701 Corporate Center Drive, Suite 475, Raleigh, North Carolina 27607

January 19, 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
ISI Enterprises Property (Parcel #37)
589 Brevard Road
Asheville, Buncombe County, North Carolina
NCDOT Project U-3601
WBS Element 34958.1.1
Earth Tech Project No. 81930

Dear Mr. Smith:

Telephone
919.854.6200
Facsimile
919.854.6259

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 November 22, 2004, and the North Carolina Department of Transportation's (NCDOT's) Notice to Proceed dated November 24, 2004. Activities associated with the assessment consisted of reviewing geophysical data, collecting soil 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 ISI Enterprises Property (Parcel #37) is located at 589 Brevard Road (NC 191) in Asheville, North Carolina. The property is situated on the west side of Brevard Road approximately 0.3 miles south of the I-40 interchange (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 (Quik Trip, formerly Flash Flood 66) where five underground storage tanks (USTs) are in use; three 8,000-gallon gasoline, one 4,000-gallon diesel fuel, and one 1,000-gallon kerosene. The property consists of a brick/concrete block building with a canopied pump island on the east side of the building. The USTs are located south of the canopied dispenser islands (Figure 2). The proposed right-of-way/easements appear to affect the building, pump islands, and USTs. Because of the presence of USTs, a Preliminary Site Assessment was requested 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 found 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 were operated under Facility Number 0-004608. The operator and owner of the tanks are listed as follows:

Owner	Operator
I-S-I Enterprises (LLC)	Quik Trip
149 Keystone Drive	589 Brevard Road
Asheville, North Carolina 28806	Asheville, North Carolina 28806
(828) 280-4124	(828) 280-4124

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 in 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 Brevard Road and the Y-axis oriented approximately perpendicular to Brevard Road. The grid was located to cover all accessible portions of the property. The survey lines were spaced 5 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.

Four significant anomalies were observed at the ISI Enterprises Property. One anomaly (Anomaly A) was located to the south of the dispenser canopy and was interpreted to represent the existing USTs known to be present in that location. Anomaly B was located immediately south of the store building and coincided with the known kerosene UST. Anomaly C was located at the dispenser islands and Anomaly D was located on the north side of the building. The electromagnetic and GPR signatures of these anomalies suggest the presence of steel reinforced concrete. Based on the data, five USTs are present at the site. A detailed report of findings and interpretations is presented in Attachment A.

Site Assessment Activities

On December 15, 2004, Earth Tech mobilized to the site to conduct a Geoprobe® direct push investigation to evaluate soil conditions within the proposed right-of-way and easements. 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 4-foot long acetate sleeves inside the direct push sampler. Each of these sleeves was divided in half for soil sample screening. Each 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 Prism Laboratories, Inc., in Charlotte, 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).

Ten direct-push holes (FF-1 through FF-10) were advanced within the proposed right-of-way at the site to a depth of 12 feet (Figure 2 and Attachment B). Borings FF-1 and FF-6 were located to evaluate the kerosene UST area; borings FF-2 through FF-5 were located to evaluate the other known USTs. Borings FF-7 and FF-8 were located to evaluate the horizontal extent of potential contamination. Borings FF-9 and FF-10 were located to evaluate the pump island area (Attachment C). The lithology encountered by the direct-push samples generally was consistent throughout the site. The ground surface was covered with about 4 inches of asphalt and gravel, or soil. Below the surface treatment to a depth of about 6 feet was a medium to light brown silt to clay. Below this material was a medium brown silt/sand saprolite that occasionally exhibited parent fabric. All the borings were terminated at refusal, which was at about 10 to 12 feet below ground surface. Based on field screening, soil samples were submitted for laboratory analysis, which are summarized in Table 1. No groundwater was encountered in any of the borings at the site.

Analytical Results

Based on the laboratory reports, summarized in Table 1 and presented in Attachment D, petroleum hydrocarbon compounds were detected in five of the 10 soil samples collected from the site (Figure 3). Total petroleum hydrocarbons (TPH) identified as diesel fuel (DRO) were detected in four of the samples and ranged in concentrations from 11 mg/kg to 2000 mg/kg. TPH identified as gasoline (GRO) were detected in three of the soil samples and ranged in concentrations from 1.2 mg/kg to 3100 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. The soil samples from borings FF-2, FF-3, and FF-6 contained a TPH DRO concentration above the 10 mg/kg assumed action level. The soil samples from borings FF-2 and FF-3 contained a TPH GRO concentration above the 10 mg/kg assumed action level.

Conclusions and Recommendations

A Preliminary Site Assessment was conducted to evaluate the proposed right-of-way at the ISI Enterprises Property (Parcel #37) located at 589 Brevard Road in Asheville, Buncombe County, North Carolina. A geophysical survey suggested that five USTs are present at the site. A total of 10 soil borings were advanced to evaluate the subsurface conditions on the proposed right-of-way. The laboratory reports of five of the 10 soil samples from these borings suggest that TPH DRO and GRO are present. The location of the borings from which soil samples were obtained that contained TPH concentrations suggests that the contamination is from a UST release.

To evaluate the volume of soil requiring possible remediation, the soil samples with TPH concentrations above 10 mg/kg were considered. The analytical results of the soil samples suggest that the soil from borings FF-2, FF-3, and FF-6 contained TPH concentrations above the assumed action level. The location of these soil borings also suggests two areas of contamination. A review of the field screening readings (Table 1) suggests that a maximum contaminated soil thickness of 8 feet (from a depth of 4 to 12 feet) is likely for the area of borings FF-2 and FF-3. The field screening readings in the area of soil boring FF-6 indicates a probable soil contamination thickness of about 2 feet (from a depth of about 10 to 12 feet). For TPH in the area of borings FF-2 and FF-3, the volume of potentially affected soil was estimated based on a thickness of 8 feet, an average width of 25 feet, and an average length of 30 feet. These dimensions result in a volume of about 222 cubic yards of contaminated soil. For TPH in the area of boring FF-6, the volume of potentially affected soil was estimated based on a thickness of 2 feet, an average width of 10 feet, and an average length of 10 feet. These dimensions result in a volume of about 7.5 cubic yards of contaminated soil. The total estimated volume of potentially contaminated soil at the site is about 230 cubic yards. 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. Because hydrocarbon concentrations were detected in the soil, Earth Tech recommends that a copy of this report be submitted to the Division of Waste Management, UST Section, in the Asheville 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
ISI ENTERPRISES, INC., PROPERTY (PARCEL #37)
ASHEVILLE, BUNCOMBE COUNTY, NORTH CAROLINA
NCDOT PROJECT NO. U-3601
WBS ELEMENT 34958.1.1
EARTH TECH PROJECT NO. 81004

LOCATION	DEPTH (ft)	FID READING (ppm)	SAMPLE ID	ANALYTICAL RESULTS (mg/kg)	ASSUMED ACTION LEVEL (mg/kg)
FF-1	0 - 2	2.16			
	2 - 4	2.17			
	4 - 6	2.37			
	6 - 8	2.34			
	8 - 10	2.82			
	10 - 12	17.6	FF-1	DRO (<7.6) GRO (<1.1)	10 10
FF-2	0 - 2	15.2			
	2 - 4	76			
	4 - 6	112			
	6 - 8	172			
	8 - 10	191			
	10 - 12	5943	FF-2	**DRO (94)** **GRO (120)**	10 10
FF-3	0 - 2	3.1			
	2 - 4	13.6			
	4 - 6	53			
	6 - 8	2545			
	8 - 10	6019			
	10 - 12	13800	FF-3	**DRO(2000)** **GRO (3100)**	10 10
FF-4	0 - 2	7.45			
	2 - 4	14.6			
	4 - 6	64			
	6 - 8	59			
	8 - 10	29			
	10 - 12	106	FF-4	DRO (7.5) GRO (<1.1)	10 10
FF-5	0 - 2	14.3			
	2 - 4	18.2			
	4 - 6	36			
	6 - 8	27			
	8 - 10	55			
	10 - 12	66	FF-5	DRO (<7.4) GRO (<1.1)	10 10
FF-6	0 - 2	0.25			
	2 - 4	0.75			
	4 - 6	1.41			
	6 - 8	2.01			
	8 - 10	4.1			
	10 - 12	25	FF-6	**DRO (11)** GRO (<1.1)	10 10
FF-7	0 - 2	41			
	2 - 4	65			
	4 - 6	70			
	6 - 8	87			
	8 - 10	462	FF-7	DRO (<8.3) GRO (1.2)	10 10
	10 - 12	98			

TABLE 1 (continued)

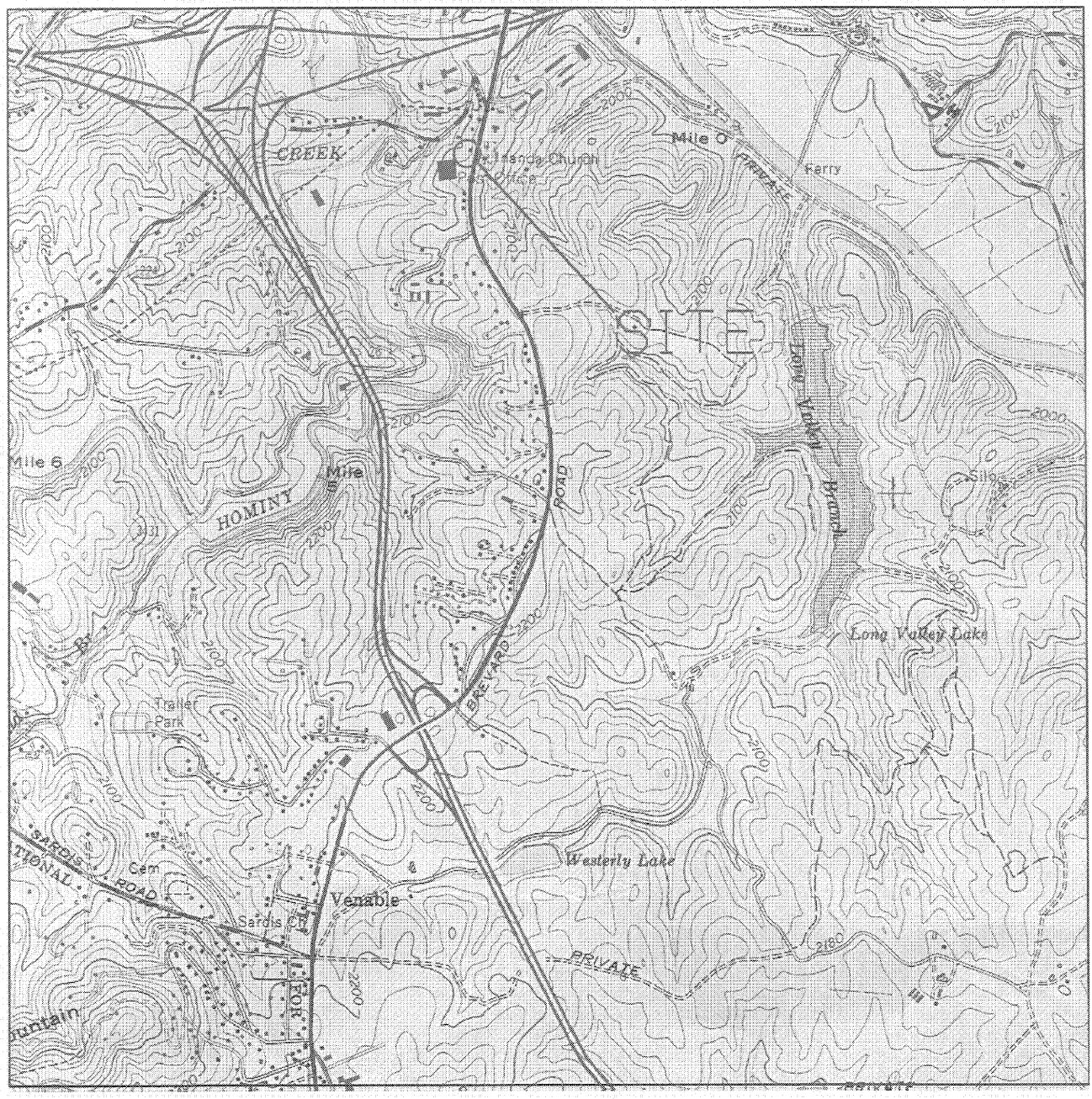
FIELD SCREENING AND ANALYTICAL RESULTS
ISI ENTERPRISES, INC., PROPERTY (PARCEL #37)
ASHEVILLE, BUNCOMBE COUNTY, NORTH CAROLINA
NCDOT PROJECT NO. U-3601
WBS ELEMENT 34958.1.1
EARTH TECH PROJECT NO. 81004

FF-8	0 - 2	1.15			
	2 - 4	1.33			
	4 - 6	3.22			
	6 - 8	3.12			
	8 - 10	3.84	FF-8	DRO (<7.3) GRO (<1.1)	10 10
FF-9	0 - 2	0.16			
	2 - 4	1.57			
	4 - 6	4.19			
	6 - 8	5.3			
	8 - 10	9.64	FF-9	DRO (>8.4) GRO (>1.2)	10 10
	10 - 12	8.23			
FF-10	0 - 2	2.3			
	2 - 4	2.55			
	4 - 6	3.2			
	6 - 8	3.55			
	8 - 10	3.39			
	10 - 12	4.1	FF-10	DRO (>7.6) GRO (>1.1)	10 10

DRO - Diesel range organics.
GRO - Gasoline range organics.

ppm - parts per million.
mg/kg - milligrams per kilogram.

FIGURES



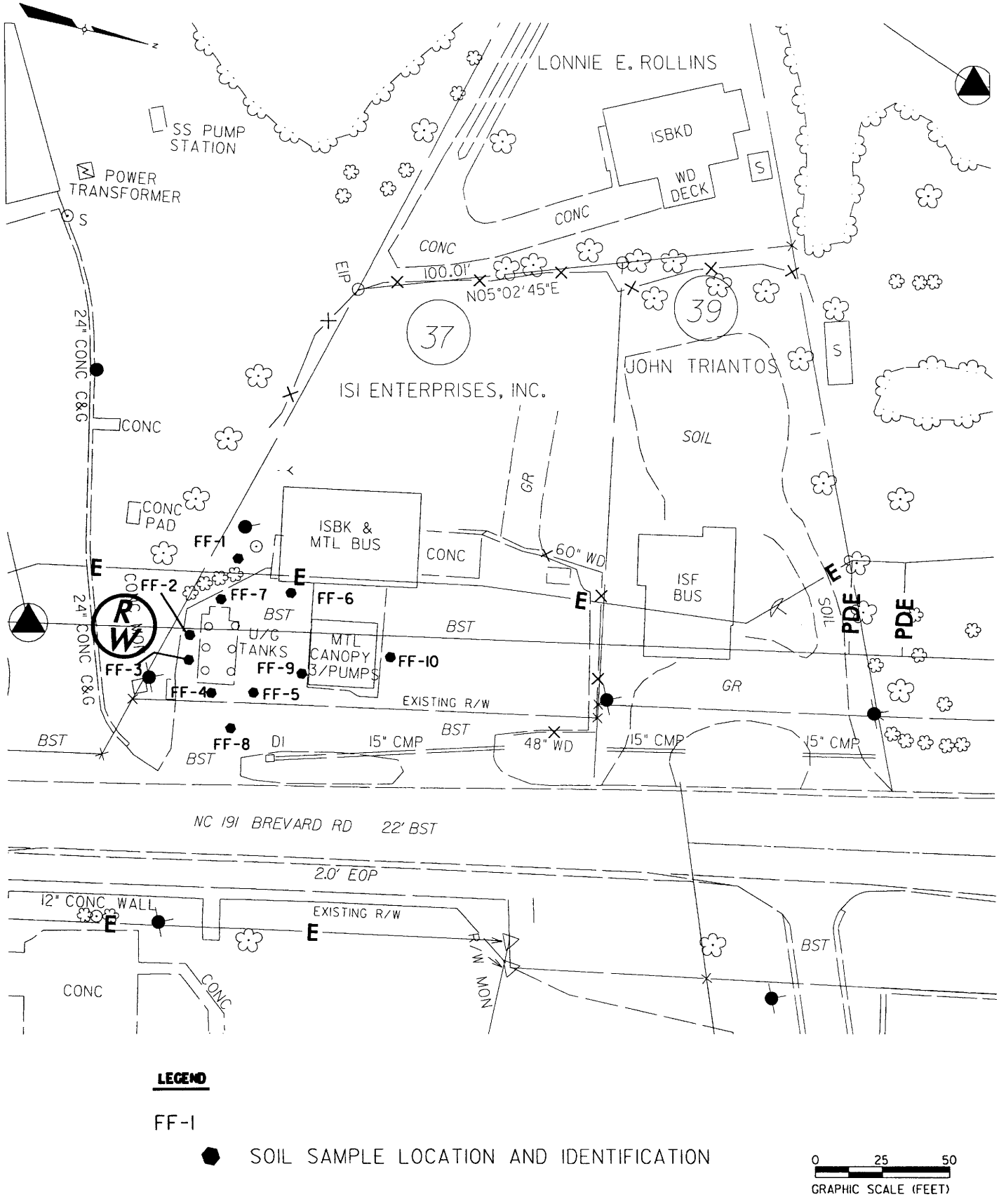
SOURCE: U.S. GEOLOGICAL SURVEY 7.5 MIN QUADRANGLE: ASHEVILLE, NC (REV 1991)

EARTH TECH

FIGURE 1
VICINITY MAP
ISI ENTERPRISES, INC., PROPERTY (PARCEL #37)
ASHEVILLE, BUNCOMBE COUNTY, NORTH CAROLINA

DECEMBER 2004

81930



LEGEND

FF-1

● SOIL SAMPLE LOCATION AND IDENTIFICATION

0 25 50

GRAPHIC SCALE (FEET)

EARTH TECH

FIGURE 2

SITE MAP

ISI ENTERPRISES, INC., PROPERTY (PARCEL #37)

ASHEVILLE, BUNCOMBE COUNTY, NORTH CAROLINA

DECEMBER 2004 81930

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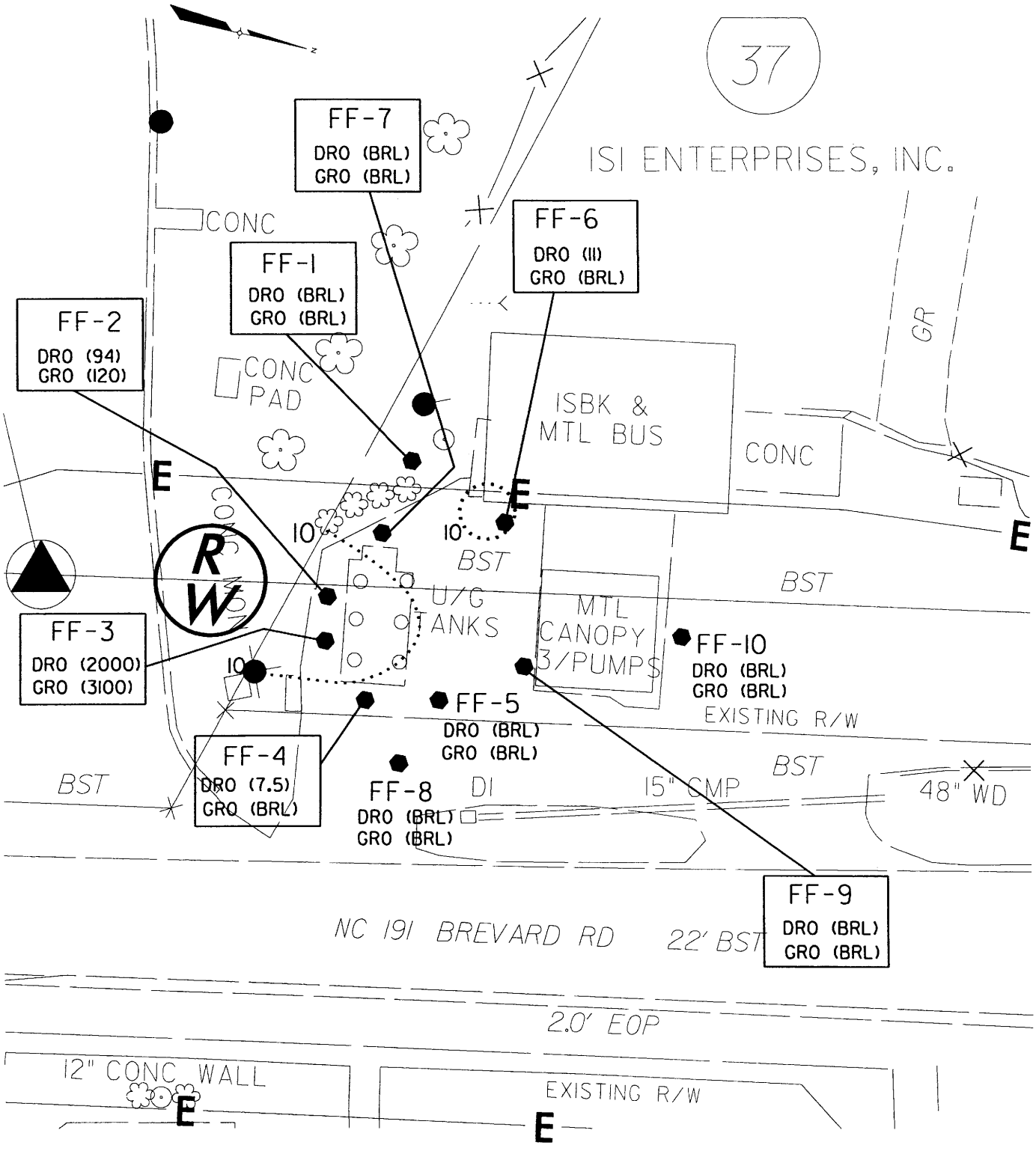

LEGEND

●	SOIL SAMPLE LOCATION
DRO (123)	TPH AS DIESEL FUEL IN MG/KG
GRO (123)	TPH AS GASOLINE IN MG/KG
BRL	BELOW REPORTING LIMIT
10 ·····	TPH ISOCONCENTRATION CONTOUR IN MG/KG

0 15 30
GRAPHIC SCALE (FEET)

EARTH TECH

FIGURE 3
SOIL ANALYTICAL RESULTS MAP
ISI ENTERPRISES, INC., PROPERTY (PARCEL #37)
ASHEVILLE, BUNCOMBE COUNTY, NORTH CAROLINA
DECEMBER 2004 81930

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ATTACHMENT A

Pyramid Project # 2004294

GEOPHYSICAL INVESTIGATION REPORT

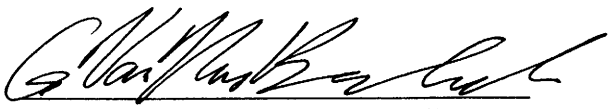
EM-61 & GPR SURVEY

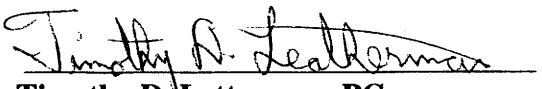
Parcel 37

589 Brevard Rd., Asheville, NC

January 12, 2005

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

Prepared by: 
G. Van Ness Burbach, PhD, PG

Reviewed by: 
Timothy D. Letterman, PG

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

GEOPHYSICAL INVESTIGATION REPORT

EM-61 & GPR SURVEY

Parcel 37 - 589 Brevard Rd., Asheville, NC

1.0 INTRODUCTION

On December 1-2, 2004, Pyramid Environmental & Engineering, P.C. (Pyramid) performed a geophysical survey on a portion of the property identified as Parcel 37, located at 589 Brevard Rd. in Asheville, North Carolina. The primary instruments used for the survey were a Geonics EM-61 time-domain electromagnetic induction metal detector and a GSSI SIR-2000 ground-penetrating radar (GPR) system with a 400 MHz antenna. The purpose of this investigation was to locate possible underground storage tanks on the site.

The Parcel 37 site contains an active gas station/convenience store (Flash Flood '76). There is one main store building with a pump island and canopy in front. Four active UST's are known on the site, including three 8000-gallon gasoline UST's, one 4000-gallon diesel UST, and one 4000-gallon kerosene UST. The main survey area was approximately 171 feet long and 75-85 feet wide and included the area within the expanded DOT construction easement. In addition, areas around the back and sides of the site building were also surveyed, mostly in reconnaissance mode.

Most of the main survey area is paved with asphalt; however, several areas of concrete are present. The area around the pump island and between the pump island and the store is covered by concrete that appears to be steel-reinforced. The 3 gasoline UST' are partially covered by a concrete slab that does not appear to be steel-reinforced. Two other areas on the site with apparently steel-reinforced concrete are the area inside the fenced enclosure for the dumpster and a small concrete pad of unknown purpose near the northwest corner of the main survey area. The areas in back and on the sides of the store building that were the focus of reconnaissance surveys were mostly dirt or grass covered. A very steep slope bounds the west side of the subject property and there are some areas of construction or other debris on the site. The important physical features of this site that may have affected the acquisition or interpretation of geophysical data are shown in **Figure 1**.

2.0 GEOPHYSICAL METHODS

2.1 EM-61

The first geophysical method chosen for this survey was time-domain electromagnetic induction (EM) using a Geonics EM-61 high sensitivity, high resolution EM metal detector. The EM-61 generates a powerful primary electromagnetic field pulse that is repeated 150 times per second. The EM pulse generates secondary electromagnetic eddy

currents in nearby conductive objects (e.g.- metal). The eddy currents decay with time after the primary pulse is over, and can be detected by the EM-61's antennae. The EM-61 has two one-meter square coil antennae, one mounted above the other.

The EM-61 can detect a metal object the size of a 55-gallon drum buried at depths up to 3 meters under typical site conditions. It can detect either ferrous or non-ferrous metal objects, and the response is practically independent of the electrical conductivity of the ground. The two antennae allow the EM-61 to discriminate against objects that are not directly below the antennae, allowing accurate metal detection in the subsurface within less than two meters of cars, fences, or other above ground metal objects. The differential between the two antennae's responses can be used to estimate the depth of a metal object.

For this survey, the EM-61 was operated in the "Wheel Mode". In this mode, the EM-61 antennae are mounted on wheels for easy and regular movement along a line. Measurements are triggered by a relay on the wheel so the data can be recorded at regular intervals and recorded with the measured distance along the line. The data and line parameters (such as line number, direction, and increment) are recorded in the EM-61's datalogger, and can be downloaded to a personal computer for review, printout and analysis.

2.2 GPR

Ground penetrating radar (GPR) uses high-frequency radio waves radiated downward into the ground by a transmitting antenna. As the radiated energy is reflected back by objects or interfaces in the subsurface, the receiving antenna detects it. As the antennae are moved across the ground surface, the instrument records a continuous profile of the subsurface. The depth of penetration is highly site-specific, being dependent upon the properties of the site's soil and/or rock materials and the frequency of the antenna, and can range from 1 to 9 meters (3-30 feet). A radar profile will show interfaces between soil and/or rock layers having sufficiently different electrical properties, as well as objects such as buried drums, pipelines, or tanks.

The instrument used in this survey was a GSSI SIR-2000 ground-penetrating radar recording system with a 400 MHz antenna. The transmitting and receiving antennae are located together in a single unit for smooth movement over the ground. The data was recorded with high-pass and low-pass filters set at 35 MHz and 565 MHz, respectively. The data were recorded with positive polarity at 512 samples per scan and 8 bits resolution. The full-scale range was set at 100 ns (nanoseconds). The data was collected in continuous mode with a maximum scan rate of 64 scans per second using fudicial markers to accurately locate the data along each line.

3.0 SURVEY LAYOUT AND DATA ACQUISITION

3.1 EM-61

Pyramid laid out a survey grid on the subject site for the collection of the geophysical data. The grid was laid out with the X-axis parallel to Brevard Road, starting at the south end of the property and increasing toward the north. The Y-axis was perpendicular to Brevard Road with zero at the white line on the road and increasing toward the west. The grid is shown on the site base map in **Figure 2**. Units on the grid axes are in feet.

The main survey lines for the EM-61 were oriented parallel to the X-axis (approximately north-south) with a spacing of 5 feet between lines. In addition, some north-south lines were collected in the reconnaissance area west of the store. Some cross-lines running parallel to the Y-axis were collected over the known UST's and on the north end of the survey area. The survey data, including the response from both the top and bottom antennae on the EM-61, and the differential between the two antennae, were recorded in the EM-61's portable data-logger and later downloaded onto a computer.

The data were adjusted to accommodate problems in the field (such as starting and stopping to go around obstructions), and then exported to an (X,Y,Z) file to be gridded and contoured using Surfer. A surfer plot showing the EM-61 data (response of the bottom antenna) and printouts of all the individual EM-61 lines are presented in **Appendix A**. Site features that can be seen in the EM-61 data are annotated on the surfer plot.

3.2 GPR

Since the EM-61 is ineffective in areas with steel-reinforced concrete, the portions of the main survey area that were paved with concrete were also covered using ground-penetrating radar. This included the area around the pump island, the UST area, and the small concrete pad near the northwest corner of the main survey. The locations of the GPR data lines are shown in **Figure 3**. Printouts of the GPR data are presented in **Appendix B**.

4.0 RESULTS AND CONCLUSIONS

Our geophysical surveys found no evidence of any underground storage tanks (UST's) other than the four active UST's already known to exist on the site. The four active UST's were clearly delineated.

The only large EM anomalies observed on the site that were not obviously related to observable site features such as vehicles, manholes, culverts, etc. were either associated with the known UST's on the site or with areas of apparently steel-reinforced concrete. Anomaly "A" (**Figure 2**) is the associated with the three gasoline UST's and one diesel UST already known to be located on the site. Except for small peaks clearly associated with the visible manholes and fill ports, the amplitude of this large anomaly was rather

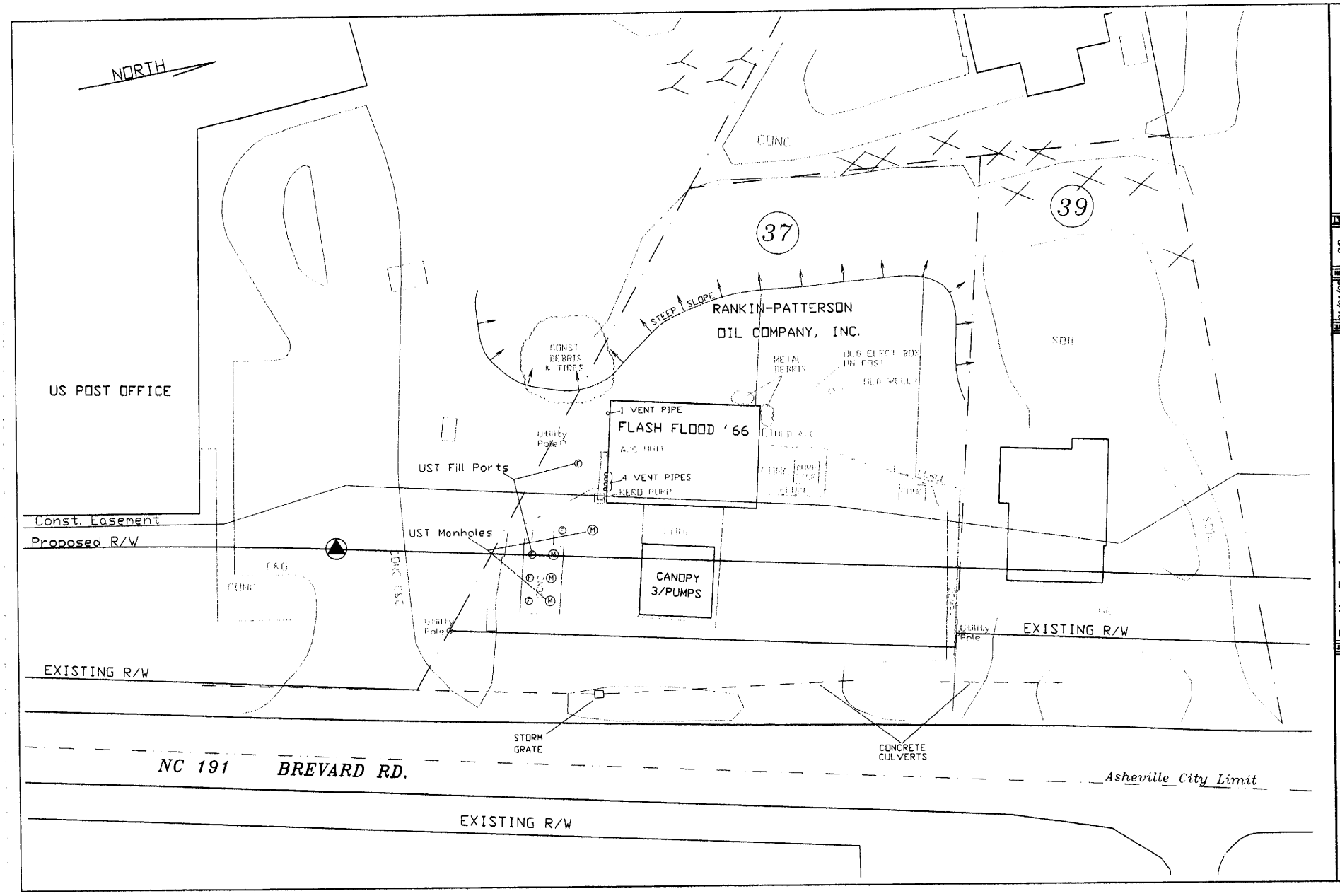
low, indicating that these four UST's are probably fiberglass. In spite of the low amplitude, the EM response seemed to extend well beyond the concrete slab surrounding the gasoline manholes and fill ports. Anomaly "B" (**Figure 2**) was associated with the known kerosene UST located on the south side of the store building. The reconnaissance EM-61 survey delineated the size and location of this UST. Anomaly "C" was associated with the concrete area around the pump islands and indicated the concrete was steel-reinforced. Anomaly "D" was associated with a small concrete slab that also appeared to be steel-reinforced.

Ground-penetrating radar (GPR) data was used to help evaluate the EM Anomalies (**Figure 3**). The GPR data over the concrete area in front of the store and around the pump island (Anomaly C) showed no sign of any UST's. The GPR data over Anomaly "D" showed nothing significant under the slab. The GPR data helped more accurately delineate the apparently fiberglass UST's.

5.0 CLOSURE

This report is prepared for and made available solely for the use of EarthTech, Inc. and the contents thereof may not be used or relied upon by any other person without the express written consent and authorization of Pyramid Environmental & Engineering, P.C.. The observations, conclusions, and recommendations documented in this report are based on site conditions and information known and/or reviewed at the time of Pyramid's investigation. Pyramid appreciates the opportunity to provide this geophysical service.

FIGURES


NORTH
CONC.
37
39
STEEP SLOPE
RANKIN-PATTERSON
OIL COMPANY, INC.
CONST. DEBRIS & TIRES
METAL DEBRIS
OLD CLEET BOX ON POST
OLD WELL
SEPTIC
US POST OFFICE
1 VENT PIPE
FLASH FLOOD '66
A/C UNIT
4 VENT PIPES
KERO PUMP
Utility Pole
UST Fill Ports
UST Manholes
Const. Easement
Proposed R/W
CANOPY
3/PUMPS
EXISTING R/W
STORM GRATE
CONCRETE CULVERTS
NC 191 BREVARD RD.
Asheville City Limit
EXISTING R/W
SCALE: 1 in = 30 ft
30 15 0 15 30
GRAPHIC SCALE IN FEET
GWB
01/04/05
KEY
Parcel 37 site map.dwg
2004294
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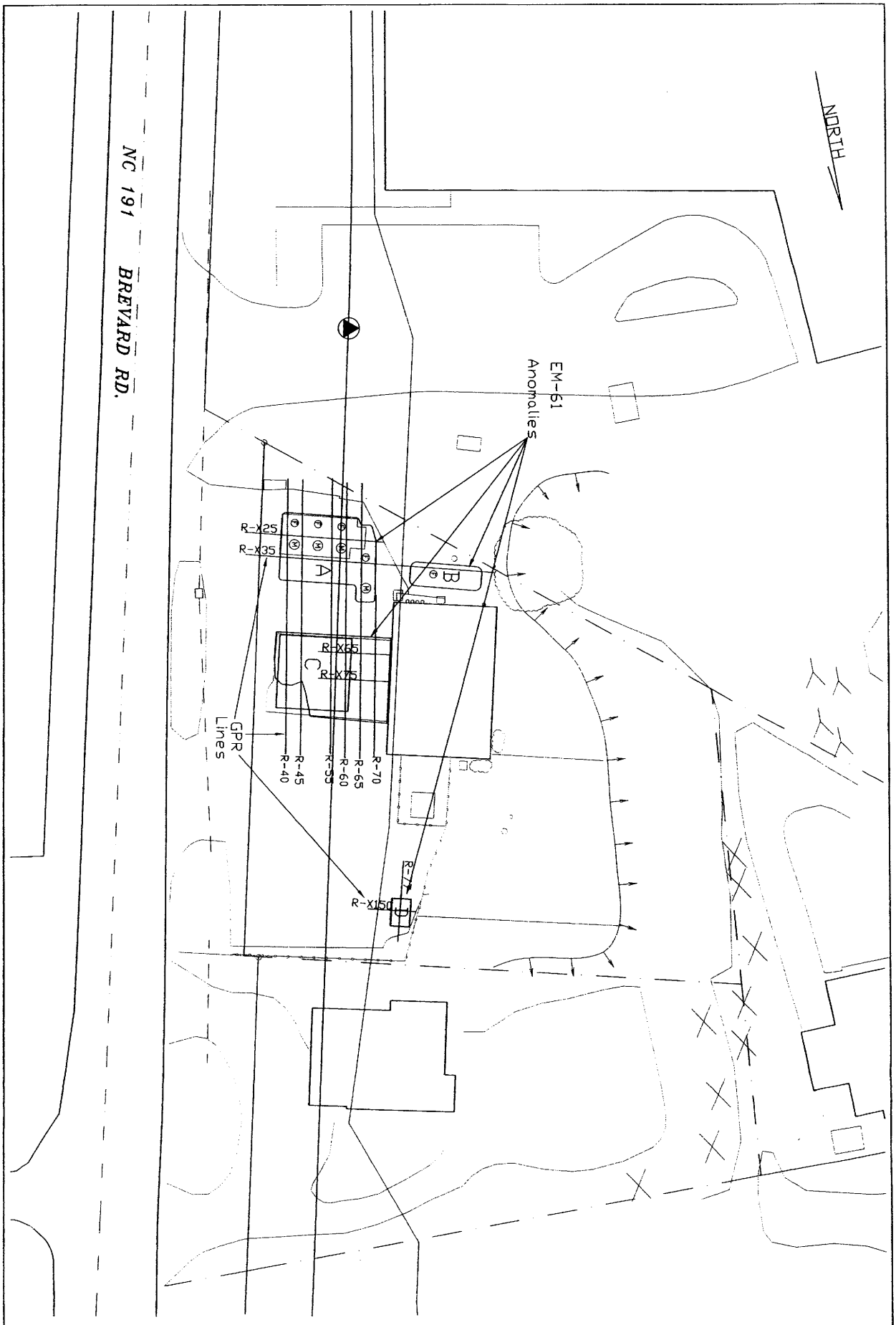
Earth Tech
Parcel 37 - 589 Brevard Rd.
Asheville
North Carolina
Site Detail Map
PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.



PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

CLIENT	Earth Tech	DATE	01/04/05	DRWN	GVB
SITE	Parcel 37 - 589 Brevard Rd.	LAT		CHKD	
CITY	Asheville	STATE	North Carolina	DWG	Parcel 37 site map.dwg
TITLE	Ground-Penetrating Radar Survey	JOB	2004294	FIGURE	3

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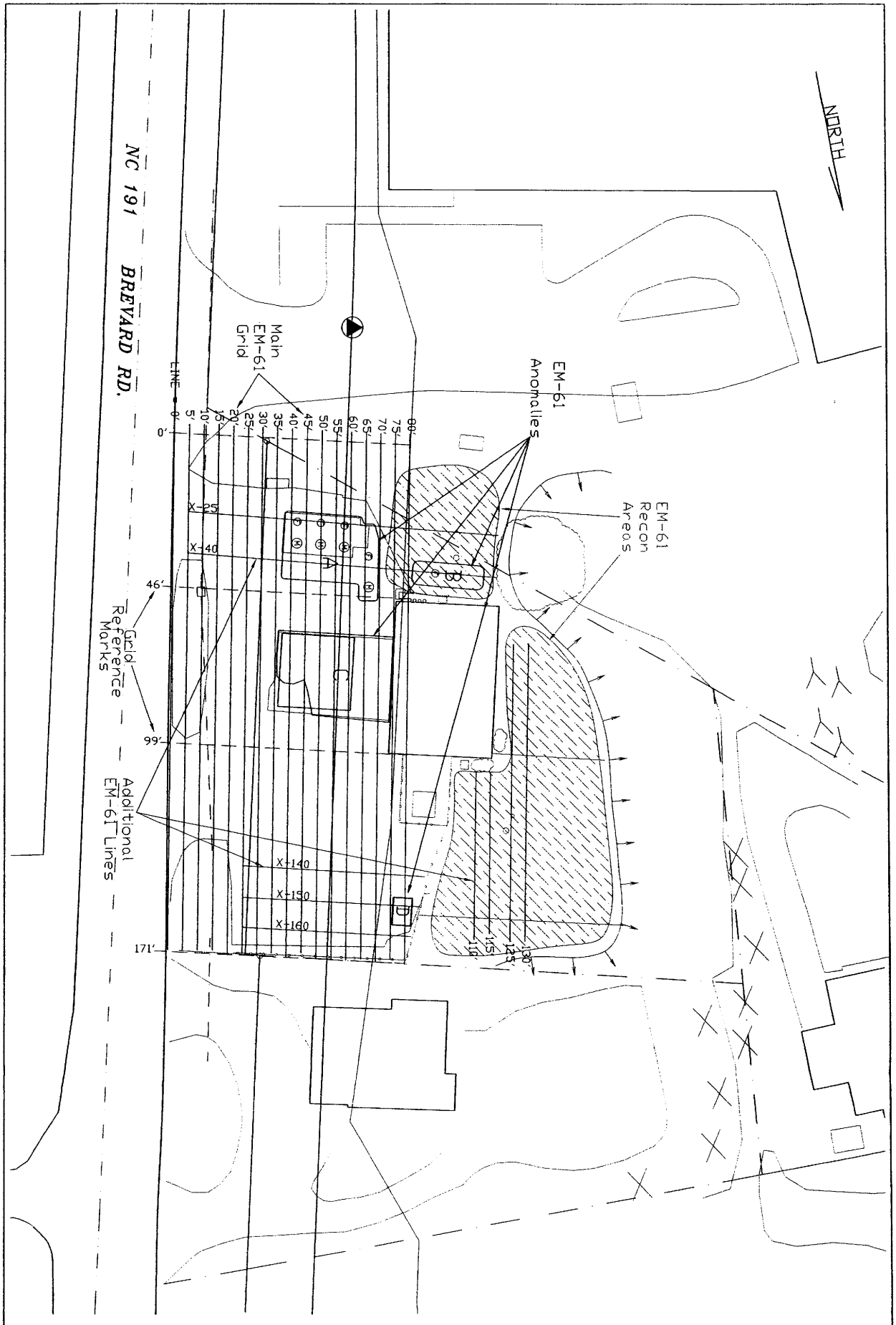
SCALE: 1 in = 30 ft



PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

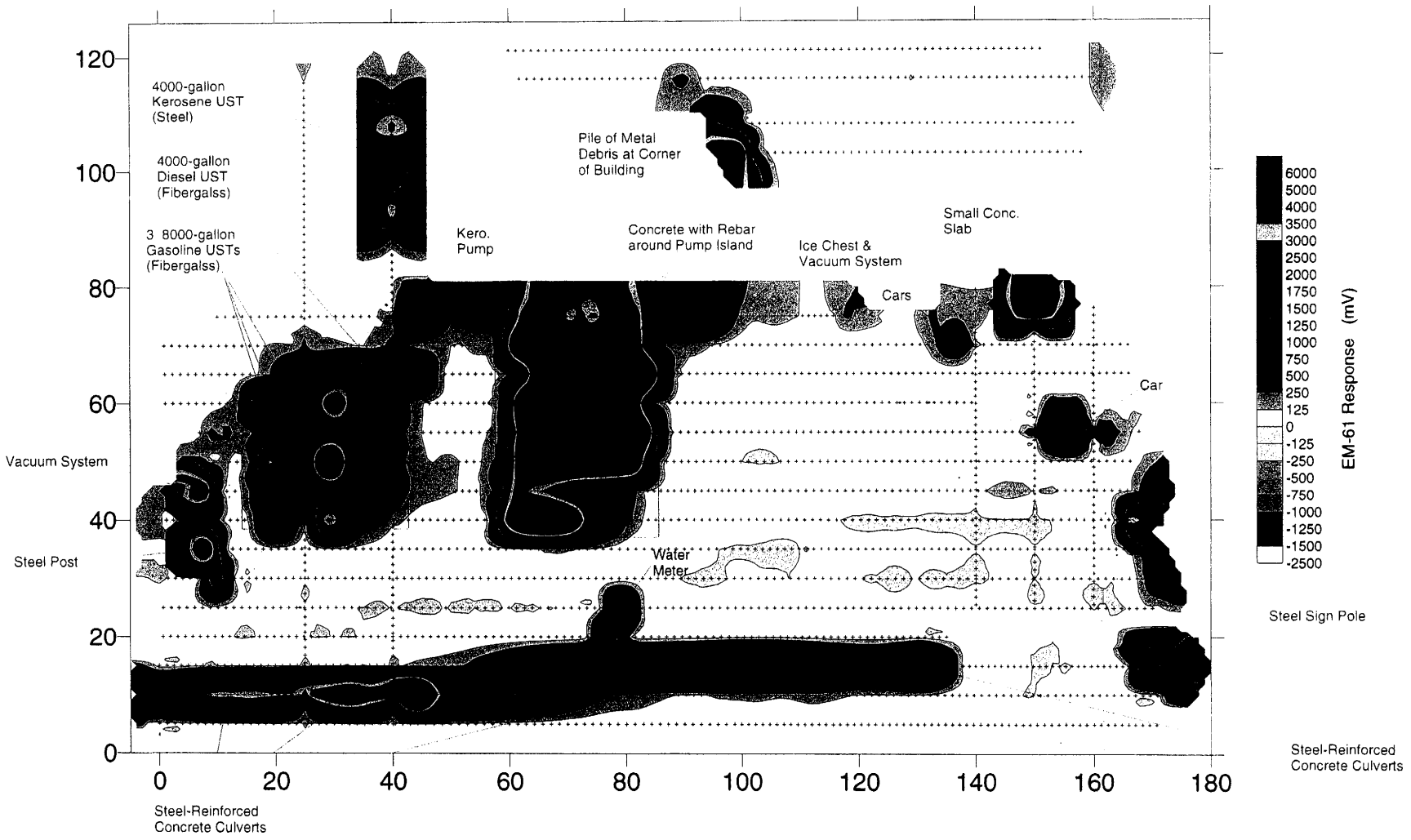
CLIENT	Earth Tech	DATE	01/04/05
SITE	Parcel 37 - 589 Brevard Rd.	LAYOUT	
CITY	Asheville	STATE	North Carolina
TITLE	Site Detail & EM-61 Survey Map		

DRWN	GVB	CHKD	
DWG	Parcel 37 site map.dwg		
JOB #	2004294	PAGE	2

GRAPHIC SCALE IN FEET
30 15 0 15 30
SCALE: 1 in = 30 ft

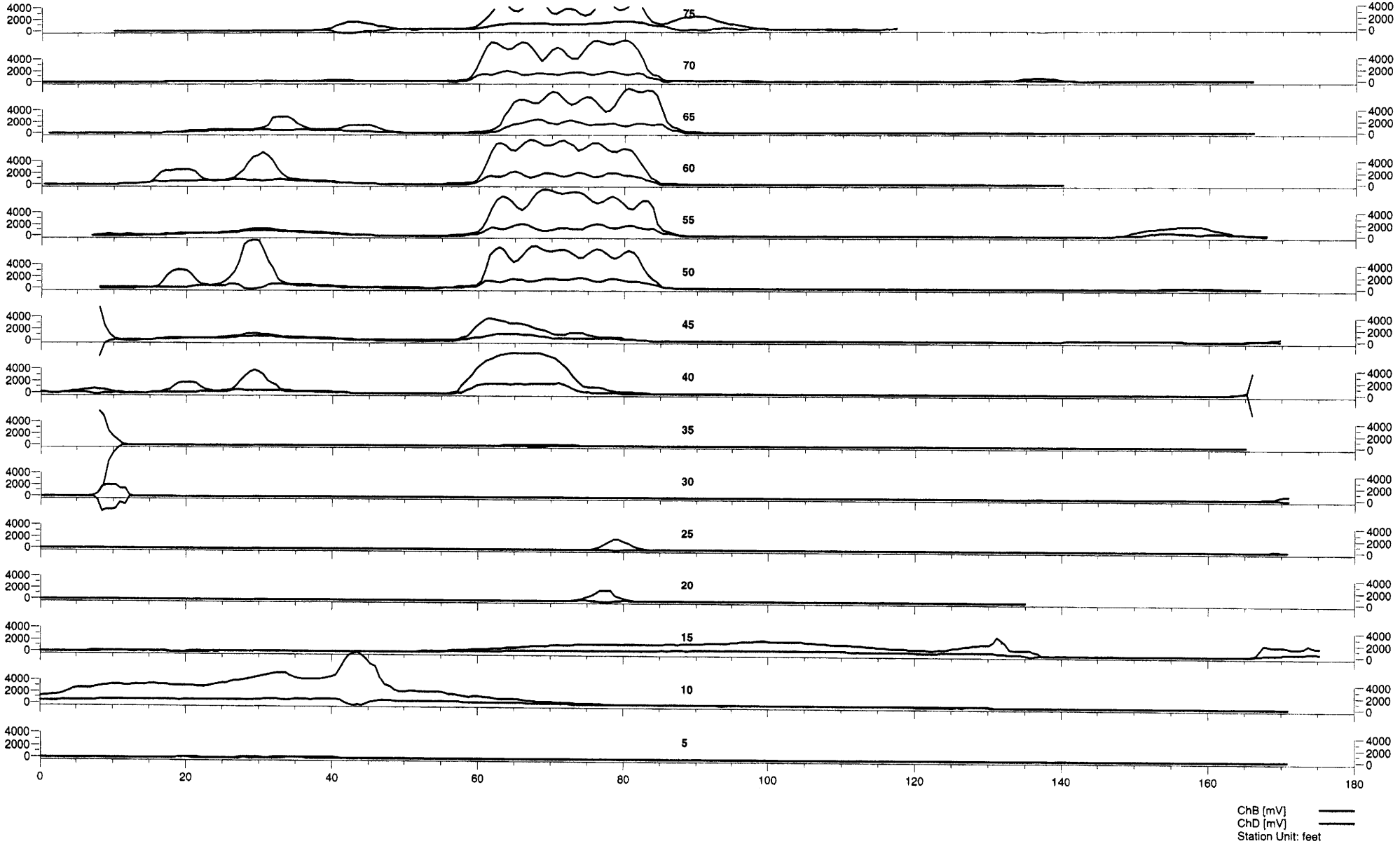
APPENDIX A

Surfer Plot & Printouts
of EM-61 Data



Parcel 37 - 589 Brevard Rd., Asheville, NC
EM-61 Survey - Response of Bottom Antenna

Parcel 37 - 589 Brevard Rd., Asheville, NC



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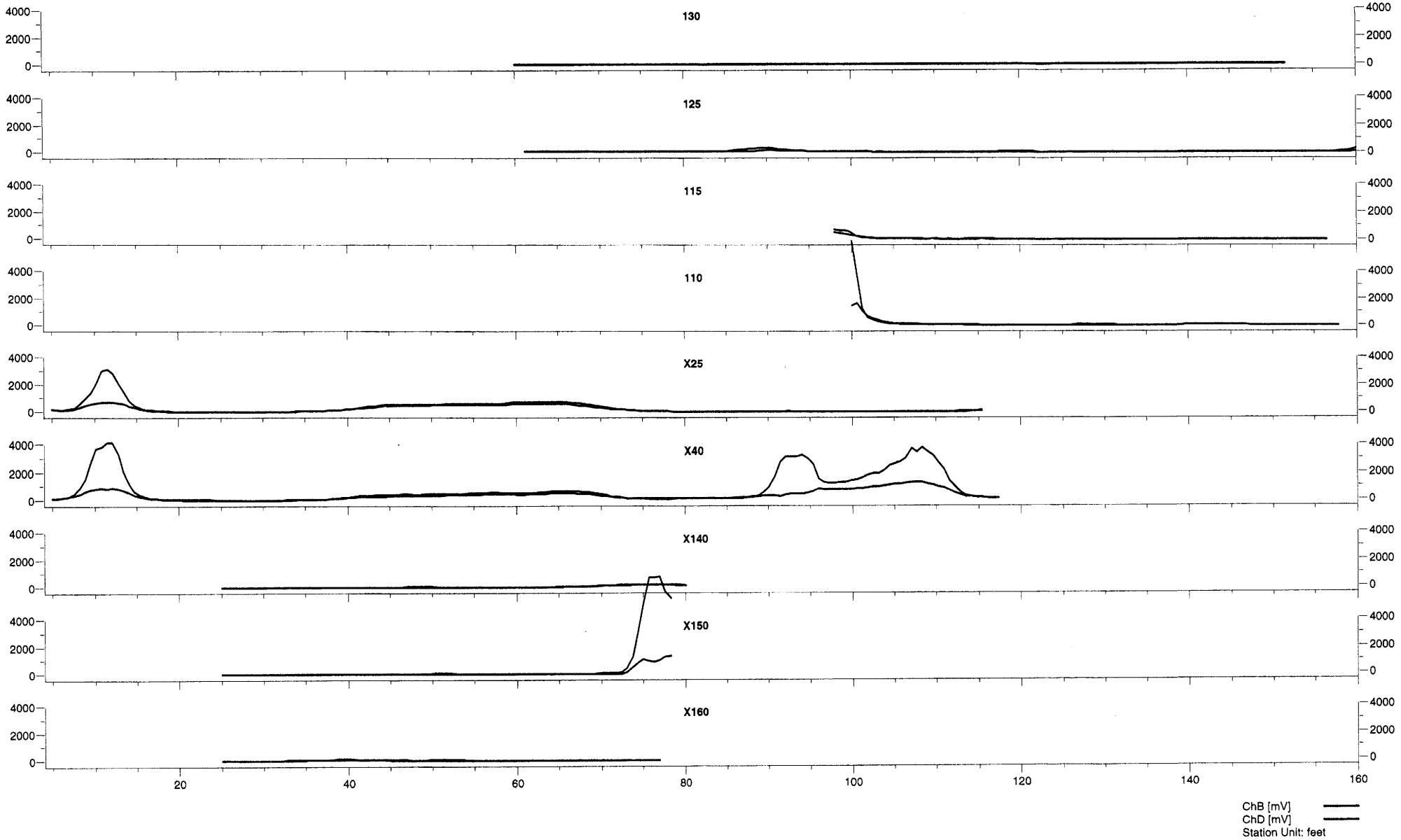
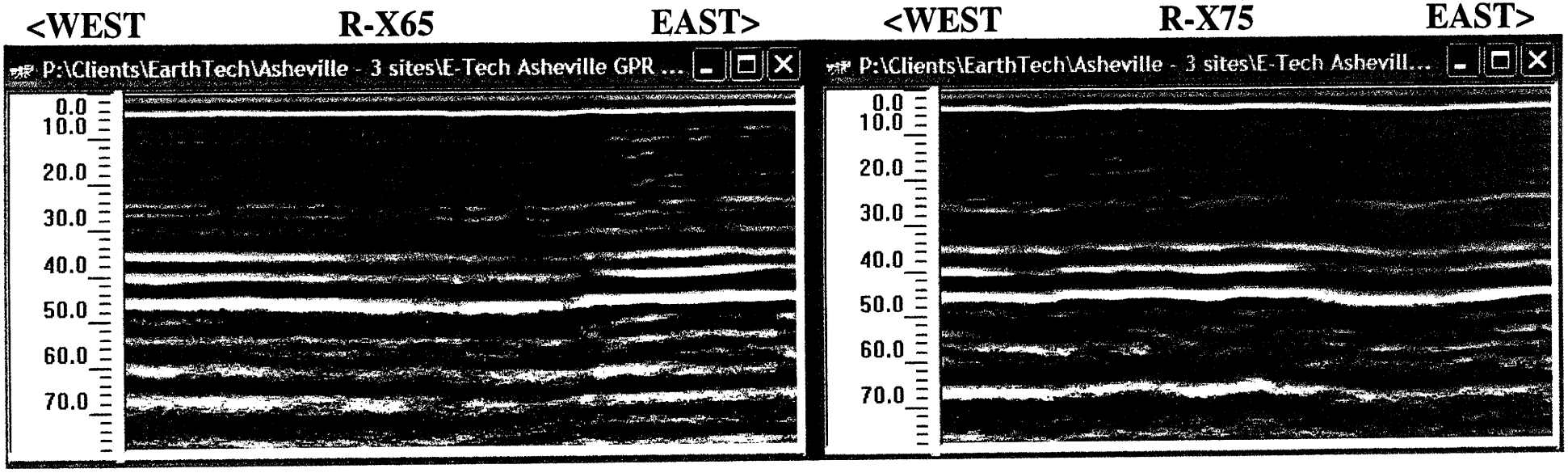


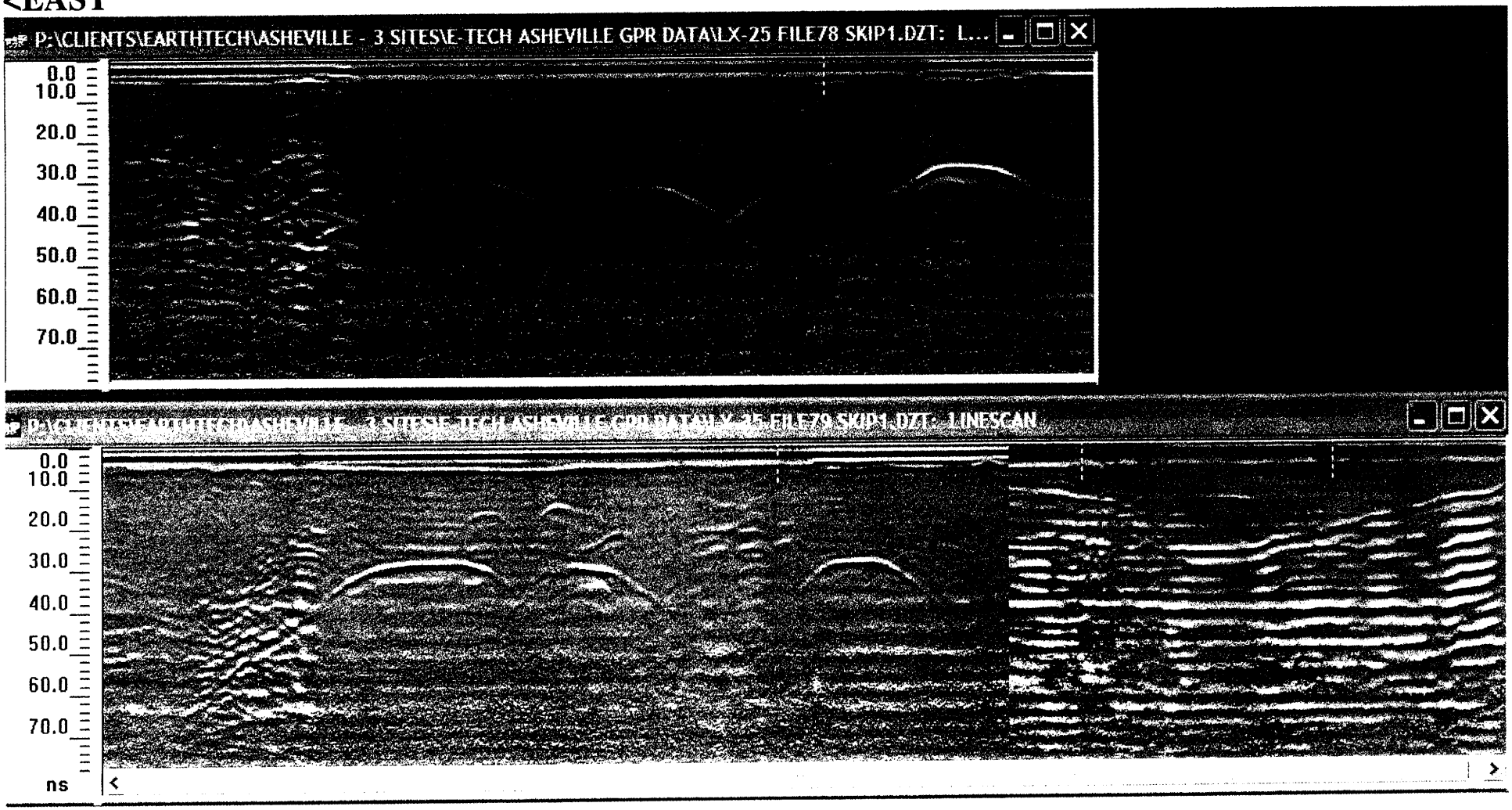
APPENDIX B

Printouts of GPR Data



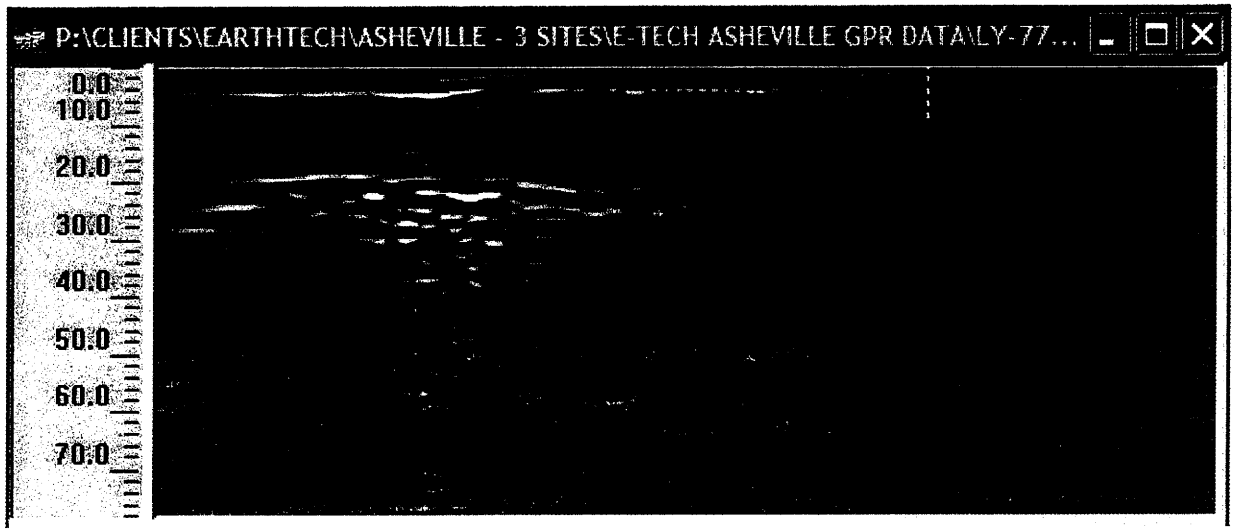
Parcel 37 - 589 Brevard Rd., Asheville, NC
GPR Lines R-X65, & R-X75
W-E Lines over Pump Island Area

<EAST WEST>

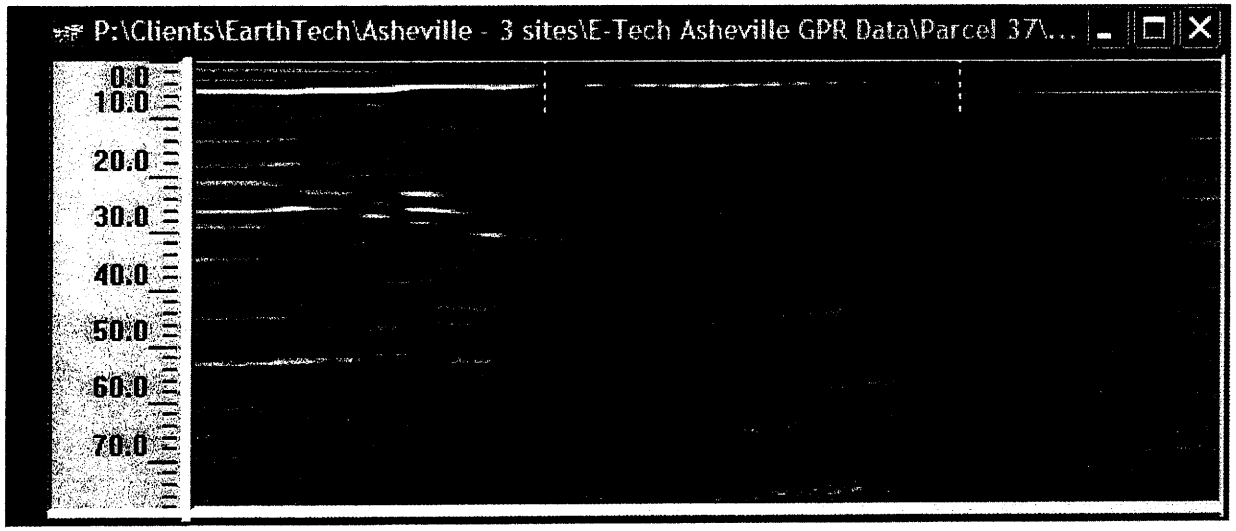


Parcel 37 - 589 Brevard Rd., Asheville, NC
GPR Lines R-X25, & R-X35
E-W Lines over UST Area

<NORTH R-77 SOUTH>

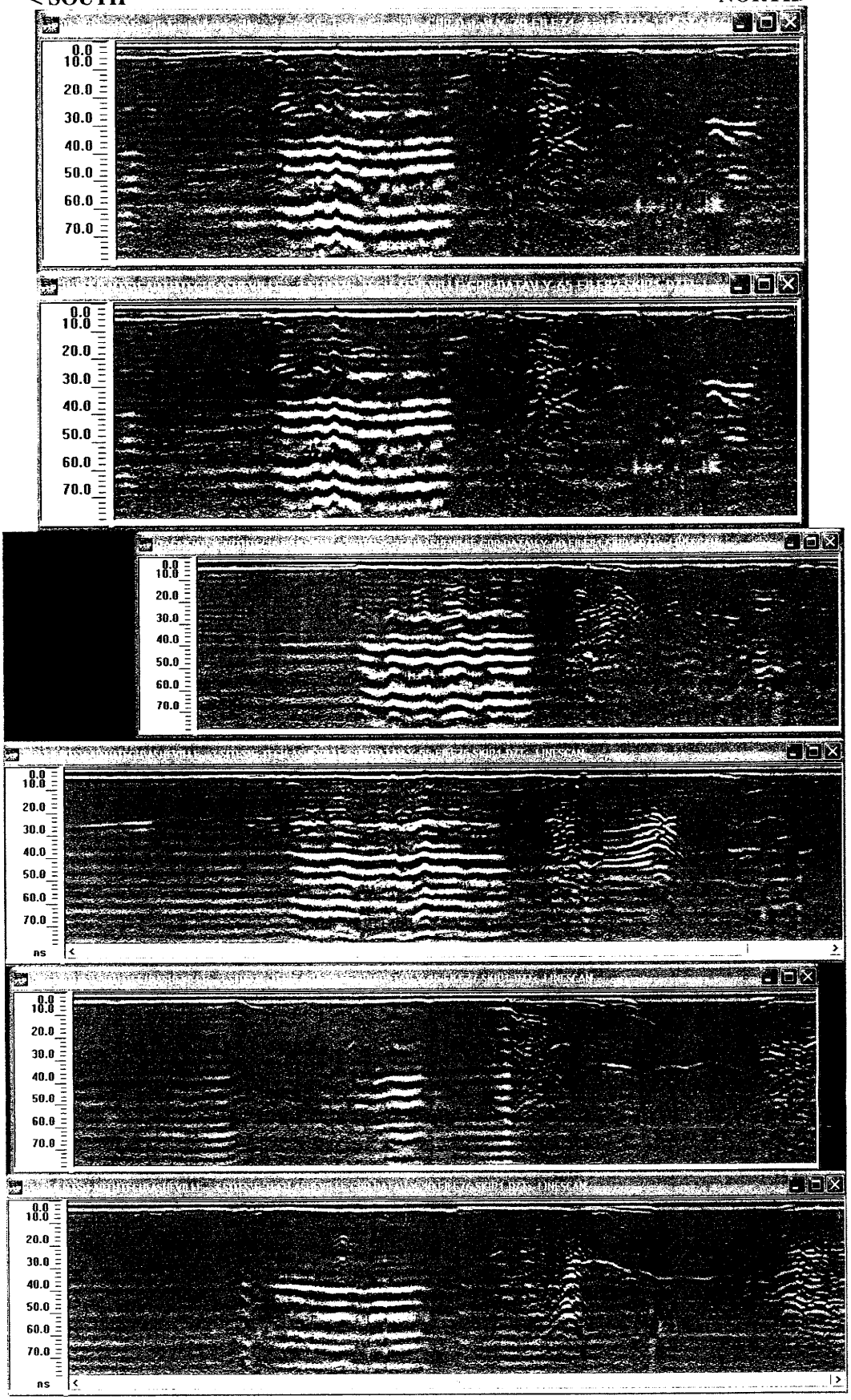


<WEST R-X150 EAST>



Parcel 37 - 589 Brevard Rd., Asheville, NC
GPR Lines R-77, & R-X150
Lines over Small Conc. Slab

< SOUTH NORTH>



Parcel 37 - 589 Brevard Rd., Asheville, NC
GPR Lines R-70, R-65, R-60, R-55, R-45, & R-40
N-S Lines over Pump Island & UST Areas

ATTACHMENT B

TEST BORING REPORT

PROJECT ISI ENTERPRISES (PARCEL #37) PSA
CLIENT NCDOT (U-3601)
PROJECT NUMBER 81930
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FF-1
PAGE 1
ELEVATION
DATE 12/15/04
DRILLER PROBE TECHNOLOGY
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			2.16		MEDIUM BROWN SILTY CLAY, DRY, NO ODOR.
			2.17		MEDIUM TO LIGHT BROWN SILTY CLAY TO CLAYEY SILT, DRY, NO ODOR.
			2.37		AS ABOVE, DRY, NO ODOR.
5.0					
			2.34		MEDIUM TO LIGHT BROWN SILT/SAND SAPROLITE, SOME PARENT FABRIC, HARD, DRY, NO ODOR.
			2.82		AS ABOVE, DRY, NO ODOR.
10.0					
			17.6		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
					REFUSAL AT 12 FEET. NO GROUNDWATER ENCOUNTERED.
15.0					
20.0					

TEST BORING REPORT

PROJECT ISI ENTERPRISES (PARCEL #37) PSA
CLIENT NCDOT (U-3601)
PROJECT NUMBER 81930
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FF-2
PAGE 1
ELEVATION
DATE 12/15/04
DRILLER PROBE TECHNOLOGY
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			15.2		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, STIFF, DRY, NO ODOR.
			76		AS ABOVE, DRY, NO ODOR.
			112		AS ABOVE, DRY, NO ODOR.
5.0					
			172		MOTTLED REDDISH BROWN, TAN, AND BLACK SILT/CLAY SAPROLITE, DRY, NO ODOR.
			191		MEDIUM BROWN SILT/SAND SAPROLITE, SOME PARENT FABRIC, DRY, MODERATE ODOR.
10.0			5943		AS ABOVE, DRY, STRONG ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
					REFUSAL AT 12 FEET. NO GROUNDWATER ENCOUNTERED.
15.0					
20.0					

TEST BORING REPORT

PROJECT ISI ENTERPRISES (PARCEL #37) PSA
CLIENT NCDOT (U-3601)
PROJECT NUMBER 81930
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FF-3
PAGE 1
ELEVATION
DATE 12/15/04
DRILLER PROBE TECHNOLOGY
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			3.1		4" ASPHALT/GRAVEL, MEDIUM TO LIGHT BROWN SILT/SAND SAPROLITE, DRY, NO ODOR.
			13.6		AS ABOVE, DRY, NO ODOR.
			53		AS ABOVE, INCREASED SAND, DRY, MODERATE ODOR.
5.0			2545		AS ABOVE, DRY, STRONG ODOR.
			6019		AS ABOVE, DRY, STRONG ODOR.
10.0			13,800		AS ABOVE, DRY, STRONG ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
					REFUSAL AT 12 FEET. NO GROUNDWATER ENCOUNTERED.
15.0					
20.0					

TEST BORING REPORT

PROJECT ISI ENTERPRISES (PARCEL #37) PSA
CLIENT NCDOT (U-3601)
PROJECT NUMBER 81930
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FF-4
PAGE 1
ELEVATION
DATE 12/15/04
DRILLER PROBE TECHNOLOGY
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			7.45		4" ASPHALT/GRAVEL, MEDIUM TO LIGHT BROWN SILT/SAND SAPROLITE, HARD, DRY, NO ODOR.
			14.6		AS ABOVE, DRY, NO ODOR.
			64		AS ABOVE, DRY, NO ODOR.
5.0					
			59		AS ABOVE, DRY, SLIGHT ODOR.
			29		AS ABOVE, DRY, NO ODOR.
10.0			106		AS ABOVE, DRY, SLIGHT ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
					REFUSAL AT 12 FEET. NO GROUNDWATER ENCOUNTERED.
15.0					
20.0					

TEST BORING REPORT

PROJECT ISI ENTERPRISES (PARCEL #37) PSA
CLIENT NCDOT (U-3601)
PROJECT NUMBER 81930
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FF-5
PAGE 1
ELEVATION
DATE 12/15/04
DRILLER PROBE TECHNOLOGY
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			14.3		4" ASPHALT/GRAVEL, MEDIUM TO LIGHT BROWN SILT/SAND SAPROLITE, HARD, DRY, NO ODOR.
			18.2		AS ABOVE, DRY, NO ODOR.
5.0			36		AS ABOVE, DRY, SLIGHT OLD GAS ODOR.
			27		AS ABOVE, DRY, SLIGHT ODOR.
			55		AS ABOVE, DRY, SLIGHT ODOR.
10.0			66		AS ABOVE, DRY, SLIGHT ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
					REFUSAL AT 12 FEET. NO GROUNDWATER ENCOUNTERED.
15.0					
20.0					

TEST BORING REPORT

PROJECT ISI ENTERPRISES (PARCEL #37) PSA
CLIENT NCDOT (U-3601)
PROJECT NUMBER 81930
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FF-6
PAGE 1
ELEVATION
DATE 12/15/04
DRILLER PROBE TECHNOLOGY
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			0.25		4" ASPHALT/GRAVEL, MEDIUM BROWN SILTY CLAY, DRY, NO ODOR.
			0.75		AS ABOVE, DRY, NO ODOR.
			1.41		AS ABOVE, DRY, NO ODOR.
5.0					
			2.01		MOTTLED MEDIUM BROWN, TAN, AND BLACK SILT/SAND SAPROLITE, HARD, DRY, NO ODOR.
			4.1		AS ABOVE, DRY, NO ODOR.
10.0			25		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
					REFUSAL AT 12 FEET. NO GROUNDWATER ENCOUNTERED.
15.0					
20.0					

TEST BORING REPORT

PROJECT ISI ENTERPRISES (PARCEL #37) PSA
CLIENT NCDOT (U-3601)
PROJECT NUMBER 81930
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FF-7
PAGE 1
ELEVATION
DATE 12/15/04
DRILLER PROBE TECHNOLOGY
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			41		4" ASPHALT/GRAVEL, MEDIUM BROWN SILTY CLAY, DRY, NO ODOR.
			65		AS ABOVE, DRY, NO ODOR.
			70		MEDIUM BROWN SILT/SAND SAPROLITE, DRY, NO ODOR.
5.0					
			87		AS ABOVE, DRY, NO ODOR.
			462		AS ABOVE, DRY, SLIGHT ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
10.0			98		AS ABOVE, DRY, SLIGHT ODOR.
					REFUSAL AT 12 FEET. NO GROUNDWATER ENCOUNTERED.
15.0					
20.0					

TEST BORING REPORT

PROJECT ISI ENTERPRISES (PARCEL #37) PSA
CLIENT NCDOT (U-3601)
PROJECT NUMBER 81930
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FF-8
PAGE 1
ELEVATION
DATE 12/15/04
DRILLER PROBE TECHNOLOGY
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			1.15		4" ASPHALT/GRAVEL, MEDIUM TO LIGHT BROWN SILT/SAND SAPROLITE, DRY, NO ODOR.
			1.33		AS ABOVE, DRY, NO ODOR.
			3.22		AS ABOVE, DRY, NO ODOR.
5.0					
			3.12		AS ABOVE, DRY, NO ODOR.
			3.84		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
10.0					REFUSAL AT 10 FEET. NO GROUNDWATER ENCOUNTERED.
15.0					
20.0					

TEST BORING REPORT

PROJECT ISI ENTERPRISES (PARCEL #37) PSA
CLIENT NCDOT (U-3601)
PROJECT NUMBER 81930
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

BORING NUMBER FF-9
PAGE 1
ELEVATION
DATE 12/15/04
DRILLER PROBE TECHNOLOGY
PREPARED BY BRANSON

DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			0.16		4" ASPHALT/GRAVEL, MEDIUM BROWN SILTY CLAY, DRY, NO ODOR.
			1.57		AS ABOVE, DRY, NO ODOR.
5.0			4.19		MEDIUM TO LIGHT BROWN SILT/SAND SAPROLITE, HARD, DRY, NO ODOR.
			5.30		AS ABOVE, DRY, SLIGHT ODOR.
			9.64		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
10.0			8.23		AS ABOVE, DRY, NO ODOR.
					REFUSAL AT 12 FEET. NO GROUNDWATER ENCOUNTERED.
15.0					
20.0					

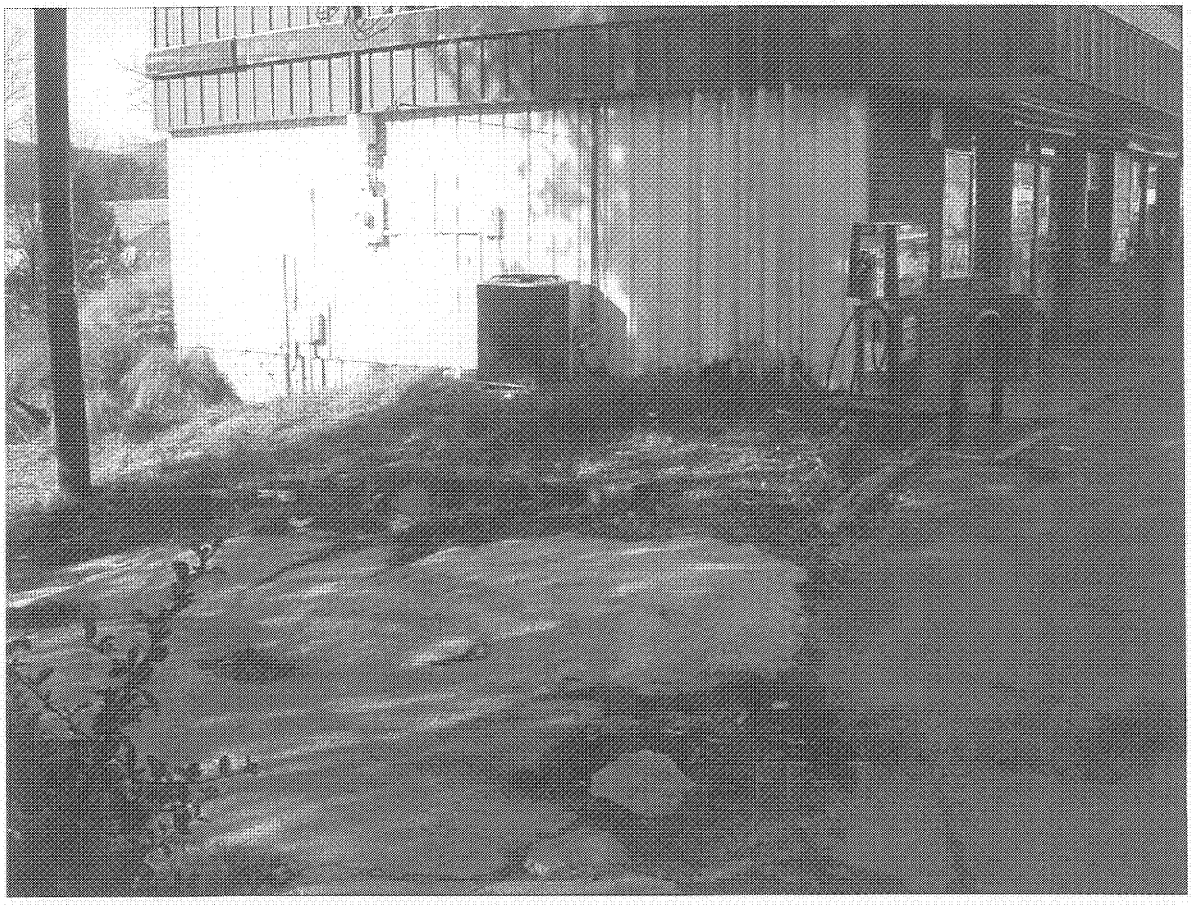
TEST BORING REPORT

PROJECT ISI ENTERPRISES (PARCEL #37) PSA
CLIENT NCDOT (U-3601)
PROJECT NUMBER 81930
CONTRACTOR PROBE TECHNOLOGY
EQUIPMENT GEOPROBE

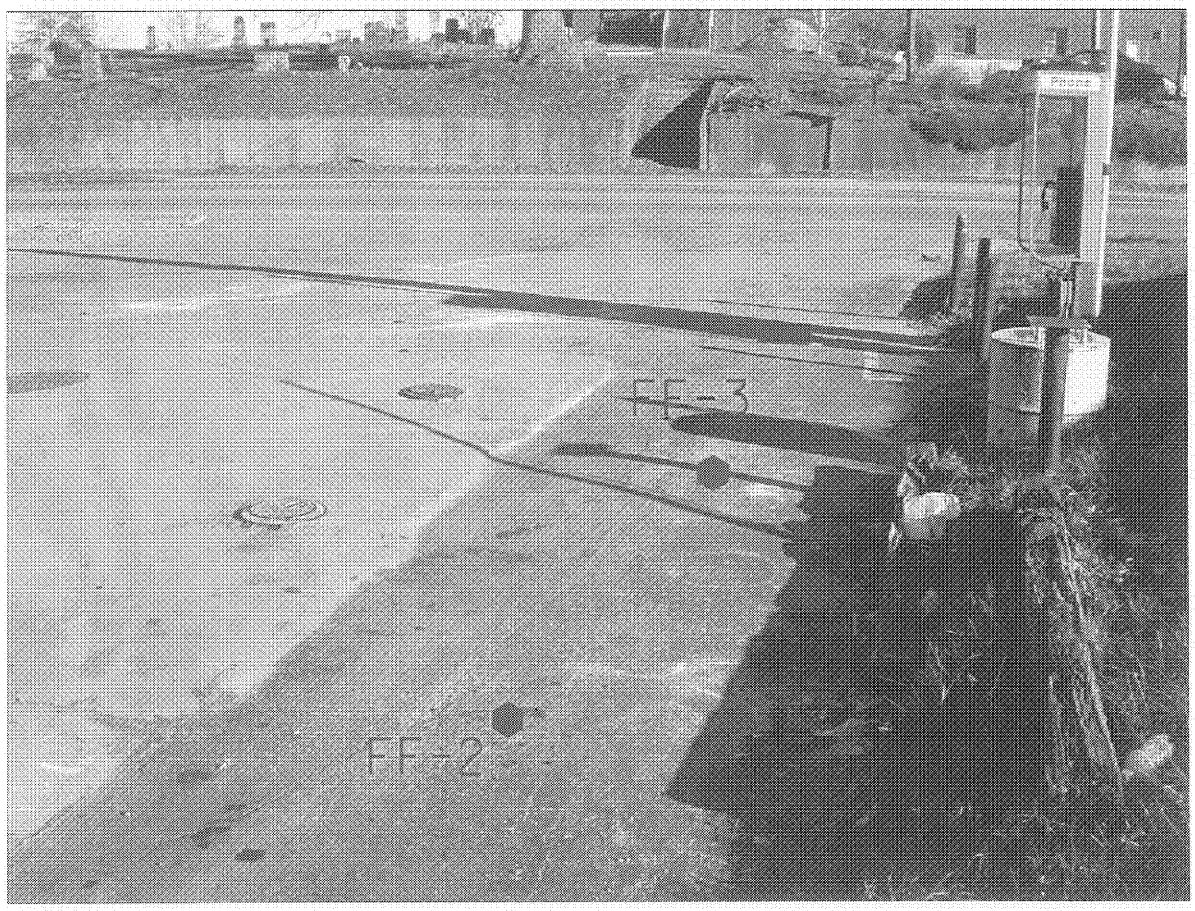
BORING NUMBER FF-10
PAGE 1
ELEVATION
DATE 12/15/04
DRILLER PROBE TECHNOLOGY
PREPARED BY BRANSON

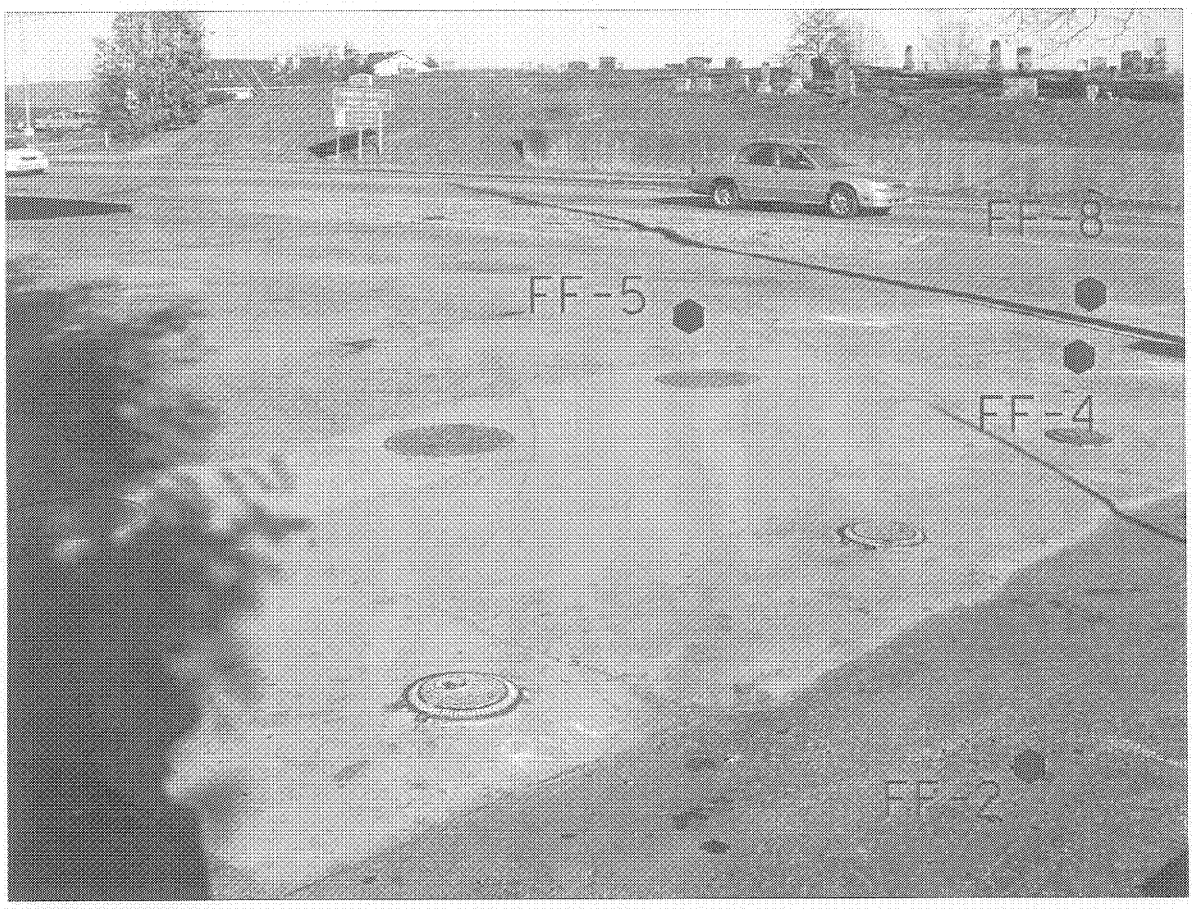
DEPTH IN FEET	CASING BLOWS FOOT	BLOWS PER 6 INCHES	OVA (ppm)	SAMPLE DEPTH RANGE	FIELD CLASSIFICATION AND REMARKS
			2.3		4" ASPHALT/GRAVEL, MEDIUM TO REDDISH BROWN SILTY CLAY, STIFF, DRY, NO ODOR.
			2.55		AS ABOVE, DRY, NO ODOR.
5.0			3.2		AS ABOVE, DRY, NO ODOR.
			3.55		AS ABOVE TO 7 FEET. BECOMES MEDIUM TO LIGHT BROWN SILT/SAND SAPROLITE, DRY, NO ODOR.
			3.39		AS ABOVE, DRY, NO ODOR.
10.0			4.10		AS ABOVE, DRY, NO ODOR. SUBMIT TO LABORATORY FOR ANALYSIS.
					REFUSAL AT 12 FEET. NO GROUNDWATER ENCOUNTERED.
15.0					
20.0					

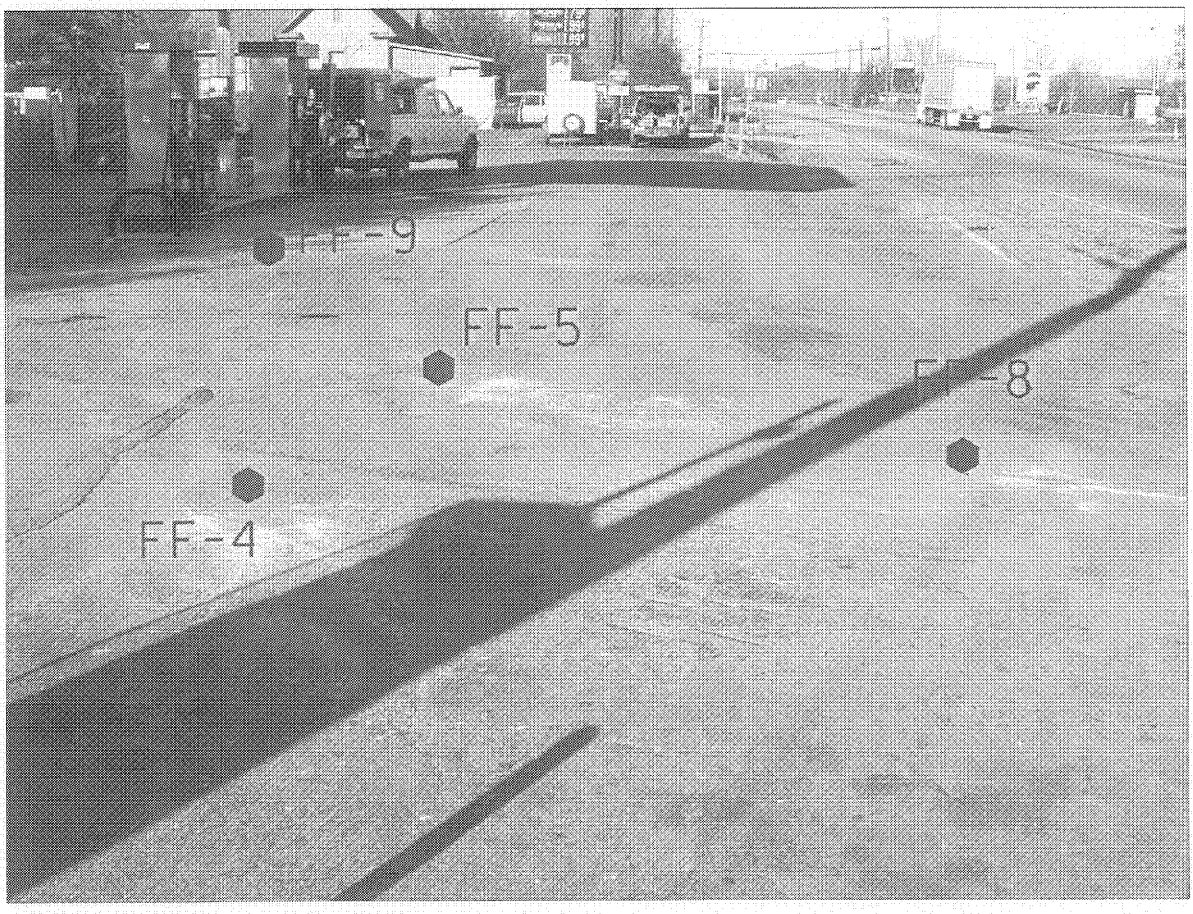
ATTACHMENT C




FF-9


FF-3
FF-2


FF-8
FF-5
FF-4
FF-2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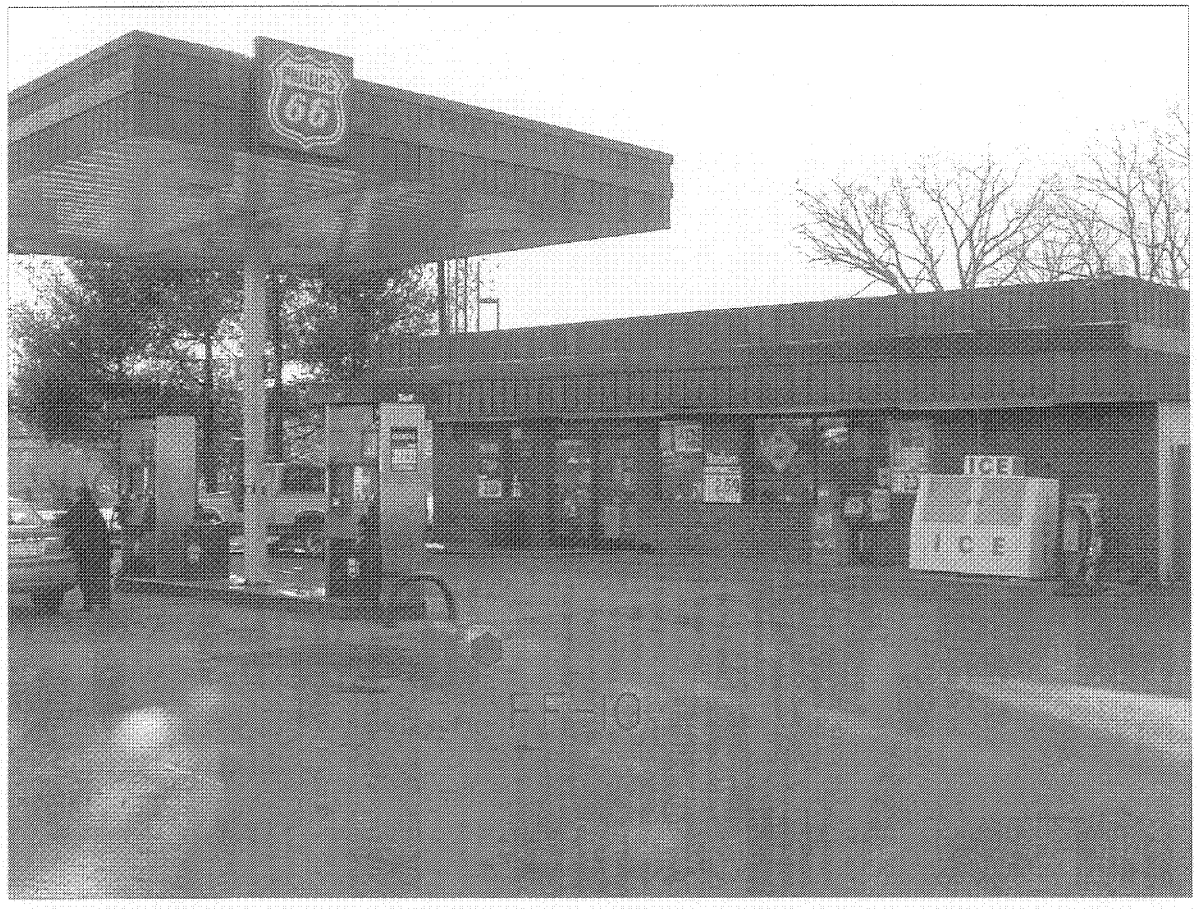
FF-5
FF-8
FF-4


FF-2
FF-3


PHILLIPS
66
ICE
FF-1

ATTACHMENT D

Case Narrative

PRISM LABORATORIES, INC.

Date: 12/31/04

Company: N. C. Department of Transportation
c/o: Earth Tech / Mike Branson
Address: 701 Corporate Ct. Dr. Ste. 475
Raleigh, NC 27607

Client Project ID: NCDOT-Asheville WBS# 34958.1.1
Prism Log-In Group No: G1204519

The attached Laboratory Report contains the analytical results for the project identified above and includes Quality Control Data and a Chain-of-Custody copy.

Data qualifiers are flagged individually on each sample. A Key Reference for the data qualifiers appears at the bottom of this page. Quality control statements and/or sample specific remarks are included in the sample comments section of the laboratory report for each sample affected.

Please call if you have any questions relating to this analytical report.

Data Reviewed by: Robbi A. Jones
Signature: Robbi A. Jones
Review Date: 12/31/04

Project Manager: Angela D. Overcash
Signature:
Approval Date: 12/31/04

Data Qualifier Key Reference:

- #: Result outside of QC Limits
- B: Compound also detected in the method blank
- DO: Compound diluted out.
- E: Estimated concentration, calibration range exceeded
- J: The analyte was positively identified but the value is estimated below the reporting limit
- JH: Estimated concentration with a high bias
- JL: Estimated concentration with a low bias
- M: A matrix effect is present
- T: Tentatively identified compound. The concentration is estimated.

Full Service Analytical & Environmental Solutions

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

Laboratory Report

12/31/04

C. Department of Transportation
Attn: Mike Branson
c/o Earth Tech Remediation
701 Corporate Center Dr. Ste 475
Raleigh, NC 27607

Project ID: NCDOT - Asheville
Project No.: WBS# 34958.1.1
Sample Matrix: Soil

Client Sample ID: FF-1
Prism Sample ID: 106731
COC Group: G1204519
Time Collected: 12/15/04 10:30
Time Submitted: 12/16/04 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Percent Solids Determination									
Percent Solids	**91.9**	%			1	SM2540 G	12/20/04 9:30	cnguyen	
Diesel Range Organics (DRO) by GC-FID									
Diesel Range Organics (DRO)	**BRL**	mg/kg	7.6	2.2	1	8015B	12/22/04 22:47	jvogel	Q01956
Sample Preparation:			25 g / 1 mL			3545	12/21/04 14:30	wconder	P11462

Surrogate	% Recovery	Control Limits
o-Terphenyl	86	49 - 124

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
soline Range Organics (GRO) by GC-FID									
asoline Range Organics (GRO)	**BRL**	mg/kg	1.1	0.13	1	8015B	12/17/04 16:21	awheeler	Q01783

Surrogate	% Recovery	Control Limits
aaa-TFT	83	55 - 129

Sample Comment(s):

All results are reported on a dry-weight basis
BRL = Below Reporting Limit
J = Estimated value between the Reporting Limit and the MDL

Angela D. Overcash, V.P. Laboratory Services

Full Service Analytical & Environmental Solutions

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

Laboratory Report

12/31/04

C. Department of Transportation
Attn: Mike Branson
c/o Earth Tech Remediation
701 Corporate Center Dr. Ste 475
Raleigh, NC 27607

Project ID: NCDOT - Asheville
Project No.: WBS# 34958.1.1
Sample Matrix: Soil

Client Sample ID: FF-2
Prism Sample ID: 106732
COC Group: G1204519
Time Collected: 12/15/04 10:50
Time Submitted: 12/16/04 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Percent Solids Determination									
Percent Solids	**79.5**	%			1	SM2540 G	12/20/04 9:30	cnguyen	
Diesel Range Organics (DRO) by GC-FID									
Diesel Range Organics (DRO)	**94**	mg/kg	8.8	2.6	1	8015B	12/22/04 23:29	jvogel	Q01956
Sample Preparation:			25.04	g /	1 mL	3545	12/21/04 14:30	wconder	P11462

Surrogate	% Recovery	Control Limits
o-Terphenyl	94	49 - 124

soline Range Organics (GRO) by GC-FID									
asoline Range Organics (GRO)	**120**	mg/kg	63	7.5	50	8015B	12/18/04 2:41	awheeler	Q01783

Surrogate	% Recovery	Control Limits
aaa-TFT	87	55 - 129

Sample Comment(s):

All results are reported on a dry-weight basis
BRL = Below Reporting Limit
J = Estimated value between the Reporting Limit and the MDL

Angela D. Overcash, V.P. Laboratory Services

Full Service Analytical & Environmental Solutions

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

Laboratory Report

12/31/04

C. Department of Transportation
Attn: Mike Branson
c/o Earth Tech Remediation
701 Corporate Center Dr. Ste 475
Raleigh, NC 27607

Project ID: NCDOT - Asheville
Project No.: WBS# 34958.1.1
Sample Matrix: Soil

Client Sample ID: FF-3
Prism Sample ID: 106733
COC Group: G1204519
Time Collected: 12/15/04 11:15
Time Submitted: 12/16/04 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Percent Solids Determination									
Percent Solids	**89.8**	%			1	SM2540 G	12/20/04 9:30	cnguyen	
Diesel Range Organics (DRO) by GC-FID									
Diesel Range Organics (DRO)	**2000**	mg/kg	78	23	10	8015B	12/23/04 5:05	jvogel	Q01956
DRO Surrogate was diluted out.									
Sample Preparation:			25.06 g	/	1 mL	3545	12/21/04 14:30	wconder	P11462

Surrogate	% Recovery	Control Limits
o-Terphenyl	DO #	49 - 124

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Gasoline Range Organics (GRO) by GC-FID									
Gasoline Range Organics (GRO)	**3100**	mg/kg	560	67	500	8015B	12/20/04 13:08	awheeler	Q01783

Surrogate	% Recovery	Control Limits
aaa-TFT	69	55 - 129

Sample Comment(s):

All results are reported on a dry-weight basis
BRL = Below Reporting Limit
J = Estimated value between the Reporting Limit and the MDL

Angela D. Overcash, V.P. Laboratory Services

Full Service Analytical & Environmental Solutions

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

Laboratory Report

12/31/04

N. C. Department of Transportation
Attn: Mike Branson
c/o Earth Tech Remediation
701 Corporate Center Dr. Ste 475
Raleigh, NC 27607

Project ID: NCDOT - Asheville
Project No.: WBS# 34958.1.1
Sample Matrix: Soil

Client Sample ID: FF-4
Prism Sample ID: 106734
COC Group: G1204519
Time Collected: 12/15/04 11:40
Time Submitted: 12/16/04 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Percent Solids Determination									
Percent Solids	**94.7**	%			1	SM2540 G	12/20/04 9:30	cnguyen	
Diesel Range Organics (DRO) by GC-FID									
Diesel Range Organics (DRO)	**7.5**	mg/kg	7.4	2.1	1	8015B	12/23/04 0:11	jvogel	Q01956
Sample Preparation:			25.07 g	/	1 mL	3545	12/21/04 14:30	wconder	P11462

Surrogate	% Recovery	Control Limits
o-Terphenyl	87	49 - 124

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Gasoline Range Organics (GRO) by GC-FID									
Gasoline Range Organics (GRO)	**BRL**	mg/kg	1.1	0.13	1	8015B	12/20/04 10:32	awheeler	Q01783

Surrogate	% Recovery	Control Limits
aaa-TFT	90	55 - 129

Sample Comment(s):

All results are reported on a dry-weight basis
BRL = Below Reporting Limit
J = Estimated value between the Reporting Limit and the MDL

Angela D. Overcash, V.P. Laboratory Services

Full Service Analytical & Environmental Solutions

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

Laboratory Report

12/31/04

C. Department of Transportation
Attn: Mike Branson
c/o Earth Tech Remediation
701 Corporate Center Dr. Ste 475
Raleigh, NC 27607

Project ID: NCDOT - Asheville
Project No.: WBS# 34958.1.1
Sample Matrix: Soil

Client Sample ID: FF-5
Prism Sample ID: 106735
COC Group: G1204519
Time Collected: 12/15/04 12:00
Time Submitted: 12/16/04 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Percent Solids Determination									
Percent Solids	**94.2**	%			1	SM2540 G	12/20/04 9:30	cnguyen	
Diesel Range Organics (DRO) by GC-FID									
Diesel Range Organics (DRO)	**BRL**	mg/kg	7.4	2.2	1	8015B	12/23/04 0:53	jvogel	Q01956
Sample Preparation:			25.17 g	/	1 mL	3545	12/21/04 14:30	wconder	P11462

Surrogate	% Recovery	Control Limits
o-Terphenyl	96	49 - 124

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
asoline Range Organics (GRO) by GC-FID									
asoline Range Organics (GRO)	**BRL**	mg/kg	1.1	0.13	1	8015B	12/17/04 17:35	awheeler	Q01783

Surrogate	% Recovery	Control Limits
aaa-TFT	82	55 - 129

Sample Comment(s):

All results are reported on a dry-weight basis
BRL = Below Reporting Limit
J = Estimated value between the Reporting Limit and the MDL

Angela D. Overcash, V.P. Laboratory Services

Full Service Analytical & Environmental Solutions

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

Laboratory Report

12/31/04

. C. Department of Transportation
Attn: Mike Branson
c/o Earth Tech Remediation
701 Corporate Center Dr. Ste 475
Raleigh, NC 27607

Project ID: NCDOT - Asheville
Project No.: WBS# 34958.1.1
Sample Matrix: Soil

Client Sample ID: FF-6
Prism Sample ID: 106736
COC Group: G1204519
Time Collected: 12/15/04 13:20
Time Submitted: 12/16/04 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Percent Solids Determination									
Percent Solids	**91.6**	%			1	SM2540 G	12/20/04 9:30	cnguyen	
Diesel Range Organics (DRO) by GC-FID									
Diesel Range Organics (DRO)	**11**	mg/kg	7.6	2.2	1	8015B	12/23/04 1:35	jvogel	Q01956
Sample Preparation:			25.12	g /	1 mL	3545	12/21/04 14:30	wconder	P11462

Surrogate	% Recovery	Control Limits
o-Terphenyl	69	49 - 124

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
soline Range Organics (GRO) by GC-FID									
asoline Range Organics (GRO)	**BRL**	mg/kg	1.1	0.13	1	8015B	12/17/04 18:10	awheeler	Q01783

Surrogate	% Recovery	Control Limits
aaa-TFT	82	55 - 129

Sample Comment(s):

All results are reported on a dry-weight basis
BRL = Below Reporting Limit
J = Estimated value between the Reporting Limit and the MDL

Angela D. Overcash, V.P. Laboratory Services

Full Service Analytical & Environmental Solutions

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SC Certification No. 99012
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FL Certification No. E87519

Laboratory Report

12/31/04

. C. Department of Transportation
Attn: Mike Branson
c/o Earth Tech Remediation
701 Corporate Center Dr. Ste 475
Raleigh, NC 27607

Project ID: NCDOT - Asheville
Project No.: WBS# 34958.1.1
Sample Matrix: Soil

Client Sample ID: FF-7
Prism Sample ID: 106737
COC Group: G1204519
Time Collected: 12/15/04 13:45
Time Submitted: 12/16/04 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Percent Solids Determination									
Percent Solids	**84.3**	%			1	SM2540 G	12/20/04 9:30	cnguyen	
Diesel Range Organics (DRO) by GC-FID									
Diesel Range Organics (DRO)	**BRL**	mg/kg	8.3	2.4	1	8015B	12/23/04 2:17	jvogel	Q01956
Sample Preparation:			25.4 g	/	1 mL	3545	12/21/04 14:30	wconder	P11462

Surrogate	% Recovery	Control Limits
o-Terphenyl	64	49 - 124

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
ısoline Range Organics (GRO) by GC-FID									
Gasoline Range Organics (GRO)	**1.2**	mg/kg	1.2	0.14	1	8015B	12/17/04 18:47	awheeler	Q01783

Surrogate	% Recovery	Control Limits
aaa-TFT	70	55 - 129

Sample Comment(s):

All results are reported on a dry-weight basis
BRL = Below Reporting Limit
J = Estimated value between the Reporting Limit and the MDL

Angela D. Overcash, V.P. Laboratory Services

Full Service Analytical & Environmental Solutions

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Laboratory Report

12/31/04

. C. Department of Transportation
Attn: Mike Branson
c/o Earth Tech Remediation
701 Corporate Center Dr. Ste 475
Raleigh, NC 27607

Project ID: NCDOT - Asheville
Project No.: WBS# 34958.1.1
Sample Matrix: Soil

Client Sample ID: FF-8
Prism Sample ID: 106738
COC Group: G1204519
Time Collected: 12/15/04 14:15
Time Submitted: 12/16/04 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Percent Solids Determination									
Percent Solids	**96.5**	%			1	SM2540 G	12/20/04 9:30	cnguyen	
Diesel Range Organics (DRO) by GC-FID									
Diesel Range Organics (DRO)	**BRL**	mg/kg	7.3	2.1	1	8015B	12/23/04 2:59	jvogel	Q01956
Sample Preparation:			25.05	g /	1 mL	3545	12/21/04 14:30	wconder	P11462

Surrogate	% Recovery	Control Limits
o-Terphenyl	77	49 - 124

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Gasoline Range Organics (GRO) by GC-FID									
Gasoline Range Organics (GRO)	**BRL**	mg/kg	1.0	0.12	1	8015B	12/17/04 19:23	awheeler	Q01783

Surrogate	% Recovery	Control Limits
aaa-TFT	77	55 - 129

Sample Comment(s):

All results are reported on a dry-weight basis
BRL = Below Reporting Limit
J = Estimated value between the Reporting Limit and the MDL

Angela D. Overcash, V.P. Laboratory Services

Full Service Analytical & Environmental Solutions

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FL Certification No. E87519

Laboratory Report

12/31/04

N. C. Department of Transportation
Attn: Mike Branson
c/o Earth Tech Remediation
701 Corporate Center Dr. Ste 475
Raleigh, NC 27607

Project ID: NCDOT - Asheville
Project No.: WBS# 34958.1.1
Sample Matrix: Soil

Client Sample ID: FF-9
Prism Sample ID: 106739
COC Group: G1204519
Time Collected: 12/15/04 14:45
Time Submitted: 12/16/04 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Percent Solids Determination									
Percent Solids	**83.4**	%			1	SM2540 G	12/20/04 9:30	cnguyen	
Diesel Range Organics (DRO) by GC-FID									
Diesel Range Organics (DRO)	**BRL**	mg/kg	8.4	2.4	1	8015B	12/23/04 3:41	jvogel	Q01956
Sample Preparation:			25.06	g /	1 mL	3545	12/21/04 14:30	wconder	P11462

Surrogate	% Recovery	Control Limits
o-Terphenyl	93	49 - 124

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Gasoline Range Organics (GRO) by GC-FID									
Gasoline Range Organics (GRO)	**BRL**	mg/kg	1.2	0.14	1	8015B	12/17/04 20:00	awheeler	Q01783

Surrogate	% Recovery	Control Limits
aaa-TFT	83	55 - 129

Sample Comment(s):

All results are reported on a dry-weight basis
BRL = Below Reporting Limit
J = Estimated value between the Reporting Limit and the MDL

Angela D. Overcash, V.P. Laboratory Services

Full Service Analytical & Environmental Solutions

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

Laboratory Report

12/31/04

.. C. Department of Transportation
Attn: Mike Branson
c/o Earth Tech Remediation
701 Corporate Center Dr. Ste 475
Raleigh, NC 27607

Project ID: NCDOT - Asheville
Project No.: WBS# 34958.1.1
Sample Matrix: Soil

Client Sample ID: FF-10
Prism Sample ID: 106740
COC Group: G1204519
Time Collected: 12/15/04 15:00
Time Submitted: 12/16/04 16:00

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Percent Solids Determination									
Percent Solids	**92.4**	%			1	SM2540 G	12/20/04 9:30	cnguyen	
Diesel Range Organics (DRO) by GC-FID									
Diesel Range Organics (DRO)	**24**	mg/kg	7.6	2.2	1	8015B	12/23/04 4:23	jvogel	Q01956
Sample Preparation:			25 g / 1 mL			3545	12/21/04 14:30	wconder	P11462

Surrogate	% Recovery	Control Limits
o-Terphenyl	82	49 - 124

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
asoline Range Organics (GRO) by GC-FID									
Gasoline Range Organics (GRO)	**BRL**	mg/kg	1.1	0.13	1	8015B	12/17/04 20:37	awheeler	Q01783

Surrogate	% Recovery	Control Limits
aaa-TFT	78	55 - 129

Sample Comment(s):

All results are reported on a dry-weight basis
BRL = Below Reporting Limit
J = Estimated value between the Reporting Limit and the MDL

Angela D. Overcash, V.P. Laboratory Services

PRISM LABORATORIES, INC.

Service Analytical & Environmental Solutions

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

CHAIN OF CUSTODY RECORD

PAGE ___ OF ___ QUOTE # TO RE PROPER BILLING: _____

Project Name: NCDOT - Asheville

Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)

*Please ATTACH any project specific reporting (QC LEVEL I II III IV) provisions and/or QC Requirements

Invoice To: NCDOT

Address: _____

	YES	NO	N/A
Samples INTACT upon arrival?			
Received ON WET ICE? Temp 1.3°			
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?			
PROPER CONTAINERS used?			

Client Company Name: EARTH TECH

Report To/Contact Name: Mike Branson

Reporting Address: 701 Corporate Center Dr Suite 475 Raleigh, NC 27607

Phone: 919 854 6238 Fax (Yes) (No): 919 854 6259

Email (Yes) (No) Email Address: Mike.Branson@EARTHTECH.com

EDD Type: X PDF ___ Excel ___ Other

Site Location Name: QUIK TRIP

Site Location Physical Address: BREVARD Rd

Purchase Order No./Billing Reference 34958.1.1

Requested Due Date ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 4 Days ☐ 5 Days

"Working Days" ☐ 6-9 Days ☒ Standard 10 days

Samples received after 15:00 will be processed next business day.

Turnaround time is based on business days, excluding weekends and holidays.

(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC ___ USACE ___ FL ___ NC X

SC ___ OTHER ___ N/A ___

Water Chlorinated: YES ___ NO ___

Sample Iced Upon Collection: YES X NO ___

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED TPH DRO	TPH GRO (8030)					REMARKS	PRISM LAB ID NO.
FF-1	12/15/04	1030	SOIL	CG	2	4/8oz	—	✓	✓						106731
FF-2		1050					—	✓	✓						106732
FF-3		1115					—	✓	✓						106733
FF-4		1140					—	✓	✓						106734
FF-5		1200					—	✓	✓						106735
FF-6		1320					—	✓	✓						106736
FF-7		1345					—	✓	✓						106737
FF-8		1415					—	✓	✓						106738
FF-9		1445					—	✓	✓						106739
FF-10		1500					—	✓	✓						106740

PRESS DOWN FIRMLY - 3 COPIES

Sampler's Signature M Branson Sampled By (Print Name) M BRANSON Affiliation EARTH TECH

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

		Date	Military/Hours
Relinquished By: (Signature) M Branson	Received By: (Signature)	12/16/04	1210
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 12/16/04	1600

Method of Shipment: NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.

Log-In Group No. G1204519

☐ Fed Ex ☐ UPS ☐ Hand-delivered ☐ Prism Field Service ☐ Other _____

Additional Comments: INVOICE NCDOT UNDER BLANKET PO

PRISM USE ONLY

Site Arrival Time:

Site Departure Time:

Field Tech Fee:

Mileage:

NPDES:	UST:	GROUNDWATER:	DRINKING WATER:	SOLID WASTE:	RCRA:	CERCLA	LANDFILL	OTHER:
☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___	☐ NC ☐ SC ☐ ___

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

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL