPANE	ug/L	Not detected	0.5
n-PROPYLBENZENE	ug/L	Not detected	0.5
BROMOBENZENE	ug/L	Not detected	0.5
1,3,5-TRIMETHYLBENZENE	ug/L	Not detected	1.0
2-CHLOROTOLUENE	ug/L	Not detected	2.0
4-CHLOROTOLUENE	ug/L	Not detected	2.0
tert-BUTYLBENZENE	ug/L	Not detected	0.5
1,2,4-TRIMETHYLBENZENE	ug/L	Not detected	1.0
sec-BUTYLBENZENE	ug/L	Not detected	5.0
p-ISOPROPYLTOLUENE	ug/L	Not detected	5.0
1,3-DICHLOROBENZENE	ug/L	Not detected	0.5
1,4-DICHLOROBENZENE	ug/L	Not detected	0.5
n-BUTYLBENZENE	ug/L	Not detected	1.0
1,2-DICHLOROBENZENE	ug/L	Not detected	0.5
1,2-DIBROMO-3-CHLOROPROPANE	ug/L	Not detected	5.0
1,2,4-TRICHLOROBENZENE	ug/L	Not detected	1.0
HEXACHLOROBUTADIENE	ug/L	Not detected	1.0
NAPHTHALENE	ug/L	Not detected	1.0
1,2,3-TRICHLOROBENZENE	ug/L	Not detected	5.0
MTBE	ug/L	Not detected	2.0
IPE	ug/L	Not detected	2.0

Sample comments:

PO#: 9.6600698 (1040-98-107)

Project name: NCDOT-Asphalt Site, Pittsboro

Lab Report

Page: 3
April 19, 1999



Full Service Analytical & Environmental Solutions

Please advise should you have questions concerning these data.

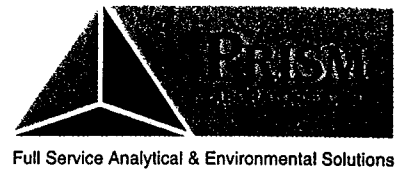
Respectfully submitted,

A handwritten signature in black ink, appearing to be 'A. Overcash'.

Angela D. Overcash
Laboratory Director

Lab Report

NC Certification No. 402
SC Certification No. 99012
NC Drinking Water Cert. No. 37735
FL Certification No. E87519



April 19, 1999

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Dear Mr. Wang:

Below are the results of analysis of 1 sample received for examination on April 8, 1999:

Sample I.D. AB25446 Customer Code: S&ME-DOT
Login Group #: A0412E5 Customer Reference: NCDOTPIT
Phone Number: (919)872-2660/fax(919)790-9827
Customer Sample I.D#: EB-1
Sample collection date: 04/07/99 Time: 15:30
Lab submittal date: 04/08/99 Time: 10:30

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT

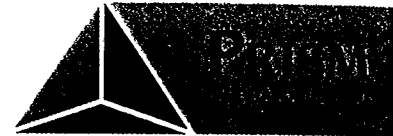
Multicomponent analysis: VOLATILE ORGANICS BY 6230D			
DICHLORODIFLUOROMETHANE	ug/L	Not detected	1.0
CHLOROMETHANE	ug/L	Not detected	2.0
VINYL CHLORIDE	ug/L	Not detected	1.0
BROMOMETHANE	ug/L	Not detected	2.0
CHLOROETHANE	ug/L	Not detected	2.0
TRICHLOROFLUOROMETHANE	ug/L	Not detected	0.5
1,1-DICHLOROETHENE	ug/L	Not detected	0.5
METHYLENE CHLORIDE	ug/L	Not detected	5.0
trans-1,2-DICHLOROETHENE	ug/L	Not detected	0.5
1,1-DICHLOROETHANE	ug/L	Not detected	0.5
2,2-DICHLOROPROPANE	ug/L	Not detected	0.5
cis-1,2-DICHLOROETHENE	ug/L	Not detected	0.5
CHLOROFORM	ug/L	Not detected	0.5
BROMOCHLOROMETHANE	ug/L	Not detected	0.5
1,1,1-TRICHLOROETHANE	ug/L	Not detected	0.5
1,1-DICHLOROPROPENE	ug/L	Not detected	0.5
CARBON TETRACHLORIDE	ug/L	Not detected	0.5
BENZENE	ug/L	Not detected	0.5
1,2-DICHLOROETHANE	ug/L	Not detected	0.5
TRICHLOROETHENE	ug/L	5.3	0.5
1,2-DICHLOROPROPANE	ug/L	Not detected	0.5
BROMODICHLOROMETHANE	ug/L	Not detected	0.5
DIBROMOMETHANE	ug/L	Not detected	0.5
TOLUENE	ug/L	Not detected	0.5
1,1,2-TRICHLOROETHANE	ug/L	Not detected	0.5
TETRACHLOROETHENE	ug/L	Not detected	0.5

Lab Report

Page: 2

April 19, 1999

James Wang Sample I.D. AB25446 (continued)



Full Service Analytical & Environmental Solutions

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT

Multicomponent analysis: VOLATILE ORGANICS BY 6230D (continued)			
1,3-DICHLOROPROPANE	ug/L	Not detected	0.5
DIBROMOCHLOROMETHANE	ug/L	Not detected	0.5
1,2-DIBROMOETHANE (EDB)	ug/L	Not detected	0.5
CHLOROBENZENE	ug/L	Not detected	0.5
ETHYLBENZENE	ug/L	Not detected	0.5
1,1,1,2-TETRACHLOROETHANE	ug/L	Not detected	0.5
TOTAL XYLENES	ug/L	Not detected	1.0
STYRENE	ug/L	Not detected	0.5
ISOPROPYLBENZENE	ug/L	Not detected	0.5
BROMOFORM	ug/L	Not detected	0.5
1,1,2,2-TETRACHLOROETHANE	ug/L	Not detected	0.5
1,2,3-TRICHLOROPROPANE	ug/L	Not detected	0.5
n-PROPYLBENZENE	ug/L	Not detected	0.5
BROMOBENZENE	ug/L	Not detected	0.5
1,3,5-TRIMETHYLBENZENE	ug/L	Not detected	1.0
2-CHLOROTOLUENE	ug/L	Not detected	2.0
4-CHLOROTOLUENE	ug/L	Not detected	2.0
tert-BUTYLBENZENE	ug/L	Not detected	0.5
1,2,4-TRIMETHYLBENZENE	ug/L	Not detected	1.0
sec-BUTYLBENZENE	ug/L	Not detected	5.0
p-ISOPROPYLTOLUENE	ug/L	Not detected	5.0
1,3-DICHLOROBENZENE	ug/L	Not detected	0.5
1,4-DICHLOROBENZENE	ug/L	Not detected	0.5
n-BUTYLBENZENE	ug/L	Not detected	1.0
1,2-DICHLOROBENZENE	ug/L	Not detected	0.5
1,2-DIBROMO-3-CHLOROPROPANE	ug/L	Not detected	5.0
1,2,4-TRICHLOROBENZENE	ug/L	Not detected	1.0
HEXACHLOROBUTADIENE	ug/L	Not detected	1.0
NAPHTHALENE	ug/L	Not detected	1.0
1,2,3-TRICHLOROBENZENE	ug/L	Not detected	5.0
MTBE	ug/L	Not detected	2.0
IPE	ug/L	Not detected	2.0

Sample comments:

PO#: 9.6600698 (1040-98-107)

Project name: NCDOT-Asphalt Site, Pittsboro

Lab Report

Page: 3
April 19, 1999

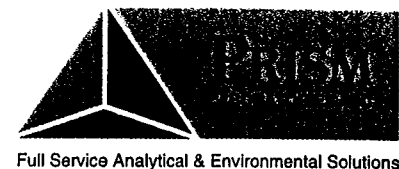


Full Service Analytical & Environmental Solutions

Please advise should you have questions concerning these data.

Respectfully submitted,

Angela D. Overcash
Laboratory Director



April 19, 1999

James Wang
 S & ME, Inc.
 3118 Spring Forest Road
 Raleigh, NC 27616
 Project: NCDOT Pittsboro

Dear Mr. Wang:

Below are the results of analysis of 1 sample received for examination on April 8, 1999:

Sample I.D. AB25447 Customer Code: S&ME-DOT
 Login Group #: A0412E5 Customer Reference: NCDOTPIT
 Phone Number: (919)872-2660/fax(919)790-9827
 Customer Sample I.D#: SW-76
 Sample collection date: 04/07/99 Time: 16:10
 Lab submittal date: 04/08/99 Time: 10:30

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
-------------------	-------	----------------	--------------------

Multicomponent analysis: VOLATILE ORGANICS BY 6230D

DICHLORODIFLUOROMETHANE	ug/L	Not detected	1.0
CHLOROMETHANE	ug/L	Not detected	2.0
VINYL CHLORIDE	ug/L	Not detected	1.0
BROMOMETHANE	ug/L	Not detected	2.0
CHLOROETHANE	ug/L	Not detected	2.0
TRICHLOROFLUOROMETHANE	ug/L	Not detected	0.5
1, 1-DICHLOROETHENE	ug/L	39	0.5
METHYLENE CHLORIDE	ug/L	Not detected	5.0
trans-1, 2-DICHLOROETHENE	ug/L	Not detected	0.5
1, 1-DICHLOROETHANE	ug/L	8.8	0.5
2, 2-DICHLOROPROPANE	ug/L	Not detected	0.5
cis-1, 2-DICHLOROETHENE	ug/L	3.6	0.5
CHLOROFORM	ug/L	Not detected	0.5
BROMOCHLOROMETHANE	ug/L	Not detected	0.5
1, 1, 1-TRICHLOROETHANE	ug/L	120	0.5
1, 1-DICHLOROPROPENE	ug/L	Not detected	0.5
CARBON TETRACHLORIDE	ug/L	Not detected	0.5
BENZENE	ug/L	Not detected	0.5
1, 2-DICHLOROETHANE	ug/L	Not detected	0.5
TRICHLOROETHENE	ug/L	1000	0.5
1, 2-DICHLOROPROPANE	ug/L	Not detected	0.5
BROMODICHLOROMETHANE	ug/L	Not detected	0.5
DIBROMOMETHANE	ug/L	Not detected	0.5
TOLUENE	ug/L	Not detected	0.5
1, 1, 2-TRICHLOROETHANE	ug/L	Not detected	0.5
TETRACHLOROETHENE	ug/L	3.9	0.5

Lab Report

April 19, 1999

James Wang Sample I.D. AB25447 (continued)



Full Service Analytical & Environmental Solutions

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT

Multicomponent analysis: VOLATILE ORGANICS BY 6230D (continued)			
1, 3-DICHLOROPROPANE	ug/L	Not detected	0.5
DIBROMOCHLOROMETHANE	ug/L	Not detected	0.5
1, 2-DIBROMOETHANE (EDB)	ug/L	Not detected	0.5
CHLOROBENZENE	ug/L	Not detected	0.5
ETHYLBENZENE	ug/L	Not detected	0.5
1, 1, 1, 2-TETRACHLOROETHANE	ug/L	Not detected	0.5
TOTAL XYLENES	ug/L	Not detected	1.0
STYRENE	ug/L	Not detected	0.5
ISOPROPYLBENZENE	ug/L	Not detected	0.5
BROMOFORM	ug/L	Not detected	0.5
1, 1, 2, 2-TETRACHLOROETHANE	ug/L	Not detected	0.5
1, 2, 3-TRICHLOROPROPANE	ug/L	Not detected	0.5
n-PROPYLBENZENE	ug/L	Not detected	0.5
BROMOBENZENE	ug/L	Not detected	0.5
1, 3, 5-TRIMETHYLBENZENE	ug/L	Not detected	1.0
2-CHLOROTOLUENE	ug/L	Not detected	2.0
4-CHLOROTOLUENE	ug/L	Not detected	2.0
tert-BUTYLBENZENE	ug/L	Not detected	0.5
1, 2, 4-TRIMETHYLBENZENE	ug/L	Not detected	1.0
sec-BUTYLBENZENE	ug/L	Not detected	5.0
p-ISOPROPYLTOLUENE	ug/L	Not detected	5.0
1, 3-DICHLOROBENZENE	ug/L	Not detected	0.5
1, 4-DICHLOROBENZENE	ug/L	Not detected	0.5
n-BUTYLBENZENE	ug/L	Not detected	1.0
1, 2-DICHLOROBENZENE	ug/L	Not detected	0.5
1, 2-DIBROMO-3-CHLOROPROPANE	ug/L	Not detected	5.0
1, 2, 4-TRICHLOROBENZENE	ug/L	Not detected	1.0
HEXACHLOROBUTADIENE	ug/L	Not detected	1.0
NAPHTHALENE	ug/L	Not detected	1.0
1, 2, 3-TRICHLOROBENZENE	ug/L	Not detected	5.0
MTBE	ug/L	Not detected	2.0
IPE	ug/L	Not detected	2.0

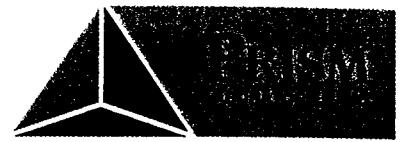
Sample comments:

PO#: 9.6600698 (1040-98-107)

Project name: NCDOT-Asphalt Site, Pittsboro

Lab Report

April 19, 1999



Please advise should you have questions concerning these data. Full Service Analytical & Environmental Solutions

Respectfully submitted,

Angela D. Overcash
Laboratory Director

Lab Report

Page: 2

April 19, 1999

James Wang Sample I.D. AB25448 (continued)



Full Service Analytical & Environmental Solutions

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT

Multicomponent analysis: VOLATILE ORGANICS BY 6230D (continued)			
1,3-DICHLOROPROPANE	ug/L	Not detected	0.5
DIBROMOCHLOROMETHANE	ug/L	Not detected	0.5
1,2-DIBROMOETHANE (EDB)	ug/L	Not detected	0.5
CHLOROBENZENE	ug/L	Not detected	0.5
ETHYLBENZENE	ug/L	Not detected	0.5
1,1,1,2-TETRACHLOROETHANE	ug/L	Not detected	0.5
TOTAL XYLENES	ug/L	Not detected	1.0
STYRENE	ug/L	Not detected	0.5
ISOPROPYLBENZENE	ug/L	Not detected	0.5
BROMOFORM	ug/L	Not detected	0.5
1,1,2,2-TETRACHLOROETHANE	ug/L	Not detected	0.5
1,2,3-TRICHLOROPROPANE	ug/L	Not detected	0.5
n-PROPYLBENZENE	ug/L	Not detected	0.5
BROMOBENZENE	ug/L	Not detected	0.5
1,3,5-TRIMETHYLBENZENE	ug/L	Not detected	1.0
2-CHLOROTOLUENE	ug/L	Not detected	2.0
4-CHLOROTOLUENE	ug/L	Not detected	2.0
tert-BUTYLBENZENE	ug/L	Not detected	0.5
1,2,4-TRIMETHYLBENZENE	ug/L	Not detected	1.0
sec-BUTYLBENZENE	ug/L	Not detected	5.0
p-ISOPROPYLTOLUENE	ug/L	Not detected	5.0
1,3-DICHLOROBENZENE	ug/L	Not detected	0.5
1,4-DICHLOROBENZENE	ug/L	Not detected	0.5
n-BUTYLBENZENE	ug/L	Not detected	1.0
1,2-DICHLOROBENZENE	ug/L	Not detected	0.5
1,2-DIBROMO-3-CHLOROPROPANE	ug/L	Not detected	5.0
1,2,4-TRICHLOROBENZENE	ug/L	Not detected	1.0
HEXACHLOROBUTADIENE	ug/L	Not detected	1.0
NAPHTHALENE	ug/L	Not detected	1.0
1,2,3-TRICHLOROBENZENE	ug/L	Not detected	5.0
MTBE	ug/L	Not detected	2.0
IPE	ug/L	Not detected	2.0

Sample comments:

PO#: 9.6600698 (1040-98-107)

Project name: NCDOT-Asphalt Site, Pittsboro

Lab Report

Page: 3

April 19, 1999



Full Service Analytical & Environmental Solutions

Please advise should you have questions concerning these data.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'AO', is written over a horizontal line.

Angela D. Overcash
Laboratory Director



Full Service Analytical & Environmental Solutions

Client: S & ME, Inc.
 Physical Address: 3118 Spring Forest Rd., Raleigh, NC 27616
 Phone: 919-872-2660 Fax: 919-872-2660
 P.O.#/Billing Reference: 96600698 (04098-167)
 Project Name: ACDOT - Asphalt Site, Pittsboro

CHAIN OF CUSTODY RECORD
 PAGE 1 OF 1 QUOTE #
 449 Springbrook Road - Charlotte, NC 28217
 P.O. Box 240543 - Charlotte, NC 28224-0543
 Phone: 704/529-6364 - Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

REPORT TO: Name: James Wang
 Address: 3118 Spring Forest Rd.
 Name: ACDOT
 Address:
 BILL TO: Name: ACDOT
 Address:
 Requested Due Date:

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

LAB USE ONLY
 Samples IN TACT upon arrival? YES NO N/A
 Received ON WET ICE? Temp 2.0
 PROPER PRESERVATIVES indicated?
 Received WITHIN HOLDING TIMES?
 CUSTODY SEALS INTACT?
 VOLATILES rec'd W/O UT HEADSPACE?
 PROPER CONTAINERS used?
 State Certification: Requested NC SC Other NA
 Water Chlorinated: Yes No
 Sample Iced Upon Collection: Yes No

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED (MILITARY HOURS)	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
				*TYPE SEE BELOW	NO.	SIZE					
SW-37	4/7/99	1425	W	VOA	3	40 ml	HCL	62307			25444
SW-57	4/7/99	1515	W								25445
EB-1	4/7/99	1530	W								25446
SN-76	4/7/99	1610	W								25447
SW-82	4/7/99	1700	W								25448

Sampler's Signature: James Wang
 Sampled By (Print Name): James Wang
 Affiliation: S & ME

Received By: (Signature)	Date: 4/7/99	Military/Hours:
Received By: (Signature)	Date:	
Received For: (Signature)	Date: 4-8-99 10:30	
Method of Shipment	Log-In Group No. A041265	

Additional Comments

48 hr rush turn around please

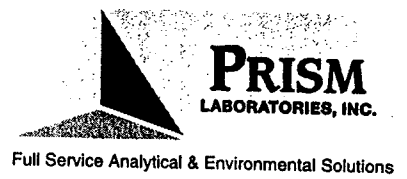
NPDES NC UST: NC SC OTHER: NC SC OTHER: NC
 SC GROUNDWATER: NC SC OTHER: NC SC OTHER: NC
 DRINKING WATER: NC SC OTHER: NC SC OTHER: NC
 SOLID WASTE: NC SC OTHER: NC SC OTHER: NC

SEE REVERSE FOR TERMS & CONDITIONS

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

Lab Report

Supply Well
parker



6/2/99

Page 1 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW40-1
Prism Sample ID: AB30167
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 11:50
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	5/21/99 07:25	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	5/21/99 07:25	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	5/21/99 07:25	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	5/21/99 07:25	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	5/21/99 07:25	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
1,1-DICHLOROETHENE	28	ug/L	0.5	6230D	5/21/99 07:25	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	5/21/99 07:25	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
1,1-DICHLOROETHANE	7.8	ug/L	0.5	6230D	5/21/99 07:25	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
cis-1,2-DICHLOROETHENE	4.0	ug/L	0.5	6230D	5/21/99 07:25	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
1,1,1-TRICHLOROETHANE	180	ug/L	0.5	6230D	5/21/99 07:25	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
BENZENE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
TRICHLOROETHENE	240	ug/L	0.5	6230D	5/21/99 07:25	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
TETRACHLOROETHENE	5.3	ug/L	0.5	6230D	5/21/99 07:25	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	5/21/99 07:25	DR2
STYRENE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

Lab Report

6/2/99

Page 2 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW40-1
Prism Sample ID: AB30167
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 11:50
Lab Submittal Date/Time: 5/20/99 10:45


The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 07:25	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/21/99 07:25	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/21/99 07:25	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 07:25	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	5/21/99 07:25	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	5/21/99 07:25	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 07:25	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 07:25	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	5/21/99 07:25	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 07:25	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	5/21/99 07:25	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	5/21/99 07:25	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	5/21/99 07:25	DR2
MTBE	Not detected	ug/L	2.0	6230D	5/21/99 07:25	DR2
IPE	Not detected	ug/L	2.0	6230D	5/21/99 07:25	DR2

Sample Comments:

PO#: 9.6600698

Project name: NCDOT Pittsboro



Angela D. Overcash, Laboratory Director

6/2/99

Page 3 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW40-2
Prism Sample ID: AB30168
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 11:58
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	5/21/99 08:29	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	5/21/99 08:29	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	5/21/99 08:29	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	5/21/99 08:29	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	5/21/99 08:29	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
1,1-DICHLOROETHENE	20	ug/L	0.5	6230D	5/21/99 08:29	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	5/21/99 08:29	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
1,1-DICHLOROETHANE	5.1	ug/L	0.5	6230D	5/21/99 08:29	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
cis-1,2-DICHLOROETHENE	1.8	ug/L	0.5	6230D	5/21/99 08:29	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
1,1,1-TRICHLOROETHANE	130	ug/L	0.5	6230D	5/21/99 08:29	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
BENZENE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
TRICHLOROETHENE	120	ug/L	0.5	6230D	5/21/99 08:29	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
TETRACHLOROETHENE	2.0	ug/L	0.5	6230D	5/21/99 08:29	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	5/21/99 08:29	DR2
STYRENE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

Lab Report

6/2/99

Page 4 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

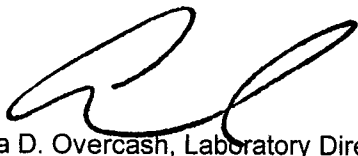
Customer Sample ID: SW40-2
Prism Sample ID: AB30168
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 11:58
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 08:29	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/21/99 08:29	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/21/99 08:29	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 08:29	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	5/21/99 08:29	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	5/21/99 08:29	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 08:29	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 08:29	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	5/21/99 08:29	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 08:29	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	5/21/99 08:29	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	5/21/99 08:29	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	5/21/99 08:29	DR2
MTBE	Not detected	ug/L	2.0	6230D	5/21/99 08:29	DR2
IPE	Not detected	ug/L	2.0	6230D	5/21/99 08:29	DR2

Sample Comments:

PO#: 9.6600698
Project name: NCDOT Pittsboro



Angela D. Overcash, Laboratory Director

Lab Report

6/2/99

Page 5 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW40-3
Prism Sample ID: AB30169
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 12:03
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	5/21/99 09:33	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	5/21/99 09:33	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	5/21/99 09:33	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	5/21/99 09:33	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	5/21/99 09:33	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
1,1-DICHLOROETHENE	25	ug/L	0.5	6230D	5/21/99 09:33	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	5/21/99 09:33	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
1,1-DICHLOROETHANE	7.6	ug/L	0.5	6230D	5/21/99 09:33	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
cis-1,2-DICHLOROETHENE	2.8	ug/L	0.5	6230D	5/21/99 09:33	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
1,1,1-TRICHLOROETHANE	120	ug/L	0.5	6230D	5/21/99 09:33	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
BENZENE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
TRICHLOROETHENE	90	ug/L	0.5	6230D	5/21/99 09:33	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
TETRACHLOROETHENE	2.2	ug/L	0.5	6230D	5/21/99 09:33	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	5/21/99 09:33	DR2
STYRENE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

Lab Report

6/2/99

Page 6 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW40-3
Prism Sample ID: AB30169
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 12:03
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 09:33	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/21/99 09:33	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/21/99 09:33	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 09:33	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	5/21/99 09:33	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	5/21/99 09:33	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 09:33	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 09:33	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	5/21/99 09:33	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 09:33	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	5/21/99 09:33	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	5/21/99 09:33	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	5/21/99 09:33	DR2
MTBE	Not detected	ug/L	2.0	6230D	5/21/99 09:33	DR2
IPE	Not detected	ug/L	2.0	6230D	5/21/99 09:33	DR2

Sample Comments:

PO#: 9.6600698

Project name: NCDOT Pittsboro



Angela D. Overcash, Laboratory Director

6/2/99

Page 7 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW50-1
Prism Sample ID: AB30170
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 13:55
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	5/21/99 10:33	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	5/21/99 10:33	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	5/21/99 10:33	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	5/21/99 10:33	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	5/21/99 10:33	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
1,1-DICHLOROETHENE	32	ug/L	0.5	6230D	5/21/99 10:33	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	5/21/99 10:33	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
1,1-DICHLOROETHANE	7.6	ug/L	0.5	6230D	5/21/99 10:33	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
cis-1,2-DICHLOROETHENE	2.6	ug/L	0.5	6230D	5/21/99 10:33	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
1,1,1-TRICHLOROETHANE	130	ug/L	0.5	6230D	5/21/99 10:33	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
BENZENE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
TRICHLOROETHENE	260	ug/L	0.5	6230D	5/21/99 10:33	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
TETRACHLOROETHENE	3.6	ug/L	0.5	6230D	5/21/99 10:33	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	5/21/99 10:33	DR2
STYRENE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

6/2/99

Page 8 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

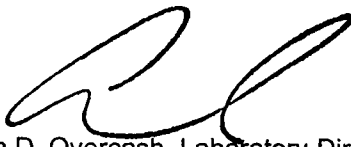
Customer Sample ID: SW50-1
Prism Sample ID: AB30170
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 13:55
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 10:33	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/21/99 10:33	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/21/99 10:33	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 10:33	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	5/21/99 10:33	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	5/21/99 10:33	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 10:33	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 10:33	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	5/21/99 10:33	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 10:33	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	5/21/99 10:33	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	5/21/99 10:33	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	5/21/99 10:33	DR2
MTBE	Not detected	ug/L	2.0	6230D	5/21/99 10:33	DR2
IPE	Not detected	ug/L	2.0	6230D	5/21/99 10:33	DR2

Sample Comments:

PO#: 9.6600698
Project name: NCDOT Pittsboro



Angela D. Overcash, Laboratory Director

6/2/99

Page 9 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW50-2
Prism Sample ID: AB30171
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 14:13
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	5/21/99 11:35	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	5/21/99 11:35	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	5/21/99 11:35	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	5/21/99 11:35	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	5/21/99 11:35	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
1,1-DICHLOROETHENE	33	ug/L	0.5	6230D	5/21/99 11:35	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	5/21/99 11:35	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
1,1-DICHLOROETHANE	6.4	ug/L	0.5	6230D	5/21/99 11:35	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
cis-1,2-DICHLOROETHENE	1.7	ug/L	0.5	6230D	5/21/99 11:35	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
1,1,1-TRICHLOROETHANE	120	ug/L	0.5	6230D	5/21/99 11:35	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
BENZENE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
TRICHLOROETHENE	210	ug/L	0.5	6230D	5/21/99 11:35	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
TETRACHLOROETHENE	4.5	ug/L	0.5	6230D	5/21/99 11:35	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	5/21/99 11:35	DR2
STYRENE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

Lab Report

6/2/99

Page 10 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW50-2
Prism Sample ID: AB30171
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 14:13
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 11:35	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/21/99 11:35	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/21/99 11:35	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 11:35	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	5/21/99 11:35	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	5/21/99 11:35	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 11:35	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/21/99 11:35	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	5/21/99 11:35	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	5/21/99 11:35	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	5/21/99 11:35	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	5/21/99 11:35	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	5/21/99 11:35	DR2
MTBE	Not detected	ug/L	2.0	6230D	5/21/99 11:35	DR2
IPE	Not detected	ug/L	2.0	6230D	5/21/99 11:35	DR2

Sample Comments:

PO#: 9.6600698
Project name: NCDOT Pittsboro



Angela D. Overcash, Laboratory Director

6/2/99

Page 11 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW50-3
Prism Sample ID: AB30172
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 14:26
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	5/28/99 11:21	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	5/28/99 11:21	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	5/28/99 11:21	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	5/28/99 11:21	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	5/28/99 11:21	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
1,1-DICHLOROETHENE	16	ug/L	0.5	6230D	5/28/99 11:21	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	5/28/99 11:21	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
1,1-DICHLOROETHANE	6.6	ug/L	0.5	6230D	5/28/99 11:21	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
cis-1,2-DICHLOROETHENE	1.8	ug/L	0.5	6230D	5/28/99 11:21	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
1,1,1-TRICHLOROETHANE	96	ug/L	0.5	6230D	5/28/99 11:21	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
BENZENE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
TRICHLOROETHENE	210	ug/L	0.5	6230D	5/28/99 11:21	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
TETRACHLOROETHENE	6.2	ug/L	0.5	6230D	5/28/99 11:21	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	5/28/99 11:21	DR2
STYRENE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

6/2/99

Page 12 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW50-3
Prism Sample ID: AB30172
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 14:26
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 11:21	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/28/99 11:21	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/28/99 11:21	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 11:21	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	5/28/99 11:21	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	5/28/99 11:21	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 11:21	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 11:21	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	5/28/99 11:21	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 11:21	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	5/28/99 11:21	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	5/28/99 11:21	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	5/28/99 11:21	DR2
MTBE	Not detected	ug/L	2.0	6230D	5/28/99 11:21	DR2
IPE	Not detected	ug/L	2.0	6230D	5/28/99 11:21	DR2

Sample Comments:

PO#: 9.6600698

Project name: NCDOT Pittsboro



Angela D. Overcash, Laboratory Director

Lab Report

6/2/99

Page 13 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW70-1
Prism Sample ID: AB30173
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 15:05
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	5/25/99 07:20	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	5/25/99 07:20	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	5/25/99 07:20	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	5/25/99 07:20	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	5/25/99 07:20	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
1,1-DICHLOROETHENE	44	ug/L	0.5	6230D	5/25/99 07:20	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	5/25/99 07:20	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
1,1-DICHLOROETHANE	7.7	ug/L	0.5	6230D	5/25/99 07:20	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
cis-1,2-DICHLOROETHENE	2.4	ug/L	0.5	6230D	5/25/99 07:20	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
1,1,1-TRICHLOROETHANE	170	ug/L	0.5	6230D	5/25/99 07:20	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
BENZENE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
TRICHLOROETHENE	1500	ug/L	0.5	6230D	5/25/99 07:20	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
TETRACHLOROETHENE	4.0	ug/L	0.5	6230D	5/25/99 07:20	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	5/25/99 07:20	DR2
STYRENE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

6/2/99

Page 14 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

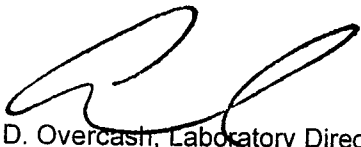
Customer Sample ID: SW70-1
Prism Sample ID: AB30173
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 15:05
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 07:20	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/25/99 07:20	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/25/99 07:20	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 07:20	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	5/25/99 07:20	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	5/25/99 07:20	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 07:20	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 07:20	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	5/25/99 07:20	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 07:20	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	5/25/99 07:20	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	5/25/99 07:20	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	5/25/99 07:20	DR2
MTBE	Not detected	ug/L	2.0	6230D	5/25/99 07:20	DR2
IPE	Not detected	ug/L	2.0	6230D	5/25/99 07:20	DR2

Sample Comments:

PO#: 9.6600698
Project name: NCDOT Pittsboro



Angela D. Overcash, Laboratory Director

6/2/99

Page 15 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW70-2
Prism Sample ID: AB30174
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 15:25
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	5/25/99 08:24	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	5/25/99 08:24	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	5/25/99 08:24	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	5/25/99 08:24	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	5/25/99 08:24	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
1,1-DICHLOROETHENE	26	ug/L	0.5	6230D	5/25/99 08:24	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	5/25/99 08:24	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
1,1-DICHLOROETHANE	8.1	ug/L	0.5	6230D	5/25/99 08:24	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
cis-1,2-DICHLOROETHENE	7.6	ug/L	0.5	6230D	5/25/99 08:24	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
1,1,1-TRICHLOROETHANE	180	ug/L	0.5	6230D	5/25/99 08:24	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
BENZENE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
TRICHLOROETHENE	780	ug/L	0.5	6230D	5/25/99 08:24	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
TETRACHLOROETHENE	10	ug/L	0.5	6230D	5/25/99 08:24	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	5/25/99 08:24	DR2
STYRENE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

6/2/99

Page 16 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW70-2
Prism Sample ID: AB30174
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 15:25
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 08:24	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/25/99 08:24	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/25/99 08:24	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 08:24	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	5/25/99 08:24	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	5/25/99 08:24	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 08:24	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 08:24	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	5/25/99 08:24	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 08:24	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	5/25/99 08:24	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	5/25/99 08:24	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	5/25/99 08:24	DR2
MTBE	Not detected	ug/L	2.0	6230D	5/25/99 08:24	DR2
IPE	Not detected	ug/L	2.0	6230D	5/25/99 08:24	DR2

Sample Comments:

PO#: 9.6600698
Project name: NCDOT Pittsboro



Angela D. Overcash, Laboratory Director

6/2/99

Page 17 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW70-3
Prism Sample ID: AB30175
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 15:40
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	5/25/99 09:27	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	5/25/99 09:27	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	5/25/99 09:27	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	5/25/99 09:27	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	5/25/99 09:27	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
1,1-DICHLOROETHENE	28	ug/L	0.5	6230D	5/25/99 09:27	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	5/25/99 09:27	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
1,1-DICHLOROETHANE	7.9	ug/L	0.5	6230D	5/25/99 09:27	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
cis-1,2-DICHLOROETHENE	5.1	ug/L	0.5	6230D	5/25/99 09:27	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
1,1,1-TRICHLOROETHANE	150	ug/L	0.5	6230D	5/25/99 09:27	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
BENZENE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
TRICHLOROETHENE	790	ug/L	0.5	6230D	5/25/99 09:27	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
TETRACHLOROETHENE	5.4	ug/L	0.5	6230D	5/25/99 09:27	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	5/25/99 09:27	DR2
STYRENE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

Lab Report

6/2/99

Page 18 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW70-3
Prism Sample ID: AB30175
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 15:40
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 09:27	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/25/99 09:27	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/25/99 09:27	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 09:27	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	5/25/99 09:27	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	5/25/99 09:27	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 09:27	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 09:27	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	5/25/99 09:27	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 09:27	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	5/25/99 09:27	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	5/25/99 09:27	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	5/25/99 09:27	DR2
MTBE	Not detected	ug/L	2.0	6230D	5/25/99 09:27	DR2
IPE	Not detected	ug/L	2.0	6230D	5/25/99 09:27	DR2

Sample Comments:

PO#: 9.6600698

Project name: NCDOT Pittsboro



Angela D. Overcash, Laboratory Director

6/2/99

Page 19 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW80-1
Prism Sample ID: AB30176
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 16:45
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	5/25/99 10:27	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	5/25/99 10:27	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	5/25/99 10:27	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	5/25/99 10:27	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	5/25/99 10:27	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
1,1-DICHLOROETHENE	18	ug/L	0.5	6230D	5/25/99 10:27	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	5/25/99 10:27	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
1,1-DICHLOROETHANE	8.5	ug/L	0.5	6230D	5/25/99 10:27	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
cis-1,2-DICHLOROETHENE	4.3	ug/L	0.5	6230D	5/25/99 10:27	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
1,1,1-TRICHLOROETHANE	150	ug/L	0.5	6230D	5/25/99 10:27	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
BENZENE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
TRICHLOROETHENE	350	ug/L	0.5	6230D	5/25/99 10:27	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
TETRACHLOROETHENE	5.6	ug/L	0.5	6230D	5/25/99 10:27	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	5/25/99 10:27	DR2
STYRENE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

6/2/99

Page 20 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: SW80-1
Prism Sample ID: AB30176
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 16:45
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 10:27	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/25/99 10:27	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/25/99 10:27	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 10:27	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	5/25/99 10:27	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	5/25/99 10:27	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 10:27	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/25/99 10:27	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	5/25/99 10:27	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	5/25/99 10:27	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	5/25/99 10:27	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	5/25/99 10:27	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	5/25/99 10:27	DR2
MTBE	Not detected	ug/L	2.0	6230D	5/25/99 10:27	DR2
IPE	Not detected	ug/L	2.0	6230D	5/25/99 10:27	DR2

Sample Comments:

PO#: 9.6600698
Project name: NCDOT Pittsboro



Angela D. Overcash, Laboratory Director

Lab Report

6/2/99

Page 21 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: DRUM#1
Prism Sample ID: AB30177
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 17:10
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	5/28/99 12:20	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	5/28/99 12:20	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	5/28/99 12:20	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	5/28/99 12:20	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	5/28/99 12:20	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	5/28/99 12:20	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
BENZENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
TOTAL XYLENES	2.3	ug/L	1.0	6230D	5/28/99 12:20	DR2
STYRENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

Lab Report

6/2/99

Page 22 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: DRUM#1
Prism Sample ID: AB30177
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 17:10
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
n-PROPYLBENZENE	3.7	ug/L	0.5	6230D	5/28/99 12:20	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 12:20	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/28/99 12:20	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/28/99 12:20	DR2
tert-BUTYLBENZENE	1.1	ug/L	0.5	6230D	5/28/99 12:20	DR2
1,2,4-TRIMETHYLBENZENE	4.3	ug/L	1.0	6230D	5/28/99 12:20	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	5/28/99 12:20	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	5/28/99 12:20	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 12:20	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 12:20	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	5/28/99 12:20	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 12:20	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	5/28/99 12:20	DR2
NAPHTHALENE	23	ug/L	1.0	6230D	5/28/99 12:20	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	5/28/99 12:20	DR2
MTBE	Not detected	ug/L	2.0	6230D	5/28/99 12:20	DR2
IPE	Not detected	ug/L	2.0	6230D	5/28/99 12:20	DR2

Sample Comments:

PO#: 9.6600698

Project name: NCDOT Pittsboro



Angela D. Overcash, Laboratory Director

6/2/99

Page 23 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: DRUM#3
Prism Sample ID: AB30178
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 17:15
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	5/28/99 04:59	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	5/28/99 04:59	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	5/28/99 04:59	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	5/28/99 04:59	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	5/28/99 04:59	DR2
TRICHLOROFUOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	5/28/99 04:59	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
BENZENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
TRICHLOROETHENE	6.1	ug/L	0.5	6230D	5/28/99 04:59	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	5/28/99 04:59	DR2
STYRENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

Lab Report

6/2/99

Page 24 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: DRUM#3
Prism Sample ID: AB30178
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 17:15
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 04:59	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/28/99 04:59	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/28/99 04:59	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 04:59	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	5/28/99 04:59	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	5/28/99 04:59	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 04:59	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 04:59	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	5/28/99 04:59	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 04:59	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	5/28/99 04:59	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	5/28/99 04:59	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	5/28/99 04:59	DR2
MTBE	Not detected	ug/L	2.0	6230D	5/28/99 04:59	DR2
IPE	Not detected	ug/L	2.0	6230D	5/28/99 04:59	DR2

Sample Comments:

PO#: 9.6600698

Project name: NCDOT Pittsboro



Angela D. Overcash, Laboratory Director

6/2/99

Page 25 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: DRUM#5
Prism Sample ID: AB30179
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 17:20
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	5/28/99 07:01	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	5/28/99 07:01	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	5/28/99 07:01	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	5/28/99 07:01	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	5/28/99 07:01	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	5/28/99 07:01	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
BENZENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	5/28/99 07:01	DR2
STYRENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

Lab Report

6/2/99

Page 26 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: DRUM#5
Prism Sample ID: AB30179
Login Group: 7169E14
Sample Collection Date/Time: 5/18/99 17:20
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 07:01	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/28/99 07:01	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/28/99 07:01	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 07:01	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	5/28/99 07:01	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	5/28/99 07:01	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 07:01	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 07:01	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	5/28/99 07:01	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 07:01	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	5/28/99 07:01	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	5/28/99 07:01	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	5/28/99 07:01	DR2
MTBE	Not detected	ug/L	2.0	6230D	5/28/99 07:01	DR2
IPE	Not detected	ug/L	2.0	6230D	5/28/99 07:01	DR2

Sample Comments:

PO#: 9.6600698

Project name: NCDOT Pittsboro



Angela D. Overcash, Laboratory Director

6/2/99

Page 27 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: TRIP BLANK
Prism Sample ID: AB30180
Login Group: 7169E14
Sample Collection Date/Time:
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	5/28/99 09:03	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	5/28/99 09:03	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	5/28/99 09:03	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	5/28/99 09:03	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	5/28/99 09:03	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	5/28/99 09:03	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
BENZENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	5/28/99 09:03	DR2
STYRENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

6/2/99

Page 28 of 28

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616
Project: NCDOT Pittsboro

Customer Sample ID: TRIP BLANK
Prism Sample ID: AB30180
Login Group: 7169E14
Sample Collection Date/Time:
Lab Submittal Date/Time: 5/20/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	Method Reference	Date/Time Started	Analyst
VOLATILE ORGANICS BY 6230D						
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 09:03	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/28/99 09:03	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	5/28/99 09:03	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 09:03	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	5/28/99 09:03	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	5/28/99 09:03	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 09:03	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/28/99 09:03	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	5/28/99 09:03	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	5/28/99 09:03	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	5/28/99 09:03	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	5/28/99 09:03	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	5/28/99 09:03	DR2
MTBE	Not detected	ug/L	2.0	6230D	5/28/99 09:03	DR2
IPE	Not detected	ug/L	2.0	6230D	5/28/99 09:03	DR2

Sample Comments:

PO#: 9.6600698
Project name: NCDOT Pittsboro



Angela D. Overcash, Laboratory Director

CHAIN OF CUSTODY RECORD

PAGE 1 OF 2 QUOTE

449 Springbrook Road ▲ Charlotte, NC 28217
 P.O. Box 240543 ▲ Charlotte, NC 28224-0543
 Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

1046-98-107

Client S+M+E Inc.
 Physical Address 3118 Spring Forest Rd.
Raleigh, NC 27616
 Phone 919-872-2600 Fax (919) 796-4827
 P.O./Billing Reference 9-6600698
 Project Name NC DOT Pitt. Co. 2

PRESS DOWN FIRMLY - 3 COPIES

REPORT TO: Name James Wilson
 Address State Field
 Name State Field Address NC DOT
 Address State Field
 Requested Due Date 1 week +

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

LAB USE ONLY

Sample INTACT upon arrival? YES NO
 Received ON WET ICE? Temp 23
 PROPER PRESERVATIVES indicated?
 Received WITHIN HOLDING TIMES?
 CUSTODY SEALS INTACT?
 VOLATILES rec'd W/OUT HEADSPACE?
 PROPER CONTAINERS used?

State Certification
 Requested NC ___ SC ___ Other ___ NA ___
 Water Chlorinated Yes ___ No ___ NA ___
 Sample Iced Upon Collection Yes ___ No ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED		REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
				*TYPE SEE BELOW	NO.	SIZE						
SW40-1	5/18/99	1150	Water	VDA	3	40	HCL					30167
SW40-2	5/18/99	1158	"	"	"	"	"					30168
SW40-3	5/18/99	1203	"	"	"	"	"					30169
SW50-1	5/18/99	1354	"	"	"	"	"					30170
SW50-2	5/18/99	1413	"	"	"	"	"					30171
SW50-3	5/18/99	1426	"	"	"	"	"					30172
SW70-1	5/18/99	1505	"	"	"	"	"					30173
SW70-2	5/18/99	1525	"	"	"	"	"					30174
SW70-3	5/18/99	1540	"	"	"	"	"					30175
SW80-1	5/18/99	1645	"	"	"	"	"					30176

Sampled By (Print Name) David V. Dry Affiliation S+M+E Inc.

Received By: (Signature) _____ Date _____ Military/Hours _____
 Received By: (Signature) _____ Date _____
 Received For Prism Laboratories By: _____ Date 5/19/99 Log-in Group No. 1045
 Method of Shipment Fed ex

NPDES NC ___ UST: NC ___ SC ___ OTHER ___
 GROUNDWATER: NC ___ SC ___ OTHER ___
 DRINKING WATER: NC ___ SC ___ OTHER ___
 SOLID WASTE: NC ___ SC ___ OTHER ___

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

CHAIN OF CUSTODY RECORD



Full Service Analytical & Environmental Solutions
 1040-48-107
 Client: SAME Inc.
 Physical Address: 3118 Spring Forest Rd.
Charlotte, NC 27716
 Phone: (704) 872-2666 Fax: (704) 791-9937
 P.O.#/Billing Reference: 9-6600698
 Project Name: NC DOT Purchase

PRESS DOWN FIRMLY - 3 COPIES

REPORT TO: Name James Wang
 Address 3118 Spring Forest Rd.
 Name James Wang
 Address Charlotte, NC DOT
 Requested Due Date 1/27/00

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

LAB USE ONLY

Samples intact upon arrival? YES NO

Received on wet ice? YES NO

PROPER PRESERVATIVES indicated? YES NO

Received WITHIN HOLDING TIMES? YES NO

CUSTODY SEALS INTACT? YES NO

VOLATILES rec'd W/OUT HEADSPACE? YES NO

PROPER CONTAINERS used? YES NO

State Certification Requested NC SC Other NA

Water Chlorinated Yes No NA

Sample Iced Upon Collection Yes No

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER		PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
				TYPE SEE BELOW	NO. SIZE					
Drum #1	5/18/99	1710	Water	VOA	3 40	HCl	62300			30177
Drum #3	5/18/99	1715	"	"	" "	"				30178
Drum #5	5/18/99	1720	"	"	" "	"				30179
Trip Blank	-	-	"	"	" "	"				30180

Sampler's Signature David V. Dry Sampled By (Print Name) David V. Dry Affiliation SAME Inc.

Relinquished By: (Signature) _____ Date _____ Military/Hours _____

Received By: (Signature) _____ Date _____

Received For Prism Laboratories By: _____ Date 5/18/99 Log-in Group No. 7167414

Method of Shipment Fed Ex

Additional Comments _____

PDES NC SC OTHER UST: NC SC OTHER GROUNDWATER: NC SC OTHER DRINKING WATER: NC SC OTHER SOLID WASTE: NC SC OTHER

CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

Lab Report

Residential



7/14/99

Page 1 of 4

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: Project: NCDOT Pittsboro
Customer Sample ID: HEATHERLY
Prism Sample ID: AB33062
Login Group: 7969E2

Sample Collection Date/Time: 6/17/99 11:00
Lab Submittal Date/Time: 6/18/99 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	6/28/99 09:04	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	6/28/99 09:04	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	6/28/99 09:04	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	6/28/99 09:04	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	6/28/99 09:04	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	6/28/99 09:04	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
BENZENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	6/28/99 09:04	DR2
STYRENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/529-0400

Lab Report

7/14/99

Page 2 of 4

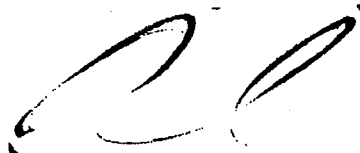
James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: Project: NCDOT Pittsboro
Customer Sample ID: HEATHERLY
Prism Sample ID: AB33062
Login Group: 7969E2
Sample Collection Date/Time: 6/17/99 11:00
Lab Submittal Date/Time: 6/18/99 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	6/28/99 09:04	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	6/28/99 09:04	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	6/28/99 09:04	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	6/28/99 09:04	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	6/28/99 09:04	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	6/28/99 09:04	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	6/28/99 09:04	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 09:04	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	6/28/99 09:04	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	6/28/99 09:04	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	6/28/99 09:04	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	6/28/99 09:04	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	6/28/99 09:04	DR2
MTBE	Not detected	ug/L	2.0	6230D	6/28/99 09:04	DR2
IPE	Not detected	ug/L	2.0	6230D	6/28/99 09:04	DR2

Sample Comments:



Angela D. Overcash, V.P. Laboratory Services

Lab Report

7/14/99

Page 3 of 4

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: Project: NCDOT Pittsboro
Customer Sample ID: MITCHEL
Prism Sample ID: AB33063
Login Group: 7969E2
Sample Collection Date/Time: 6/17/99 11:20
Lab Submittal Date/Time: 6/18/99 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	6/28/99 10:04	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	6/28/99 10:04	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	6/28/99 10:04	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	6/28/99 10:04	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	6/28/99 10:04	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	6/28/99 10:04	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
BENZENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	6/28/99 10:04	DR2
STYRENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

Lab Report

7/14/99

Page 4 of 4

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: Project: NCDOT Pittsboro
Customer Sample ID: MITCHEL
Prism Sample ID: AB33063
Login Group: 7969E2
Sample Collection Date/Time: 6/17/99 11:20
Lab Submittal Date/Time: 6/18/99 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	6/28/99 10:04	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	6/28/99 10:04	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	6/28/99 10:04	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	6/28/99 10:04	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	6/28/99 10:04	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	6/28/99 10:04	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	6/28/99 10:04	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	6/28/99 10:04	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	6/28/99 10:04	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	6/28/99 10:04	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	6/28/99 10:04	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	6/28/99 10:04	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	6/28/99 10:04	DR2
MTBE	Not detected	ug/L	2.0	6230D	6/28/99 10:04	DR2
IPE	Not detected	ug/L	2.0	6230D	6/28/99 10:04	DR2

Sample Comments:



Angela D. Overcash, V.P. Laboratory Services

DW-3

8/3/99

Page 1 of 14

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Site 6-48(Lee Pa)
Customer Sample ID: DW-3 115
Prism Sample ID: AB37272
Login Group: AO83E7
Sample Collection Date/Time: 7/28/99 14:51
Lab Submittal Date/Time: 7/30/99 11:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	8/2/99 20:44	PLE
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	8/2/99 20:44	PLE
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	8/2/99 20:44	PLE
BROMOMETHANE	Not detected	ug/L	2.0	6230D	8/2/99 20:44	PLE
CHLOROETHANE	Not detected	ug/L	2.0	6230D	8/2/99 20:44	PLE
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	8/2/99 20:44	PLE
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
CHLOROFORM	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,1,1-TRICHLOROETHANE	5.9	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
BENZENE	1.2	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
TRICHLOROETHENE	24	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
TOLUENE	23	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	8/2/99 20:44	PLE
STYRENE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

Lab Report

8/3/99

Page 2 of 14

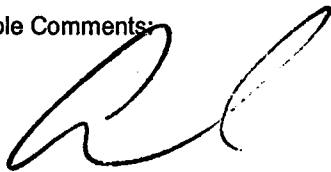
James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Site 6-48(Lee Pa
Customer Sample ID: DW-3 115
Prism Sample ID: AB37272
Login Group: AO83E7
Sample Collection Date/Time: 7/28/99 14:51
Lab Submittal Date/Time: 7/30/99 11:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
BROMOFORM	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
BROMOBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	8/2/99 20:44	PLE
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	8/2/99 20:44	PLE
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	8/2/99 20:44	PLE
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	8/2/99 20:44	PLE
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	8/2/99 20:44	PLE
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	8/2/99 20:44	PLE
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	8/2/99 20:44	PLE
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 20:44	PLE
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	8/2/99 20:44	PLE
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	8/2/99 20:44	PLE
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	8/2/99 20:44	PLE
NAPHTHALENE	Not detected	ug/L	1.0	6230D	8/2/99 20:44	PLE
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	8/2/99 20:44	PLE
MTBE	9.2	ug/L	2.0	6230D	8/2/99 20:44	PLE
IPE	Not detected	ug/L	2.0	6230D	8/2/99 20:44	PLE

Sample Comments:



Angela D. Overcash, V.P. Laboratory Services

8/3/99

Page 3 of 14

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Site 6-48(Lee Pa
Customer Sample ID: DW-3 90
Prism Sample ID: AB37273
Login Group: AO83E7
Sample Collection Date/Time: 7/28/99 16:00
Lab Submittal Date/Time: 7/30/99 11:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	8/3/99 05:54	PLE
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	8/3/99 05:54	PLE
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	8/3/99 05:54	PLE
BROMOMETHANE	Not detected	ug/L	2.0	6230D	8/3/99 05:54	PLE
CHLOROETHANE	Not detected	ug/L	2.0	6230D	8/3/99 05:54	PLE
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	8/3/99 05:54	PLE
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
CHLOROFORM	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,1,1-TRICHLOROETHANE	6.3	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
BENZENE	2.0	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
TRICHLOROETHENE	22	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
TOLUENE	24	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	8/3/99 05:54	PLE
STYRENE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

8/3/99

Page 4 of 14

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Site 6-48(Lee Pa
Customer Sample ID: DW-3 90
Prism Sample ID: AB37273
Login Group: AO83E7
Sample Collection Date/Time: 7/28/99 16:00
Lab Submittal Date/Time: 7/30/99 11:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
BROMOFORM	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
BROMOBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 05:54	PLE
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	8/3/99 05:54	PLE
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	8/3/99 05:54	PLE
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 05:54	PLE
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	8/3/99 05:54	PLE
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	8/3/99 05:54	PLE
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 05:54	PLE
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 05:54	PLE
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	8/3/99 05:54	PLE
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 05:54	PLE
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	8/3/99 05:54	PLE
NAPHTHALENE	Not detected	ug/L	1.0	6230D	8/3/99 05:54	PLE
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	8/3/99 05:54	PLE
MTBE	19	ug/L	2.0	6230D	8/3/99 05:54	PLE
IPE	Not detected	ug/L	2.0	6230D	8/3/99 05:54	PLE

Sample Comments:



Angela D. Overcash, V.P. Laboratory Services

8/3/99

Page 5 of 14

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Site 6-48(Lee Pa)
Customer Sample ID: DW-3 68
Prism Sample ID: AB37274
Login Group: AO83E7
Sample Collection Date/Time: 7/28/99 17:00
Lab Submittal Date/Time: 7/30/99 11:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	8/3/99 03:52	PLE
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	8/3/99 03:52	PLE
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	8/3/99 03:52	PLE
BROMOMETHANE	Not detected	ug/L	2.0	6230D	8/3/99 03:52	PLE
CHLOROETHANE	Not detected	ug/L	2.0	6230D	8/3/99 03:52	PLE
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	8/3/99 03:52	PLE
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
CHLOROFORM	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,1,1-TRICHLOROETHANE	0.84	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
BENZENE	1.2	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
TRICHLOROETHENE	7.4	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
TOLUENE	11	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	8/3/99 03:52	PLE
STYRENE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

8/3/99

Page 6 of 14

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Site 6-48(Lee Pa
Customer Sample ID: DW-3 68
Prism Sample ID: AB37274
Login Group: AO83E7
Sample Collection Date/Time: 7/28/99 17:00
Lab Submittal Date/Time: 7/30/99 11:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
BROMOFORM	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
BROMOBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 03:52	PLE
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	8/3/99 03:52	PLE
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	8/3/99 03:52	PLE
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 03:52	PLE
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	8/3/99 03:52	PLE
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	8/3/99 03:52	PLE
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 03:52	PLE
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 03:52	PLE
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	8/3/99 03:52	PLE
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 03:52	PLE
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	8/3/99 03:52	PLE
NAPHTHALENE	Not detected	ug/L	1.0	6230D	8/3/99 03:52	PLE
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	8/3/99 03:52	PLE
MTBE	22	ug/L	2.0	6230D	8/3/99 03:52	PLE
IPE	Not detected	ug/L	2.0	6230D	8/3/99 03:52	PLE

Sample Comments:



Angela D. Overcash, V.P. Laboratory Services

8/3/99

Page 7 of 14

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Site 6-48(Lee Pa
Customer Sample ID: DW-3 28
Prism Sample ID: AB37275
Login Group: AO83E7
Sample Collection Date/Time: 7/28/99 18:00
Lab Submittal Date/Time: 7/30/99 11:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	8/3/99 01:49	PLE
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	8/3/99 01:49	PLE
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	8/3/99 01:49	PLE
BROMOMETHANE	Not detected	ug/L	2.0	6230D	8/3/99 01:49	PLE
CHLOROETHANE	Not detected	ug/L	2.0	6230D	8/3/99 01:49	PLE
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,1-DICHLOROETHENE	0.68	ug/L	0.5	6230D	8/3/99 01:49	PLE
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	8/3/99 01:49	PLE
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,1-DICHLOROETHANE	0.89	ug/L	0.5	6230D	8/3/99 01:49	PLE
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
CHLOROFORM	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,1,1-TRICHLOROETHANE	17	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
BENZENE	1.8	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
TRICHLOROETHENE	90	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
TOLUENE	19	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	8/3/99 01:49	PLE
STYRENE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

8/3/99

Page 8 of 14


James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Site 6-48(Lee Pa
Customer Sample ID: DW-3 28
Prism Sample ID: AB37275
Login Group: AO83E7
Sample Collection Date/Time: 7/28/99 18:00
Lab Submittal Date/Time: 7/30/99 11:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
BROMOFORM	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
BROMOBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 01:49	PLE
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	8/3/99 01:49	PLE
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	8/3/99 01:49	PLE
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 01:49	PLE
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	8/3/99 01:49	PLE
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	8/3/99 01:49	PLE
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 01:49	PLE
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 01:49	PLE
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	8/3/99 01:49	PLE
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 01:49	PLE
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	8/3/99 01:49	PLE
NAPHTHALENE	Not detected	ug/L	1.0	6230D	8/3/99 01:49	PLE
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	8/3/99 01:49	PLE
MTBE	9.5	ug/L	2.0	6230D	8/3/99 01:49	PLE
IPE	Not detected	ug/L	2.0	6230D	8/3/99 01:49	PLE

Sample Comments:



Angela D. Overcash, V.P. Laboratory Services

8/3/99

Page 9 of 14

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Site 6-48(Lee Pa
Customer Sample ID: TRIP BLANK
Prism Sample ID: AB37276
Login Group: AO83E7
Sample Collection Date/Time: 7/28/99 13:50
Lab Submittal Date/Time: 7/30/99 11:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	8/3/99 00:48	PLE
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	8/3/99 00:48	PLE
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	8/3/99 00:48	PLE
BROMOMETHANE	Not detected	ug/L	2.0	6230D	8/3/99 00:48	PLE
CHLOROETHANE	Not detected	ug/L	2.0	6230D	8/3/99 00:48	PLE
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	8/3/99 00:48	PLE
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
CHLOROFORM	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
BENZENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
TOLUENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	8/3/99 00:48	PLE
STYRENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

Lab Report

8/3/99

Page 10 of 14

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Site 6-48(Lee Pa
Customer Sample ID: TRIP BLANK
Prism Sample ID: AB37276
Login Group: AO83E7
Sample Collection Date/Time: 7/28/99 13:50
Lab Submittal Date/Time: 7/30/99 11:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
BROMOFORM	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
BROMOBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 00:48	PLE
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	8/3/99 00:48	PLE
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	8/3/99 00:48	PLE
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 00:48	PLE
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	8/3/99 00:48	PLE
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	8/3/99 00:48	PLE
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 00:48	PLE
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/3/99 00:48	PLE
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	8/3/99 00:48	PLE
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	8/3/99 00:48	PLE
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	8/3/99 00:48	PLE
NAPHTHALENE	Not detected	ug/L	1.0	6230D	8/3/99 00:48	PLE
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	8/3/99 00:48	PLE
MTBE	Not detected	ug/L	2.0	6230D	8/3/99 00:48	PLE
IPE	Not detected	ug/L	2.0	6230D	8/3/99 00:48	PLE

Sample Comments:



Angela D. Overcash, V.P. Laboratory Services

8/3/99

Page 11 of 14

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Site 6-48(Lee Pa
Customer Sample ID: DW-3 215
Prism Sample ID: AB37277
Login Group: AO83E7
Sample Collection Date/Time: 7/29/99 10:10
Lab Submittal Date/Time: 7/30/99 11:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	8/2/99 23:46	PLE
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	8/2/99 23:46	PLE
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	8/2/99 23:46	PLE
BROMOMETHANE	Not detected	ug/L	2.0	6230D	8/2/99 23:46	PLE
CHLOROETHANE	Not detected	ug/L	2.0	6230D	8/2/99 23:46	PLE
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	8/2/99 23:46	PLE
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
CHLOROFORM	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
BENZENE	2.4	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
TRICHLOROETHENE	2.1	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
TOLUENE	13	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	8/2/99 23:46	PLE
STYRENE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

8/3/99

Page 12 of 14

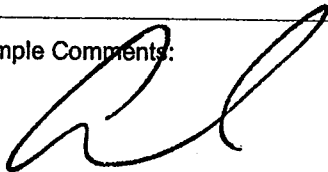
James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Site 6-48(Lee Pa
Customer Sample ID: DW-3 215
Prism Sample ID: AB37277
Login Group: AO83E7
Sample Collection Date/Time: 7/29/99 10:10
Lab Submittal Date/Time: 7/30/99 11:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
BROMOFORM	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
BROMOBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	8/2/99 23:46	PLE
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	8/2/99 23:46	PLE
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	8/2/99 23:46	PLE
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	8/2/99 23:46	PLE
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	8/2/99 23:46	PLE
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	8/2/99 23:46	PLE
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	8/2/99 23:46	PLE
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 23:46	PLE
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	8/2/99 23:46	PLE
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	8/2/99 23:46	PLE
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	8/2/99 23:46	PLE
NAPHTHALENE	Not detected	ug/L	1.0	6230D	8/2/99 23:46	PLE
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	8/2/99 23:46	PLE
MTBE	38	ug/L	2.0	6230D	8/2/99 23:46	PLE
IPE	Not detected	ug/L	2.0	6230D	8/2/99 23:46	PLE

Sample Comments:



Angela D. Overcash, V.P. Laboratory Services

8/3/99

Page 13 of 14

James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Site 6-48(Le Pa
Customer Sample ID: DW-3 290
Prism Sample ID: AB37278
Login Group: AO83E7
Sample Collection Date/Time: 7/29/99 12:07
Lab Submittal Date/Time: 7/30/99 11:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	8/2/99 21:45	PLE
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	8/2/99 21:45	PLE
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	8/2/99 21:45	PLE
BROMOMETHANE	Not detected	ug/L	2.0	6230D	8/2/99 21:45	PLE
CHLOROETHANE	Not detected	ug/L	2.0	6230D	8/2/99 21:45	PLE
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	8/2/99 21:45	PLE
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
CHLOROFORM	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
BENZENE	3.3	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
TRICHLOROETHENE	5.4	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
TOLUENE	28	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	8/2/99 21:45	PLE
STYRENE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

8/3/99

Page 14 of 14


James Wang
S & ME, Inc.
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Site 6-48(Lee Pa
Customer Sample ID: DW-3 290
Prism Sample ID: AB37278
Login Group: AO83E7
Sample Collection Date/Time: 7/29/99 12:07
Lab Submittal Date/Time: 7/30/99 11:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
BROMOFORM	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
BROMOBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	8/2/99 21:45	PLE
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	8/2/99 21:45	PLE
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	8/2/99 21:45	PLE
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	8/2/99 21:45	PLE
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	8/2/99 21:45	PLE
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	8/2/99 21:45	PLE
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	8/2/99 21:45	PLE
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	8/2/99 21:45	PLE
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	8/2/99 21:45	PLE
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	8/2/99 21:45	PLE
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	8/2/99 21:45	PLE
NAPHTHALENE	Not detected	ug/L	1.0	6230D	8/2/99 21:45	PLE
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	8/2/99 21:45	PLE
MTBE	19	ug/L	2.0	6230D	8/2/99 21:45	PLE
IPE	Not detected	ug/L	2.0	6230D	8/2/99 21:45	PLE

Sample Comments:



Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

Client S&ME

Physical Address 3118 SPRING FOREST ROAD,
RALEIGH NC 27616
Phone (919) 892-2660 Fax (919) 790-9927
P.O.#/Billing Reference 9.66.00698
Project Name NC DOT ASPHALT SITE 6-48 (LEE PAVING)

PRESS DOWN FIRMLY - 3 COPIES

REPORT TO: Name JAMES WANG
Address S&ME - RALEIGH
BILL TO: Name NC DOT
Address NC DOT

Requested Due Date 7/27/99
(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

LAB USE ONLY

Samples INTACT upon arrival? 4.0
 Received ON WET ICE? Temp 4.0
 PROPER PRESERVATIVES indicated?
 Received WITHIN HOLDING TIMES?
 CUSTODY SEALS INTACT?
 VOLATILES rec'd W/OUT HEADSPACE?
 PROPER CONTAINERS used?

Slate Certification Requested SC Other NA
 Water Chlorinated Yes No NA
 Sample Iced Upon Collection Yes No No

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
				TYPE SEE BELOW	NO.	SIZE					
DW-3 115	7/28/99	1451	H ₂ O	10A	3	40 ml.	HCl		72 HOUR		372
DW-3 90		1600							TURN-		372
DW-3 68		1700							AROUND!		372
DW-3 28		1800									372
TRIP BLANK		1350									372
DW-3 215	7/29/99	1010									372
DW-3 290		1207									372

Sampler's Signature Ken P. Courneigan Sampled By (Print Name) Ken P. Courneigan Affiliation S&ME

Relinquished By: (Signature) [Signature] Received By: (Signature) [Signature] Date 7/29/99 Military/Hours 7:45

Relinquished By: (Signature) [Signature] Received By: (Signature) [Signature] Date 7/29/99 Military/Hours 7:45

Relinquished By: (Signature) [Signature] Received By: (Signature) [Signature] Date 7/29/99 Military/Hours 7:45

Method of Shipment Log-In Group No. F30791145
ACB3E7

Additional Comments *Rec'd extra vials. MK

NPDES NC SC UST: NC SC GROUNDWATER: NC SC DRINKING WATER: NC SC SOLID WASTE: NC SC OTHER: NC SC

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

Lab Report



Full Service Analytical & Environmental Solutions

10/14/99

Page 1 of 6

S&ME, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Pittsboro

Customer Sample ID: HOLLOWAY

Prism Sample ID: AB42613

Login Group: 1675F2

Sample Collection Date/Time: 9/21/99 14:30

Lab Submittal Date/Time: 9/22/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	10/5/99 05:56	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	10/5/99 05:56	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	10/5/99 05:56	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	10/5/99 05:56	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	10/5/99 05:56	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	10/5/99 05:56	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
BENZENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2

Lab Report



Full Service Analytical & Environmental Solutions

10/14/99

Page 2 of 6

S&ME, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Pittsboro
Customer Sample ID: HOLLOWAY
Prism Sample ID: AB42613
Login Group: 1675F2
Sample Collection Date/Time: 9/21/99 14:30
Lab Submittal Date/Time: 9/22/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	10/5/99 05:56	DR2
STYRENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	2.0	6230D	10/5/99 05:56	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	10/5/99 05:56	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	10/5/99 05:56	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	10/5/99 05:56	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	10/5/99 05:56	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	10/5/99 05:56	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	10/5/99 05:56	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	10/5/99 05:56	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 05:56	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	10/5/99 05:56	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	10/5/99 05:56	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	10/5/99 05:56	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	10/5/99 05:56	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	10/5/99 05:56	DR2
MTBE	Not detected	ug/L	2.0	6230D	10/5/99 05:56	DR2
IPE	Not detected	ug/L	2.0	6230D	10/5/99 05:56	DR2

Lab Report



PRISM
LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

10/14/99

Page 3 of 6

S&ME, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Pittsboro
Customer Sample ID: HOLLOWAY
Prism Sample ID: AB42613
Login Group: 1675F2
Sample Collection Date/Time: 9/21/99 14:30
Lab Submittal Date/Time: 9/22/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
-------------------	----------------	-------	-----	---------------------	----------------------	---------

Sample Comments:

NCDOT # 9.6600698

Angela D. Overcash, V.P. Laboratory Services

Lab Report



PRISM
LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

10/14/99

Page 4 of 6

S&ME, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Pittsboro
Customer Sample ID: TRIP BLANK
Prism Sample ID: AB42614
Login Group: 1675F2
Sample Collection Date/Time: 9/21/99
Lab Submittal Date/Time: 9/22/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	1.0	6230D	10/5/99 07:00	DR2
CHLOROMETHANE	Not detected	ug/L	2.0	6230D	10/5/99 07:00	DR2
VINYL CHLORIDE	Not detected	ug/L	1.0	6230D	10/5/99 07:00	DR2
BROMOMETHANE	Not detected	ug/L	2.0	6230D	10/5/99 07:00	DR2
CHLOROETHANE	Not detected	ug/L	2.0	6230D	10/5/99 07:00	DR2
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
METHYLENE CHLORIDE	Not detected	ug/L	5.0	6230D	10/5/99 07:00	DR2
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
CHLOROFORM	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
BENZENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
TOLUENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2

Lab Report

10/14/99

Page 5 of 6

S&ME, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Pittsboro
Customer Sample ID: TRIP BLANK
Prism Sample ID: AB42614
Login Group: 1675F2
Sample Collection Date/Time: 9/21/99
Lab Submittal Date/Time: 9/22/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
TOTAL XYLENES	Not detected	ug/L	1.0	6230D	10/5/99 07:00	DR2
STYRENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
BROMOFORM	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	2.0	6230D	10/5/99 07:00	DR2
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
BROMOBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	10/5/99 07:00	DR2
2-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	10/5/99 07:00	DR2
4-CHLOROTOLUENE	Not detected	ug/L	2.0	6230D	10/5/99 07:00	DR2
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	1.0	6230D	10/5/99 07:00	DR2
sec-BUTYLBENZENE	Not detected	ug/L	5.0	6230D	10/5/99 07:00	DR2
p-ISOPROPYLTOLUENE	Not detected	ug/L	5.0	6230D	10/5/99 07:00	DR2
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
n-BUTYLBENZENE	Not detected	ug/L	1.0	6230D	10/5/99 07:00	DR2
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	10/5/99 07:00	DR2
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5.0	6230D	10/5/99 07:00	DR2
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	1.0	6230D	10/5/99 07:00	DR2
HEXACHLOROBUTADIENE	Not detected	ug/L	1.0	6230D	10/5/99 07:00	DR2
NAPHTHALENE	Not detected	ug/L	1.0	6230D	10/5/99 07:00	DR2
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	5.0	6230D	10/5/99 07:00	DR2
MTBE	Not detected	ug/L	2.0	6230D	10/5/99 07:00	DR2
IPE	Not detected	ug/L	2.0	6230D	10/5/99 07:00	DR2

Lab Report



10/14/99

Page 6 of 6

S&ME, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: NCDOT Asphalt Pittsboro
Customer Sample ID: TRIP BLANK
Prism Sample ID: AB42614
Login Group: 1675F2
Sample Collection Date/Time: 9/21/99
Lab Submittal Date/Time: 9/22/99 10:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
-------------------	----------------	-------	-----	---------------------	----------------------	---------

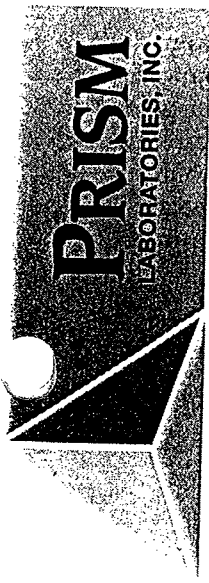
Sample Comments:

NCDOT # 9.6600698

A handwritten signature in black ink, appearing to read "Angela D. Overcash", is written over the signature line of the table.

Angela D. Overcash, V.P. Laboratory Services

CHAIN OF CUSTODY RECORD



Full Service Analytical & Environmental Solutions
 Client: S & M E, Inc.

Physical Address: 3118 Spring Forest Rd.
 Phone: 919-273-2660 Fax: 919-790-9827
 P.O.#/Billing Reference: NC07 9.6600698
 Project Name: NC DOT Asphalt - Pittsboro

PRESS DOWN FIRMLY - 3 COPIES

REPORT TO: Name: James Wang (S & M E)
 Address: 3118 Spring Forest Rd
 BILL TO: Name: NC DOT
 Address: _____
 Requested Due Date: _____

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

LAB USE ONLY

Samples INTACT upon arrival? Y YES NO N/A
 Received ON WET ICE? Temp _____
 PROPER PRESERVATIVES indicated?
 Received WITHIN HOLDING TIMES?
 CUSTODY SEALS INTACT?
 VOLATILES rec'd W/OUT HEADSPACE?
 PROPER CONTAINERS used?

State Certification Requested NC SC _____ Other NA
 Water Chlorinated Yes _____ No NA
 Sample Iced Upon Collection Yes No _____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER		PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
				*TYPE SEE BELOW	NO. SIZE					
<u>Holloway</u>	<u>9/21/99</u>	<u>1430</u>	<u>Water</u>	<u>VOA</u>	<u>3 40 ml</u>	<u>Hcl</u>	<u>62307</u>			
<u>Top Blank</u>					<u>2 "</u>	<u>"</u>				

Sampler's Signature: James Wang Sampled By (Print Name): James Wang Affiliation: S & M E, Inc.

Received By: (Signature) James Wang Date: 9/21/99 Military/Hours: 1800

Received By: (Signature) Fed Ex Date: _____

Received For Prism Laboratories By: [Signature] Date: 10/27/01 Log-in Group No: 161512

Method of Shipment: _____ Additional Comments: _____

PDES NC _____ UST: _____ GROUNDWATER: NC SC _____ DRINKING WATER: NC _____ SOLID WASTE: NC _____
 OTHER: _____ OTHER: _____ OTHER: _____

CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

3/8/00

Page 1 of 12

S&ME, Inc
Attn: James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: Lee Paving 9.6600698
Customer Sample ID: UPSTREAM
Prism Sample ID: AB59222
Login Group: 7064F4
Sample Collection Date/Time: 2/21/00 10:45
Lab Submittal Date/Time: 2/22/00 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
TRICHLOROFUOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
BENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
TOLUENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

3/8/00

Page 2 of 12

S&ME, Inc
Attn: James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: Lee Paving 9.6600698
Customer Sample ID: UPSTREAM
Prism Sample ID: AB59222
Login Group: 7064F4
Sample Collection Date/Time: 2/21/00 10:45
Lab Submittal Date/Time: 2/22/00 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
STYRENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
sec-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
n-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
NAPHTHALENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
MTBE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB
IPE	Not detected	ug/L	0.5	6230D	3/6/00 06:23	CMB

3/8/00

Page 3 of 12

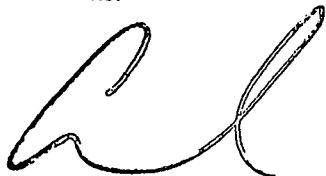
S&ME, Inc
Attn: James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: Lee Paving 9.6600698
Customer Sample ID: UPSTREAM
Prism Sample ID: AB59222
Login Group: 7064F4
Sample Collection Date/Time: 2/21/00 10:45
Lab Submittal Date/Time: 2/22/00 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
-------------------	----------------	-------	-----	---------------------	----------------------	---------

Sample Comments:



Angela D. Overcash, V.P., Laboratory Services

3/8/00

Page 4 of 12

S&ME, Inc
Attn: James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: Lee Paving 9.6600698
Customer Sample ID: DOWNSTREAM
Prism Sample ID: AB59223
Login Group: 7064F4
Sample Collection Date/Time: 2/21/00 11:10
Lab Submittal Date/Time: 2/22/00 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
TRICHLOROFUOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
BENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
TOLUENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB

3/8/00

Page 5 of 12

S&ME, Inc
Attn: James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: Lee Paving 9.6600698
Customer Sample ID: DOWNSTREAM
Prism Sample ID: AB59223
Login Group: 7064F4
Sample Collection Date/Time: 2/21/00 11:10
Lab Submittal Date/Time: 2/22/00 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
STYRENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
sec-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
n-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
NAPHTHALENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
MTBE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB
IPE	Not detected	ug/L	0.5	6230D	3/6/00 04:33	CMB

Lab Report

3/8/00

Page 6 of 12

S&ME, Inc
Attn: James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: Lee Paving 9.6600698
Customer Sample ID: DOWNSTREAM
Prism Sample ID: AB59223
Login Group: 7064F4
Sample Collection Date/Time: 2/21/00 11:10
Lab Submittal Date/Time: 2/22/00 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
-------------------	----------------	-------	-----	---------------------	----------------------	---------

Sample Comments:



Angela D. Overcash, V.P. Laboratory Services

Lab Report

3/8/00

Page 7 of 12

S&ME, Inc
Attn: James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: Lee Paving 9.6600698
Customer Sample ID: MIDSTREAM
Prism Sample ID: AB59224
Login Group: 7064F4
Sample Collection Date/Time: 2/21/00 11:25
Lab Submittal Date/Time: 2/22/00 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
BENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
TRICHLOROETHENE	2.0	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
TOLUENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB

3/8/00

Page 8 of 12

S&ME, Inc
Attn: James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: Lee Paving 9.6600698
Customer Sample ID: MIDSTREAM
Prism Sample ID: AB59224
Login Group: 7064F4
Sample Collection Date/Time: 2/21/00 11:25
Lab Submittal Date/Time: 2/22/00 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
STYRENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
sec-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
n-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
NAPHTHALENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
MTBE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB
IPE	Not detected	ug/L	0.5	6230D	3/6/00 05:28	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification N. E87519

Lab Report

3/8/00

Page 9 of 12

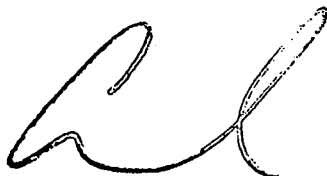
S&ME, Inc
Attn: James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: Lee Paving 9.6600698
Customer Sample ID: MIDSTREAM
Prism Sample ID: AB59224
Login Group: 7064F4
Sample Collection Date/Time: 2/21/00 11:25
Lab Submittal Date/Time: 2/22/00 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
-------------------	----------------	-------	-----	---------------------	----------------------	---------

Sample Comments:



Angela D. Overcash, V.P. Laboratory Services

3/8/00

Page 10 of 12

S&ME, Inc
 Attn: James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: Lee Paving 9.6600698
 Customer Sample ID: TRIP BLANK
 Prism Sample ID: AB59225
 Login Group: 7064F4
 Sample Collection Date/Time: 2/21/00
 Lab Submittal Date/Time: 2/22/00 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
BENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
TOLUENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB



3/8/00

Page 11 of 12

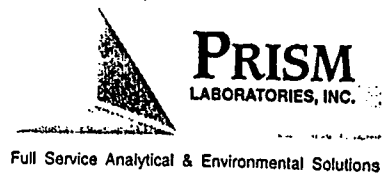
S&ME, Inc
Attn: James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: Lee Paving 9.6600698
Customer Sample ID: TRIP BLANK
Prism Sample ID: AB59225
Login Group: 7064F4
Sample Collection Date/Time: 2/21/00
Lab Submittal Date/Time: 2/22/00 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
STYRENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
sec-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
n-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
NAPHTHALENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
MTBE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB
IPE	Not detected	ug/L	0.5	6230D	3/7/00 07:20	CMB

Lab Report



3/8/00

Page 12 of 12

S&ME, Inc

Customer Project ID: Lee Paving 9.6600698

Attn: James Wang

Customer Sample ID: TRIP BLANK

3118 Spring Forest Road

Prism Sample ID: AB59225

Raleigh, NC 27616

Login Group: 7064F4

Sample Collection Date/Time: 2/21/00

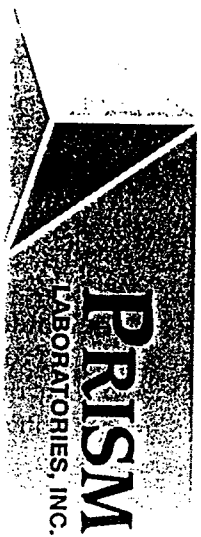
Lab Submittal Date/Time: 2/22/00 10:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
-------------------	----------------	-------	-----	---------------------	----------------------	---------

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services



Full Service Analytical & Environmental Solutions

449 Springbrook Road ▲ Charlotte, NC 28217
 P.O. Box 240543 ▲ Charlotte, NC 28224-0543
 Phone: 704/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE 1 OF QUOTE #

PRESS DOWN FIRMLY - 3 COPIES

Client: State of North Carolina
 Physical Address: 1000 ...

Phone: 704/529-6364 Fax: 704/525-0409
 P.O.#/Billing Reference: 240543
 Project Name: ...

REPORT TO: Name: ... Address: ...
 BILL TO: Name: ... Address: ...
 Requested Due Date: ...

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested: NC SC Other NA
 Water Chlorinated: Yes No NA
 Sample Iced Upon Collection: Yes No

LAB USE ONLY

Samples INTACT upon arrival? YES NO NA
 Received ON WET ICE? Temp: 1
 PROPER PRESERVATIVES Indicated?
 Received WITHIN HOLDING TIMES?
 CUSTODY SEALS INTACT?
 VOLATILES rec'd W/OUT HEADSPACE?
 PROPER CONTAINERS used?

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
				*TYPE SEE BELOW	NO.	SIZE					
...
...

Sampler's Signature: ... Sampled By (Print Name): ... Affiliation: ...

Relinquished By: (Signature) ... Received By: (Signature) ... Date: ... Military/Hours: ...

Relinquished By: (Signature) ... Received By: (Signature) ... Date: ...

Relinquished By: (Signature) ... Received By: (Signature) ... Date: ...

Method of Shipment: ... Log-In Group No.: ...

NPDES NC SC OTHER UST: NC SC OTHER GROUNDWATER: NC SC OTHER DRINKING WATER: NC SC OTHER SOLID WASTE: NC SC OTHER

CONTAINER 1 CODES: A = Amber C = Clear G = Glass P = Plastic TL = Teflon-Lined VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR ...

4/28/00

Page 1 of 48

S&ME, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698
Customer Sample ID: 48MW-1
Prism Sample ID: AB64778
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00 13:40
Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,1-DICHLOROETHENE	44	ug/L	0.5	6230D	4/20/00 02:21	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,1-DICHLOROETHANE	3.8	ug/L	0.5	6230D	4/20/00 02:21	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
cis-1,2-DICHLOROETHENE	1.4	ug/L	0.5	6230D	4/20/00 02:21	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,1,1-TRICHLOROETHANE	110	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
BENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
TRICHLOROETHENE	94	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
TOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
CHLOROENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

4/28/00

Page 2 of 48

S&ME, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698
Customer Sample ID: 48MW-1
Prism Sample ID: AB64778
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00 13:40
Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
STYRENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
sec-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
n-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
NAPHTHALENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
MTBE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB
IPE	Not detected	ug/L	0.5	6230D	4/20/00 02:21	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

Lab Report



4/28/00

Page 3 of 48

S&ME, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698
Customer Sample ID: 48MW-1
Prism Sample ID: AB64778
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00 13:40
Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
-------------------	----------------	-------	--------------------	---------------------	----------------------	---------

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report

4/28/00

Page 4 of 48

S&ME, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

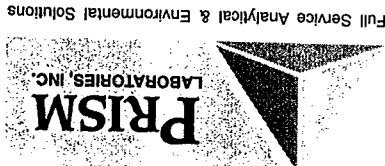
Customer Project ID: 9.6600698
Customer Sample ID: 48MW-2
Prism Sample ID: AB64779
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00 14:40
Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
BENZENE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
TOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 03:16	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&M, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698
Customer Sample ID: 48MW-2
Prism Sample ID: AB64779
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00 14:40
Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	RESULT	UNITS	REPORTING	METHOD	REFERENCE	DATE/TIME	STARTED	ANALYST
------	------	--------	-------	-----------	--------	-----------	-----------	---------	---------

ETHYLBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
TOTAL XYLENES	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
STYRENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
ISOPROPYLBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
BROMOFORM	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
n-PROPYLBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
BROMOBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
2-CHLOROTOLUENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
4-CHLOROTOLUENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
tert-BUTYLBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
sec-BUTYLBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
n-BUTYLBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
NAPHTHALENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
MTBE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB
IPE	Not detected	ug/L	6230D	0.5	4/20/00 03:16	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543

Phone: 704/579-6364 - Toll Free Number: 1 800/539-6264 Fax: 704/535-0400

Lab Report



Full Service Analytical & Environmental Solutions

Page 6 of 48

4/28/00
 S&ME, Inc
 James Wang
 318 Spring Forest Road
 Raleigh, NC 27616

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	RESULT	UNITS	REPORTING METHOD	REFERENCE	DATE/TIME STARTED	ANALYST
-------------------	--------	-------	---------------------	-----------	----------------------	---------

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-2
 Prism Sample ID: AB64779
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00
 Lab Submittal Date/Time: 4/12/00
 14:40
 11:00

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road ▶ P.O. Box 240543 ▶ Charlotte, NC 28224-0543

Phone: 704/529-6364 ▶ Toll Free Number: 1-800/529-6364 ▶ Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&M, Inc
James Wang
318 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698
Customer Sample ID: 48MW-3
Prism Sample ID: AB64780
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00 14:20
Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
----------------	-------------	-------	-----------------	------------------	-------------------	---------

DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
TRICHLOROFUOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,1-DICHLOROETHENE	2.2	ug/L	0.5	6230D	4/20/00 04:11	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
trans-1,2-DICHLOROETHENE	0.90	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,1-DICHLOROETHANE	0.93	ug/L	0.5	6230D	4/20/00 04:11	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
cis-1,2-DICHLOROETHENE	1.6	ug/L	0.5	6230D	4/20/00 04:11	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,1,1-TRICHLOROETHANE	6.1	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
BENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
TRICHLOROETHENE	0.77	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
TOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800-776-1111

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&ME, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-3
 Prism Sample ID: AB64780
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 14:20
 Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

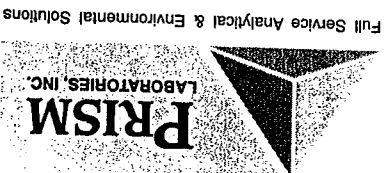
TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
----------------	-------------	-------	-----------------	------------------	-------------------	---------

ETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
STYRENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
sec-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
n-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
NAPHTHALENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
MTBE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB
IFE	Not detected	ug/L	0.5	6230D	4/20/00 04:11	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
 Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&ME, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698
Customer Sample ID: 48MW-3
Prism Sample ID: AB64780
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00 14:20
Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING METHOD	REFERENCE	DATE/TIME	ANALYST
----------------	-------------	-------	------------------	-----------	-----------	---------

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 Fax: 704/529-0499

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&M, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698
Customer Sample ID: 48MW-4
Prism Sample ID: AB64781
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00 14:15
Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
-------------------	----------------	-------	--------------------	---------------------	----------------------	---------

DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,1,1-TRICHLOROETHANE	2.8	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
BENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/529-6364

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&M, Inc
James Wang
318 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698
Customer Sample ID: 48MW-4
Prism Sample ID: AB64781
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00 14:15
Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
----------------	-------------	-------	-----------------	------------------	-------------------	---------

ETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
STYRENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
sec-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
n-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
HEXACHLOROBTADIENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
NAPHTHALENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
MTBE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB
IPE	Not detected	ug/L	0.5	6230D	4/20/00 05:07	CMB

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&ME, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-4
 Prism Sample ID: AB64781
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00
 Lab Submittal Date/Time: 4/12/00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST RESULT	UNITS	REPORTING LIMIT	REFERENCE METHOD	DATE/TIME STARTED	ANALYST
------	-------------	-------	-----------------	------------------	-------------------	---------

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Page 13 of 48

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-5
 Prism Sample ID: AB64782
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 14:05
 Lab Submittal Date/Time: 4/12/00 11:00

S&ME, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
----------------	-------------	-------	-----------------	------------------	-------------------	---------

DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
TRICHLOROFUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
BENZENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road ▶ P.O. Box 240543 ▶ Charlotte, NC 28224-0543
 Phone: 704/529-6364 ▶ Toll Free Number: 1-800/529-6364 ▶ Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&ME, Inc

James Wang

318 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698
Customer Sample ID: 48MW-5
Prism Sample ID: AB64782
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00 14:05
Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
----------------	-------------	-------	-----------------	------------------	-------------------	---------

ETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
STYRENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
ISOPROPYLBENZENE	4.6	ug/L	0.5	6230D	4/21/00 11:28	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
n-PROPYLBENZENE	5.4	ug/L	0.5	6230D	4/21/00 11:28	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
sec-BUTYLBENZENE	10	ug/L	0.5	6230D	4/21/00 11:28	CMB
p-ISOPROPYLTOLUENE	6.3	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
n-BUTYLBENZENE	5.6	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
NAPHTHALENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
MTBE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB
IPE	Not detected	ug/L	0.5	6230D	4/21/00 11:28	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&ME, Inc
 James Wang
 318 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-5
 Prism Sample ID: AB64782
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00
 Lab Submittal Date/Time: 4/12/00

14:05
 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING METHOD	REFERENCE	DATE/TIME	ANALYST
----------------	-------------	-------	------------------	-----------	-----------	---------

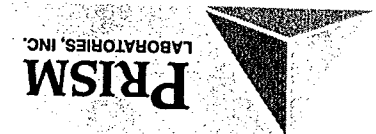
Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road ▶ P.O. Box 240543 ▶ Charlotte, NC 28224-0543
 Phone: 704/529-6364 ▶ Toll Free Number: 1-800/529-6364 ▶ Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&M, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698
Customer Sample ID: 48MW-6
Prism Sample ID: AB64783
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00 14:50
Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
----------------	-------------	-------	-----------------	------------------	-------------------	---------

DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
TRICHLOROFUOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
BENZENE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 06:57	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road ▶ P.O. Box 240543 ▶ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▶ Toll Free Number: 1-800/529-6364 ▶ Fax: 704/525-0409

Lab Report

Full Service Analytical & Environmental Solutions



4/28/00

S&M, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698
Customer Sample ID: 48MW-6
Prism Sample ID: AB64783
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00 14:50
Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING METHOD	REFERENCE	DATE/TIME STARTED	ANALYST
----------------	-------------	-------	------------------	-----------	-------------------	---------

ETHYLBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
TOTAL XYLENES	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
STYRENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
ISOPROPYLBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
BROMOFORM	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
2-CHLOROTOLUENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
4-CHLOROTOLUENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
tert-BUTYLBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
sec-BUTYLBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
n-BUTYLBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
NAPHTHALENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
MTBE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB
IFE	Not detected	ug/L	6230D	0.5	4/20/00 06:57	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/529-0400

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&ME, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-6
 Prism Sample ID: AB64783
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00
 Lab Submittal Date/Time: 4/12/00

14:50
 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	UNITS	REPORTING	METHOD	DATE/TIME	ANALYST
PARAMETER	RESULT		LIMIT	REFERENCE	STARTED	

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road ▶ P.O. Box 240543 ▶ Charlotte, NC 28224-0543
 Phone: 704/529-6364 ▶ Toll Free Number: 1-800/529-6364 ▶ Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00
 S&ME, Inc
 James Wang
 318 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-7
 Prism Sample ID: AB64784
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 14:45
 Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
----------------	-------------	-------	-----------------	------------------	-------------------	---------

DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,1-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
BENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
TOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543
 Phone: 704/529-6364 Toll Free Number: 1-800/529-6364 Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00
 S&ME, Inc
 James Wang
 318 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-7
 Prism Sample ID: AB64784
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 14:45
 Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
----------------	-------------	-------	-----------------	------------------	-------------------	---------

ETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
STYRENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
sec-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
n-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
HEXACHLOROBTADIENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
NAPHTHALENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
MTBE	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB
IPB	Not detected	ug/L	0.5	6230D	4/20/00 07:52	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road ► P.O. Box 240543 ► Charlotte, NC 28224-0543
 Phone: 704/529-6364 ► Toll Free Number: 1-800/529-6364 ► Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&ME, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-7
 Prism Sample ID: AB64784
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00
 Lab Submittal Date/Time: 4/12/00

14:45
 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	RESULT	UNITS	REPORTING	METHOD	REFERENCE	DATE/TIME	ANALYST
PARAMETER	TEST	RESULT	UNITS	LIMIT	REPORTING	REFERENCE	DATE/TIME	ANALYST

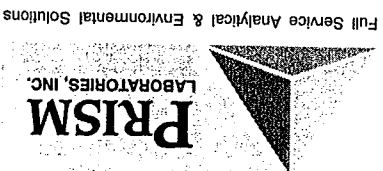
Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543
 Phone: 704/529-6364 Toll Free Number: 1-800/529-6364 Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&M, Inc

James Wang

3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698

Customer Sample ID: 48MW-10

Prism Sample ID: AB64785

Login Group: 8384F16

Sample Collection Date/Time: 4/11/00 13:50

Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

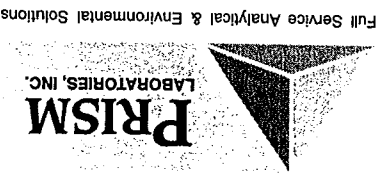
TEST	TEST	UNITS	REPORTING	METHOD	REFERENCE	DATE/TIME	ANALYST
------	------	-------	-----------	--------	-----------	-----------	---------

DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
TRICHLOROFUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,1-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
BENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
TOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543
Phone: 704/529-6364 Toll Free Number: 1-800/529-6364 Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Page 23 of 48

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-10
 Prism Sample ID: AB64785
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 13:50
 Lab Submittal Date/Time: 4/12/00 11:00

S&ME, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
----------------	-------------	-------	-----------------	------------------	-------------------	---------

ETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
STYRENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
sec-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
n-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,3-NAPHTHALENE	1.3	ug/L	0.5	6230D	4/21/00 12:24	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
MTBE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB
IFE	Not detected	ug/L	0.5	6230D	4/21/00 12:24	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
 Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Customer Project ID: 9.6600698

Customer Sample ID: 48MW-10

Prism Sample ID: AB64785

Login Group: 8384F16

Sample Collection Date/Time: 4/11/00 13:50

Lab Submittal Date/Time: 4/12/00 11:00

S&ME, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
------	-------------	-------	-----------------	------------------	-------------------	---------

Sample Comments:

A handwritten signature in black ink, appearing to be "A. Overcash", written over a horizontal line.

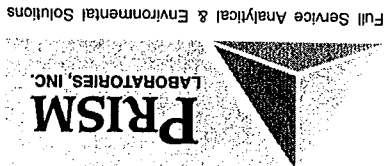
Angela D. Overcash, V.P. Laboratory Services

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543

Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Page 25 of 48

S&M, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-11
 Prism Sample ID: AB64786
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 12:50
 Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	RESULT	UNITS	REPORTING	METHOD	REFERENCE	DATE/TIME	ANALYST
------	------	--------	-------	-----------	--------	-----------	-----------	---------

DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
TRICHLOROPFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,1-DICHLOROETHENE	52	ug/L	0.5	6230D	4/21/00 13:19	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,1-DICHLOROETHANE	7.3	ug/L	0.5	6230D	4/21/00 13:19	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
cis-1,2-DICHLOROETHENE	6.5	ug/L	0.5	6230D	4/21/00 13:19	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,1,1-TRICHLOROETHANE	94	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
BENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
TRICHLOROETHENE	300	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
TOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
TETRACHLOROETHENE	1.4	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543
 Phone: 704/529-6364 Toll Free Number: 1-800/529-6364 Fax: 704/525-0409

Lab Report

Full Service Analytical & Environmental Solutions



4/28/00

Page 26 of 48

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-11
 Prism Sample ID: AB64786
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 12:50
 Lab Submittal Date/Time: 4/12/00 11:00

S&M, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	UNITS	REPORTING	METHOD	DATE/TIME	ANALYST
PARAMETER	RESULT		LIMIT	REFERENCE	STARTED	

ETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
STYRENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
sec-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
n-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
NAPHTHALENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
MTBE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB
IFE	Not detected	ug/L	0.5	6230D	4/21/00 13:19	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543

Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&ME, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-11
 Prism Sample ID: AB64786
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00
 Lab Submittal Date/Time: 4/12/00

12:50
 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
-------------------	--------	-------	--------------------	---------------------	----------------------	---------

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road ▶ P.O. Box 240543 ▶ Charlotte, NC 28224-0543

Phone: 704/529-6364 ▶ Toll Free Number: 1-800/529-6364 ▶ Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&M, Inc

James Wang

3118 Spring Forest Road

Raleigh, NC 27616

Customer Project ID: 9.6600698

Customer Sample ID: 48MW-12

Prism Sample ID: AB64787

Login Group: 8384F16

Sample Collection Date/Time: 4/11/00 15:40

Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	RESULT	UNITS	REPORTING	METHOD	REFERENCE	DATE/TIME	ANALYST
------	------	--------	-------	-----------	--------	-----------	-----------	---------

DICHLORODIFLUOROMETHANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
CHLOROMETHANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
VINYL CHLORIDE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
BROMOMETHANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
CHLOROETHANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
TRICHLOROFUOROMETHANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
1,1-DICHLOROETHENE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
METHYLENE CHLORIDE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
1,1-DICHLOROETHANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
cis-1,2-DICHLOROETHENE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
CHLOROFORM	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
1,1,1-TRICHLOROETHANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
BENZENE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
TRICHLOROETHENE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
DIBROMOMETHANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
TOLUENE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
TETRACHLOROETHENE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB
CHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/21/00 14:16	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543

Phone: 704/529-6364 Toll Free Number: 1 800/539-6364 Fax: 704/525-0109

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Page 29 of 48

S&M, Inc
 James Wang
 318 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-12
 Prism Sample ID: AB64787
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 15:40
 Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
------	-------------	-------	-----------------	------------------	-------------------	---------

ETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
STYRENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
sec-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
n-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
NAPHTHALENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
MTBE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB
IPE	Not detected	ug/L	0.5	6230D	4/21/00 14:16	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543

Phone: 704/529-6364 - Toll Free Number: 1 800/529-6364 Fax: 704/529-0100

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&ME, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698
Customer Sample ID: 48MW-12
Prism Sample ID: AB64787
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00 15:40
Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	REPORTING	METHOD	DATE/TIME	ANALYST
------	------	-----------	--------	-----------	---------

Sample Comments:

A handwritten signature in black ink, appearing to be "Angela D. Overcash".

Angela D. Overcash, V.P. Laboratory Services

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Page 31 of 48

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-13
 Prism Sample ID: AB64788
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 16:00
 Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
------	-----------	-------------	-------	-----------------	------------------	-------------------	---------

DICHLORODIFLUOROMETHANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
CHLOROMETHANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
VINYL CHLORIDE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
BROMOMETHANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
CHLOROETHANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
TRICHLOROFUOROMETHANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
1,1-DICHLOROETHENE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
METHYLENE CHLORIDE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
trans-1,2-DICHLOROETHENE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
1,1-DICHLOROETHANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
2,2-DICHLOROPROPANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
cis-1,2-DICHLOROETHENE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
CHLOROFORM	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
BROMOCHLOROMETHANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
1,1,1-TRICHLOROETHANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
1,1-DICHLOROPROPENE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
CARBON TETRACHLORIDE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
BENZENE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
1,2-DICHLOROETHANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
TRICHLOROETHENE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
1,2-DICHLOROPROPANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
BROMODICHLOROMETHANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
DIBROMOMETHANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
TOLUENE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
1,1,2-TRICHLOROETHANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
TETRACHLOROETHENE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
1,3-DICHLOROPROPANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
DIBROMOCHLOROMETHANE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
1,2-DIBROMOETHANE (EDB)	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB
CHLOROBENZENE	ug/L	Not detected	6230D	0.5	4/21/00 15:11	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
 Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/529-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Page 32 of 48

S&M, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48MW-13
 Prism Sample ID: AB64788
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 16:00
 Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	REPORTING	METHOD	DATE/TIME	ANALYST
PARAMETER	RESULT	LIMIT	REFERENCE	STARTED	
	UNITS				

ETHYLBENZENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
TOTAL XYLENES	Not detected	ug/L	6230D	4/21/00 15:11	CMB
STYRENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
ISOPROPYLBENZENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
BROMOFORM	Not detected	ug/L	6230D	4/21/00 15:11	CMB
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
n-PROPYLBENZENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
BROMOBENZENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
2-CHLOROTOLUENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
4-CHLOROTOLUENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
tert-BUTYLBENZENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
sec-BUTYLBENZENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
n-BUTYLBENZENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
NAPHTHALENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
MTBE	Not detected	ug/L	6230D	4/21/00 15:11	CMB
IPB	Not detected	ug/L	6230D	4/21/00 15:11	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543

Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&ME, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698
Customer Sample ID: 48MW-13
Prism Sample ID: AB64788
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00
Lab Submittal Date/Time: 4/12/00

16:00
11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING METHOD	REFERENCE	DATE/TIME STARTED	ANALYST
-------------------	----------------	-------	---------------------	-----------	----------------------	---------

Sample Comments:

A handwritten signature in black ink, appearing to be "Angela D. Overcash".

Angela D. Overcash, V.P. Laboratory Services

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Page 34 of 48

S&M, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616
 Customer Project ID: 9.6600698
 Customer Sample ID: 48 DW-1
 Prism Sample ID: AB64789
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 14:30
 Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	UNITS	REPORTING	METHOD	DATE/TIME	ANALYST
PARAMETER	RESULT		LIMIT	REFERENCE	STARTED	

DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
BENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
TOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543
 Phone: 704/529-6364 Toll Free Number: 1-800/529-6364 Fax: 704/525-0409

Lab Report

Full Service Analytical & Environmental Solutions



4/28/00

Page 35 of 48

Customer Project ID: 9.6600698
 Customer Sample ID: 48 DW-1
 Prism Sample ID: AB64789
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00
 Lab Submittal Date/Time: 4/12/00
 14:30
 11:00

S&M/E, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	UNITS	REPORTING	METHOD	DATE/TIME	ANALYST
PARAMETER	RESULT		LIMIT	REFERENCE	STARTED	

ETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
STYRENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
sec-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
n-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
NAPHTHALENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
MTBE	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB
IPB	Not detected	ug/L	0.5	6230D	4/21/00 16:07	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road ▶ P.O. Box 240543 ▶ Charlotte, NC 28224-0543
 Phone: 704/529-6364 ▶ Toll Free Number: 1-800/529-6364 ▶ Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&ME, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48 DW-1
 Prism Sample ID: AB64789
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00
 Lab Submittal Date/Time: 4/12/00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
------	-----------	-------------	-------	-----------------	------------------	-------------------	---------

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Page 37 of 48

Customer Project ID: 9.6600698
 Customer Sample ID: 48 DW-2
 Prism Sample ID: AB64790
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00
 Lab Submittal Date/Time: 4/12/00

S&M, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
----------------	-------------	-------	-----------------	------------------	-------------------	---------

DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
TRICHLOROFUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
1,1-DICHLOROETHENE	93	ug/L	0.5	6230D	4/21/00 17:03	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
1,1-DICHLOROETHANE	11	ug/L	0.5	6230D	4/21/00 17:03	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
cis-1,2-DICHLOROETHENE	5.6	ug/L	0.5	6230D	4/21/00 17:03	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
1,1,1-TRICHLOROETHANE	64	ug/L	0.5	6230D	4/21/00 17:03	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
BENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
TRICHLOROETHENE	420	ug/L	0.5	6230D	4/21/00 17:03	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
TOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
1,1,2-TRICHLOROETHANE	0.70	ug/L	0.5	6230D	4/21/00 17:03	CMB
TETRACHLOROETHENE	2.1	ug/L	0.5	6230D	4/21/00 17:03	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB
CHLOROENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:03	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543
 Phone: 704/529-6364 Toll Free Number: 1-800/529-6364 Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&M, Inc

James Wang

3118 Spring Forest Road

Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48 DW-2
 Prism Sample ID: AB64790
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 13:20
 Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	REPORTING	METHOD	DATE/TIME	ANALYST
PARAMETER	RESULT	LIMIT	REFERENCE	STARTED	
	UNITS				

ETHYLBENZENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
TOTAL XYLENES	Not detected	ug/L	6230D	4/21/00 17:03	CMB
STYRENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
ISOPROPYLBENZENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
BROMOFORM	Not detected	ug/L	6230D	4/21/00 17:03	CMB
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
n-PROPYLBENZENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
BROMOBENZENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
2-CHLOROTOLUENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
4-CHLOROTOLUENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
tert-BUTYLBENZENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
sec-BUTYLBENZENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
n-BUTYLBENZENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
NAPHTHALENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
MTBE	Not detected	ug/L	6230D	4/21/00 17:03	CMB
IPE	Not detected	ug/L	6230D	4/21/00 17:03	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road ▶ P.O. Box 240543 ▶ Charlotte, NC 28224-0543

Phone: 704/529-6364 ▶ Toll Free Number 1-800/579-6364 ▶ Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Page 39 of 48

S&ME, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48 DW-2
 Prism Sample ID: AB64790
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00
 Lab Submittal Date/Time: 4/12/00

13:20
 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	RESULT	UNITS	REPORTING	METHOD	REFERENCE	DATE/TIME	STARTED	ANALYST
------	------	--------	-------	-----------	--------	-----------	-----------	---------	---------

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Page 40 of 48

S&M, Inc
 James Wang
 318 Spring Forest Road
 Raleigh, NC 27616
 Customer Project ID: 9.6600698
 Customer Sample ID: 48 DW-3
 Prism Sample ID: AB64791
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 15:00
 Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	UNITS	REPORTING	METHOD	DATE/TIME	ANALYST
PARAMETER	RESULT		LIMIT	REFERENCE	STARTED	

DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
TRICHLOROFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
BENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
TRICHLOROETHENE	1.5	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
TOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
 Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Page 41 of 48

S&M, Inc
 James Wang
 318 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48 DW-3
 Prism Sample ID: AB64791
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 15:00
 Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	UNITS	REPORTING	METHOD	DATE/TIME	ANALYST
PARAMETER	RESULT		LIMIT	REFERENCE	STARTED	

ETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
STYRENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
sec-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
n-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
NAPHTHALENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
MTBE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB
IPE	Not detected	ug/L	0.5	6230D	4/21/00 17:59	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road - R.O. Box 240543 - Charlotte, NC 28224-0543

Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/529-0109

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&ME, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: 48 DW-3
 Prism Sample ID: AB64791
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 15:00
 Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST RESULT	UNITS	REPORTING METHOD	REFERENCE	DATE/TIME	ANALYST
------	-------------	-------	------------------	-----------	-----------	---------

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road ▶ P.O. Box 240543 ▶ Charlotte, NC 28224-0543
 Phone: 704/529-6364 ▶ Toll Free Number: 1-800/529-6364 ▶ Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Page 43 of 48

S&M, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698
Customer Sample ID: SUPPLY WELL
Prism Sample ID: AB64792
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00 15:30
Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
----------------	-------------	-------	-----------------	------------------	-------------------	---------

DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
TRICHLOROFUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
1,1-DICHLOROETHENE	84	ug/L	0.5	6230D	4/21/00 18:55	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
1,1-DICHLOROETHANE	6.0	ug/L	0.5	6230D	4/21/00 18:55	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
cis-1,2-DICHLOROETHENE	3.7	ug/L	0.5	6230D	4/21/00 18:55	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
1,1,1-TRICHLOROETHANE	140	ug/L	0.5	6230D	4/21/00 18:55	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
BENZENE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
1,2-DICHLOROETHANE	1.2	ug/L	0.5	6230D	4/21/00 18:55	CMB
TRICHLOROETHENE	570	ug/L	0.5	6230D	4/21/00 18:55	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
TOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
TETRACHLOROETHENE	2.4	ug/L	0.5	6230D	4/21/00 18:55	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 18:55	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Page 44 of 48

S&M/E, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: SUPPLY WELL
 Prism Sample ID: AB64792
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00 15:30
 Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
------	-----------	-------------	-------	-----------------	------------------	-------------------	---------

ETHYLBENZENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
TOTAL XYLENES	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
STYRENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
ISOPROPYLBENZENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
BROMOFORM	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
n-PROPYLBENZENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
BROMOBENZENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
2-CHLOROTOLUENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
4-CHLOROTOLUENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
tert-BUTYLBENZENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
sec-BUTYLBENZENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
n-BUTYLBENZENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
NAPHTHALENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
MTBE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB
IPE	Not detected	ug/L	6230D	0.5	4/21/00 18:55	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
 Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0109

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&ME, Inc
James Wang
3118 Spring Forest Road
Raleigh, NC 27616

Customer Project ID: 9.6600698
Customer Sample ID: SUPPLY WELL
Prism Sample ID: AB64792
Login Group: 8384F16
Sample Collection Date/Time: 4/11/00 15:30
Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	REPORTING METHOD	DATE/TIME	ANALYST
------	------	------------------	-----------	---------

Sample Comments:

A handwritten signature in black ink, appearing to be "Angela D. Overcash".

Angela D. Overcash, V.P. Laboratory Services

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Page 46 of 48

S&M, Inc
 James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698
 Customer Sample ID: TRIP BLANK
 Prism Sample ID: AB64793
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00
 Lab Submittal Date/Time: 4/12/00 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
-------------------	----------------	-------	--------------------	---------------------	----------------------	---------

DICHLORODIFLUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
CHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
VINYL CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
BROMOMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
CHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
TRICHLOROFUOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,1-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
METHYLENE CHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
trans-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,1-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
2,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
cis-1,2-DICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
CHLOROFORM	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
BROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,1,1-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,1-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
CARBON TETRACHLORIDE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
BENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,2-DICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
TRICHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,2-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
BROMODICHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
DIBROMOMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
TOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,1,2-TRICHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
TETRACHLOROETHENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,3-DICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
DIBROMOCHLOROMETHANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,2-DIBROMOETHANE (EDB)	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
CHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543

Phone: 704/529-6364 Toll Free Number 1-800/529-6364 Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

Page 47 of 48

S&M, Inc
 James Wang
 318 Spring Forest Road
 Raleigh, NC 27616
 Customer Project ID: 9.6600698
 Customer Sample ID: TRIP BLANK
 Prism Sample ID: AB64793
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00
 Lab Submittal Date/Time: 4/12/00
 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST	UNITS	REPORTING	METHOD	DATE/TIME	ANALYST
PARAMETER	RESULT		LIMIT	REFERENCE	STARTED	

ETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
STYRENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
sec-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
n-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
HEXACHLOROBUTADIENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
NAPHTHALENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
MTBE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB
IPE	Not detected	ug/L	0.5	6230D	4/21/00 08:42	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road P.O. Box 240543 Charlotte, NC 28224-0543

Lab Report



Full Service Analytical & Environmental Solutions

4/28/00

S&M, Inc
 James Wang
 318 Spring Forest Road
 Raleigh, NC 27616

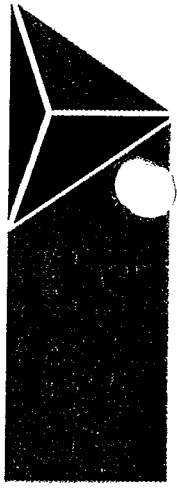
Customer Project ID: 9.6600698
 Customer Sample ID: TRIP BLANK
 Prism Sample ID: AB64793
 Login Group: 8384F16
 Sample Collection Date/Time: 4/11/00
 Lab Submittal Date/Time: 4/12/00
 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST	TEST RESULT	UNITS	REPORTING METHOD	REFERENCE	DATE/TIME	ANALYST
------	-------------	-------	------------------	-----------	-----------	---------

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services



Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 1 OF 2 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

Client: STATE (James Vang)
Physical Address: 3118 Spring Forest Rd.
KATEVA, NC 27616
Phone: 919-872-2660 Fax: 919-190-9827
P.O. #/Billing Reference: AKWOT 9.6800898
Project Name: ACWOT PHSBAND

REPORT TO: Name: James Vang
Address: STATE
BILL TO: Name: ACWOT
Address: _____
Requested Due Date: _____

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

LAB USE ONLY

Samples INTACT upon arrival? 48 YES NO N/A

Received ON WET ICE? Temp. 48 YES NO N/A

PROPER PRESERVATIVES indicated? YES NO N/A

Received WITHIN HOLDING TIMES? YES NO N/A

CUSTODY SEALS INTACT? YES NO N/A

VOLATILES rec'd W/OUT HEADSPACE? YES NO N/A

PROPER CONTAINERS used? YES NO N/A

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
				TYPE SEE BELOW	NO.	SIZE					
48 MW-1	4/11/00	1340	H ₂ O	VOA	3	40	HCl	<input checked="" type="checkbox"/>			64778
48 MW-2	4/11/00	1440	H ₂ O	VOA	3	40	HCl	<input checked="" type="checkbox"/>			64779
48 MW-3	4/11/00	1420	H ₂ O	VOA	3	40	HCl	<input checked="" type="checkbox"/>			64780
48 MW-4	4/11/00	1415	H ₂ O	VOA	3	40	HCl	<input checked="" type="checkbox"/>			64781
48 MW-5	4/11/00	1405	H ₂ O	VOA	3	40	HCl	<input checked="" type="checkbox"/>			64782
48 MW-6	4/11/00	1450	H ₂ O	VOA	3	40	HCl	<input checked="" type="checkbox"/>			64783
48 MW-7	4/11/00	1445	H ₂ O	VOA	3	40	HCl	<input checked="" type="checkbox"/>			64784
48 MW-10	4/11/00	1350	H ₂ O	VOA	3	40	HCl	<input checked="" type="checkbox"/>			64785
48 MW-11	4/11/00	1250	H ₂ O	VOA	3	40	HCl	<input checked="" type="checkbox"/>			64786
48 MW-12	4/11/00	1540	H ₂ O	VOA	3	40	HCl	<input checked="" type="checkbox"/>			64787

Sampler's Signature: David V. Gray Sampled By (Print Name): David V. Gray Affiliation: STATE

Relinquished By: (Signature) David V. Gray Received By: (Signature) FeDEX Date: 4/11/00 Military/Hours: 1700

Relinquished By: (Signature) _____ Received By: (Signature) _____ Date: _____

Method of Shipment: _____ Received For/Prism Laboratories By: ACWOT PHSBAND Date: 4/12/00 Log-In Group No. 0284716

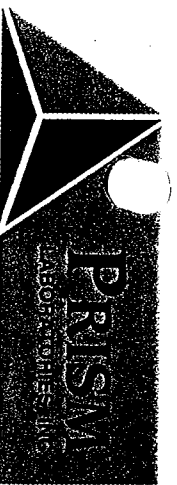
NPDES NC _____ UST: NC _____ GROUNDWATER: NC DRINKING WATER: NC _____ SOLID WASTE: NC _____ OTHER: NC _____

SC _____ OTHER: _____

OTHER: _____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS



Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE 2 OF 2 QUOTE #

449 Springbrook Road ▲ Charlotte, NC 28217
 P.O. Box 240543 ▲ Charlotte, NC 28224-0543
 Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRESS DOWN FIRMLY - 3 COPIES

Client: ST AIE (James Wang)
 Physical Address: 3118 Spring Forest Rd., Raleigh, NC 27616
 Phone: 919-873-2660 Fax: 919-790-9827
 P.O./Billing Reference: ACBOT 4, 6600698
 Project Name: ACBOT 4/11/00

REPORT TO: Name: James Wang Address: STAFF
 BILL TO: Name: ACBOT Address: ACBOT
 Requested Due Date: _____ (SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

LAB USE ONLY

Samples INTACT upon arrival? YES NO NA

Received DRYWET ICE? Temp: 4.8 YES NO NA

PROPER PRESERVATIVES Indicated? YES NO NA

Received WITHIN HOLDING TIMES? YES NO NA

CUSTODY SEALS INTACT? YES NO NA

VOLATILES rec'd W/OUT HEADSPACE? YES NO NA

PROPER CONTAINERS used? YES NO NA

State Certification Requested: NC SC Other NA

Water Chlorinated: Yes No NA

Sample Iced Upon Collection: Yes No NA

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED	REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
				TYPE	NO.	SIZE					
48 MW-13	4/11/00	1600	50% H ₂ O	VOA	3	40	HCl	X	6230D		64738
48 MW-1	4/11/00	1430	H ₂ O	VOA	3	40	HCl	X			64789
48 DW-2	4/11/00	1320	H ₂ O	VOA	3	40	HCl	X			64790
48 DW-3	4/11/00	1500	H ₂ O	VOA	3	40	HCl	X			64791
Supply Well	4/11/00	1530	H ₂ O	VOA	3	40	HCl	X			64792
Trip Blank	4/11/00	—	H ₂ O	VOA	3	40	HCl	X			64793

Sampler's Signature: David V. Dry Sampled By (Print Name): David V. Dry Affiliation: SUNE

Relinquished By (Signature): David V. Dry Received By (Signature): FEDERX Date: 4/11/00 Military/Hours: 1700

Relinquished By (Signature): _____ Received By (Signature): _____ Date: _____ Military/Hours: _____

Relinquished By (Signature): _____ Received For (Prism Laboratories) By: James Wang Date: 4/12/00 Log-in Group No.: 3384516

Method of Shipment: _____

NPDES NC _____ UST: NC _____ GROUNDWATER: NC DRINKING WATER: NC _____ SOLID WASTE: NC _____
 SC _____ OTHER _____ SC _____ OTHER _____
 OTHER _____ OTHER _____ OTHER _____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

Lab Report

Full Service Analytical & Environmental Solutions



5/4/00

Page 1 of 3

Customer Project ID: 9.6600698/Lee Paving

Customer Sample ID: 48MW-14

Prism Sample ID: AB66301

Login Group: AO54F1

Sample Collection Date/Time: 4/26/00 13:00

Lab Submittal Date/Time: 4/27/00 10:35

S & ME, Inc
 Attn: Mr. James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
----------------	-------------	-------	-----------------	------------------	-------------------	---------

DICHLORODIFLUOROMETHANE
 Not detected
 ug/L
 0.5

CHLOROMETHANE
 Not detected
 ug/L
 0.5

VINYL CHLORIDE
 Not detected
 ug/L
 0.5

BROMOMETHANE
 Not detected
 ug/L
 0.5

CHLOROETHANE
 Not detected
 ug/L
 0.5

TRICHLOROFLUOROMETHANE
 Not detected
 ug/L
 0.5

1,1-DICHLOROETHENE
 Not detected
 ug/L
 0.5

METHYLENE CHLORIDE
 Not detected
 ug/L
 0.5

trans-1,2-DICHLOROETHENE
 Not detected
 ug/L
 0.5

1,1-DICHLOROETHANE
 Not detected
 ug/L
 0.5

2,2-DICHLOROPROPANE
 Not detected
 ug/L
 0.5

cis-1,2-DICHLOROETHENE
 Not detected
 ug/L
 0.5

CHLOROFORM
 Not detected
 ug/L
 0.5

BROMOCHLOROMETHANE
 Not detected
 ug/L
 0.5

1,1,1-TRICHLOROETHANE
 Not detected
 ug/L
 0.5

1,1-DICHLOROPROPENE
 Not detected
 ug/L
 0.5

CARBON TETRACHLORIDE
 Not detected
 ug/L
 0.5

BENZENE
 Not detected
 ug/L
 0.5

1,2-DICHLOROETHANE
 Not detected
 ug/L
 0.5

TRICHLOROETHENE
 Not detected
 ug/L
 0.5

1,2-DICHLOROPROPANE
 Not detected
 ug/L
 0.5

BROMODICHLOROMETHANE
 Not detected
 ug/L
 0.5

DIBROMOMETHANE
 Not detected
 ug/L
 0.5

0.61
 Not detected
 ug/L
 0.5

1,1,2-TRICHLOROETHANE
 Not detected
 ug/L
 0.5

TETRACHLOROETHENE
 Not detected
 ug/L
 0.5

1,3-DICHLOROPROPANE
 Not detected
 ug/L
 0.5

DIBROMOCHLOROMETHANE
 Not detected
 ug/L
 0.5

1,2-DIBROMOETHANE (EDB)
 Not detected
 ug/L
 0.5

CHLOROBENZENE
 Not detected
 ug/L
 0.5

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road ▶ P.O. Box 240543 ▶ Charlotte, NC 28224-0543
 Phone: 704/529-6364 ▶ Toll Free Number: 1-800/529-6364 ▶ Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

5/4/00

S & ME, Inc
 Attn: Mr. James Wang
 3118 Spring Forest Road
 Raleigh, NC 27616

Customer Project ID: 9.6600698/Lee Paving
 Customer Sample ID: 48MW-14
 Prism Sample ID: AB66301
 Login Group: AO54F1
 Sample Collection Date/Time: 4/26/00 13:00
 Lab Submittal Date/Time: 4/27/00 10:35

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
----------------	-------------	-------	-----------------	------------------	-------------------	---------

ETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
TOTAL XYLENES	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
STYRENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
ISOPROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
BROMOFORM	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
n-PROPYLBENZENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
BROMOBENZENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
1,3,5-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
2-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
4-CHLOROTOLUENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
tert-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
1,2,4-TRIMETHYLBENZENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
sec-BUTYLBENZENE	0.93	ug/L	0.5	6230D	5/4/00 05:39	CMB
p-ISOPROPYLTOLUENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
1,3-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
1,4-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
n-BUTYLBENZENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
1,2-DICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
1,2,4-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
1,2,3-TRICHLOROBENZENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
MTBE	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB
IPB	Not detected	ug/L	0.5	6230D	5/4/00 05:39	CMB

NC Certification No. 402 - SC Certification No. 99012 - NC Drinking Water Cert. No. 37735 - FL Certification No. E87519

449 Springbrook Road ▶ P.O. Box 240543 ▶ Charlotte, NC 28224-0543
 Phone: 704/529-6364 ▶ Toll Free Number: 1-800/529-6364 ▶ Fax: 704/525-0409

Lab Report



Full Service Analytical & Environmental Solutions

Page 3 of 3

Customer Project ID: 9.6600698/Lee Paving

Customer Sample ID: 48MW-14

Prism Sample ID: AB66301

Login Group: AO54F1

Sample Collection Date/Time: 4/26/00 13:00

Lab Submittal Date/Time: 4/27/00 10:35

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory

TEST	PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
------	-----------	-------------	-------	-----------------	------------------	-------------------	---------

Sample Comments:

A handwritten signature in black ink, appearing to be "Angela D. Overcash".

Angela D. Overcash, V.P. Laboratory Services

AQUIFER TEST MODELING INPUT AND OUTPUT

APPENDIX V

SOLUTION

Well Name		PW 1	
X (ft)	Y (ft)	0	0
Well Name		DW-2	
X (ft)	Y (ft)	130	0

Pumping Wells

Observation Wells

WELL DATA

Saturated Thickness: 70. ft

Anisotropy Ratio (kz/kr): 1.

AQUIFER DATA

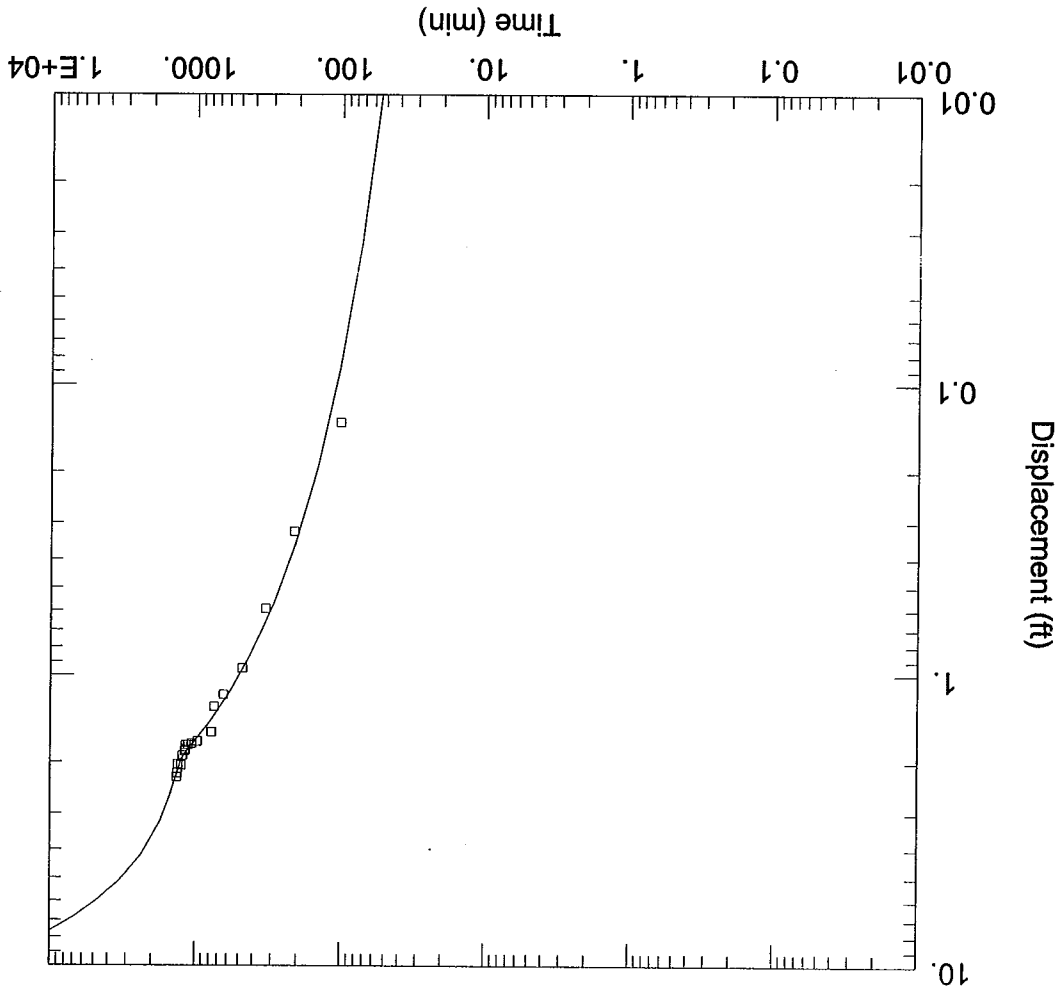
Company: DOT-Pittsboro, NC
 Client: NCDOT
 Project: 1040-98-107
 Test Location: Pittsboro, NC
 Test Well: WS-1
 Test Date: 5/11-5/12-2000

PROJECT INFORMATION

Data Set: C:\AQTW\DOTPIT.AQT
 Date: 06/21/00

Time: 08:58:48

DOT PITTSBORO



Data Set: C:\AQTWDOT\PIT.AQT
Title: DOT Pittsboro
Date: 06/21/00
Time: 08:58:27

PROJECT INFORMATION

Company: DOT-Pittsboro, NC
Client: NCDOT
Project: 1040-98-107
Location: Pittsboro, NC
Test Date: 5/11-5/12-2000
Test Well: WS-1

AQUIFER DATA

Saturated Thickness: 70. ft
Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

Number of pumping wells: 1

Pumping Well No. 1: PW 1

X Location: 0. ft
Y Location: 0. ft

No. of pumping periods: 3

Pumping Period Data

Time (min)	Rate (cu. ft/min)	Time (min)	Rate (cu. ft/min)	Time (min)	Rate (cu. ft/min)
0.	0.334	1160.	0.535	1288.	0.615

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: DW-2

X Location: 130. ft
Y Location: 0. ft

No. of observations: 19

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
102.	0.135	780.	1.571	1225.	1.892
212.	0.321	965.	1.69	1255.	2.044

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
332.	0.591	1060.	1.723	1313.	2.028
477.	0.946	1120.	1.74	1326.	2.18
642.	1.166	1160.	1.74	1345.	2.247
747.	1.284	1170.	1.808		
772.	1.571	1189.	1.825		

SOLUTION

Aquifer Model: Leaky

Solution Method: Hantush

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	ft ² /min
T	0.01649	
S	0.0007292	
B	0.07871	

AUTOMATIC ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	Std. Error	ft ² /min
T	0.01649	0.02932	
S	0.0007292	0.001119	
B	0.07871	0.6699	

Parameter Correlations

T	S	B
1.00	1.00	-1.00
1.00	-1.00	1.00
-1.00	1.00	1.00

Residual Statistics

for weighted residuals

Sum of Squares ...	0.1068 ft ²
Variance	0.006674 ft ²
Std. Deviation	0.0817 ft
Mean	-0.001172 ft
No. of Residuals ...	19.
No. of Estimates ...	3

SOLUTION

Well Name		WS 1	
X (ft)	Y (ft)	0	0
Well Name		□ DW 2	
X (ft)	Y (ft)	130	0

Pumping Wells

Observation Wells

WELL DATA

Saturated Thickness: 70. ft

Anisotropy Ratio (Kz/Kr): 1.

AQUIFER DATA

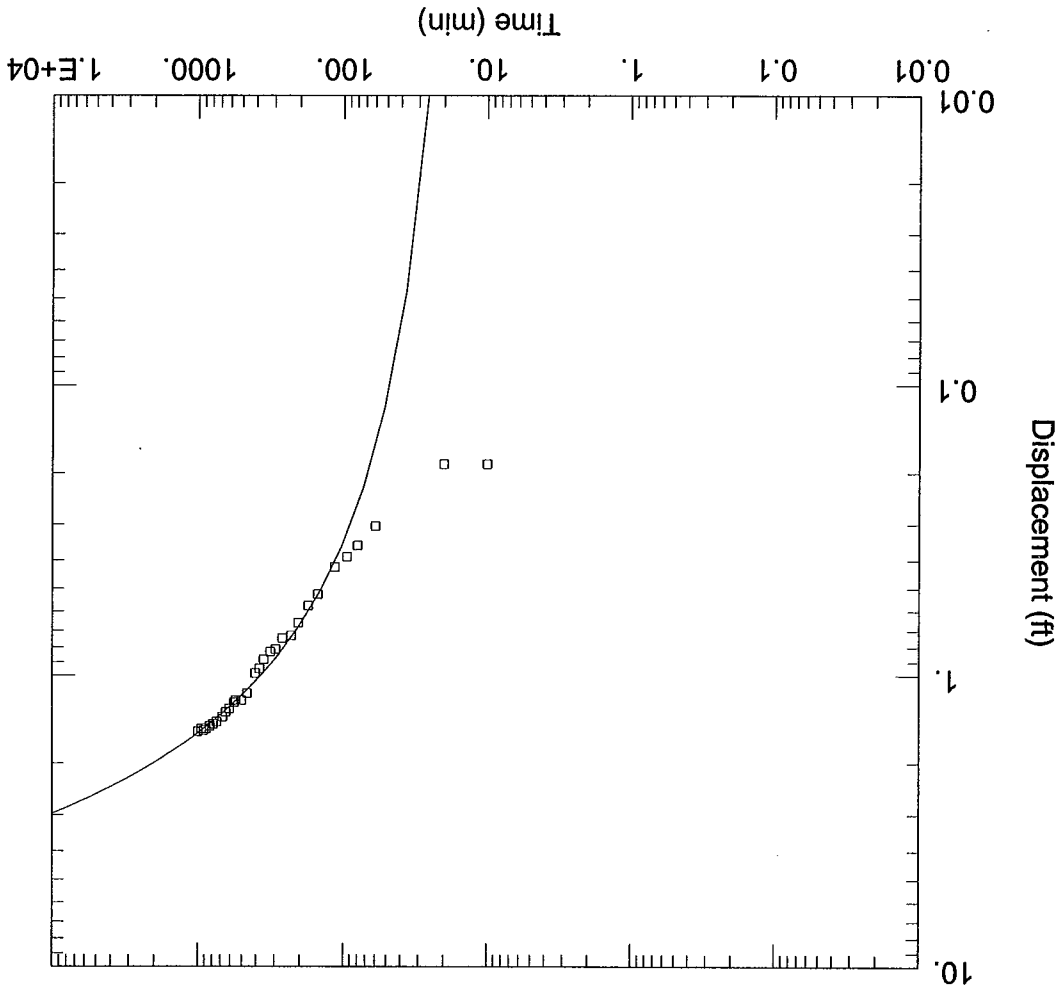
Company: DOT Pittsboro
 Client: DOT
 Project: 1040-98-107
 Test Location: Pittsboro, NC
 Test Well: WS-1
 Test Date: 5/11/2000

PROJECT INFORMATION

Data Set: C:\AQT\WDOT\PIT2.AQT
 Date: 06/21/00

Time: 08:55:03

DOTPIT2.AQT



Data Set: C:\AQT\WDOTPIT2.AQT
Title: DOTPIT2.AQT
Date: 06/21/00
Time: 08:52:43

PROJECT INFORMATION

Company: DOT Pittsboro
Client: DOT
Project: 1040-98-107
Location: Pittsboro, NC
Test Date: 5/11/2000
Test Well: WS-1

AQUIFER DATA

Saturated Thickness: 70. ft
Anisotropy Ratio (Kz/Kr): 1.

PUMPING WELL DATA

Number of pumping wells: 1

Pumping Well No. 1: WS 1

X Location: 0. ft
Y Location: 0. ft

No. of pumping periods: 1

Pumping Period Data
Time (min) Rate (cu. ft/min)
1060. 0.294

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: DW 2

X Location: 130. ft
Y Location: 0. ft

No. of observations: 30

Observation Data

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
10.	0.186	265.	0.744	610.	1.301
20.	0.186	295.	0.811	645.	1.335

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
60.	0.304	320.	0.828	680.	1.386
80.	0.355	355.	0.879	745.	1.439
95.	0.389	380.	0.946	790.	1.467
115.	0.422	405.	0.98	830.	1.487
150.	0.524	461.	1.149	880.	1.521
175.	0.575	505.	1.217	915.	1.538
205.	0.659	550.	1.217	950.	1.521
230.	0.727	565.	1.234	1005.	1.555

SOLUTION

Aquifer Model: Leaky

Solution Method: Hantush

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	ft ² /min
T	0.03807	
S	0.0004075	
β	1.E-05	