PRELIMINARY SITE ASSESSMENT

PARCEL #119, CIRCLE K PROPERTY
CHARLOTTE – US 74 (INDEPENDENCE BOULEVARD) FROM NC 24 - 27
(ALBEMARLE ROAD) TO IDELWILD ROAD
MECKLENBURG COUNTY, NORTH CAROLINA

NCDOT WBS ELEMENT 3479.1.1
STATE PROJECT U-0209B

August 20, 2010

Prepared for:

Ethan J. Caldwell, L.G., P. E.
North Carolina Department of Transportation
Geotechnical Engineering Unit
GeoEnvironmental Section
1589 Mail Service Center
Raleigh, North Carolina 27699-1589

Prepared by:

Kleinfelder Southeast, Inc.
313 Gallimore Dairy Road
Greensboro, North Carolina 27409

Kleinfelder Project No. 111989

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August 20, 2010
File No. 111989 | GSO10R158

Ethan J. Caldwell, L.G., P. E.
North Carolina Department of Transportation
1589 Mail Service Center
Raleigh, North Carolina 27699-1589

Reference: **Preliminary Site Assessment**
WBS Element No. 34749.1.1, State Project U-0209B
Parcel #119, Circle K Property
Mecklenburg County, North Carolina

Dear Mr. Caldwell:

Please find enclosed a report summarizing the sampling activities for the preliminary site assessment conducted at the referenced site. Laboratory analysis of soil samples collected at the site detected contaminant concentrations exceeding the State action levels in six of eight samples. This report summarizes our field activities, results, laboratory report, and conclusions.

Should questions arise or additional information be required, please contact the undersigned.

Sincerely,

Kleinfelder Southeast, Inc.

Annamarie Blauser
Staff Professional I

John M. Stewart, P.G.
Senior Professional

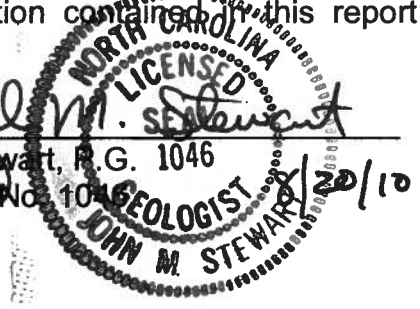
AB/JMS:cas
Enclosure

PRELIMINARY SITE ASSESSMENT

Site Name and Location:	Parcel #119, Circle K Property 6420 E. Idlewild Road Charlotte, Mecklenburg County, North Carolina
Latitude and Longitude:	35° 10' 60" N, 80° 45' 20" W
Facility ID Number:	0-000135
NCDOT Project No.:	NCDOT WBS Element 34749.1.1 State Project U-0209B
Date of Report:	August 20, 2010
Consultant:	Kleinfelder 313 Gallimore Dairy Road Greensboro, North Carolina 27409 Attn: Mr. John M. Stewart Phone: 336.668.0093 X115

Seal and Signature of Certifying Licensed Geologist

I, John M. Stewart, a Licensed Geologist for Kleinfelder Southeast, Inc., do certify that the information contained in this report is correct and accurate to the best of my knowledge.



John M. Stewart, P.G. 1046
NC License No. 1046

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1.0 INTRODUCTION

Kleinfelder Southeast, Inc. (Kleinfelder) has prepared this Preliminary Site Assessment (PSA) report documenting assessment activities performed at the Circle K property (Parcel 119) located at 6420 East Idlewild Road in Charlotte, Mecklenburg County, North Carolina (Figure 1). This assessment was conducted on behalf of the North Carolina Department of Transportation (NCDOT) in accordance with Kleinfelder's June 15, 2010 proposal.

NCDOT is proposing to widen Independence Boulevard (US 74) from NC 24 -27 (Albemarle Road) to Idlewild Road and construct a bridge with on and off ramps accessing Idlewild Road. The proposed right-of-way includes almost the entire Circle K property (Figure 2). Based on the location of the proposed right-of-way, NCDOT has determined that the entire parcel will be taken. Therefore, there is concern that contaminated soils could be encountered during the construction activities at this site.

The purpose of this assessment was to determine the presence or absence of impacted soil at the subject property in proposed right-of-way construction areas related to the widening of US 74 (Independence Boulevard) from NC 24 -27 (Albemarle Road) to Idlewild Road.

1.1 Site Description

The proposed right-of-way includes almost the entire property owned by Circle K Stores. At the time of our site reconnaissance, this parcel was occupied by an active gas station and convenience store (Circle K, Facility ID No. 0-000135). Three underground storage tanks (USTs) are registered for the facility and two USTs were closed in 2003. The current USTs are located in the northwest corner of the property. One dispenser island is located north of the convenience store (along the front of the property). The majority of the site is covered with concrete. Site photographs are shown in Appendix A.

1.2 Site Location

The facility is located on the southwest corner of Electra Lane and East Idlewild Road, in Charlotte, North Carolina. The property is bound to the north by Idlewild Road and

beyond by an apartment complex. The site is bound to the south and west by an automobile dealership and to the east by Electra Lane and further east by an apartment complex.

1.3 NCDENR File Review

Kleinfelder reviewed archived documented files at the North Carolina Department of Environment and Natural Resources (NCDENR) Mooresville Regional Office. Archived files are generally for those incidents that have been closed. A past release at the site was issued Incident Number 27507. Documented information associated with Groundwater Incident Number 27507 is summarized below

- In August 2003, ATC prepared an UST Closure Report. The report documented that two 4,000-gallon unleaded gasoline USTs were permanently closed in place in June 2003, and two 8,000-gallon gasoline USTs and one 6,000-gallon gasoline UST were installed adjacent to them. Product lines and dispensers were upgraded at this time.
- During UST and product line upgrades, soil with petroleum odor was removed. ATC screened the soil with a PID and collected soil samples. The soil samples contained concentrations of petroleum hydrocarbons similar to gasoline above the State action level, and approximately 169 tons of contaminated soil was removed.
- In January 2004, as part of a Limited Site Assessment, ATC installed a monitoring well and collected soil and groundwater samples. The soil sample laboratory analytical results indicated that none of the soil samples exceeded the residential MSCCs.
- Between August 3, 2003 and November 18, 2003, ATC collected soil samples from sixteen direct push borings drilled around the UST field, product lines, and dispensers. Low concentrations of TPH were detected in three of the borings.
- Based upon this information, the incident associated with the 2003 release was issued a No Further Action.

2.0 SITE ASSESSMENT

2.1 Geophysical Investigation

Pyramid Environmental & Engineering, P.C (Pyramid) conducted a geophysical investigation of the entire property on June 29, 2010. Pyramid utilized ground penetration radar (GPR) and electromagnetic (EM) induction technology to identify potential geophysical anomalies and potential USTs at the site. However, the Circle K site contained steel reinforced concrete across much of the site which eliminated the opportunity to conduct an EM survey. Consequently a GPR survey was conducted across the entire site. Prior to conducting soil borings, utilities were marked by NC One Call and Taylor Wiseman & Taylor (TWT).

2.2 Soil Sampling

To determine if contaminated soil may be encountered during the proposed construction activities, soil samples were collected on either side of the dispenser island (north and south), adjacent to the supply lines and around the UST located in the northwest corner of the Circle K property. Kleinfelder met Probe Technology at the Circle K property on July 20, 2010; Probe Technology advanced eight soil borings (B-1 to B-8) by direct push technology (DPT). The approximate location of the borings is shown on Figure 3. Copies of the boring logs are included in Appendix C.

Soil borings were advanced to a depth of four to twelve feet below the ground surface (bgs) depending of their location. Borings B-1 and B-2 were located on either side of the dispenser island. Borings B-4, B-5, B-7 and B-8 were located around the UST field. Boring B-2 was located along the product line. Boring B-6 was initially located on the east side of the UST field, but the boring hit refusal at four feet. The boring was moved south approximately five feet and re-drilled. The boring hit refusal again at four feet indicating that boring B-6 was likely located over one of the two closed USTs. Soil samples were collected by driving a macrocore sampler in 4-foot intervals in each boring. Each 4-foot sample sleeve was divided in half and screened for volatile organic compounds in the field using a MiniRae 2000 photo-ionization detector (PID). In each boring, the soil interval with the highest PID reading was collected for laboratory analysis. If no organic vapors were detected, the sample collected from the bottom of

the boring was submitted for analysis. The PID readings are summarized in Table 1. Copies of the boring logs are included in Appendix C.

Prior to the initial boring and after each subsequent boring, the sampling equipment was decontaminated. The soil samples collected for laboratory analysis were analyzed for total petroleum hydrocarbons (TPH) similar to diesel and gasoline (DRO/GRO) using EPA Method 8015B following 3550 and 5035 preparation. All soil samples were placed into laboratory provided jars, labeled, and maintained on ice until delivered to Prism laboratories a NCDOT contract laboratory for chemical analysis.

3.0 RESULTS

3.1 Geophysical Investigation

Pyramid's results indicate that disregarding the active and known USTs, the GPR investigation did not detect unknown metallic USTs within the survey area. Pyramid's report is included in Appendix B.

3.2 Soil Sampling

Gasoline range organics (GRO) were detected at concentrations above the State action level of 10 milligrams per kilogram in soil sample B-2 (2-4 ft), B-3 (2-4ft), B-4 (0-2ft), B-6 (2-4ft), B-7 (4-6ft), and B-8 (4-6ft). Diesel range organics (DRO) was detected in soil sample B-8 (4-6ft) above the States action level. The laboratory results are summarized in Table 2 and on Figure 3. The laboratory report and associated chain-of-custody document are included in Appendix D.

Based on laboratory analytical results and PID readings, petroleum impacted soils are present on Parcel 119 adjacent to the USTs in the northwest corner of the property. The contaminated soil covers an area approximately 7,500 square feet (Figure 4). The contaminated soil extends vertically between four and six feet below ground surface. Based on these dimensions Kleinfelder estimates that there are approximately 1,500 cubic yards of impacted soil, following removal of the three UST volumes (8,000 gallon = 39 cubic yards and 6,000 gallon = 30 cubic yards).

4.0 CONCLUSIONS

Based on results of the laboratory analysis and field observations, Kleinfelder has the following conclusions:

- Groundwater was not encountered in the soil borings.
- GRO was detected in borings B-2, B-3, B-4, B-6, B-7 and B-8, and DRO was detected in boring B-8. All detected concentrations of TPH were above the State action level. The source of the diesel range organics is unknown at this time. There is no indication that diesel fuel has been sold at this location.
- Based upon the laboratory results, petroleum impacted soil is located between a depth of two to six feet bgs in the area of the USTs and dispsenser islands. The results of this investigation are consistent with the results of the ATC investigation conducted in 2003-2004.
- Approximately 1,500 cubic yards of contaminated soil was identified in and around the existing and former USTs located on the northwest corner of the property. Almost all of the contaminated soil is located within the proposed right-of-way. Petroleum contaminated soil could be encountered as shallow two feet below grade in the area of the UST field.

5.0 LIMITATIONS

Our work has been performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services were provided. Our conclusions, opinions and recommendations are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

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TABLES

TABLE 1: SOIL SAMPLE PID RESULTS

SAMPLE LOCATION	DEPTH (feet bgs)	PID READINGS
B-1	0.0 - 2.0	1.4
	2.0 - 4.0	**2.1**
B-2	0.0 - 2.0	1.8
	2.0 - 4.0	**16.2**
B-3	0.0 - 2.0	3.8
	2.0 - 4.0	**26.8**
B-4	0.0 - 2.0	**43.1**
	2.0 - 4.0	16.0
	4.0 - 6.0	6.4
	6.0 - 8.0	7.9
	8.0 - 10.0	25.2
	10.0 - 12.0	20.9
B-5	0.0 - 2.0	0.7
	2.0 - 4.0	0.0
	4.0 - 6.0	0.0
	6.0 - 8.0	0.0
	8.0 - 10.0	0.2
	10.0 - 12.0	**1.3**
B-6	0.0 - 2.0	20.8
	2.0 - 4.0	**73.4**
B-7	0.0 - 2.0	1.3
	2.0 - 4.0	8.4
	4.0 - 6.0	**13.8**
	6.0 - 8.0	2.6
	8.0 - 10.0	10.9
	10.0 - 12.0	7.3
B-8	0.0 - 2.0	0.0
	2.0 - 4.0	0.0
	4.0 - 6.0	**246.0**
	6.0 - 8.0	2.6
	8.0 - 10.0	16.7
	10.0 - 12.0	0.0

Notes:
Samples were collected on July 20, 2010.
Readings reported in parts per million
feet bgs = feet below ground surface
Bold = Selected for laboratory analysis

TABLE 2: SOIL SAMPLE ANALYTICAL SUMMARY

SAMPLE ID	COLLECTION DATE	DRO	GRO
B-1 (2-4ft)	7/20/2010	BRL	BRL
B-2 (2-4ft)	7/20/2010	BRL	**48**
B-3 (2-4ft)	7/20/2010	BRL	**24**
B-4 (0-2ft)	7/20/2010	BRL	**14**
B-5 (10-12ft)	7/20/2010	BRL	BRL
B-6 (2-4ft)	7/20/2010	BRL	**17**
B-7 (4-6ft)	7/20/2010	BRL	**11**
B-8 (4-6ft)	7/20/2010	**2800**	**19**
State Action Level		10	10

Notes:

Sample collection depth is indicated in Sample ID, following sequential soil sample number
Results presented in milligrams per kilogram, analogous to parts per million
DRO = Diesel Range Organics
GRO = Gasoline Range Organics
BRL = Below reporting limit
Bold denotes concentration exceeds the State Action Level

FIGURES

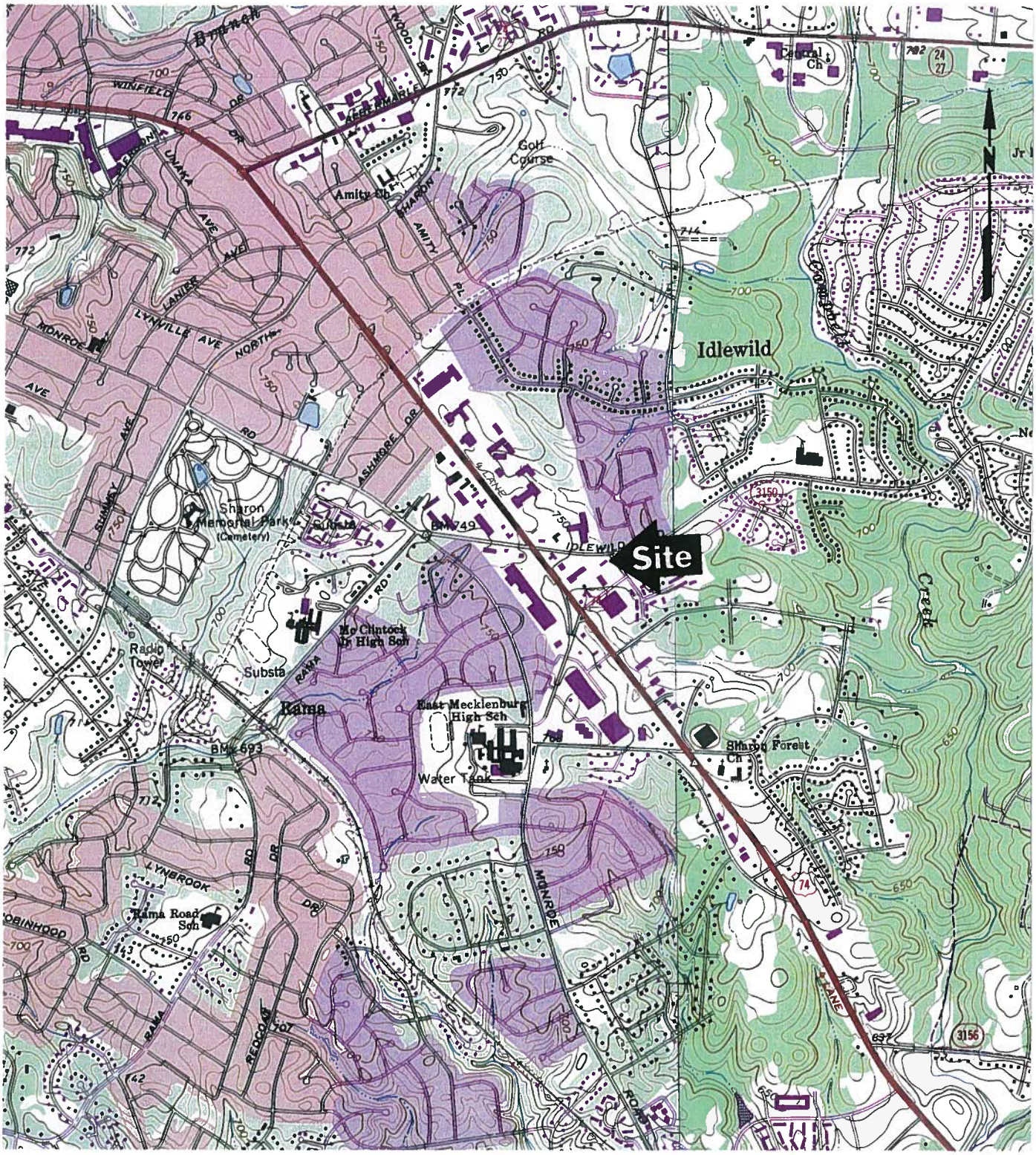

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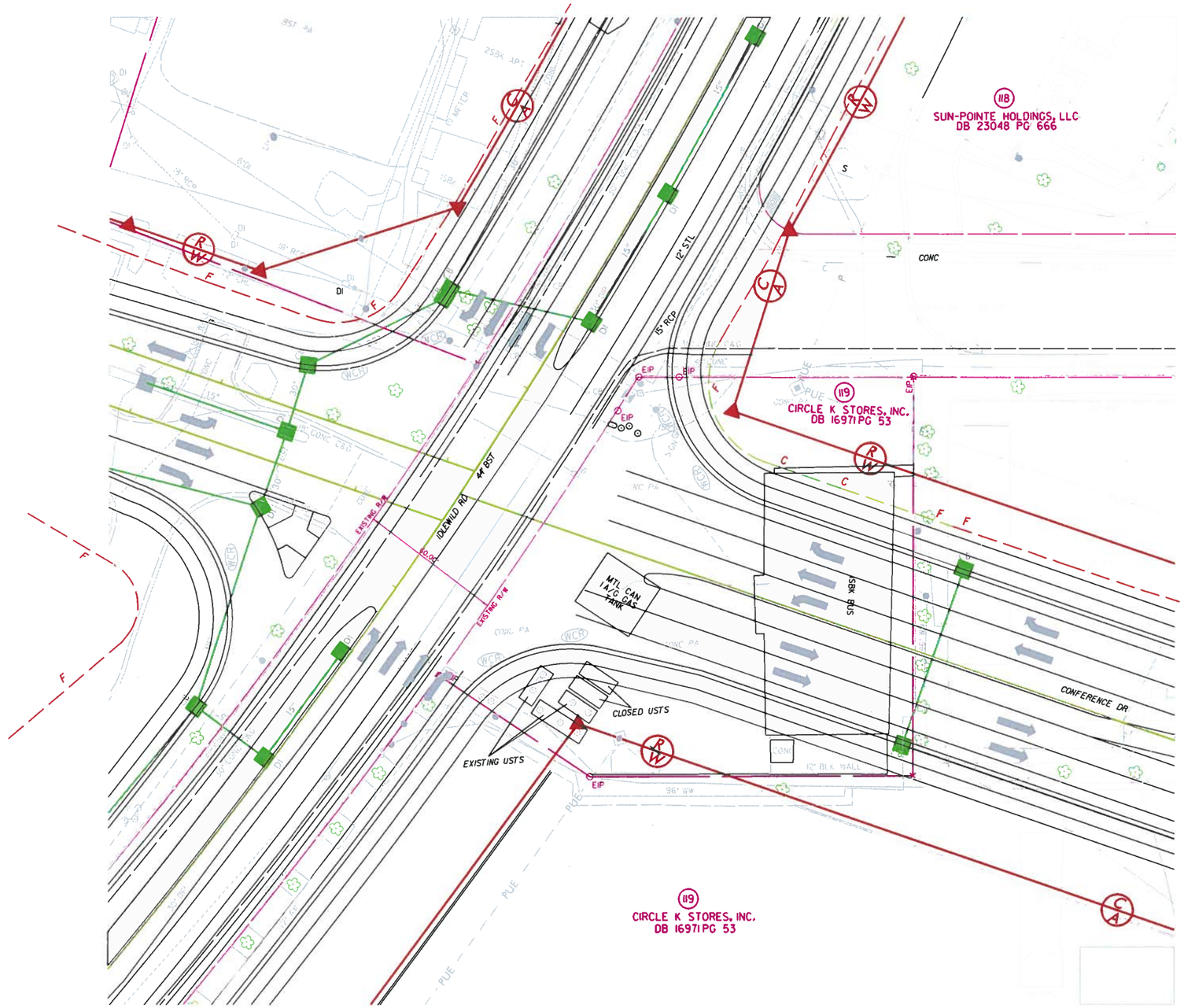
FIGURE 1
SITE LOCATION MAP

PARCEL # 119 – CIRCLE K PROPERTY
6420 EAST IDLEWILD ROAD
MECKLENBURG COUNTY, NORTH CAROLINA

DATE: July 26, 2010	APPROVED BY:	SCALE: 1" to 2,000'
SOURCE: USGS 7.5' Topographic Map, Charlotte East Quadrangle		PROJECT NO. 111989



GRAPHIC SCALE
50 0 50 100

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PROJECT NO.	111989
DRAWN:	08/06/2010
DRAWN BY:	DJH
CHECKED BY:	JMS
SCALE:	1" = 50'

SITE MAP

PARCEL #119
CIRCLE K STORES
6420 E. IDLEWILD ROAD

TIP NO. U-0209B | WBS ELEMENT NO. 34749.1.1

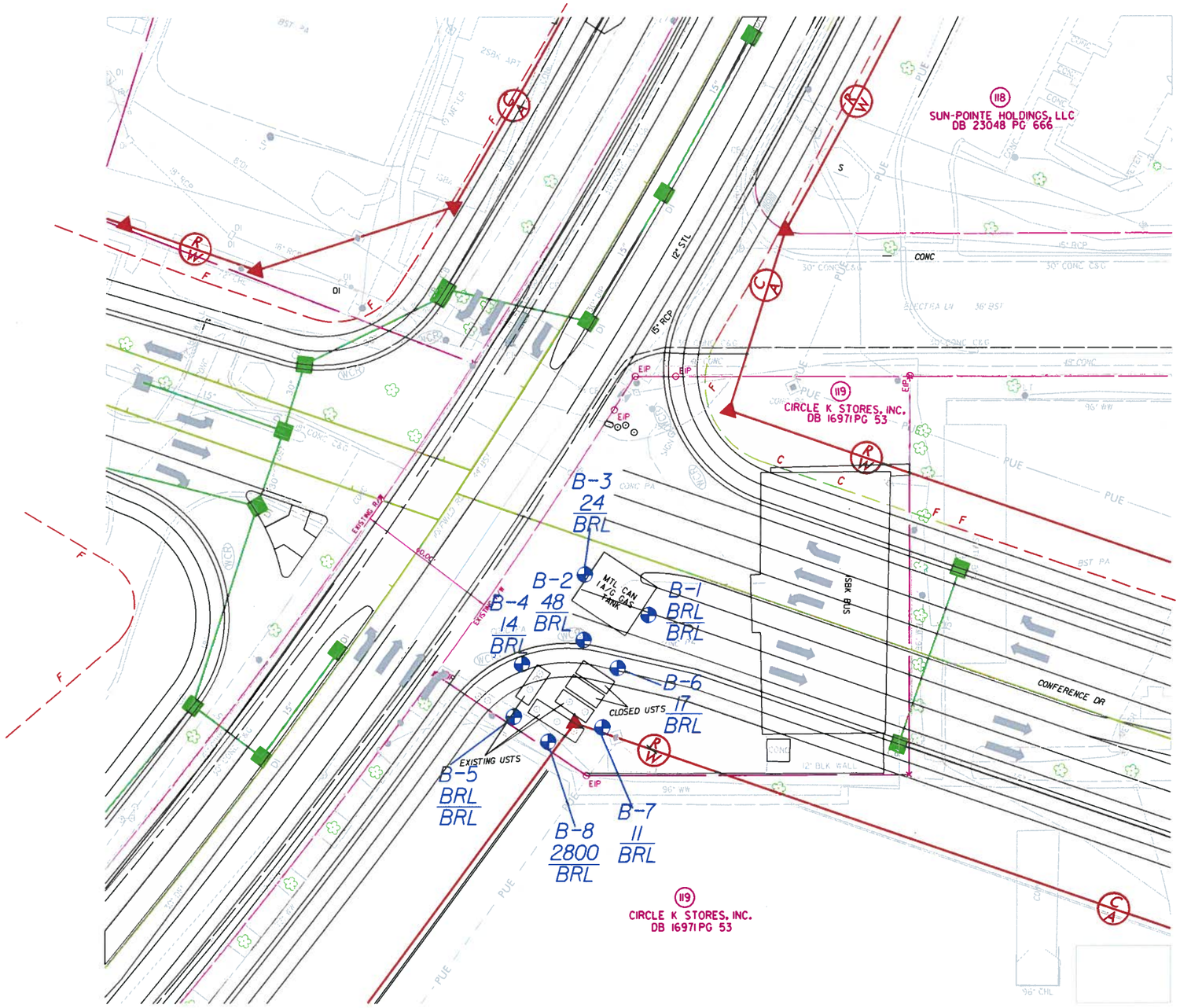
MECKLENBURG COUNTY
NORTH CAROLINA

FIGURE: **2**

DRAWING NAME: parcel-119_CircleK.dgn

KLEINFELDER JOB NUMBER: 111989

OFFICE LOCATION: GREENSBORO



EXPLANATION

SOIL BORING

B-1

BRL / BRL — **GRO / DRO IN PPM**

NOTE: BRL - BELOW REPORTING LIMIT
GRO - GASOLINE RANGE ORGANICS
DRO - DIESEL RANGE ORGANICS

GRAPHIC SCALE
50 0 50 100

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PROJECT NO.	111989
DRAWN:	08/06/2010
DRAWN BY:	DJH
CHECKED BY:	JMS
SCALE:	1" = 50'

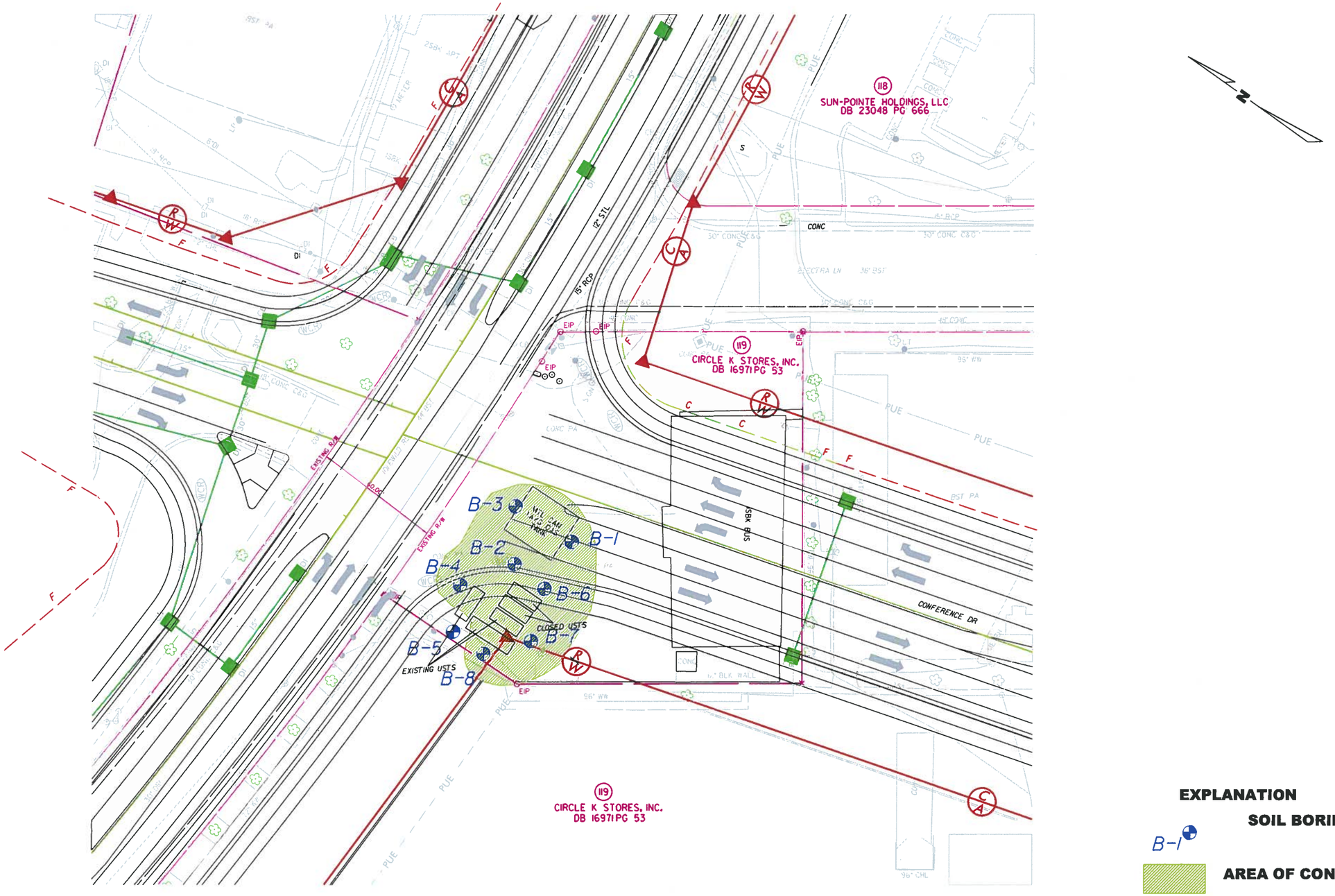
BORING LOCATION MAP

PARCEL #119
CIRCLE K STORES
6420 E. IDLEWILD ROAD

TIP NO. U-0209B | WBS ELEMENT NO. 34749.1.1

MECKLENBURG COUNTY
NORTH CAROLINA

FIGURE: **3**



EXPLANATION

SOIL BORING B-1

AREA OF CONTAMINATION

GRAPHIC SCALE

50 0 50 100

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DRAWN:	08/06/2010
DRAWN BY:	DJH
CHECKED BY:	JMS
SCALE:	1" = 50'

HORIZONTAL EXTENT OF CONTAMINATION MAP

PARCEL #119
CIRCLE K STORES
6420 E. IDLEWILD ROAD

TIP NO. U-0209B | WBS ELEMENT NO. 34749.1.1

MECKLENBURG COUNTY
NORTH CAROLINA

FIGURE: **4**

OFFICE LOCATION: GREENSBORO KLEINFELDER JOB NUMBER: 111989 DRAWING NAME: parcel-119_CircleK.dgn

APPENDIX A

SITE PHOTOGRAPHS
KLEINFELDER PROJECT NO. 111989
PARCEL NO. 119

Photograph 1 – View of the Circle K station looking southeast. The UST field is located in the center of the photograph. The dispenser islands are shown to the left (east) of the UST field.

Photograph 2 – View of the Circle K station's dispensers looking northeast. The product lines for the dispensers and USTs are shown to the right (west) of the dispensers.

SITE PHOTOGRAPHS
KLEINFELDER PROJECT NO. 111989
PARCEL NO. 119

Photograph 3 – View of the southeast corner of UST field in the foreground. Two USTs were closed in 2003 in this area. Refusal encountered at four feet for B-6 in two locations in this area.

Photograph 4 – View of the west side of the UST field looking north.

APPENDIX B

Pyramid Project # 2010153

GEOPHYSICAL INVESTIGATION REPORT

GPR SURVEYS

CIRCLE K STORES, INC. PROPERTY
PARCEL 119
Charlotte, North Carolina

August 10, 2010

Report prepared for: John Stewart P.G.
Kleinfelder
6200 Harris Technology Boulevard
Charlotte, NC 28269

Prepared by: Mark J. Deni, P.G.

Reviewed by: Douglas Canavello, P.G.

PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.
P.O. Box 16265
GREENSBORO, NC 27416-0265
(336) 335-3174

Kleinfelder
GEOPHYSICAL INVESTIGATION REPORT
CIRCLE K STORES, INC. PROPERTY
PARCEL 119
Charlotte, North Carolina

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FIGURES

1.0 INTRODUCTION

Pyramid Environmental conducted a geophysical investigation for Kleinfelder across the Circle K Stores, Inc. property (Parcel 1119) located at the intersection of Idlewild Road and Electra Lane in Charlotte, North Carolina. Conducted on June 29, 2010 the geophysical investigation was performed as part of the North Carolina Department of Transportation (NCDOT) preliminary site assessment project to determine if unknown, metallic underground storage tanks (UST's) were present beneath the proposed ROW area of the site.

Parcel 119 consists of an active Circle K gas station, store and laundromat. The geophysical survey area covered the entire property which had a maximum length and width of 185 feet and 150 feet, respectively.

Kleinfelder representative Mr. John Stewart, PE provided site maps during the week of June 1, 2010 that outlined the geophysical survey area of the Circle K Stores, Inc. property and Kleinfelder representative Mr. John Lindemann was on site the morning of June 23, 2010 and identified the perimeter of the geophysical survey area to Pyramid Environmental personnel. Photographs of the geophysical equipment used in this investigation and a portion of the Circle K Stores, Inc. property are shown in **Figure 1**.

2.0 FIELD METHODOLOGY

Prior to conducting the geophysical investigation, a 10-foot by 10-foot survey grid was established across the geophysical survey area (property) using measuring tapes, pin flags and water-based marking paint. These grid marks were used as X-Y coordinates for location control when collecting the geophysical data and establishing base maps for the geophysical results.

After establishing the survey grid, a two-minute recon was performed with the EM61 metal detector across the site. The recon indicated that nearly the entire site contains steel reinforced concrete pavement which eliminated the opportunity to conduct an EM61 metal detection survey.

Consequently, a comprehensive ground penetrating radar (GPR) investigation was conducted across the entire site. using a GSSI SIR-2000 unit equipped with a 400 MHz antenna. Data were digitally collected in a continuous mode along X-axis and/or Y-axis survey lines, spaced 5.0 feet apart using a vertical scan of 512 samples, at a rate of 48 scans per second. A 70 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 5 feet, based on an estimated two-way travel time of 8 nanoseconds per foot. All of the GPR data were downloaded to a field computer and reviewed in the field and office using Radprint software.

The purple solid lines in **Figure 2** represent the locations of the GPR survey lines acquired at Parcel 119. Preliminary geophysical results obtained from the Parcel 119 were reported to Mr. Stewart on July 14, 2010.

3.0 DISCUSSION OF RESULTS

An image of GPR survey line Y=55 is presented in **Figure 3** and shows the changes in reflection character from grid lines Y=55 to Y=90 that are probably in response to the active UST pad centered near grid coordinates X=55 Y=70. The GPR data across the active UST pad lacked the high amplitude, hyperbolic GPR anomalies that are usually associated with metallic USTs. Therefore, the absence of the strong anomalies suggests nonmetallic USTs are present at the Circle K Stores property. Furthermore, a determination of whether 3 or 4 USTs were present within the active UST pad could not be made.

Although buried lines and conduits were detected by the GPR investigation, the data suggest that the remaining portion of the Circle K Stores site (excluding the active UST pad) does not contain unknown, metallic USTs.

4.0 SUMMARY & CONCLUSIONS

Our evaluation of the GPR data collected across the Circle K Stores, Inc. property (Parcel 119) located in Charlotte, North Carolina, provides the following summary and conclusions:

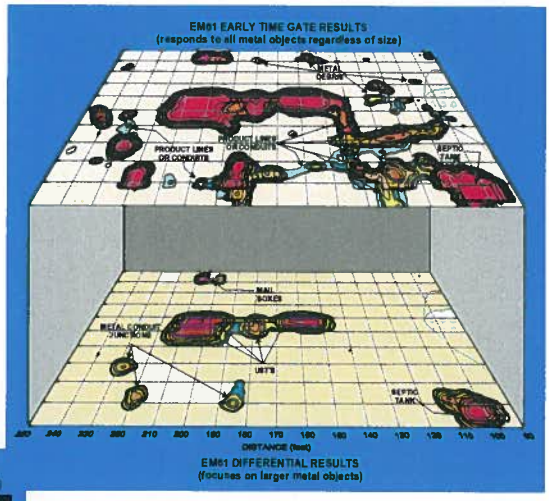
- The GPR surveys provided reliable results for the detection of metallic USTs within the surveyed portions of the site.

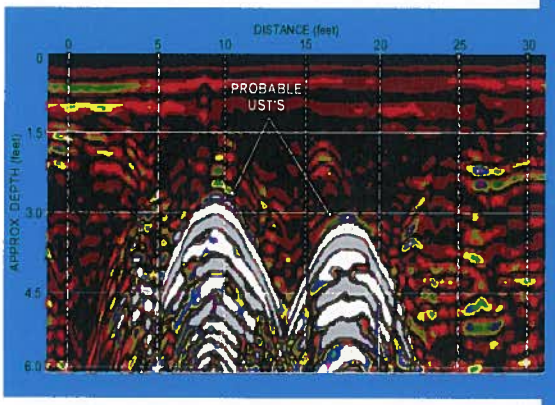
- The GPR data across the active UST pad lacked the high amplitude, hyperbolic GPR anomalies that are usually associated with metallic USTs. Therefore, the absence of the strong anomalies suggests nonmetallic USTs are present at the Circle K Stores property. Furthermore, a determination of whether 3 or 4 USTs were present within the active UST pad could not be made.

- Although buried lines and conduits were detected by the GPR investigation, the data suggest that the remaining portion of the Circle K Stores site (excluding the active UST pad) does not contain unknown, metallic USTs.

5.0 LIMITATIONS

GPR surveys have been performed and this report prepared for Kleinfelder in accordance with generally accepted guidelines for GPR surveys. It is generally recognized that the results of the GPR investigation are non-unique and may not represent actual subsurface conditions. Excluding the active (known) USTs, the GPR results obtained for this project have not conclusively determined that the site does not contain unknown, buried metallic USTs, but that none were detected.

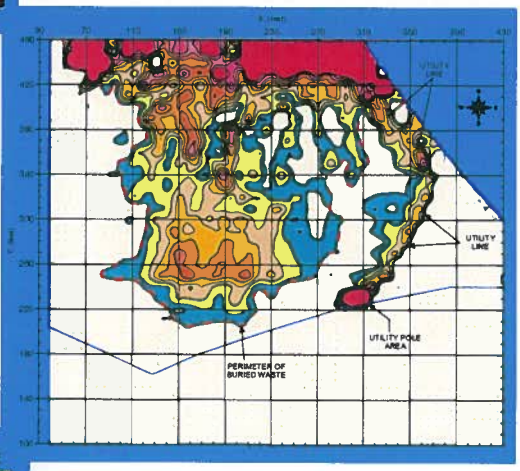


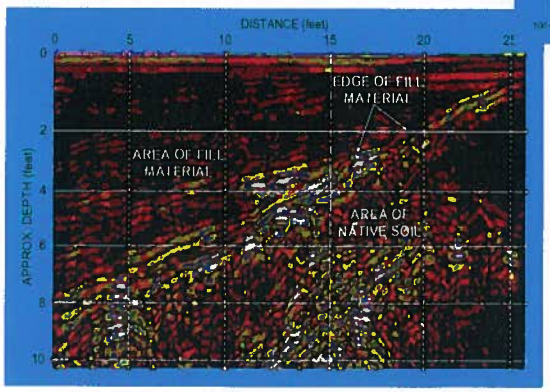


FIGURES

(on the following pages)

Figures shown on this page are for esthetic purposes only and are not related to the geophysical results discussed in this report.

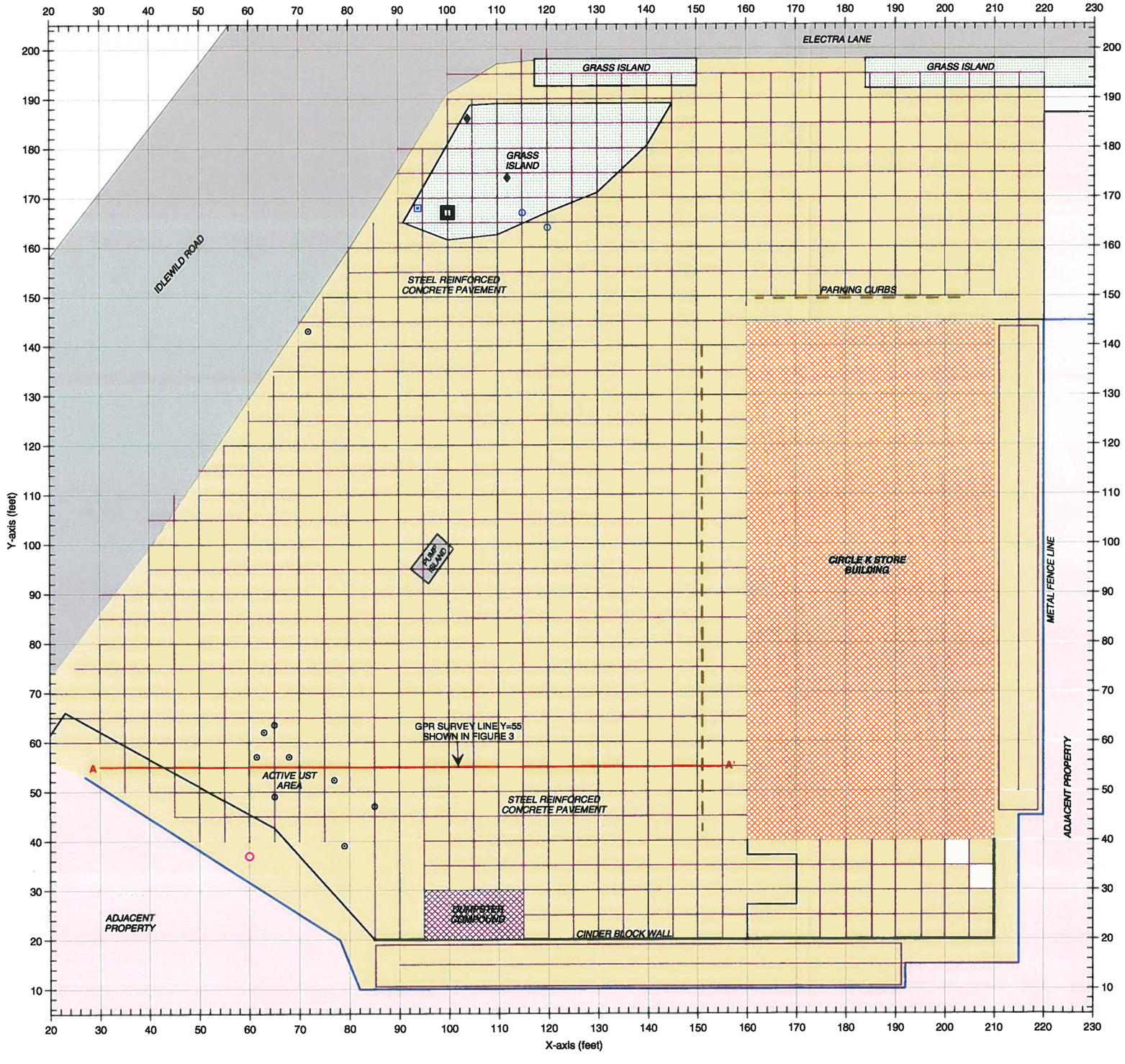




The photographs show the SIR-2000 GPR system equipped with a 400 MHz antenna that were used to conduct the ground penetrating radar investigation at Parcel 119 on June 29, 2010.

The photograph shows the northern portion of the Circle K Stores, Inc. property (Parcel 119) located at the intersection of Idlewild Road and Electra Lane in Charlotte, North Carolina. The photograph is viewed in southerly direction.

PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.	CLIENT: KLEINFELDER	DATE: 08/06/10	DRAWN BY: MJD	GEOPHYSICAL EQUIPMENT & SITE PHOTOGRAPHS	
	SITE: CIRCLE K STORES, INC PROPERTY (PARCEL 119)	LAT:	CHK'D BY:		
	CITY: CHARLOTTE STATE: NORTH CAROLINA		DWG:		
	TITLE: GEOPHYSICAL RESULTS	JOB#: 2010-153	REVISED:	FIGURE 1	



APPROXIMATE NORTH

LEGEND

- SURVEY AREA: GPR DATA ACQUIRED ALONG X-AXIS AND Y-AXIS TRENDING LINES SPACED 5 FEET APART
- BUILDING
- STORE SIGN POLE
- CINDER BLOCK WALL
- CONCRETE PARKING CURBS
- DUMPSTER COMPOUND
- METALLIC FENCE LINE
- MANHOLE COVER
- PVC VENT PIPE
- UTILITY LINE BOX
- UTILITY OR LAMP POLE
- WATER METER BOX
- UST VALVE COVER
- GPR SURVEY LINE
- AREA SCANNED WITH GPR UNIT

The Circle K property contained steel reinforced concrete across much of the site which did not allow a metal detection survey to be conducted. Consequently, a ground penetrating radar (GPR) survey was conducted across the site on June 29, 2010 using a Geophysical Survey Systems SIR 2000 instrument with a 400 MHz antenna. GPR data were acquired along X-axis and Y-axis lines spaced 5 feet apart (purple lines shown on the map). GPR recons (purple polygons shown on the map) were also conducted along the metal fence and cinder block wall areas.

Disregarding the active and known USTs, the GPR investigation did not detect unknown metallic USTs within the surveyed portion of the site.

GPR SURVEY LINE LOCATION MAP

FIGURE 2

GRAPHIC SCALE IN FEET	
DRWN	MJD
CHKD	
DATE	08/07/10
LAY	
DWG	
FIGURE	
JOB NO.	2010-153
CLIENT	KLEINFELDER
SITE	CIRCLE K STORES, INC PROPERTY (PARCEL 119)
CITY	CHARLOTTE
STATE	NORTH CAROLINA
TITLE	GEOPHYSICAL RESULTS

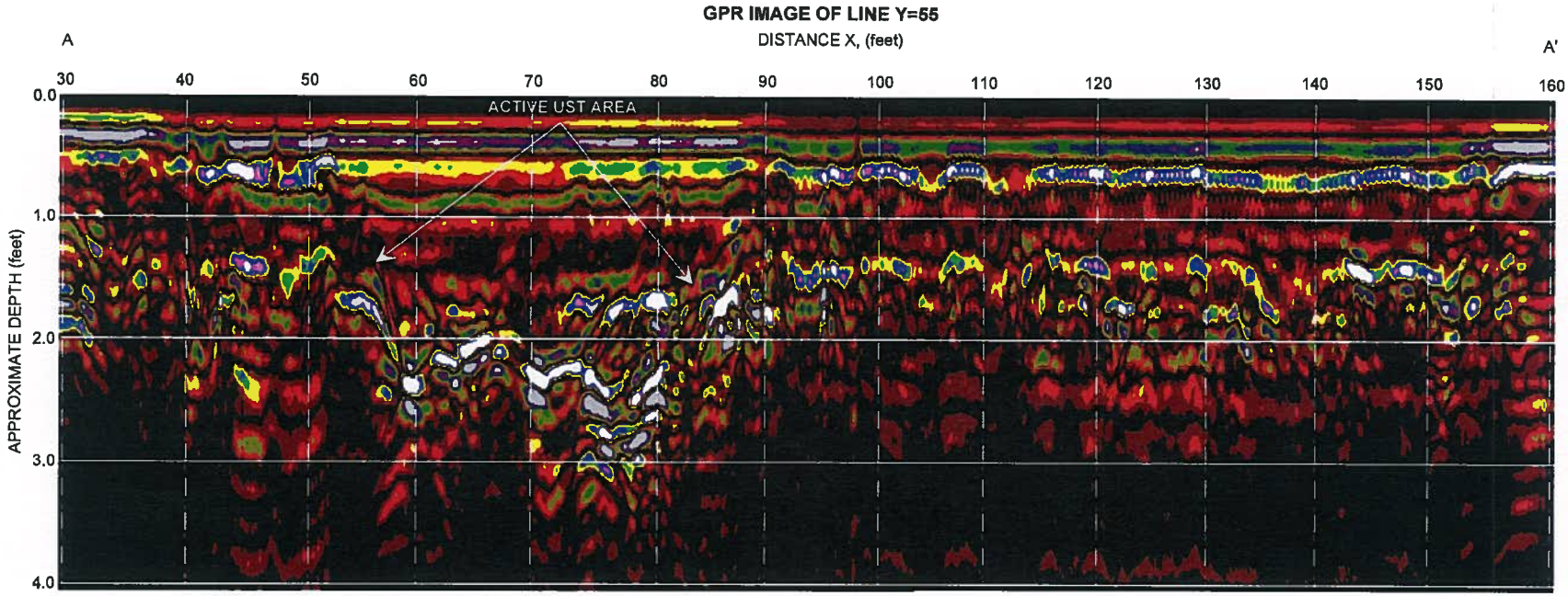
PYRAMID ENVIRONMENTAL & ENGINEERING, P.C.

PYRAMID
ENVIRONMENTAL & ENGINEERING, P.C.

TITLE	CITY	SITE	CLIENT
GEOPHYSICAL RESULTS	CHARLOTTE	CIRCLE K STORES, INC PROPERTY (PARCEL 119)	KLEINFELDER
	STATE		
	NORTH CAROLINA		
JOB NO.	DWG	SCALE	DATE
2010-153			08/04/10
FIGURE		CHKD	DRWN
			MJD

IMAGE OF GPR SURVEY LINE Y=55

FIGURE 3



Changes in GPR reflection character in response to the active UST pad are recorded along survey line X=55 from grid line X=55 to grid line X=90. The absence of high amplitude, hyperbolic GPR reflections, which usually identify metallic USTs, suggest the 3 or 4 active USTs are probably nonmetallic USTs. The solid red line labeled AA' in Figure 2 represents the location of GPR survey line Y=55.

APPENDIX C

LOG OF BORING B-1

SHEET 1 OF 1

Client NCDOT
Project Name U-0209B
Number 111989
Location Parcel 119-Circle K

Drill Contractor Probe Techology
Drill Method 2 inch Direct Push
Drilling Started 7/20/10 Ended 7/20/10
Logged By T. Stewart

Elevation --
Total Depth 4.0
Depth To Water

DEPTH FEET	SAMPLE NO.	BLOWS/FT	PID ppm	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
			1.4	CL		Red Brown, Gray, Lean CLAY, Hard, Dry, No Odor	
	SS		2.1	CL		Gray, Lean CLAY, Tacky, Hard, Moist, Petroleum Odor	
						Boring Terminated at 4 feet in RESIDUAL	

5 10 15 20 25 30

Kleinfelder
313 Gallimore Dairy Road
Greensboro, NC 27409
Telephone: 336-668-0093
Fax: 336-668-3868

Remarks Sample B-1 collected from 2-4 ft. submitted for laboratory analysis.

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 111989H.GPJ LOG A EWNN05.GDT 8/6/10

LOG OF BORING B-2

SHEET 1 OF 1

Client NCDOT
Project Name U-0209B
Number 111989
Location Parcel 119-Circle K

Drill Contractor Probe Techology
Drill Method 2 inch Direct Push
Drilling Started 7/20/10 Ended 7/20/10
Logged By T. Stewart

Elevation --
Total Depth 4.0
Depth To Water

DEPTH FEET	SAMPLE NO.	BLOWS/FT	PID ppm	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
	SS		1.8 16.2	CL		Gray, Brown, Lean CLAY, Hard, Dry, Petroleum Odor	
5						Boring Terminated at 4 feet in RESIDUAL	5
10							10
15							15
20							20
25							25
30							30

Kleinfelder
313 Gallimore Dairy Road
Greensboro, NC 27409
Telephone: 336-668-0093
Fax: 336-668-3868

Remarks Sample B-2 collected from 2-4 ft. submitted for laboratory analysis.

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 111989H.GPJ LOG A EWNN05.GDT 8/6/10

LOG OF BORING B-3

SHEET 1 OF 1

Client NCDOT
Project Name U-0209B
Number 111989
Location Parcel 119-Circle K

Drill Contractor Probe Techology
Drill Method 2 inch Direct Push
Drilling Started 7/20/10 Ended 7/20/10
Logged By T. Stewart

Elevation --
Total Depth 4.0
Depth To Water

DEPTH FEET	SAMPLE NO.	BLOWS/FT	PID ppm	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
0	SS		3.8 26.8	CL		Brown, Gray, Lean CLAY, Hard, Dry, Petroleum Odor	
4						Boring Terminated at 4 feet in RESIDUAL	
5							5
10							10
15							15
20							20
25							25
30							30

Kleinfelder
313 Gallimore Dairy Road
Greensboro, NC 27409
Telephone: 336-668-0093
Fax: 336-668-3868

Remarks Sample B-3 collected from 2-4 ft. submitted for laboratory analysis.

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 111989H.GPJ LOG A EWNN05.GDT 8/6/10

LOG OF BORING B-4

SHEET 1 OF 1

Client NCDOT
Project Name U-0209B
Number 111989
Location Parcel 119-Circle K

Drill Contractor Probe Techology
Drill Method 2 inch Direct Push
Drilling Started 7/20/10 Ended 7/20/10
Logged By T. Stewart

Elevation --
Total Depth 12.0
Depth To Water

DEPTH FEET	SAMPLE NO.	BLOWS/FT	PID ppm	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
	SS		43.1	CL		Gray, Lean CLAY, Tacky, Dry, Petroleum Odor	
			16.0				
5			6.4	CL		Gray, Sandy Lean CLAY, Dry, Petroleum Odor	5
			7.9				
			25.2				
10			20.9				10
						Boring Terminated at 12 feet in RESIDUAL	
15							15
20							20
25							25
30							30

Kleinfelder
313 Gallimore Dairy Road
Greensboro, NC 27409
Telephone: 336-668-0093
Fax: 336-668-3868

Remarks Sample B-4 collected from 0-2 ft. submitted for laboratory analysis.

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 111989H.GPJ LOG A EWNN05.GDT 8/6/10

LOG OF BORING B-5

SHEET 1 OF 1

Client NCDOT
Project Name U-0209B
Number 111989
Location Parcel 119-Circle K

Drill Contractor Probe Techology
Drill Method 2 inch Direct Push
Drilling Started 7/20/10 Ended 7/20/10
Logged By T. Stewart

Elevation --
Total Depth 12.0
Depth To Water

DEPTH FEET	SAMPLE NO.	BLOWS/FT	PID ppm	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
			0.7			Yellowish Brown, Sandy Lean CLAY, Pulverized, Dry, No Odor	
			0.0	CL			
5			0.0				5
			0.0			Yellowish Brown, Sandy Lean CLAY, Slightly Tacky, Loose, Dry, No Odor	
			0.2	CL			
10	SS		1.3				10
						Boring Terminated at 12 feet in RESIDUAL	
15							15
20							20
25							25
30							30

Kleinfelder
313 Gallimore Dairy Road
Greensboro, NC 27409
Telephone: 336-668-0093
Fax: 336-668-3868

Remarks Sample B-5 collected from 10-12 ft. submitted for laboratory analysis.

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 111989H.GPJ LOG A EWNN05.GDT 8/6/10

LOG OF BORING B-6

SHEET 1 OF 1

Client NCDOT
Project Name U-0209B
Number 111989
Location Parcel 119-Circle K

Drill Contractor Probe Techology
Drill Method 2 inch Direct Push
Drilling Started 7/20/10 Ended 7/20/10
Logged By T. Stewart

Elevation --
Total Depth 4.0
Depth To Water

DEPTH FEET	SAMPLE NO.	BLOWS/FT	PID ppm	USCS	LITHOLOGY	DESCRIPTION
	SS		20.8	CL		Gray, Sandy Lean CLAY, Hard, Dry, Petroleum Odor
			73.4	SM		Brown, Fine SAND, Dry, Petroleum Odor (Appears Backfill Sand)
						Boring Terminated at 4 feet in RESIDUAL

DEPTH FEET: 5, 10, 15, 20, 25, 30

Kleinfelder
313 Gallimore Dairy Road
Greensboro, NC 27409
Telephone: 336-668-0093
Fax: 336-668-3868

Remarks Sample B-6 collected from 2-4 ft. submitted for laboratory analysis.

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 111989H.GPJ LOG A EWNN05.GDT 8/6/10

LOG OF BORING B-7

SHEET 1 OF 1

Client NCDOT
Project Name U-0209B
Number 111989
Location Parcel 119-Circle K

Drill Contractor Probe Techology
Drill Method 2 inch Direct Push
Drilling Started 7/20/10 Ended 7/20/10
Logged By T. Stewart

Elevation --
Total Depth 12.0
Depth To Water

DEPTH FEET	SAMPLE NO.	BLOWS/FT	PID ppm	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
			1.3	CL		Red Brown, Lean CLAY, Tacky, Hard, Dry, No Odor	
			8.4	CL		Gray, Sandy Lean CLAY, Dry, Petroleum Odor (Piece of Scrap Metal between 3-4 ft.)	
5	SS		13.8	CL		Gray, Lean CLAY, Tacky, Wet, Petroleum Odor (Piece of Scrap Metal between 4-5 ft.)	5
			2.6	CL		Yellowish Brown, Gray, Sandy Lean CLAY, Loose, Dry, Petroleum Odor	
			10.9	CL		Gray, Lean CLAY, Tacky, Moist, Petroleum Odor	
10			7.3			Boring Terminated at 12 feet in RESIDUAL	10
15							15
20							20
25							25
30							30

Kleinfelder
313 Gallimore Dairy Road
Greensboro, NC 27409
Telephone: 336-668-0093
Fax: 336-668-3868

Remarks Sample B-7 collected from 4-6 ft. submitted for laboratory analysis.

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 111989H.GPJ LOG A EWNN05.GDT 8/6/10

LOG OF BORING B-8

SHEET 1 OF 1

Client NCDOT
Project Name U-0209B
Number 111989
Location Parcel 119-Circle K

Drill Contractor Probe Techology
Drill Method 2 inch Direct Push
Drilling Started 7/20/10 Ended 7/20/10
Logged By T. Stewart

Elevation --
Total Depth 12.0
Depth To Water

DEPTH FEET	SAMPLE NO.	BLOWS/FT	PID ppm	USCS	LITHOLOGY	DESCRIPTION
			0.0			Red Brown, Yellowish Brown, Gray, Lean CLAY, Hard, Dry, Petroleum Odor
			0.0	CL		
5	SS		246			
			2.6			Gray, Silty Lean CLAY, Very Fine, Dry, Petroleum Odor
			16.7	CL		
10			0.0			
						Boring Terminated at 12 feet in RESIDUAL
15						
20						
25						
30						

DEPTH FEET: 5, 10, 15, 20, 25, 30

Kleinfelder
313 Gallimore Dairy Road
Greensboro, NC 27409
Telephone: 336-668-0093
Fax: 336-668-3868

Remarks Sample B-8 collected from 4-6 ft. submitted for laboratory analysis.

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 111989H.GPJ LOG A EWNN05.GDT 8/6/10

APPENDIX D

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

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

Case Narrative

08/04/2010

Kleinfelder SE, Inc. (NCDOT Project)
John Stewart
313 Gallimore Dairy Rd.
Greensboro, NC 27409

Project: NCDOT Parcel #119
Project No.: WBS# 34749.1.1
Lab Submittal Date: 07/20/2010
Prism Work Order: 0070539

This data package contains the analytical results for the project identified above and includes a Case Narrative, Sample Results and Chain of Custody. Unless otherwise noted, all samples were received in acceptable condition and processed according to the referenced methods.

Data qualifiers are flagged individually on each sample. A key reference for the data qualifiers appears at the end of this case narrative.

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

Respectfully,

PRISM LABORATORIES, INC.

VP Laboratory Services

Reviewed By

Data Qualifiers Key Reference:

Aa	Surrogates recovered outside established QC range. Matrix interference is suspected.
BRL	Below Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
*	Results reported to the reporting limit. All other results are reported to the MDL with values between MDL and reporting limit indicated with a J.

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

Sample Receipt Summary

08/04/2010

Prism Work Order: 0070539

Client Sample ID	Lab Sample ID	Matrix	Date Sampled	Date Received
B-1 (2-4)	0070539-01	Solid	7/20/10	7/20/10
B-2 (2-4)	0070539-02	Solid	7/20/10	7/20/10
B-3 (2-4)	0070539-03	Solid	7/20/10	7/20/10
B-4 (0-2)	0070539-04	Solid	7/20/10	7/20/10
B-5 (10-12)	0070539-05	Solid	7/20/10	7/20/10
B-6 (2-4)	0070539-06	Solid	7/20/10	7/20/10
B-7 (4-6)	0070539-07	Solid	7/20/10	7/20/10
B-8 (4-6)	0070539-08	Solid	7/20/10	7/20/10

Samples received in good condition at 4.1 degrees C unless otherwise noted.

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

Kleinfelder SE, Inc. (NCDOT Project)
Attn: John Stewart
313 Gallimore Dairy Rd.
Greensboro, NC 27409

Project: NCDOT Parcel #119

Project No.: WBS# 34749.1.1
Sample Matrix: Solid

Client Sample ID: B-1 (2-4)
Prism Sample ID: 0070539-01
Prism Work Order: 0070539
Time Collected: 07/20/10 07:38
Time Submitted: 07/20/10 15:58

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	BRL	mg/kg dry	8.5	1.4	1	*8015C	7/28/10 20:17	GRR	P0G0567
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*80 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	4.0	0.52	50	*8015C	7/28/10 13:07	HPE	P0G0574
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*106 %*		*55-129*	
General Chemistry Parameters									
% Solids	**81.7**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/27/10 14:45**	**JAB**	**P0G0564**

Kleinfelder SE, Inc. (NCDOT Project)
Attn: John Stewart
313 Gallimore Dairy Rd.
Greensboro, NC 27409

Project: NCDOT Parcel #119

Project No.: WBS# 34749.1.1
Sample Matrix: Solid

Client Sample ID: B-2 (2-4)
Prism Sample ID: 0070539-02
Prism Work Order: 0070539
Time Collected: 07/20/10 07:49
Time Submitted: 07/20/10 15:58

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	BRL	mg/kg dry	8.4	1.4	1	*8015C	7/28/10 20:52	GRR	P0G0567
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*59 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**48**	**mg/kg dry**	**7.1**	**0.92**	**50**	***8015C**	**7/28/10 13:38**	**HPE**	**P0G0574**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*105 %*		*55-129*	
General Chemistry Parameters									
% Solids	**82.9**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/27/10 14:45**	**JAB**	**P0G0564**

Kleinfelder SE, Inc. (NCDOT Project)
Attn: John Stewart
313 Gallimore Dairy Rd.
Greensboro, NC 27409

Project: NCDOT Parcel #119

Project No.: WBS# 34749.1.1
Sample Matrix: Solid

Client Sample ID: B-3 (2-4)
Prism Sample ID: 0070539-03
Prism Work Order: 0070539
Time Collected: 07/20/10 07:56
Time Submitted: 07/20/10 15:58

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	BRL	mg/kg dry	8.1	1.3	1	*8015C	7/28/10 22:03	GRR	P0G0567
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*84 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**24**	**mg/kg dry**	**4.2**	**0.54**	**50**	***8015C**	**7/28/10 14:09**	**HPE**	**P0G0574**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*100 %*		*55-129*	
General Chemistry Parameters									
% Solids	**86.3**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/27/10 14:45**	**JAB**	**P0G0564**

Kleinfelder SE, Inc. (NCDOT Project)
Attn: John Stewart
313 Gallimore Dairy Rd.
Greensboro, NC 27409

Project: NCDOT Parcel #119

Project No.: WBS# 34749.1.1
Sample Matrix: Solid

Client Sample ID: B-4 (0-2)
Prism Sample ID: 0070539-04
Prism Work Order: 0070539
Time Collected: 07/20/10 08:05
Time Submitted: 07/20/10 15:58

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	BRL	mg/kg dry	8.4	1.4	1	*8015C	7/28/10 22:38	GRR	P0G0567
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*86 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**14**	**mg/kg dry**	**4.6**	**0.60**	**50**	***8015C**	**7/28/10 14:41**	**HPE**	**P0G0574**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*100 %*		*55-129*	
General Chemistry Parameters									
% Solids	**83.0**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/27/10 14:45**	**JAB**	**P0G0564**

Kleinfelder SE, Inc. (NCDOT Project)
Attn: John Stewart
313 Gallimore Dairy Rd.
Greensboro, NC 27409

Project: NCDOT Parcel #119

Project No.: WBS# 34749.1.1
Sample Matrix: Solid

Client Sample ID: B-5 (10-12)
Prism Sample ID: 0070539-05
Prism Work Order: 0070539
Time Collected: 07/20/10 08:36
Time Submitted: 07/20/10 15:58

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	BRL	mg/kg dry	8.9	1.4	1	*8015C	7/28/10 23:14	GRR	P0G0567
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*73 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	BRL	mg/kg dry	5.4	0.70	50	*8015C	7/28/10 15:12	HPE	P0G0574
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*103 %*		*55-129*	
General Chemistry Parameters									
% Solids	**78.6**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/27/10 14:45**	**JAB**	**P0G0564**

Kleinfelder SE, Inc. (NCDOT Project)
Attn: John Stewart
313 Gallimore Dairy Rd.
Greensboro, NC 27409

Project: NCDOT Parcel #119

Project No.: WBS# 34749.1.1
Sample Matrix: Solid

Client Sample ID: B-6 (2-4)
Prism Sample ID: 0070539-06
Prism Work Order: 0070539
Time Collected: 07/20/10 08:59
Time Submitted: 07/20/10 15:58

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	BRL	mg/kg dry	8.9	1.4	1	*8015C	7/28/10 23:50	GRR	P0G0567
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*82 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**17**	**mg/kg dry**	**4.6**	**0.60**	**50**	***8015C**	**7/28/10 15:43**	**HPE**	**P0G0574**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*93 %*		*55-129*	
General Chemistry Parameters									
% Solids	**78.6**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/27/10 14:45**	**JAB**	**P0G0564**

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Kleinfelder SE, Inc. (NCDOT Project)
Attn: John Stewart
313 Gallimore Dairy Rd.
Greensboro, NC 27409

Project: NCDOT Parcel #119

Project No.: WBS# 34749.1.1
Sample Matrix: Solid

Client Sample ID: B-7 (4-6)
Prism Sample ID: 0070539-07
Prism Work Order: 0070539
Time Collected: 07/20/10 09:20
Time Submitted: 07/20/10 15:58

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	BRL	mg/kg dry	8.3	1.3	1	*8015C	7/29/10 0:25	GRR	P0G0567
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*87 %*		*49-124*	
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**11**	**mg/kg dry**	**6.1**	**0.79**	**50**	***8015C**	**7/28/10 16:15**	**HPE**	**P0G0574**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*123 %*		*55-129*	
General Chemistry Parameters									
% Solids	**84.5**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/27/10 14:45**	**JAB**	**P0G0564**

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

Kleinfelder SE, Inc. (NCDOT Project)
Attn: John Stewart
313 Gallimore Dairy Rd.
Greensboro, NC 27409

Project: NCDOT Parcel #119

Project No.: WBS# 34749.1.1
Sample Matrix: Solid

Client Sample ID: B-8 (4-6)
Prism Sample ID: 0070539-08
Prism Work Order: 0070539
Time Collected: 07/20/10 09:36
Time Submitted: 07/20/10 15:58

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Diesel Range Organics by GC/FID									
Diesel Range Organics	**2800**	**mg/kg dry**	**45**	**7.3**	**5**	***8015C**	**7/29/10 1:00**	**GRR**	**P0G0567**
			Surrogate			Recovery		Control Limits	
			o-Terphenyl			*1120 %*		*49-124*	*Aa*
Gasoline Range Organics by GC/FID									
Gasoline Range Organics	**19**	**mg/kg dry**	**4.8**	**0.62**	**50**	***8015C**	**7/28/10 16:46**	**HPE**	**P0G0574**
			Surrogate			Recovery		Control Limits	
			a,a,a-Trifluorotoluene			*89 %*		*55-129*	
General Chemistry Parameters									
% Solids	**77.8**	**% by Weight**	**0.100**	**0.100**	**1**	***SM2540 G**	**7/27/10 14:45**	**JAB**	**P0G0564**

449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543
Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409

Kleinfelder SE, Inc. (NCDOT Project)
Attn: John Stewart
313 Gallimore Dairy Rd.
Greensboro, NC 27409

Project: NCDOT Parcel #119

Project No: WBS# 34749.1.1

Prism Work Order: 0070539
Time Submitted: 7/20/10 3:58:00PM

Gasoline Range Organics by GC/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0574 - 5035										
Blank (P0G0574-BLK1)				Prepared & Analyzed: 07/28/10						
Gasoline Range Organics	BRL	5.0	mg/kg wet							
Surrogate: a,a,a-Trifluorotoluene	*4.65*		*mg/kg wet*	*5.00*		*93*	*55-129*			
LCS (P0G0574-BS1)				Prepared & Analyzed: 07/28/10						
Gasoline Range Organics	42.3	5.0	mg/kg wet	50.0		85	67-116			
Surrogate: a,a,a-Trifluorotoluene	*5.30*		*mg/kg wet*	*5.00*		*106*	*55-129*			
LCS Dup (P0G0574-BSD1)				Prepared & Analyzed: 07/28/10						
Gasoline Range Organics	42.2	5.0	mg/kg wet	50.0		84	67-116	0.1	200	
Surrogate: a,a,a-Trifluorotoluene	*5.35*		*mg/kg wet*	*5.00*		*107*	*55-129*			
Matrix Spike (P0G0574-MS1)		**Source: 0070539-01**		Prepared & Analyzed: 07/28/10						
Gasoline Range Organics	61.0	6.1	mg/kg dry	61.2	BRL	100	57-113			
Surrogate: a,a,a-Trifluorotoluene	*7.22*		*mg/kg dry*	*6.12*		*118*	*55-129*			
Matrix Spike Dup (P0G0574-MSD1)		**Source: 0070539-01**		Prepared & Analyzed: 07/28/10						
Gasoline Range Organics	61.6	6.1	mg/kg dry	61.2	BRL	101	57-113	1	23	
Surrogate: a,a,a-Trifluorotoluene	*7.28*		*mg/kg dry*	*6.12*		*119*	*55-129*			

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Kleinfelder SE, Inc. (NCDOT Project)
Attn: John Stewart
313 Gallimore Dairy Rd.
Greensboro, NC 27409

Project: NCDOT Parcel #119

Project No: WBS# 34749.1.1

Prism Work Order: 0070539
Time Submitted: 7/20/10 3:58:00PM

Diesel Range Organics by GC/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P0G0567 - 3545A										
Blank (P0G0567-BLK1)				Prepared: 07/27/10 Analyzed: 07/28/10						
Diesel Range Organics	BRL	7.0	mg/kg wet							
Surrogate: o-Terphenyl	*1.25*		*mg/kg wet*	*1.60*		*78*	*49-124*			
LCS (P0G0567-BS1)				Prepared: 07/27/10 Analyzed: 07/28/10						
Diesel Range Organics	59.0	7.0	mg/kg wet	79.7		74	55-109			
Surrogate: o-Terphenyl	*1.77*		*mg/kg wet*	*1.59*		*111*	*49-124*			
LCS Dup (P0G0567-BSD1)				Prepared: 07/27/10 Analyzed: 07/28/10						
Diesel Range Organics	65.1	7.0	mg/kg wet	79.7		82	55-109	10	200	
Surrogate: o-Terphenyl	*1.88*		*mg/kg wet*	*1.59*		*118*	*49-124*			

Sample Extraction Data

Prep Method: 3545A

Lab Number	Batch	Initial	Final	Date
0070539-01	P0G0567	25.1 g	1 mL	07/27/10
0070539-02	P0G0567	24.99 g	1 mL	07/27/10
0070539-03	P0G0567	25.18 g	1 mL	07/27/10
0070539-04	P0G0567	25.07 g	1 mL	07/27/10
0070539-05	P0G0567	25.04 g	1 mL	07/27/10
0070539-06	P0G0567	25.09 g	1 mL	07/27/10
0070539-07	P0G0567	25.01 g	1 mL	07/27/10
0070539-08	P0G0567	25 g	1 mL	07/27/10

Prep Method: 5035

Lab Number	Batch	Initial	Final	Date
0070539-01	P0G0574	7.7 g	5 mL	07/28/10
0070539-02	P0G0574	4.25 g	5 mL	07/28/10
0070539-03	P0G0574	6.93 g	5 mL	07/28/10
0070539-04	P0G0574	6.5 g	5 mL	07/28/10
0070539-05	P0G0574	5.88 g	5 mL	07/28/10
0070539-06	P0G0574	6.87 g	5 mL	07/28/10
0070539-07	P0G0574	4.89 g	5 mL	07/28/10
0070539-08	P0G0574	6.71 g	5 mL	07/28/10

NO PREP

Lab Number	Batch	Initial	Final	Date
0070539-01	P0G0564	30 g	30 mL	07/27/10
0070539-02	P0G0564	30 g	30 mL	07/27/10
0070539-03	P0G0564	30 g	30 mL	07/27/10
0070539-04	P0G0564	30 g	30 mL	07/27/10
0070539-05	P0G0564	30 g	30 mL	07/27/10
0070539-06	P0G0564	30 g	30 mL	07/27/10
0070539-07	P0G0564	30 g	30 mL	07/27/10
0070539-08	P0G0564	30 g	30 mL	07/27/10

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CHAIN OF CUSTODY RECORD

PRISM LABORATORIES, INC. | Full-Service Analytical & Environmental Solutions

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

PAGE 1 OF 1 QUOTE # TO ENSURE PROPER BILLING:

Project Name: NCDOT - Parcel 119

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: John Stewart

Address: Same

Client Company Name: Kleinfelder

Report To/Contact Name: John Stewart

Reporting Address: 313 Gallimore Dairy Rd. Greensboro, NC 27409

Phone: 336-668-0883 Fax (Yes) (No):

Email (Yes) (No) Email Address: JMStewart@

EDD Type: PDF X Excel ___ Other Kleinfelder.com

Site Location Name: Parcel 119

Site Location Physical Address: Charlotte, NC

Purchase Order No./Billing Reference

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

"Working Days" ☐ 6-9 Days ☒ Standard 10 days ☐ Rush Work Must Be Pre-Approved

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)

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp 4.1	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd WOUT HEADSPACE?			✓
PROPER CONTAINERS used?	✓		

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NELAC ___ USACE ___ FL ___ NC ___ SC ___ OTHER ___ N/A ___

Water Chlorinated: YES ___ NO X

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	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED GRO	ANALYSES REQUESTED DRO	ANALYSES REQUESTED	ANALYSES REQUESTED	ANALYSES REQUESTED	ANALYSES REQUESTED	REMARKS	PRISM LAB ID NO.
B-1(2-4)	7-20-10	0738	SO		4		Methanol	X	X						01
B-2(2-4)		0749	SO		4			X	X						02
B-3(2-4)		0756	SO		4			X	X						03
B-4(0-2)		0805	SO		4			X	X						04
B-5(10-12)		0836	SO		4			X	X						05
B-6(2-4)		0859	SO		4			X	X						06
B-7(4-6)		0920	SO		4			X	X						07
B-8(4-6)		0936	SO		4			X	X						08

Sampler's Signature: Tina M Stewart Sampled By (Print Name) TINA M STEWART Affiliation Kleinfelder

PRESS DOWN FIRMLY - 3 COPIES

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)	Received By: (Signature)	7/20/10	1447
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date 7-20-10	1447

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.

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

COC Group No. 0070539

Additional Comments: WBS# 34749.1.1

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