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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
J. C. Faw Property (Parcel #19)
713 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 J. C. Faw Property (Parcel #19) is located at 713 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 Bailey Drive (Figure 1). Based on information supplied by the NCDOT and the site visit, Earth Tech understands that the site is an active gas station/convenience store (Fast Track #104) with a Taco Bell restaurant where four underground storage tanks (USTs) are present. The USTs include one 6,000-gallon kerosene and three 10,000-gallon gasoline tanks. The property consists of a single-story building with a canopied pump island on the north side of the building. The USTs are located on the east side of the dispenser islands (Figure 2). The proposed right-of-way does not appear to affect the building or USTs, but may affect one corner of the dispenser island area. Because of the presence of USTs, the NCDOT requested a Preliminary Site Assessment to evaluate the soils within the proposed right-of-way.

Earth Tech reviewed the North Carolina Department of Environment and Natural Resources (NCDENR) Incident Management database and no incident number was listed for this location. Earth Tech also reviewed the UST registration database to obtain UST ownership information. According to the database and the on-site UST Permit, the USTs on the property are operated under Facility Number 0-016983. The operator and owner of the tanks are listed as follows:

Owner
Fast Track, Inc.
Post Office Box 410
Wilkesboro, North Carolina 28697-0410
(336) 838-4000

Operator
Fast Track 104
713 South Main Street
King, North Carolina 27021
(336) 983-4696

Geophysical Survey

Prior to Earth Tech's mobilization to the site, Pyramid Environmental conducted a geophysical survey to evaluate if additional USTs, other than the ones in use, were present on the proposed right-of-way. 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 parallel to Bailey Drive. 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.

Several anomalies were detected in the geophysical survey. However, these anomalies were generally attributed to buildings, known USTs, 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 A.

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).

Eight direct-push holes (FA-1 through FA-8) were advanced within the proposed right-of-way at the site to a depth of 4.8 meters (16 feet) as shown in Figure 2 and Attachment B. The borings were located within the proposed right-of-way to evaluate the entire right-of-way (Attachment C). Borings FA-1 and FA-2 were located to evaluate the known UST area. Borings FA-3 through FA-7 were located to assess the pump island area. Boring FA-8 was located to evaluate soil conditions in the proposed right-of-way on the west side of the property along Bailey Drive. 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 0.15 meters (6 inches) of asphalt and gravel. Below the surface treatment to a depth of about 1.2 to 1.8 meters (4 to 6 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 D, petroleum hydrocarbon compounds were detected in one of the seven soil samples collected from the site (Figure 3). The soil sample from boring FA-4 contained a diesel range organic (DRO) concentration of 53.7 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. One of the soil samples collected from the site contained a TPH diesel fuel concentration above the 10 mg/kg assumed action level.

During the course of the field investigation, moderate to strong non-hydrocarbon odors were noted at a depth of 4.2 to 4.8 meters (12 to 14 feet) in borings FA-6 and FA-7. Elevated field screening readings suggested that the odor was from a volatile organic compound. The TPH analysis indicated that no petroleum hydrocarbon compounds were detected in the soil samples from these borings. The odors noted in the field were similar to those noted on a parcel (Hill Oil Company) across the street from the Faw Property. An analysis of one soil sample from that site indicated that no target volatile organic compounds were detected, but an analysis of tentatively identified compounds suggested the presence of minor concentrations of amelyne hydrate, 2-methyl-2-pentanol, and 3-methyl-3-pentanol. The on-line Dorland's Illustrated Medical

Dictionary defines amylene hydrate as a clear, colorless liquid with a camphoraceous odor, miscible with alcohol, chloroform, ether, and glycerin; used as a solvent in pharmaceutical preparations. No uses regarding 2-methyl-2-pentanol or 3-methyl-3-pentanol were available. Neither of these compounds appears to be on the list of hazardous substances. The presence of these compounds on the Faw Property has not been verified, but their occurrence is suggested by the unique odor in the soil samples.

Conclusions and Recommendations

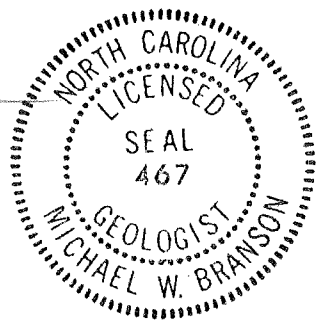
A Preliminary Site Assessment was conducted to evaluate the J. C. Faw Property (Parcel #19) located at 713 South Main Street in King, Stokes County, North Carolina. Eight soil borings were advanced to evaluate the soil conditions on the property. The laboratory reports of the soil samples from these borings suggest that one of the samples contained TPH concentrations above the assumed action levels. Based on the location of the soil boring from which the soil sample was collected that contained elevated TPH concentrations, the source of the contamination is most likely from the dispenser islands.

To evaluate the volume of soil requiring possible remediation, the soil sample with TPH concentrations above 10 mg/kg was considered. The analytical results of the soil sample suggest that the soil from boring FA-4 contained a TPH concentration above the assumed action level. A review of the field screening readings (Table 1) suggests that a maximum contaminated soil thickness of 1.2 meters (4 feet), from ground surface to 1.2 meters (4 feet), is likely. The volume of potentially affected soil was estimated based on a thickness of 1.2 meters (4 feet), a width of 8 meters (26 feet), and a length of 12.5 meters (41 feet). These dimensions result in a volume of about 120 cubic meters (157 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.

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



Michael W. Branson, P.G.
Project Manager

Attachments

c: Project File

TABLE 1

FIELD SCREENING AND ANALYTICAL RESULTS
J. C. FAW PROPERTY (PARCEL #19)
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)
FA-1	0 - 0.6	6.43			
	0.6 - 1.2	5.75			
	1.2 - 1.8	5.22			
	1.8 - 2.4	6.17			
	2.4 - 3.0	5			
	3.0 - 3.6	6.23			
	3.6 - 4.2	5.82			
	4.2 - 4.8	7.5	FA-1	DRO (BQL) GRO (BQL)	10 10
FA-2	0 - 0.6	12.26			
	0.6 - 1.2	15.58		DRO (BQL) GRO (BQL)	10 10
	1.2 - 1.8	10.03			
	1.8 - 2.4	14.14			
	2.4 - 3.0	12.21			
	3.0 - 3.6	10.71			
	3.6 - 4.2	11.91			
	4.2 - 4.8	4.87			
FA-3	0 - 0.6	7.96			
	0.6 - 1.2	8.01			
	1.2 - 1.8	8.36			
	1.8 - 2.4	8.85	FA-3	DRO (BQL) GRO (BQL)	10 10
	2.4 - 3.0	7.35			
	3.0 - 3.6	7.35			
	3.6 - 4.2	7.8			
	4.2 - 4.8	6.13			
FA-4	0 - 0.6	8.95			
	0.6 - 1.2	8.19			
	1.2 - 1.8	5.65			
	1.8 - 2.4	6.42			
	2.4 - 3.0	2.57			
	3.0 - 3.6	3.83			
	3.6 - 4.2	8.06			
	4.2 - 4.8	13.05	FA-4	**DRO (53.7)** GRO (BQL)	10 10
FA-5	0 - 0.6	6.83			
	0.6 - 1.2	7.94			
	1.2 - 1.8	11.28			
	1.8 - 2.4	42	FA-5	DRO (BQL) GRO (BQL)	10 10
	2.4 - 3.0	19			
	3.0 - 3.6	21			
FA-6	0 - 0.6	2.87			
	0.6 - 1.2	5.48			
	1.2 - 1.8	22			
	1.8 - 2.4	144			
	2.4 - 3.0	38			
	3.0 - 3.6	153			
	3.6 - 4.2	174			
	4.2 - 4.8	1259	FA-6	DRO (BQL) GRO (BQL)	10 10

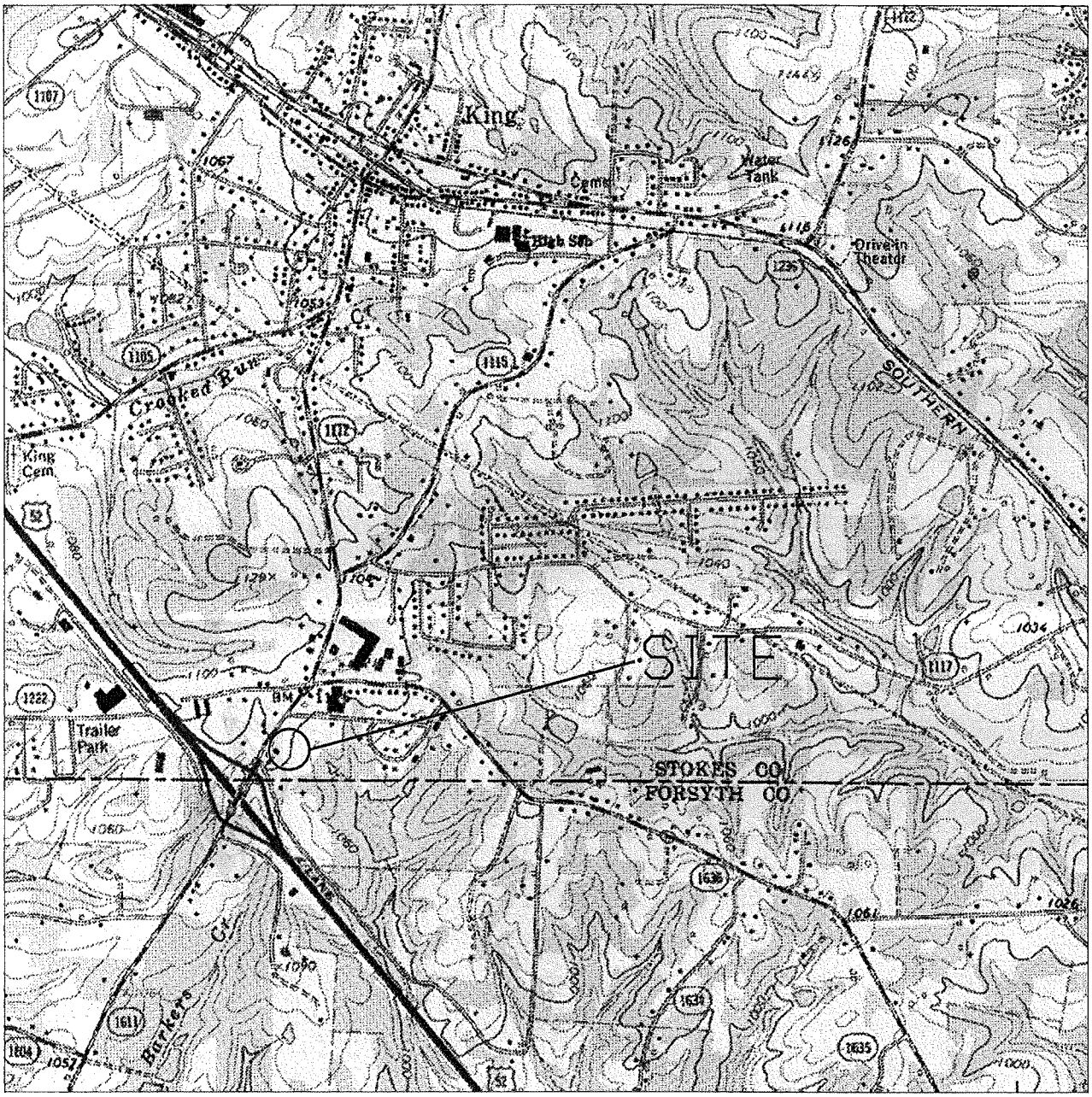
TABLE 1 (continued)

FIELD SCREENING AND ANALYTICAL RESULTS
J. C. FAW PROPERTY (PARCEL #19)
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)
FA-7	0 - 0.6	0.97			
	0.6 - 1.2	1.69			
	1.2 - 1.8	5.19			
	1.8 - 2.4	53			
	2.4 - 3.0	116			
	3.0 - 3.6	405			
	3.6 - 4.2	402			
	4.2 - 4.8	436	FA-7	DRO (BQL) GRO (BQL)	10 10
FA-8	0 - 0.6	1.01			
	0.6 - 1.2	1.3			
	1.2 - 1.8	0.66			
	1.8 - 2.4	1.67			
	2.4 - 3.0	1.07			
	3.0 - 3.6	0.69			
	3.6 - 4.2	1.67			
	4.2 - 4.8	1.82		DRO (BQL) GRO (BQL)	10 10

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

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

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

EARTH TECH

FIGURE 1
VICINITY MAP
J. C. FAW PROPERTY (PARCEL #19)
KING, NORTH CAROLINA

MAY 2005

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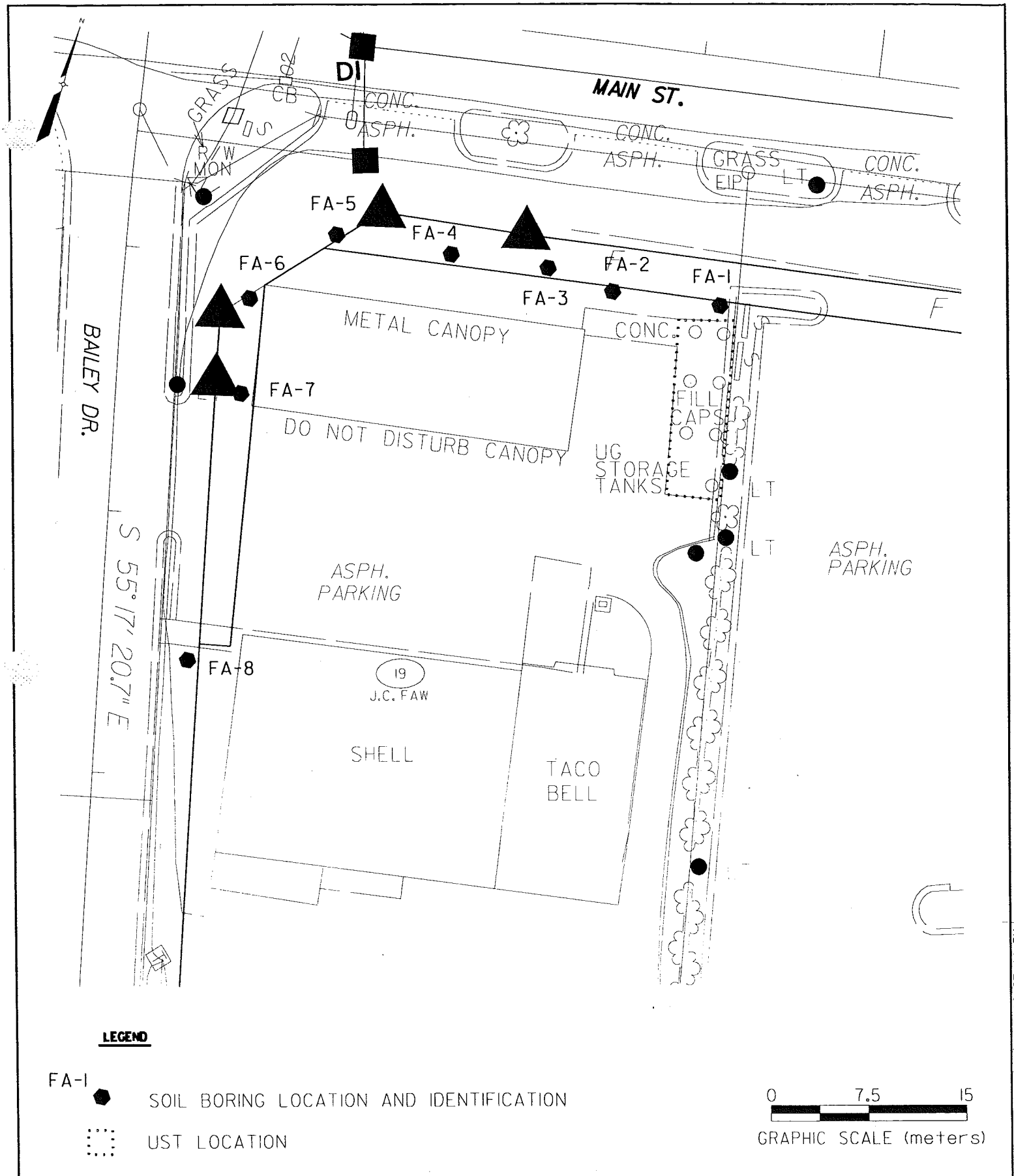

EARTH TECH

FIGURE 2
SITE MAP
J. C. FAW PROPERTY (PARCEL #19)
KING, NORTH CAROLINA

MAY 2005

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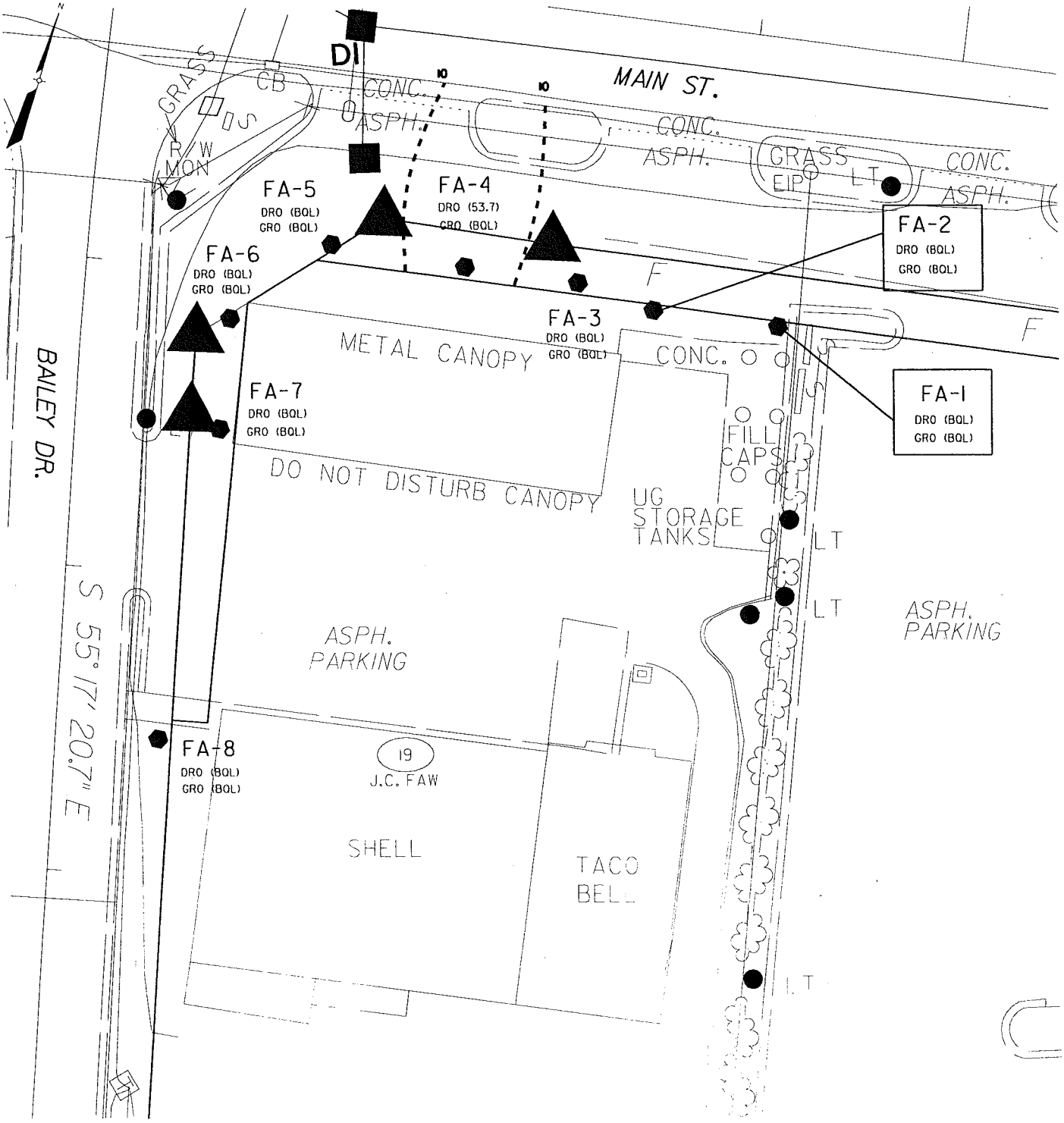

LEGEND

- SOIL SAMPLE LOCATION
- 10 — TPH ISOCONCENTRATION CONTOUR
- DRO (123) — TPH AS DIESEL FUEL IN MG/KG
- GRO (123) — TPH AS GASOLINE IN MG/KG
- BQL — BELOW QUANTITATION LIMIT

0 7.5 15

GRAPHIC SCALE (meters)

EARTH TECH

FIGURE 3

ANALYTICAL RESULTS MAP

J. C. FAW PROPERTY (PARCEL #19)

KING, NORTH CAROLINA

MAY 2005

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ATTACHMENT A

Pyramid Project # 2005100

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-Tobaccoville 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]

JC Faw Property (Parcel 19) Shell Station

[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

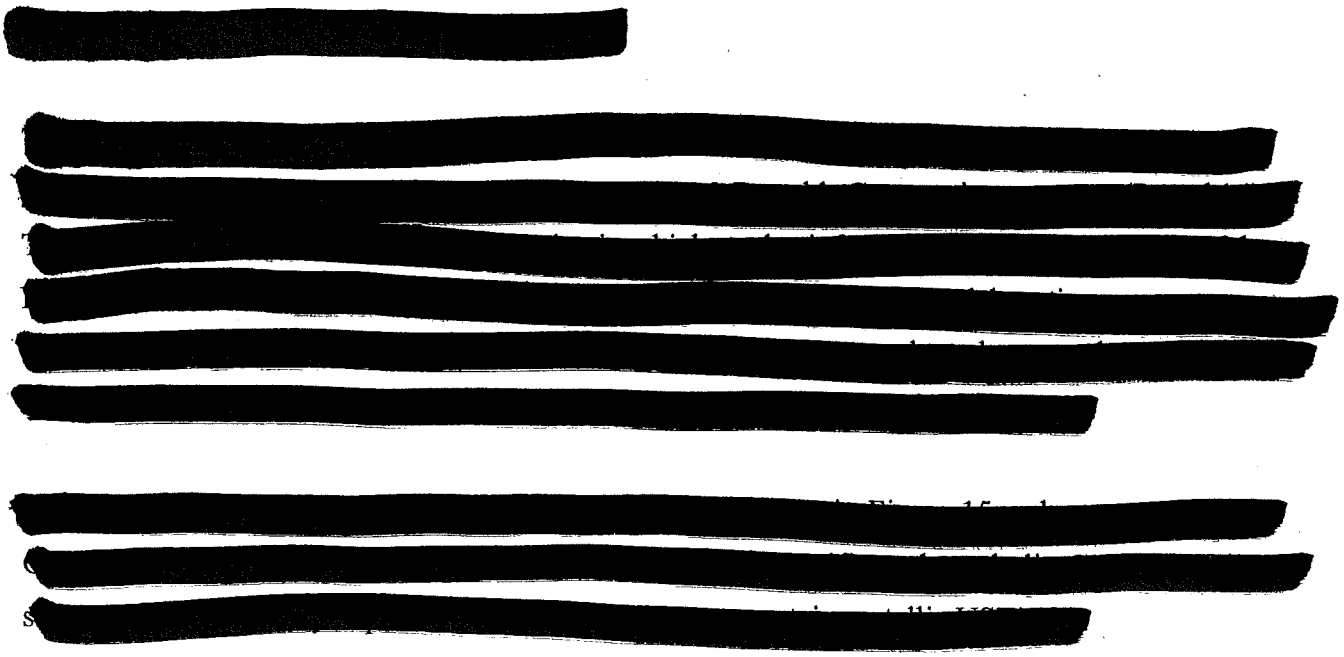
[redacted]

3.4 JC Faw Property (Parcel 19)

The JC Faw property is located immediately northeast of the Main Street and Bailey Drive intersection. The property contains an active Shell Station and Taco Bell restaurant with much of the survey area consisting of asphalt or grass-covered surfaces (Figure 11).

The EM61 bottom coil results and the differential results are presented in Figures 12 and 13, 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 as storm drains, signs, utility-related objects, and steel-reinforced concrete. The edge of the area containing the known UST's lies approximately 2 meters beyond the easement perimeter, with the western most UST centered near grid coordinates X=47 Y=70.

GPR surveys were conducted across several differential anomalies and across the areas containing steel-reinforced concrete. The geophysical results suggest that the proposed ROW and easement areas of Parcel 19 do not contain metallic UST's. Detailed geophysical information on the EM61 anomalies is provided in Figures 12 and 13.



[redacted]

4.0 SUMMARY & CONCLUSIONS

Our evaluation of the EM61 and GPR data collected across the proposed ROW and easement areas at the nine sites in King, North Carolina provides the following summary and conclusions:

- The EM61 and GPR surveys provided reliable results for the detection of metallic UST's within the surveyed portions of the proposed ROW and easement areas of each site.

- GPR surveys were conducted across selected EM61 differential anomalies, areas containing steel reinforced concrete, and at several areas where parked vehicles had obstructed the EM61 surveys.

- Linear EM61 anomalies at the nine sites are probably in response to buried utility lines and/or conduits. The majority of non-linear anomalies are probably in response to known cultural features.

- Excluding the areas containing active and known UST's, the geophysical results did not detect the presence of unknown metallic UST's within the surveyed portions of the proposed ROW and easement areas at the following sites:

[redacted]

JC Faw Property (Parcel 19)

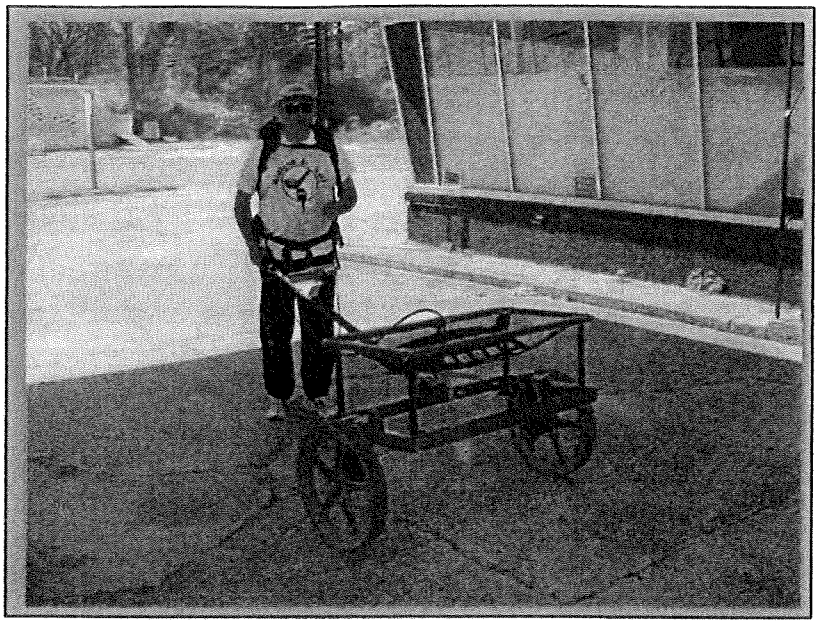
[redacted]

- [redacted]

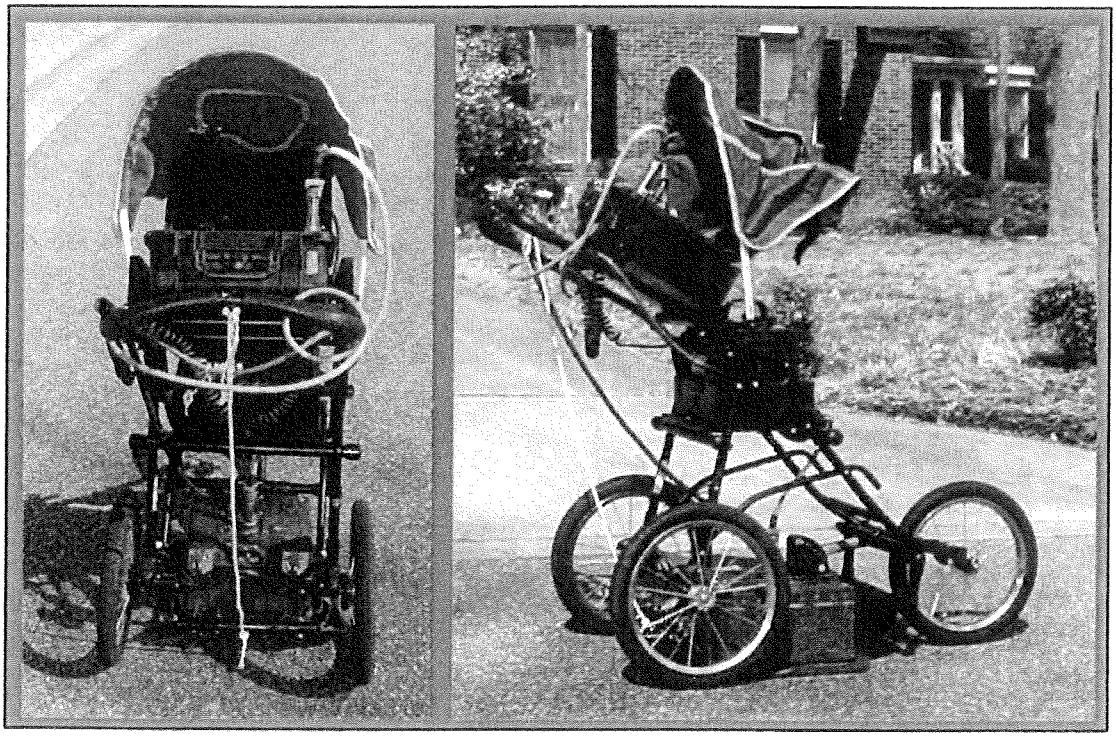
- [redacted]

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.

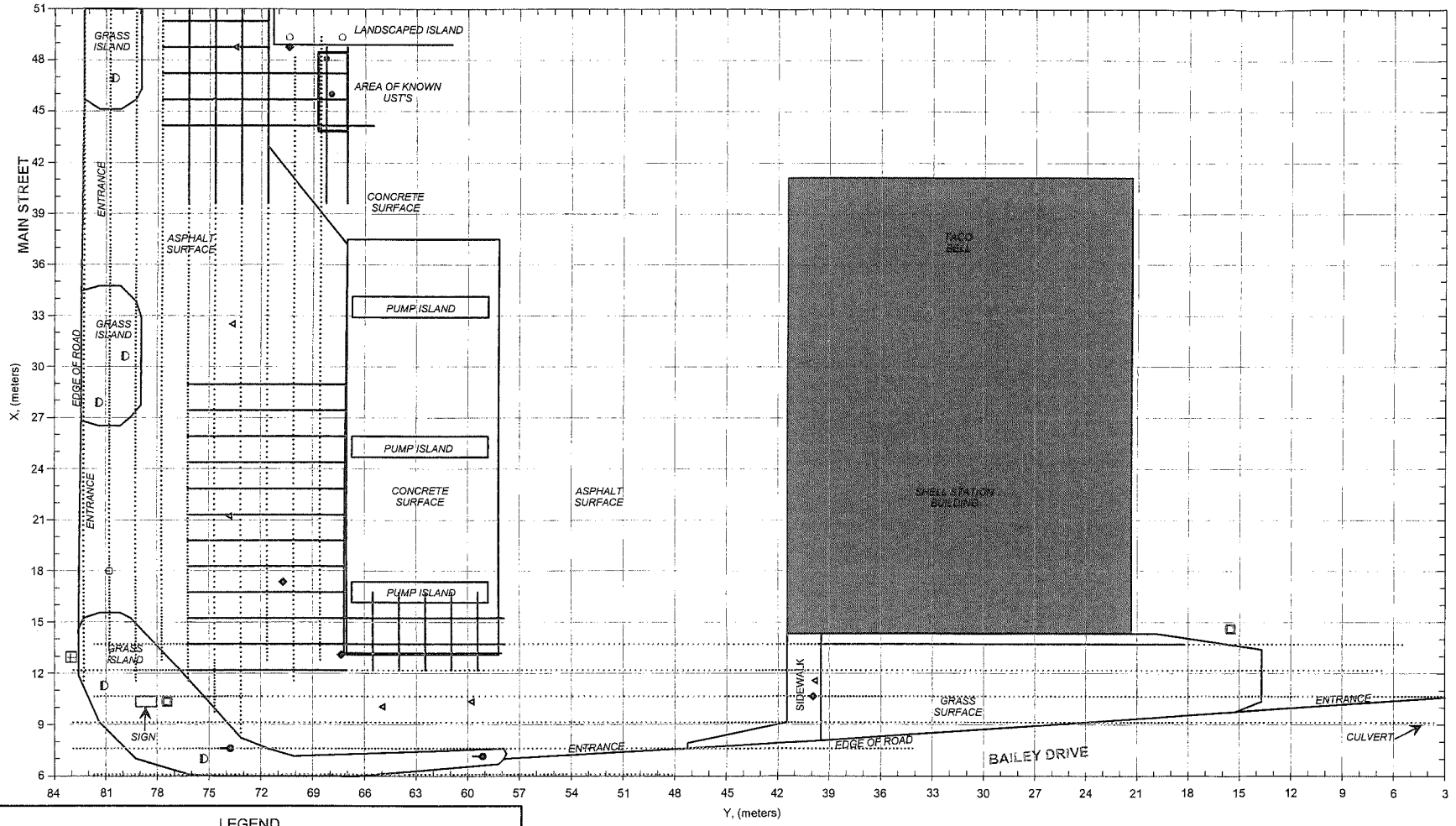
PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	EARTH TECH OF NORTH CAROLINA, INC.	DATE	5/11/05	DRWN	
SITE	KING-TOBACCOVILLE ROAD (MAIN STREET) SITES	LAT		CHKD	
CITY	KING	STATE	NORTH CAROLINA	OWD	
TITLE	GEOPHYSICAL RESULTS	LAND	2005-100	PRJMG	

GRAPHIC SCALE IN METERS

GEOPHYSICAL EQUIPMENT

FIGURE 1



LEGEND

- EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHERLY-SOUTHERLY OR EASTERLY-WESTERLY TRENDING LINES SPACED 1.5 METERS APART
- BUILDING
- UTILITY POLE
- WATER METER COVER
- GUY WIRE
- METAL POLE
- STORM SEWER GRATE
- TRAFFIC SIGN
- CABLE BOX
- RIGHT-OF-WAY MARKER
- EASEMENT MARKER
- INDIVIDUAL EM61 SURVEY LINE
- INDIVIDUAL GPR SURVEY LINE

Note: The plot shows the EM61 and GPR survey line locations in red dots and purple lines, respectively. 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 22, 2005 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

N
W E
S
APPROXIMATE NORTH

FIGURE 11

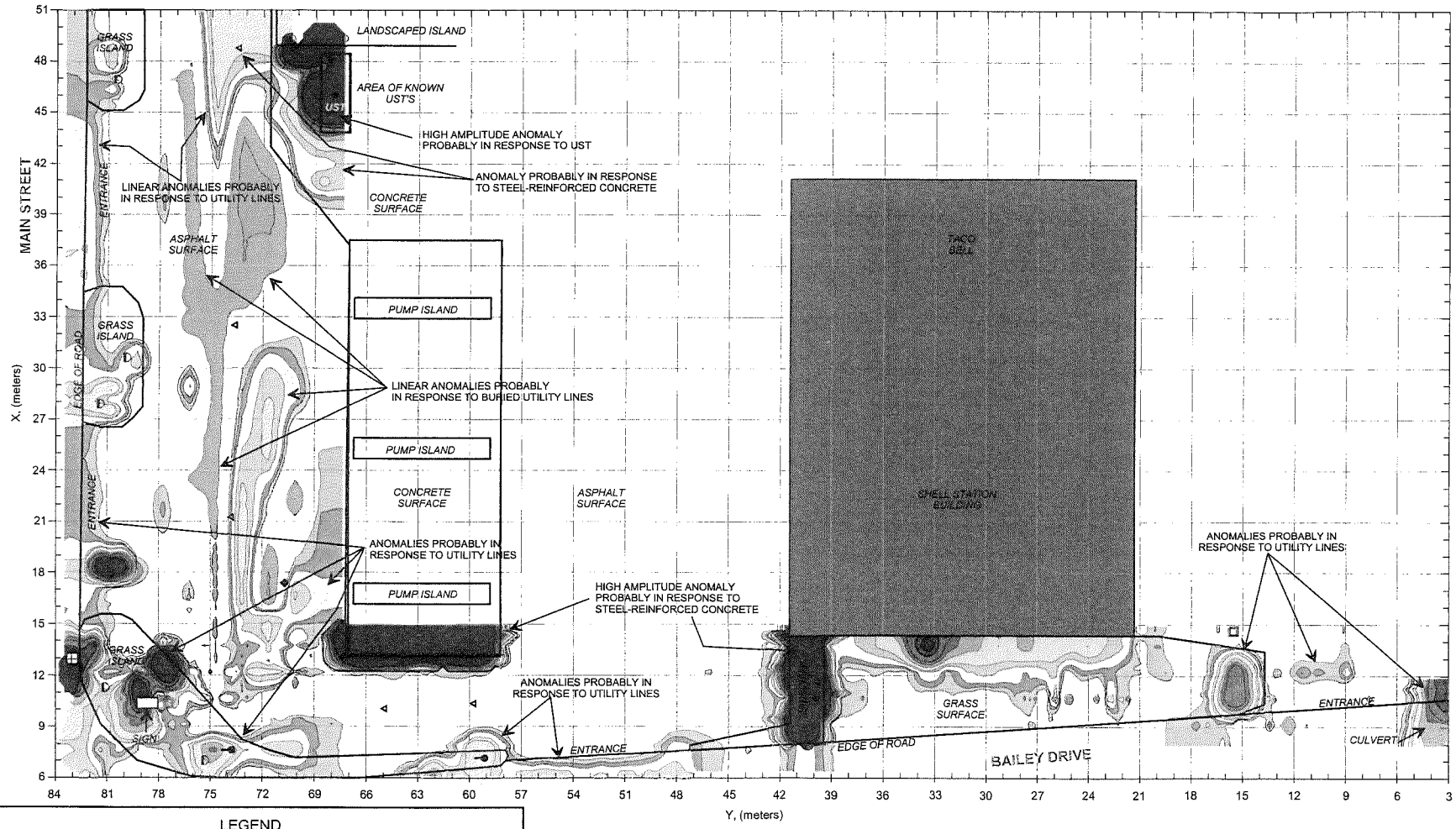
GEOPHYSICAL SURVEY AREA

GRAPHIC SCALE IN METERS

DRWN	CHKD	FIGURE
DATE: 5/12/05	LAY	DWG. 2005-100

CLIENT: EARTH TECH OF NORTH CAROLINA, INC.
SITE: JC FAW PROPERTY (PARCEL 19)
CITY: KING
STATE: NORTH CAROLINA
TITLE: GEOPHYSICAL RESULTS

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.



LEGEND

- EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHERLY-SOUTHERLY OR EASTERLY-WESTERLY TRENDING LINES SPACED 1.5 METERS APART
- BUILDING
- UTILITY POLE
- WATER METER COVER
- GUY WIRE
- METAL POLE
- STORM SEWER GRATE
- TRAFFIC SIGN
- CABLE BOX
- RIGHT-OF-WAY MARKER
- EASEMENT MARKER
- APPROXIMATE LOCATION OF PROBABLE UST AS DEFINED BY GEOPHYSICAL RESULTS

EM61 BOTTOM COIL RESPONSE (MILLIVOLTS)

-10000 -200 -100 -90 50 60 75 100 150 200 300 400 500 750 1000

N W E S

APPROXIMATE NORTH

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 22, 2005 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.The GPR results are not shown on this map.

EM61
BOTTOM COIL
RESULTS

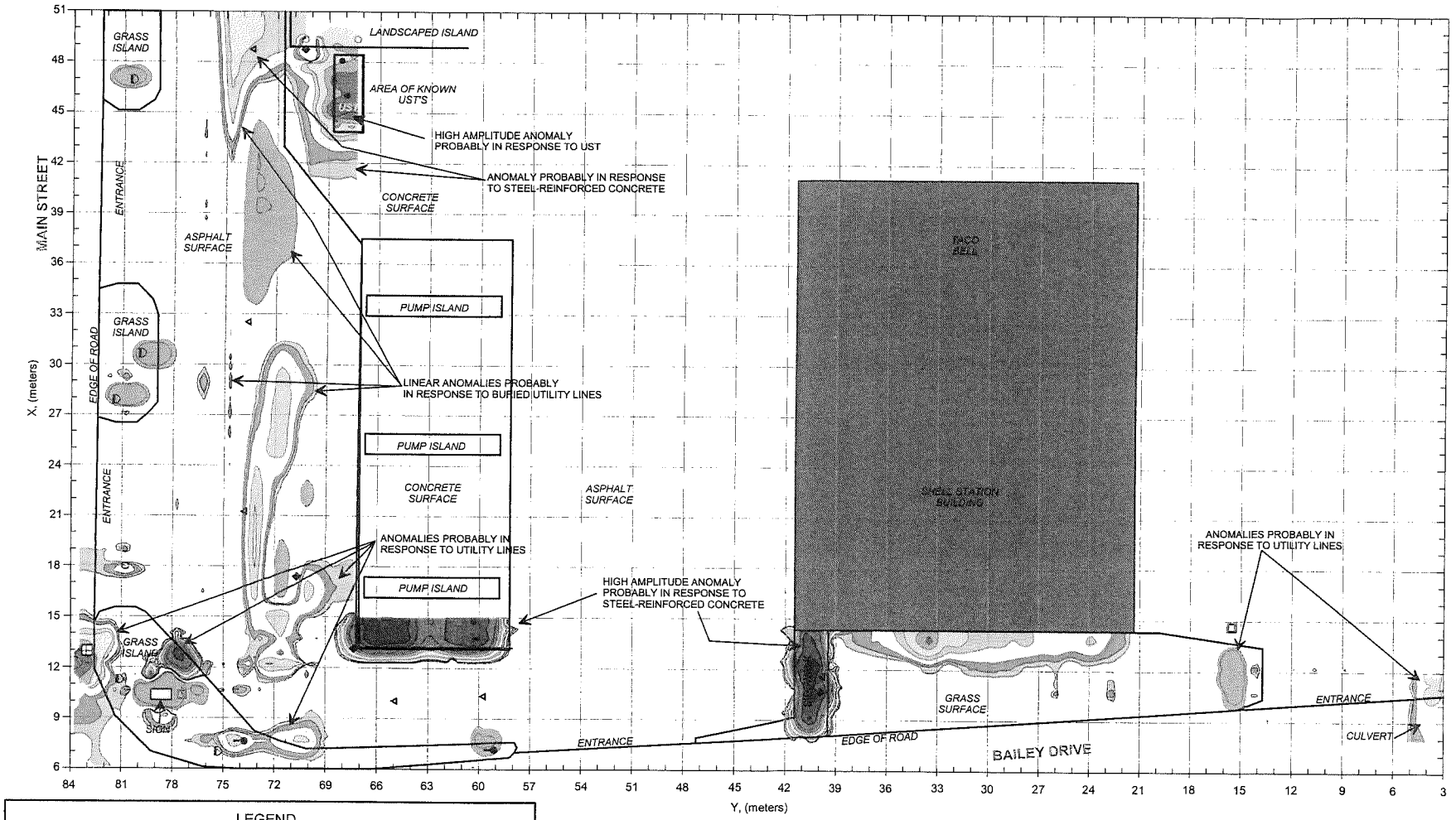
FIGURE 12

GRAPHIC SCALE IN METERS

DRAWN	CHKD	DATE	DWG	JOB
		4/25/05		2005-100

CLIENT: EARTH TECH OF NORTH CAROLINA, INC.
SITE: JC FAW PROPERTY (PARCEL 19)
CITY: KING
STATE: NORTH CAROLINA
TITLE: EM61 GEOPHYSICAL RESULTS

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.



LEGEND

- EM61 SURVEY AREA: EM DATA ACQUIRED ALONG NORTHERLY-SOUTHERLY OR EASTERLY-WESTERLY TRENDING LINES SPACED 1.5 METERS APART
- BUILDING
- UTILITY POLE
- WATER METER COVER
- GUY WIRE
- METAL POLE
- STORM SEWER GRATE
- TRAFFIC SIGN
- CABLE BOX
- RIGHT-OF-WAY MARKER
- EASEMENT MARKER
- APPROXIMATE LOCATION OF PROBABLE UST AS DEFINED BY GEOPHYSICAL RESULTS

EM61 DIFFERENTIAL RESPONSE (MILLIVOLTS)

-10000 -200 -100 -99 -49 -50 -75 -100 -150 -200 -300 -400 -500 -750 -1000

N
W E
S
APPROXIMATE NORTH

Note: The contour plot shows the differential response between the bottom and top coils of the EM61 instrument in millivolts (mV). The differential response focuses on larger, buried metallic objects such as drums and UST's and ignores smaller miscellaneous, buried, metal debris. The EM61 data were collected on April 15, 2005 using a Geonics EM61 instrument. Ground penetrating radar (GPR) data were acquired on April 22, 2005 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna.

EM61 DIFFERENTIAL RESULTS

FIGURE 13

GRAPHIC SCALE IN METERS

DRAWN 5/12/05 DATE

CHKD LAY

OWG LND 2005-100

CLIENT EARTH TECH OF NORTH CAROLINA, INC.

SITE JC FAW PROPERTY (PARCEL 19)

CITY KING STATE NORTH CAROLINA

TITLE EM61 GEOPHYSICAL RESULTS

PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.

ATTACHMENT B

TEST BORING REPORT

PROJECT J. C. FAW PROPERTY (PARCEL #19)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FA-1
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
			6.43		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR.
			5.75		AS ABOVE, DRY, NO ODOR.
			5.22		AS ABOVE, DRY, NO ODOR.
5.0					
			6.17		AS ABOVE, DRY, NO ODOR.
			5.0		MOTTLED MEDIUM BROWN AND TAN SILT/CLAY SAPROLITE, DRY, NO ODOR.
10.0					
			6.23		AS ABOVE, DRY, NO ODOR.
			5.82		AS ABOVE, WEATHERED QUARTZ VEINS COMMON, DRY, NO ODOR.
			7.5		AS ABOVE WITH QUARTZ VEINS, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
15.0					
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT J. C. FAW PROPERTY (PARCEL #19)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FA-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
			12.26		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR.
			15.58		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
5.0			10.03		MOTTLED MEDIUM BROWN, REDDISH BROWN, TAN, AND BLACK SILT/SAND/CLAY SAPROLITE, DRY, NO ODOR.
			14.14		AS ABOVE, DRY, NO ODOR.
			12.21		AS ABOVE, DRY, NO ODOR.
10.0			10.71		AS ABOVE, DRY, NO ODOR.
			11.91		AS ABOVE, DRY, NO ODOR.
15.0			4.87		AS ABOVE, DRY, NO ODOR.
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT J. C. FAW PROPERTY (PARCEL #19)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FA-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
			7.96		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR.
			8.01		AS ABOVE, DRY, NO ODOR.
			8.36		MOTTLED MEDIUM BROWN, REDDISH BROWN, TAN, AND BLACK SILT/SAND/CLAY SAPROLITE, DRY, NO ODOR.
5.0					
			8.85		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			7.35		AS ABOVE, DRY, NO ODOR.
10.0			7.35		AS ABOVE, DRY, NO ODOR.
			7.8		AS ABOVE, DRY, NO ODOR.
			6.13		AS ABOVE, DRY, NO ODOR.
15.0					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT J. C. FAW PROPERTY (PARCEL #19)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FA-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
			8.95		10" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR.
			8.19		AS ABOVE, DRY, NO ODOR.
			5.65		AS ABOVE, DRY, NO ODOR.
5.0					
			6.42		MOTTLED MEDIUM BROWN, REDDISH BROWN, AND TAN SILT/CLAY SAPROLITE, DRY, NO ODOR.
			2.57		AS ABOVE, DRY, NO ODOR.
10.0					
			3.83		AS ABOVE, DRY, NO ODOR.
			8.06		AS ABOVE, DRY, NO ODOR.
			13.05		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
15.0					
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT J. C. FAW PROPERTY (PARCEL #19)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FA-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
			6.83		10" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR.
			7.94		AS ABOVE, DRY, NO ODOR.
			11.28		AS ABOVE, DRY, NO ODOR.
5.0					
			42		MOTTLED MEDIUM BROWN, REDDISH BROWN, TAN, AND BLACK SILT/CLAY SAPROLITE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
			19		AS ABOVE, DRY, NO ODOR.
10.0					
			21		AS ABOVE, DRY, NO ODOR.
					LOST CUTTING SHOE AT 16 FEET, NO RECOVERY 12 TO 16 FEET. NO GROUNDWATER ENCOUNTERED.
15.0					
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT J. C. FAW PROPERTY (PARCEL #19)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FA-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
			2.87		8" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR.
			5.48		AS ABOVE, DRY, NO ODOR.
5.0			22		MOTTLED MEDIUM BROWN, REDDISH BROWN, TAN, AND BLACK SILT/SAND/CLAY SAPROLITE, DRY, NO ODOR.
			144		AS ABOVE, DRY, NO ODOR.
			38		AS ABOVE, DRY, NO ODOR.
10.0			153		AS ABOVE, DRY, NO ODOR.
			174		AS ABOVE, DRY, NO ODOR.
15.0			1259		AS ABOVE, DRY, NON-HYDROCARBON ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

TEST BORING REPORT

PROJECT J. C. FAW PROPERTY (PARCEL #19)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FA-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
			0.97		10" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, DRY, NO ODOR.
			1.69		AS ABOVE, DRY, NO ODOR.
			5.19		AS ABOVE, DRY, NO ODOR.
5.0			53		MOTTLED MEDIUM BROWN, REDDISH BROWN, AND TAN SILT/CLAY SAPROLITE, DRY, NO ODOR.
			116		AS ABOVE, DRY, NO ODOR.
10.0			405		AS ABOVE, DRY, NO ODOR.
			402		AS ABOVE, DRY, NO ODOR.
			436		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
15.0					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

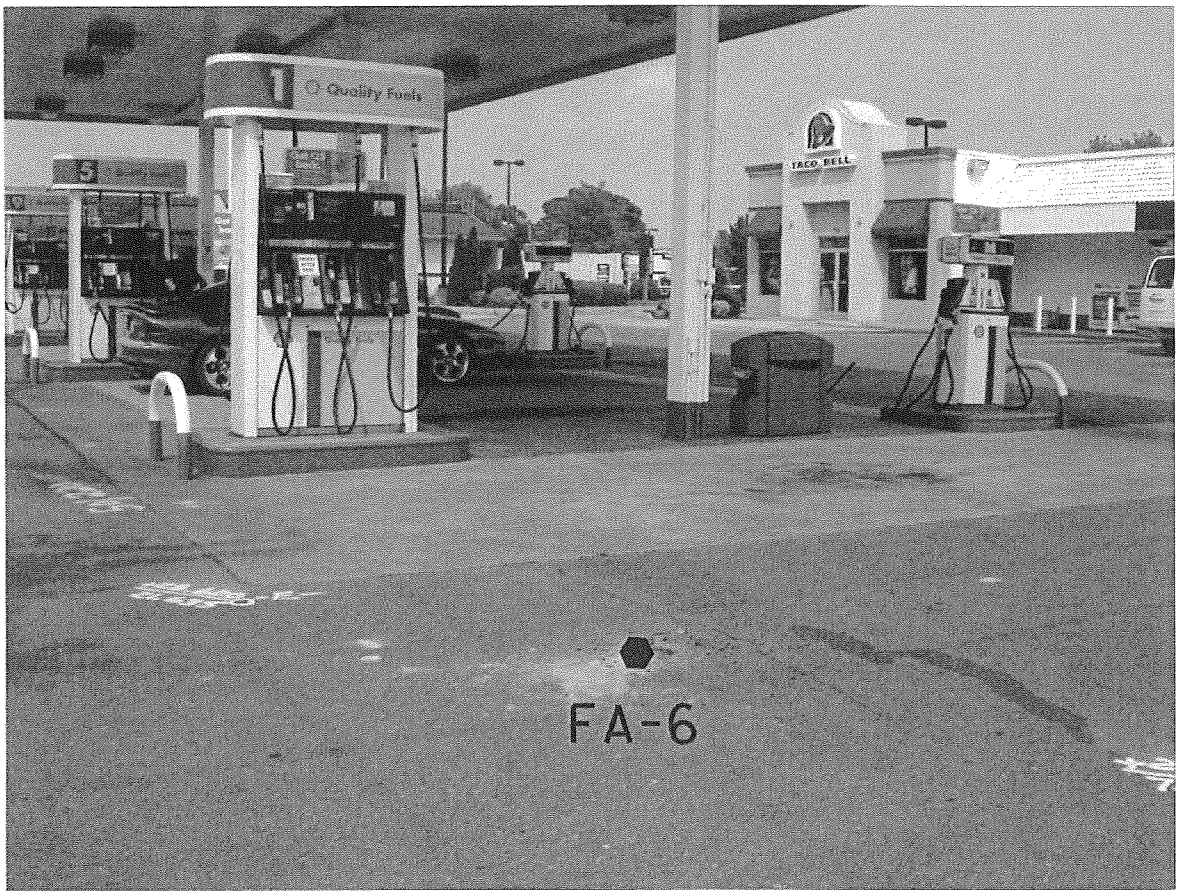
TEST BORING REPORT

PROJECT J. C. FAW PROPERTY (PARCEL #19)
CLIENT NCDOT (R-2201)
PROJECT NUMBER 85238
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FA-8
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
			1.01		4" TOPSOIL, MOTTLED REDDISH BROWN AND TAN SILTY CLAY, DRY, NO ODOR.
			1.30		AS ABOVE, DRY, NO ODOR.
			0.66		AS ABOVE, DRY, NO ODOR.
5.0					
			1.67		AS ABOVE, DRY, NO ODOR.
			1.07		MOTTLED MEDIUM BROWN, REDDISH BROWN, TAN, AND BLACK SILT/CLAY SAPROLITE, DRY, NO ODOR.
10.0					
			0.69		AS ABOVE, DRY, NO ODOR.
			1.67		AS ABOVE, DRY, NO ODOR.
			1.82		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
15.0					
					BORING TERMINATED AT 16 FEET. NO GROUNDWATER ENCOUNTERED.
20.0					

ATTACHMENT C

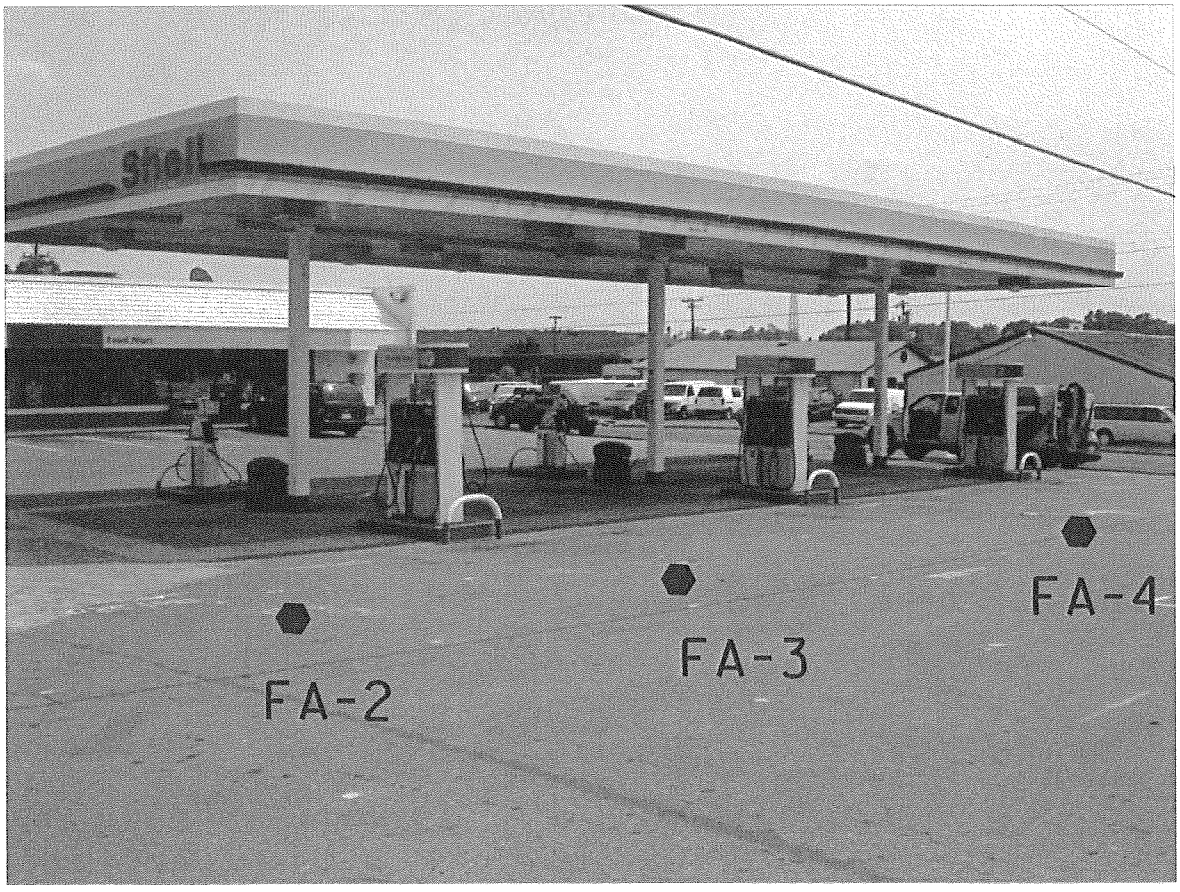


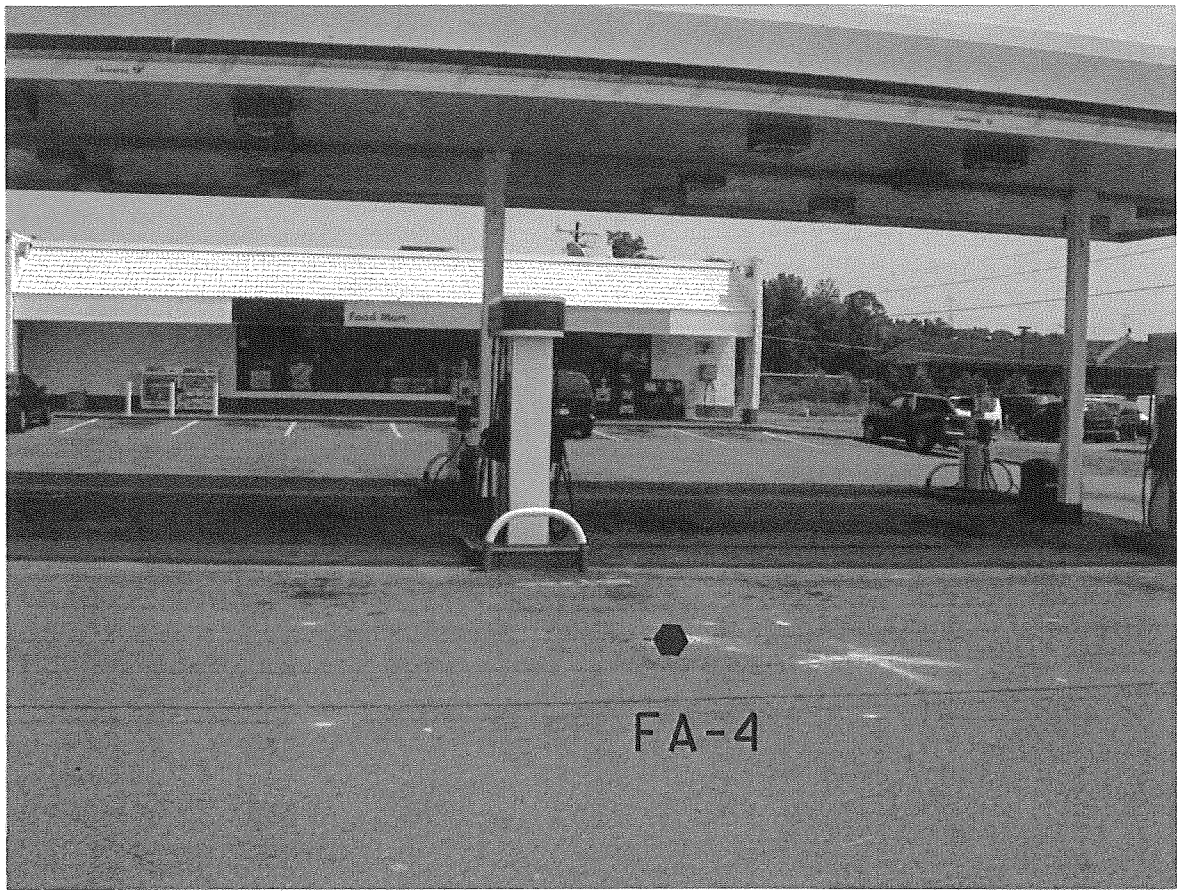
FA-6

FA-7

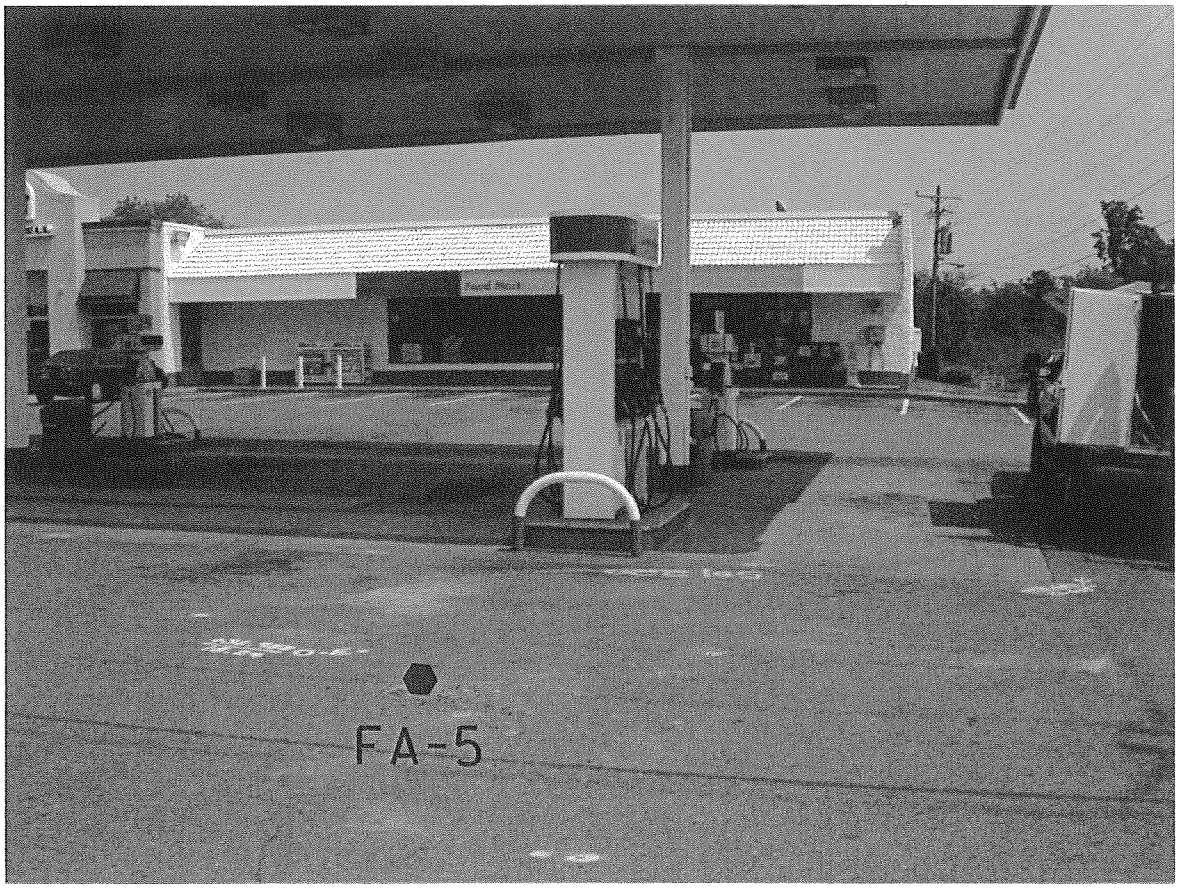

FA-8


TACO BELL
FA-1


shell
FA-2
FA-3
FA-4



FA-4



FA-5

ATTACHMENT D

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: G204-452

Client Project: NCDOT-FAW #19

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 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.

5/23/05
Laboratory Director Date
J. Patrick Weaver

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: FA-1
Client Project ID: NCDOT-FAW #19
Lab Sample ID: G204-452-1
Lab Project ID: G204-452
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/10/05 12:30
Date Received: 5/11/05
Matrix: Soil
Solids 65.40

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	9.17	5030	1	05/19/05
Diesel Range Organics	BQL	8.15	3545	1	05/20/05

Reviewed By: _____

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: FA-2
Client Project ID: NCDOT-FAW #19
Lab Sample ID: G204-452-2
Lab Project ID: G204-452
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/10/05 13:10
Date Received: 5/11/05
Matrix: Soil
Solids 72.39

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.29	5030	1	05/19/05
Diesel Range Organics	BQL	7.69	3545	1	05/20/05

Reviewed By: _____
TPH_LIMS_v1.71.XLS

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: FA-3
Client Project ID: NCDOT-FAW #19
Lab Sample ID: G204-452-3
Lab Project ID: G204-452
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/10/05 13:40
Date Received: 5/11/05
Matrix: Soil
Solids 72.24

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.31	5030	1	05/19/05
Diesel Range Organics	BQL	8.11	3545	1	05/20/05

Reviewed By: _____

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: FA-4
Client Project ID: NCDOT-FAW #19
Lab Sample ID: G204-452-4
Lab Project ID: G204-452
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/10/05 14:10
Date Received: 5/11/05
Matrix: Soil
Solids 88.58

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	6.77	5030	1	05/19/05
Diesel Range Organics	53.7	6.8	3545	1	05/20/05

Reviewed By: MC

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: FA-5
Client Project ID: NCDOT-FAW #19
Lab Sample ID: G204-452-5
Lab Project ID: G204-452
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/10/05 14:30
Date Received: 5/11/05
Matrix: Soil
Solids 75.95

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	7.9	5030	1	05/19/05
Diesel Range Organics	BQL	7.79	3545	1	05/20/05

Reviewed By:

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: FA-6
Client Project ID: NCDOT-FAW #19
Lab Sample ID: G204-452-6
Lab Project ID: G204-452
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/10/05 15:00
Date Received: 5/11/05
Matrix: Soil
Solids 71.56

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	8.38	5030	1	05/19/05
Diesel Range Organics	BQL	8.47	3545	1	05/20/05

Reviewed By: _____

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: FA-7
Client Project ID: NCDOT-FAW #19
Lab Sample ID: G204-452-7
Lab Project ID: G204-452
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/10/05 15:30
Date Received: 5/11/05
Matrix: Soil
Solids 84.07

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	7.14	5030	1	05/19/05
Diesel Range Organics	BQL	7.29	3545	1	05/20/05

Reviewed By: _____

Results for Total Petroleum Hydrocarbons
by GC/FID 8015

Client Sample ID: FA-8
Client Project ID: NCDOT-FAW #19
Lab Sample ID: G204-452-8
Lab Project ID: G204-452
Report Basis: Dry Weight

Analyzed By: DCS
Date Collected: 5/10/05 16:00
Date Received: 5/11/05
Matrix: Soil
Solids 65.97

Analyte	Result MG/KG	Report Limit MG/KG	Prep Method	Dilution Factor	Date Analyzed
Gasoline Range Organics	BQL	9.1	5030	1	05/19/05
Diesel Range Organics	BQL	8.82	3545	1	05/20/05

Reviewed By: MC

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

% soilds = 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# 44092

Page ____ of ____

Client: EARTH TECH | Project ID: NCDOT-FAW #19 | Date: 5/10/05 | Report To: MIKE BRANSON
Address: 701 Corporate Center Dr. | Contact: MIKE BRANSON | Turnaround: STANDARD | EARTH TECH
Address: Suite 475 | Phone: 9198546238 | Job Number: 85238
Quote #: RALEIGH, NC 27607 | Fax: 9198546259 | P.O. Number: WBS # 34380.1.1 | Invoice To: NCDOT

Sample ID	Date	Time	Matrix	Preservatives	Analytes: TPH-GRO/MA	Analytes: TPH-Diesel/MA	Comments: Please specify any special reporting requirements
FA-1	5/10/05	1230	SOIL		✓	✓	G204-452
FA-2	5/10/05	1310	SOIL		✓	✓	INVOICE NCDOT UNDER
FA-3	5/10/05	1340	SOIL		✓	✓	BC Contract PO
FA-4	5/10/05	1410	SOIL		✓	✓	
FA-5	5/10/05	1430	SOIL		✓	✓	
FA-6	5/10/05	1500	SOIL		✓	✓	
FA-7	5/10/05	1530	SOIL		✓	✓	
FA-8	5/10/05	1600	SOIL		✓	✓	

Relinquished By	Date	Time	Received By	Date	Time	Temperature	State Certification Requested
[signature]	5/10/05	1800	[signature]	5/11/05	1015	2.4°C	NC X SC ____ Other ____
							SEE REVERSE FOR TERMS AND CONDITIONS

ORIGINAL

PARADIGM ANALYTICAL LABORATORIES, INC.

N.C. Certification #481 S.C. Certification #99029