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June 16, 2005

Mr. Greg Smith
North Carolina Department of Transportation
Geotechnical Engineering Unit
1589 Mail Service Center
Raleigh, North Carolina 27699-1589

Reference: Preliminary Site Assessment
Lakewood Development Property (Parcel #18)
723 South Main Street
King, Stokes County, North Carolina
NCDOT Project R-2201
WBS Element 34380.1.1
Earth Tech Project No. 85238

Dear Mr. Smith:

Earth Tech of North Carolina, Inc., (Earth Tech) has completed the Preliminary Site Assessment conducted at the above-referenced property. The work was performed in accordance with the Technical and Cost proposal dated April 7, 2005, and the North Carolina Department of Transportation's (NCDOT's) Notice to Proceed dated April 12, 2005. Activities associated with the assessment consisted of conducting a geophysical investigation, collecting soil and groundwater samples for laboratory analysis, and reviewing applicable North Carolina Department of Environment and Natural Resources (NCDENR) records. The purpose of this report is to document the field activities, present the laboratory analyses, and provide recommendations regarding the property.

Location and Description

The Lakewood Development Property (Parcel #18) is located at 723 South Main Street in King, North Carolina. The property is situated on the southeast side of South Main Street at the northeastern quadrant of the intersection of South Main Street and Marziano Drive (Figure 1). The property frontage is located from the intersection of Marziano Drive north to the intersection with Bailey Drive. Based on information supplied by the NCDOT and the site visit, Earth Tech understands that the site is a former gas station where three 8,000-gallon gasoline underground storage tanks (USTs) were removed. The gas station has also been removed and a Wendy's restaurant has been built. The property consists of a Wendy's restaurant, single-story building housing an automotive parts store, and a single-story building with a small business tenant (Figure 2). An aerial photograph from 1985 (Figure 3) shows the former gas station and associated USTs and pump islands. Superimposed on the aerial photograph is the footprint of the existing

Mr. Greg Smith

June 16, 2005

Page 2

Wendy's. The three former USTs were located on the north side of the pump islands. The proposed right-of-way appears to affect the area of the former USTs.

Earth Tech reviewed the North Carolina Department of Environment and Natural Resources (NCDENR) Incident Management database and Incident Number 19738 was listed for this location. However, the site was identified as the King Shell Service Center. Information in the NCDENR files (Attachment A) indicates that soil contamination was detected in December 1998 when three 8,000-gallon gasoline USTs were closed. Ten soil samples were collected as part of the closure assessment. Three of the soil samples contained total petroleum hydrocarbon (TPH) concentrations above the 10 mg/kg action level for the UST closure. These concentrations ranged from 25 mg/kg to 1,100 mg/kg. Two of the soil samples were collected from below the USTs and one was collected from below a dispenser island. A Site Check and Initial Abatement (20-Day) Report was prepared and submitted in February 1999. On the basis of the findings from the 20-day report, a Phase I and Phase II Limited Site Assessment was conducted and submitted in May 1999 (this document had been archived at the NCDENR and was not available for review). A No Further Action letter was issued to Quality Oil Company, Inc., on July 17, 2000. This letter suggests that the site was a low-risk classification. Because of the presence of reported contamination and former USTs, the NCDOT requested a Preliminary Site Assessment to evaluate the soils within the proposed right-of-way.

Earth Tech also reviewed the UST registration database to obtain UST ownership information. According to the database, the former USTs on the property were operated under Facility Number 0-008994. The operator and owner of the tanks are listed as follows:

Owner

Quality Oil Company, LLC
Post Office Box 2736
Winston-Salem, North Carolina 27127

Operator

King Shell Service Center
723 South Main Street
King, North Carolina 27021

Geophysical Survey

Prior to Earth Tech's mobilization to the site, Pyramid Environmental conducted a geophysical survey to evaluate if additional USTs were present on the property. The geophysical survey consisted of an electromagnetic survey using a Geonics EM61 time-domain electromagnetic induction meter to locate buried metallic objects, specifically USTs. A survey grid was laid out at the property with the X-axis oriented approximately parallel to South Main Street and the Y-axis oriented approximately perpendicular to South Main Street. The grid was located to cover all accessible portions of the proposed right-of-way. The survey lines were spaced 3 meters (10 feet) apart. Magnetic data was collected continuously along each survey line with a data logger. After collection, the data was reviewed in the field with graphical computer software. Following the electromagnetic survey, a ground penetrating radar (GPR) survey was conducted to further evaluate any anomalies.

Mr. Greg Smith

June 16, 2005

Page 3

Several anomalies were detected in the geophysical survey. However, these anomalies were generally attributed to buildings, steel-reinforced concrete, pump islands, vehicles, and buried utility lines or conduits. The survey concluded that no metallic USTs were present on the property. A detailed report of findings and interpretations is presented in Attachment B.

Site Assessment Activities

On May 10, 2005, Earth Tech mobilized to the site to conduct a Geoprobe® direct push investigation to evaluate soil conditions within the proposed corridor. Continuous sampling using direct push technology (Probe Technology of Concord, North Carolina) resulted in generally good recovery of soil samples from the direct-push holes. Soil samples were collected and contained in 1.2-meter (4-foot) long acetate sleeves inside the direct push sampler. Each of these sleeves was divided in half for soil sample screening. Each 0.6-meter (2-foot) interval was placed in a resealable plastic bag and the bag was set aside for a sufficient amount of time to allow volatilization of organic compounds from the soil to the bag headspace. The probe of a flame ionization detector/photo ionization detector (FID/PID) was inserted into the bag and the reading was recorded. After terminating the sample hole, the soil sample from the depth interval with the highest FID/PID reading was submitted to Paradigm Analytical Laboratories, Inc., in Wilmington, North Carolina, using standard chain-of-custody procedures. The laboratory analyzed the soil samples for total petroleum hydrocarbons (TPH) using extraction methods 3550 (diesel fuel/fuel oil) and 5030 (gasoline).

Seven direct-push holes (LD-1 through LD-7) were advanced within the property at the site to a depth of 4.8 meters (16 feet) as shown in Figure 2 and Attachment C. The borings were located within the proposed right-of-way to evaluate the entire right-of-way and in particular the former UST and dispenser island areas (Attachment D, Figure 3). Borings LD-1 through LD-3 were located to evaluate the proposed right-of-way on the south side of the property. Borings LD-4 and LD-5 were located to assess the former UST and pump island area. Borings LD-6 and LD-7 were located to evaluate soil conditions in the proposed right-of-way on the west side of the property along South Main Street. The lithology encountered by the direct-push samples generally was consistent throughout the site. The ground surface for the boring locations was covered with about 0.05 meters (2 inches) of topsoil. The remainder of the property was covered with asphalt or concrete. Below the surface treatment to a depth of about 1.8 to 3.0 meters (6 to 10 feet) was a medium to reddish brown silt/clay. Below this soil to a depth of 4.8 meters (16 feet) was a mottled medium brown, reddish brown, and tan silt/clay saprolite. No groundwater was encountered in any of the borings. Based on field screening, soil samples were submitted for laboratory analysis, which are summarized in Table 1.

Analytical Results

Based on the laboratory reports, summarized in Table 1 and presented in Attachment E, petroleum hydrocarbon compounds were detected in two of the seven soil samples collected from the site (Figure 4). The soil sample from boring LD-6 contained a diesel range organic (DRO)

Mr. Greg Smith

June 16, 2005

Page 4

concentration of 12 mg/kg and the soil sample from boring LD-7 contained a DRO concentration of 36 mg/kg. According to the North Carolina Underground Storage Tank Section's Underground Storage Tank Closure Policy dated August 24, 1998, the action level for TPH analyses is 10 mg/kg for both gasoline and diesel fuel. However, that agency's "Guidelines for Assessment and Corrective Action," dated April 2001, does not allow for use of TPH analyses for confirmation of the extent of petroleum contamination or its cleanup. As a result, while TPH concentrations are no longer applicable in determining if soil contamination is present, this analysis is a legitimate screening tool. Based on the TPH action level for UST closures, the assumed action level for this report is 10 mg/kg. Two of the soil samples collected from the site contained a TPH diesel fuel concentration above the 10 mg/kg assumed action level.

Conclusions and Recommendations

A Preliminary Site Assessment was conducted to evaluate the Lakewood Development Property (Parcel #18) located at 723 South Main Street in King, Stokes County, North Carolina. A previous release from former USTs at the site resulted in a groundwater incident being assigned to the property. As of July 2000, the incident number was assigned a No Further Action status. Nine soil borings were advanced to evaluate the soil conditions on the property. The laboratory reports of the soil samples from these borings suggest that two of the samples contained TPH concentrations above the assumed action levels. Based on the location of the soil borings from which soil samples were collected containing elevated TPH concentrations and the absence of known nearby USTs, the source of the contamination could not be identified.

To evaluate the volume of soil requiring possible remediation, the soil samples with TPH concentrations above 10 mg/kg and oil were considered. The analytical results of the soil samples suggest that the soil from borings LD-6 and LD-7 contained TPH concentrations above the assumed action level. A review of the field screening readings (Table 1) suggests that a maximum contaminated soil thickness of 3.0 meters (10 feet), from ground surface to 3.0 meters (10 feet) is likely. The volume of potentially affected soil was estimated based on a thickness of 3.0 meters (10 feet), a width of 14 meters (45 feet), and a length of 30 meters (98 feet). These dimensions result in a volume of about 1,260 cubic meters (1,648 cubic yards) of contaminated soil. This volume is estimated from TPH analytical data, which are no longer valid for remediation of sites reported after January 2, 1998. After this date, MADEP EPH/VPH and EPA Method 8260/8270 analyses will likely be required to confirm cleanup. However, these analyses do not correlate exactly with TPH data and, as a result, the actual volume of contaminated soil may be higher or lower.

Mr. Greg Smith

June 16, 2005

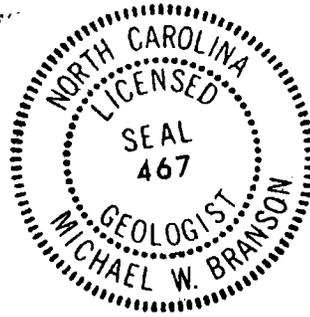
Page 5

Earth Tech appreciates the opportunity to work with the NCDOT on this project. Earth Tech recommends that a copy of this report be submitted to the Division of Waste Management, UST Section, in the Winston-Salem Regional Office. If you have any questions, please contact me at (919)854-6238.

Sincerely,



Michael W. Branson, P.G.
Project Manager



Attachments

c: Project File

TABLE 1

FIELD SCREENING AND ANALYTICAL RESULTS
 LAKEWOOD DEVELOPMENT PROPERTY (PARCEL #18)
 KING, NORTH CAROLINA
 NCDOT PROJECT NO. R-2201
 WBS ELEMENT 34380.1.1
 EARTH TECH PROJECT NO. 85328

LOCATION	DEPTH (m)	FID READING (ppm)	SAMPLE ID	ANALYTICAL RESULTS (mg/kg)	ASSUMED ACTION LEVEL (mg/kg)
LD-1	0 - 0.6	3.52			
	0.6 - 1.2	3.49			
	1.2 - 1.8	4.45			
	1.8 - 2.4	3.14			
	2.4 - 3.0	4			
	3.0 - 3.6	4.2			
	3.6 - 4.2	3.9			
	4.2 - 4.8	4.85	LD-1	DRO (BQL) GRO (BQL)	10 10
LD-2	0 - 0.6	0.06			
	0.6 - 1.2	2.89			
	1.2 - 1.8	1.66			
	1.8 - 2.4	4.91			
	2.4 - 3.0	3.39			
	3.0 - 3.6	4.9			
	3.6 - 4.2	5.47	LD-2	DRO (BQL) GRO (BQL)	10 10
LD-3	0 - 0.6	6.41			
	0.6 - 1.2	11.12			
	1.2 - 1.8	82	LD-3	DRO (BQL) GRO (BQL)	10 10
	1.8 - 2.4	13.55			
	2.4 - 3.0	4.02			
	3.0 - 3.6	4.27			
	3.6 - 4.2	2.38			
	4.2 - 4.8	4.83			
LD-4	0 - 0.6	2.13			
	0.6 - 1.2	3.79			
	1.2 - 1.8	3.12			
	1.8 - 2.4	3.31			
	2.4 - 3.0	2.44			
	3.0 - 3.6	6.73			
	3.6 - 4.2	5.04	LD-4	DRO (BQL) GRO (BQL)	10 10
	4.2 - 4.8	6.83			
LD-5	0 - 0.6	6.33			
	0.6 - 1.2	4.56			
	1.2 - 1.8	9.91			
	1.8 - 2.4	6.67			
	2.4 - 3.0	9.92			
	3.0 - 3.6	9.5			
	3.6 - 4.2	11.25	LD-5	DRO (BQL) GRO (BQL)	10 10
	4.2 - 4.8	4.17			

TABLE 1 (continued)

FIELD SCREENING AND ANALYTICAL RESULTS
 LAKEWOOD DEVELOPMENT PROPERTY (PARCEL #18)
 KING, NORTH CAROLINA
 NCDOT PROJECT NO. R-2201
 WBS ELEMENT 34380.1.1
 EARTH TECH PROJECT NO. 85328

LOCATION	DEPTH (m)	FID READING (ppm)	SAMPLE ID	ANALYTICAL RESULTS (mg/kg)	ASSUMED ACTION LEVEL (mg/kg)
LD-6	0 - 0.6	5.58			
	0.6 - 1.2	7.52			
	1.2 - 1.8	8.68			
	1.8 - 2.4	7.59			
	2.4 - 3.0	10.54	LD-6	DRO (12) GRO (BQL)	10 10
	3.0 - 3.6	7.22			
	3.6 - 4.2	7.42			
	4.2 - 4.8	8.11			
LD-7	0 - 0.6	10.19			
	0.6 - 1.2	8.86			
	1.2 - 1.8	9.23			
	1.8 - 2.4	10.82	LD-7	DRO (36) GRO (BQL)	10 10
	2.4 - 3.0	8.4			
	3.0 - 3.6	7.95			
	3.6 - 4.2	8.3			
	4.2 - 4.8	7.42			

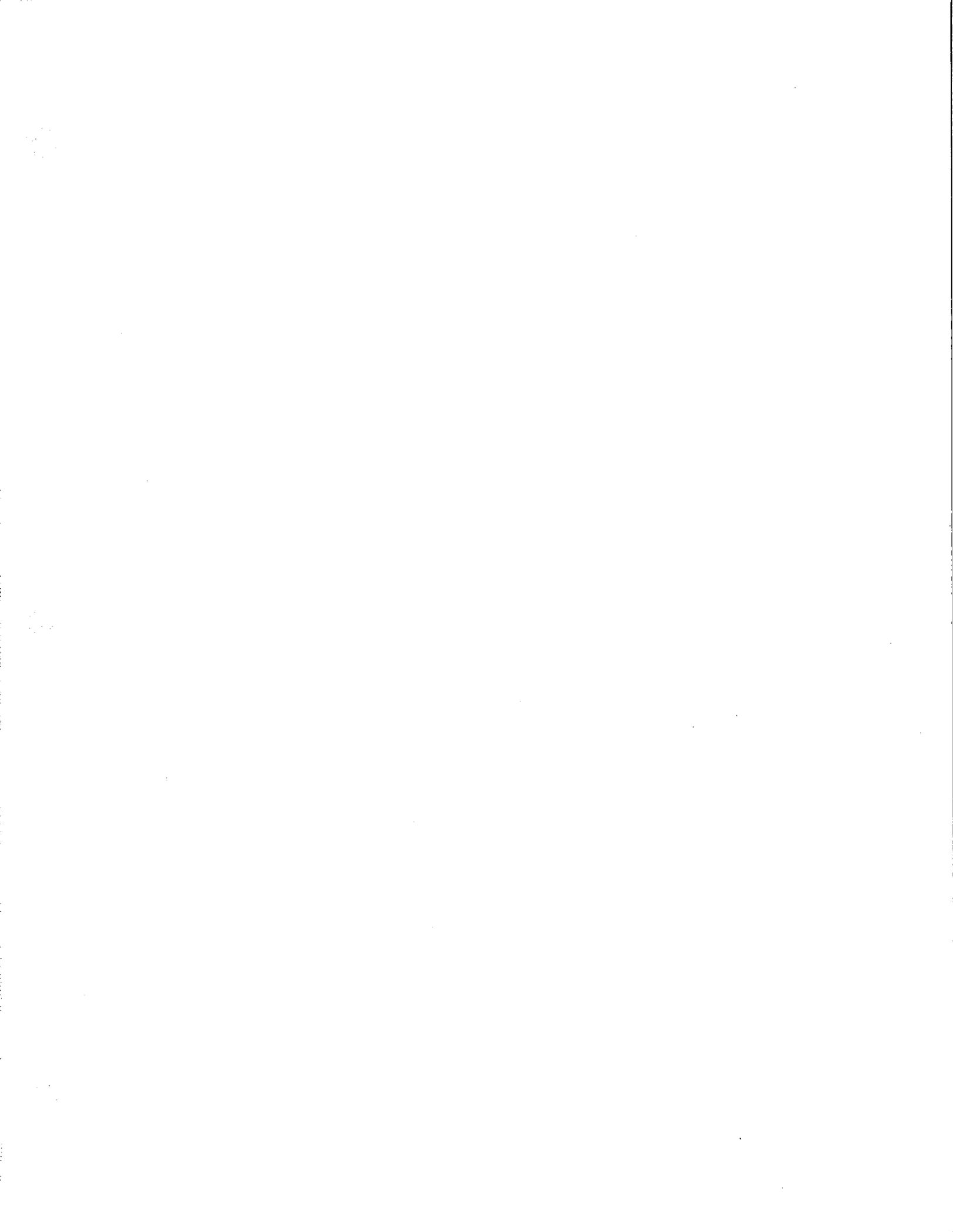
DRO - Diesel range organics.

GRO - Gasoline range organics.

BOLD values are present above the assumed action level.

ppm - parts per million.

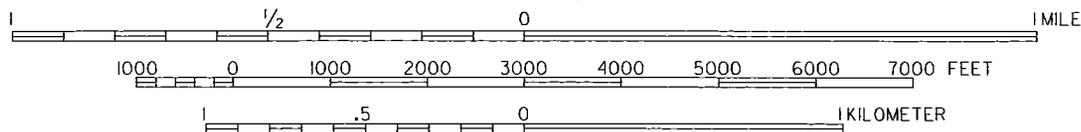
mg/kg - milligrams per kilogram.



FIGURES



SCALE 1:24,000



SOURCE: U.S. GEOLOGICAL SURVEY 7.5 MIN QUADRANGLE: KING, NC (REV 1983)

EARTH  TECH

FIGURE 1
VICINITY MAP
LAKEWOOD DEVELOPMENT PROPERTY (PARCEL #18)
KING, NORTH CAROLINA

MAY 2005

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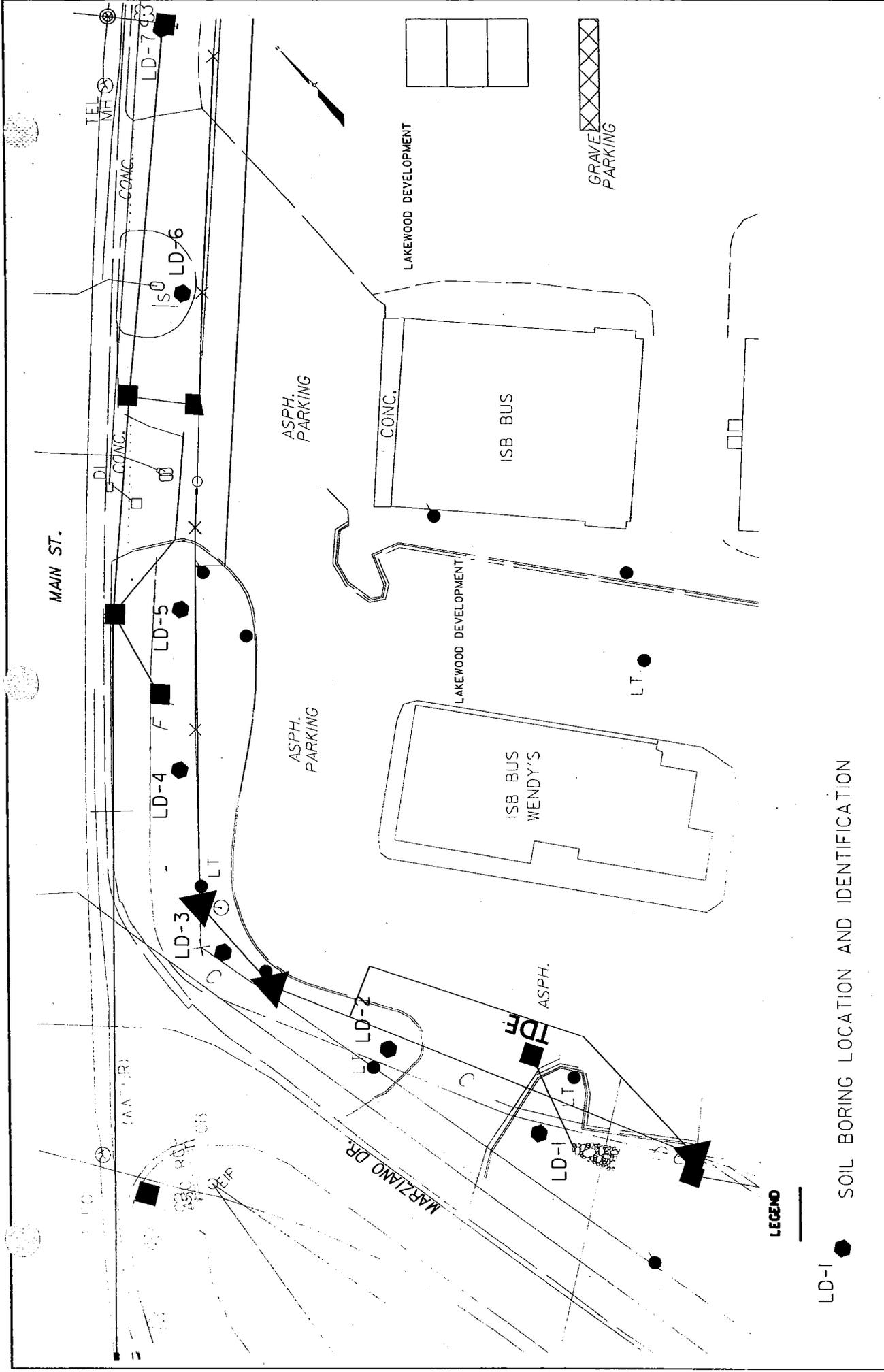
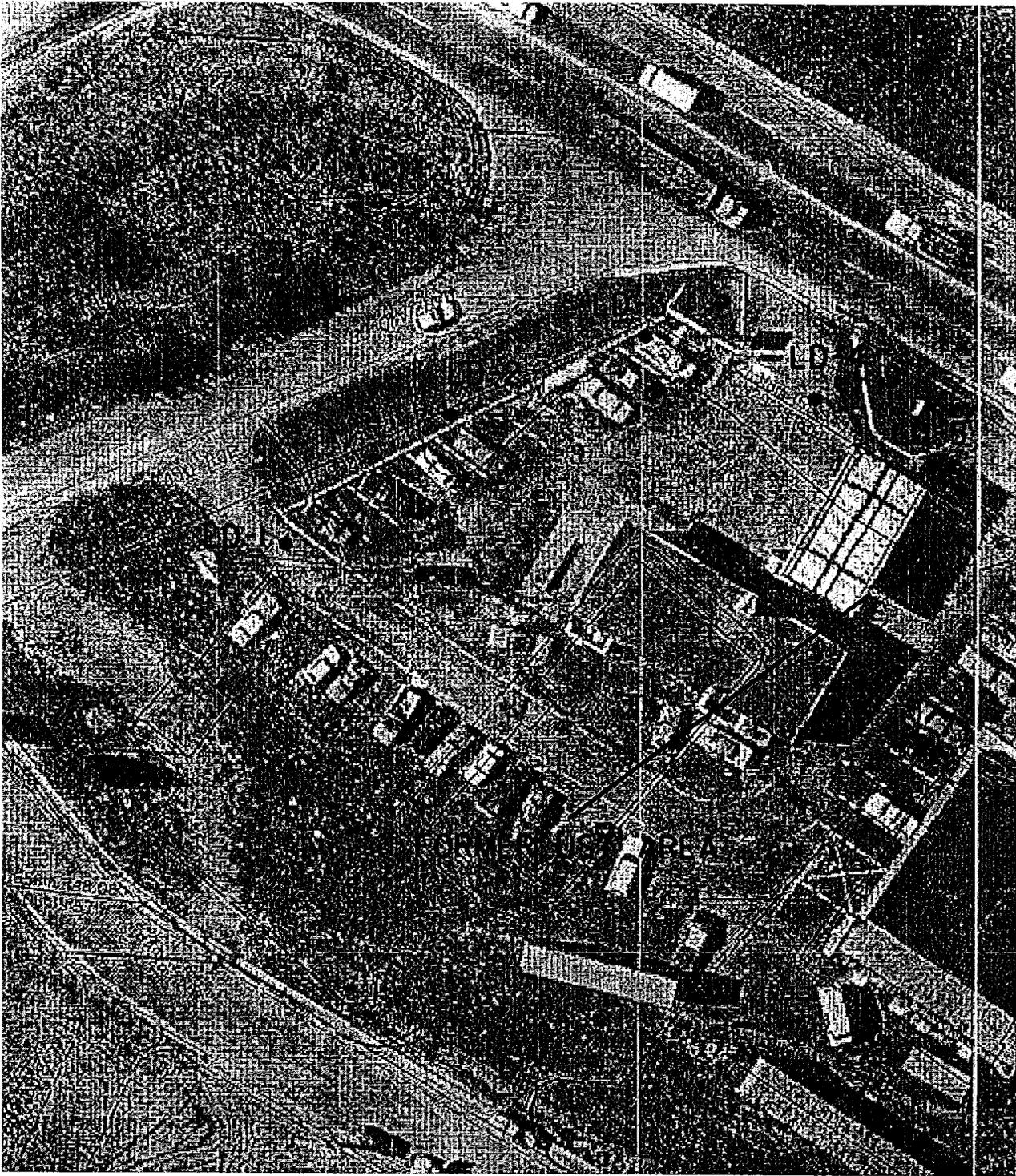


FIGURE 2
SITE MAP
LAKWOOD DEVELOPMENT PROPERTY (PARCEL #18)
 KING, NORTH CAROLINA

E A R T H T E C H



MAY 2005 85238



NOT TO SCALE

LEGEND

LD-1 ● SOIL BORING LOCATION AND IDENTIFICATION

REFERENCE: NCDOT AIR PHOTOGRAPH MISSION 1952 FLOWN 12-2-1985



FIGURE 3
AERIAL PHOTO MAP
LAKEWOOD DEVELOPMENT PROPERTY (PARCEL #18)
KING, NORTH CAROLINA

MAY 2005

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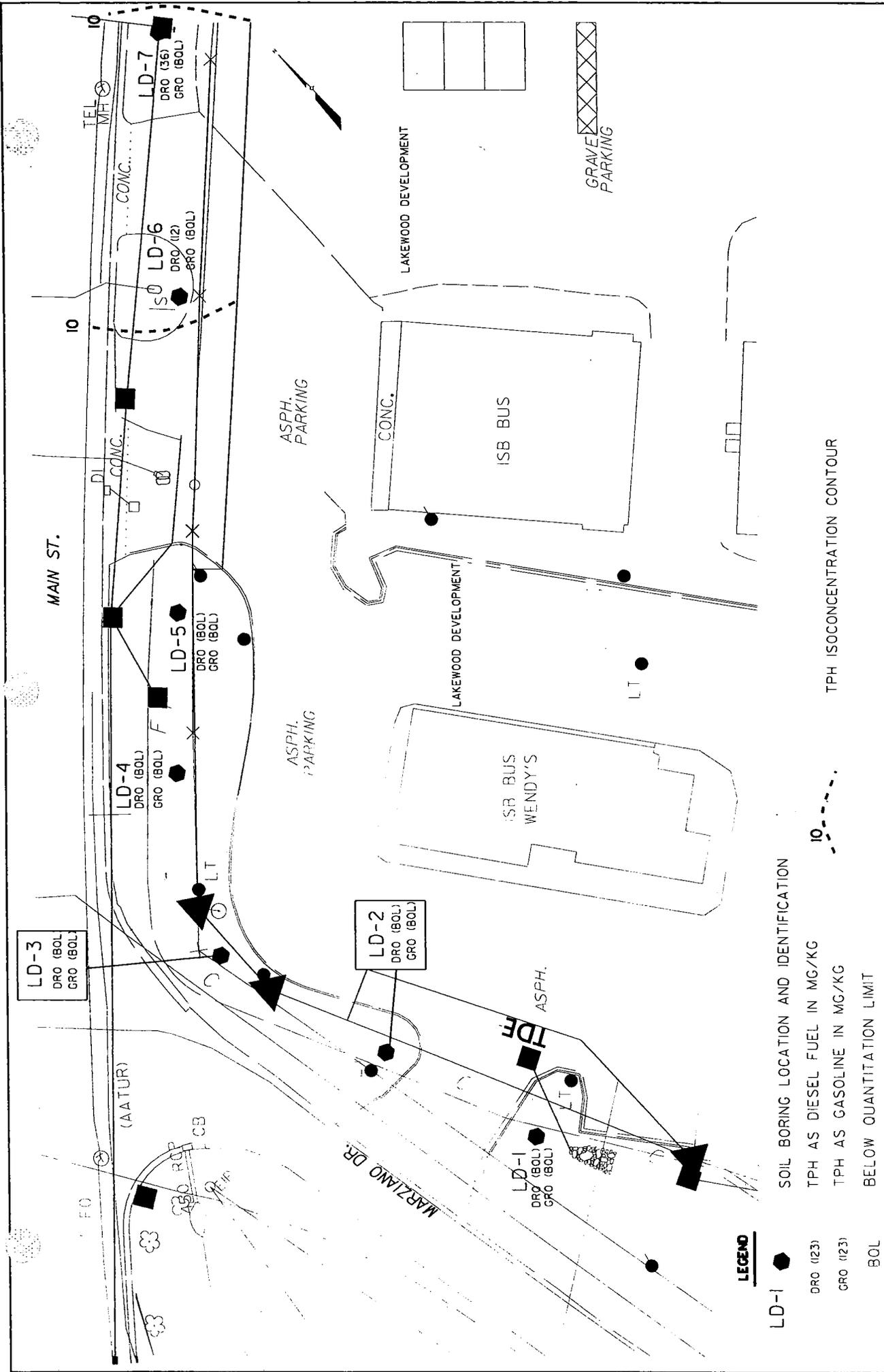


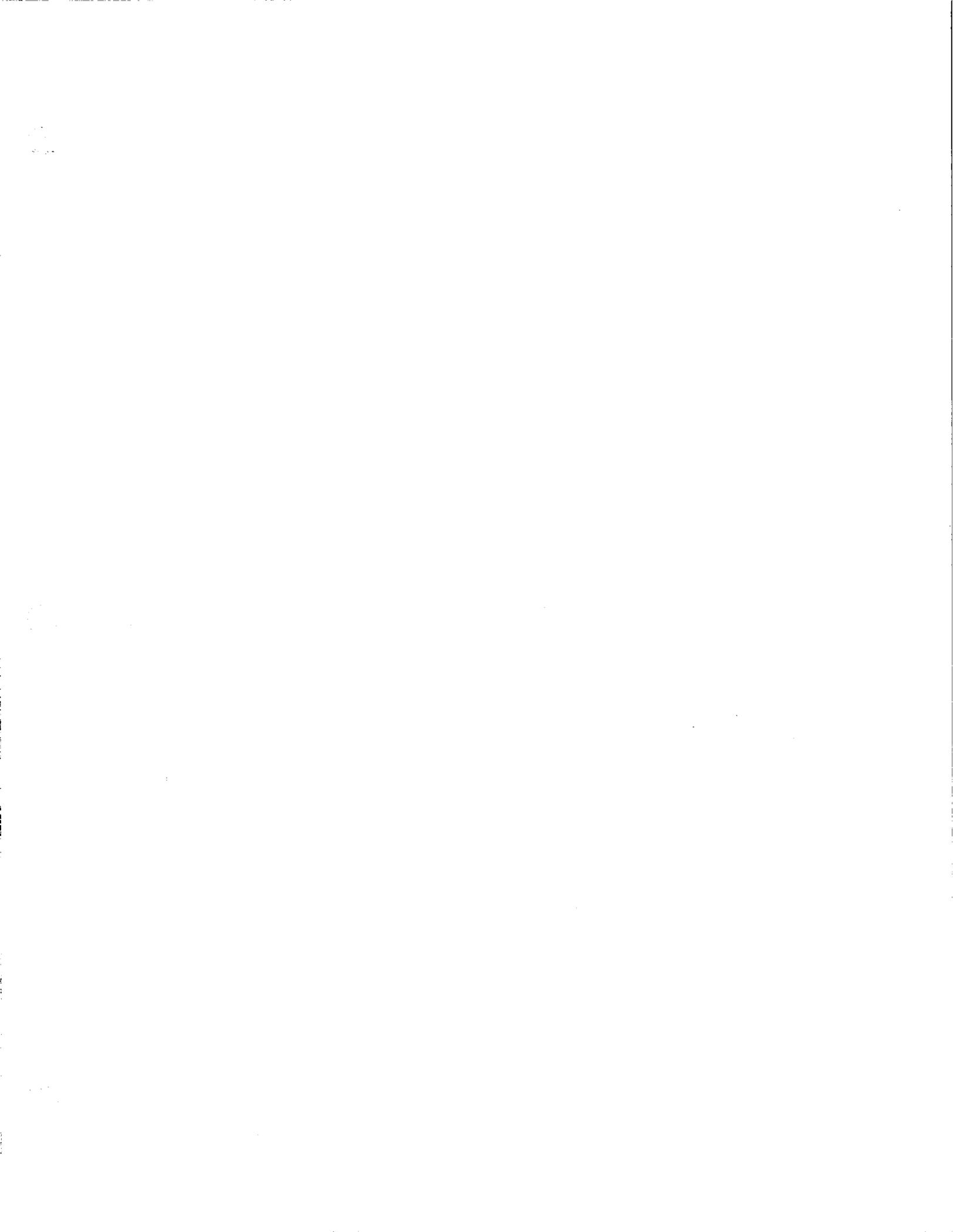
FIGURE 4
SOIL ANALYTICAL RESULTS MAP
LAKewood DEVELOPMENT PROPERTY (PARCEL #18)
 KING, NORTH CAROLINA

E A R T H T E C H

0 10 20
 GRAPHIC SCALE (meters)

MAY 2005

85238



ATTACHMENT A



RECEIVED
N.C. Dept. of EHNR

FEB 10 1999

Winston-Salem
Regional Office

February 8, 1999

Ms. Linda Estkowski
NC Division of Waste Management
UST Section
Winston-Salem Regional Office
585 Waughtown Street
Winston-Salem, NC 27102-2241

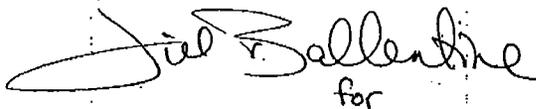
Re: Site Check and Initial Abatement (20-Day) Report
UST Closure Report
Quality Oil - King Shell Service Station
723 South Main Street
King, North Carolina (Stokes Co.)
TEC Project No. 04098

Dear Ms. Estkowski:

Enclosed is one copy of the Site Check and Initial Abatement (20-Day) Report and one copy of the UST Closure Report for the above referenced facility. If you have any questions or need additional information, please call me at (919) 932-1590.

Sincerely,

TURNER ENVIRONMENTAL CONSULTANTS, P.C.


for

Jonathan Grubbs
Project Manager

cc: Danny Stroud, Quality Oil Company, LLC

Enclosure



**SITE CHECK AND INITIAL ABATEMENT REPORT
(20-Day Report)**

**KING SHELL SERVICE STATION
723 SOUTH MAIN STREET
KING, NORTH CAROLINA**

RECEIVED
N.C. Dept. of ENR

FEB 10 1999

Winston-Salem
Regional Office

Latitude: 36° 15' 41" N Longitude: 80° 21' 49" W

Release Information

Date Discovered: 12/12/98

Estimated Release Quantity: Unknown

Release Cause/Source: Commercial Underground Storage Tank System

UST Capacity: three 8,000-gallon Gasoline USTs

UST System Owner/Responsible Party:

Quality Oil Company, LLC
Post Office Box 2736
Winston-Salem, NC 27127

Property Owner:

Richard Stone
Post Office Box 426
King, NC 27027

TEC Project No. 04098

February 1999

TURNER ENVIRONMENTAL CONSULTANTS, P.C.

110 WEST MAIN STREET • SUITE A • CARRBORO, NC 27510 • PHONE 919-932-1590 • FAX 919-932-1594

**CERTIFICATION FOR THE SUBMITTAL
OF AN ENVIRONMENTAL / GEOLOGICAL ASSESSMENT**

Attached is the Site Check and Initial Abatement Report (20-Day Report) for:

Site Name: King Shell Service Center
Address: 723 South Main Street
City: King State: NC Zip Code: 27021
Phone: (336) 983-9255

Responsible Party: Quality Oil Company, LLC
Address: Post Office Box 2736
City: Winston-Salem State: NC Zip Code: 27127
Phone: (336) 722-3441

I, Michael J. Brown, a Licensed Geologist in the State of North Carolina for TURNER ENVIRONMENTAL CONSULTANTS, P.C. do hereby certify that I am familiar with and have reviewed all material including figures within this report and that to the best of my knowledge the data, site assessments, figures, and other associated materials are correct and accurate. All work was performed under my direct supervision. My seal and signature are affixed below. Additional seals and/or signatures are also affixed below.

TURNER ENVIRONMENTAL CONSULTANTS, P.C.



Jonathan R. Grubbs
Project Manager



Michael J. Brown, P.G., REP
Vice President

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SITE HISTORY	1
3.0	INITIAL ABATEMENT ACTIVITIES	1
4.0	FIELD AND LABORATORY ANALYSES	2
4.1	Soil Sampling Methodology and Results	2
5.0	FREE PRODUCT CHECK	4
6.0	POTENTIAL SOURCES OF PETROLEUM HYDROCARBONS	4
7.0	NATURE AND ESTIMATED QUANTITY OF RELEASE	4
8.0	SITE AND VICINITY DESCRIPTION	4
9.0	CONCLUSIONS	5
10.0	LIMITATIONS	6

FIGURES

- 1: Site Location Map
- 2: Site Layout
- 3: Closure Sample Locations

TABLES

- 1: Site History Data
- 2: Closure Soil Sample Results

1.0 INTRODUCTION

Quality Oil Company, LLC (QUALITY) has contracted Turner Environmental Consultants, P.C. (TEC) to perform environmental assessment activities on its behalf at the King Shell Service Center located at 723 South Main Street in King, NC. The assessment activities are associated with the closure of three 8,000-gallon gasoline commercial underground storage tanks (UST). During the closure, soil samples collected beneath the USTs were found to contain concentrations of gasoline constituents in excess of the reportable concentration for Total Petroleum Hydrocarbons (TPH) 5030. The site location is shown in Figure 1. A site layout map is included in Figure 2.

2.0 SITE HISTORY

Based upon the UST dimensions measured by TEC, the USTs are each approximately 8,000 gallons in capacity. According to the North Carolina UST Database, two of the USTs were installed in May 1964 and the third in May 1970. A 550-gallon heating oil UST, installed in May 1964, was removed in November 1988. According to Danny Stroud of QUALITY, QUALITY has owned the USTs since their installation. In December 1998, the USTs were taken out of service, and the site was closed as a gas station. The product type, capacity, date installed, date closed, and release detection information for the USTs are listed in Table 1.

3.0 INITIAL ABATEMENT ACTIVITIES

In December 1998, QUALITY contracted TEC to collect closure soil samples from the various component of the UST system. The excavation services were performed by Beauchamp Inc. of Lewisville, NC. The three gasoline USTs, product lines and dispensers of the former UST system were removed. After the USTs were excavated, they were visually inspected for signs of deterioration. The USTs had minimal pitting and rusting. No

holes were noted in the USTs. The USTs were taken offsite and disposed of by Safeway Tank Disposal, Inc. of Belews Creek, NC.

Ten closure soil samples, CS1 - CS10, were collected at evenly spaced intervals beneath the UST and the dispensers in accordance with North Carolina Division of Waste Management - UST Section (NCDWM - UST) closure sampling protocol. Soil samples were screened for volatile organic vapors, placed in the appropriate laboratory containers, and submitted to a North Carolina-certified laboratory for analysis. Soil samples were analyzed for TPH targeting gasoline/low boiling fuels by EPA Method TPH 5030.

The analytical results from the soil samples collected on December 11 and 14, 1998 revealed contaminant concentrations in excess of the NCDWM - UST reportable concentration of 10 parts per million (ppm) for gasoline compounds. On January 5, 1999, TEC personnel reported the release to Michael Amsbaugh of the NCDWM - UST Winston-Salem Regional Office after the receipt of the laboratory data.

A more detailed description of the soil sampling is discussed in Section 4.0. Table 2 lists the analytical results for the soil samples. Figure 3 depicts the locations and analytical results of the soil samples. Laboratory reports will be submitted with the forthcoming UST Closure Report.

4.0 FIELD AND LABORATORY ANALYSES

4.1 Soil Sampling Methodology and Results

During the UST closure on December 11 and 14, 1998, soil samples CS1 - CS6 were collected beneath the bottom of the three USTs, approximately 13 feet below ground level (BGL). The top of the USTs were approximately 3 feet BGL. Closure samples CS7 - CS10 were collected approximately 3 feet beneath the four dispensers.

All of the soil samples obtained during the UST closure were collected following the proper NCDWM-UST soil sampling protocol. Since the USTs were greater than six feet long, two soil samples were collected beneath each UST at evenly spaced intervals. A closure sample was not collected beneath the product lines, since the UST basin was within 10 feet of the dispenser islands.

Each sample was screened with an organic vapor monitor (OVM). A grab sample from each sample location was collected, placed in the appropriate laboratory containers, and submitted to a North Carolina-certified laboratory. Closure samples CS1 - CS6 were collected by TEC personnel from an excavator bucket. Dispenser island closure samples CS7 - CS10 were collected using a stainless steel hand auger. Under the NCDWM-UST closure sampling protocol, the soil samples were analyzed for TPH 5030 targeting gasoline/low boiling point fuels. OVM screening results for the soil samples are included in Table 2.

Analytical results from the samples revealed petroleum contaminant concentrations in excess of the NCDWM - UST reportable concentration for TPH 5030 of 10 ppm for gasoline constituents in samples CS2, CS3, and CS9. Table 2 lists the analytical results for the soil samples. Laboratory reports will be submitted with the forthcoming UST Closure Report. Figure 2 depicts the location and analytical results for the UST closure samples.

Based upon the high OVM results of certain soil samples and to facilitate the removal of the UST system, 427.30 tons of contaminated soil were excavated and disposed of at the Soil Solutions Inc. soil disposal facility in Winston-Salem, NC. Two composite soil samples collected from the excavated soil revealed gasoline concentrations ranging up to 19 ppm. The final dimensions of the UST basin were 39' long x 29' wide x 13' deep. The soil lithology encountered during the excavation was a reddish-brown Silty Clay with sand. The UST basin was backfilled with sandy clay fill dirt.

5.0 FREE PRODUCT CHECK

No free product in the form of gasoline was observed in the UST basin during the closure.

6.0 POTENTIAL SOURCES OF PETROLEUM HYDROCARBONS

Potential sources of petroleum hydrocarbons in the site vicinity consist of the former gasoline UST system and the former onsite 550-gallon heating oil UST. Offsite sources include two gas stations located along South Main Street within 1,500 feet of the site.

7.0 NATURE AND ESTIMATED QUANTITY OF RELEASE

The nature of the release is gasoline from the former gasoline UST system removed on December 11 and 14, 1998. The amount of the release is currently unknown.

8.0 SITE AND VICINITY DESCRIPTION

The site is located at 723 South Main Street in King, NC. Land usage surrounding the subject property is primarily commercial. The site location is shown in Figure 1.

The site and neighboring auto parts supply store are serviced by an on site potable well. As a precautionary measure, TEC personnel sampled the well for volatile organic compounds by EPA Method 6210D + methyl tert butyl ether (MTBE) + isopropyl ether (IPE) during the closure activities. Analytical results of the water sample revealed a MTBE concentration of 6 parts per billion (ppb). The 2L Standard for the compound is 200 ppb. The property owner, occupants of the property buildings, and the NCDWM - UST Winston-Salem Regional Office have been notified of the result. The NCDWM - UST is planning to resample the well to verify the water quality. The surrounding properties derive their drinking water from the Town of King municipal water system.

Underground utilities identified at the site consist of water and sewer lines. The remaining utilities are overhead. The site utilities were not in the immediate vicinity of the release area. Further assessment will be needed to determine if the utilities are within the zone of contamination:

9.0 CONCLUSIONS

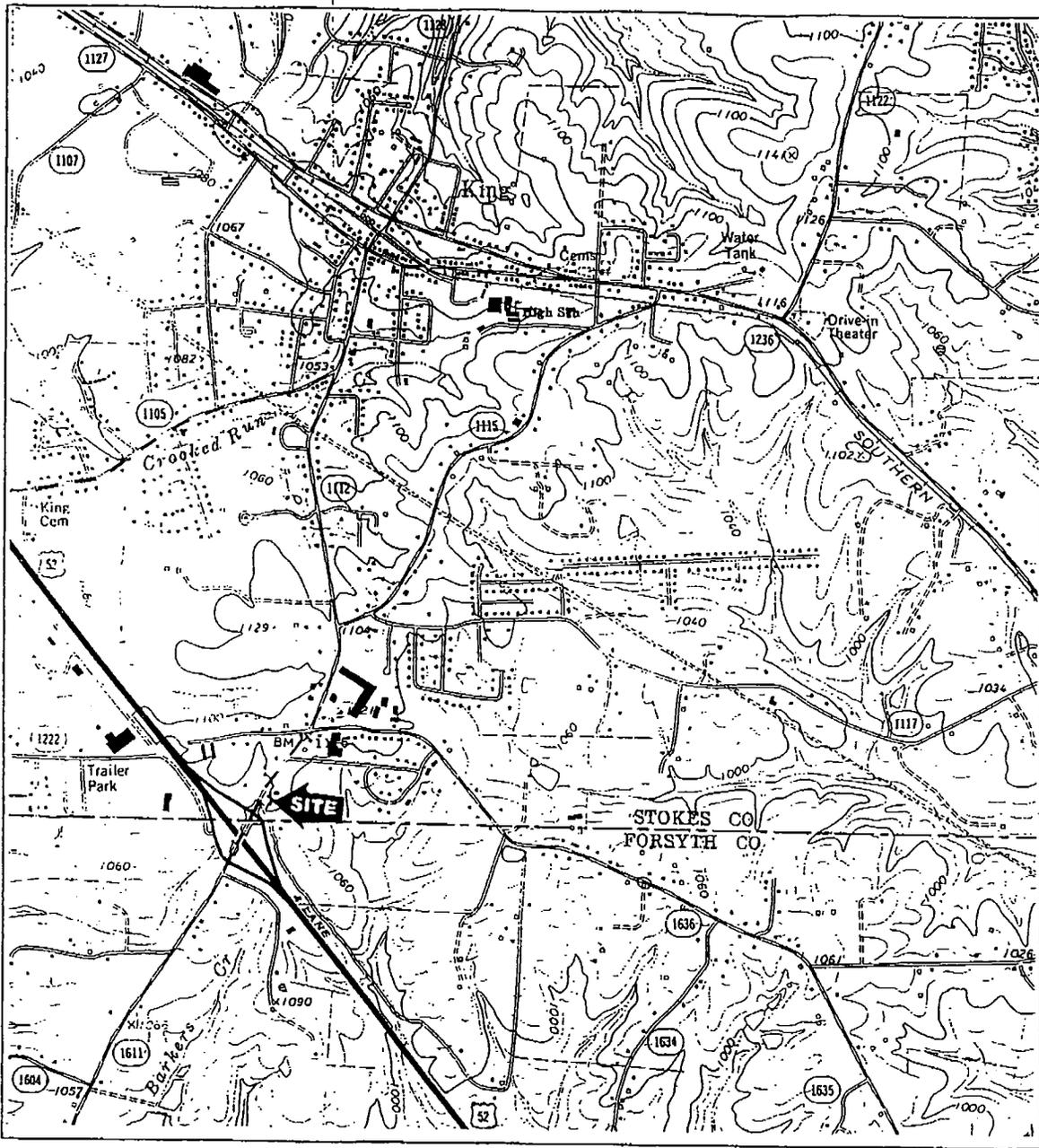
TEC has completed the removal of the primary source of contamination at the site, the former UST system. TEC has also assembled data regarding the site vicinity and nature of the release in order to comply with the Title 15A NCAC 2L .0115(c)(1) regulations. Based upon the data gathered from this limited investigation, the following conclusions can be made:

- ▶ Analytical results of soil samples collected from different components of the UST system confirm that a release of gasoline into the subsurface has occurred.
- ▶ The vertical extent of soil impact is unknown.
- ▶ Groundwater quality beneath the release area is unknown.
- ▶ A MTBE concentration of 6 ppb was detected in a water sample collected from the onsite potable well.

Based upon the analytical data from the closure, the former UST system appears to be the source of the release. In accordance with rules under Title 15A NCAC 2L .0115(c), additional assessment activities must be completed at the site. The next assessment activity is the completion of a Limited Site Assessment Report. Additional information regarding the UST closure and results will be presented in the forthcoming UST Closure Report.

10.0 LIMITATIONS

This report is limited to the investigation of only petroleum hydrocarbons, such as gasoline, and does not imply that other unforeseen adverse impacts to the environment are not present at the site. In addition, subsurface heterogeneities not identified during the current study may influence the migration of groundwater or contaminants in unpredicted ways. The limited amount of sampling and testing conducted during this study cannot practically reveal all subsurface heterogeneities. Furthermore, subsurface conditions, particularly groundwater flow, elevations, and water quality may vary through time. The opinions and conclusions arrived at in this report are in accordance with North Carolina Department of Environment and Natural Resources regulations and guidelines and industry-accepted geologic and hydrogeologic practices at this time and location. No warranty is implied or intended.

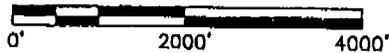


CONTOUR INTERVAL = 20 FEET.



MAP SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC -- KING, NC

GRAPHIC SCALE



TURNER ENVIRONMENTAL
CONSULTANTS, P.C.

CARRBORO, NC

SITE LOCATION MAP
723 SOUTH MAIN STREET
KING, NC

QUALITY OIL COMPANY, LLC

WINSTON-SALEM, NC

PROJECT NO. 04088

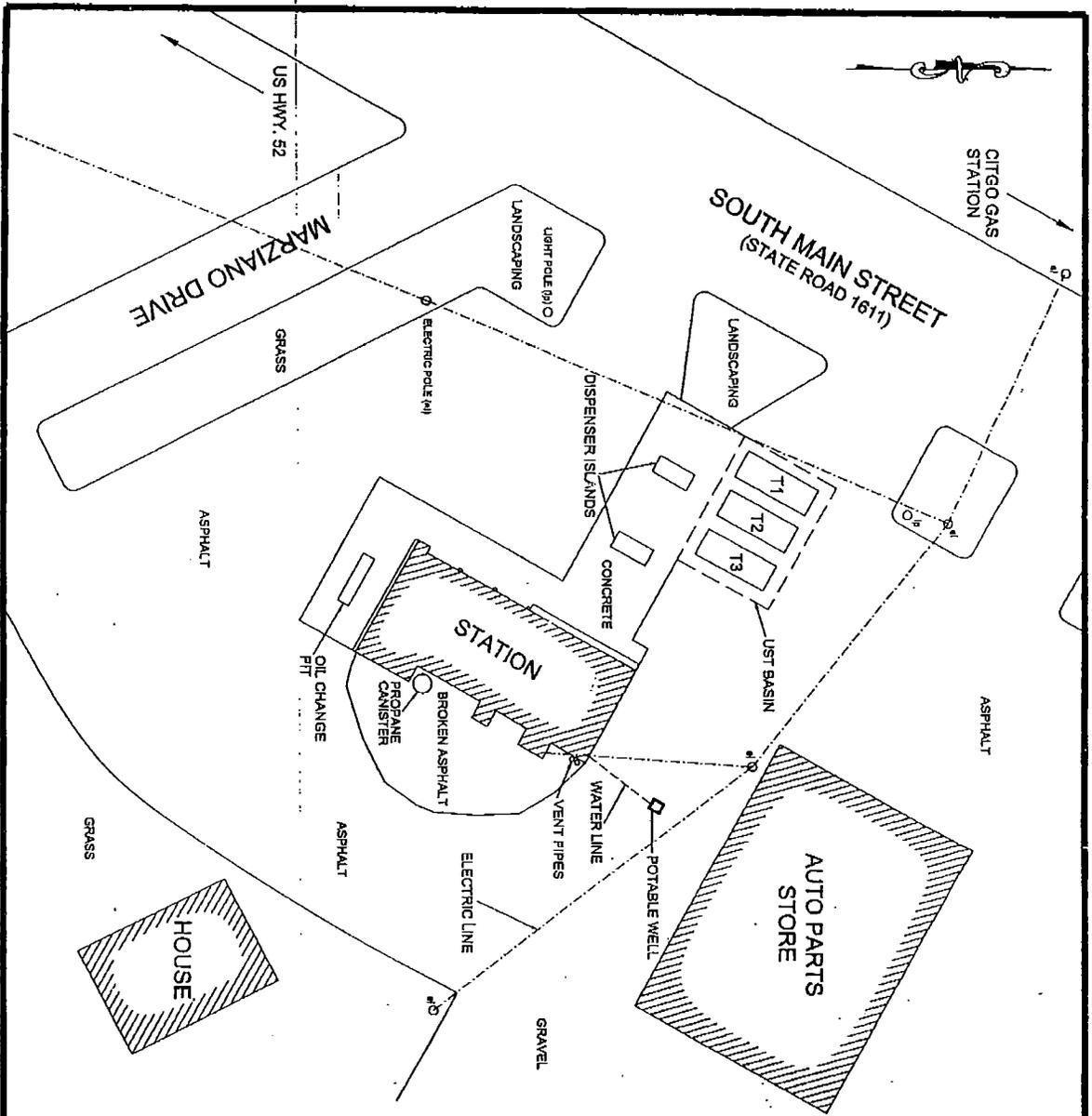
DRAWN BY: JRG

DATE: 2/1/99

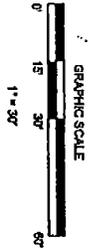
SCALE: 1" = 2000'

CHECKED BY: MJB

FIGURE NO. 1



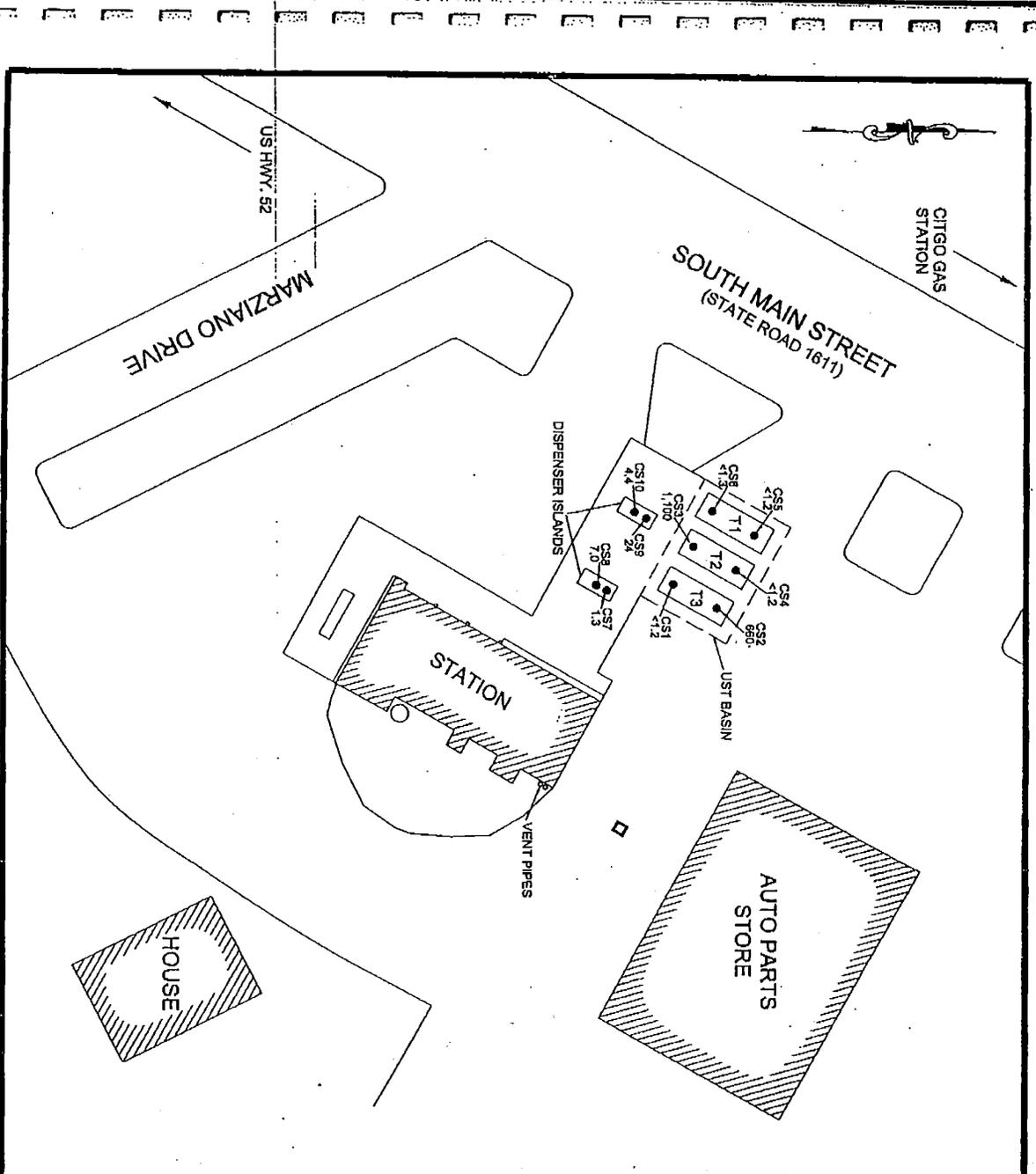
LEGEND



TURNER ENVIRONMENTAL
CONSULTANTS, P.C.
CARRBORO, NC

SITE LAYOUT
KING SHELL SERVICE STATION
723 SOUTH MAIN STREET, KING, NC
QUALITY OIL COMPANY, LLC

PROJECT NO: 04088	CHECKED BY: MJB	FIGURE NO. 2
SCALE: 1" = 30'	DRAWN BY: JRG	DATE: 1/28/98



LEGEND

- CLOSURE SAMPLE LOCATION
- CS1 UST IDENTIFICATION
- T1 ANALYTICAL RESULTS (TPH 5030)
- 1,100 BELOW SAMPLE DETECTION LIMIT
- < ALL RESULTS IN MILLIGRAMS PER KILOGRAM(MG/KG)
- MG/KG = PARTS PER MILLION
- POTABLE WELL



TURNER ENVIRONMENTAL CONSULTANTS, P.C.
CARRBORO, NC

CLOSURE SAMPLE LOCATIONS

KING SHELL SERVICE STATION
723 SOUTH MAIN STREET, KING, NC
QUALITY OIL COMPANY, LLC

PROJECT NO: 04066	CHECKED BY: MJB	FIGURE NO. 3
SCALE: 1" = 30'	DRAWN BY: JRQ	DATE: 1/28/98

TABLE 1
SITE HISTORY DATA
King Shell Service Center

Tank	Type	Product	Capacity	Dimensions	Date Installed	Date Closed	Release Detected?
T1	UST	Gasoline	8,000	8' x 22'2"	12/30/88	12/3/98	Yes*
T2	UST	Gasoline	8,000	8' x 21'4"	5/6/64	12/3/98	Yes*
T3	UST	Gasoline	8,000	8' x 21'4"	5/6/64	12/3/98	No
T4	UST	Heating Oil	550	-	5/6/64	11/1/88	-

1. Information obtained from field measurements and NC Petroleum Underground Storage Tank Database records.
2. * - Analytical results from the closure samples collected beneath the UST indicate that a release has occurred.
3. Tanks were of steel construction.
4. Dimension and release data about the former 550-gallon heating oil UST is unknown.

TABLE 2
CLOSURE SOIL SAMPLE RESULTS
King Shell Service Center

SAMPLE	LOCATION	DEPTH (Ft)	OVM	TPH 5030 (Gasoline)
CS1	Below UST	13	0	<1.2
CS2	Below UST	13	1,100	660
CS3	Below UST	13	980	1,100
CS4	Below UST	13	0	<1.2
CS5	Below UST	13	0	<1.2
CS6	Below UST	13	880	<1.3
CS7	Dispenser	3	2,360	1.3
CS8	Dispenser	3	2,200	7.0
CS9	Dispenser	3	1,500	2.4
CS10	Dispenser	3	1,880	4.4
SP1	Excavated Soil	-	-	<6.9
SP2	Excavated Soil	-	-	19

1. All results are in parts per million (ppm).
2. Shading denotes analytical results with TPH concentrations greater than the reportable concentration /action limit of 10 ppm.
3. (-) - Not applicable

50/5



NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

WINSTON-SALEM REGIONAL OFFICE
DIVISION OF WASTE MANAGEMENT
JULY 17, 2000



JAMES B. HUNT JR.
GOVERNOR

BILL HOLMAN
SECRETARY

CERTIFIED MAIL 7099 3400 0006 9315 7371
RETURN RECEIPT REQUESTED

Mr. Danny Stroud
Quality Oil Company, Inc.
1540 Silas Creek Parkway
Winston-Salem, NC 27127

LSA (Hunt 12/11)
5.12.99.

This file was archived
could not locate copy on
computer

RE: Notice of No Further Action
15A NCAC 2L .0115(h)
RISK-BASED ASSESSMENT AND
CORRECTIVE ACTION FOR
PETROLEUM UNDERGROUND
STORAGE TANKS

King Shell Service Center
723 S. Main Street, King, NC
Stokes County
Incident No. 19738
Low Risk Classification

Dear Mr. Stroud:

A review of the subject site file shows that soil contamination does not exceed the residential maximum soil contaminant concentrations established in 15A NCAC 2L .0115(m). A review of the file also shows that contaminated groundwater does not exceed gross contamination levels that were established in 15A NCAC 2L .0115(g).

Based on information provided to date, the DWM determines that no further action is required for this incident. This determination is conditional pending completion of the public notice specified below. Once proper public notice has been given, this determination will apply unless the DWM later determines that the discharge or release poses an unacceptable risk or a potentially unacceptable risk to human health or the environment.

This no-further-action determination applies only to three 8,000 gallon gasoline USTs that were permanently closed on December 11-14, 2000. This determination does not apply to any other sources of contamination that formerly or presently exist at the subject site.

Please be advised that because contaminated groundwater has not been restored to the level of the standard or interim standard established in 15A NCAC 2L .0202, groundwater within the area of contamination or within the area where contamination is expected to migrate, is not suitable for use as a water supply.

Pursuant to 15A NCAC 2L .0115(e), you have a continuing obligation to notify the DWM of any changes that you know of or should know of, that might affect the level of risk assigned to the discharge or release. Such changes include, but are not limited to, changes in zoning of real property, use of real property or the use of groundwater that has been contaminated or is expected to be contaminated by the discharge or release, if such change could cause the DWM to reclassify the risk. Please note that this responsibility not only pertains to changes involving the property on which the release occurred, but to changes involving the surrounding properties as well.

Please be advised that you must comply with the public notice requirements of 15A NCAC 2L .0115(k) as specified below. **If public notice is not provided as required, this no further action determination will be deemed invalid.** Within 30 days of receipt of this no further action notice, you must provide a copy of this notice to the following persons:

- local health director;
- chief administrative officer (i.e., Mayor, Chairman of the County Commissioners, County Manager, City Manager or other official of equal or similar position) of each political jurisdiction in which the contamination occurs;
- all property owners and occupants within or contiguous to the area containing contamination; and
- all property owners and occupants within or contiguous to the area where the contamination is expected to migrate.

Copies of this no further action notice must be sent to the persons listed above by certified mail. If it is impractical to provide notice by certified mail to the occupants of apartment buildings, condominiums, office buildings, etc., you may post a copy of this notice in a prominent place where the occupants are most likely to see it.

Within 60 days of receiving this no further action notice, you must provide the DWM Winston-Salem Regional Office with proof of receipt of the copy of the notice or of refusal by the addressee to accept delivery of the copy of the notice. If a copy of the notice is posted, you must provide the DWM with a description of the manner in which the notice was posted.

Interested parties may examine the subject site file by contacting Linda Estkowski at (336) 771-4608, extension 284. In addition, comments on the subject site file may be submitted to the regional office at:

Linda Estkowski
Winston-Salem Regional Office
585 Waughtown Street, Winston-Salem, NC 27107
(336) 771-4600

Please be advised that you must close any monitoring wells used to investigate this incident in accordance with 15A NCAC 2C .0113.

Should you have any questions concerning this notice, please contact Linda Estkowski at (336) 771-4608, extension 284.

Sincerely,

Cindy Rintoul

Cindy Rintoul
Winston-Salem Regional Supervisor

Attachments: 15A NCAC 2C .0113
Well Abandonment Form

cc: Winston-Salem Files

U.S. Postal Service CERTIFIED MAIL RECEIPT <small>(Domestic Mail Only; No Insurance Coverage)</small>	
Article Sent To: _____	
Postage \$ _____ Certified Fee _____ Return Receipt Fee (Endorsement Required) _____ Restricted Delivery Fee (Endorsement Required) _____ Total Postage & Fees \$ _____	<p style="text-align: center;">COMPLETE THIS SECTION ON DELIVERY</p> <p>A. Received by (Please Print Clearly) <i>T. Jefferson</i> B. Date of Delivery <i>7/19/00</i></p> <p>C. Signature <i>[Signature]</i> Agent <input type="checkbox"/> Addressee <input type="checkbox"/></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes <input type="checkbox"/> No If YES, enter delivery address below:</p>
<p style="text-align: center;">SENDER: COMPLETE THIS SECTION</p> <p>1. Article Addressed to: Mr. Danny Stroud Quality Oil Company, Inc. 1540 Silas Creek Parkway Winston-Salem, NC 27127</p>	
<p>3. Service Type <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p>	
<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	
2. Article Number (Copy from service label) <i>7099 3400 0006 9315 7371</i>	
Domestic Return Receipt <i>Notice of delivery</i> <small>102595-PS-N-7189</small>	
PS Form 3811, July 1999	

7099 3400 0006 9315 7371

PS Form 3800, July 1999

100

100

100

ATTACHMENT B

GEOPHYSICAL INVESTIGATION REPORT

EM-61 & GPR SURVEYS

**King-Tobaccoville Road (Main Street) Sites
King, North Carolina**

May 13, 2005

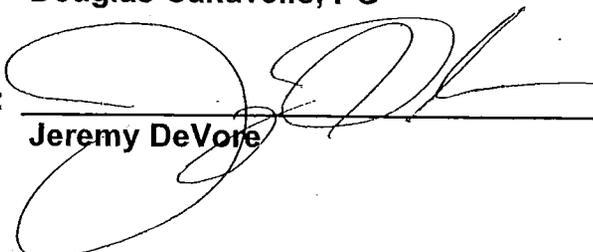
**Report prepared for: Mike Branson
EarthTech, Inc.
701 Corporate Center Drive, Suite 475
Raleigh, North Carolina 27607**

Prepared by:



Douglas Canavello, PG

Reviewed by:



Jeremy DeVore

**PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.
700 NORTH EUGENE ST.
GREENSBORO, NC 27401
(336) 335-3489**

1.0 INTRODUCTION

Pyramid Environmental conducted geophysical investigations for Earth Tech of North Carolina, Inc. during the period of April 13 to May 2, 2005, within the proposed Right-of-Way (ROW) and easement areas at nine sites in King, North Carolina. The work was done as part of the North Carolina Department of Transportation (NCDOT) road widening project. The sites are located along the both sides of King-Tobacoville Road (Main Street) from 0.25 miles west of US 52 to Meadowbrook Road. The geophysical surveys were conducted to determine if unknown metallic underground storage tanks (UST's) were present beneath the proposed ROW and easement areas of each site.

Earth Tech's representative Mr. Michael Branson, PG, provided maps that outlined the geophysical survey areas of each site and visited the sites with Pyramid Environmental's representative Mr. Douglas Canavello, PG during the week of March 28, 2005. Geophysical surveys were conducted at the following nine sites:

[REDACTED]

Lakewood Development Property (Parcel 18) Wendy's

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

2.0 FIELD METHODOLOGY

Prior to conducting the geophysical investigations, a 10-foot by 10-foot survey grid was established across the proposed ROW and easement areas of eight of the nine sites using water-based marking paint. The exception was the William Oil Property (Parcel 6) where the entire site was gridded and surveyed. These marks were used as X-Y coordinates for location control when collecting the geophysical data and establishing base maps for the geophysical results.

The geophysical investigations consisted of electromagnetic (EM) induction-metal detection surveys and ground penetrating radar (GPR) surveys. The EM surveys were performed using a Geonics EM61-MK1 metal detection instrument. According to the manufacture's specifications, the EM61 can detect a metal drum down to a maximum depth of approximately 8 feet. The EM61 data were digitally collected at each site along parallel northerly-southerly or easterly-westerly trending survey lines spaced five feet apart. The data were downloaded to a computer and reviewed in the office using the Geonics DAT61W and Surfer for Windows Version 7.0 software programs.

Contour plots of the EM61 bottom coil results and the EM61 differential results for each site are included in this report. The bottom coil results represent the most sensitive component of the EM61 instrument and detect metal objects regardless of size. The bottom coil response can be used to delineate metal conduits or utility lines, small, isolated metal objects, and areas containing insignificant metal debris.

The differential results are obtained from the difference between the top and bottom coils of the EM61 instrument. The differential results focus on the larger metal objects such as drums and UST's and ignore the smaller insignificant metal objects.

GPR surveys were conducted across selected EM61 differential anomalies, and steel-reinforced concrete using a GSSI SIR-2000 unit equipped with a 400 MHz antenna. Surveys were also performed across several areas where parked vehicles that obstructed the EM61 survey had since been removed. GPR data were digitally collected in a continuous mode along X and/or Y survey lines, spaced two to five feet apart using a vertical scan of 512 samples, at a rate of 24 scans per second. A 110 MHz high pass filter and an 800 MHz low pass filter were used during data acquisition with the 400 MHz antenna. GPR data were collected down to a maximum depth of approximately eight feet, based on an estimated two-way travel time of 6 nanoseconds per foot.

The GPR data were downloaded to a field computer and later reviewed in the office using Radprint software. Photos of the EM61 and GPR instruments are shown in Figure 1. The perimeters of possible UST's, based on the geophysical results, were marked and labeled in the field using orange, water-based marking paint.

During the weeks of April 25 and May 2 2005, preliminary contour plots of the EM61 bottom coil and the differential results were emailed to Mr. Branson.

3.0 DISCUSSION OF RESULTS

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

3.3 Lakewood Development Property (Parcel 18)

The Lakewood Development property is located along the along the east-southeast side of Main Street extending from Marziano Drive to Bailey Street. The property lies directly across Main Street from the McDonald's Corporation property and consists of a Wendy's Restaurant and several private businesses. The proposed ROW and easement areas consist primarily of grass islands and asphalt-covered parking lots. Figure 8 is a site map of Parcel 18 showing the geophysical survey area.

The EM61 bottom coil results and the differential results are presented in Figures 9 and 10, respectively. The linear EM anomalies are probably in response to utility lines or conduits. The majority of non-linear anomalies are probably in response to cultural features such storm drains, signs, manhole covers, etc.

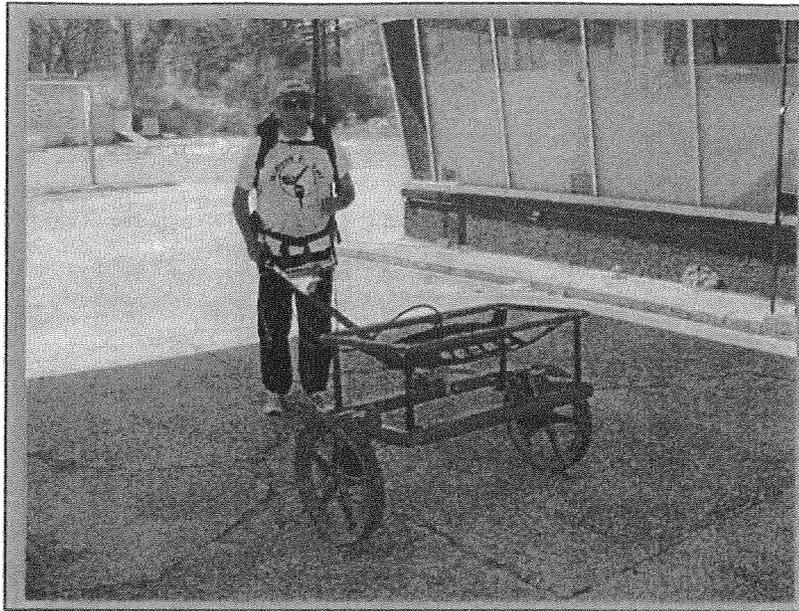
GPR surveys were conducted across several differential anomalies and across the steel-reinforced concrete located along Marziano Drive. The geophysical results suggest that the proposed ROW and easement areas of Parcel 18 do not contain metallic UST's. Detailed geophysical information on the EM61 anomalies is provided in Figures 9 and 10.

[REDACTED]
[REDACTED]
Lakewood Development Property (Parcel 18)
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

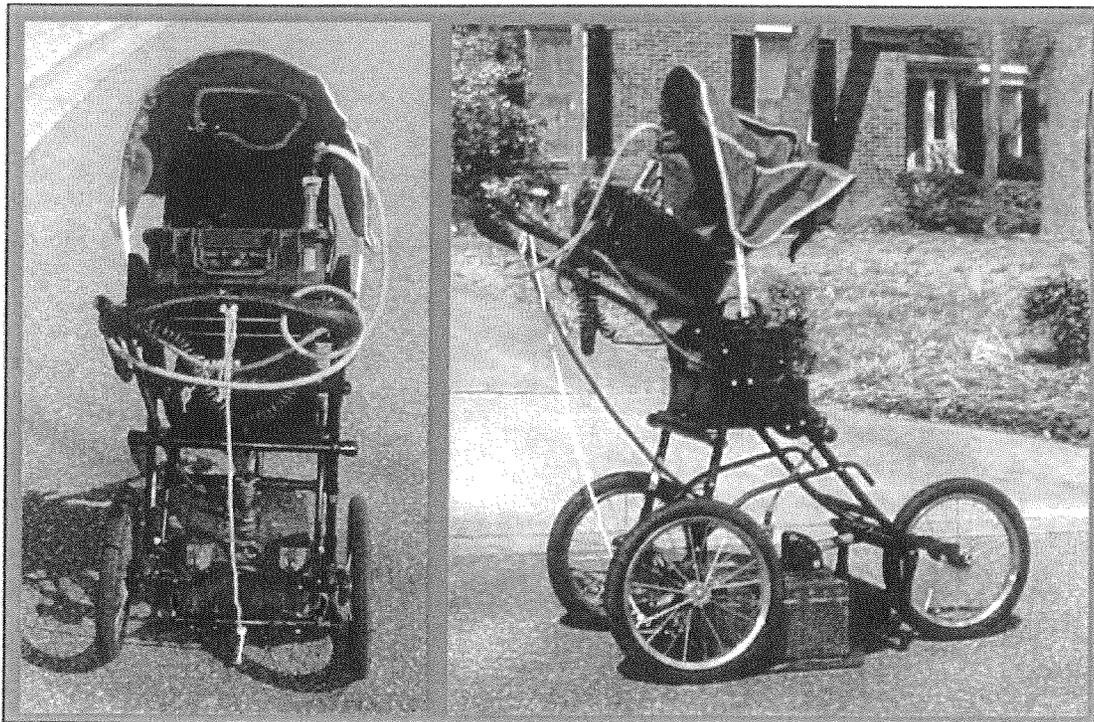
- [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
- [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

5.0 LIMITATIONS

EM61 and GPR surveys have been performed and this report prepared for Earth Tech of North Carolina, Inc. in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally recognized that the results of the EM61 and GPR are non-unique and may not represent actual subsurface conditions. The EM61 and GPR results obtained for this project do not conclusively define the locations of all metallic UST's but only suggest where some of the metallic UST's may be present. The EM61 and GPR anomalies, interpreted as possible UST's or tanks, may be attributed to other surface or subsurface conditions or cultural interference.

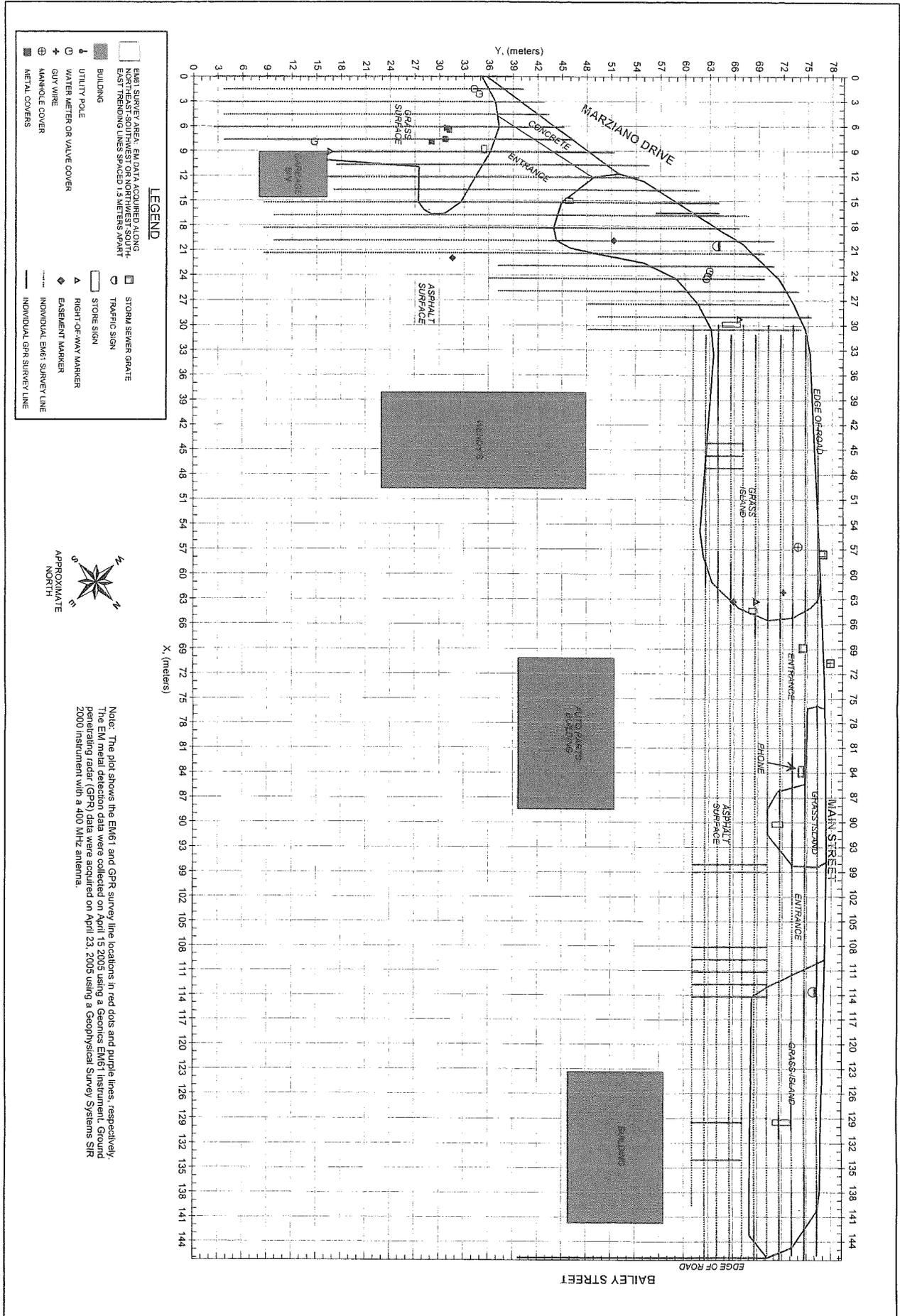


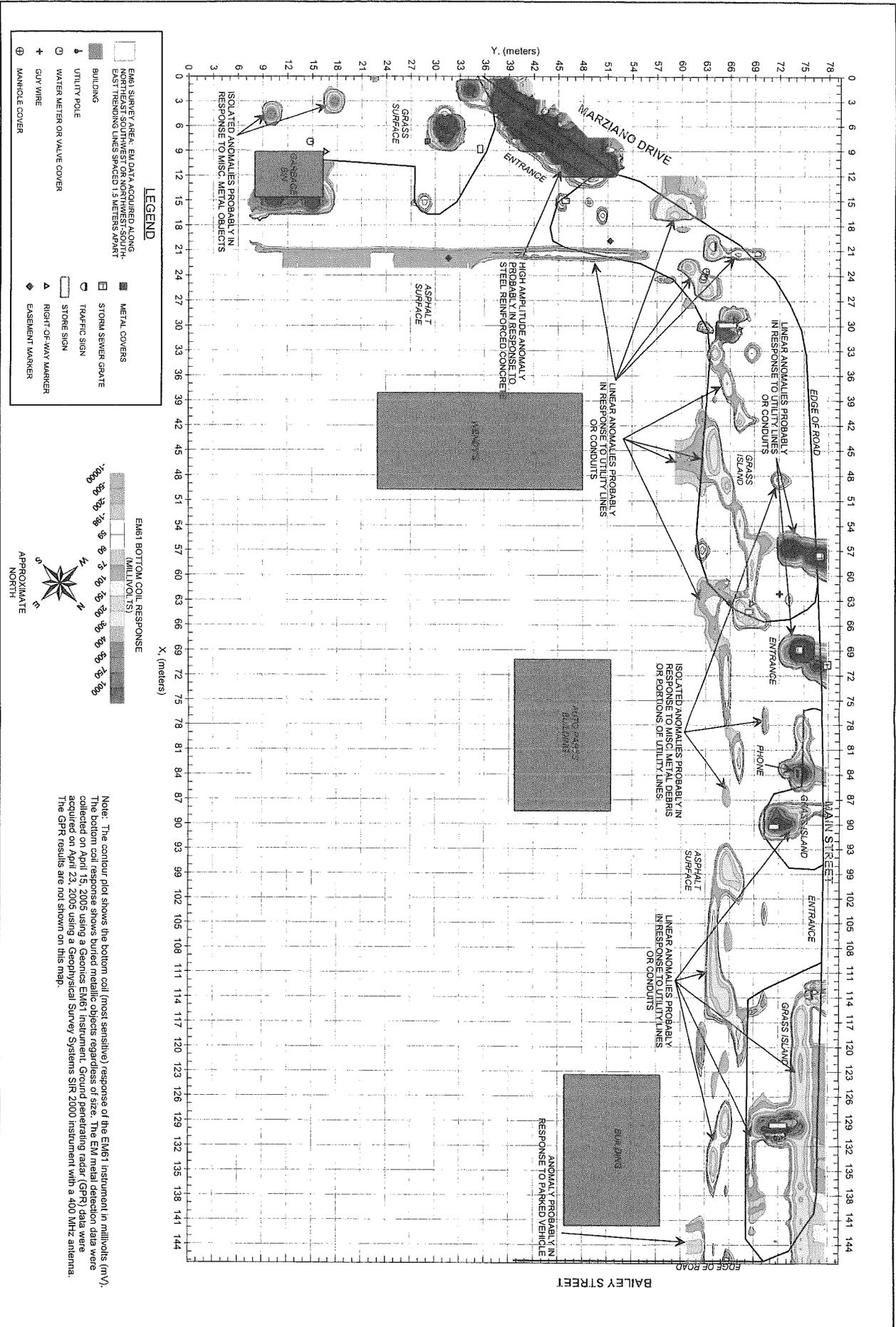
The Geonics EM61 metal detector was used to conduct the metal detection surveys at the King-Tobaccoville Road sites in April 2005.



The SIR-2000 GPR system equipped with a 400 MHz antenna that was used at the King-Tobacco Road sites in April and May 2005.

CLIENT	EARTH TECH OF NORTH CAROLINA, INC.		DATE	5/11/05
SITE	KING-TOBACCOVILLE ROAD (MAIN STREET) SITES		NO.	
CITY	KING	STATE	NORTH CAROLINA	
TITLE	GEOPHYSICAL RESULTS		NO.	2005-100



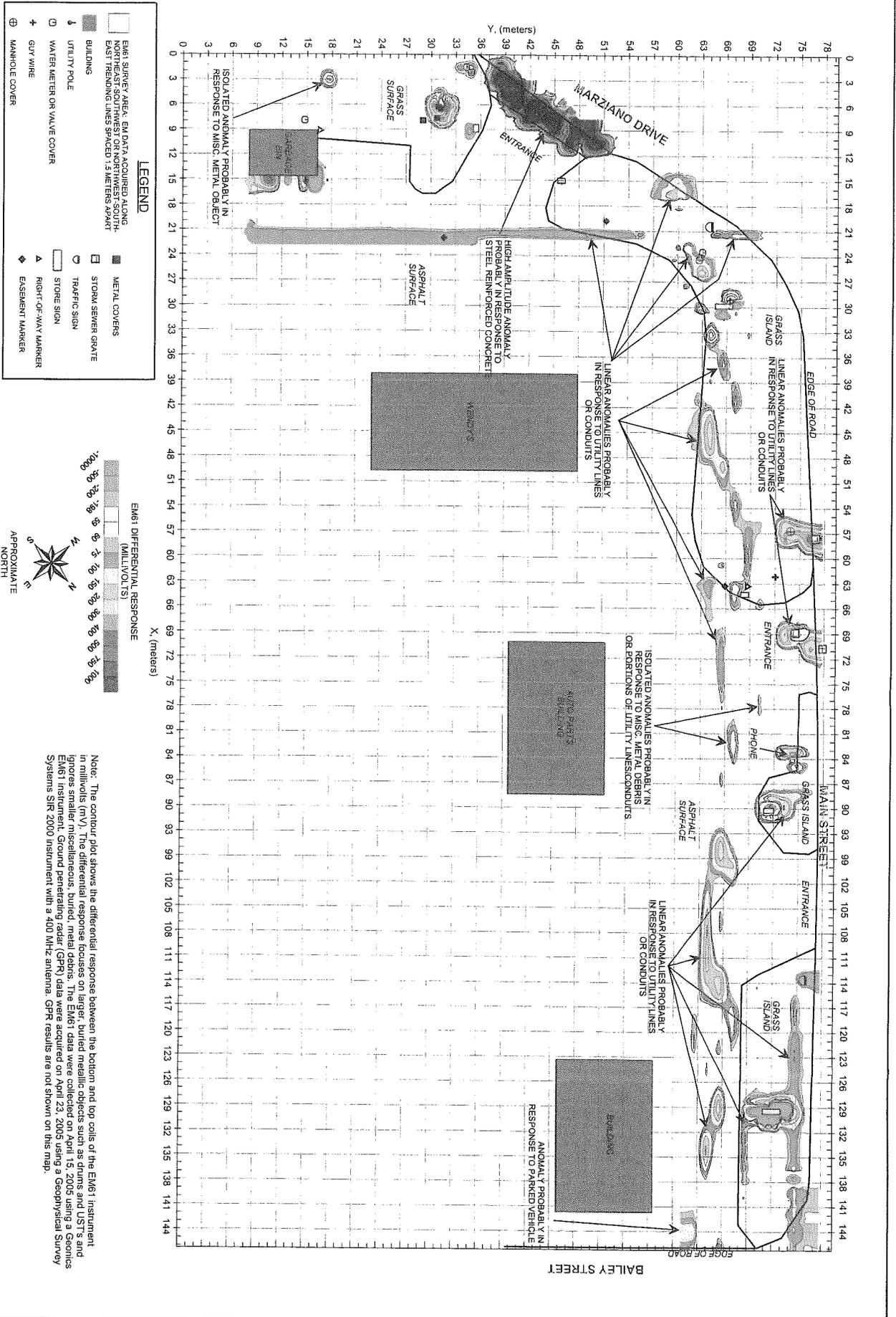


Note: The contour plot shows the bottom coil (most sensitive) response of the EM61 instrument in millivolts (mV). The bottom coil response shows buried metallic objects regardless of size. The EM metal detection data were collected on April 15, 2005 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on April 23, 2005 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna. The GPR results are not shown on this map.



DATE	5/11/05	DATE	
PROJECT	EARTH TECH OF NORTH CAROLINA, INC.	CLIENT	
LOCATION	LAKEWOOD DEVELOPMENT PROPERTY (PARCEL 18)	STATE	
CITY	KING	COUNTY	
STATE	NORTH CAROLINA	PROJECT NO.	
SCALE	EM61 GEOPHYSICAL RESULTS	DATE	2005-100

EM61
BOTTOM COIL
RESULTS



Note: The contour plot shows the differential response between the bottom and top coils of the EM61 instrument in millivolts (mV). The differential response between the bottom and top coils of the EM61 instrument ignores smaller miscellaneous buried metal debris. The EM61 data were acquired on April 23, 2005 using a Geonics Systems SIR 2000 instrument with a 400 MHz antenna. GPR results are not shown on this map.



EARTH TECH OF NORTH CAROLINA, INC.		DATE	5/11/05
LAKEWOOD DEVELOPMENT PROPERTY (PARCEL 18)		CLIENT	
KING	NORTH CAROLINA	PROJECT	2005-100
EM61 GEOPHYSICAL RESULTS		SCALE	

EM61 DIFFERENTIAL RESULTS

FIGURE 10



ATTACHMENT C

TEST BORING REPORT

PROJECT LAKEWOOD DEVELOPMENT PROPERTY (PARCEL #18)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER LD-2
PAGE 1
ELEVATION
DATE 5/10/05
DRILLER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
5.0			0.06		2" TOPSOIL, MEDIUM TO REDDISH BROWN SILT/CLAY, DRY, NO ODOR.
			2.89		AS ABOVE, DRY, SLIGHT ODOR.
			1.66		AS ABOVE, DRY, NO ODOR.
			4.91		AS ABOVE, DRY, NO ODOR.
10.0			3.39		MOTTLED MEDIUM BROWN, REDDISH BROWN, AND TAN SILT/CLAY SAPROLITE, DRY, NO ODOR.
			4.9		AS ABOVE, DRY, NO ODOR.
			5.47		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			4.23		AS ABOVE, DRY, NO ODOR.
15.0					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT LAKEWOOD DEVELOPMENT PROPERTY (PARCEL #18)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER LD-3
PAGE 1
ELEVATION
DATE 5/10/05
DRILLER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
5.0			6.41		2" TOPSOIL, MEDIUM TO REDDISH BROWN SILT/CLAY, DRY, NO ODOR.
			11.12		
			82		
10.0			13.55		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			4.02		
			4.27		
15.0			2.38		AS ABOVE, DRY, NO ODOR.
			4.83		
20.0					MOTTLED MEDIUM BROWN, REDDISH BROWN, AND BLACK SILT/CLAY SAPROLITE, DRY, NO ODOR.
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.

TEST BORING REPORT

PROJECT LAKEWOOD DEVELOPMENT PROPERTY (PARCEL #18)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER LD-4
PAGE 1
ELEVATION
DATE 5/10/05
DRILLER
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			2.13		2" TOPSOIL, MEDIUM TO REDDISH BROWN SILT/CLAY, DRY, NO ODOR.
			3.79		AS ABOVE, DRY, NO ODOR.
5.0			3.12		AS ABOVE, DRY, NO ODOR.
			3.31		AS ABOVE, DRY, NO ODOR.
			2.44		AS ABOVE, DRY, NO ODOR.
10.0			6.73		AS ABOVE, DRY, NO ODOR.
			5.04		MOTTLED MEDIUM BROWN, REDDISH BROWN, AND BLACK SILT/CLAY SAPROLITE, DRY, NO ODOR.
15.0			6.83		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT LAKEWOOD DEVELOPMENT PROPERTY (PARCEL #18)
 CLIENT NCDOT (R-2201)
 PROJECT NUMBER 85238
 CONTRACTOR PROBE TECHNOLOGY
 EQUIPMENT GEOPROBE

BORING NUMBER LD-5
 PAGE 1
 ELEVATION _____
 DATE 5/10/05
 DRILLER _____
 PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
5.0			6.33		2" TOPSOIL, MEDIUM TO REDDISH BROWN SILT/CLAY, DRY, NO ODOR.
			4.56		AS ABOVE, DRY, NO ODOR.
			9.91		AS ABOVE, DRY, NO ODOR.
10.0			6.67		AS ABOVE, DRY, NO ODOR.
			9.92		AS ABOVE, DRY, NO ODOR.
			9.0		AS ABOVE, DRY, NO ODOR.
15.0			11.25		MEDIUM BROWN SAND/CLAY SAPROLITE, DRY, NO ODOR.
			4.17		AS ABOVE, DRY, NO ODOR.
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT LAKEWOOD DEVELOPMENT PROPERTY (PARCEL #18)
 CLIENT NCDOT (R-2201)
 PROJECT NUMBER 85238
 CONTRACTOR PROBE TECHNOLOGY
 EQUIPMENT GEOPROBE

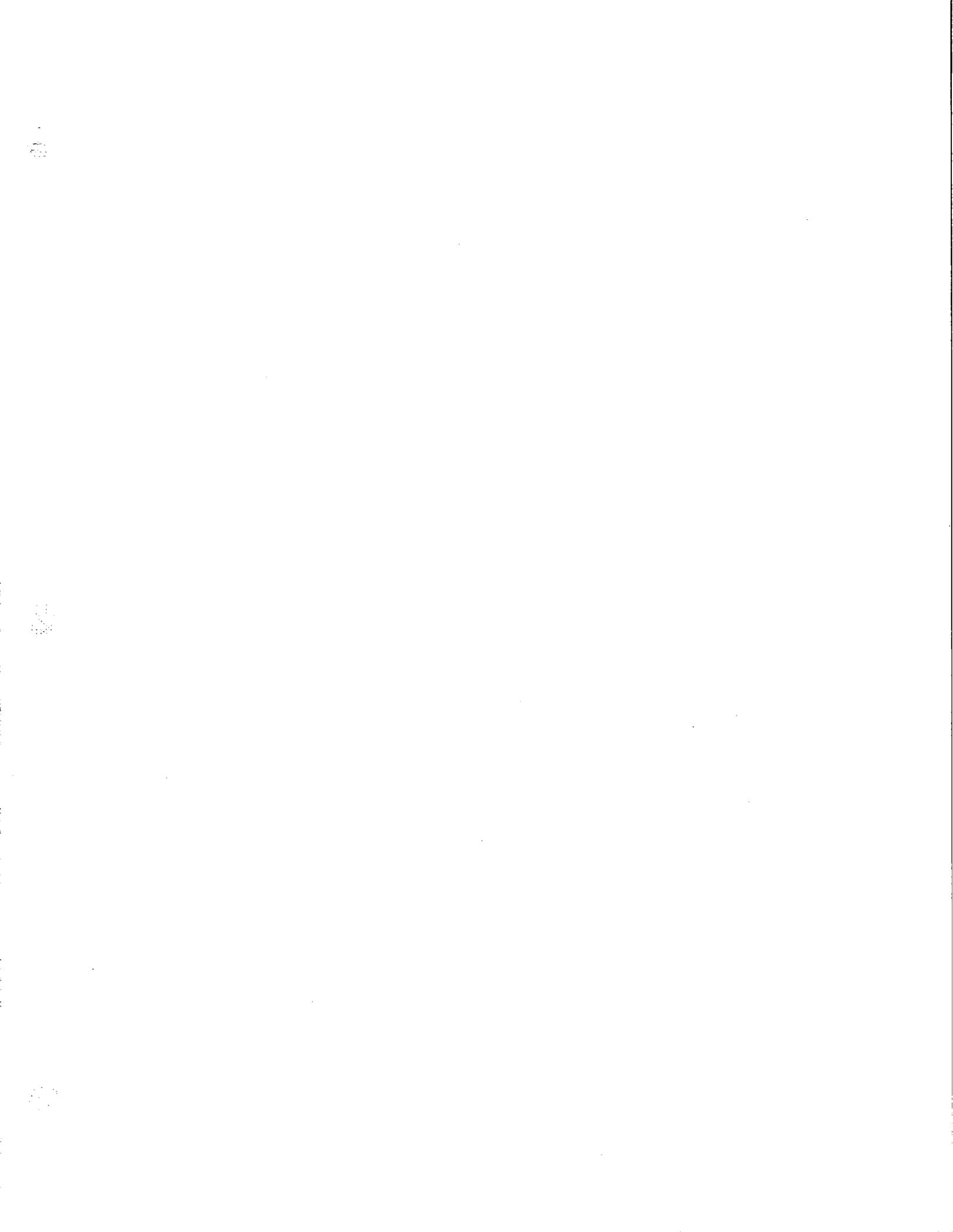
BORING NUMBER LD-6
 PAGE 1
 ELEVATION
 DATE 5/10/05
 DRILLER
 PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
5.0			5.58		1" TOPSOIL, MOTTLED MEDIUM BROWN, REDDISH BROWN, AND BLACK SILT/CLAY, DRY, NO ODOR.
			7.52		AS ABOVE, DRY, NO ODOR.
			8.68		MEDIUM BROWN SILT/CLAY, DRY, NO ODOR.
10.0			7.59		MOTTLED MEDIUM BROWN, REDDISH BROWN, TAN, AND BLACK SILT/CLAY SAPROLITE, DRY, NO ODOR.
			10.54		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			7.22		AS ABOVE, DRY, NO ODOR.
15.0			7.42		AS ABOVE, DRY, NO ODOR.
			8.11		AS ABOVE, DRY, NO ODOR.
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT LAKEWOOD DEVELOPMENT PROPERTY (PARCEL #18) CLIENT NCDOT (R-2201) PROJECT NUMBER 85238 CONTRACTOR PROBE TECHNOLOGY EQUIPMENT GEOPROBE	BORING NUMBER LD-7 PAGE 1 ELEVATION DATE 5/10/05 DRILLER PREPARED BY BRANSON
---	---

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
5.0			10.19		2" TOPSOIL, MEDIUM TO REDDISH BROWN SILT/CLAY, DRY, NO ODOR.
			8.86		AS ABOVE, DRY, NO ODOR.
			9.23		AS ABOVE, DRY, NO ODOR.
10.0			10.82		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			8.4		LIGHT BROWN SILT/SAND SAPROLITE, DRY, NO ODOR.
			7.95		MOTTLED MEDIUM BROWN, REDDISH BROWN, TAN, AND BLACK SILT/CLAY SAPROLITE, DRY, NO ODOR.
15.0			8.3		AS ABOVE, DRY, NO ODOR.
			7.42		AS ABOVE, DRY, NO ODOR.
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

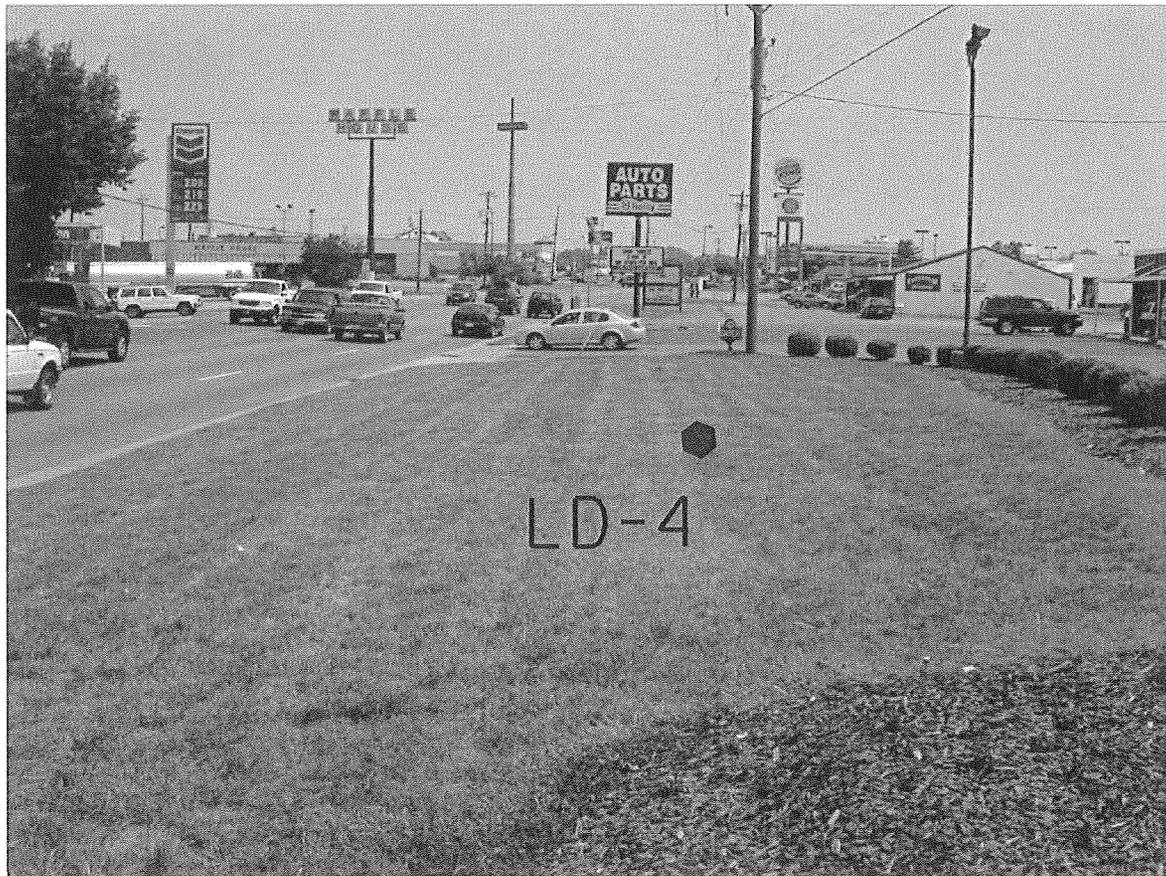


ATTACHMENT D





LD-3



LD-4



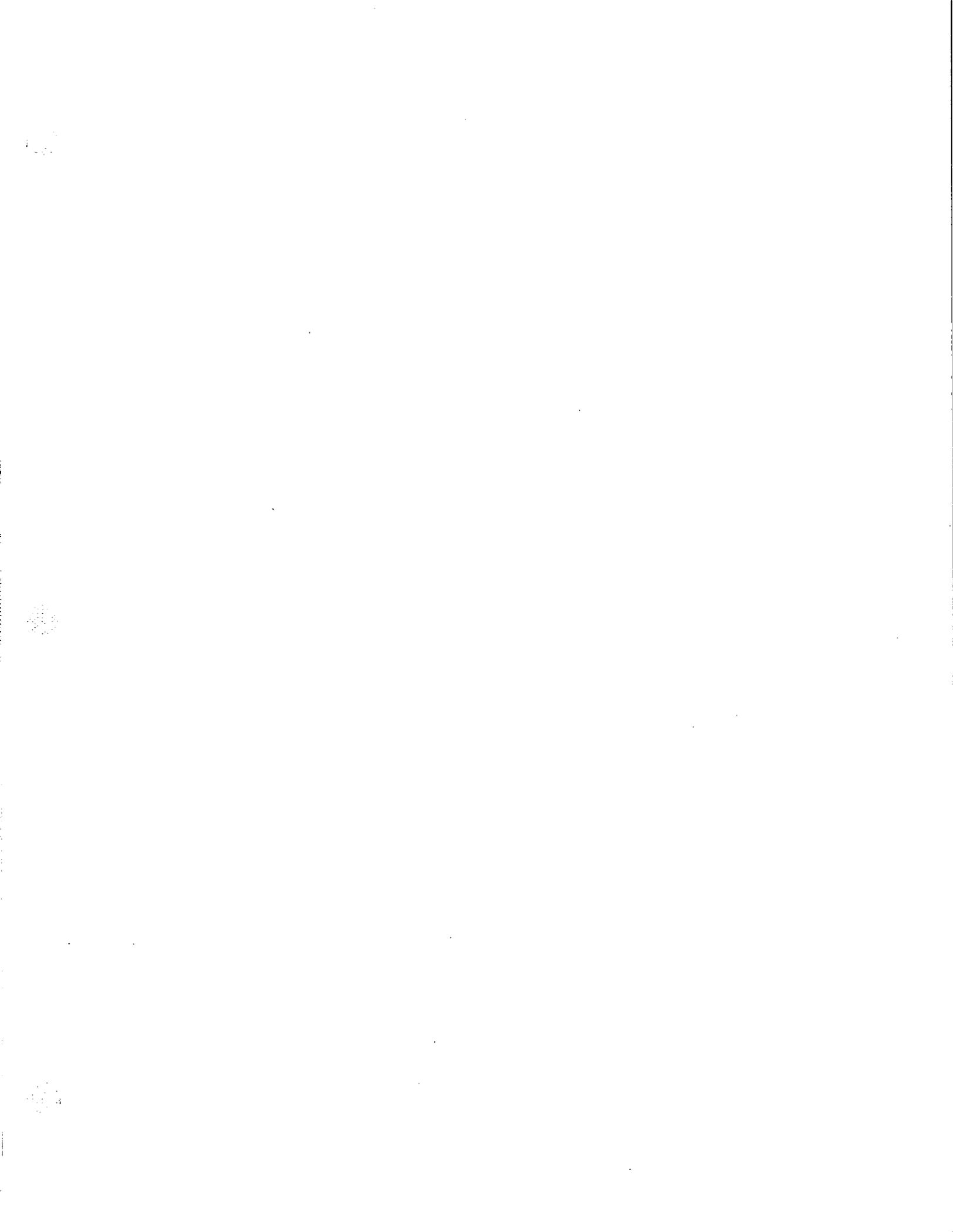


LD-7

KING PHOTO CTS
9 83-6363
WE DOE SIN 83, 198

WAFFLE
HOUSE

KING PHOTO



ATTACHMENT E

PARADIGM ANALYTICAL LABORATORIES, INC.

5500 Business Drive
Wilmington, North Carolina 28405
(910) 350-1903
Fax (910) 350-1557

Mr. Mike Branson
Earth Tech
701 Corporate Dr. Suite 475
Raleigh NC 27607

Report Number: G204-451

Client Project: NCDOT-Lakewood Development

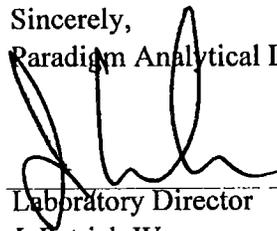
Dear Mr. Branson:

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call Paradigm at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
Paradigm Analytical Laboratories, Inc.



Laboratory Director
J. Patrick Weaver

5/23/05

Date

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: LD-1

Client Project ID: NCDOT-Lakewood Development

Lab Sample ID: G204-451-1

Lab Project ID: G204-451

Report Basis: Dry Weight

Analyzed By: DCS

Date Collected: 5/10/05 8:00

Date Received: 5/11/05

Matrix: Soil

Solids 69.40

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.65	5030	1	05/17/05
Diesel Range Organics	BQL	8.86	3545	1	05/17/05

Reviewed By: *mc*
TPH_LIMS_v1.71.XLS of 10

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: LD-2

Client Project ID: NCDOT-Lakewood Development

Lab Sample ID: G204-451-2

Lab Project ID: G204-451

Report Basis: Dry Weight

Analyzed By: DCS

Date Collected: 5/10/05 8:45

Date Received: 5/11/05

Matrix: Soil

Solids 71.15

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.43	5030	1	05/17/05
Diesel Range Organics	BQL	8.63	3545	1	05/17/05

Reviewed By: *mc*
TPH_LIMS_v1 71.XLS3 of 10

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: LD-3

Client Project ID: NCDOT-Lakewood Development

Lab Sample ID: G204-451-3

Lab Project ID: G204-451

Report Basis: Dry Weight

Analyzed By: DCS

Date Collected: 5/10/05 9:15

Date Received: 5/11/05

Matrix: Soil

Solids 74.87

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.01	5030	1	05/18/05
Diesel Range Organics	BQL	8.2	3545	1	05/18/05

Reviewed By: 
TPH_LIMS_v1.71.XLS4 of 10

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: LD-4

Client Project ID: NCDOT-Lakewood Development

Lab Sample ID: G204-451-4

Lab Project ID: G204-451

Report Basis: Dry Weight

Analyzed By: DCS

Date Collected: 5/10/05 9:45

Date Received: 5/11/05

Matrix: Soil

Solids 71.53

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.39	5030	1	05/18/05
Diesel Range Organics	BQL	8.51	3545	1	05/18/05

Reviewed By: mc
TPH_LIMS_v1.71.XLS of 10

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: LD-5

Client Project ID: NCDOT-Lakewood Development

Lab Sample ID: G204-451-5

Lab Project ID: G204-451

Report Basis: Dry Weight

Analyzed By: DCS

Date Collected: 5/10/05 10:15

Date Received: 5/11/05

Matrix: Soil

Solids 83.63

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	7.17	5030	1	05/18/05
Diesel Range Organics	BQL	7.39	3545	1	05/18/05

Reviewed By: MMC
TPH_LIMS_v1.71.XLS6 of 10

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: LD-6

Client Project ID: NCDOT-Lakewood Development

Lab Sample ID: G204-451-6

Lab Project ID: G204-451

Report Basis: Dry Weight

Analyzed By: DCS

Date Collected: 5/10/05 10:45

Date Received: 5/11/05

Matrix: Soil

Solids 70.26

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.54	5030	1	05/18/05
Diesel Range Organics	12	8.53	3545	1	05/21/05

Reviewed By: *ml*
TPH_LIMS_v1.71.XLS7 of 10

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: LD-7

Analyzed By: DCS

Client Project ID: NCDOT-Lakewood Development

Date Collected: 5/10/05 11:10

Lab Sample ID: G204-451-7

Date Received: 5/11/05

Lab Project ID: G204-451

Matrix: Soil

Report Basis: Dry Weight

Solids 60.90

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	9.85	5030	1	05/18/05
Diesel Range Organics	36	9.46	3545	1	05/20/05

Reviewed By: *mc*
TPH_LIMS_v1.71.XLS8 of 10

List of Reporting Abbreviations
and Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantitation Limit

DF = Dilution Factor

Dup = Duplicate

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL = Reporting Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% solids = Percent Solids

Special Notes:

- 1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.
- 2) Uncertainty for all reported data is less than or equal to 30 percent.

MI34.011404.1

PARADIGM ANALYTICAL LABORATORIES, INC.

5500 Business Drive, Wilmington, NC 28405
 Phone: (910)-350-1903 FAX: (910)-350-1557

Chain-of Custody Record & Analytical Request

COC# 44093

Page _____ of _____

Client: Energy Tech Project ID: NCOT-Lakeview Development Date: 5/10/05
 Address: 201 Corporate Center Dr. Contact: Mike Bannon Turnaround: STANDARD
 Address: Suite 475 Phone: 9198546238 Job Number: 85238
 Quote #: Raleigh, NC 27602 Fax: 9198546259 P.O. Number: 1285#34380.1.1

Report To: Mike Bannon
Energy Tech
 Invoice To: NETT

PARADIGM ANALYTICAL LABORATORIES, INC.

Sample ID	Date	Time	Matrix	Preservatives		Analysis			Comments: Please specify any special reporting requirements								
LD-1	5/10/05	0800	Soil						G204-451								
LD-2	5/10/05	0845	Soil						ANALYZE NEXT WEEK								
LD-3	5/10/05	0915	Soil						Revised TO								
LD-4	5/10/05	0945	Soil														
LD-5	5/10/05	1015	Soil														
LD-6	5/10/05	1045	Soil														
LD-7	5/10/05	1110	Soil														
Requisitioned By: <u>MM Bannon</u>				Date:	<u>5/10/05</u>	Time:	<u>1800</u>	Received By:	<u>Judith Pines</u>	Date:	<u>5/11/05</u>	Time:	<u>10:05</u>	Temperature:	<u>2.4°C</u>	State Certification Requested:	NC <input checked="" type="checkbox"/> SC <input type="checkbox"/> Other <input type="checkbox"/>

ORIGIN

SEE REVERSE FOR TERMS AND CONDITIONS