

December 5, 2016

Mr. Terry Fox, L.G.
North Carolina Department of Transportation
Geotechnical Engineering Unit
1589 Mail Service Center
Raleigh, North Carolina 27699-1589

Reference: Preliminary Site Assessment Revision 1

6157 Crystal Drive LLC Property (Parcel #72)

6605 Raeford Road

Fayetteville, Cumberland County, North Carolina

State Project: U-4405 WBS Element 39049.1.1

SIES Project No. 2016.0054.NDOT

Dear Mr. Fox:

Solutions-IES, Inc., (SIES) 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 September 26, 2016, and the North Carolina Department of Transportation's (NCDOT's) Notice to Proceed dated September 26, 2016. Activities associated with the assessment consisted of conducting a geophysical investigation, collecting soil samples for analysis, and reviewing applicable North Carolina Department of Environmental Quality (NCDEQ) 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 6157 Crystal Drive LLC Property (Parcel #72) is located at 6605 Raeford Road in Fayetteville, Cumberland County, North Carolina. The property is situated on the south side of Raeford Road in the southwest quadrant of the intersection of Raeford Road and Strickland Bridge Road (**Figure 1**). The property consists of an active gas station and convenience store (Circle K). Based on a review of on-line UST registry information, three gasoline underground storage tanks (USTs) were reportedly installed on the property in 1986.

An asphalt parking area surrounds the building on north and east sides and extends almost to the property boundaries. A detached canopy with two dispensers is located at the northern corner of the building, and the three USTs are located at the entrance to the eastern side of the property (noted as U/G Tank on **Figure 2**). The proposed easement has not been marked at the site, but the NCDOT plan sheet shows the easement as potentially impacting the canopy and one UST.

On the basis of the presence of the gas station and the proximity of the USTs to the proposed easement, the NCDOT requested a Preliminary Site Assessment for the right-of-way and proposed easement. The scope of work as defined in the Request for Technical and Cost Proposal was to evaluate the site with respect to the presence of known and unknown USTs, and to assess where contamination exists on the right-of-way/proposed easement. An estimate of the quantity of impacted soil was to be provided, should impacted soils be encountered.

SIES reviewed the on-line NCDEQ Incident Management database and Incident Number 23062 was assigned to the site. A further file review regarding the incident from the NCDEQ Fayetteville Regional Office indicated that a release was discovered from a gasoline UST in March 2001. As a convenience to the reader, relevant excerpts from the file documents are presented in Attachment A and the file reports without laboratory data are added to the end of this report. A Phase II Limited Site Assessment was conducted and soil and groundwater contamination was confirmed. Free product was noted in both the soil and groundwater. Groundwater was encountered at 19 feet below ground surface (ft bgs). Based on the Limited Site Assessment findings, the site was assigned a high-risk groundwater classification because of nearby water supply wells. Subsequently, aggressive fluid vapor recovery was conducted over a period of one year, and 20,157 gallons of contaminated groundwater, 2,998 pounds of petroleum vapors, and 1,882 gallons of free product were recovered. A Comprehensive Site Assessment (CSA) was completed in April 2003. During the course of the investigation, 13 monitoring wells and three recovery wells were installed to assess the site. Of these wells, the three recovery wells and four monitoring wells contained approximately 0.5 feet of free product. One off-site monitoring well to the east contained one foot of product. None of the borings advanced for the wells installed for the CSA encountered free product in the soil. The CSA concluded that the extent of contamination was established on all sides except the east. Landowner access issues prevented further delineation in that direction. The report also recommended that a Corrective Action Plan be prepared for the site; however, no such document was available in the NCDEQ files.

In March 2012, Enviroassessments conducted a Phase II Environmental Site Assessment (ESA) in relation to a pending real estate transaction. Eight soil samples and three groundwater samples were collected from various areas of the site. With the exception of one soil sample, no total petroleum hydrocarbons diesel or gasoline range organics (GRO/DRO) were detected above the applicable action level. One soil sample at a depth of four feet from a boring that may be within the NCDOT right-of-way contained DRO at a concentration of 47.6 milligrams per kilogram (mg/kg) and GRO at a concentration of 115 mg/kg. The GRO is above the current action level of 50 mg/kg. Groundwater results indicated the presence of petroleum compounds.

From January 2008 to May 2015 (the latest groundwater monitoring report in the files) Withers & Ravenel (W&R) conducted groundwater monitoring events at the site. According to the Active Remediation Monitoring Report, free product continues to be observed periodically in the recovery wells and two monitoring wells. Groundwater samples from wells with no free product contain petroleum compounds above the a 15A NCAC 2L standards.

SIES also examined the UST registration database to obtain UST ownership information. According to the database, the USTs on the property were operated under Facility Number 00-0-000012307. The active USTs include three 10,000-gallon gasoline tanks. The owner and operator of the tanks are listed as follows:

Owner
Circle K Stores Inc.
2440 Whitehall Park Drive, Ste 800
Charlotte, NC 28273

Operator Circle K 2720486 6605 Raeford Road Fayetteville, NC 28304

Geophysical Survey

Prior to SIES' mobilization to the site, Pyramid Environmental & Engineering of Greensboro, NC (Pyramid) conducted a geophysical survey to confirm the presence of the known USTs in the right-of-way/proposed easement and determine if additional USTs were present in that area. The geophysical survey consisted of an electromagnetic survey using a Geonics EM61 time-domain electromagnetic induction meter to locate buried metallic objects, and ground penetrating radar using a Geophysical Survey Systems Inc. Utility Scan DF with a dual frequency 300/800 MHz antenna. The instruments were used specifically to locate USTs.

A survey grid was laid out along the right-of-way/proposed easement with the X-axis oriented approximately parallel to Raeford Road and the Y-axis oriented approximately perpendicular to Raeford Road. The grid was positioned to cover the entire right-of-way/proposed easement, as shown on **Figure 2** of the geophysical survey report in **Attachment B**.

The survey lines were spaced five feet apart and magnetic data were collected continuously along each survey line with a data logger. After collection, the data were reviewed in the field with graphical computer software. Following the electromagnetic survey, a ground penetrating radar (GPR) survey was conducted to further evaluate any significant metallic anomalies.

Access was available to all areas of the property, and several anomalies were detected with the geophysical survey. The anomalies were generally attributed to metallic debris, underground utilities, signage, or USTs. One anomaly was detected in the UST area that Pyramid interpreted as known USTs,

based on the NCDOT criteria. Pyramid's detailed report of findings and interpretations is presented in **Attachment B**.

Site Assessment Activities

X On October 24, 2016, SIES mobilized to the site to conduct a Geoprobe® direct-push investigation to evaluate subsurface soil conditions on the property. As directed by the NCDOT, the Geoprobe® borings were terminated at 10 feet below ground surface (ft bgs) unless the location was in the vicinity of a known or suspected UST, which resulted in a boring terminated at 12 ft bgs. Ten direct-push holes (72-SB-1 through 72-SB-10) were advanced throughout the right-of-way/proposed easement (**Figure 2**). The soil boring logs are included as **Attachment C**. Borings 72-SB-1 through 72-SB-4 were located to evaluate the subsurface conditions in the right-of-way/easement along Raeford Road, and borings 72-SB-5 through 72-SB-10 were located to evaluate the conditions on the right-of-way/proposed easement along the west side of Strickland Bridge Road (see photos in **Attachment D**).

Continuous sampling using a Geoprobe® resulted in generally good recovery of soil samples from the direct-push holes. Soil samples were collected and contained in four-foot long acetate sleeves inside the direct-push Macro-Core® sampler. Each of the sleeves was divided into two-foot long sections for soil sample screening. Soil from each two-foot interval was placed in a resealable plastic bag and the bag was set aside for volatilization of organic compounds from the soil to the bag headspace. A photoionization detector (PID) probe was inserted into the bag and the reading was recorded (**Table 1**).

If the PID concentrations in a boring were consistently low, one sample from the bottom interval was selected for analysis. If the PID concentrations were elevated, samples at the elevated and bottom intervals were selected for analyses. The PID results are summarized in Table 1.

The selected soil samples were submitted to an on-site mobile laboratory for analysis of total petroleum hydrocarbons (TPH) diesel range organics (DRO) and gasoline range organics (GRO) using ultraviolet fluorescence (UVF) methodology. Each boring was backfilled with bentonite and drill cuttings to the surface after completion.

The lithology encountered by the direct-push samples was generally consistent throughout the site. The ground surface was covered with about 0.5 feet of asphalt or topsoil. Below this surface cover to a depth of about two feet was a mottled brown and red clayey fine-grained sand. Underlying the sand was a mottled brown and red sandy clay. Groundwater was observed in the three 12-ft deep borings at a depth of about 10.5 feet. No bedrock was noted in any of the borings.

According to the 1985 Geologic Map of North Carolina, the site is within of Coastal Plain Physiographic Province in North Carolina near the contact between the Cretaceous Black Creek and Middendorf Formations. The strata of the Black Creek Formation consist of gray to black clay, thin lenses of fine-grained sand and thick lenses of cross-bedded sand. The lithology may also include glauconite and fossils. In comparison, the Middendorf Formation consists of sand, sandstone, and mudstone that are laterally discontinuous. The soils observed at the site are consistent with the Middendorf Formation as the parent material.

Analytical Results

The laboratory data are summarized in **Table 1** and the complete report is presented in **Attachment E**. Thirteen soil samples were submitted for analysis (multiple samples were collected from borings 72-SB-7 and 72-SB-10). Of these samples, one contained detectable GRO compounds and seven contained detectable DRO compounds. Soil sample 72-SB-7-8-10 contained 5.5 mg/kg GRO. DRO concentrations ranged from 0.17 to 2.1 mg/kg. The action levels are 50 mg/kg for GRO and 100 mg/kg for DRO¹. None of the soil samples analyzed for this site contained DRO or GRO concentrations above their respective action levels.

Conclusions and Recommendations

A Preliminary Site Assessment was conducted to evaluate the 6157 Crystal Drive LLC Property (Parcel #72) located at 6605 Raeford Road in Fayetteville, Cumberland County, North Carolina. Documents within the NCDEQ UST Section files indicated that a release had occurred at the site. Soil and groundwater contamination and free product were detected. One soil sample collected as part of a Phase II ESA² contained GRO above the current action level. The boring appears to be under the north side of the canopy, but the location of the boring is not clearly identified. It cannot be confirmed that the boring is not within the right-of-way. A recent monitoring report³ found free product at the site.

A geophysical survey conducted at the site located the known USTs on the east side of the property. No other probable/possible UST's were identified. Ten soil borings were advanced to evaluate the subsurface soil conditions along the right-of-way/proposed easement. None of the analyzed soil samples detected GRO or DRO concentrations above their respective action levels.

¹ NCDEQ, Guidelines for North Carolina Action Limits for Total Petroleum Hydrocarbons (TPH), July 26, 2016,

² Enviroassessments, 2012, Phase II Environmental Site Assessment, Kangaroo Station, 6605 Raeford Road

³ Withers & Ravenel, 2015, Active Remediation Monitoring Report, 6605 Raeford Road

Free product and associated soil contamination have been detected at the south and of the grassy area along Strickland Road just inside the proposed right-of-way. Boring 72-SB-8 was drilled in this location but detected neither GRO all nor DRO above method detection limits at 8-10 ft bgs. However, it is possible that some soil contamination exists in the smear zone above the water table in this location.

The UVF analytical results (**Table 1**) of the soil samples collected on October 25, 2016 indicate that none of the soil samples contained DRO or GRO concentrations above the action level. Therefore, no estimate of the volume of soil requiring possible remediation was made.

SIES appreciates the opportunity to work with the NCDOT on this project. Because compounds were detected above the method detection limit in the soil samples, SIES recommends that a copy of this report be submitted to the Division of Waste Management, UST Section, in the Fayetteville Regional Office. If you have any questions, please contact us at (919) 873-1060.

Sincerely,

Michael W. Branson, P.G.

Project Manager

Attachments

John Palmer, P.G. Senior Hydrogeologist

Not considered Final unless all signatures are completed

TABLE 1

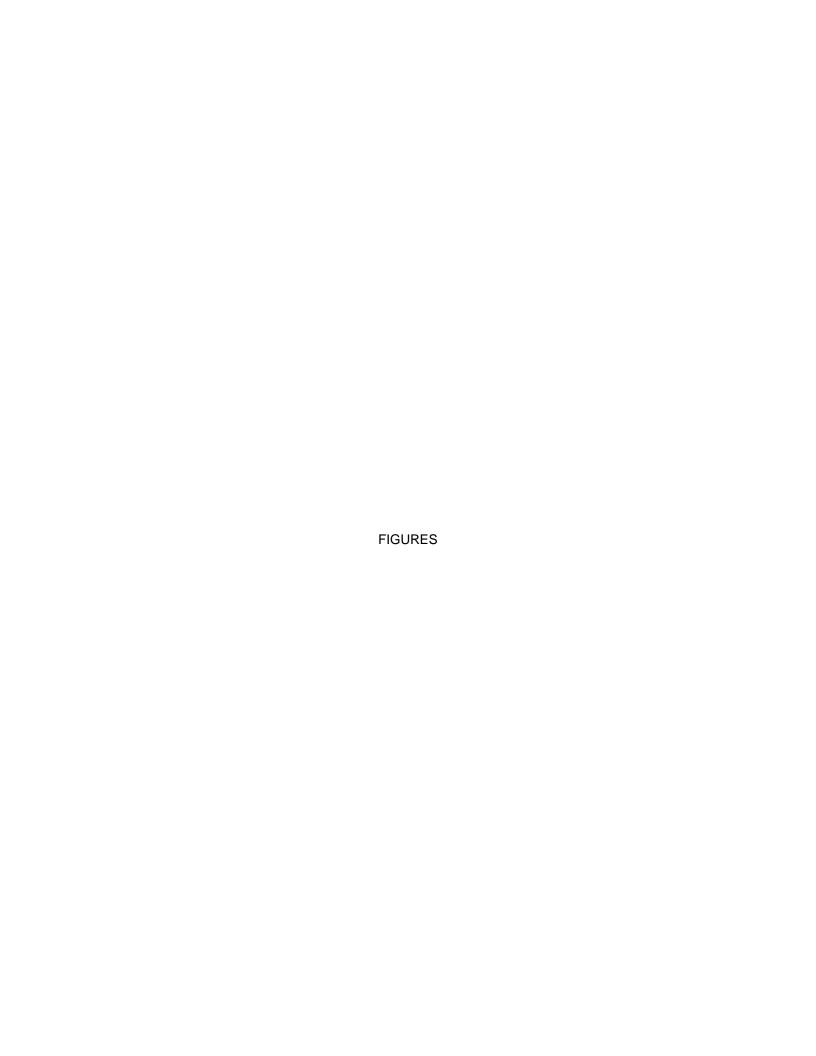
SOIL FIELD SCREENING AND ANALYTICAL RESULTS 6157 CRYSTAL DRIVE LLC PROPERTY (PARCEL #72) FAYETTEVILLE, CUMBERLAND COUNTY, NORTH CAROLINA STATE PROJECT: U-4405

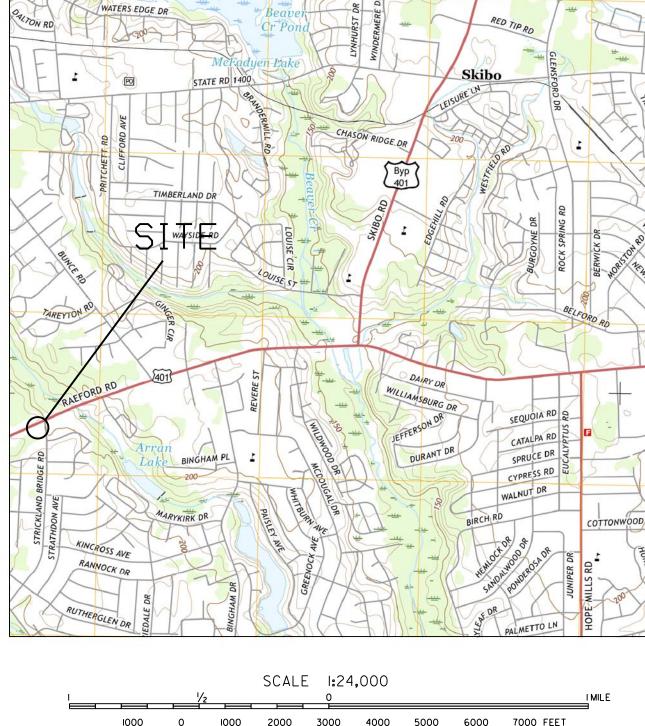
WBS ELEMENT 39049.1.1 SIES PROJECT NO. 2016.0054.NDOT

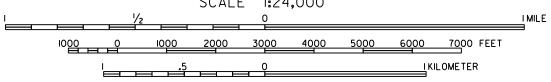
SAMPLE ID	DEPTH (ft)	PID READING	SAMPLE ID		L RESULTS
SAMPLE ID	DEPTH (II)	(ppm)	SAMPLE ID	(mg UVF GRO	UVF DRO
		\	->	50	100
		Action Level (mg/k	9)	50	100
	0 - 2	3.9			
72-SB-1	2 - 4	2.1			
	4 - 6 6 - 8	3.5			
	8 - 10	2.8 4.3	72-SB-1-8-10	<0.19	0.19
	0 - 10		72-3B-1-0-10	<0.19	0.19
	2 - 4	3.3 1.4			
72-SB-2					
12-3D-2	4 - 6 6 - 8	0.9 0.6			
	8 - 10	1.6	72-SB-2-8-10	<0.2	<0.2
	0 - 2	0.2	72-3B-2-6-10	<0.2	<0.2
	2 - 4	2.9			
72-SB-3	4 - 6	0.2			
72-0D-3	6-8	0.3			
	8 - 10	0.3	72-SB-3-8-10	<0.17	2.0
	0 - 2	0.3	.2 35.3-0-10	30.17	2.0
	2 - 4	0			
72-SB-4	4 - 6	0.4			
72 05 4	6-8	0.6			
	8 - 10	2.0	72-SB-4-8-10	<0.24	0.24
	0 - 2	0.2	72 02 10 10	10.21	0.2.
	2 - 4	0.1			
72-SB-5	4 - 6	0.7			
	6 - 8	0.4			
	8 - 10	0.4	72-SB-5-8-10	<0.16	<0.16
	0 - 2	0.4			
	2 - 4	0.5			
72-SB-6	4 - 6	0.9			
	6 - 8	0.3			
	8 - 10	1.2	72-SB-6-8-10	<0.18	<0.18
	0 - 2	0.6			
	2 - 4	0.2			
72-SB-7	4 - 6	18.3	72-SB-7-4-6	<0.14	0.54
12-36-1	6 - 8	6.5	72-SB-7-6-8	<0.56	0.56
	8 - 10	2.2	72-SB-7-8-10	5.5	<0.58
	10 - 12	NS			
	0 - 2	0.8			
	2 - 4	0.2			
72-SB-8	4 - 6	0.1			
	6 - 8	0.2			
	8 - 10	12.7	72-SB-8-8-10	<0.19	<0.19
	0 - 2	0.2			
	2 - 4	0			
72-SB-9	4 - 6	0.3			
	6 - 8	1.4	70.00.00.00	0 :-	0 :-
	8 - 10	15.5	72-SB-9-8-10	<0.17	0.17
	10 - 12	NS 0			
	0 - 2	0			
	2 - 4	0			
72-SB-10	4 - 6	0.2	72 CD 40 C C	-0.0	-0.0
	6 - 8 8 - 10	16.6 20.7	72-SB-10-6-8 72-SB-10-8-10	<0.2 <0.16	<0.2 2.1
	10-12	NS NS	12-30-10-0-10	<0.10	4.1
	.0 12				

- 1) ft feet
- 2) ppm parts per million.
- 3) PID photoionization ionization detector
- 4) mg/kg milligrams per kilogram.
- 5) UVF DRO Diesel range organics by UVF.
- 6) UVF GRO Gasoline range organics by UVF.
 7) Action level based upon NCDEQ memo Guidelines for North Carolina Action Limits for Total Petroleum Hydrocarbons July 29, 2016.
- 8) Soil samples were collected on October 24, 2016.
- 9) NS Not sampled due to groundwater
- 10) **Bold** values are above the detection level.







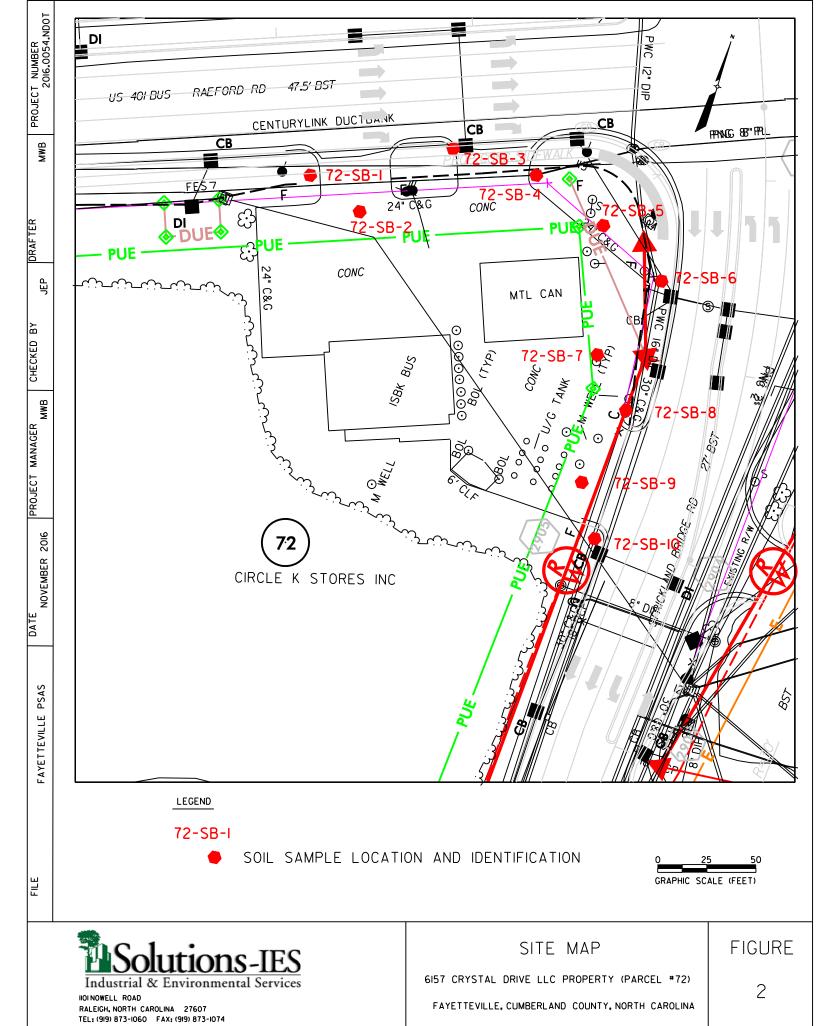


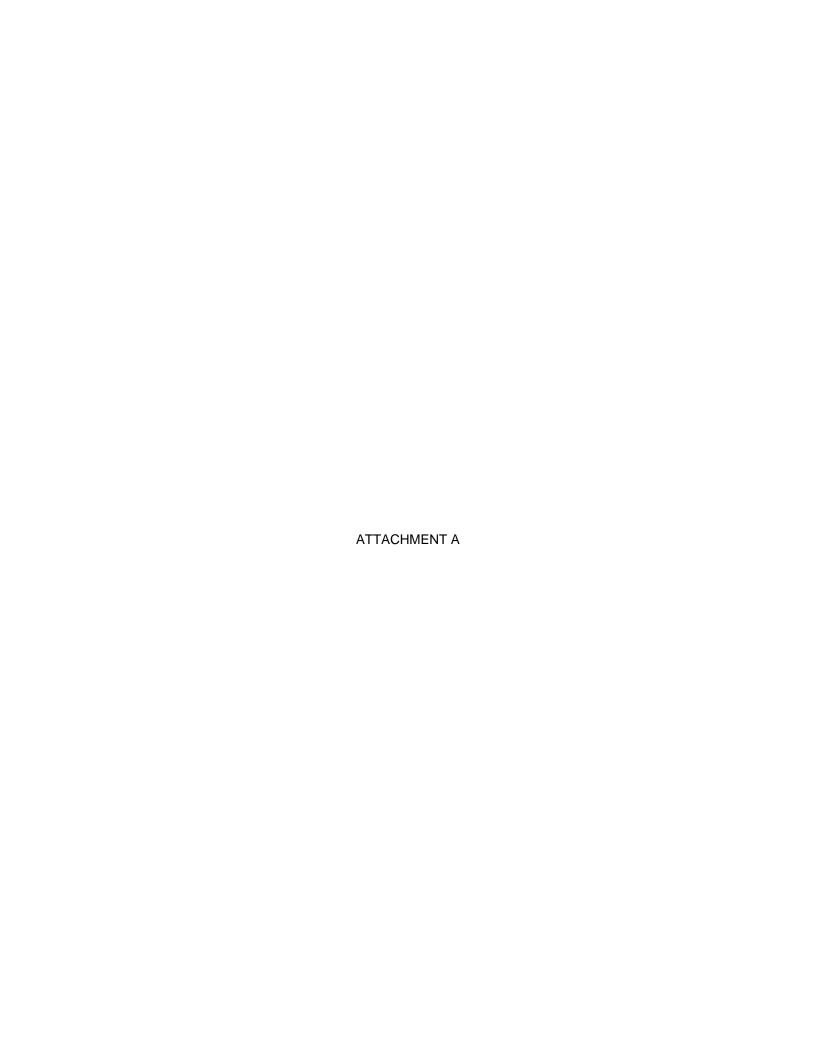
SOURCE: U.S. GEOLOGICAL SURVEY 7.5 MIN QUADRANGLE: FAYETTEVILLE, NC (2016)



VICINITY MAP

6157 CRYSTAL DRIVE LLC PROPERTY (PARCEL #72) FAYETTEVILLE, CUMBERLAND COUNTY NORTH CAROLINA **FIGURE**





SEIEngineering & Geological Services, P.C.

Comprehensive Site Assessment Report

Site Location:

The Pantry #486 6605 Raeford Road Fayetteville, North Carolina Cumberland County Site Owner:
Joseph H. Gillis, et al
P. O. Box 736
Fayetteville, North Carolina 28302

Prepared for:

The Pantry, Inc. P. O. Box 1410 Sanford, North Carolina 27330 (919) 774-6700

Project Number: 501430 Facility ID Number: 0-023655 Incident Number: 23062 Site Priority Ranking: High

Reason for Risk Classification: Water supply well located within 1,000 feet of the source area of the release

General Site Information:

Surrounding Land Use – Commercial/Residential/Undeveloped
Latitude/Longitude – N 35° 2' 24" / W 78° 59' 50"
Release Date – March 21, 2001
Estimated Quantity – Unknown
Cause of Release – Underground storage tank system
UST Information – (3) 10,000-gallon gasoline

Prepared by:

Michael W. Worden, P.G.

NC Licensed Geologist #1891

SEI Engineering and

Geological Services, P.C.

5100 N. I-85 Service Road, Suite 7A Charlotte, North Carolina 28206

April 28, 2003

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DENR - FAYETTEVILLE REGIONAL OFFICE

TABLE B-1

Site History UST System Information

The Pantry #486
6605 Raeford Road
Fayetteville, Cumberland, County, North Carolina
Facility ID Number: 0-023655
Incident Number: 23062
SEI Project Number: 501430

UST ID Number	Product	Capacity (gallons)	Date Installed	Permanent Closure Date Or Currently in Use	Was Release Associated With UST System? (Y/N)
1	Gasoline	10,000	05/06/1986	Currently in Use	Y
2	Gasoline	10,000	05/06/1986	Currently in Use	Y
3	Gasoline	10,000	05/06/1986	Currently in Use	Y

TABLE B-2

Site History UST Owner/Operator Information

The Pantry #486
6605 Raeford Road
Fayetteville, Cumberland, Gounty, North Carolina
Facility ID Number: 0-023655
Incident Number: 23062
SEI Project Number: 501430

UST ID Number	Dates of Ownership / Operation	Name of Owner or Operator	Owner or Operator?			
1	05/06/86 to Present	The Pantry, Inc.	Both			
		Address	Telephone Number			
		Post Office Box 1410 Sanford, North Carolina 27330	(919) 774-6700			
UST ID Number	Dates of Ownership / Operation	Name of Owner or Operator	Owner or Operator?			
2	05/06/86 to Present	The Pantry, Inc.	Both			
		Address	Telephone Number			
		Post Office Box 1410 Sanford, North Carolina 27330	(919) 774-6700			
UST ID Number	Dates of Ownership / Operation	Name of Owner or Operator	Owner or Operator?			
3	05/06/86 to Present	The Pantry, Inc.	Both			
		Address	Telephone Number			
		Post Office Box 1410 Sanford, North Carolina 27330	(919) 774-6700			

TABLE B-3

Soil Sample Analytical Results from Limited Site Assessment

The Pantry #486 6605 Raeford Road

Fayetteville, Cumberland, County, North Carolina

Facility ID Number: 0-023655 Incident Number: 23062 SEI Project Number: 501430

Sample Location	Sample Depth (feet)	Date Sampled	OVA (ppm)	Benzene (µg/kg)	Toluene (µg/kg)	Ethylbenzene (µg/kg)	Total Xylenes (µg/kg)	MTBE (lightg)	CS-C8 Aliphatics (µg/kg)	C9-C12 Aliphatics (ug/kg)	C9-C10 Aromatics (Lg/kg)		
MW-1		03/22/01					Free Product	Present					
RW-1		03/23/01	·				Free Product	Present					
RW-2		03/23/01		Free Product Present									
RW-3		03/23/01		Free Product Present									
		Groundwate sidential MS		5.6 22,000	7,000 3,200,000	240 1,560,000	5,000 32,000,000	920 156,000	72,000 939,000	3,255,000 9,386,000	34,000 469,000		

ppm - parts per million

μg/kg - micrograms per kilogram

BDL - Below detection limits

Bold denotes concentrations above the Soil-to-Groundwater Maximum Soil Contaminant Concentrations (MSCC)

TABLE B-4

Groundwater Analytical Results

The Pantry #486 6605 Raeford Road

Fayetteville, Cumberland, County, North Carolina Facility ID Number: 0-023655

Facility ID Number: 0-023655 Incident Number: 23062 SEI Project Number: 501430

Sample Location	Date Sampled	Benzene (µg/L)	Ethylbenzene (µg/L)	Toluene (μg/L)	Total Xylenes (µg/L)	MTBE (μg/L)	IPE (µg/L)	Lead (µg/L)	EDB (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (µg/L)	
MW-1	04/30/01	1628 1798 1879 1977 1886 1888 1889 1889 1889 1889 1889 1889 1889 1889 1889 1889 1889 1889 1889 1889 18	jeskam komenne, už setykše rykle kotula. V	(a) , লাভাচ - আগত ট্রাকু নির্মিত	Technology	Not Sam	pled – Free	Product P	resent	<u>, a la propertional a </u>	<u>Province States (States and Sta</u>		
	02/26/03	Not Sampled – Free Product Present											
MW-2	04/30/01	Not Sampled - Free Product Present											
	02/26/03	Not Sampled – Free Product Present											
MW-3	04/30/01	4,700	2,400	24,000	14,000	1,900	<1,000	<11	<0.020	38,000	18,000	9,800	
	02/26/03	Not Sampled - Free Product Present											
MW-4	04/30/01	Not Sampled – Free Product Present											
	02/26/03	Not Sampled – Free Product Present											
MW-5	04/30/01	1.2	1.1	5.8	32.9	78	3.7	<11	<0.020	260	49	54	
	02/26/03	120	11	50	160	1,400	<50	<5.0	NA	4,000	620	370	
MW-6	10/16/01	<1.0	<1.0	2.0	4.3	<1.0	<1.0	100	<0.020	<40	<20	29	
	02/26/03	4.3	<1.0	<5.0	12	<5.0	<5.0	5.9	NA	1,200	<100	<100	
MW-7	10/16/01	2.1	2.2	20	10.0	<1.0	<1.0	<11	<0.020	50	<20	<20	
	02/26/03	<1.0	<1.0	<5.0	<3.0	<5.0	<5.0	7.1	NA	<100	<100	<100	
MW-8	10/16/01	7.0	3.6	37	20.9	1.8	<1.0	<11	<0.020	78	<20	36	
	02/26/03	<1.0	<1.0	<5.0	3.1	<5.0	<5.0	<5.0	NA	<100	<100	<100	

TABLE B-4 (Continued)

Groundwater Analytical Results

The Pantry #486 6605 Raeford Road

Fayetteville, Cumberland, County, North Carolina Facility ID Number: 0-023655

Incident Number: 23062 SEI Project Number: 501430

Sample Location	Date Sampled	Benzene (µg/L)	Ethylbenzene (µg/L)	Toluene (µg/L)	Total Xylenes (µg/L)	MTBE (μg/L)	IPE (µg/L)	Lead (µg/L)	EDB (µg/L)	C5-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (µg/L)	C9-C10 Aromatics (μg/L)	
MW-9	10/16/01	5,100	1,900	25,000	9,800	<200	<200	<11	<0.020	37,000	13,000	5,400	
	02/26/03		Not Sampled Free Product Present										
MW-10	10/16/01	68	4.1	150	70	<1.0	<1.0	<11	<0.020	680	73	37	
	02/26/03	410	20	600	240	450	<5.0	5.4	NA	2,700	520	100	
MW-11	03/04/02	Not Sampled Free Product Present											
	02/26/03	Not Sampled – Free Product Present											
MW-12	03/04/02	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<11	<0.020	<40	<20	<20	
	02/26/03	<1.0	<1.0	<5.0	<3.0	<5.0	<5.0	<5.0	NA	<100	<100	<100	
MW-13	03/04/02	<1.0	<1.0	1.3	<3.0	<1.0	<1.0	<11	<0.020	<40	<20	22	
	02/26/03	<1.0	<1.0	<5.0	<3.0	<5.0	<5.0	<5.0	NA	<100	<100	<100	
2L Star		1	29	1,000	530	200	70	15	0.0004	420	4,200	210	
10 x 2L St		10	290	10,000	5,300	2,000	700	150	0.004	4,200	42,000	2,100	
GC	Ls	5,000	29,000	257,500	87,500	200,000	70,000	15,000	NE	NE	NE	NE	

µg/L - micrograms per liter

Bold denotes concentration is greater than the 15A NCAC 2L Standard

NE - Not established

NA - Not analyzed

GCL - Gross Contamination Level

TABLE B-5A

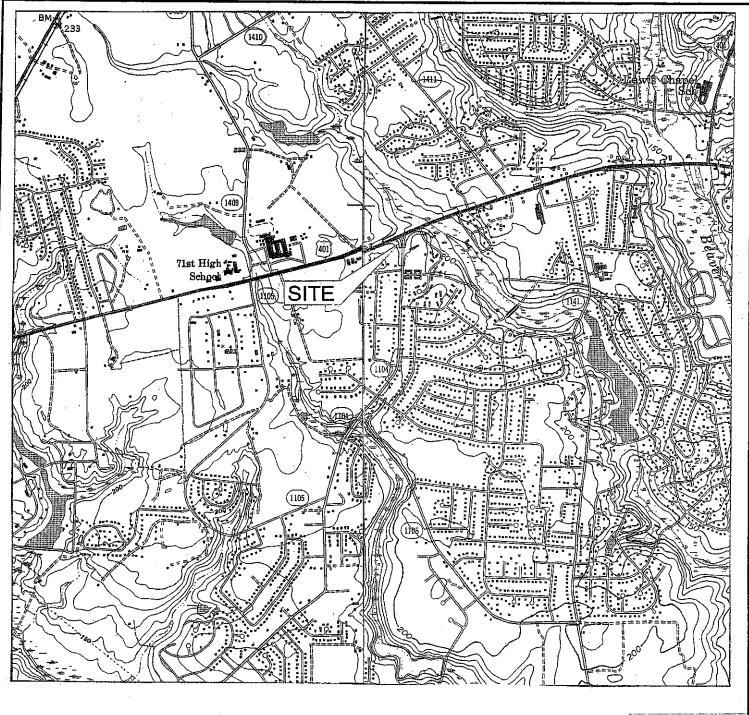
Water Supply Well Information

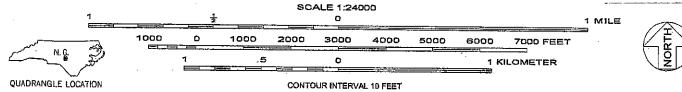
The Pantry #486 6605 Raeford Road

Fayetteville, Cumberland, County, North Carolina Facility ID Number: 0-023655 Incident Number: 23062 SEI Project Number: 501430

Well#	Well Owner	Physical Address	Phone.Number	Well: Use	Well Depth (feet bis)	Type of Well	Well Casing Depth (feet bls)	Well Screen Interval (feet bis)	Distance from source area of release (feet)	Cardinal Direction from release
WW-1	Mary Morton Griffin Heirs 1104 Strickland Bridge Road Fayetteville, NC 28304	880 Strickland Bridge Road Fayetteville, NC 28304	Unk	Potable	Unk	Unk	Unk	Unk	350	S
WW-2	Brookwood Water Corporation 5948 Fisher Road, Ste. 101 Fayetteville, NC 28304	Jet Circle	(910) 867-4486	Potable	Unk	Unk	Unk	Unk	1,400	NE
WW-3	Brookwood Water Corporation 5948 Fisher Road, Ste. 101 Fayetteville, NC 28304	Bostian Drive	(910) 867-4486	Potable	Unk	Unk	Unk	Unk	1,700	s

Unk - Unknown Information





CLIFDALE, N.ºC. SE/4 CLIFDALE 15' QUADRANGLE N3500-W7900/7.5

> 1948 PHOTOREVISED 1982 DMA 5154 II SE-SERIES V842

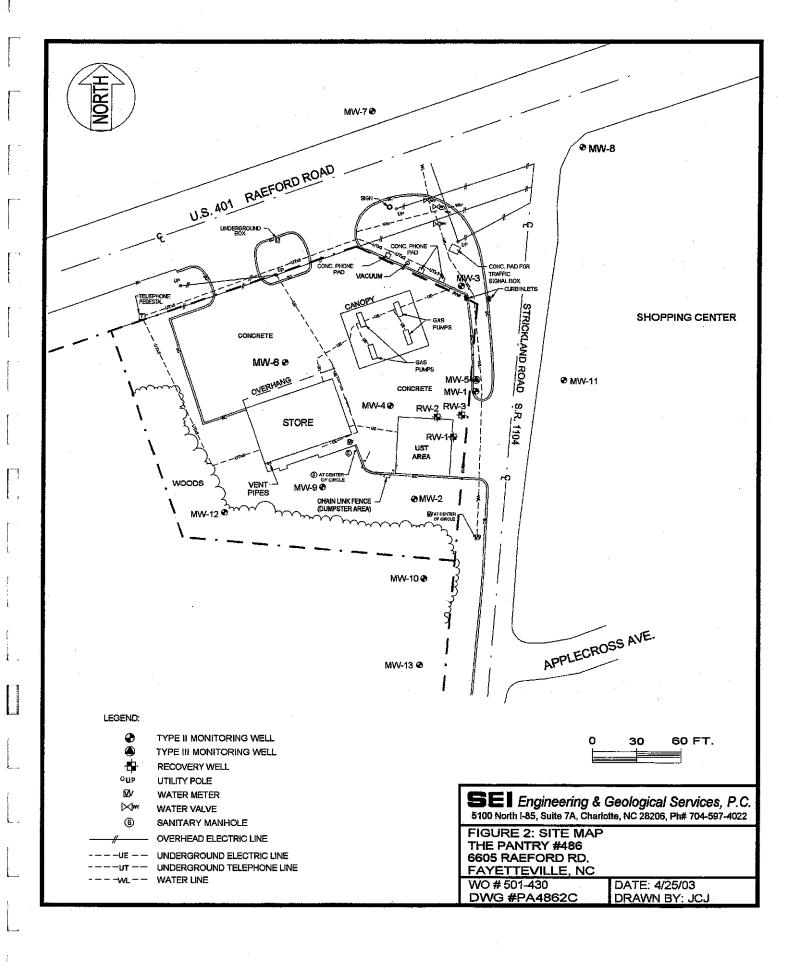
FAYETTEVILLE, N. C.

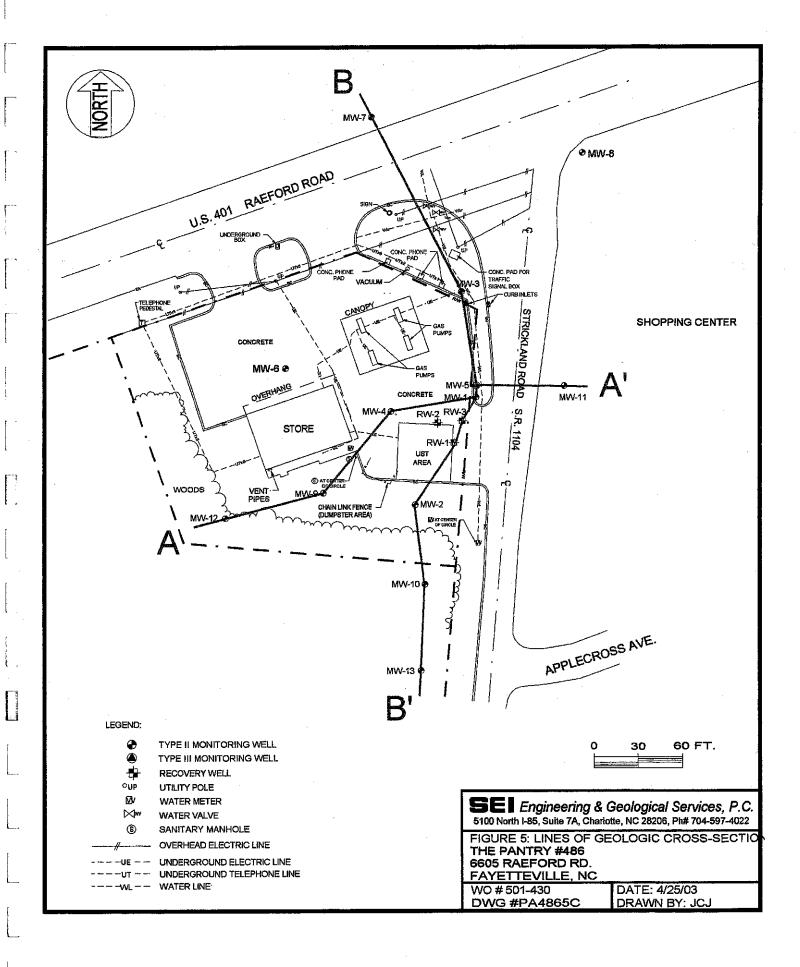
SW/4 FAYETTEVILLE 15' QUADRANGLE 35078-A8-TF-024

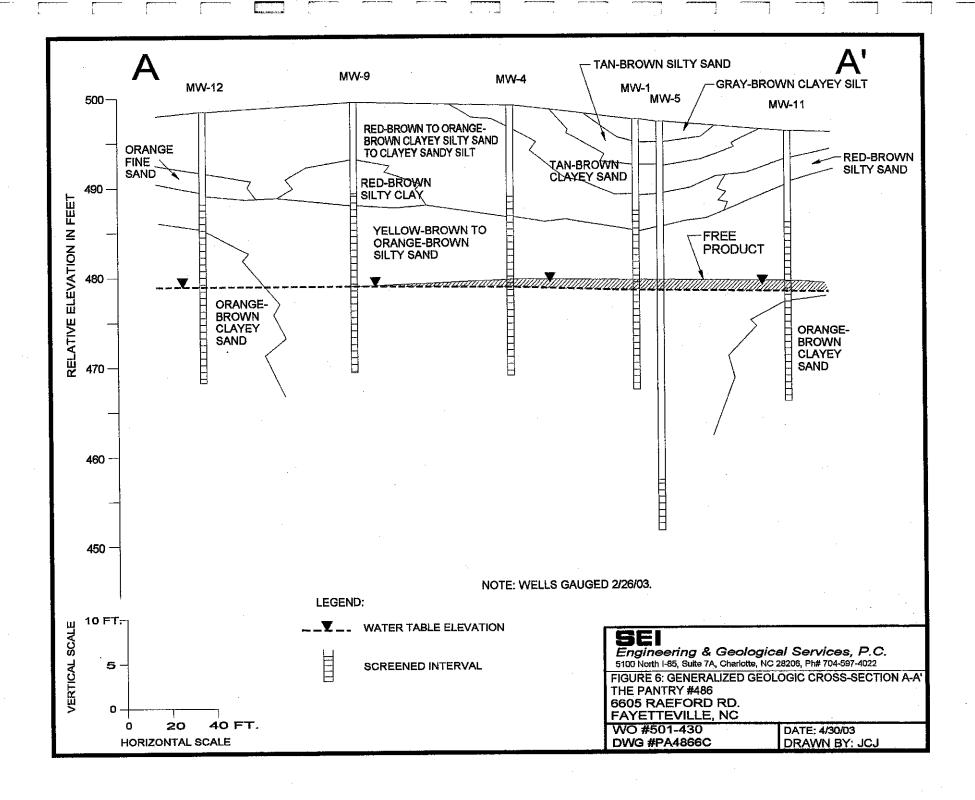
1957 PHOTOREVISED 1987 DMA 5254 III SW-SERIES V842

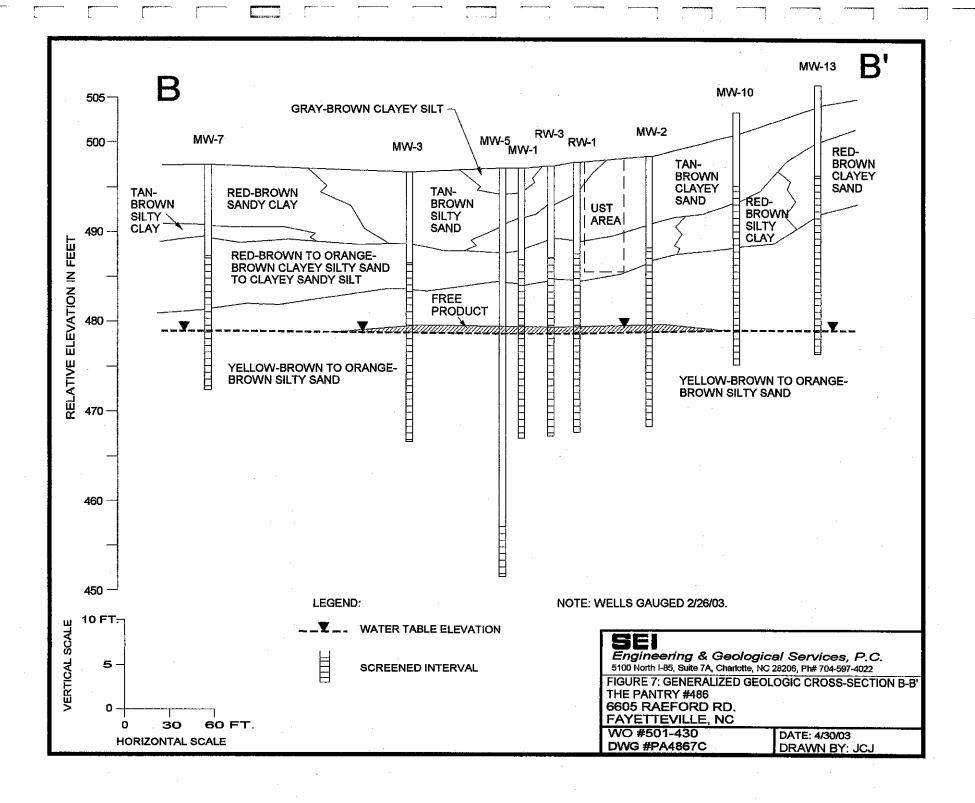
SEI Engineering & Geological Services, P.C. 5100 North I-85, Suite 7A, Charlotte, NC 28206, Ph# 704-597-4022

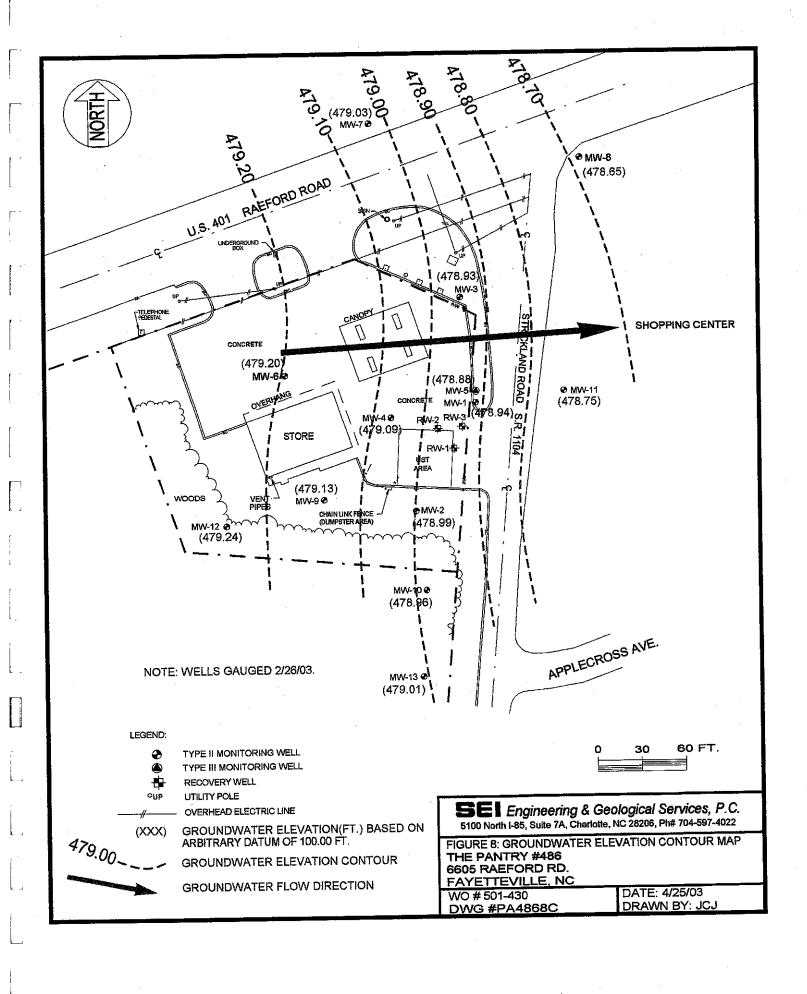
FIGURE 1: USGS QUADRANGLE MAP THE PANTRY #486 6605 RAEFORD ROAD FAYETTEVILLE, NO

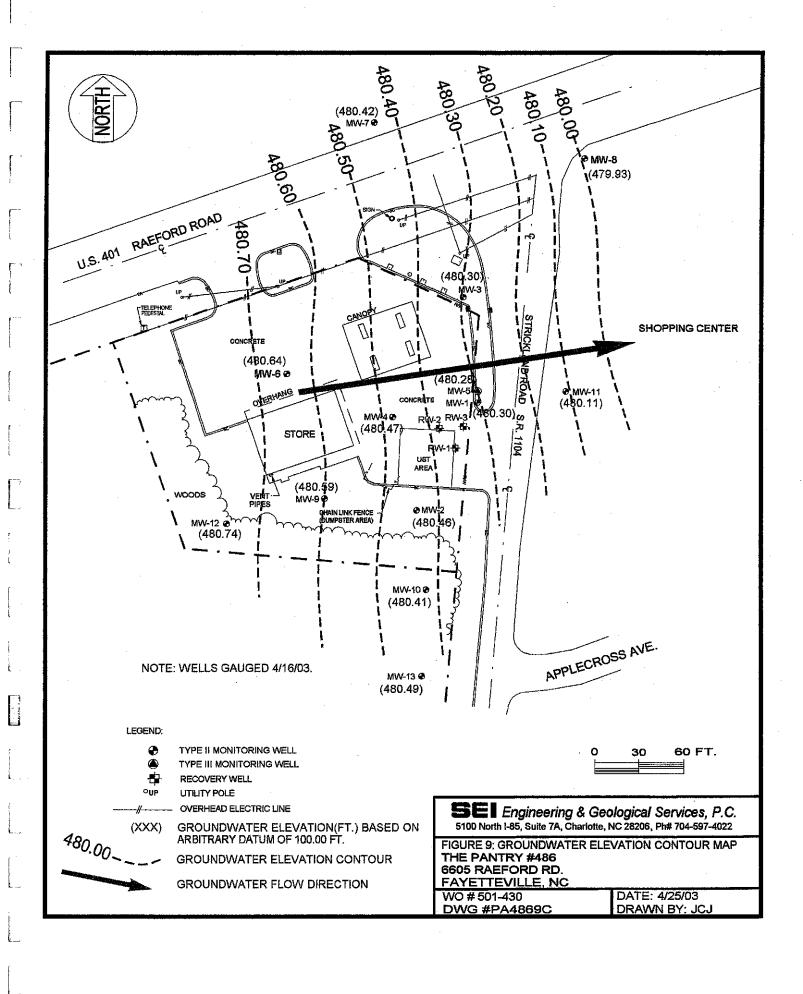


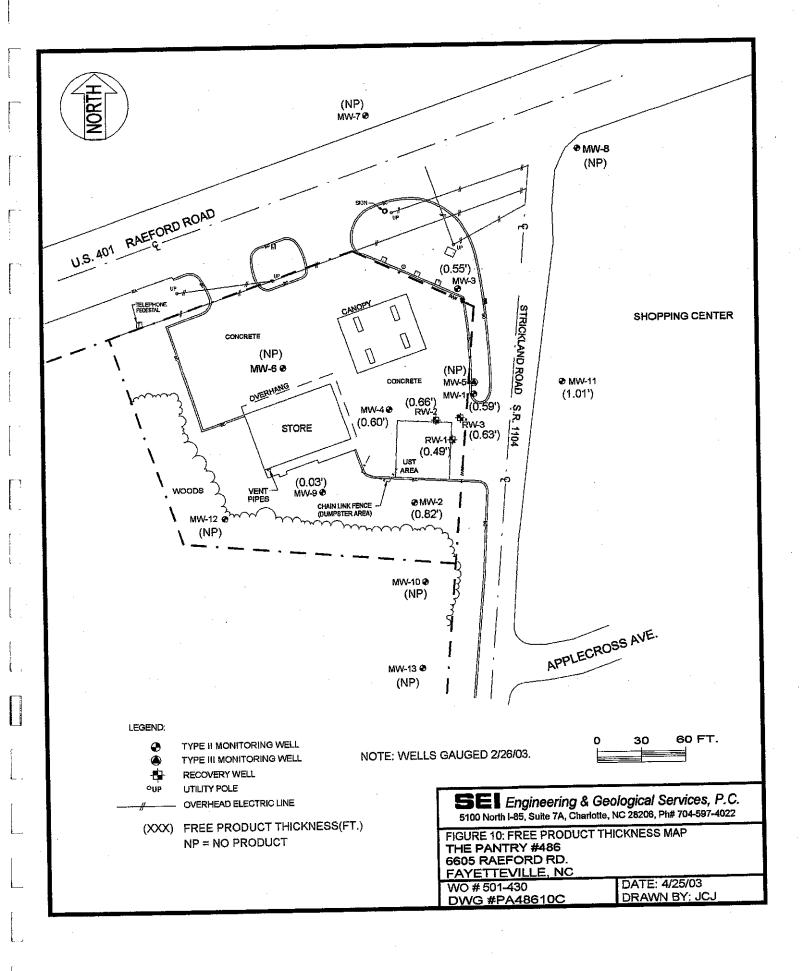














Engineering & Geological Services, P.C.

Limited Site Assessment Report

Site Location:

The Pantry #486 6605 Raeford Road Fayetteville, North Carolina Cumberland County Site Owner:
The Pantry, Inc.
P. O. Box 1410
Sanford, North Carolina 27330

Prepared for:

The Pantry, Inc. P. O. Box 1410 Sanford, North Carolina 27330 (919) 774-6700

Project Number: 501403
Facility ID Number: 0-023655
Incident Number: Pending 23062
Site Priority Ranking: Pending

General Site Information:

Surrounding Land Use – Commercial/Residential/Undeveloped Latitude/Longitude – N 35° 2' 24" / W 78° 59' 50"

Release Date – March 21, 2001

Estimated Quantity – Unknown

Cause of Release – Underground storage tank system

UST Information – (3) 10,000-gallon gasoline

Prepared by:

Gretchen L. Miller, P.G. NC Licensed Geologist #1736 SEI Engineering and

Geological Services, P.C. 5100 I-85 Service Road, Suite 7A Charlotte, North Carolina 28206

TABLE 1

	Groundwater Analytical Results The Pantry#486 6605 Raeford Road Fayetteville, North Carolina Comberland County Project Number: 501403											
Sample Location	Date Sampled	Benzene (HPL)	Ethylbenzene (ug/L)	Foluene (ug/L)	Total Xylenes (1.g.L)	ugği)	resident (p.g.b.)	Lend (mg/E)	EDB (ugl.):	CS.C8 Aliphatics (ug/kg)	C9-C12 Aliphatics. (#g/kg)	C9-C10 Aromatics (tights)
MW-1	04/30/01				1000 PATRICAL PROPERTY OF THE		Free Produc	t Present				
MW-2	04/30/01						Free Produc	t Present				
MW-3	04/30/01	4,700	2,400	24,000	14,000	1,900	BDL	BDL	BDL	38,000	18,000	9,800
MW-4	04/30/01						Free Produc					
MW-5	04/30/01	1.2	1.1	5.8	32,9	78	3.7	BDL	BDL	260	49	54
	ndards	1	29	1,000	530	200	70	15	0.0004	420	4,200	210
	tandards	10	290	10,000	5,300	2,000	700	150	0.004	4,200	42,000	2,100
GC	CLs	5,000	29,000	257,500	87,500	200,000	70,000	15	NE	NE	NE	NE

μg/L - micrograms per liter
BDL – Below detection limits
Bold denotes concentration is greater than the 15A NCAC 2L Standard
GCL - Gross Contamination Level

NE - Not established

TABLE 2

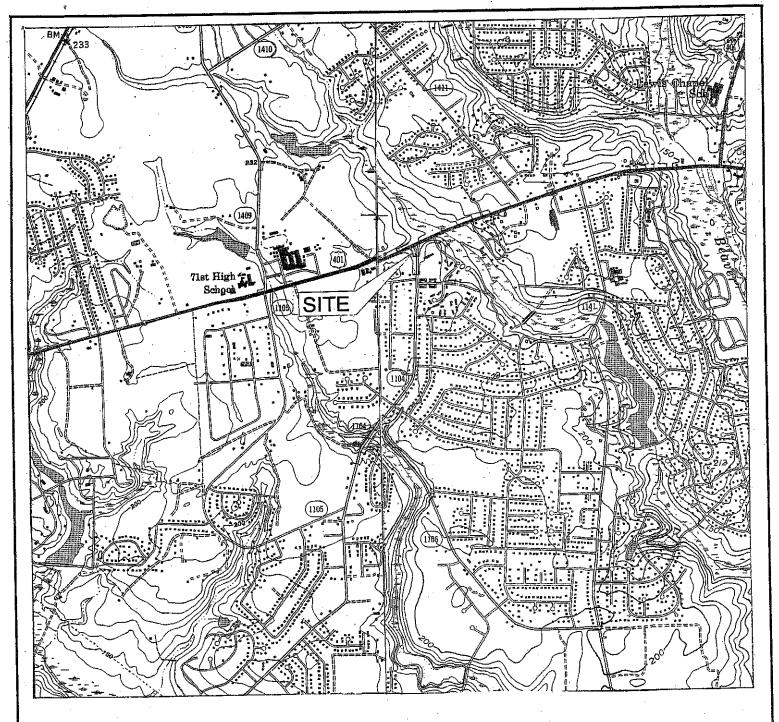
Monitoring Well Construction and Groundwater Elevation Data

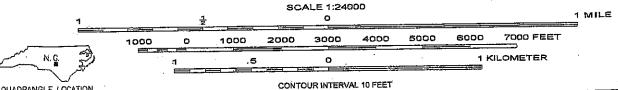
The Pantry #486 6605 Raeford Road Fayetteville, North Carolina **Cumberland County** Project Number: 501403

Well	Date	Total	Screened Interval	Date Gauged	TOC Elevation	Depth to Product	Depth to Groundwater	Groundwater Elevation*
ID :	Installed	Depth (feet)	(feet)	Caugo	(feet)	(feet)	(feet)	(feet)
MW-1	03/22/01	30	10-30	04/30/01	496.98	16.52	18.87	479.99
MW-2	03/23/01	30	10-30	04/30/01	498.65	18.02	20.71	480.09
MW-3	03/23/01	30	10-30	04/30/01	496.65		16.85	479.80
MW-4	04/26/01	30	10-30	04/30/01	499.26	18.70	20.07	480.29
MW-5	04/26-27/01	45.5	41.1-45.5	04/30/01	496.88		17.10	479.78
RW-1	03/23/01	30	10-30	04/30/01	497.67	17.18	19.63	480.00
RW-2	03/23/01	30	10-30	04/30/01	498.14	17.63	20.05	480.03
RW-3	03/23/01	30	10-30	04/30/01	497.22	16.75	19.10	480.00

TOC - Top of casing elevations based on a survey by Chas. H. Sells, Inc.

^{*}Groundwater Elevation = [(Top of Casing Elevation) - (DTW)] + (0.8*Product Thickness) ---- where applicable





QUADRANGLE LOCATION

CLIFDALE, N.ºC. SE/4 CLIFDALE 15 QUADRANGLE N3500-W7900/7.5

1948 PHOTOREVISED 1982 DMA 5154 II SE-SERIES V842

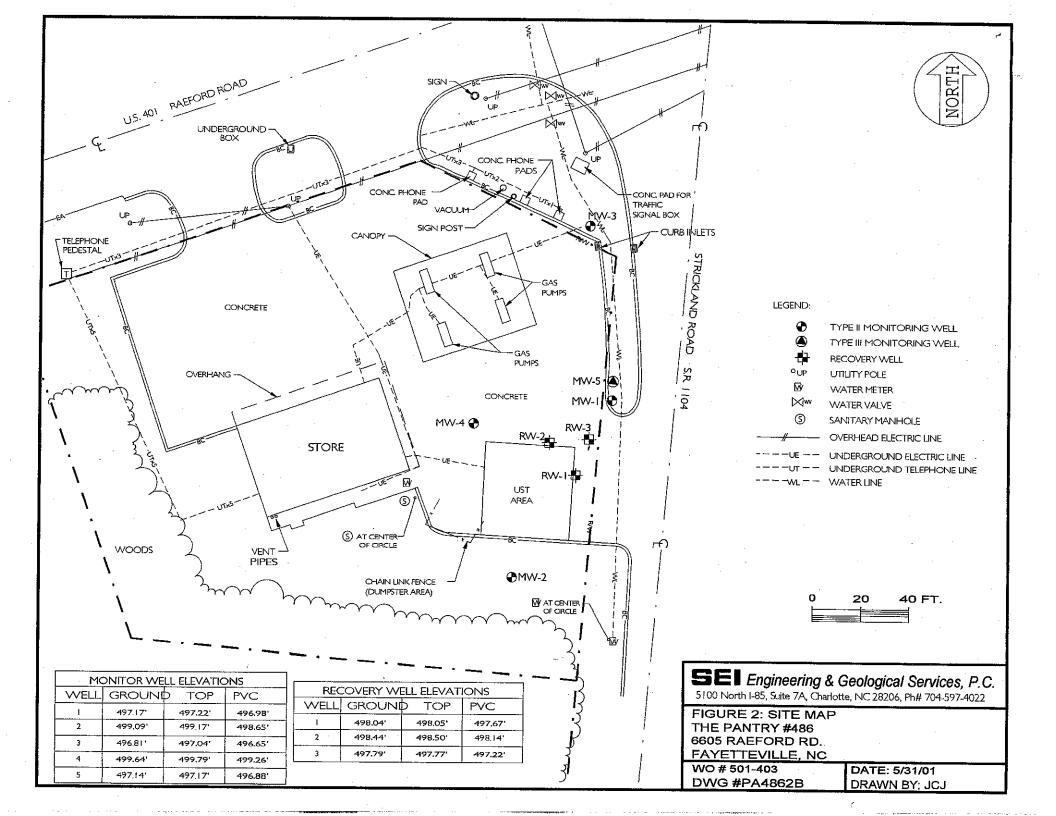
FAYETTEVILLE, N. C.

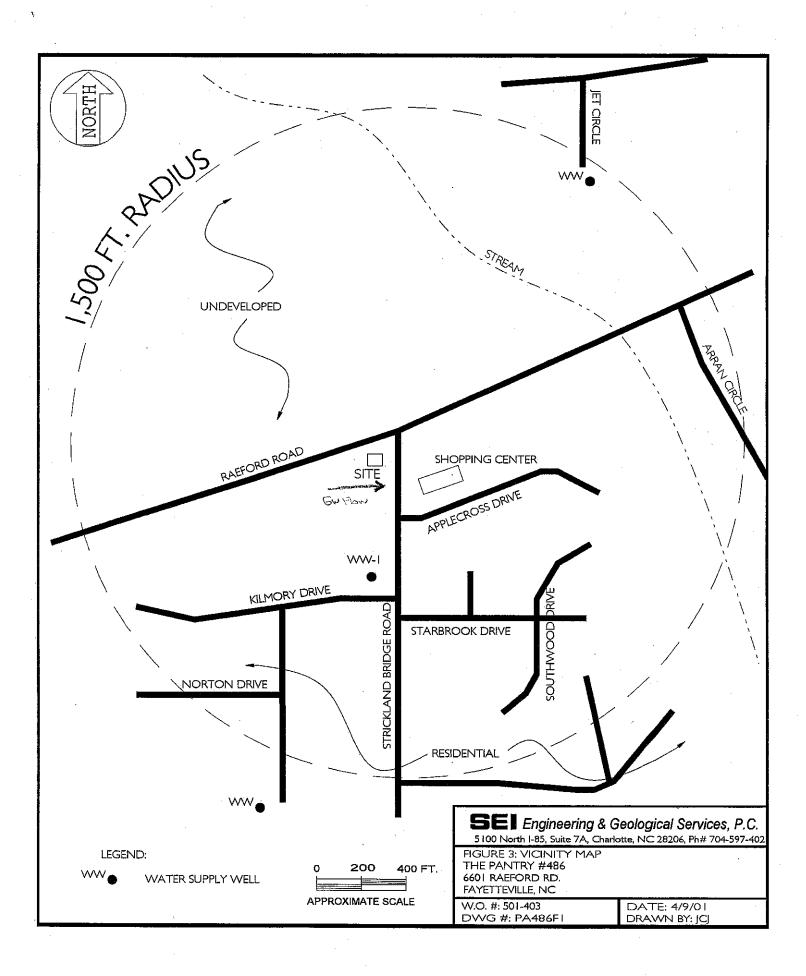
SW/4 FAYETTEVILLE 15' QUADRANGLE 35078-A8-TF-024

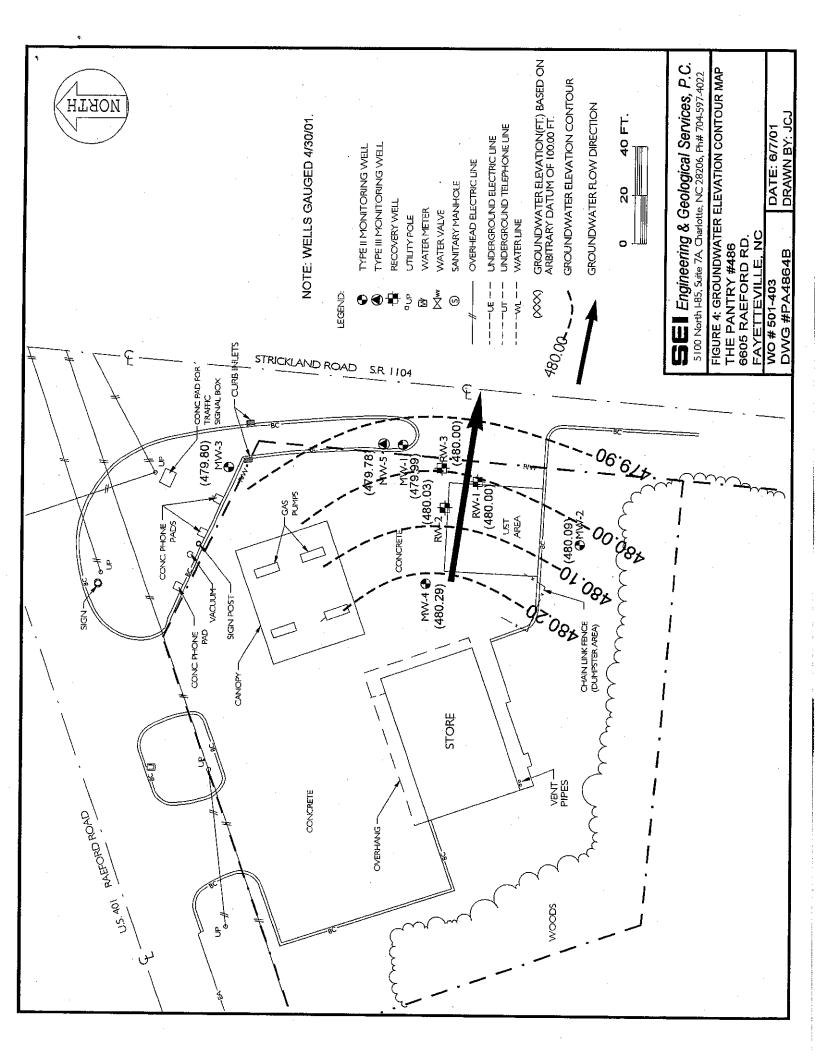
1957 PHOTOREVISED 1987 DMA 5254 III SW-SERIES V842

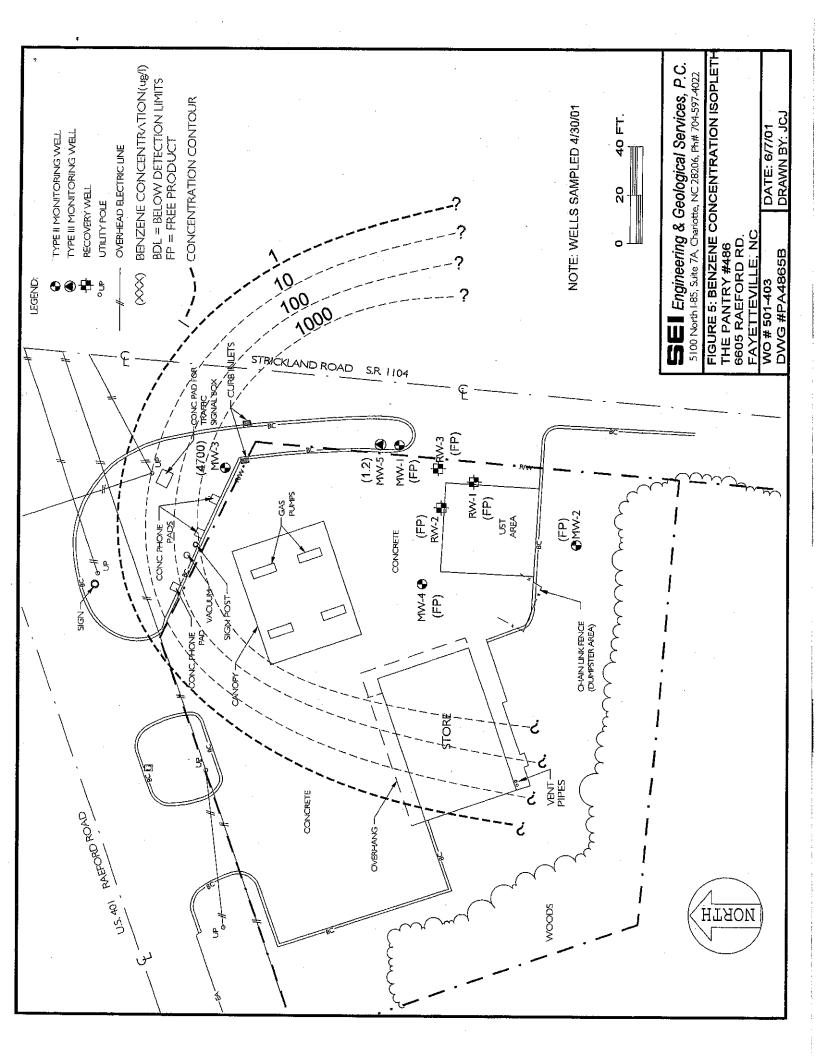
Engineering & Geological Services, P.C. 5100 North 1-85, Suite 7A, Charlotte, NC 28206, Ph# 704-597-4022

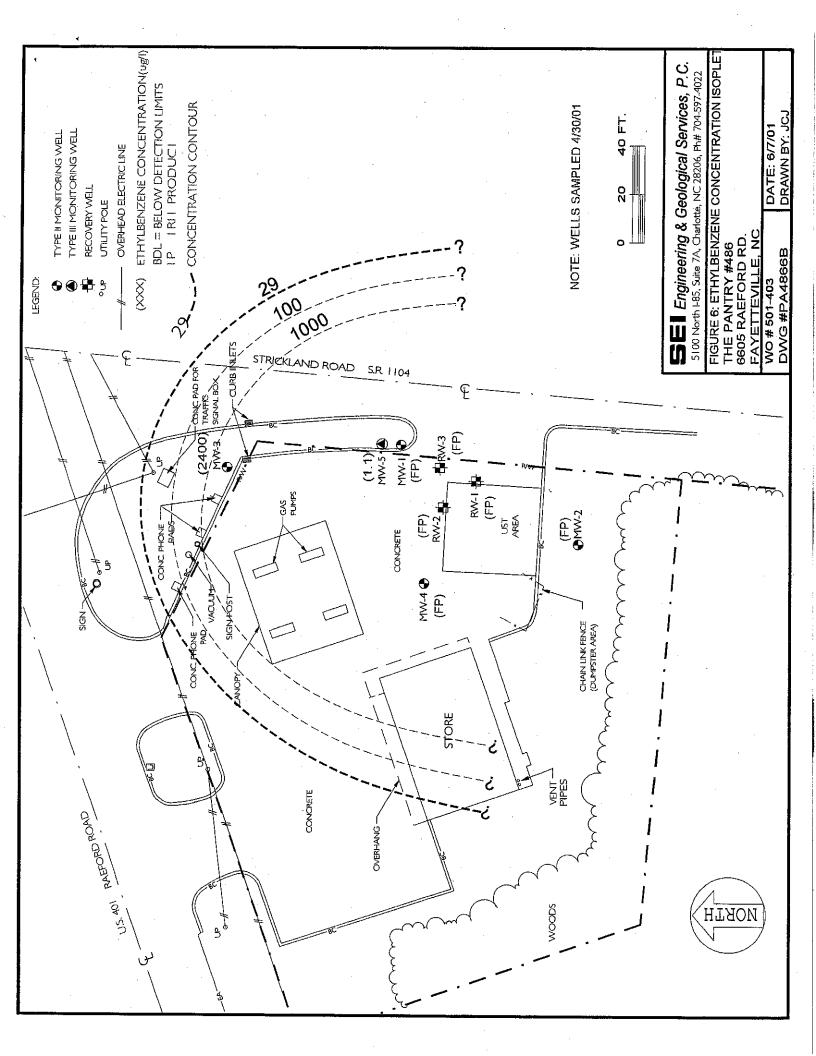
FIGURE 1: USGS QUADRANGLE MAP THE PANTRY #486 6605 RAEFORD ROAD FAYETTEVILLE, NO











9307 Monroe Road, Suite K Charlotte, North Carotina 28270 T 704.846.8853 F 704.846.3271 enviroassessments.com



enviroassessments

KANGAROO STATION

RECEIVED

March 22, 2012

APR - 2 2012

Frank Moody C/o 6157 Crystal Dr., LLC Dunn, North Carolina DENR -FAYETTEVILLE REGIONAL OFFICE

Attention:

Mr. Frank Moody

Reference:

Phase II Environmental Site Assessment

Kangaroo Station

6605 Raeford Road (Highway 401)

Fayetteville, Cumberland County, North Carolina

EA Project No. 12-9183.1

Dear Mr. Moody:

EnviroAssessments (EA) has completed a Phase II Environmental Site Assessment (ESA) of the Kangaroo Station property (the "Project"), located at 6605 Raeford Road (Highway 401) in Fayetteville, Cumberland County, North Carolina. A Site Location Map is attached as **Figure 1**. The purpose of the Phase II ESA was to evaluate the Project with respect to potential contamination issues and concerns for a pending real estate transaction because the site operates as a gasoline station. Therefore, 6157 Crystal Dr., LLC requested a Phase II environmental site assessment (ESA) be performed for the Project to evaluate the potential for undocumented petroleum releases. Specifically, the Phase II ESA evaluated for the presence of petroleum and/or solvent compounds in the soil and groundwater at the Project from potential undocumented releases associated with the on-site UST system.

1.0 PROJECT HISTORY

The Project operates as a retail gasoline station/convenience store located in the southwest corner of the intersection of Raeford Road and Strickland Bridge Road at 6605 Raeford Road in Fayetteville, North Carolina. The Project is developed with a one-story convenience store building. According to the attached Notification for Underground Storage Tanks, dated May 1986, three 10,000-gallon gasoline USTs were installed in 1986 and are located in a tank basin east of the store building. The tanks were upgraded in 1994 to meet 1998 upgrade requirements. A copy of the most recent UST system inspection (UST-10B Form) on February 25, 2010 is also attached, no violations were reported. The current active UST system is a potential ongoing source of petroleum contamination to soil and/or groundwater at the Project and to nearby off-site properties. Spills and overfills of fuel during bulk fuel transfers to the UST systems and the current automobile filling operations from the dispensers are sources of petroleum contamination to soil and groundwater. The assessment and remediation of

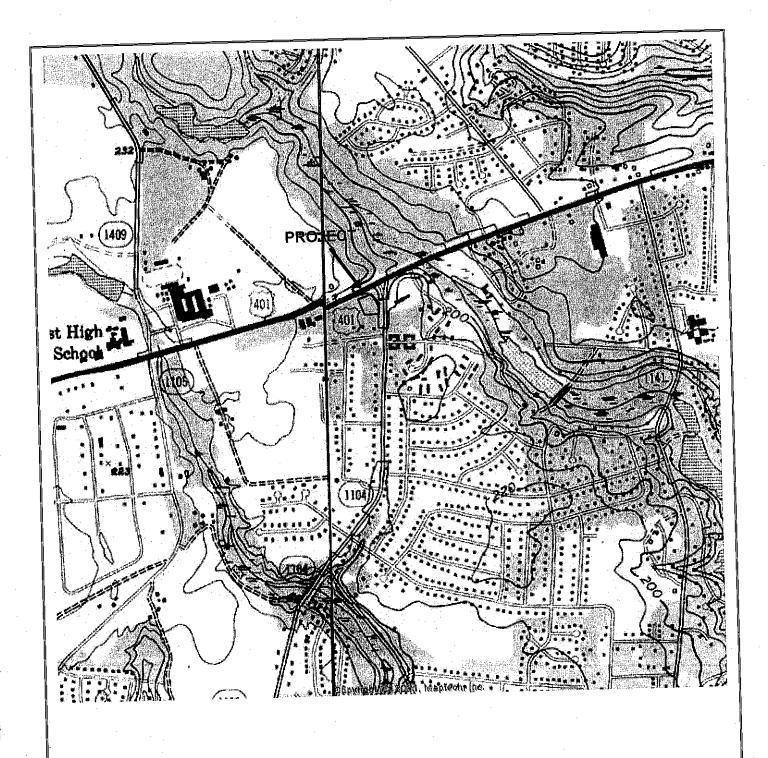


Figure 1 - Site Location Map

Source: USGS 7.5 Minute Topographic Map Fayetteville, NC Quadrangle 1957, Revised 1987

Scale: 1: 24,000 N1



9387 Monrae Road, Suite K Charlotte, North Caroline 28270 1 704,844,8953 F 704,844,3271 enviroassessments.com

enviroassessments

Site Name:

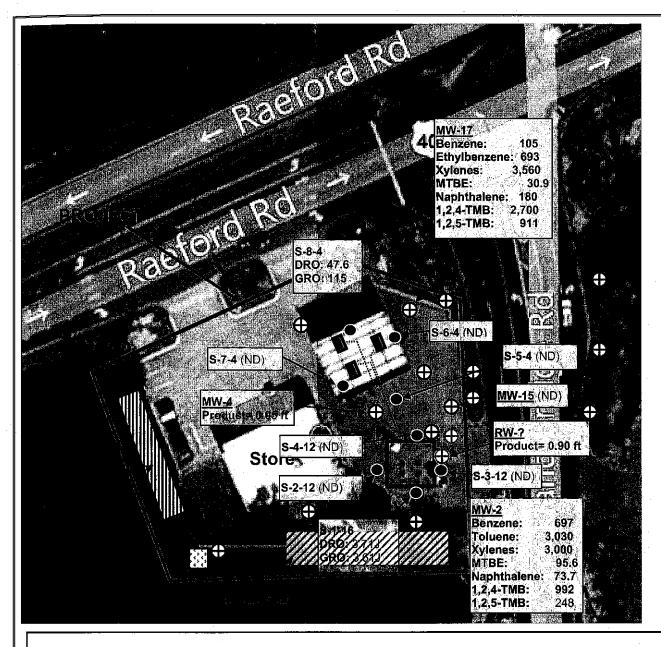
Kangaroo Station

6605 Raeford Road (Hwy 401) Fayetteville, Cumberland Co,

North Carolina

EA Project Number:

12-9183.1



KEY

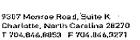
- Soil Sample Location
- Approximate Existing Monitoring Well Location
- Approximate Existing Recovery Well Location
 - Current Gasoline UST Basin
 - **Fuel Product Lines**



Gasoline Dispenser

- *Refer to Table 4 for all other detected target analytes in groundwater
- * Soil concentrations are reported in milligrams per kilograms (mg/kg).
- * Groundwater concentrations are reported in micrograms per liter (ug/L).
- *BOLD depicts target analytes which exceed state standards

Figure 2: Site Plan



enviroassessments.com



Site Name: Kangaroo Station

6605 Raeford Road (Hwy 401) Fayetteville, Cumberland Co,

Scale: NTS

North Carolina

EA Project # 12-9183.1

Source: Bing Maps



enviroassessments

TABLE 2

FAYETTEVILLE, CUMBERLAND COUNTY, NORTH CAROLINA **ENVIROASSESSMENTS PROJECT NO. 12-9183.1** 6605 RAEFORD ROAD (HIGHWAY 401) SOIL ANALYTICAL RESULTS KANGAROO STATION

-										
Sample ID		S-1-16	S-2-12	S-3-12	S-4-12	S-5-4	S-6-4	S-7-4	S-8-4	MC A office
Sample Depth (ft, bgs)	Analytical	16	12	21	12	7	4	4	4	INC. ACTIOIL
Collection Date	Memod	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012	Level
Total Petroleum Hydrocarbons(TPH) -	bons(TPH) - Gasoline Range Or	e Organics (GRC	ko)							
ТРН	GRO	3.61 J	QN	QN	QN	QN	QN	ND	115	10
Total Petroleum Hydrocarbons (TPH) - L	Diesel Range Organ	Organics (DRC	<u>(</u>							
TPH	DRO	3.71 J	ΠN	QN	ΠN	QN	GN	QN	47.6	10
1										

Notes:

All concentrations are reported in milligrams per kilogram (mg/kg). **BOLD** results exceed the NC Action Level of 10 mg/kg for TPH

ft, bgs - feet below ground surface

ND - Not Detected

J - Estimated value above laboratory method detection limits and below laboratory reporting limits.

TABLE 4

GROUNDWATER SAMPLING ANALYTICAL RESULTS KANGAROO STATION 6605 RAEFORD ROAD (HIGHWAY 401) FAYETTEVILLE, CUMBERLAND COUNTY, NORTH CAROLINA ENVIROASSESSMENTS, PLLC PROJECT NO. 12-9183.1

Sample ID	Analytical	MW-2	MW-15	MW-17		Gross Contamiantion Level (GCL)
Collection Date	Method	3/1/2012	3/1/2012	3/1/2012	Standard	
Volatile Organic Compounds by EF	A Method 82	60B				
Acetone	8260B	613 J	ND	ND	6000	6000000
Benzene	8260B	697	ND	105	11	5000
Toluene	8260B	3030	ND	575	600	260000
Ethylbenzene	8260B	491	ND	693	600	84500
Isopropylbenzene	8260B	36.9 J	ND	ND	70	25000
Xylenes, total	8260B	3000	ND	3560°	500	85500
n-Butylbenzene	8260B	ND	ND	82.6	70	6900
sec-Butylbenzene	8260B	ND	ND	53.2	70	8500
p-Isopropyltoluene	8260B	ND	ND	26.1	NE	NE
Naphthalene	8260B	73.7 J	ND	180	6	6000
n-Propylbenzene	8260B	115	ND	525	70	3000
1,2,4-Trimethylbenzene	8260B	992	ND	2700°	400	28500
1,2,5-Trimethylbenzene	8260B	248	ND	911	400	25000
Methyl Tert-Butyl Ether (MTBE)	8260B	95.6	ND	30.9	20	20000
Polycyclic Aromatic Hydrocarbons	(PAH) by EP.	A Method 827	0C			
Fluorene	8270C	ND	ND	0.52 J	300	990
1-Methylnaphthalene	8270C	19.4	ND	35.9	NE	NE
2-Methylnaphthalene	8270C	37.6	ND	79.8 ^a	30	12500
Naphthalene	8270C	68.5 ⁿ	ND	76.3 ^a	6	6000
Phenanthrene	8270C	0,30 J	ND	0.43 J	200	410

All concentrations are reported in micrograms per liter(ug/L). **BOLD** results exceed their respective NCAC 2L Groundwater Standard.

ND - Not Detected

NE - Not Established

J - Estimated value above laboratory detection limits and below laboratory reporting limits.

a - Result is from Run #2

ENGINEERS | PLANNERS | SURVEYORS

ACTIVE REMEDIATION MONITORING REPORT

PANTRY #486
6605 Raeford Road
Fayetteville, Cumberland County, North Carolina
Incident # 23062
Facility I.D. Number: 0-023655

Risk Classification: Intermediate Ranking: I175D Land Use Category: Residential

Responsible Party:
The Pantry, Inc.
305 Gregson Drive
Cary, North Carolina 27511
(919) 774-6700

Current Property Owner: 6157 Crystal Drive LLC Post Office Box 926 Dunn, North Carolina 28335

Report Prepared By:
Withers & Ravenel, Inc.
115 MacKenan Drive
Cary, North Carolina 27511
(919) 469-3340
W&R Project #02071121.0

Release Discovered:

March 21, 2001

Release Quantity:

Unknown

Cause/Source of Release:

Apparent UST System

UST System:

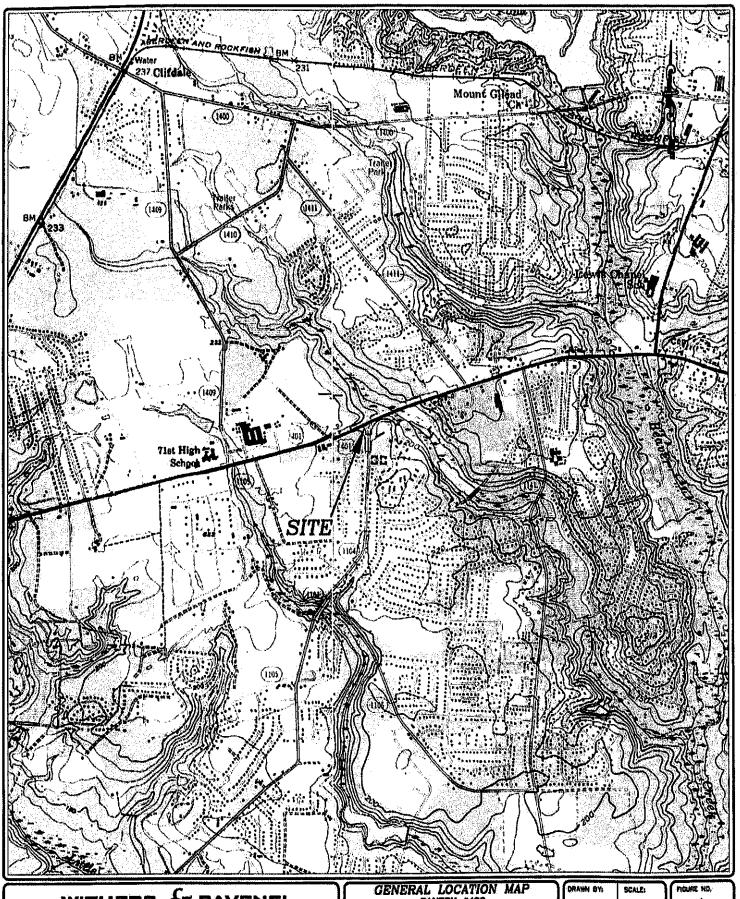
3 - 10,000 Gallon Gasoline USTs

Latitude:

N 35° 02' 24"

Longitude:

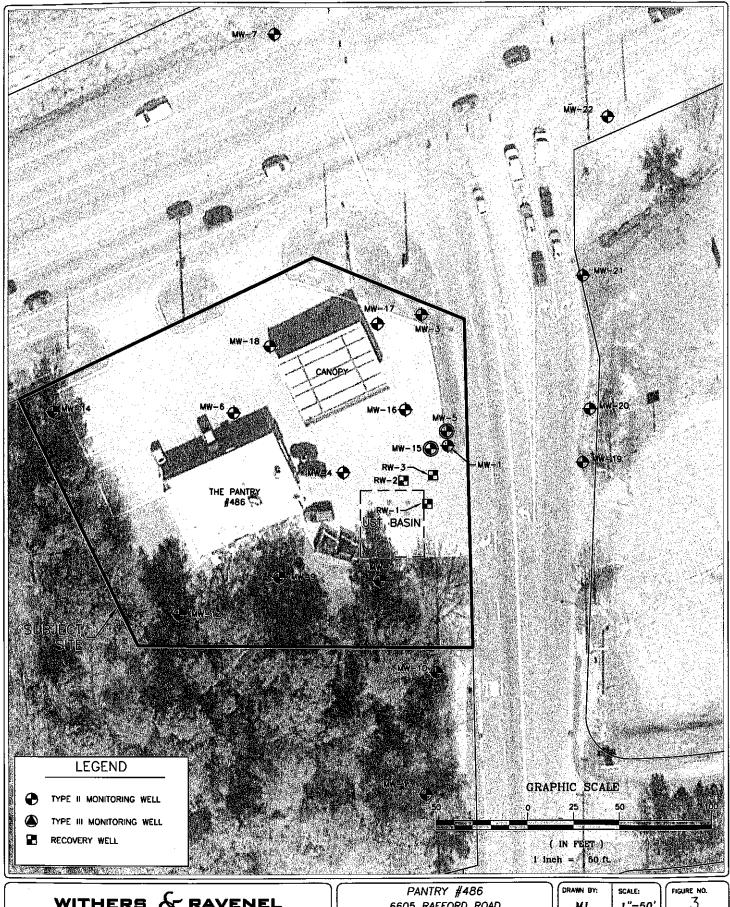
W 78° 59' 50"



WITHERS & RAVENEL

111 MocKenon Drive Cory, Horth Corolino 27511 www.mitherarovenel.com tat 919-460-6006 fest 919-535-4545.

DRAWN BY:	SCALE:	ſ
PCF	1"=2000	L
APPROVED BY	DATEI	7
CB	01/23/08	L

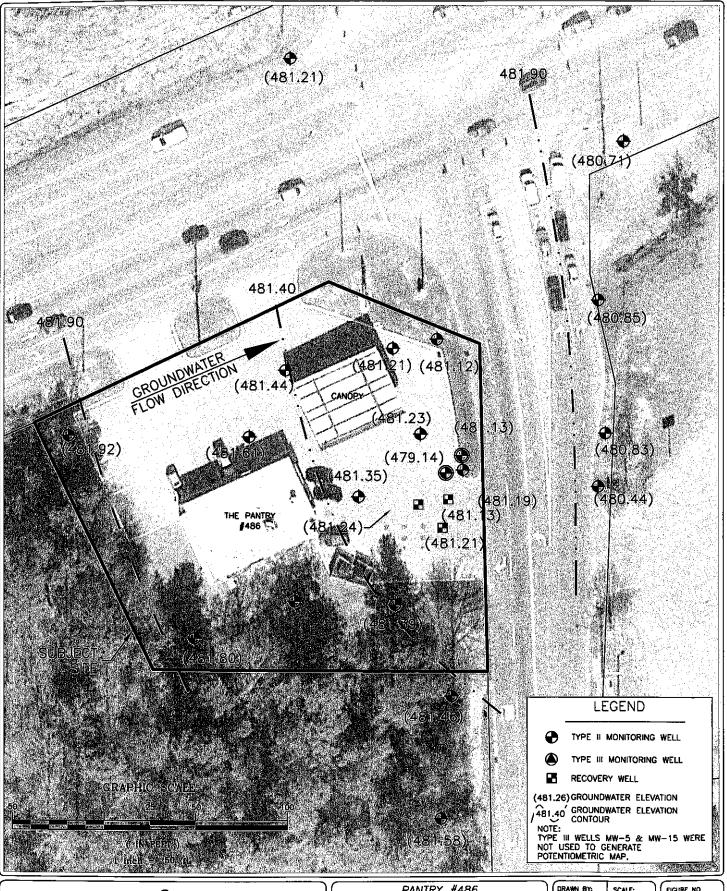


lel: 919-4469-3340 fox: 919-467-6008

6605 RAEFORD ROAD FAYETTEVILLE, CUMBERLAND COUNTY, NC SITE MAP

DRAWN BY:	SCALE:	ĺ	•
MJ	1"=50'		
APPROVED BY:	DATE:		
СВ	06/12/15	ا	

K:\07\07-1120\071121-PANTRY 488\CAD\BASE MAP - JUNE 2015,DNG 6/12/2015 4:58 PM JAMES, MATT 1:1

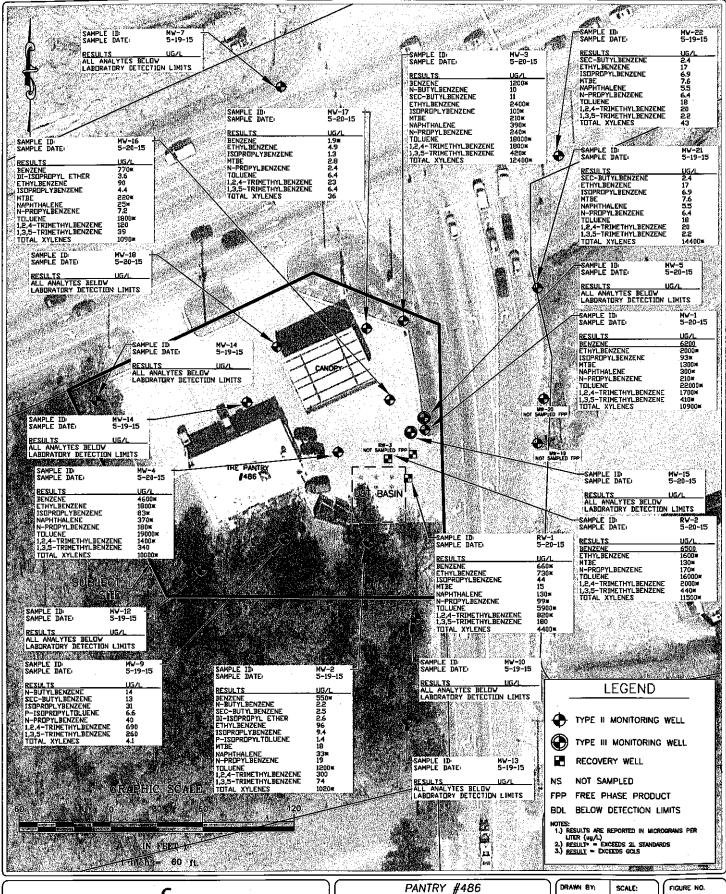


WITHERS & RAVENEL

PANTRY #486 6605 RAEFORD ROAD FAYETTEVILLE, CUMBERLAND COUNTY, NC

POTENTIOMETRIC MAP - SEPTEMBER 2014

DRAWN BY:	SCALE: 1"=50'	FIGURE NO.
APPROVED BY:	DATE:	JOB NO:
KTC	10/30/14	0207112

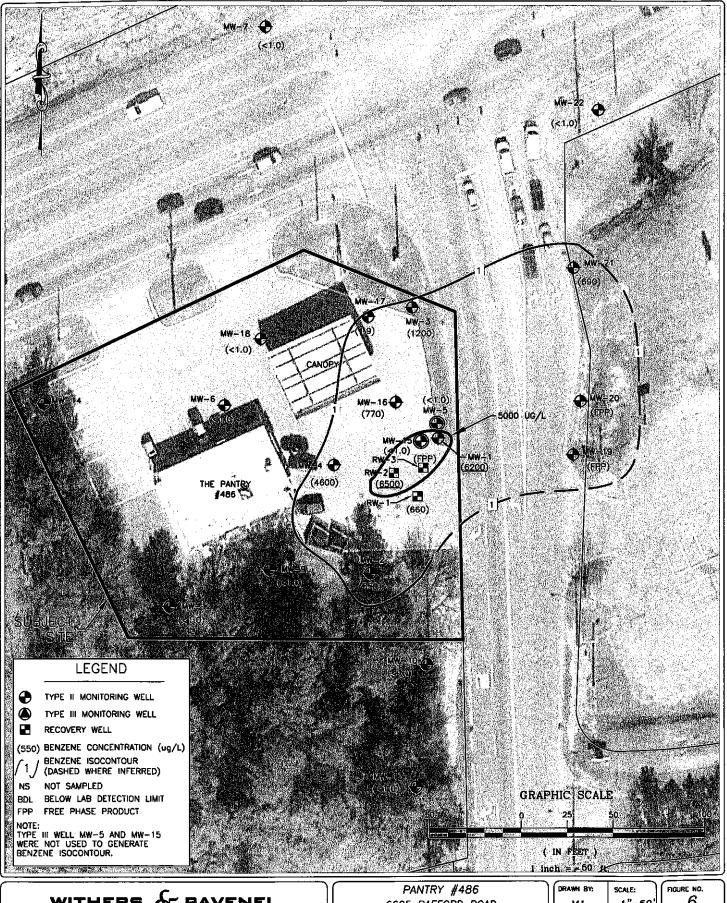


WITHERS & RAVENEL

115 MacKenan Drive Cary, North Caralina 27511 www.nithersravenel.com tel: 919-4469-3340 (ax: 919-457-6008 PANIRY #486 6605 RAEFORD ROAD FAYETTEVILLE, CUMBERLAND COUNTY, NC GROUNDWATER ANALYTICAL RESULTS

DRAWN BY:	SCALE: 1"=60'	FIGURE NO.
APPROVED BY:	DATE:	JOB NO:
СВ	06/12/15	02071121.0

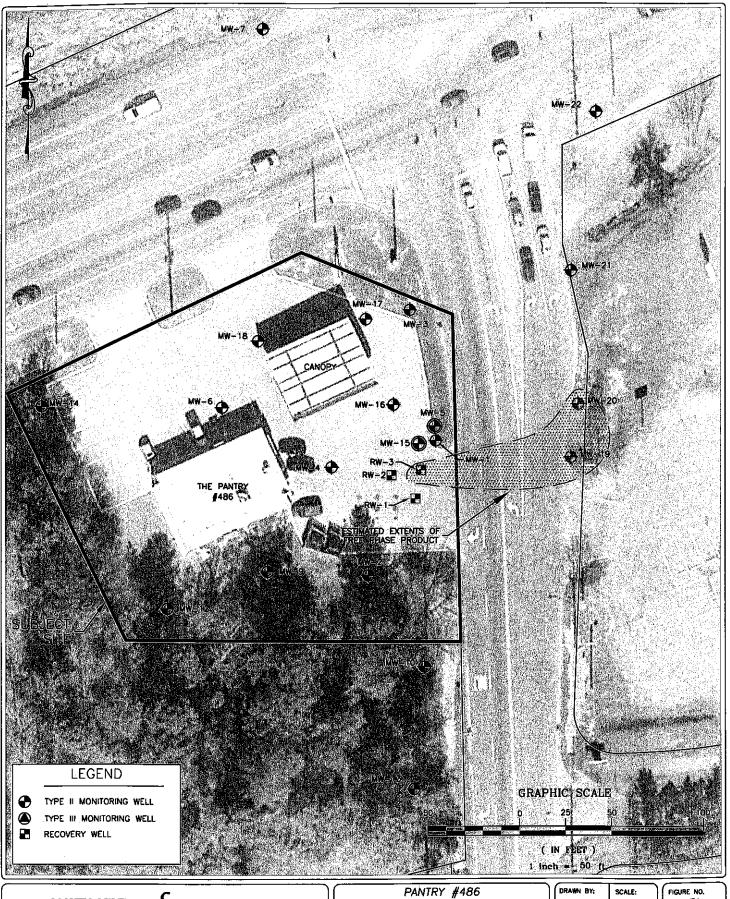
K:\07\07-1120\071121-PANTRY 486\CAD\BASE MAP - JUNE 2015.DWG 9/8/2015 12:47 PM



115 MacKenan Drive Cary, North Carolina 27511 www.withersravenel.com tel: 919-4469-3340 fox: 919-467-6008

6605 RAEFORD ROAD FAYETTEVILLE, CUMBERLAND COUNTY, NC BENZENE ISOCONCENTRATION MAP

PANTRY #486	DRAWN BY:	SCALE:	FIGURE NO.
05 RAEFORD ROAD	MJ	1"=50'	6
, CUMBERLAND COUNTY, NC	APPROVED BY:	DATE:	JOB NO:
ISOCONCENTRATION MAP			02071121.0
K:\07\07-1120\071121-PANTRY 486\CAD\BASE W	P - JUNE 2015.DW	G 6/12/2015 5:0)6 PN JANES, WATT 1:



WITHERS & RAVENEL

ENGINEERS I PLANNERS I SURVEYORS
115 MocKenon Drive Cary, North Carolino 27511 www.milhersrovenel.com
tel: 919-4469-3340 fax: 919-467-6008

PANTRY #486 6605 RAEFORD ROAD FAYETTEVILLE, CUMBERLAND COUNTY, NC

FREE PRODUCT MAP-MAY 2015

CB 06/12/15 02071121.0

K:\07\07-1120\071121-PANTRY ABS\CAD\BASE MAP - JUNE 2015,DWG 6/12/2015 5:07 PM JAMES, MAT 1:1

DRAWN BY:	SCALE: 1"=50'	FIGURE
APPROVED BY:	DATE:	J09 N0
CB	06/12/15	0207

												TABLE	99													
										HSTORICA	L GROUNDW	PATER ANALYTICAL	YTICAL RESU	HISTORICAL GROUNDWATER ANALYTICAL RESULTS - PANTRY #488	Y#486											
										_	ayetteville, C	tumberland C	sees raciona rosas Fayetteville, Cumberland County, North Carolina	Carolina												
	L			IIIV4			ŀ			PWW-2						PMM-2					MWA	Ĺ		NO	NGAC 2L STD	ē
Sampanna	6/4/2010	6/4/2010 12/15/2010 7/25/2012 698/2013	725/2012 1	518/2013 12	12/27/2013 9/12/201		5/20/2014 6	642010 12	5/2010 7/2	12/16/2010 7/26/2012 12/27/2013 9/12/2016 5/19/2015	72013 9/12/	2016 57972	2015 8/4/ZL	8/4/2010 12/16/2010	110 7725/2012	12/27/2013	7/25/2012 12/27/2013 8H2/2014	5/20/2016	<u>. </u>	12/15/2010	6/4/2010 12/15/2010 7/26/2012 12/27/2013	2/27/2013	BM17734 E	6720/2016	(nat)	Gen
Volatile Organic Compounds (VOCs) by GPA Method 62008	Cs) by GPA Me.	thed 6200B																					1			
Benzane	2008/6	25 const.	NS K	- 300 E-		- 000 000 000 000 000 000 000 000 0	9,2002,9	発性研究	SN SN	W. HOUSE	\$2.85×5%	日本大学を	AND STATEMENT	SN NA	NS		7.09B	* 900 F - 007 H - 1806 F	1,800	坚	≅		C.5500 - 0.0500	3.C.B80	1.0	2,000
CH-Soprapy other (IPE)	Taa	901	SN	BOL	_	Jaa	BDL	109	SA	108	B	BDL 2.8	<u>a</u>	SN 1	NS.	_	301	apr.	ā	NS	NS	1_	100	90.	92	200 07
Ethylhenzene	200	5 2 SD01 5	NS 85	0.000	盛	** 1 ZOUS \$ 4 Z COURS		왕	SN	100	90	26		SN WEST	SN .	_	THE REPORT	25 peter - 2 and	4.200 ×	SH.	S.	12	** ** ** ** ** ** ** ** ** ** ** ** **	10 mm	909	84.500
Bapyopylbenzane	27	108	NS	BDL	_	19		BDL	NS SECTION	100%	5,8	5,2	ē.	SN NS	2	_	A LONG	TO THE PERSON AND ADDRESS.	_	¥	SS.	<u> </u>	1306	The second	20	25,000
Methyl tertlary-butyl ether (MTBE)	2000/25 pes	3,000 ZS-	寒 SN	1.200 F.		STANDARY NO.	September 1 septem	2500 to	NS W	A 10.00	1.1	19 18	0 Sec. 18	SN MA	SN		地位的	無数の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の	300	NS	Ş	<u></u>	BDL	901	20	20,000
Naphthalone	C. 12	BDL	NS	BDL		THE RESIDENCE OF THE PERSON NAMED IN		BDL.	SN SN	A 10 TO 10	77.	A. C.	108	SN 7	SN			100 mg	ida	ž	5€	_	108	247.976.23	۰	900
n-Propylbanzana	£	BEH 029 - 12	NS	BDF	i i	12 12 12 12 12 12 12 12 12 12 12 12 12 1	SEID OF SEA	(Sept.)	NS	_	19	9 18	1	SN SSSS	SN		STATE OF THE PARTY.	Section Section	第一种种种的	SN	SN	188	4.200 E	2000年の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の	e.	30,000
P-Isopropyffoliane	Ŧ	108	NS	BDI	į	HO!	BDI,	BDL	NS	10E	ig L	7. 1.4	4 80.	SN	Ş	ı E	da	īg.	108	SN	SN	- I	982	IDE	호	ž
n-Butytbenzana	BD(BOL (NS	BDI.		10	BDL	BDL	NS	2.3	1.7	7 2.2	2 BD(SN NS	2	_	TQB	₽	108	SN	SN		- OBD	108	202	006.9
sec-Bulylpenzene	BDL	108	NS I	BDL		9.9	BDL	901	SN	1.8	1.7	7 2.5	H	L NIS	SM		108	-14	TOB	NS.	NS	_	BOF	801	70	8,500
Toluene	* 41,800 kg - 310,000 kg	200 000	SE SE	24 Pod	*	SACISTOR SECTIONS SECTIONS	22,000,000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SN	200 Table 1886	225	10 AND 10	HANDERS OF REPORTS	SN WE	Ş	_	10 m	THE PROPERTY OF THE PROPERTY O	\$ 100 E	NS.	Š	LES	S40000 8 213 000	2000年	8	260,000
1,2,4-Trimethylbenzene	101 2 10 00 20 TO	4. 10t. P	NE NE	K. Alboury	*	SE SECTION	1620034 ESA	STATISTICS.	62	260	480	300	0	SN	NS		THE PERSON NAMED IN COLUMN	A STATE OF THE STA	STATE OF THE PARTY	SN	SN	i Si	CATACON CONTRACTOR	会はの数の対象	400	28.50b
1,3,5-Trimethylbenzene	140	表数的数数		380		310	200	190	SN	25	4	4 .74	5002	SN 1	SI		320	200	240	NS	ž		E-4300 - 23	24	904	25,000
Xylenes, Total	SALES SECTIONS	3521.200.80	SN	AND COLORS	K∯.	SOME STREET, S	化成物的物	18 SADOUR 18	SN SN	A PROPERTY AND A PROP	C	CALC BURESHING SELECTION	200 A 100 A	NS NS	SN	_	SECOND SECOND	SALTHANDS FOR GROUPES	\$500B \$ 500	SZ.	9	Œ	C. BELLOO ALC DOOR	THE PROPERTY.	.009	86,500
Notes:	<u>بر</u>																									
	All results in y	All results in µg/L - (micrograms per liter); BDL = Below Detection Limit, NA = Not Analyzed by particular method	ms per filer); i	50L = Below\	Detection Lin	att NA = Not A	natived by par	ricular method																		
	GCL = Grass	GCL = Gross Contaminant Level; NL = Not Listed	vol; NL = Not	t Lisbod																						
	2L STD - Grat.	21, STD - Groundwater Quality Standard (15A NGAC Subchapter 21.)	V Standard (1	SA NCAC Sur	behapter 21)																					
	Parameters m	Parameters not listed were tratow detection limits - see complete laboratory report for details	alow detection	- firmits - see c	complete labo	or altery report for	ır details																			
	NAPL - Non-A	NAPL - Non-Aqueous Phase Liguid present	Liquid presen	,																						
	Result	Result - Result Exceeds Laboratory Detection Limits	to Laboratory	Defection Lin	看																					_
	W. Translith	資気をおいれる - Result Exceeds 21. Standard	ts 2L Standar	P																						_

_	Γ.	-		_	무	8	8	8	٥	8		٥	٥	00	Ŕ	8	8	
	O GOL			90°S	70,000	84,500	25,000	20,000	8,000	30.00	IN NE	6,900	8,500	000 09Z	28,500	25,000	95,500	
	NCAC 2L STD	(E-1)		1,0	22	009	02	02	ø	0.2	IN	0.4	02	909	007*	400	200	<u> </u>
		549/2016		ig B	BD	1GB	TOB	1GB	109	BDF	าตย	1 0 8	BDI	BDI	BDL	108 BDT	TQ8	
		9/1/2014		BDL	BOL	10g	TOR	TOR	HOL	TOB.	BDL	BDI,	TOB _	BD.	BDT	BDT	BDL	
		12/27/2013		109	ä	EDI	TG8	TOS	BDL	108	108	BDL	108	BDL	708	305	1CB	-
		5/13/2013		BDL	901	108	108	708	BDL	BD1	BDL	BDL	BDL	BOL	BDL	BDT	BOL	
	Ļ	7/26/2012		BOL	BDI.	BDL	BDL	BDI.	901	BDL	BDI.	BDF	BDF.	BOL	300	900,	BDL	
	5-MM	77200 6422010 121612010 772612012 ERZO12 ERZO13 122712013 131612014 EZZO14 EZZO		10 miles	3D),	3DF	BDL	307	BDL	BDL	BDL	BOL	BDL	BOL	BDL	BDL	BDL	
,		12/18/2010			BD1,	BDL	BDL	BDL	BDL	108	108	30.	900	BDI,	BDI.	BDI	BOL	
		6/4/ZD10		100	7Q8	708	BDL.	108	BDL	BOL	BOL	BDL	BD(BDL	BDL	BDL	BDL	
NIS JONIOAL GROONDING RAWALT I IOAL RESULTS - FANI KT RASS FASTOR ROSA Fayetteville, Quanchard Colony, North Garolina		40/5/2009		18 V	BD(108	1.1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.0	BDI.	BDL	
Fayetteville, Quanberland Golardy, North Carolina		2/25/2008		30E	BDL	901	BDL	BDI.	901	BDL	108	BDL	BDL	BDI.	HD,	HD.	BDI.	
KS05 F		5/20/2015		HD1.	BD(BOL	BDI	PD(BDL	BOI,	BDI.	BD.	BDI	BDL	BDL	BDI.	BDL	P _Q
Fayetter		9/12/2014		108	3DF	80f	801	BDL	BDL	BDL	80f	90,5	30,	108	108	306	301	varkaular met
Ê		1227/2013		BD1.	BD1.	BD/L	BDC	23	BDL	BOL	BD.	BOL.	BD.	BDT	BDL	BDL	BD.	(rikicagams per Bay BDL = Bahav Dekaddan Linit NA = Net Arabyzed by particular method annimat (versit NL = Net Linit Subset) and versit Subset (Versit NL = Net Linit NA = Net Arabyzed by particular method and versit below determined in the versit of the Versit Subset (Versit NL = Net Net Linit NL = Net NL = NL
		6/8/zu13		306	108	BDL	BDL	1.3	BDL	306	BDL	30.	8DI,	BDI.	80F	BDI	BDL	mit; NA = Nat oratory report
	988	7726/2012		BD(BDL	BOL	BD1,	BDT	BOL	BDL	BOL	BDT	BDL	BDL	BDL	BD:	BOL	/ Detaction Li ubchapter 24 complete lab
		12/16/2010		108	108	901	BOL	2"3	BOL	BDI.	BDI,	BD.	BDL	ē	2.6	BDL	3,5	BDL = Balav of Listed (15A NCAC 5 on finits - see set y Detection L
		6/4/2010		108	BDL	BDI	BDL	TG8	BDL	BDL	BDL	BDL	BDI	BDL	BDL	HD).	BDL	ams per Bot) Leves NL = N Illy Standard Delow detecti or Uquid press or Laborato ects 21, Shand
		ģ	80029 poup	- TOB	BDL	BDL	BD.	2,1	- TOB	BDC	BD(BDC	BDI.	BDL	90F	109	BDL	ag/L - (microgi Contaminant undwater Que of Ested were squetts Phas = Result Exce
		4/28/2008	s) by EPA Me	BOL	TG8	BDL	BDL	25 W 35.C	BDL	BDL	60,	BDL	BOI,	BDL (BDL	BDL	HOF	Alexade in logic (releagemen per littig EB). = Blaww Devotedon Linit; NA = Not Amargest CG12 - CG2 - CG2 - CG2 - CG3
		Campadha	olatile Organic Compounds (VOCs) by EPA Methor	up.	DHsopropyl ether (IPE)	Eliyibanzana	Sopropylbenzene	Mothy) tertlary-butyl ather (MTBE)	Japhthalene	-Propylanzene	p-fsopropy(in)terns	Bulyfbanzette	soc-Butylbenzene	al	2.4-Trimethylbonzane	3,5-Trimothytbonzana	Xylenes, Total	Notes:
	L		Votabli	Benzene	OHSop	Ethylbe	Sopra	Mothyl	Naphth	Prop.	Meap	P-Buly	sec-Bu	Toluane	12.4	1,3,5-1	Xyene	

									EST 5	RICAL GROL	INDWATER A	TER ANALYTICAL	HISTORICAL GROUNDWATER ANALYTICAL RESULTS - PANTRY #486	NTRY #486										
										Fayettev	about Alle, Cumberla	ind County.	Fayetteville, Cumberland County, North Carolina											_
					2-MH				l			MW-6						8-MM					NGAC 2L STD	90,
Compound	2/25/2008	2/25/2008 10/7/2009		6/4/2010 12/18/2010 7/26/2012	7/26/2012	5/8/2013	13 5/8/2013	9/11/2014	5/13/2015	1/29/2008	10/7/2009	6/4/ZD/ID 1:	12/18/2010 7/2	7726/2012 1/28/	1/28/28/08 10/6	10/6/2009 6/4/	6/4/2010 12/15/2010	5010 7726/2012	012 5/8/2013	113 5/8/2013	3 9/11/2014	4 5/19/2015	(had)	(hgd)
Volatite Organic Compaunds (VOCs) by EPA Method 5200B	Cs) by EPA III.	ethod 5200B																						
Benzene	BDf	108	108	1GB	109	BD.	109	HD4	109	108	日本の 日本の 日本	108	109	ř	801 8	1,08	30T BD	108	_	708	TOR	TOB	1,0	5,000
Di-Isaptapyl other (IPE)	-TOE	BDL	ioa Boi:	- DOE	109	301	BDL	100	BDL	BOL	BDL	1aa	BDf.	ď	eor e	BDT BI	aor ab		108	_	TGB	BDL	70	70,000
Ethylbenzene	BDI.	108) OB	BD.	108	3DF	BDI	BD.	BDL	BD(BDL i	BDL	BDL	7			37 BD	4,3		H	708	109	009	84.500
Isopropylbenzane	-JGB	BOL	JOB .	BDI	108	301	BDL	ia	TOB		109	П	109		2000	F	784.00		H	88	6	£	70	25,000
Methyl tertiary-butyl other (MTBE)	BDI	TOS	108	σz	108	108	BDL	108	BOL		400	218	建设设施的			30	.or BD	TOB BDIT	L	108	BDF	BDL	02	20,000
Naphthalene	108	HDF	108	BD£	TGB	TOE	BDL	HOL	108	BDI	109	BD!	108	ř.	200		1	49	TOB SSA	L L	BDE	109	65	6.000
n-Propylbenzene	ROF	10 9	108	BDF	1GB	1 0 8	BDL	HD1.	801	BDL	BDL	BDL	108	â	280% 拳 320%		DPZ 16 16 16 18 18 18 18 18 18 18 18 18 18 18 18 18	100	28	SDOL XX	188	40	02	30,000
p-Isopropyfloluene	BDL	7.08	BDI.	BD.	BDL	108	BDL	HD).	HOL	BDf	108	BDL	BO!						L	-	7.2	9'9	'N	¥
n-Butyfbenzene	901	BOL	BDL	BDL	BDL	BOL	BDL	∃ga	BOL	BD/L	HOT I	BDL	BDL	330	, 108	12 BI	DT B6	45	16	14	14	14	٤	6,900
sec-Butylbenzane	108	108	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		16 E	1 1	13 801	-	13		15	43	QZ .	6,500
Tokusha	BDL	801	BDL	80.	BDL	BDL	BDL	BDL	BOL	BDL	BDI.	BDL	BDL	ă		BOL BDL	DL 1901		BOL BDL	I BDL	BDL	BDL	600	280,000
1,2,4-Trimethylbanzona	BDL	109	-lae	BDL	nga	BDI.	TOB	108	TOR	109	BDL	HD.	BDI.		er St. Property	经验证的	8	2	008) A 300	0074××2001	100 THE REST	2 G69 % SA	400	28,500
1,3,5-Trimethytbenzone	BOL	BDL	9	BDL	HOL	108	BOL	BDL	HOY	SDI,	BDL i	BDI	HDI.	N.			350 000000	(紫景 220	_	1 400	<072		400	25,000
Xylenes, Total	108	BOL	BDL	BDL	BDL	BDL	807	BOL	BDL	BDL	BDL	BDL	BOL.		2 (SECTION 2	270	:12 380		1 BDL	_	Ŧ	7	005	65,500
Motes																								Γ
	All results in s	ug/L - (misro	grams per lite	All results in ug/L - (micrograms per liter); BDL = Below Detection Limit; NA	w Detection L	×	Not Analyzed by perfoular method	perfoular me	thad															_
	CCL = Gross	3 Contaminan	GCL = Gross Contaminant Level, NL = Not Listed	Not Listed																				
	2L STD-Gn	sundwater Qt.	uality Standar.	2L STD - Groundwaler Quality Standard (15A NCAC Subchapler 2L)	Subchapler 2.	9																		_
	Parametars n	yot listed were	a below detec	Perameters not listed were below detection limits - see complote laboratory	a complete la		aport for details																	
	NAPL - Non-	Aqueous Pha	MAPL - Non-Aqueous Phase Liquid present	sent																				_
	Result	= Result Exc	coeds Labora:	tory Detection	Limits																			_
	PRESIDEN	= Result Ext	2000s 2L 5tar	公司Result 2000 - Result Exceeds 2L Standard																				
	が活動を	to Recuit Eye.	A Land	4110																				-

									¥	TORICAL GI	TAE ROUNDWATI BB	TABLE 6 (Confinuer NATER ANALYTICAL I 6505 Raeford Road	TABLE 6 (Confinued) HISTORICAL GROUNDWATER ANALYTICAL RESULTS - PANTRY #485 BBGS Raeford Road	PANTRY #486	/4										
					MW-10				ŀ	Lay.	ITEVINE, DUI	IIIM-12	rayettevire, Dumbelland County, North Catolina MA-12	6	Ļ				MW-43					NCAC 21 STD	SCI
Compound	1/29/2008 10/6/2009 6/4/2010 12/18/2010 7/27/2012	6002/5/0	54/2010 12	718/2010	72772012 \$	5H3/2013 12/27/20	22772013 8	13 8/11/2014 EM	6719/2015 6/	172010 127	18/2010 7/2	77.2012 12.72.	6/4/2010 12/18/2010 7/2/2012 12/2/2013 SH1/2014 6/18/2015	014 6/19/20	1/29/2008		9 6 6/4/2010	10/6/2009 6/4/2010 12/4/2010 7/2/2012 5/13/2013 12/2/2013 8/1/2014	772772012	5/13/2013	12/27/2013	BH1/2014	5/19/2015	(Ban)	(Jean)
Volatile Organic Compounds (VOCs) by EPA Method 6200B	3) by EPA Meth	10d 6200B																							
Benzone	108	BD!	109	301	- TOB	109	108	108	100	HOF	108	708	Œ	H	TGB	108	10B	108)QB	JOS	HDF	108	BDL	1.0	5,000
Di-Sopropyl ethor (IPE)	TOE	BD1.	BOL	ä	100	BDL	ī	BOL		BDL	700	BD1.	108	JGB T	B	108	TOB	TQ8	TGB	BDL	708	108 101	BDL	5	70,000
Ethylbenzene	108	BDf,	BDL	BDL	BDL	BDL	BOL	BDI	80ř	BO.		BOL	8	108 T	BDL	10B }	TIGE!	108	108	108	108	BDL	EDI.	600	84,500
kopropyľbenžene	HD1.	BD1.	PDF	108	ig Bor	BDL	ig B	108			100	BDL	9		90	TOB	TOG	BD1,	BDL	108	100	ă	1GB	5	25,000
Methyl britany-bunyl ether (MTBE)	108	- TGB	HO.	901	apr	108	108	BDT	709	BOL	305	BOL	108		TOS .	TGB	BDL	108	1G8	HO!	108	BDL	108	20	20,000
Naphthalene	108	TOB	BDL	ğ	301)GB	BOL	BOL	H		H	BD1.	90	TGB T	BDI	GDC	BDI	BDF	109	108	BDL	렱	ide	9	6,000
n-Propylbenzene	109	HDI,	HD1,	901	edor.	1G8	HOI	BDT	_	BOL	108	BOL	BDI		_	∃GB	BDL	708	108	108	BDI	10g	TG8	0,2	30,000
p-fsapropyiloluene	108	HDL	BDA.	108	BDL	BDL	FDI.	BD(BD.		HDI.	BDL	90	L	L	TOB	BDL	HDF	108	708	108	ם	TOB	Z	¥
n-Butylbenzena	BDL	108	HD.	90(BD1.	BDL	BDI.	BDI,	BOL	BOL	L	BOL	TOS	r BDL	901	BDC	BDI.	TGB	108	TOB	BDL	ig.	TOB	02	6,900
sec-Butylbenzana	108	306	BD.	108	108	BDL	109	BDT	301	BDL	HOP.	BDL	108	ר ו פטר	BDF	BDL	305	108	108	TGB	108	DOC	108	02	8,500
Toluene	BDT	109	307	109	108	BOL	BDL	Tae	108	TOB	_	BOL	ICB	TOB T	108	BDL	306	108	306	108	ã	JOB	108	900	260,000
1,2,4-Trimothylbenzene	1GB	BDL	108	100	BOL	1QB	1.3	HD.	BOL	aor	708	BDL	108	ר פטר	BDL	BDL	305	108	708	HD1.	BDL	BDF	BDL	900	28,500
1,3,5-Trimathylbenzane	BDt	BDL	108	ig H	BOL	BDF	BDL	308	108	_	301	BDL	BDI	ר פסר	108	BDL	TGB	BDI	30F	TGB	7Q8	BOL	BDL	400	25,000
Xylenas, Total	Tos	nge .	BDI,	HDI.	BOL	BDI.	3,8	BDL	BDL	BDL		BDL	BDL	L BDL		BDL	801	BDI	γgg	709	BDF	PDF	108	. DOS	85,500
Notes:	Alfresults in µg't (micrograms per files) BDL = Belew Detection Limit, NA = Net Analyzee	?L - (microgra	ms per Rer); B	DL = Balow	Detection Lim	It, NA = Not /	id id pazifeu	i by particular method	T									-							
	2L STD - Groundwaler Quelity Standard (15A NGAC Subchepter 2t.)	Avater Quelle	eyer, NL = Net ly Standard (15	SA NCAC SU	bchapter 2(.)																				
	Parameters not listed were below detection limits - see complete laboratory report for details	fisted were t	notoetec wele	mits - 598	complete labo	ratory report	for details																		
		Result Excess	Regult F. Rosulf Excepts Light present	Detaction Lin	2																				
	※SRESEMEN = Result Exceeds 2L Standard	Result Exceo	ds 21. Standard																						
		Result Exces	ds GCL Value																						

				-					HIST	HISTORICAL GROUNDWATER ANALYTICAL RESULTS - PANTRY #486	UNDWATER.	ANALYTICAL	RESULTS - I	ANTRY #48	w										
-										Fayette	6605 ; ville, Cumber,	1605 Raeford Road Inberland County,	6605 Raeford Road Fayetteville, Cumberland County, North Carolina	g											
					MW-14									MW-15				-		ĺ	MW-15		M	NCAC 2L STD	28
Овтрация	1/29/2008	1/29/2008 10/5/2009	6/4/2010	64/2010 12/15/2010 7/26/2012	7/26/2012	5/8/2013	5/8/2013 12/30/2013 9/11/2014 6/19/2015	9M172014	5/19/2015	1/28/2008	10/7/2009	6/4/2010	12/15/2010 7/26/2012 SH3/2013 B/13/2013 SH2/2014 6/20/2016	726/2012	5M3/2013	V13/2013	H222014	720/2016	-	5M3/2013 12/30/2013 9/12/2014	20/2013 S		5/26/2015	(hear)	(Pad
Volatile Organic Compounds (VDCs) by EPA Method \$200B	Cs) by EPA Ma	Hod \$200B																		_					•
Beitzehs	HD4	BDI.	108	- Ide	108	108	708	708	108	4 6 GZ	BDL	708	BDL	TOB	108	7 08	f 108	HD(SN SN	- C9.	an.	- 412 - D9	3414C	1,0	5,000
Dispray other (PE)	HD!	BDI.	108	BDL	TGB	301	BDL	308	BDL.	708	BOL	BDL	BDL	BDL	301	aD.	100	3DF		BDI.		BDF	3,6	ou.	000'07
Ethylbenzene	108	BD(BDL	9Dt	BDL	ĕ	BDL	7GB .	108	2.5	108	TOB	108	BD.	108	- TOP	108	BD(SN	34	_	41	90	009	84,500
Sopropylbenzene	1gg	BDI	109	BD1.	BDL	ī	BD(BDL	108	8DI	BDL	BOL	108	BDL	30F	TGB	108	- TGB	SN	2	L_	1.5	4.4	7.0	25,000
Methyl tertiary-butyl ether (MTBE)	108	108	801	9	4,6	TCS	1QB	708	HD4	2.8	HD1	1.1	6.8	TOB	BDL	- TOB	108	- TOB	SN SN	Sec. 22.	Š,	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	350 PT 350	20	20,000
Naphthalone	-BDI	BDL	108	108	าดย	109	108	708	109	108	109	ΉOΒ	BDL	HDF.	108	1da	108	-Taa	NS SN	がなり		NOF NO	× 98	8	6,000
n-Propytonzone	- TOB	BDL	108	BDL	าดย	HD1	108	708	HOI,	108	BDL	HDL	HDE.	BDL	HDI	BD1,	108	TOB	υN	4		า	7.2	02	30,000
P-Isopropy/folluono	708	108	108	108	PDF	BDL	108	BDF	PDF	708	BDL	HD/L	108	BDL	HOL	BOL	BOL	BDL	NS	BD1.	_	108	108	¥	¥
n-Butytbanzene	301	- TGB	BDL	108	709	BDL	108	TOB	BOL	108	ED1	1GB	BDI,	BDL	108	BDL	TOS	BDL	SN	BDL	<u> </u>	- TOR	BDL	5	6,900
sec-Butylbenzane	TCB	BDL	BDL	108	108	108	10B	108	108	TOB	BDL	TOB	108	BDL	108	BDL	HDF	BDI.	SZ	BDL		BDL -	BOL	R	8,500
Tolluette	TOB .	108	BDL	BDL	BDL	BDL	BDL	BDL	- BD/	\$4	BDL	HDF	108	BDL	HDF.	BDL	108	BDL	SN	200	L	SB	WATERDON SIX	909	280,000
1,2,4-Timethybenzone	BDL	108	108	2	272	BOL	708	108	ADL.	1'8	BDf,	BDL	BDL.	BDL	BDL	BDL	108	BDL	62	69		74	120	400	28,500
1,3,5-TrimethythenZene	BDI	108	TOB BDT	BDL	708	BDL	305	108	10B	0.2	HDF	BDL.	901	BDL	108	BDL	108	100	SN	45	L	7.5	88	400	25,000
Xylenes, Total	- BDL	COL	BDL	109	108	BDL	108	108	BDL	19.6	BDL	BDL	BDL	BDL	BDL	BDI.	BDI	BDI.	e S	230	L	111	32.2000 S. 32	200	85,500
Notes	١																								
	Al results in s	ig/L - (microgit	rams por Rer,	t; BDL = Belo	w Detection L	Imit NA - N	All results in 18/1 (micrograms per Red); BDL = Below Detection Limit; NA = Not Analyzed by particular method	mariloniar m.	thod:																
	CCL = Gross	GCL = Gross Contaminant Levet NL = Not Listed	Level NL = 1	tot Lisked																					
	2L STD-Gro	2L STD - Groundwater Quelly Standard (15A NCAC Subchapter 2L)	My Standard	(15A NCAC)	Subchapler 2	5																			_
	Peremeters n	Peremeters not listed were below detection limits - see complete laboratory	below detect	es - simil not	e complete la	thorstory repo	report for details																		_
	NAPL - Non-	NAPL - Non-Aqueous Phase Liquid present	to Liquid pres	in mil																					
	Result	Result = Rosult Excoods Laboratory Detection Limits	octs Laborate	ury Detection	Umils																				_
	The Base of the	京のPeant記載 = Result Exceeds 21. Standard	ede 2L Stant	ferd																					

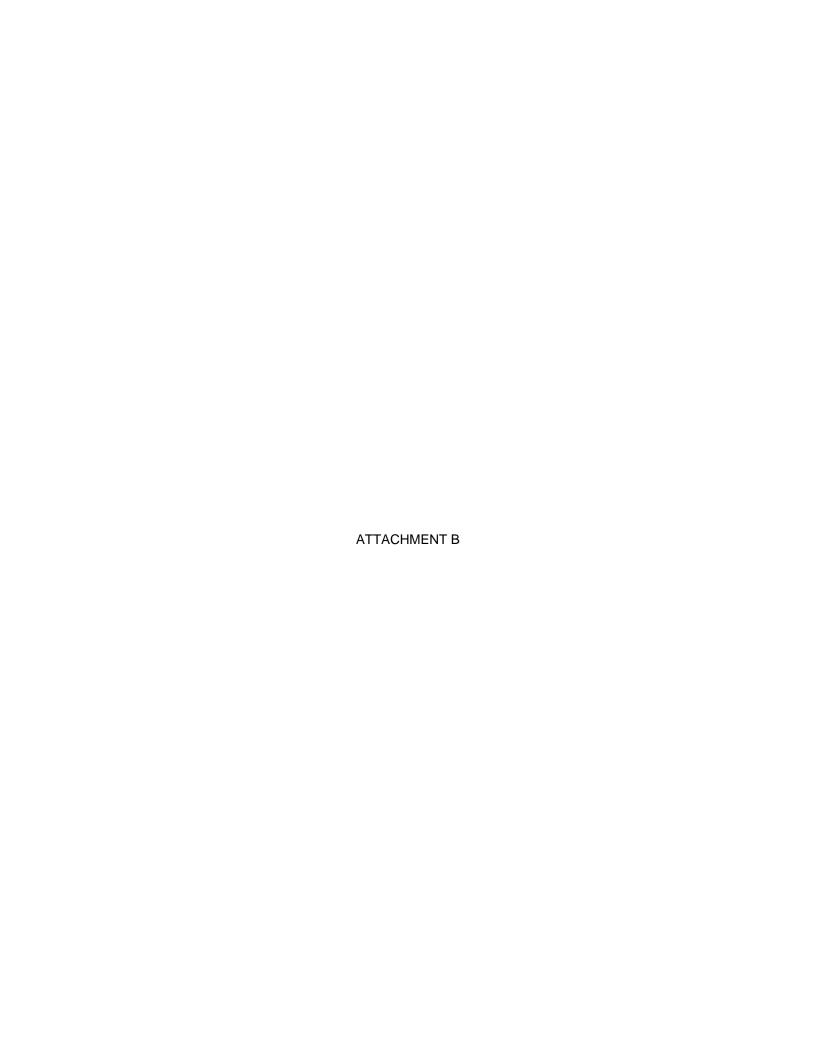
										ğ	ICAL GROUN	DWATER AN	HISTORICAL GROUNDWATER ANALYTICAL RESULTS - PANTRY #486	OUT IS - PAN.	KT #465											
											Fayettevilk	t, Cumbertar	Fayetteville, Cumberfand County, North Carolina	th Carolina												
		*	WW-47		-		M.	48	I !	L	EP-WW			IGW-ZD	-ZD	Γ		MW-Z		L		MW-22	-22		NCAC 2L STD	150 361
Companie	7726/2012	772672012 58872013 122772013 9/11/2014 6/20/2016 7/26/2012 6/13/2013 12/30/2013 9/11/2014	127/2013 5	1112014 GL	20/2015 7/26	72012 5713	2013 12/30	2013 9/11/	2014 5/20/2016	12/30/2013	13 8/11/201	SM172014 5/20/2015	7/27/2012	12/30/2013	2105/05/2 4105/119 E105/06/21 5105/15/7	5/20/2015	7/27/2012 12/30/2013 8/12/2014	2302013 \$	112/2014 G	5/13/2016 7/21	7/27/2012 6/8/	2013 12/30	72013 9/12/2	6/8/2013 12/30/2013 9/12/2014 5/19/2015	(legal)	(fight)
Volable Organic Compounds (VOCs) by EPA Method S200B	ics) by EPA Men	thed 6200B																								
Benzere	108	6.2	BDE	W YOR		No. of Contract	П	7CB 108	H	L	L	_	1000				500-12 878.00 5.540.00 5.000	Transfer S	(2) (2) (2) (3) (3) (3) (3) (3) (3) (3) (3) (3) (3	Ц	9 108	108 TOB	3r 8DF	TOB .	0.1	5,000
Di-Sapropyl either (IPE)	308	1GB	108	TGB	BDL	108	Γ	108 109	F				BDI	_			BDL BDC	BDC	BOL	709	BDL B	108	<u> </u>	BD(70	000'02
Ethylbenzane	305	1GB	301	1.4	4,9	10 E.	E,3 BC	BDL BDL	H	_			2.80er			_6	2500 X	6,300 cm	2,000			L	L	L	900	84,500
Isoptopylbenzana	ă		109	TOB	1 11	9	7.6 BE	108 TO8	L				801				H30 - 100 - 100 - 110 - 100 -	A 27872	を見る		BDT. B	BDT BI	31 20	6,9	70	25,000
Methyl tertary-butyl ether (MTBE)	108	108	덚	108	2.8	10 E.	18 8.3	BDL BDL	_			_	* 25 gdb * 3				2 (012) See (11)	270	002		6.9	1,P BD	-	9"2	20	20,000
Naphthalene	BDL	aDi.	IGE	TOB	BDT B	BD. BG	adr BE	BDT BOL	ו (ממר			_	108				BDI 🛣			ш	BDI. B	Н	A Special R	90 27	9	6,000
n-Propyfbertzens	BDL	H	108	8.6	BD.	5	24.0 BE	BDI BOL		, age	10.00	MAD	BDL	MAD	200	097	100 LX 100 B 1	新教育		1 1000	BDI B	108 TOB	Γ.	6.4	22	30,000
p-isopropylibluene	108	1QS	HDI.	TOS	-Tae	1 6	38 0'9	109 109	_				108		Š	į	108	BDI	108		BD(108	108 108	ור ו פסו	BDL	N.	'n
n-Butybenzene	301	apr	108	BDL	ā	2.2	27.0 BE	108 ROL	ור פוסר				BDL	_			BDL	BDL	BOL	11 E	BDr (B	108	109 TC	708	2	6,900
sec-Butylberzane	108	108	108	HDT.	708	3 4.	12.0 BE	108 10B	_				BDL	_			801	BDL	BDT.	Ц	BDT B	BDI BDI	L	L	22	8,500
Totalene	BDL	53	108	5,5	6,4 B	BDL BI	108 BDT	BDF BC	80F (80F				30 000			···	11,000,00	24 18 JOHN 14	44 (44)	200021	BDL B				600	260,000
1,2,4-Trimathythenzone	HDL	32	2.1	12	23	62 4	110 BE	Н	H				KINTON S			arti	Contain Second Second	** CODE	S. STORY		BDF B	108 108)L 230	20	400	28,500
1,3,5-Trimethylbenzene	BDI	12	108	1.7	6.4	27 5	16 29	BDL BDL)(BDL	П			BDL			Lite	- euto : 1,200f - seato 1.	1.300	Seattle S			BDI BDI)L	100	400	25,000
Xylenes, Total	109	5	8,1	13	36	73 36	36.2 BE	BOL BDL	L				SUPPLIES OF STREET			-81	SATINGES	25 E0b	318.2db 32.	H	BDY BI	BDL BE	BD(************************************	43	200	85,500
Notes																										
	Alt tosults in p	Alt tosults in µg/L - (micrograms per liter); BDL = Below Detection Litrit; NA = Not Analyzed by particular mathod	ns per (fer);	BDL = Below C	Velbodion Urrat; i	VA = Not Anal	yzad by partic.	ular method																		
	GCL = Gross	GCL = Gross Contaminant Level; NL = Not Listed	vel; NL = No	t Listed																						
	2L STD - Glos.	2L STD - Groundwater Quality Standard (15A NGAC Subchapter 2L)	* Shandard (1	5A NCAC Sub	chapter 24,																					
	Parameters no	Parameters not listed were below detection limits - see complete laboratory report for details	low detection	1 limits - sue co.	resplote laborati	ny report for a	letails																			
	MAPL - Non-A	NAPL - Non-Aqueous Phase Liquid present	Lkquid prese	*																						
	Result	Result - Rosult Exceeds Laboratory Detection Limits	ts Laboratory	- Detection Lim	4																					
	Part of	Resident - Result Exceeds 2L Standard	is 2L Stands	ē																						
	200 May 1	Kesuk Exceeds GCL Value	is occ value																							

TABLE 7 FREE PRODUCT MONITORING AND RECOVERY HISTORICAL SUMMARY Pantry #486 (Incident: #23062, Facility ID: 0-023655) 6606 Raeford Road

Monitoring/F	Revovery Date	June 18	3, 2012	October	31, 2011	March 1	6, 2011	Decembe	15, 2010	Novembe	r 29, 2010	May 24	4. 2010	October	6, 2009
Well ID	Screened Interval	Depth to Water Uncorrected (feet)	Free Product Thickness (feet)	Depth to Water Uncorrected (feet)	Free Produc Thickness (feet)										
MW-1	10 - 30	17.58	0.20	17.75	0.20	17.25	0.02	16.89	-	16.92	0.10	NM	NM	17.20	0.08
MW-2	10 - 30	19.01	-	19.22	-	18.87	0.02	18.51	0.10	18.63	0.28	NM	NM	18.74	0.18
MW-3	10 - 30	17,47	0.02	17.60	0.02	17.00	0.07	16.71	0.20	17.51	1.01	NM	NM	16.93	0.29
MW-4	10 - 30	19.87	0.15	19.92	0.12	19.47	0.02	19.16	0.20	19.10	0.10	NM:	NM	- 19.30	0.33
MW-16	10 - 30	18.61	0,06	18.30	0.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-17	10 - 30	18.44	0.04	18.62	0.01	N/A	N/A	N/A	N/A	N/A	N/A	. N/A	N/A	N/A	N/A
MW-18	10 - 30	19.50		18.82	_	N/A	N/A	N/A	N/A	N/A	· N/A	N/A	N/A	N/A	N/A
MW-19	10 - 30	18.22	0.04	18.40	0.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	· N/A
MW-20	10 - 29	17.18	0.04	17.41	0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-21	10 - 29	16.05	0.04	16.20	0.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-22	10 - 30	17.76	-	17.98	_	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RW-1	10 - 30	18.16	0.07	18.31	0.04	17.94	0.01	N/A	N/A	17.77	0.77	N/A	N/A	N/A	N/A
RW-2	10 - 30	18.54	0.02	18.35	0.01	17.50	0.01	N/A	N/A	18.02	0.02	N/A	N/A	N/A	N/A
RW-3	10 - 30	17.79	0.18	17.98	0.16	17.54	-	N/A	N/A	17.20	0.12	N/A	N/A	N/A	N/A
Recove	ry Method	ММРЕ	Event	Ва	iler	N/A - Moni	oring Event	N/A - Monit	oring Event	MMPE	Event	MMPE	Event	N/A - Monit	oring Event
Recove	ry Volume	~11,397 Gallons Wat ~46 Gallo		~20 Gallons Water ~8.0 Gall	/Petroleum Mixture	No	กอ	No	ne	~12,967Gallons Wat ~44 Gallo		~8,502 Gallons Wate ~54 Gallo	er/Petroleum Mixture ons NAPL	No	ne

Notes:

1.) Deoth-to-Water and Free Product Thickness measurements represent conditions prior to the associated recovery event.





PYRAMID GEOPHYSICAL SERVICES (PROJECT 2016-265)

GEOPHYSICAL SURVEY

METALLIC UST INVESTIGATION: PARCEL 072 - 6157 CRYSTAL DRIVE, LLC **NCDOT PROJECT U-4405**

6605 RAEFORD RD., FAYETTEVILLE, CUMBERLAND COUNTY, NC **NOVEMBER 4, 2016**

Report prepared for: Mike Branson

Solutions, IES 1101 Nowell Road

Raleigh, North Carolina 27607

Prepared by:

Eric C. Cross, P.G. NC License #2181

Reviewed by:

Douglas A. Canavello, P.G. NC License #1066

GEOPHYSICAL INVESTIGATION REPORT

Parcel 072 – 6605 Raeford Road Fayetteville, Cumberland County, North Carolina

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Summary and Conclusions	
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- Figure 2 Parcel 072 EM61 Results Contour Map
- Figure 3 Parcel 072 GPR Transect Locations & Select Images

Appendices

Appendix A – GPR Transect Images

LIST OF ACRONYMS

CADD	Computer Assisted Drafting and Design
DF	Dual Frequency
EM	Electromagnetic
GPR	Ground Penetrating Radar
GPS	Global Positioning System
NCDOT	North Carolina Department of Transportation
ROW	Right-of-Way
SVE	Soil Vapor Extraction
UST	Underground Storage Tank

Project Description: Pyramid Environmental conducted a geophysical investigation for Solutions, IES (Solutions) at Parcel 072, located at 6605 Raeford Road, Fayetteville, NC. The survey was part of a North Carolina Department of Transportation (NCDOT) Right-of-Way (ROW) investigation (NCDOT Project U-4405). Solutions directed Pyramid as to the geophysical survey boundaries at the project site, which were designed to extend from the existing edge of pavement to the proposed ROW lines and/or easement lines within the property, whichever distance was greater. Conducted from October 12-17, 2016, the geophysical investigation was performed to determine if unknown, metallic underground storage tanks (USTs) were present beneath the survey area.

Geophysical Results: An existing tank bed containing known USTs was present on the south side of the property, directly west of the survey area. A significant portion of the site contained metal-reinforced concrete, resulting in widespread interference in the EM survey. All EM anomalies not caused by the metal reinforcement were directly attributed to cultural features such as signs, utilities, guy wires, and storm sewer structures. A formal grid of GPR scans was performed across the areas containing reinforced concrete to investigate below the reinforcement for USTs. No evidence of larger structures such as tanks was observed. Collectively, the geophysical data did not show any evidence of unknown metallic USTs at Parcel 072.

Pyramid Environmental conducted a geophysical investigation for Solutions, IES (Solutions) at Parcel 072, located at 6605 Raeford Road, Fayetteville, NC. The survey was part of a North Carolina Department of Transportation (NCDOT) Right-of-Way (ROW) investigation (NCDOT Project U-4405). Solutions directed Pyramid as to the geophysical survey boundaries at the project site, which were designed to extend from the existing edge of pavement to the proposed ROW lines and/or easement lines within the property, whichever distance was greater. Conducted from October 12-17, 2016, the geophysical investigation was performed to determine if unknown, metallic underground storage tanks (USTs) were present beneath the survey area.

The site included an active service station with a pump island, canopy, asphalt parking areas and grass medians. Aerial photographs showing the survey area boundaries and ground-level photographs are shown in **Figure 1**.

FIELD METHODOLOGY

The geophysical investigation consisted of electromagnetic (EM) induction-metal detection and ground penetrating radar (GPR) surveys. Pyramid collected the EM data using a Geonics EM61 metal detector integrated with a Trimble AG-114 GPS antenna. The integrated GPS system allows the location of the instrument to be recorded in real-time during data collection, resulting in an EM data set that is geo-referenced and can be overlain on aerial photographs and CADD drawings. A boundary grid was established around the perimeter of the site with marks every 10 feet to maintain orientation of the instrument throughout the survey and assure complete coverage of the area.

According to the instrument specifications, the EM61 can detect a metal drum down to a maximum depth of approximately 8 feet. Smaller objects (1-foot or less in size) can be detected to a maximum depth of 4 to 5 feet. The EM61 data were digitally collected at approximately 0.8 foot intervals along north-south trending or east-west trending, generally

parallel survey lines spaced five feet apart. The data were downloaded to a computer and reviewed in the field and office using the Geonics NAV61 and Surfer for Windows Version 11.0 software programs.

GPR data were acquired across select EM anomalies on October 17, 2016, using a Geophysical Survey Systems, Inc. (GSSI) UtilityScan DF unit equipped with a dual frequency 300/800 MHz antenna. Data were collected both in reconnaissance fashion as well as along formal transect lines across EM features. The GPR data were viewed in real-time using a vertical scan of 512 samples, at a rate of 48 scans per second. GPR data were viewed down to a maximum depth of approximately 4 feet, based on dielectric constants calculated by the DF unit in the field during the reconnaissance scans. GPR transects across specific anomalies were saved to the hard drive of the DF unit for post-processing and figure generation.

Pyramid's classifications of USTs for the purposes of this report are based directly on the geophysical UST ratings provided by the NCDOT. These ratings are as follows:

	Geophysical Surveys for on NCD	Underground Stora OOT Projects	ge Tanks
High Confidence	Intermediate Confidence	Low Confidence	No Confidence
Known UST	Probable UST	Possible UST	Anomaly noted but not
Active tank - spatial	Sufficient geophysical data from both	Sufficient geophysical data from	characteristic of a UST. Should be
location, orientation,	magnetic and radar surveys that is	either magnetic or radar surveys	noted in the text and may be called
and approximate	characteristic of a tank. Interpretation may	that is characteristic of a tank.	out in the figures at the
depth determined by	be supported by physical evidence such as	Additional data is not sufficient	geophysicist's discretion.
geophysics.	fill/vent pipe, metal cover plate,	enough to confirm or deny the	
	asphalt/concrete patch, etc.	presence of a UST.	

DISCUSSION OF RESULTS

Discussion of EM Results

A contour plot of the EM61 results obtained across the survey area at the property is presented in **Figure 2**. Each EM anomaly is numbered for reference in the figure. The

following table presents the list of EM anomalies and the cause of the metallic response, if known:

LIST OF METALLIC ANOMALIES IDENTIFIED BY EM SURVEY

Metallic Anomaly #	Cause of Anomaly	Investigated with GPR
1	Sign	
2	Water and Gas Utilities	$oldsymbol{\lozenge}$
3	Reinforced Concrete	Ø
4	Guy Wires	
5	Telephone Pole and Signs	
6	Telephone Pole and Utility Box	
7	Drop Inlet	
8	Reinforced Concrete	Ø
9	Suspected Utility	Ø
10	Reinforced Concrete	Ø
11	Known UST	Ø
12	Storm Sewer	
13	Sign, Bollards, and Sewer Cover	
14	Reinforced Concrete	Ø
15	Telephone Pole	

A large portion of the survey area contained metal-reinforced concrete that resulted in widespread metallic interference during the EM survey. For this reason, a formal grid of GPR scans was performed across the survey area to investigate beneath the reinforcement for structures such as USTs. In addition to the anomalies associated with the metal reinforcement, cultural features such as signs, utilities, guy wires, and storm sewer structures resulted in isolated EM features. Lastly, a bed containing known USTs was located on the south portion of the property, directly west of the survey area. These tanks also resulted in an EM anomaly adjacent to the tank bed.

Discussion of GPR Results

Figure 3 presents the locations of the formal GPR transects performed at the property, as well as select transect images. A total of 32 GPR transects were performed at the site across the areas containing reinforced concrete. The GPR survey verified the presence of reinforcement in all of the interpreted locations. None of the GPR scans recorded evidence of structures underlying the reinforcement that would be indicative of USTs, with the exception of the known USTs located west of the south portion of the survey area.

Collectively, the geophysical data <u>did not show any evidence of unknown metallic USTs</u> at Parcel 072.

SUMMARY & CONCLUSIONS

Pyramid's evaluation of the EM61 and GPR data collected at Parcel 072 in Fayetteville, Cumberland County, North Carolina, provides the following summary and conclusions:

- The EM61 and GPR surveys provided reliable results for the detection of metallic USTs within the accessible portions of the geophysical survey area.
- An existing tank bed containing known USTs was present on the south side of the property, directly west of the survey area.
- A significant portion of the site contained metal-reinforced concrete, resulting in widespread interference in the EM survey.
- All EM anomalies not caused by the metal reinforcement were directly attributed to cultural features such as signs, utilities, guy wires, and storm sewer structures.
- A formal grid of GPR scans was performed across the areas containing reinforced concrete to investigate below the reinforcement for USTs. No evidence of larger structures such as tanks was observed.
- Collectively, the geophysical data <u>did not show any evidence of unknown metallic</u> USTs at Parcel 072.

LIMITATIONS

Geophysical surveys have been performed and this report was prepared for Solutions, IES in accordance with generally accepted guidelines for EM61 and GPR surveys. It is generally recognized that the results of the EM61 and GPR surveys are non-unique and may not represent actual subsurface conditions. The EM61 and GPR results obtained for this project have not conclusively determined the definitive presence or absence of metallic USTs, but the evidence collected is sufficient to result in the conclusions made in this report. Additionally, it should be understood that areas containing extensive vegetation, reinforced concrete, or other restrictions to the accessibility of the geophysical instruments could not be fully investigated.

APPROXIMATE BOUNDARIES OF GEOPHYSICAL SURVEY AREA



NC STATE PLANE, EASTING (NAD83, FEET)



View of Survey Area (Facing Approximately East)



View of Southeast Survey Area (Facing Approximately South)

TITLE

PARCEL 072 - GEOPHYSICAL SURVEY BOUNDARIES AND SITE PHOTOGRAPHS

PROJECT

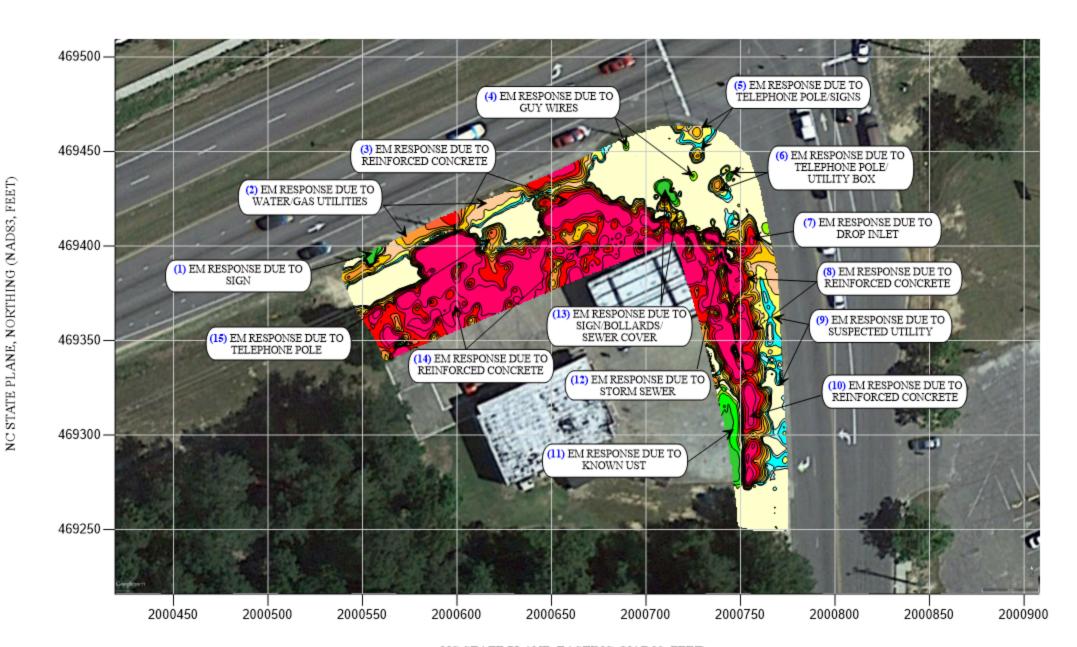
6605 RAEFORD ROAD FAYETTEVILLE, NORTH CAROLINA NCDOT PROJECT U-4405



503 INDUSTRIAL AVENUE GREENSBORO, NC 27460 (336) 335-3174 (p) (336) 691-0648 (f) License # C1251 Eng. / License # C257 Geology

DATE	10/31/16	CLIENT	SOLUTIONS, IES
PYRAMID	2016-265		FIGURE 1

EM61 METAL DETECTION RESULTS



NC STATE PLANE, EASTING (NAD83, FEET)

NUMBERS IN BLUE (x) CORRESPOND TO ANOMALY TABLE INCLUDED IN THE REPORT

NO EVIDENCE OF UNKNOWN METALLIC USTs OBSERVED

The contour plot shows the differential results of the EM61 instrument in millivolts (mV). The differential results focus on larger metallic objects such as USTs and drums. The EM61 data were collected on October 12, 2016, using a Geonics EM61 instrument. Verification GPR data were collected using a GSSI UtilityScan DF instrument on October 17, 2016.

EM61 Metal Detection Response (millivolts)



TITLE

PARCEL 072 - EM61 RESULTS CONTOUR MAP

PROJECT

6605 RAEFORD ROAD FAYETTEVILLE, NORTH CAROLINA NCDOT PROJECT U-4405



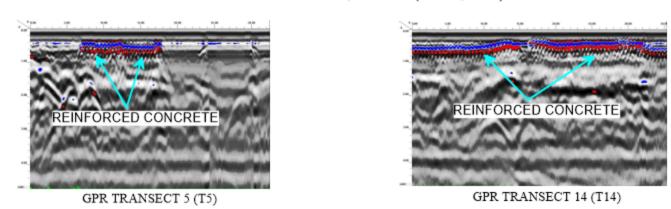
503 INDUSTRIAL AVENUE GREENSBORO, NC 27460 (336) 335-3174 (p) (336) 691-0648 (f) License # C1251 Eng. / License # C257 Geology

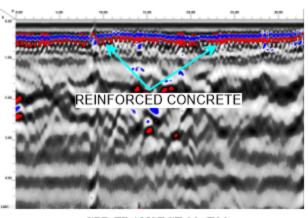
DATE	10/31/2016	CLIENT SOLUTIONS, IES	
PYRA: PROJE		FIGURE 2	

LOCATIONS OF GPR TRANSECTS



NC STATE PLANE, EASTING (NAD83, FEET)





GPR TRANSECT 20 (T20)

TITLE

PARCEL 072 - GPR TRANSECT LOCATIONS AND SELECT IMAGES

PROJECT

6605 RAEFORD ROAD FAYETTEVILLE, NORTH CAROLINA NCDOT PROJECT U-4405



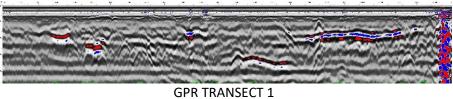
503 INDUSTRIAL AVENUE GREENSBORO, NC 27460 (336) 335-3174 (p) (336) 691-0648 (f) License # C1251 Eng. / License # C257 Geology

	DATE	10/31/2016	CLIENT	SOLUTIONS, IES
--	------	------------	--------	----------------

PYRAMID FIGURE 3 2016-265

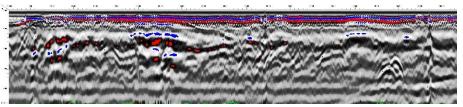
PROJECT #:



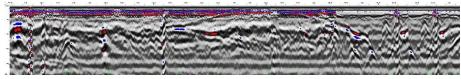




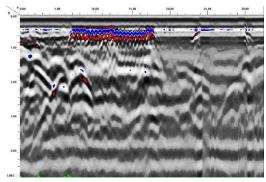
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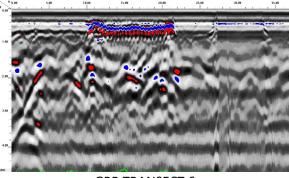
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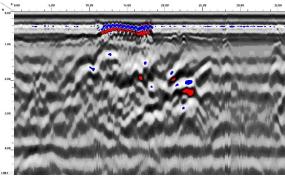
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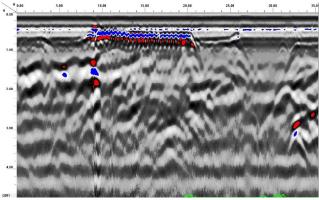
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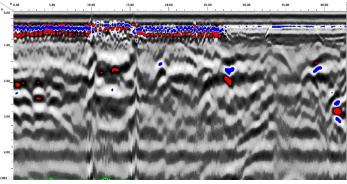
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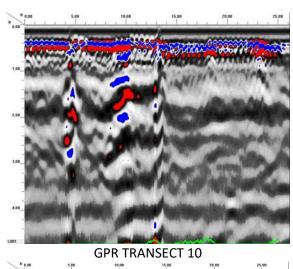
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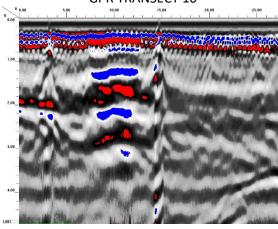


GPR TRANSECT 8

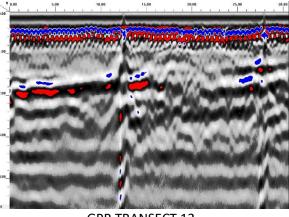


GPR TRANSECT 9

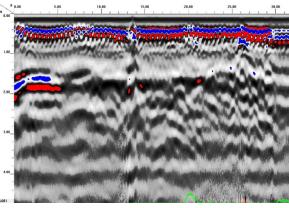




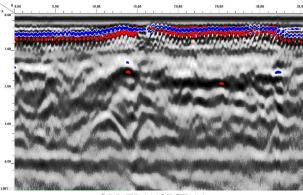
GPR TRANSECT 11



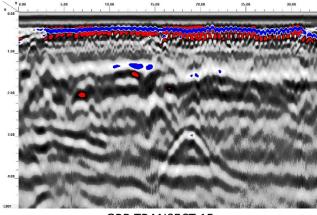
GPR TRANSECT 12



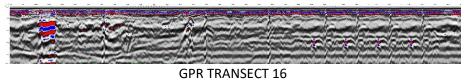
GPR TRANSECT 13

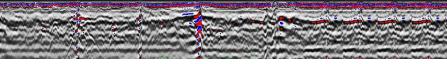


GPR TRANSECT 14

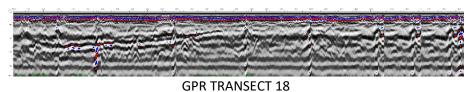


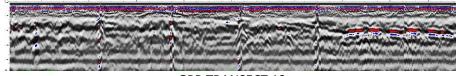
GPR TRANSECT 15



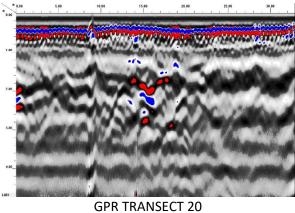


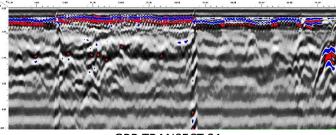
GPR TRANSECT 17



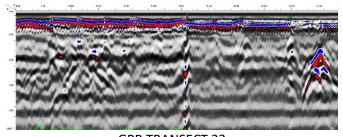


GPR TRANSECT 19

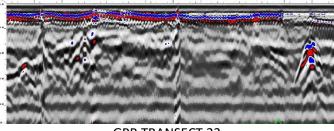




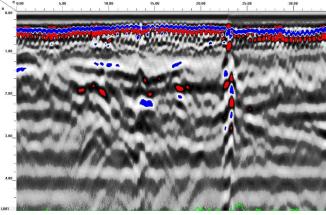
GPR TRANSECT 21



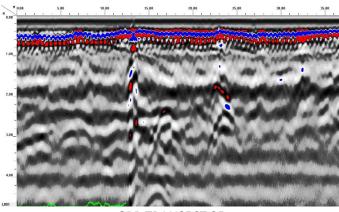
GPR TRANSECT 22



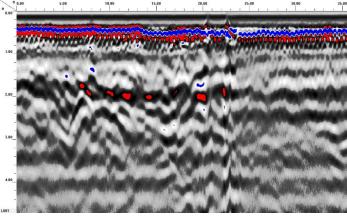
GPR TRANSECT 23



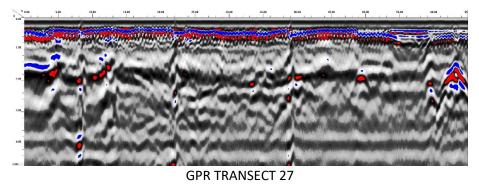
GPR TRANSECT 24



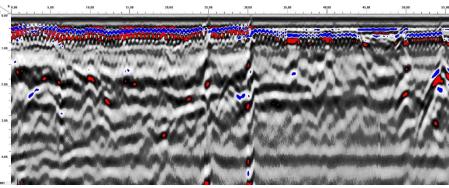
GPR TRANSECT 25



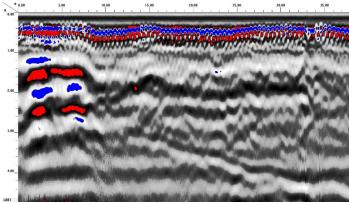
GPR TRANSECT 26



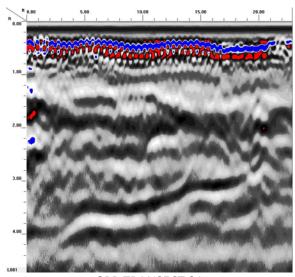
GPR TRANSECT 28



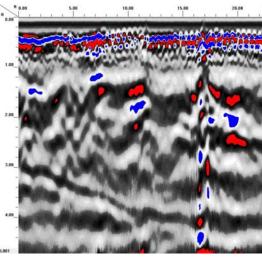
GPR TRANSECT 29



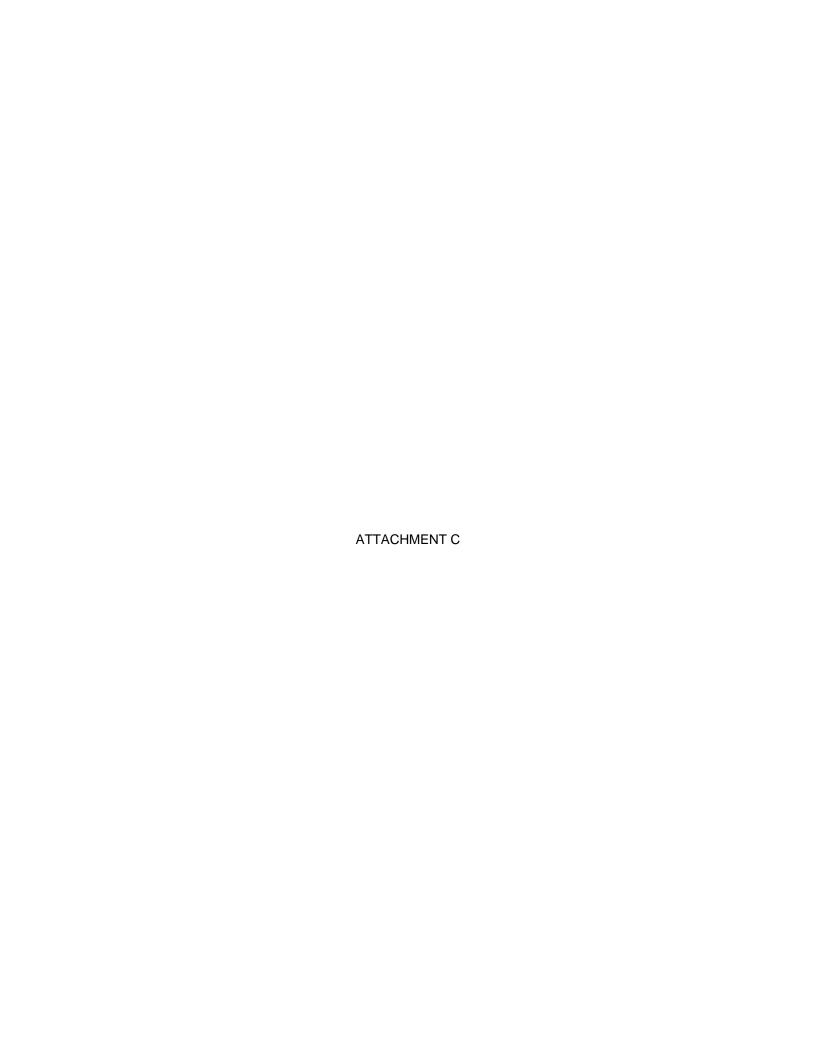
GPR TRANSECT 30



GPR TRANSECT 31



GPR TRANSECT 32



Indus.	Solu trial & En	tio	ns	S-IES		Log of Boring 72-SB-1							
	IG LOCATIO		iliciita		2, Fayetteville, NC	PROJECT NUMBER: 2016.0054.NDOT							
DRILL	ING CONTR	ACTOF	₹:		Regional Probing Services	DATE STARTED: 10/24/2016	DATE FINISHED: 10/24/2016						
DRILLI	NG METHO	D: D	irect P	ush	BOREHOLE DIAMETER: 2.25"	TOTAL DEPTH (ft bgs): 10 ft bgs	SCREEN INTERV	AL (ft bgs):					
DRILL	ING EQUIPM	IENT:	(Geoprobe 5	3410	NORTHING: NA	EASTING: NA						
SAMPL	ING METHO	DD:	Macr	o Core		INITIAL DTW:	FINAL DTW: NA						
	ED BY: I McIntyre		CHEC	CKED BY:									
DEPTH (ft bgs)	((t bgs) (t bg				DEPTH (ft bgs)								
0	a o		PID (ppm)					0					
1-			3.9		Light brown and red mottled clayey fine sand.	Dry.							
2-		93%						2					
3-			2.1										
_					-3								
4-								_4					
5—			3.5		Light brown and rad mattled fine sandy clay. Dry								
_		100%											
6-		100			Light brown and red mottled fine sandy clay. Dry.								
7-			2.8					-7					
8-								8					
_	-8-10	%						-					
9-	72-SB-1-8-10	100%	4.3					<u> </u>					
10-	7					nd of Boring		10					
					_	na or Boning							
								Page 1 of 1					

Indus	Solu	1t	10	ns	-IES		Log of Boring 72-SB-2							
	IG LOCAT			nenta		2, Fayetteville, NC	PROJECT NUMBER: 2016.0054.NDOT							
DRILL	ING CON	TRAC	CTOR	:		Regional Probing Services	DATE STARTED: 10/24/2016	DATE FINISHED: 10/24/2016						
DRILL	ING METH	HOD:	Di	rect Pu	ısh	BOREHOLE DIAMETER: 2.25"	TOTAL DEPTH (ft bgs): 10 ft bgs	SCREEN INTERVAL (ft bgs): NA						
DRILL	ING EQUI	PME	NT:	C	Geoprobe 5	410	NORTHING: NA	EASTING: NA						
SAMP	LING MET	HOD):	Macro	Core		INITIAL DTW:	FINAL DTW:						
LOGGED BY: CHECKED BY: Samuel McIntyre														
_		IPLES							Ι. 🙃					
DEPTH (ftbgs)	Sample ID	and Interval	Recovery	PID (ppm)		DESCRIPTION OF MATERIALS			DEPTH (ftbgs)					
0		to _									Concrete.			0
1-				3.3		Light brown and red mottled clayey fine sand. C	Ory.		_ _1					
2—			100%						-2					
_			10						-					
3-				1.4					-3					
4—				0.9										
-														
5—				0.9										
6—			100%	_////	Light brown and red mottled fine sandy clay. Dry.									
-			100					-6 -						
7—				0.6					-7					
8-									- 8					
-	Ç	2												
9—	0 0 0	0P-7-00	100%	1.6					-9					
-	8	7							- I					
10					,,,,,	End	l of Boring		10					

Indu	Solu strial & En	tio	ns menta	S-IES)	Log of Boring 72-SB-3					
	NG LOCATIO				2, Fayetteville, NC	PROJECT NUMBER: 2016.0054.NDOT					
DRIL	LING CONTR	ACTOF	₹:		Regional Probing Services	DATE STARTED: 10/24/2016	DATE FINISHED: 10/24/2016				
DRILL	ING METHO	D: D	irect P	ush	BOREHOLE DIAMETER: 2.25"	TOTAL DEPTH (ft bgs): 10 ft bgs	SCREEN INTERVA NA	L (ft bgs):			
DRILI	LING EQUIPM	MENT:	(Geoprobe 5	5410	NORTHING: NA	EASTING: NA				
SAMF	LING METHO	DD:	Macr	o Core		INITIAL DTW:	FINAL DTW: NA				
	SED BY: el McIntyre		CHEC	CKED BY:							
	SAMPL	1						H. (s			
DEPTH (ft bgs)	Sample ID and Interval	Recovery	PID (ppm)		DESCRIPTION OF MATERIALS			DEPTH (ft bgs)			
0	S E							0			
1-			0.2		Light brown and red mottled clayey fine sand. [Dry.		_ _1			
-		%									
2-		100%						_2			
3-			2.9					-3			
-								-4			
4-											
5-			0.2								
-		100%			Light brown and red mottled fine sandy clay. Dry.						
6-		100									
7-			0.3					-7			
8-								- 8			
-	8-10	٥						_			
9-	72-SB-3-8-10	100%	0.3					- 9			
10-	22							10			
					Enc	d of Boring					
								Page 1 of 1			

Indu	Solu strial & En	tio	ns menta	S-IES) S	Log of Boring 72-SB-4							
	NG LOCATIO				2, Fayetteville, NC	PROJECT NUMBER: 2016.0054.NDOT							
DRIL	LING CONTR	ACTOF	R:		Regional Probing Services	DATE STARTED: 10/24/2016	DATE FINISHED: 10/24/2016						
DRILL	ING METHO	D: D	irect P	ush	BOREHOLE DIAMETER: 2.25"	TOTAL DEPTH (ft bgs): 10 ft bgs	SCREEN INTERVA NA	L (ft bgs):					
DRILI	LING EQUIPM	IENT:	(Geoprobe 5	410	NORTHING: NA	EASTING: NA						
SAMF	PLING METHO	D:	Macr	o Core		INITIAL DTW:	FINAL DTW: NA						
	SED BY: el McIntyre		CHEC	CKED BY:									
Ιœ	SAMPL		e e		DESCRIPTION OF MATERIALS			TH (sg					
DEPTH (ft bgs)	Sample ID and Interval	Recovery	PID (ppm)				DEPTH (ft bgs)						
0	S E							0					
1-			0.0		Light brown and red mottled clayey fine sand. [)nv							
-		,			Light brown and red mothed dayey line sand. L	лу.							
2-		100%						-2					
3-			0.0					-3					
-													
4-								- 4					
5-			0.4				-5						
-		%											
6-		100%			Light brown and red mottled fine sandy clay. Dry.								
7-			0.6					-7					
-								-8					
8-	-10							_ o _					
9-	72-SB-4-8-10	100%	2.0					-9					
10-	72-												
10					Enc	d of Boring		10					
								Page 1 of 1					

Indu	Solu strial & En	tio	ns menta	S-IES)	Log of Boring 72-SB-5							
	NG LOCATIO				2, Fayetteville, NC	PROJECT NUMBER: 2016.0054.NDOT							
DRIL	LING CONTR	ACTOF	₹:		Regional Probing Services	DATE STARTED: 10/24/2016	DATE FINISHED: 10/24/2016						
DRILL	ING METHO	D: D	irect P	ush	BOREHOLE DIAMETER: 2.25"	TOTAL DEPTH (ft bgs): 10 ft bgs	SCREEN INTERVA	AL (ft bgs):					
DRIL	LING EQUIPM	1ENT:	(Geoprobe 5	3410	NORTHING: NA	EASTING: NA						
SAME	PLING METHO	DD:	Macr	o Core		INITIAL DTW:	FINAL DTW:						
1	SED BY: el McIntyre		CHEC	CKED BY:									
Τ	SAMPL	1	Ē					H. (s					
DEPTH (ft bgs)	Sample ID and Interval	Recovery	PID (ppm)		DESCRIPTION OF MATERIALS			DEPTH (ft bgs)					
0	S C							0					
1-			0.2		Light brown and red mottled clayey fine sand. [Orv.							
-		9			3	,		_					
2-		100%						-2					
3-			0.1					-3					
-													
4-							_4						
5-			0.7										
-	_	%											
6-		100%			Light brown and red mottled fine sandy clay. Dry.								
7-	_		0.4					-7					
-								-					
8-	-10							- 8					
9-	72-SB-5-8-10	100%	0.4					-9					
10-	72-8							10					
10-					Enc	d of Boring							
								Page 1 of 1					

Indu	Solu	tio	ns menta	S-IES) S	Log of Boring 72-SB-6							
	NG LOCATIO				2, Fayetteville, NC	PROJECT NUMBER: 2016.0054.NDOT							
DRIL	LING CONTR	ACTOF	₹:		Regional Probing Services	DATE STARTED: 10/24/2016	DATE FINISHED: 10/24/2016						
DRILL	ING METHO	D: D	irect P	ush	BOREHOLE DIAMETER: 2.25"	TOTAL DEPTH (ft bgs): 10 ft bgs	SCREEN INTERVAL NA	(ft bgs):					
DRIL	LING EQUIPN	MENT:	(Geoprobe 5	410	NORTHING: NA	EASTING: NA						
SAMF	LING METHO	DD:	Macr	o Core		INITIAL DTW:	FINAL DTW: NA						
l .	SED BY: el McIntyre		CHEC	CKED BY:									
	SAMPL	1	<u> </u>					E (s					
DEPTH (ft bgs)	Sample ID and Interval	Recovery	PID (ppm)		DESCRIPTION OF MATERIALS			DEPTH (ft bgs)					
0	a & l		<u> </u>					0					
1-			0.4		Light brown and red mottled clayey fine sand. [Dry.		-1					
_		\ ₀						_					
2-		100%						-2					
3-			0.5					-3					
-													
4-													
5-			0.9		Light brown and red mottled fine sandy clay. Dry.								
-		%											
6-		100%											
7-			0.3					-7					
-													
8-	-10							- 8					
9-	72-SB-6-8-10	100%	1.2		Light brown and red mottled fine silty clay. Dry.			-9					
-	72-8							40					
10-					Enc	d of Boring		10					
								Page 1 of 1					

Indus	trial 8	& En	viron	115 menta	-IES I Service	<u>.</u> s	Log of Boring 72-SB-7						
BORIN	IG LOC	CATION	N:		Parcel #7	2, Fayetteville, NC	PROJECT NUMBER: 2016.0054.NDOT						
DRILL	ING C	ONTRA	ACTOR	R:		Regional Probing Services	DATE STARTED: 10/24/2016	DATE FINISHED: 10/24/2016					
DRILLI	NG ME	ETHOD): D	irect Pu	ısh	BOREHOLE DIAMETER: 2.25"	TOTAL DEPTH (ft bgs): 12 ft bgs	SCREEN INTERVAL (ft bgs): NA					
DRILL	ING E	QUIPM	ENT:	G	eoprobe 5	5410	NORTHING: NA	EASTING: NA					
SAMPL	LING M	ИЕТНО	D:	Macro	Core		INITIAL DTW:	FINAL DTW: NA					
LOGGI Samue				CHEC	KED BY:								
DEPTH (ft bgs)	(ft bgs) Sample ID and Interval Secovery Recovery PID (ppm)					DESCRIPTION OF MATERIALS	DESCRIPTION OF MATERIALS						
0		Ж É	Concrete.										
1-	1-		. 0	0.6		Light brown and red mottled clayey fine sand.	Dry.		- -1 -				
_			100%	0.2		Light brown and red mottled fine sandy clay. D	Pry.		-2 - -3				
4-	Г												
5—		72-SB-7-4-6	%	18.3					-5 -6				
6— 7—		72-SB-7-6-8	100%	6.5	6.5	Light brown and red mottled fine sandy clay. Some black staining with slight hydrocarbon odor present. Dry.							
8- 9- 10-		72-SB-7-8-10	100%	2.2		Light brown and red mottled silty clay. Dry.							
11-			10	NA		Light brown and red mottled silty clay. Wet.			- 11 -				
12			<u> </u>	1	/////	Enc	d of Boring		— <u> </u> 12				

Notes: 1) NA - Not available, PID reading not collected.

Indu	Solu strial & En	tio	ns menta	S-IES		Log of Boring 72-SB-8								
	NG LOCATIO				2, Fayetteville, NC	PROJECT NUMBER: 2016.0054.NDOT								
DRILI	LING CONTR	ACTOF	₹:		Regional Probing Services	DATE STARTED: 10/24/2016	DATE FINISHED: 10/24/2016							
DRILL	ING METHO	D: D	irect P	ush	BOREHOLE DIAMETER: 2.25"	TOTAL DEPTH (ft bgs): 10 ft bgs	SCREEN INTERVAL	_ (ft bgs):						
DRILL	LING EQUIPM	IENT:	(Geoprobe 5	5410	NORTHING: NA	EASTING: NA							
SAMF	LING METHO	DD:	Macr	o Core		INITIAL DTW:	FINAL DTW: NA							
	GED BY: el McIntyre		CHE	CKED BY:										
Τ	SAMPL		Ē		DESCRIPTION OF MATERIALS			LH (S)						
DEPTH (ft bgs)	Sample ID and Interval	Recovery	PID (ppm)				DEPTH (ft bgs)							
0	g ő E		_					0						
1-			0.8		Light brown and red mottled clayey fine sand. [Dry.		- -1						
_		٠,0						_						
2-		100%												
3-			0.2					-3						
_														
4-								- 4						
5-			0.1		Light brown and red mottled fine sandy clay. Di		-5							
_		%												
6-		100%						- 6						
7—			0.2					-7						
-														
8-	-10													
9-	72-SB-8-8-10	100%	12.7		Light brown and red mottled silty clay. Dry.			-9						
- 10-	72-8													
10					Enc	d of Boring		10						
								Page 1 of 1						

Indus	strial & En	viron	menta	-IES l Service	s	Log of Boring 72-SB-9				
BORIN	IG LOCATIO	N:		Parcel #7	2, Fayetteville, NC	PROJECT NUMBER: 2016.0054.NDOT				
DRILL	ING CONTR	ACTOR	₹:		Regional Probing Services	DATE STARTED: 10/24/2016	DATE FINISHED: 10/24/2016			
DRILL	ING METHO	D: D	irect Pu	ısh	BOREHOLE DIAMETER: 2.25"	TOTAL DEPTH (ft bgs): 12 ft bgs	SCREEN INTERVAL (ft bgs): NA			
DRILL	ING EQUIPM	IENT:	C	Geoprobe 5	410	NORTHING: NA	EASTING: NA			
SAMP	LING METHO	D:	Macro	Core		INITIAL DTW:	FINAL DTW: NA			
	ED BY:		CHEC	KED BY:						
	SAMPL	ES								
DEPTH (ftbgs)	Sample ID and Interval	Recovery	PID (ppm)		DESCRIPTION OF MATERIALS			DEPTH (ftbgs)		
0				700	Concrete.			0		
_	_		0.2		Light brown and red mottled clayey fine sand.	Dry.				
1-			0.2					1		
2-		%26						-2		
-		0,			Light brown and red mottled fine sandy clay.	Dry.		-		
3-			0.0					-3		
-								_		
4-								-4		
5—			0.3					5		
5_			0.3					_5		
6-		100%						-6		
-		_			Light hypers and and motified piles along Day			-		
7—			1.4		Light brown and red mottled silty clay. Dry.			-7		
-								-		
8-	0							- 8		
9-	9-6-6-1		15.5					_ 9		
_	72-SB-9-8-10							-		
10-		100%						-10		
-		,						-		
11-			NA		Light brown and red mottled silty clay. Wet.			-11		
12								12		
12—			•		Er	nd of Boring		12		

Notes: 1) NA - Not available, PID reading not collected.

Indu	Solu strial & En	tio	ns menta	-IES		Log of Boring 72-SB-10				
	NG LOCATIO				2, Fayetteville, NC	PROJECT NUMBER: 2016.0054.NDOT				
DRILL	ING CONTR	ACTOR	R:		Regional Probing Services	DATE STARTED: 10/24/2016	DATE FINISHED: 10/24/2016			
DRILL	ING METHO	D: D	irect Po	ısh	BOREHOLE DIAMETER: 2.25"	TOTAL DEPTH (ft bgs): 12 ft bgs	SCREEN INTERVAL (ft bgs): NA			
DRILL	ING EQUIPM	ENT:	(Seoprobe 5	410	NORTHING: NA	EASTING: NA			
SAMP	LING METHO	D:	Macro	Core		INITIAL DTW: NA	FINAL DTW: NA			
	SED BY: el McIntyre		CHEC	KED BY:						
DEPTH (ftbgs)	Sample ID BY And Interval	Recovery	PID (ppm)		DESCRIPTION OF MATERIALS			DEPTH (ft bgs)		
0 -	S E		0.0		Light brown and red mottled clayey fine sand. [Dry.		0		
2— 3—		100%	0.0		Light brown and red mottled fine sandy clay. D	ry.		-2 -3 4		
4— 5— 6— 7—		100%	0.2	Light brown and red mottled silty clay. Dry.						
8— 9—	72-SB-10-8-10		20.7					-7 -8 -9		
10-	2	100%	NA		Light brown and red mottled silty clay. Wet.			-10 - -11 - 12		
12					End	l of Boring		12		

Notes: 1) NA - Not available, PID reading not collected.

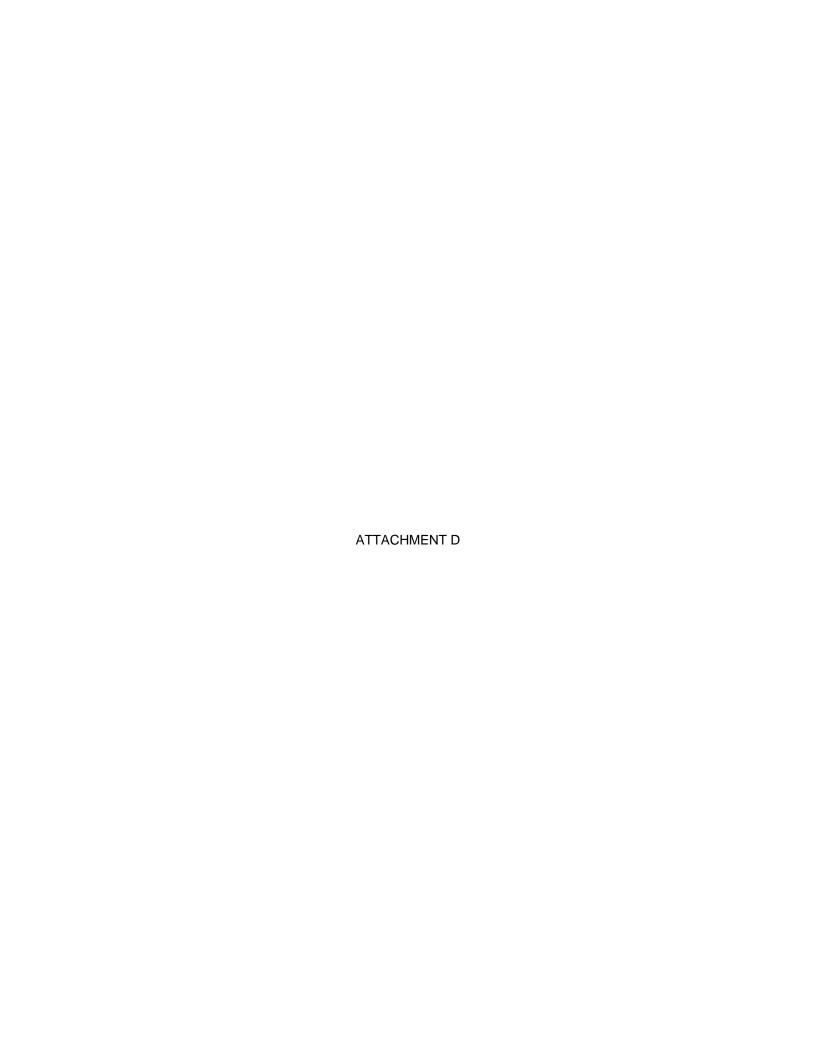




PHOTO I - VIEW OF SOIL BORING LOOKING NORTHWEST PHOTO 2 - VIEW OF SOIL BORING LOOKING NORTH







PHOTO 3 - VIEW OF SOIL BORING LOOKING NORTHWEST PHOTO 4 - VIEW OF SOIL BORING LOOKING NORTHEAST



PHOTO 5 - VIEW OF SOIL BORING LOOKING NORTHEAST PHOTO 6 - VIEW OF SOIL BORING LOOKING NORTH





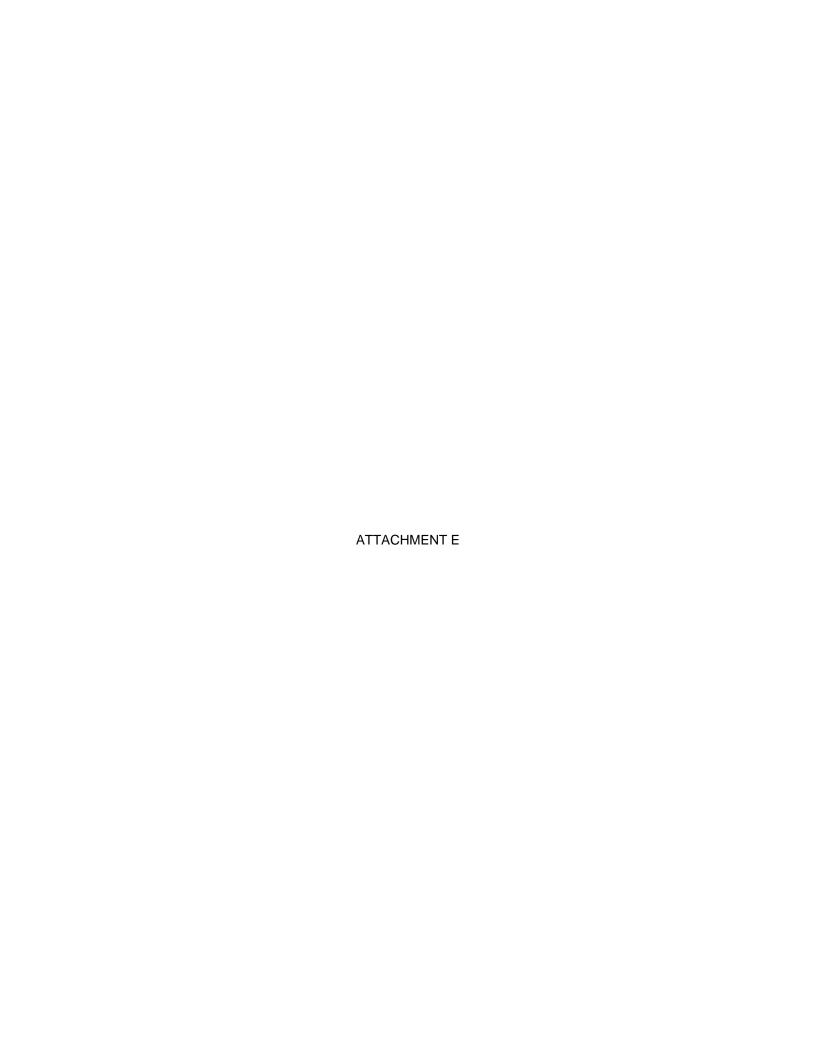
PHOTO 7 - VIEW OF SOIL BORING LOOKING EAST



PHOTO 8 - VIEW OF SOIL BORING LOOKING EAST



PHOTO 8 - VIEW OF SOIL BORING LOOKING SOUTHEAST









Hydrocarbon Analysis Results

 Client:
 NCDOT
 Samples taken
 10/25/2016

 Address:
 Parcel 72: 6605 Raeford Rd
 Samples extracted
 10/25/2016

Fayetteville, NC Samples analysed 10/25/2016

Contact: Operator Candy Elliott

Project: 2016.0054.NDOT

													U04049
Matrix	Sample ID	Dilution used	BTEX (C6 · C9)	GRO (C5 - C10)	DRO (C10 - C35)	TPH (C5 - C35)	Total Aromatics (C10-C35)	16 EPA PAHs	ВаР	Ratios	Ratios		HC Fingerprint Match
										% light	% mid	% heavy	
S	72-SB-1-8-10	7.7	<0.19	<0.19	0.19	0.19	0.14	0.02	<0.001	0	100	0	PHC not detected (FCM)
S	72-SB-2-8-10	8.2	<0.2	<0.2	<0.2	<0.2	<0.04	<0.007	<0.001	0	0	0	PHC not detected
S	72-SB-3-8-10	6.7	<0.17	<0.17	2	2	1	0.04	<0.001	0	100	0	Transformer oil (FCM) 91.4%
S	72-SB-4-8-10	9.4	<0.24	<0.24	0.24	0.24	0.22	0.03	<0.001	0	93.6	6.4	Residual.PHC (FCM)
S	72-SB-5-8-10	6.3	<0.31	<0.16	<0.16	<0.16	< 0.03	< 0.005	<0.001	0	19.1	80.9	Residual.PHC
S	72-SB-6-8-10	7.1	<0.18	<0.18	<0.18	<0.18	<0.04	<0.006	<0.001	0	21	79	Residual.PHC
S	72-SB-7-4-6	5.6	<0.14	<0.14	0.54	0.54	0.5	0.02	<0.001	0	91.8	8.2	Deg.PHC (FCM) 89.9%
S	72-SB-7-6-8	22.5	<0.56	<0.56	0.56	0.56	0.35	<0.02	<0.002	0	38.9	61.1	Residual.PHC (FCM) (P) (BO) 56.8%
S	72-SB-7-8-10	23.2	<0.58	5.5	<0.58	5.5	<0.12	<0.02	<0.002	98.2	0	1.8	Deg Gas (FCM) (P) (BO) 19.2%
S	72-SB-8-8-10	7.5	<0.19	<0.19	<0.19	<0.19	<0.04	<0.006	<0.001	0	0	100	Residual.PHC (P)
S	72-SB-9-8-10	6.7	<0.17	<0.17	0.17	0.17	0.13	0.02	<0.001	0	100	0	PHC not detected (FCM)
S	72-SB-10-6-8	8.2	<0.2	<0.2	<0.2	<0.2	<0.04	<0.007	<0.001	0	100	0	PHC not detected
S	72-SB-10-8-10	6.3	<0.16	<0.16	2.1	2.1	0.98	0.04	<0.001	0	96.4	3.6	Deg.Diesel (FCM) 72.1%

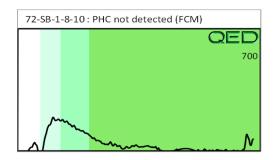
Results generated by a QED HC-1 analyser. Concentration values in mg/kg for soil samples and mg/L for water samples. Soil values are not corrected for moisture or stone content

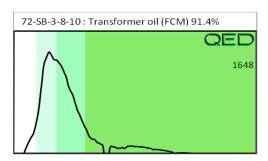
Fingerprints provide a tentative hydrocarbon identification. The abbreviations are:- FCM = Results calculated using Fundamental Calibration Mode: % = confidence for sample fingerprint match to library

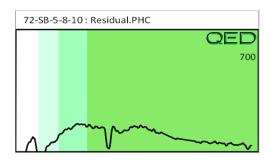
(SBS) or (LBS) = Site Specific or Library Background Subtraction applied to result : (PFM) = Poor Fingerprint Match : (T) = Turbid : (P) = Particulate present

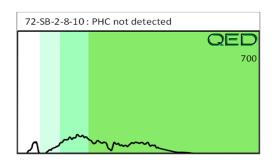
Initial Calibrator QC check OK

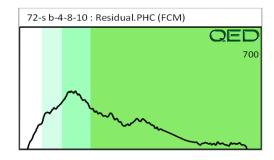
Project: 2016.0054.NDOT 10/25/2016

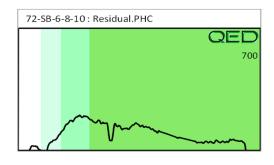


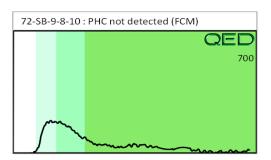


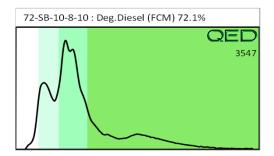


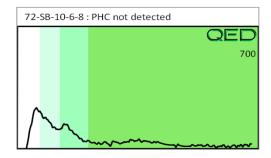


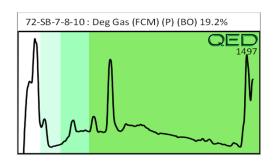


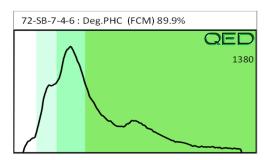


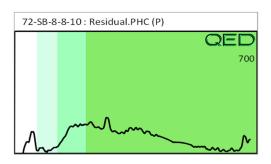


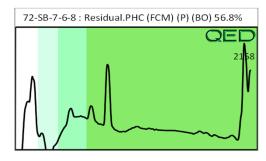












File Review Reports
6157 Crystal Drive LLC Property (Parcel #72)
6605 Raeford Road
Fayetteville, Cumberland County, North Carolina
State Project: U-4405
WBS Element 39049.1.1



Engineering & Geological Services, P.C.

Limited Site Assessment Report

Site Location:

The Pantry #486 6605 Raeford Road Fayetteville, North Carolina Cumberland County Site Owner:
The Pantry, Inc.
P. O. Box 1410
Sanford, North Carolina 27330

Prepared for:

The Pantry, Inc. P. O. Box 1410 Sanford, North Carolina 27330 (919) 774-6700

Project Number: 501403
Facility ID Number: 0-023655
Incident Number: Pending 23062
Site Priority Ranking: Pending

General Site Information:

Surrounding Land Use – Commercial/Residential/Undeveloped Latitude/Longitude – N 35° 2' 24" / W 78° 59' 50"

Release Date – March 21, 2001

Estimated Quantity – Unknown

Cause of Release – Underground storage tank system

UST Information – (3) 10,000-gallon gasoline

Prepared by:

Gretchen L. Miller, P.G. NC Licensed Geologist #1736 SEI Engineering and

Geological Services, P.C. 5100 I-85 Service Road, Suite 7A Charlotte, North Carolina 28206

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LIMITATIONS

This report has been prepared under the guidance of a North Carolina Licensed Geologist to meet the requirements of the North Carolina Department of Environment and Natural Resources (NCDENR). The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of samples associated with this report were performed by a subcontracted, independent, and certified laboratory. All data and parameters have been reviewed for accuracy and, excepting obvious errors, have been accepted as correct. SEI Engineering and Geological Services, P.C. reserves the right to revise estimates of performance as required by changes in the data supplied by Environmental Conservation Laboratories.

1.0 INTRODUCTION AND SITE HISTORY

The Pantry #486 is a retail gasoline and convenience store located at 6605 Raeford Road in Fayetteville, Cumberland County, North Carolina. Figure 1 is an excerpt from a United States Geological Survey (USGS) 7.5 minute topographical quadrangle map showing the location of the site, as well as cultural and topographic features. The site is currently active and contains three 10,000-gallon underground storage tanks (USTs). Figure 2 is a site map showing the site features and the UST locations.

The January 2001 statistical inventory reconciliation (SIR) data for this site showed a "fail" for the 10,000-gallon premium gasoline UST. When The Pantry, Inc. received the SIR report in February 2001, they immediately ordered a tank tightness test. The February 26, 2001, tightness test on the premium UST indicated a "pass." The February 2001 SIR data, which was reported in March 2001, indicated an "inconclusive" result for the premium UST, due to the fact that it had been pumped out by The Pantry, Inc. On March 21, 2001, a release was discovered when store personnel found a hole in the bottom of the premium UST near the fill port.

On March 22, 2001, The Pantry, Inc. contracted SEI Environmental, Inc. to investigate the release. This included installing three 4-inch diameter recovery wells and recovering free product via aggressive fluid vapor recovery (AFVR). The four AFVR events were successful in removing approximately 561 gallons of free product, 9,543 gallons of contaminated groundwater, and 786.91 pounds of petroleum vapors. A 20 Day and Free Product Report for the AFVR events was submitted to the NCDENR Division of Waste Management, UST Section on May 2, 2001.

SEI Environmental, Inc. initiated a Phase I Limited Site Assessment (LSA), which included the installation of one type II groundwater monitoring well (MW-1). Due to the fact that free product was observed in the well, SEI Environmental, Inc. did not collect a groundwater sample and went immediately to a Phase II LSA. The Phase II LSA included the installation of three type II groundwater monitoring wells (MW-2 through MW-4), and one type III groundwater monitoring well (MW-5). This report summarizes results from the installation and sampling of four type II

groundwater monitoring wells (MW-1 through MW-4) and one type III monitoring well (MW-5) on March 22 and 23, 2001, and April 26, 27, and 30, 2001.

2.0 RECEPTOR INFORMATION AND RISK CHARACTERIZATION

A completed Limited Site Assessment Risk Classification and Land Use Form is included in Appendix A. The major points of the form are summarized below.

The subject property is currently active, and is zoned planned commercial. The properties to the west, south and east are also zoned planned commercial. US Highway 401 borders the property to the north. The undeveloped property north of US Highway 401 is zoned planned commercial. Properties further to the south, southwest, and southeast of the site are zoned residential.

The properties immediately adjacent to the subject property contain businesses, undeveloped land, and a highway. A table containing the names and addresses of surrounding property owners adjacent to the subject site is contained in Appendix B, along with a vicinity map showing the locations of the properties.

A 1,500-foot radius receptor survey was performed. Several potable wells were noted in the surrounding area, the closest of which is located approximately 350 feet south of the UST bed. The City of Fayetteville confirmed that public water is available to the site and to part of the surrounding area, although people are not required to connect to public water. The City of Fayetteville obtains its water from the Cape Fear River and Glenville Lake. Brookwood Water Corporation provides residential water supply service to several homes in the surrounding area. Brookwood Water Corporation obtains its water from water supply wells, the closest of which is located approximately 1,400 feet northeast of the site. The nearest surface water is a small stream located approximately 650 feet northeast of the site.

To date, there are no state recognized wellhead protection areas as defined in 42 USC 300h-7(e) within a 1,500 foot radius of the site. The site is located in the Coastal Plain Physiographic Province. According to the National Water Summary (1987), the site is located in the crystalline rock aquifer, which is semiconfined to confined. Subsurface structures with potential to contain explosive vapors were not located near the release area.

3.0 SITE GEOLOGY AND SOIL SAMPLING

The site is located within the sands of the Middendorf Formation of the Coastal Plain Physiographic Province. According to the Geologic Map of North Carolina (Brown, et al., 1985), the formation is characterized by sand, sandstone, and mudstone that is gray to pale gray with an orange cast. Clay balls and iron-cemented concretions are common. Bedding is laterally discontinuous, with cross-bedding common.

On March 22 and 23, 2001, three type II monitoring wells (MW-1 through MW-3) were advanced to the northeast and south of the gasoline USTs to a depth of 30 feet below land surface (bls). On April 26 and 27, 2001, one type II monitoring well (MW-4) was installed to a depth of 30 feet bls and one type III monitoring well (MW-5) was installed to a depth of 45.5 feet bls. Due to the presence of free product in the soil, soil samples were not collected. Free product was encountered in the soil at approximately sixteen feet bls in monitoring wells MW-1, MW-2, MW-4, and MW-5. Groundwater was encountered at approximately nineteen feet bls. The soil encountered while performing the soil borings was primarily a yellow-brown to tan-gray silty sand and gray-tan clayey sand. The soil boring locations are shown on Figure 2. Soil Boring Logs are included in Appendix C.

During drilling activities, suspected contaminated soil was placed into drums and left on site. Contaminant Control, Inc. removed 22 drums of soil on April 3 and May 15, 2001, and transported them to its facility in Hope Mills, North Carolina, for proper treatment and disposal. A copy of the non-hazardous material manifests for these drums is included in Appendix E.

4.0 MONITORING WELL CONSTRUCTION

On March 22, 2001, Phase I of the LSA was initiated with the installation of one type II monitoring well (MW-1) to a depth of 30 feet bls. The well was completed with ten feet of 2 inch Schedule 40 PVC casing and twenty feet of 0.010-inch slot PVC screen.

Due to the presence of free product, on March 23 and April 26, 2001, Phase II of the LSA was initiated with the installation of three type II monitoring wells (MW-2 through MW-4) to a depth of 30 feet bls. Monitoring wells MW-2 through MW-4 were completed with ten feet of 2 inch Schedule 40 PVC casing and twenty feet of 0.010-inch slot PVC screen. The locations of the monitoring wells are noted on Figure 2.

The annulus of each well was filled with a sand filter pack to two feet above the top of the screened interval. A four-foot thick bentonite seal was placed above the sand filter pack and hydrated with water. The remaining well bore was filled with grout to the surface. The wells were completed flush to grade with a locking cap, watertight seal, and a bolt-down manhole.

On April 26 and 27, 2001, SEI Environmental, Inc. installed one vertical extent type III groundwater monitoring well (MW-5) by setting a 6-inch PVC outer casing to a depth of 39 feet bls. The borehole annulus was filled with grout and allowed to harden over one night. The end plug of the outer casing was drilled out, extending the boring to a depth of 45.5 feet bls. The well was completed with four feet of 0.010-inch slot PVC screen and 41.5 feet of 2 inch threaded PVC well riser to the surface.

A sand filter pack was placed around the screen and extended to 1.5 feet above the screen. A three-foot thick bentonite seal was placed above the sand filter pack and hydrated with water. The remaining well bore was filled with grout to the surface. The well was completed with a locking cap, watertight seal, and bolt-down manhole. Soil Boring Logs and well construction details are included in Appendix C.

5.0 GROUNDWATER SAMPLING

Prior to sampling, each monitoring well was gauged with an electronic oil/water interface probe to measure depth to water and to detect any free product. Free product was detected in monitoring wells MW-1, MW-2, and MW-4 with respective thicknesses of 2.35 feet, 2.69 feet, and 1.37 feet. Groundwater monitoring wells MW-3 and MW-5 were sampled on April 30, 2001. The nearest water supply well (WW #1) was also sampled. Figure 4 is a groundwater elevation map from the April 30, 2001, sampling event showing the direction of groundwater flow at the site. The apparent groundwater flow is to the east. Monitoring well construction and groundwater elevation data are included in Table 2.

Monitoring wells MW-3 and MW-5 were purged prior to sampling by removing a minimum of three well volumes. A groundwater sample from each well was collected after the well was allowed to recover. Each sample was collected using a new, disposable Teflon® bailer and placed in laboratory supplied, cleaned containers. The samples were maintained at 4°C and submitted under proper chain-of-custody procedures to Environmental Conservation Laboratories in Cary, North Carolina, for analysis. The groundwater samples were analyzed by EPA methods 601, 602 (with IPE and MTBE), and 504.1 for EDB, MADEP method VPH, and standard method 3030c for lead. The water well sample (WW #1) was analyzed by EPA methods 601 and 602 extended to detect MTBE and IPE.

6.0 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples were collected from monitoring wells MW-3 and MW-5 on April 30, 2001. The samples were analyzed by EPA methods 601, 602 (with IPE and MTBE), and 504.1 for EDB, MADEP method VPH, and standard method 3030c for lead. The water well sample (WW #1) was analyzed by EPA methods 601 and 602 extended to detect MTBE and IPE.

Petroleum hydrocarbons were detected in both groundwater monitoring wells MW-3 and MW-5 above the 15A NCAC 2L groundwater standards. Maximum concentrations of benzene (4,700 micrograms per liter (μg/L)), ethylbenzene (2,400 μg/L), toluene (24,000 μg/L), total xylenes (14,000 μg/L), MTBE (1,900 μg/L), aliphatics in the C5-C8 range (38,000 μg/L), aliphatics in the C9-C12 range (18,000 μg/L), and aromatics in the C9-C10 range (9,800 μg/L) were detected in MW-3. Benzene (1.2 μg/L) was the only petroleum hydrocarbon constituent detected at a concentration above the 15A NCAC 2L groundwater standards in monitoring well MW-5. Petroleum hydrocarbon constituents were not detected above detection limits for the sample collected from the water supply well, WW #1. The groundwater sample laboratory results are summarized in Table 1. A copy of the laboratory report and chain-of-custody form is included in Appendix D. Petroleum constituent concentration isopleths are presented as Figures 5 through 9 for illustrative purposes only.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The subject property is zoned planned commercial and potential future use indicates that it will remain at that zoning status. A 1,500-foot radius potable well search was performed, which revealed the presence of several potable wells in the surrounding area. The closest water supply well (WW-1) is located approximately 350 feet south of the site. The City of Fayetteville confirmed that public water is available to the site and to part of the surrounding area, although people are not required to connect to public water. The nearest surface water is a small stream located approximately 650 feet northeast of the site.

During the April 30, 2001, groundwater sampling event, free product was observed in three of the five monitoring wells located on site. Petroleum constituents were detected in the other two groundwater monitoring wells located at levels greater than the 15A NCAC 2L standards. Petroleum hydrocarbon constituents were not detected above laboratory detection limits for the sample collected from the water supply well, WW #1. Due to the presence of free product, soil samples were not collected from any of the borings.

Based on the information presented above and in the Limited Site Assessment Risk Classification and Land Use Form (Appendix A), the subject site should be ranked high risk. Since free product was observed in the soil samples and three of the five monitoring wells, and concentrations detected in the groundwater monitoring wells are above the 15A NCAC 2L Standards, SEI Engineering and Geological Services, P.C. recommends that a Comprehensive Site Assessment (CSA) be initiated for this release.

TABLE 1

	Groundwater Analytical Results The Pantry #486 6695 Raeford Road Favetteville, North Carolina Cumbertand County Project Number: 501403											
Sample Egcation	Date Sampled	Benzene (HyL)	Ethylberzene (ug&)	Loluene ((tg/L))	Fotal Xylenes (Lg/L)	MTBE	PE LEL	Lead (mg/L)	LDB: ((ugL))	CS-C8 Aliphatics (up.kg)	Co-C12 Aiphanes (ugkg)	C9-C10 Aromatics (t.g/kg)
MW-1	04/30/01	Free Product Present										
MW-2	04/30/01	Free Product Present										
MW-3	04/30/01	4,700	2,400	24,000	14,000	1,900	BDL	BDL	BDL	38,000	18,000	9,800
MW-4	04/30/01	Free Product Present										
MW-5	04/30/01	1.2	1.1	5.8	32,9	78	3.7	BDL	BDL	260	49	54
<u> </u>	2L Standards		29	1,000	530	200	70	15	0.0004	420	4,200	210
	10 x 2L Standards		290	10,000	5,300	2,000	700	150	0.004	4,200	42,000	2,100
GC	GCLs		29,000	257,500	87,500	200,000	70,000	15	NE	NE	NE	NE

μg/L - micrograms per liter
BDL – Below detection limits
Bold denotes concentration is greater than the 15A NCAC 2L Standard
GCL - Gross Contamination Level

NE - Not established

TABLE 2

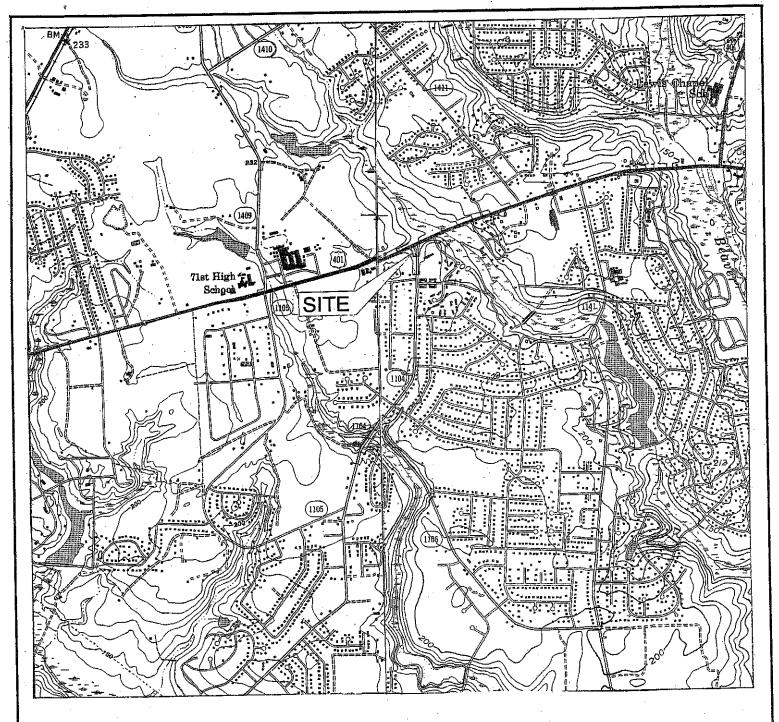
Monitoring Well Construction and Groundwater Elevation Data

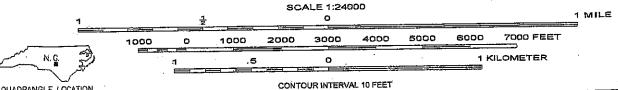
The Pantry #486 6605 Raeford Road Fayetteville, North Carolina Cumberland County Project Number: 501403

Well	Date	Total	Screened	Date	TOC	Depth to	Depth to	Groundwater
ID.	Installed	Depth	Interval	Gauged	Elevation	Product	Groundwater	Elevation*
		(feet)	(feet)		(feet)	(feet)	(feet)	(feet)
MW-1	03/22/01	30	10-30	04/30/01	496.98	16.52	18.87	479.99
MW-2	03/23/01	30	10-30	04/30/01	498.65	18.02	20.71	480.09
MW-3	03/23/01	30	10-30	04/30/01	496.65		16.85	479.80
MW-4	04/26/01	30	10-30	04/30/01	499.26	18.70	20.07	480.29
MW-5	04/26-27/01	45.5	41.1-45.5	04/30/01	496.88		17.10	479.78
RW-1	03/23/01	30	10-30	04/30/01	497.67	17.18	19.63	480.00
RW-2	03/23/01	30	10-30	04/30/01	498.14	17.63	20.05	480.03
RW-3	03/23/01	30	10-30	04/30/01	497.22	16.75	19.10	480.00

TOC - Top of casing elevations based on a survey by Chas. H. Sells, Inc.

^{*}Groundwater Elevation = [(Top of Casing Elevation) - (DTW)] + (0.8*Product Thickness) ---- where applicable





QUADRANGLE LOCATION

CLIFDALE, N.ºC. SE/4 CLIFDALE 15 QUADRANGLE N3500-W7900/7.5

1948 PHOTOREVISED 1982 DMA 5154 II SE-SERIES V842

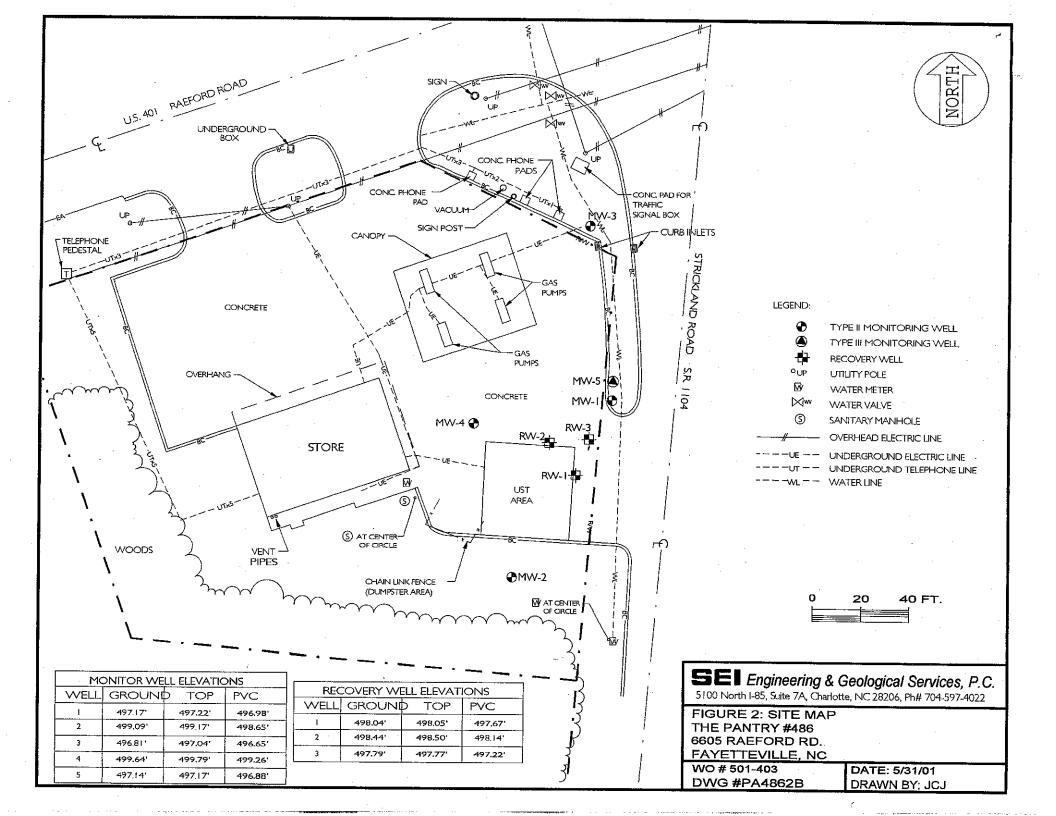
FAYETTEVILLE, N. C.

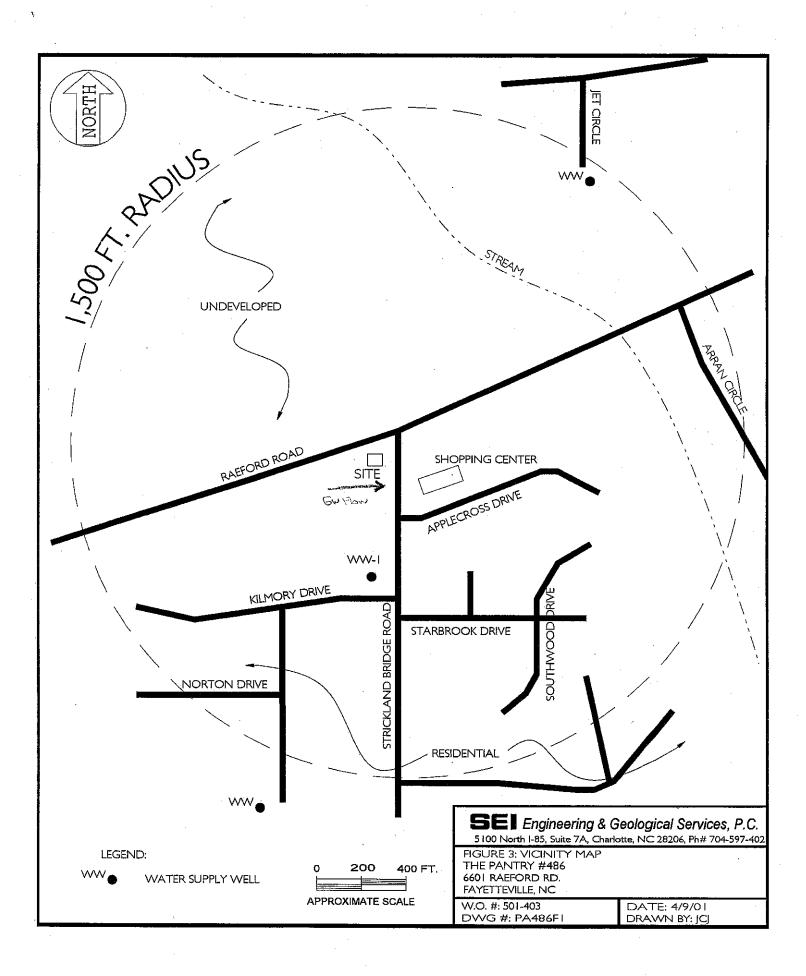
SW/4 FAYETTEVILLE 15' QUADRANGLE 35078-A8-TF-024

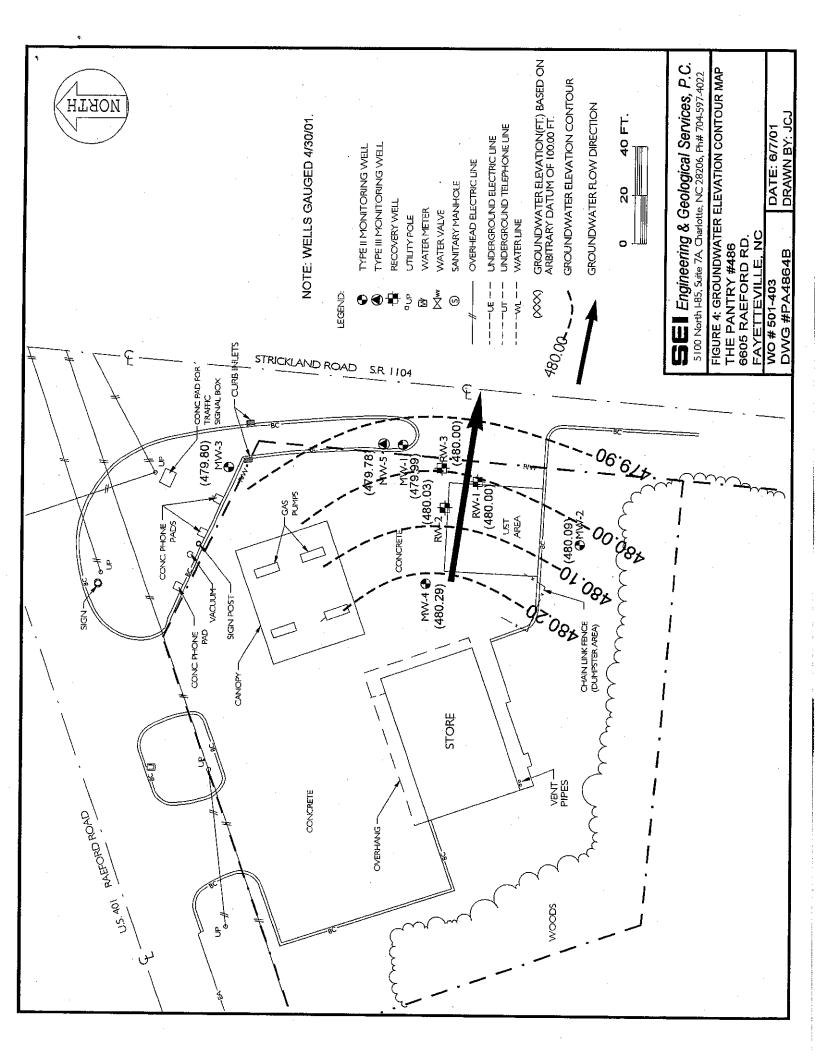
1957 PHOTOREVISED 1987 DMA 5254 III SW-SERIES V842

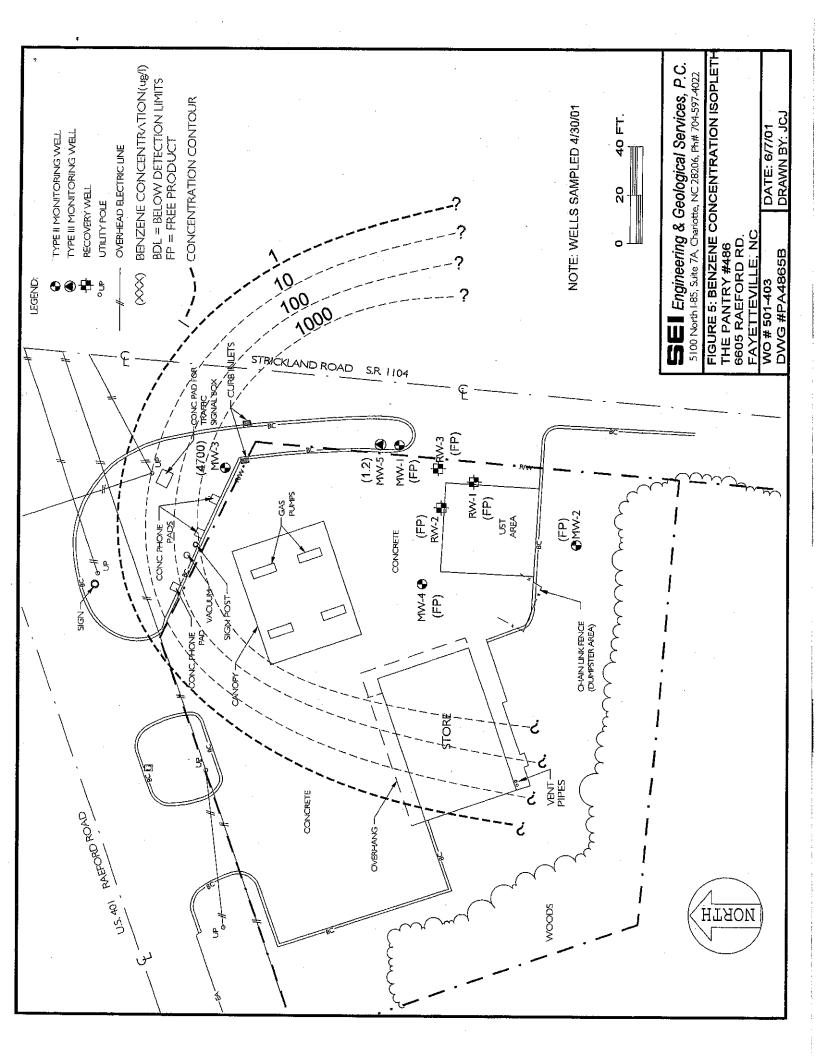
Engineering & Geological Services, P.C. 5100 North 1-85, Suite 7A, Charlotte, NC 28206, Ph# 704-597-4022

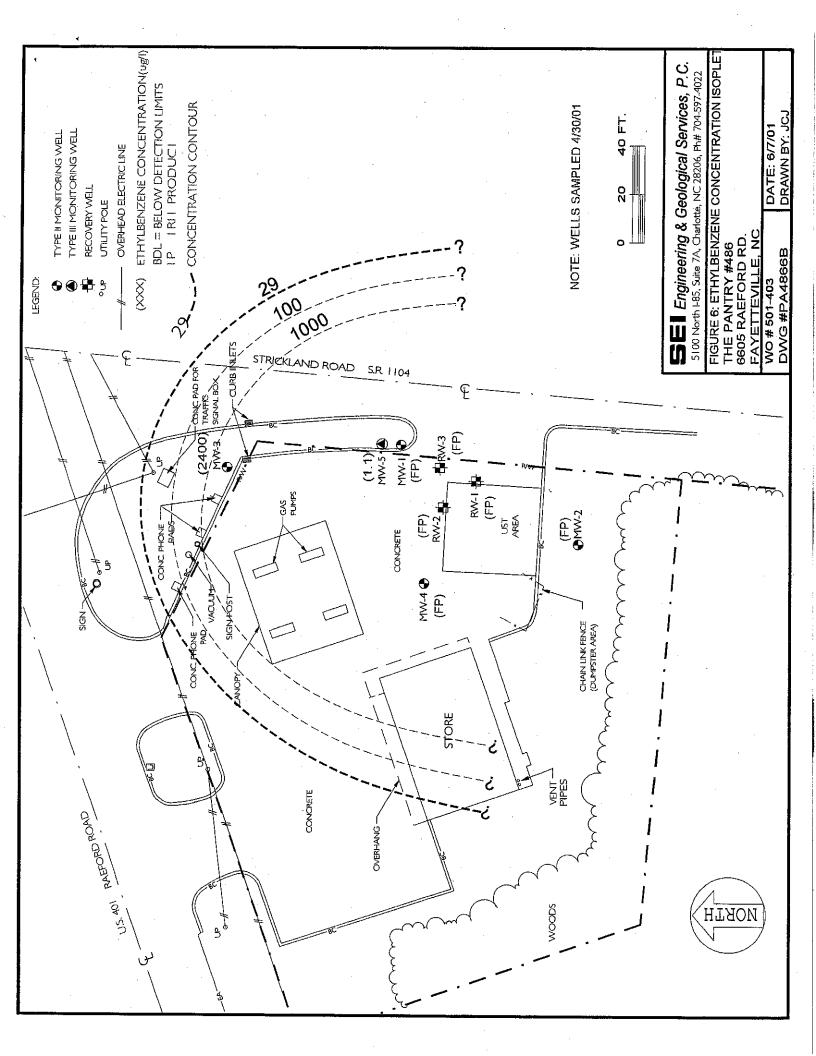
FIGURE 1: USGS QUADRANGLE MAP THE PANTRY #486 6605 RAEFORD ROAD FAYETTEVILLE, NO

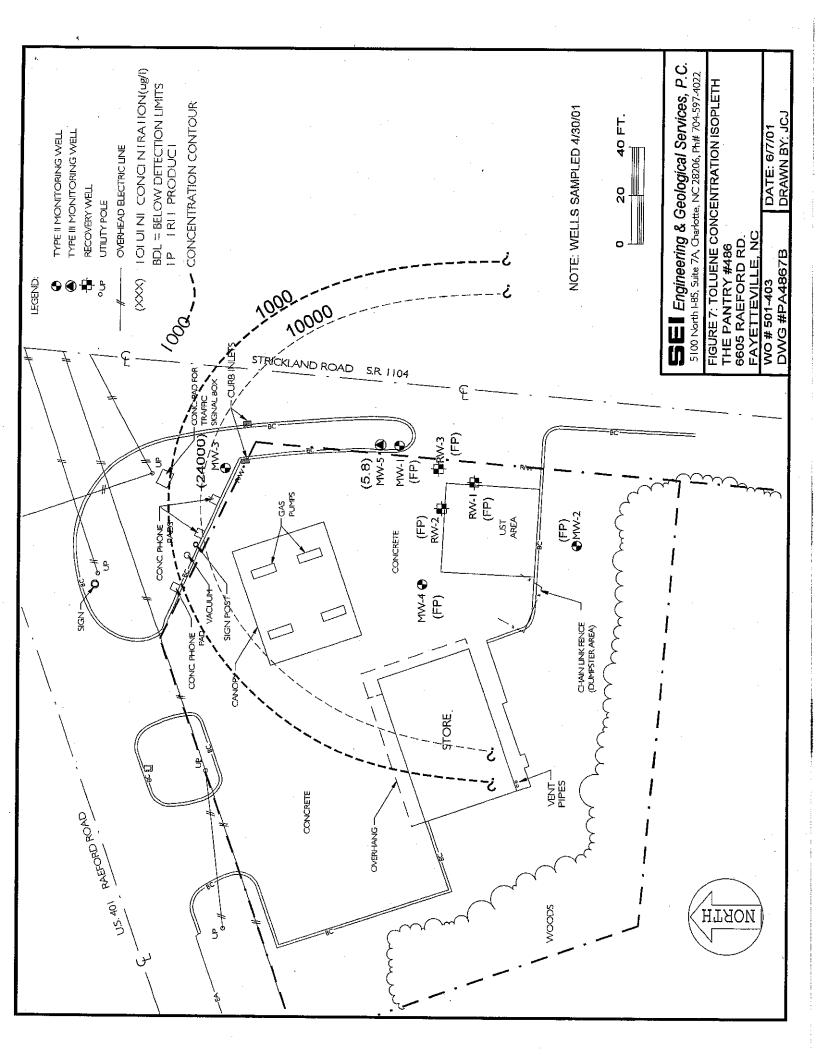


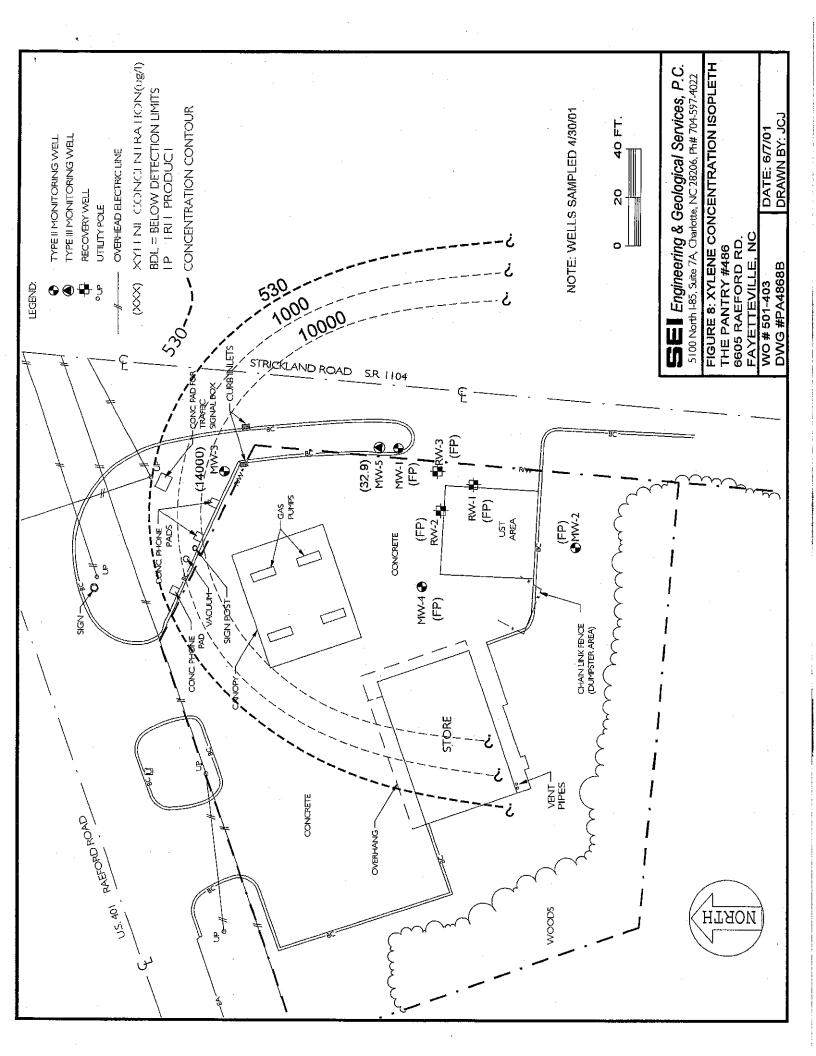


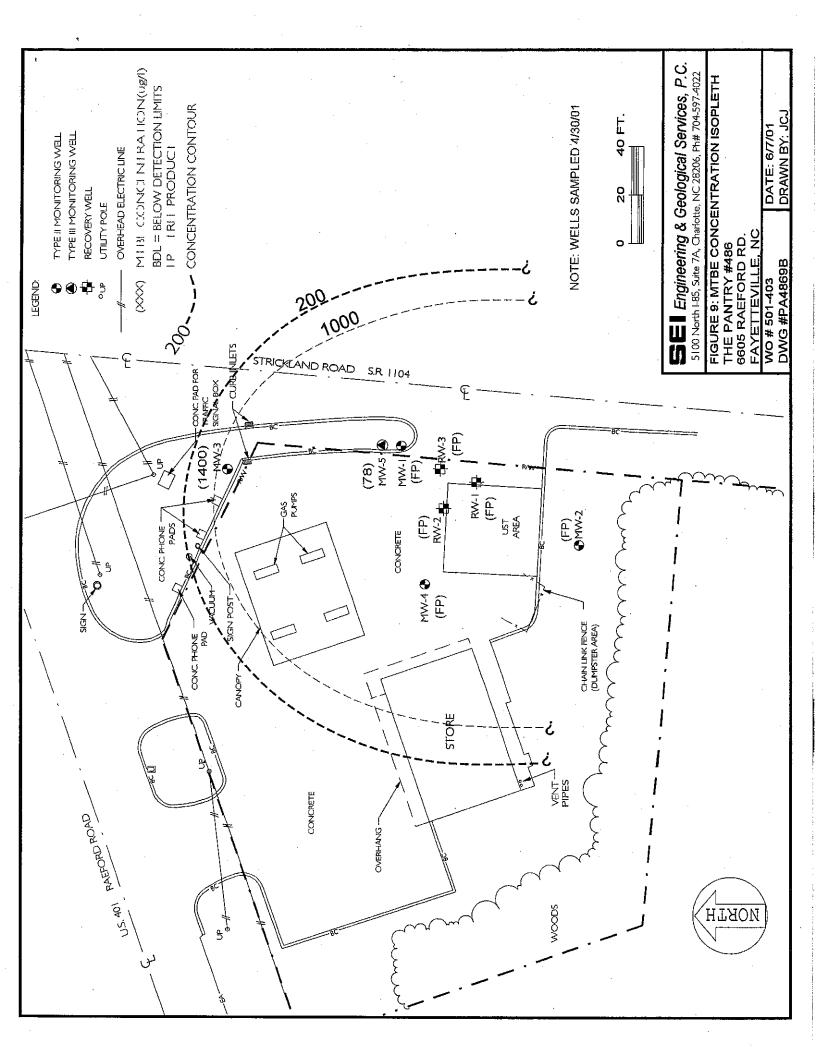












APPENDIX A

Limited Site Assessment Risk Classification and Land Use Form

Risk
Has the discharge or release contaminated any water supply well including any used for non-drinking purposes? If yes, explain.
Is a water supply well used for drinking water located within 1000 feet of the source area the discharge or release? The nearest water supply well is located approximately 350 feet from the source area.
Is a water supply well used for any purpose (e.g., irrigation, washing cars, industrial cooling water, filling swimming pools) located within 250 feet of the source area of the release or discharge? YES/NO The nearest water supply well is located approximately 350 feet from the source area.
Does groundwater within 500 feet of the source area of the discharge or release have the potential for future use in that there is no other source of water supply other than the groundwater? Explain.
Do vapors from the discharge or release pose a threat of explosion because of accumulation of the vapors in a confined space or pose any other serious threat to public health, public safety or the environment? YES/NO If yes, explain.
Are there any other factors that would cause the discharge or release to pose an imminent danger to public health, public safety, or the environment? YES/NO If yes, explain.

	release?
	· · · · · · · · · · · · · · · · · · ·
	If yes, does the maximum groundwater contaminant concentration exceed the surface quality standards and criteria found in 15A NCAC 2B .0200 by a factor of 10? YES
	Is the source area of the discharge or release located within a designated wellhead protection area as defined in 42 USC 300h-7(e)? YES YES
	·
-	Is the discharge or release located in the Coastal Plain physiographic region as designated on a map entitled "Geology of North Carolina" published by the Department in 1985?
	The site is located in the Middendorf Formation of the Coastal Plain physiographic
	region.
	If yes, is the source area of the discharge or release located in an area in which there is recharge to an unconfined or semi-confined deeper aquifer that is being used or may bused as a source of drinking water? YES The source area is located in the crystalline rock aquifer, which is semi-confined to confined.
-	
]	Do the levels of groundwater contamination for any contaminant exceed the contamination levels established (see Table 7) by the Department. Free product was observed in monitoring wells.
(contamination levels established (see Table 7) by the Department.

Part II - Land Use

1.	Does the property contain one or more primary or secondary residences (permanent or temporary)? YES/N
	Explain.
2.	Does the property contain a school, daycare center, hospital, playground, park, recreation area, church, nursing home, or other place of public assembly? YESON Explain.
3.	Does the property contain a commercial (e.g., retail, warehouse, office/business space, et or industrial (e.g., manufacturing, utilities, industrial research and development, chemical/petroleum bulk storage, etc.) enterprise, an inactive commercial or industrial enterprise, or is the land undeveloped? Explain. Retail gasoline and convenience store.
·	Do children visit the property? Explain. Children visit the property for short periods while accompanying parents purchasing gasoline and/or groceries.
	Is access to the property reliably restricted consistent with its use (e.g., by fences, securit personnel or both)? Explain. The property is an active retail location and does not require restricted access.
	Do pavement, buildings, or other structures cap the contaminated soil? Explain. The parking lot is paved with concrete and asphalt.
	If yes, what mechanisms are in place or can be put into place to ensure that the contaminated soil will remain capped in the foreseeable future? The site will likely remain an active retail gasoline and convenience store with a paved parking lot.

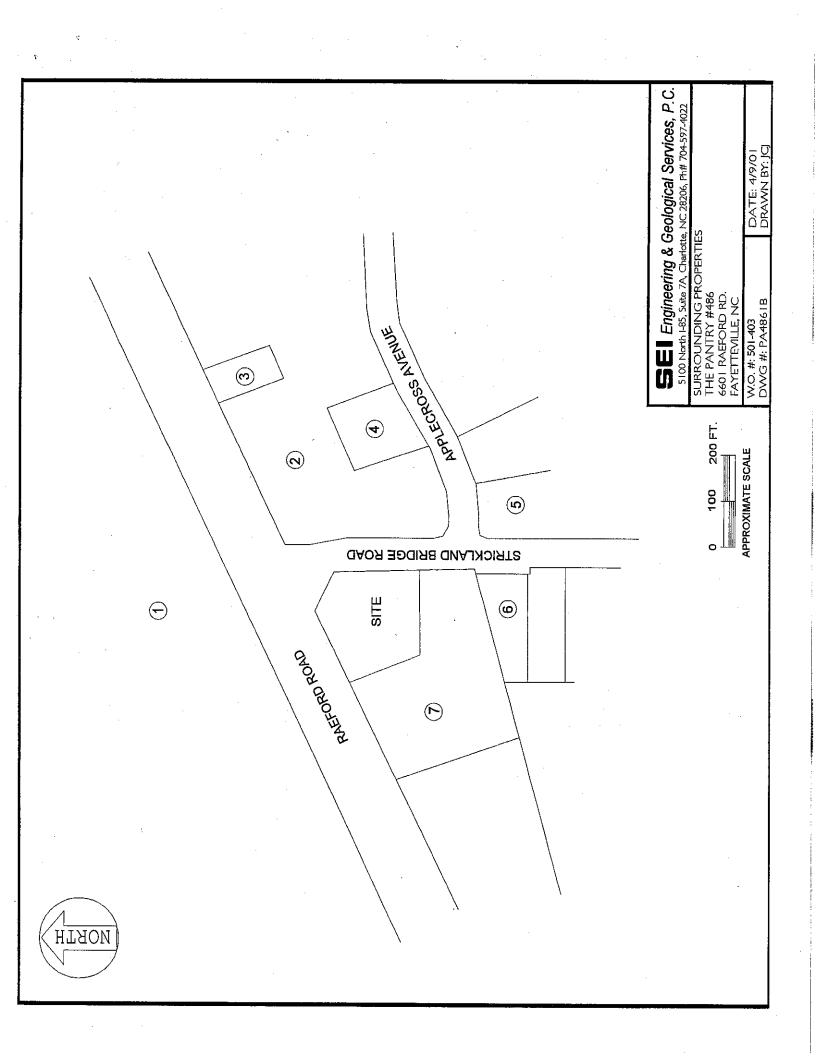
7.	What is the zoning status of the property? <u>CP – Planned Commercial</u>
8.	Is the use of the property likely to change in the next 20 years? Explain. The facility will likely remain a retail gasoline and convenience store for the foreseeable future.
Proper	ty Surrounding Source Area of Discharge or Release nestions below pertain to the area within 1500 feet of the source area of the discharge or
release	e (excludes property containing source area of the release):
11	What is the distance from the source area of the release to the nearest primary or secondary residence (permanent or temporary)? The nearest residences are located approximately 150 feet south of the site.
12	What is the distance from the source area of the release to the nearest school, daycare center, hospital, playground, park, recreation area, church, nursing home or other place of public assembly? The nearest place of public assembly is a church located approximately 500 feet southeast from the site.
13	. What is the zoning status of properties in the surrounding area? The surrounding properties are zoned planned commercial and residential.
14	Briefly characterize the use and activities of the land in the surrounding area. The surrounding area is a mix of residences, businesses, and undeveloped property along the main roads, and residences on the side roads.

APPENDIX B

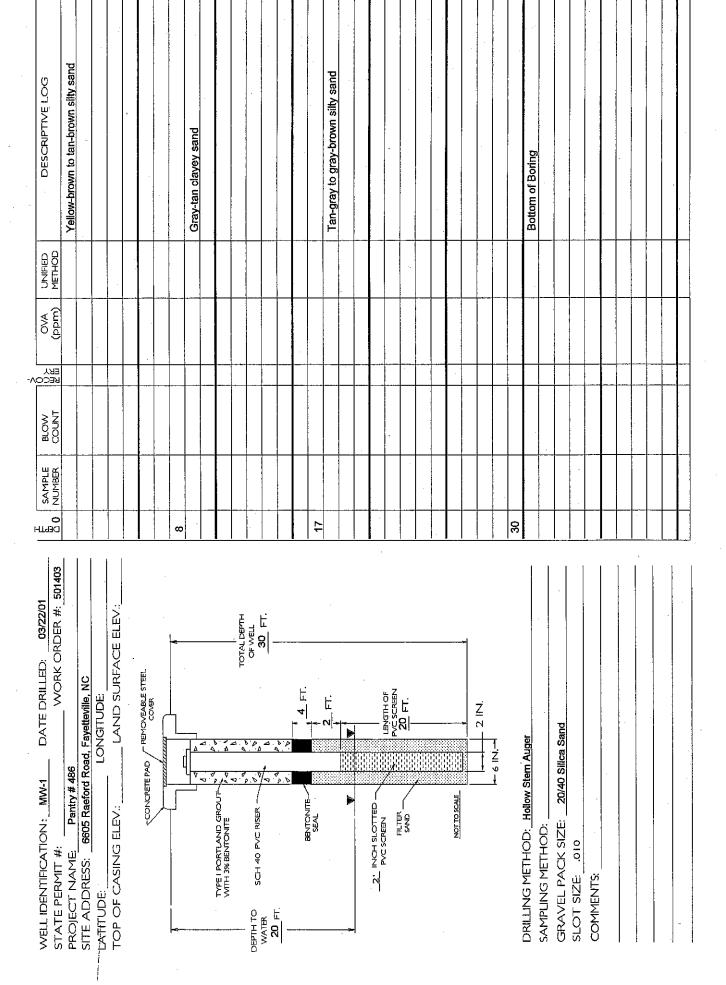
Surrounding Property Owners

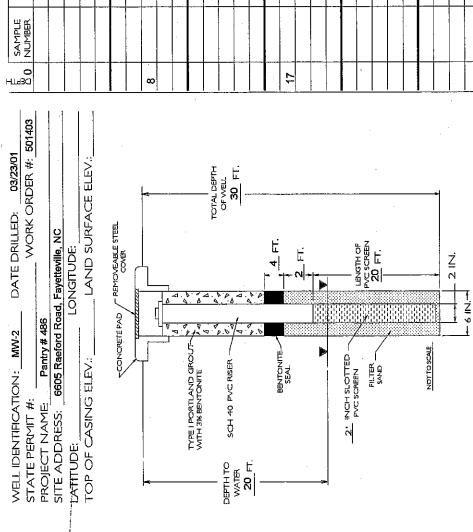
The Pantry #486 6605 Raeford Road Fayetteville, North Carolina Cumberland County Project Number: 501403

Location on Vicinity Map	Property Owner	Mailing Address
1	Sharlene R. Williams	PO Box 53646 Fayetteville, NC 28305
2,3,4	William H. Elliot, Jr.	P O Box 9267 Fayetteville, NC 28311-7696
5	Helen D. Autry	PO Box 41526 Fayetteville, NC 28309
6	In Kyung Song	874 Strickland Bridge Rd. Fayetteville, NC 28304
7	Joseph H. Gillis Betty H. Gillis James D. Gillis	PO Box 736 Fayetteville, NC 28302









D DESCRIPTIVE LOG	Yellow-brown to tan-brown silty sand	And the second s					Gray-tan clayey sand				-				Tan-gray to gray-brown silty sand				1	the state of the s		Alban sama da manda ay an		Bottom of Boring					
UNIFIED		į																		·									
OVA (mgq)																													
ERY								_					_				ļ			 									
BLOW																				,	-					,			
SAMPLE				:																									
HT930						∞		,						12									೫						
23/01	ı		EV.:						,	Ŧ		-									•								

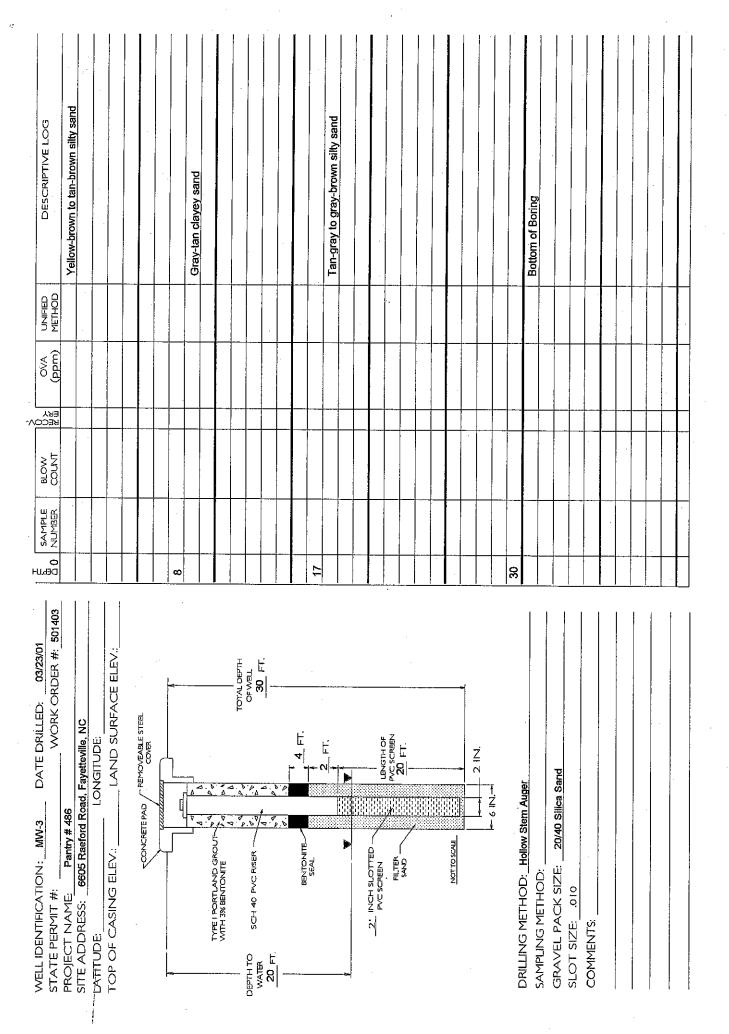
GRAVEL PACK SIZE: 20/40 Silica Sand

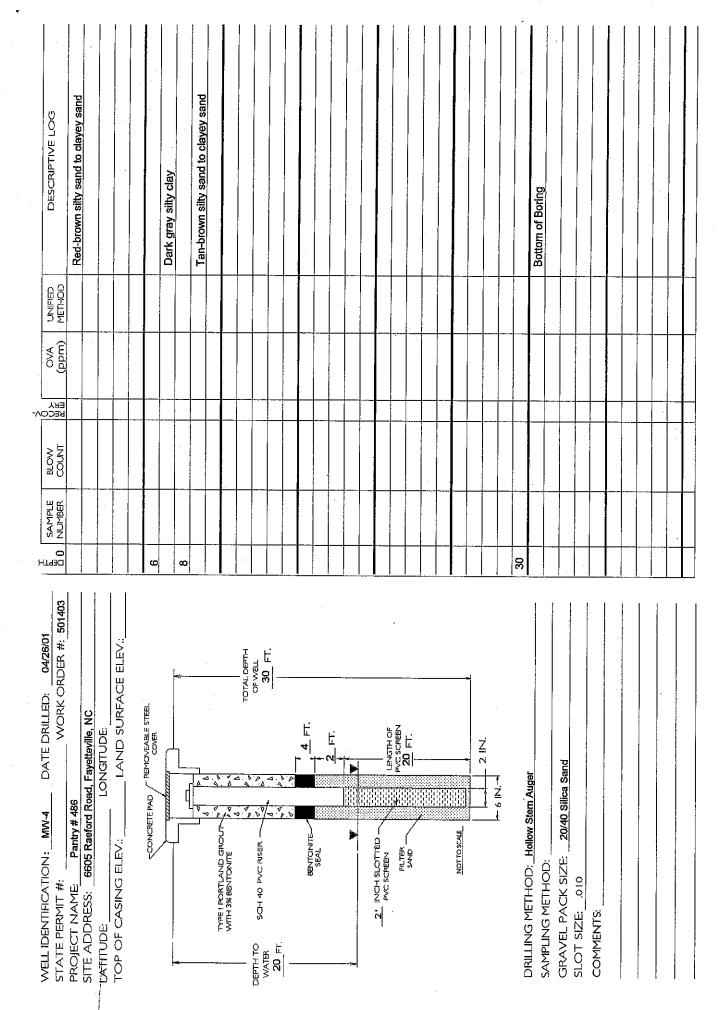
SLOT SIZE .010

COMMENTS

DRILLING METHOD: Hollow Stem Auger

SAMPLING METHOD:





DESCRIPTIVE LOG	Gray-brn clayey silt	Gray-bm to red-bm sandy silt with gravel	Gray-bm sandy day	Red-brn sli. dayey sandy silt		Lt. tan silty fine sand to cse. sand									Bottom of Boring									
ONTHED METHOD																								
OVA (ppm)																								
EBY RECOV-		·											-											
BLOW				-																				
SAMPLE																								-
HT930	2	15	, ,		5									45.5										
WELL IDENTIFICATION: MW-5 DATE DRILLED: 04/26/01 & 04/27/01 STATE PERMIT #: 501403		RESS. 6605 Raeford Roa	<u> </u>	TOP OF CASING ELEV: LAND SURFACE ELEV:	GROUND SURFACE. COVER ASSEMBLY WITH	REMOVEABLE STEEL CO		GROUT TO A CONTRACT CASHING		1	6 INCH PVC CASING	TOTAL DEPTH	45.5 FT	(SLOTTED OINCH)	SO HONE	SAND ————————————————————————————————————	BOTTOM CAP	DRILLING METHOD: Hollow Stem Auger/mud rotary	SAMPLING METHOD:	GRAVEL PACK SIZE 20/40 Silica sand	1 1	The state of the s		•

NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT DIVISION OF ENVIRONMENTAL MANAGEMENT - GROUNDWATER SECTION P.O. BOX 27587 - RALEIGH, N.C. 27611, PHONE (919) 733-3221

	FOR OFFICE USE ONLY	
Quad. No.		
Lat.	Long.	Pc
Minor Basin		
Basin Code		
Header Ent.	GW-1 Ent	

	RILLING CONTRACTOR Geologic Exploration - Mark Gettys	STATE WELL CONSTRUCTION	•
D	RILLER REGISTRATION NUMBER 2345 MW-1	PERMIT NUMBER:	N/A
1.	WELL LOCATION: (Show sketch of the location below)	County: Cumberland	
	Nearest Town:Fayetteville 6605 Raeford Road	<u>Depth</u> From To	DRILLING LOG Formation Description
	(Road, Community, or Subdivision and Lot No.)	0 8	Yellow-tan to tan-brn
2.	OWNER The Pantry, Inc The Pantry #486 ADDRESS PO Box 1410	8 17	silty sand Gray-tan clayey sand
	(Street or Route No.) Sanford NC 27330	17 30	TD
	City or Town State Zip Code	17 30	Tan-gray to gray-brn silty sand
3.	DATE DRILLED 03/22/01 USE OF WELL Monitoring		
4.	TOTAL DEPTH 30' CUTTINGS COLLECTED Yes X No		
5.	DOES WELL REPLACE EXISTING WELL? Yes No		
6.	STATIC WATER LEVEL 20 FT. Above TOP OF CASING.		
	TOP OF CASING IS 0 FT. ABOVE LAND SURFACE.	If additional spaces is nee	ded use back of form.
7.	YIELD (gpm): N/A METHOD OF TEST N/A	LOCAT	ION SKETCH
8.	WATER ZONES (depth): N/A	(Show direction and distance from other map reference points).	n at least two State Roads, or
9.	CHLORINATION: Type N/A Amount N/A		rt
	CASING: Wall Thickness Depth Diameter or Weight/Ft. Material FROM 0 TO 10 FT 2" Sch 40 PVC FROM TO FT TO TO	TAND BRIDGE BOATEAND	Med. Compared Compared Services and Compared Services and Compared Compared Services and
11.	GROUT: Depth Material Method FROM 0 TO 4 FT Portland Slurry	A SECTION OF THE PROPERTY OF T	250 X
	FROM TO FT	• • • • • • • • • • • • • • • • • • • •	
12.	SCREEN:		
	Depth Diameter Slot Size Material FROM 10 TO 30 FT 2 in .010 in PVC	PAST CRU ROAD	
	FROM TO FT in in	RAGE.	
13.	GRAVEL PACK:	No. of the control of	teans of tea
	Depth Size Material		25 - 7 20 - 7 20 - 8
-	FROM 8 TO 30 FT 20/40 Silica Sand		398
	FROM TO FT		~~
14.	REMARKS: Bentonite seal from 4' to 8'		
	I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCT STANDARDS, AND THAT A COPY OF THIS RECORD HAS BE	TED IN ACCORDANCE WITH 15 NCAC 2C, SEN PROVIDED TO THE WELL OWNER.	
	70	LE OL	4-27-01
	GW-1 Revised 6/88 Submit origi	RE OF CONTRACTOR OR AGENT inal to Division of Environmental Management	DATE and copy to well owner.

NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT DIVISION OF ENVIRONMENTAL MANAGEMENT - GROUNDWATER SECTION P.O. BOX 27587 - RALEIGH, N.C. 27611, PHONE (919) 733-3221

FOR	OFFICE USE ON	LY
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Lat.	Long.	Pc
Minor Basin		
Basin Code		
Header Ent.	GW-1	Ent.

DRILLING CONTRACTOR Geologic Exploration - Brian Thomas	•	•
	STATE WELL CONSTRUCTION	
DRILLER REGISTRATION NUMBER 2581 MW-2	PERMIT NUMBER:	N/A
1. WELL LOCATION: (Show sketch of the location below)	County: <u>Cumberland</u>	
Nearest Town: Fayetteville	<u>Depth</u>	DRILLING LOG
6605 Raeford Road	From To	Pormation Description
(Road, Community, or Subdivision and Lot No.)	0 8	Yellow-tan to tan-brn
2. OWNER The Pantry, Inc The Pantry #486	· · · · · · · · · · · · · · · · · · ·	silty sand
ADDRESS PO Box 1410	8 17	Gray-tan clayey sand
(Street or Route No.)		
Sanford NC 27330 City or Town State Zip Code	1730	Tan-gray to gray-brn silty
		sand
3. DATE DRILLED 03/23/01 USE OF WELL Monitoring	<u></u>	
4. TOTAL DEPTH 30' CUTTINGS COLLECTED Yes X No.		
· ·		•
5. DOES WELL REPLACE EXISTING WELL? Yes X No		<u> </u>
6. STATIC WATER LEVEL 20 FT. Above TOP OF CASING.		·
□ Below		<u> </u>
TOP OF CASING IS 0 FT. ABOVE LAND SURFACE.	If additional spaces is nee	eded use back of form.
7. YIBLD (gpm): N/A METHOD OF TEST N/A		TON SKETCH
	(Show direction and distance from	n at least two State Roads, or
8. WATER ZONES (depth): N/A	other map reference points).	
9. CHLORINATION: Type N/A Amount N/A	The state of the s	
Depth Diameter Wall Thickness	CONVATINOS EDONAS DIVIDAS DE SOCIAS DIVIDAS DE SOCIAS DIVIDAS DE SOCIAS DIVIDAS DE SOCIAS DI VIDAS DI VI	Engineering & St. Control of St. Con
11. GROUT:		CONTRACTOR OF THE PROPERTY OF
Depth Material Method		
FROM 0 TO 4 FT Portland Slurry		The state of the s
FROM TO FT		
12. SCREEN:	8 .	
Depth Diameter Slot Size Material FROM 10 TO 30 FT 2 in .010 in PVC	CONTRACTOR	
700 M 170		
FROM TO FT in in		┛
3. GRAVEL PACK:	1 4 3	
Depth Size Material		
FROM 8 TO 30 FT 20/40 Silica Sand		364
FROM TO FT		~~~
4. REMARKS: Bentonite seal from 4' to 8'		
I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED	N ACCORDANCE WITH 15 NGAC CO.	WELL CONCENTIONS
STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN	PROVIDED TO THE WELL OWNER.	WELL CONSTRUCTION
\mathcal{M}_{ℓ}	'e 1) l	4-27-01
SIGNATURE	OF CONTRACTOR OR AGENT	DATE
GW-1 Revised 6/88 Submit original	I to Division of Environmental Management	and copy to well owner.

NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT DIVISION OF ENVIRONMENTAL MANAGEMENT - GROUNDWATER SECTION P.O. BOX 27587 - RALBIGH, N.C. 27611, PHONE (919) 733-3221

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Lat	Long.	Pc
Minor Basin		
Basin Code		/
Header Ent.	GW-	1 Ent.

DRILLER REGISTRATION NUMBER 2581 MY	STATE WELL CONSTRUCTION PERMIT NUMBER: N/A
WELL LOCATION: (Show sketch of the location below)	County: Cumberland
Nearest Town: Fayetteville 6605 Raeford Road (Road, Community, or Subdivision and Lot No.)	Depth DRILLING LOG From To Formation Description
	0 8 Yellow-tan to tan-brn
2. OWNERThe Pantry, Inc The Pantry #486	silty sand
ADDRESS PO Box 1410	8 17 Gray-tan clayey sand
Sanford NC 2733 City or Town State Zip 0	This glay to gray our only
3. DATE DRILLED 03/23/01 USE OF WELL Monitoring	
4. TOTAL DEPTH 30' CUTTINGS COLLECTED Yes X No	
5. DOES WELL REPLACE EXISTING WELL? Yes No	
6. STATIC WATER LEVEL 20 FT. Above TOP OF CASING.	
TOP OF CASING IS 0 FT. ABOVE LAND SURFACE.	If additional spaces is needed use back of form.
7. YIELD (gpm): N/A METHOD OF TEST N/A	LOCATION SKETCH
8. WATER ZONES (depth): N/A	(Show direction and distance from at least two State Roads, or other
9. CHLORINATION: Type N/A Amount	map reference points).
10. CASING: Depth Diameter Or Weight/Ft. Mate	
Depth Material Metho	
FROM 0 TO 4 FT Portland Slurr	
FROM TO FT	
12. SCREEN: Depth Diameter Slot Size Mate	erial R F R S
TDOX 40 TO TO	
FROM TO FT in in	
3. GRAVEL PACK:	The reserved of the reserved o
Depth Size Materia	
FROM 8 TO 30 FT 20/40 Silica Sa	<u>nd</u>
FROM TO FT	
4. REMARKS: Bentonite seal from 4' to 8'	
I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTI	
GW-1 Revised 6/88 Submi	ATURE OF CONTRACTOR OR AGENT t original to Division of Environmental Management and copy to well owner.

NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT DIVISION OF ENVIRONMENTAL MANAGEMENT - GROUNDWATER SECTION P.O. BOX 27587 - RALBIGH, N.C. 27611, PHONE (919) 733-3221

P	OR OFFICE USE ON	LY
Quad. No.		
Lat	Long.	Pc
Minor Basin		
Basin Code		•
Header Ent.	GW-1	Ent.

	RILLER REGISTRATION NUMBER 2402 MW-4	STATE WELL CONSTRUCTION PERMIT NUMBER:	N/A
1.	WELL LOCATION: (Show sketch of the location below)	County: <u>Cumberland</u>	
	Nearest Town: Fayetteville 6605 Raeford Road	<u>Denth</u> From To	DRILLING LOG Formation Description
	(Road, Community, or Subdivision and Lot No.)	0 6	Red-brn silty sand to clayey
2.	OWNERThe Pantry, Inc The Pantry #486		sand
	ADDRESS PO Box 1410	6 8	Dk. gray silty clay
	(Street or Route No.)	·	
	Sanford NC 27330 City or Town State Zip Code	8 30	Tan-brn silty sand to clayey
_			sand
3.	DATE DRILLED 04/26/01 USE OF WELL Monitoring		
4.	TOTAL DEPTH 30' CUTTINGS COLLECTED Yes X No		· · · · · · · · · · · · · · · · · · ·
5.	DOES WELL REPLACE EXISTING WELL? Yes X No		· .
	—		
6.	STATIC WATER LEVEL 20 FT. Above TOP OF CASING.		
	TOP OF CASING IS 0 FT. ABOVE LAND SURFACE.	If additional energy is	needed use back of form.
7.	YIELD (gpm): N/A METHOD OF TEST N/A		ATION SKETCH
		(Show direction and distance fi	om at least two State Roads, or
8.	WATER ZONES (depth): N/A	other map reference points).	
9.	CHLORINATION: Type N/A Amount N/A	-	
10.	Depth Diameter Wall Thickness Wall Thickness Or Weight/Ft. Material	CIMATINOS ESCIN	MAY OF THE BOTH AND A CHARLES OF THE
11.	GROUT:		© E = 3.21 € 2
	Depth Material Method		قراً / ب که قوار ا
	FROM 0 TO 4 FT Portland Siurry	[] [[]	15 2 11
	FROM TO FT		
12.	SCREEN:		The state of the s
	Depth Diameter Slot Size Material	900	EFFRENCY SHE EFFE EFFE EFFE EFFE EFFE EFFE EFFE E
	FROM 10 TO 30 FT 2 in .010 in PVC FROM TO FT in in	RAEGID ROAD	
	FROM TO FT in in		`
13.	GRAVEL PACK:	NA CANADA	No state of the st
	Depth Size Material		ucreso & House
	FROM 8 TO 30 FT 20/40 Silica Sand		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	FROM FT		~~~
14.	REMARKS: Bentonite seal from 4' to 8'	•	
	I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED	D IN ACCORDANCE WITH 15 NCAC 2	C, WELL CONSTRUCTION
	STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEET	N PROVIDED TO THE WELL OWNER.	,
		1 6. OK_	4-27.07
	GW-1 Revised 6/88 Submit origins	OF CONTRACTOR OR AGENT	DATE
	Submit origina	al to Division of Environmental Manageme	nt and copy to well owner

NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT DIVISION OF ENVIRONMENTAL MANAGEMENT - GROUNDWATER SECTION P.O. BOX 27587 - RALEIGH, N.C. 27611, PHONE (919) 733-3221

WELL CONSTRUCTION RECORD

		Header Ent.	GW-1 Ent
D	RILLING CONTRACTOR Geologic Exploration - Mike McConahey	STATE WELL CONSTRUCTION	
Dl	RILLER REGISTRATION NUMBER2402 MW-5	PERMIT NUMBER:	N/A
1	WELL LOCATION: (Show sketch of the location below)		
٠.		County: <u>Cumberland</u>	
	Nearest Town:Fayetteville 6605 Raeford Road (Road, Community, or Subdivision and Lot No.)	<u>Depth</u> From To	DRILLING LOG Formation Description
	•	02	Gray-brn clayey silt
2.	OWNER The Pantry, Inc The Pantry #486	2 5	Gray-brn to red-brn sandy
	ADDRESS PO Box 1410 (Street or Route No.)		silt with gravel
	Sanford NC 27330	5 7	Gray-brn sandy clay
	City or Town State Zip Code		
3.	DATE DRILLED 04/26-27/01 USE OF WELL Monitoring	7 12	Red-brn sli. clayey sandy
4.	TOTAL DEPTH 45.5' CUTTINGS COLLECTED Yes X No		silt
		<u>12</u> 45.5	Lt. tan silty fine sand to
5.	DOES WELL REPLACE EXISTING WELL? Yes X No		cse, sand
6.	STATIC WATER LEVEL 20 FT. Above TOP OF CASING.		
	⊠ Below	···	·
	TOP OF CASING IS 0 FT. ABOVE LAND SURFACE.	If additional spaces is no	eeded use back of form.
7.	YIELD (gpm): N/A METHOD OF TEST N/A	LOCA	TION SKETCH
8.	WATER ZONES (depth): N/A	(Show direction and distance fro	om at least two State Roads, o
		map reference points).	
9.	CHLORINATION: Type N/A Amount N/A		
10.	CASING: Depth Diameter Wall Thickness Waterial	CHANGE BOOKER ON	THE STREET STREE
11.	GROUT:		□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
	Depth Material Method	Page 1	TEN YEAR
	FROM 0 TO 39 FT Portland Slurry		[/ ("ni
	FROM 0 TO 37 FT Portland Siurry		• \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
2.	SCREEN:		
	Depth Diameter Slot Size Material	ROAD LINE	The several se
	FROM 41.5 TO 45.5 FT 2 in .010 in PVC	M-FOND ROAD	
	FROM TO FT in in	1.1/-	
3.	GRAVEL PACK:		A Section 4
	Depth Size Material		Construction of the constr
	FROM 40 TO 45.5 FT 20/40 Silica Sand		(19 k
	FROM TO FT		
1	DUMADUC. Destrict of Co. Co. Co.		
7.	REMARKS: Bentonite seal from 37' to 40'; Double Cased Well I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED STANDARDS: AND THAT A CONV. OF THE PROPERTY OF	O IN ACCORDANCE WITH 15 NGA CO.	West Concentions
	STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN	PROVIDED TO THE WELL OWNER.	., WELL CONSTRUCTION
	ne de la companya de	e a ne	4-27-01
	SIGNATURE	OF CONTRACTOR OR AGENT	DATE
	GW-1 Revised 6/88 Submit original	l to Division of Environmental Managemer	it and copy to well owner.

FOR OFFICE USE ONLY

Long.

Serial No.

Quad. No.

Minor Basin Basin Code

Lat.



Environmental Conservation Laboratories, Inc.

4810 Executive Park Court, Suite 211 Jacksonville, Florida 32216-6069 904 / 296-3007

Fax 904 / 296-6210 www.encolabs.com



DHRS Certification No. E82277

CLIENT : SEI Environmental, Inc.

ADDRESS: 130 Penmarc Drive

Suite 108

Raleigh, NC 27603

REPORT #

: JAX17303

DATE SUBMITTED: May 1, 2001

DATE REPORTED : May 9, 2001

PAGE 1 OF 9

ATTENTION: Mr. Douglas Parker

SAMPLE IDENTIFICATION

Samples submitted and identified by client as:

PROJECT #: 501403

Pantry 486

04/30/01

#1 - MW-3 @ 13:20

#2 - MW-5 @ 13:05

- WW-1 @ 13:30 #3

PROJECT MANAGER

REPORT # : JAX17303

DATE REPORTED: May 9, 2001 REFERENCE : 501403 PROJECT NAME : Pantry 486

PAGE 2 OF 9

RESULTS OF ANALYSIS

EPA METHOD 601 -							
VOLATILE HALOCARBONS		MW-3		ī	MW - 5	,	Units
Dichlorodifluoromethane	-	1000 U	D1				 μg/L
Chloromethane		1000 U	D1		1.0 U		μg/L μg/L
Vinyl Chloride		1000 U	D1		1.0 U		μg/L
Bromomethane		- 1000 U	D1		1.0 U		μg/L
Chloroethane		1000 U	.D1	~	1.0 U		μg/L
Trichlorofluoromethane		2000 U	D1		2.0 U	-	μg/L
1,1-Dichloroethene	•	1000 `U	D1	-	1.0 U		μg/L
Methylene Chloride		5000 U	D1		5.0 U	•	μg/L
t-1,2-Dichloroethene		1000 U	D1		1.0 U		μg/L
1,1-Dichloroethane		1000 U	D1		1.0 U		μg/L
c-1,2-Dichloroethene		1000 U	D1		1.0 U		μg/L
Chloroform		1000 U	D1		1.0 U		μg/L
1,1,1-Trichloroethane	•	1000 U	D1 .		1.0 U		μ g/L
Carbon Tetrachloride	•	1000 U	.D1		1.0 U		μg/L
1,2-Dichloroethane		1000 U	D1		1.0 U		μg/L
Trichloroethene		1000 U	D1		1.0 U		μg/L
1,2-Dichloropropane		1000 U	D1		1.0 U		μg/L
Bromodichloromethane		1000 U	D1		1.0 U		μg/L
c-1,3-Dichloropropene		1000 U	D1	• •	1.0 U		μg/L
t-1,3-Dichloropropene		1000 U	D1		1.0 U	•	μg/L
1,1,2-Trichloroethane		1000 U	D1	`.	1.0 U		μg/L
Tetrachloroethene		1000 U	D1		1.0 U		μg/L
Dibromochloromethane Chlorobenzene	,	1000 U	D1		1.0 U		μg/L
Bromoform		1000 U 1000 U	D1 D1		1.0 U		μg/L
1,1,2,2-Tetrachloroethane		1000 U	D1		1.0 U 1.0 U		μg/L
1,3-Dichlorobenzene		1000 0	D1		1.0 U		μg/L
1,4-Dichlorobenzene		1000 U	D1		1.0 U		μg/L
1,2-Dichlorobenzene		1000 U	D1		1.0 U	` .	μg/L μα/Ι
-,		1000 0			2.00		$\mu { m g}/{ m L}$
Surrogate:		% RECOV			% RECOV		LIMITS
Bromofluorobenzene		93			75	*	37-161
Date Analyzed		05/07/01	,	0	5/06/01		**

U = Compound was analyzed for but not detected to the level shown. D1 = Analyte value determined from a 1:1000 dilution.

ENCO LABORATORIES REPORT # : JA : JAX17303 DATE REPORTED: May 9, 2001 REFERENCE: 501403

PROJECT NAME : Pantry 486

PAGE 3 OF 9

EPA METHOD 602 - VOLATILE AROMATICS	<u>MW-3</u>	<u>MW - 5</u>	<u>Units</u>
Methyl tert-butyl ether Isopropyl Ether Benzene Toluene Chlorobenzene Ethylbenzene m-Xylene & p-Xylene o-Xylene 1,3-Dichlorobenzene 1,4-Dichlorobenzene	1900 D1 1000 U D1 4700 D1 24000 D1 1000 U D1 2400 D1 8900 D1 4100 D1 1000 U D1	78 3.7 1.2 5.8 1.0 U 1.1 8.9 18 1.0 U	μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L
1,2-Dichlorobenzene Surrogate: Bromofluorobenzene Date Analyzed	1000 U D1 **RECOV 109 05/07/01	1.0 U * RECOV 102 05/06/01	μg/L LIMITS 52-147
EPA METHOD 504 - ETHYLENE DIBROMIDE	<u>MW-3</u>	<u>MW - 5</u>	Units
Ethylene Dibromide Date Prepared Date Analyzed	0.020 U 05/03/01 05/03/01	0.020 U 05/03/01 05/03/01	μ g/L

U = Compound was analyzed for but not detected to the level shown. D1 = Analyte value determined from a 1:1000 dilution.

REPORT # : JAX17303 DATE REPORTED: May 9, 2001 REFERENCE: 501403

PROJECT NAME : Pantry 486

PAGE 4 OF 9

EPA METHOD MA VPH - Vol. Petr. Hydrocarb	oons	<u>MW-3</u>		<u>MW - 5</u>	Units
C5-C8 Aliphatics C9-C12 Aliphatics		38000 18000	D2 D2	260 49	μg/L μg/L
Surrogate: 2,5-Dibromotoluene Date Analyzed		% RECOV 80 05/03/01		% RECOV 77 05/03/01	LIMITS 70-130
EPA METHOD MA VPH - Vol. Petr. Hydrocarb	ons	<u>MW-3</u>		<u>MW-5</u>	<u>Units</u>
C9-C10 Aromatics		9800	D2	54	μ g/L
Surrogate: 2,5-Dibromotoluene Date Analyzed		% RECOV 101 05/03/01		% RECOV 86 05/03/01	<u>LIMITS</u> 70-130
			•		
TOTAL METALS	METHOD	<u>MW-3</u>		<u>MW - 5</u>	Units
Lead Date Analyzed	200.7	0.011 U 05/08/01		0.011 U 05/08/01	mg/L

U = Compound was analyzed for but not detected to the level shown. D2 = Analyte value determined from a 1:20 dilution.

REPORT # : JAX17303 DATE REPORTED: May 9, 2001

REFERENCE : 501403

PROJECT NAME : Pantry 486

PAGE 5 OF 9

EPA METHOD 601 -		. *	
VOLATILE HALOCARBONS	<u>ww-1</u>	LAB BLANK	Units
Dichlorodifluoromethane	1.0 U	1.0 U	μg/L
Chloromethane	1.0 U	1.0 Ŭ	μg/L
Vinyl Chloride	1.0 U	1.0 U	μg/L
Bromomethane	1.0 U	1.0 U	μg/L
Chloroethane	1.0 U	1.0 U	μg/L
Trichlorofluoromethane	2.0 U	2.0 U	μg/L
1,1-Dichloroethene	1.0 U	1.0 U	μg/L
Methylene Chloride	5.0 U	5.0 ぜ	μg/L
t-1,2-Dichloroethene	, 1.0 U	1.0 U	μg/L
1,1-Dichloroethane	1.0 U	1.0 U	μg/L
c-1,2-Dichloroethene	1.0 U	1.0 U	μg/L
Chloroform	1.0 U	1.0 U	μg/L
1,1,1-Trichloroethane	1.0 U	1.0 U	μg/L
Carbon Tetrachloride	1.0 U	1.0 U	μg/L
1,2-Dichloroethane	1.0 U	1.0 U	$\mu g/L$
Trichloroethene	1.0 U	1.0 U	$\mu g/L$
1,2-Dichloropropane	1.0 U	1.0 U	$\mu { t g}/{ t L}$
Bromodichloromethane	1.0 U	1.0 U	μg/L
c-1,3-Dichloropropene	1.0 U	1.0 U	$\mu { t g}/{ t L}$
t-1,3-Dichloropropene	1.0 U	1.0 U	μ g/L
1,1,2-Trichloroethane	1.0 U	. 1.0 U	μg/L
Tetrachloroethene	1.0 U	1.0 U	μ g/L
Dibromochloromethane	1.0 U	1.0 U	$\mu { t g}/{ t L}$
Chlorobenzene	1.0 U	1.0 U	μġ/L
Bromoform	1.0 U	1.0 U	μg/L
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	μg/L
1,3-Dichlorobenzene	1.0 U	1.0 U	μg/L
1,4-Dichlorobenzene	1.0 U	1.0 U	μ g/L
1,2-Dichlorobenzene	1.0 U	1.0 U	$\mu { m g/L}$
Surrogate:	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	63	50	37-161
Date Analyzed	05/06/01	05/06/01	

U = Compound was analyzed for but not detected to the level shown.

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VOLATILE AROMATICS	<u> WW - 1</u>	<u>LAB</u> BLANK	Units
Methyl tert-butyl ether Isopropyl Ether Benzene Toluene Chlorobenzene Ethylbenzene m-Xylene & p-Xylene o-Xylene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L
Surrogate: Bromofluorobenzene Date Analyzed	% RECOV 106 05/06/01	% RECOV 108 05/06/01	LIMITS. 52-147

REPORT # : JAX17303
DATE REPORTED: May 9, 2001
REFERENCE : 501403
PROJECT NAME : Pantry 486

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		e .	
EPA METHOD MA VPH - Vol. Petr. Hydrocarbons		LAB BLANK	<u>Units</u>
C5-C8 Aliphatics C9-C12 Aliphatics		40 U 20 U	μg/L μg/L
Surrogate: 2,5-Dibromotoluene Date Analyzed		% RECOV 95 05/02/01	LIMITS 70-130
EPA METHOD MA VPH - Vol. Petr. Hydrocarbons		LAB BLANK	<u>Units</u>
C9-C10 Aromatics		20 U	μ g/L
Surrogate: 2,5-Dibromotoluene Date Analyzed		% RECOV 122 05/02/01	<u>LIMITS</u> 70-130
TOTAL METALS METI	HOD	LAB BLANK	Units
Lead 200. Date Analyzed	.7	0.011 U 05/08/01	mg/L
			· · · · · · · · · · · · · · · · · · ·
EPA METHOD 504 - ETHYLENE DIBROMIDE		LAB BLANK	<u>Units</u>
Ethylene Dibromide Date Prepared Date Analyzed		0.020 U 05/03/01 05/03/01	μg/L
		•	

 $^{{\}tt U}$ = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES

REPORT # : JAX17303
DATE REPORTED: May 9, 2001

REFERENCE : 501403

PROJECT NAME : Pantry 486

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RESULTS OF ANALYSIS

EPA METHOD MA VPH - Vol. Petr. Hydrocarbons	LAB BLANK	<u>Units</u>
C5-C8 Aliphatics C9-C12 Aliphatics	40 U 20 U	μg/L μg/L
Surrogate: 2,5-Dibromotoluene Date Analyzed	% RECOV 95 05/03/01	<u>LIMITS</u> 70:-130
		· .
EPA METHOD MA VPH - Vol. Petr. Hydrocarbons	LAB BLANK	<u>Units</u>
C9-C10 Aromatics	20 U	$\mu { m g}/{ m L}$
Surrogate: 2,5-Dibromotoluene Date Analyzed	% RECOV 111 05/03/01	LIMITS 70-130

ENVIRONMENTAL CONSERVATION LABORATORIES

4810 Executive Park Court, Suite 211 10207 General Drive Jacksonville, Florida 32216-6069 Ph. (904) 296-3007 • Fax (904) 296-6210 Ph. (407) 826-5314 • Fax (407) 850-6945

1015 Passport Way Cary, North Carolina 27513

Ph. (919) 677-1669 • Fax (919) 677-9846

ENCO CompQAP No.: 960038G/0

CUSTODY RECORD	S'A	EXPEDITED REPORT DELIVERY (surcharge) Date Due:	REMARKS		The state of the s					The state of the s						-	DATE TIME	DATE TIME	DATE TIME	-
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APPENDIX E

G.													
	NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. CESQG	Manifest 2. Document No. 4 0 7 4 2	Page 1 of 1									
	3. Generator's Name and Mailing Address THE 6605	E PANTRY # 486 S RAEFORD ROAD ZETTEVILLE, NC 28304											
ŧί	5. Transporter 1 Company Name CONTAMINANT CONTROL, INC	6. US EPA ID N		Transporter's Ph. 910-424-74									
	7. Transporter 2 Company Name	8. US EPA ID N	umber B.	B. Transporter's Phone									
	9. Designated Facility Name and Site Address CONTAMINANT CONTROL, INC 3434 BLACK & DECKER ROAD HOPE MILLS, NC 28348	10. US EPA ID N C. N. C. D. 9. 8. 6		C. Facility's Phone 910-424-7443									
	11. Waste Shipping Name and Description			12. Conta	iners 13. Total Type Quantity	14. Unit Wt/Vol							
	o. NON DOT/RCRA REGULATED N SOIL/DEBRIS WITH PETROLEU	MATERIALS, SOLID (CONTAIN IM) (GASOLINE)	IS ABSORBENT	81 014	DM07000	P							
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GENERATOR	с.												
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	d.				s for Wastes Listed Abov								
	D. Additional Descriptions for Materials Listed Ab. 11a. CCI JOB # 10-3-3222; PROF		F	. Handling Code									
	15. Special Handling Instructions and Additional	Information											
	EMER	RGENCY RESPONSE CONTACT	CCI @ 1-888-62	24-6555 (24-H	OURS)								
	16. GENERATOR'S CERTIFICATION: I certify the		ot subject to federal regul	lations for reporting	proper disposal of Hazard	ous Waste.							
V	Printed/Typed Name Kewworth H. BASS	Signature	the No	buse	040	30/							
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Printed/Typed Name	Signature	n d d:	ug N	Month, Do	30%							
PCRTE	18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	of Materials Signature			Month Do	ay Year							
L.	19. Discrepancy Indication Space												
A C I L I		receipt of waste materials covered by this m	anifest except as noted	l in Item 10.									
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ORIGINAL - RETURN TO GENERATOR

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NUN-DAZARDOO	or's US EPA ID No.	Manifest Document No.	2. Page 1	•		
WASTE MANIFEST C E S	0 G · · · · ·	5 0 7 6 3				
3. Generator's Name and Mailing Address THE PANTR	Y #486					
6605 RAEFO	RD ROAD			•	-	
	ILLE, NC 28304					
4. Generator's Phone (910) 868-4041 5. Transporter I Company Name	6. US EPA ID	Number	A. Transporte	er's Phone		
· · · · · · · · · · · · · · · · · · ·	NCROOL	01011	910-4	24-7443		
7. Transporter 2 Company Name	8. US EPA ID	Number	B. Transporte	r's Phone		
			C. Facility's P	hone		
9. Designated Facility Name and Site Address	10. US EPA ID	Number	C. Tourity at			
CONTAMINANT CONTROL, INC.	•		910-4	24-7443		
3434 BLACK & DECKER ROAD	NCD98	17361	5			
HOPE MILLS, NC 28348	14 C D 2 G		12.	Containers	13. Total	14. Unit
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EMERGENCY RESPONSE CONT	ACT CCI @ 1-888-62	4-6555 (24 HUU	Ev.3)		•	
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16. GENERATOR'S CERTIFICATION: I certify the materials de	scribed above on this manifest a	e not subject to federal	regulations for r	eporting prope	disposal of Hazardo	ous Waste.
Printed /Typed Name	Signature	PA	Jalan		Month Do	ry Year
Teresa L. Colon	Ju	sad. U	June C		KA J	<u> </u>
A Landau and of Receipt of Materials	AI	- Aud	'		Month Do	y Year
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L 20. Facility Owner or Operator: Certification of receipt of w	aste materials covered by thi	s manifest except as :		7.		
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Managar Preparation and Associate Control of the Co	ORIGINAL - RETURN T	O GENERATOR				

SEIEngineering & Geological Services, P.C.

Comprehensive Site Assessment Report

Site Location:

The Pantry #486 6605 Raeford Road Fayetteville, North Carolina Cumberland County Site Owner:
Joseph H. Gillis, et al
P. O. Box 736
Fayetteville, North Carolina 28302

Prepared for:

The Pantry, Inc. P. O. Box 1410 Sanford, North Carolina 27330 (919) 774-6700

Project Number: 501430 Facility ID Number: 0-023655 Incident Number: 23062 Site Priority Ranking: High

Reason for Risk Classification: Water supply well located within 1,000 feet of the source area of the release

General Site Information:

Surrounding Land Use – Commercial/Residential/Undeveloped
Latitude/Longitude – N 35° 2' 24" / W 78° 59' 50"
Release Date – March 21, 2001
Estimated Quantity – Unknown
Cause of Release – Underground storage tank system
UST Information – (3) 10,000-gallon gasoline

Prepared by:

Michael W. Worden, P.G.

NC Licensed Geologist #1891

SEI Engineering and

Geological Services, P.C.

5100 N. I-85 Service Road, Suite 7A Charlotte, North Carolina 28206

April 28, 2003

RECEIVED

MANY R C 2268

DENR - FAYETTEVILLE REGIONAL OFFICE

DIVISION OF WATER QUALITY Certification for the Submittal of a Comprehensive Site Assessment

Responsible Party: The Pantr	y, Inc.				
Contact Person: Ms. Reneé Th	nomas				
Address: P.O. Box 1410					
City: Sanford	State:	NC	_ Zip Code:	27330	
Site Name: _The Pantry #486					
Address: 6605 Raeford Road					
City: Fayetteville	State:	NC	Zip Code:	28304	
Groundwater Incident Number:	23062		ite Priority		High
			-		
I, <u>Michael W. Worden</u> , a <u>Profession SEI Engineering and Geological Service</u> hereby certify that the information indica Comprehensive Site Assessment (CSA) assessments, conclusions, recommendat complete, and accurate.	es, P.C. ated belo and that	_ (firm ow is g to the	or company enclosed as best of my	y of emplo <u>part</u> of the knowledge	Dyment) do ne required e the data
(Each item must be initialed by the cer	rtifying li	cense	d professio	nal)	
The source of the contamination sources of the contamination	nation ha	as bee ched.	n identified.	A list of a	all potentia
2 Imminent hazards to public	health a	nd safe	ety have bee	n identified	d.
3. Potential receptors and sign	nificant e	xposur	e pathways	have been	identified.
4. Geological and hydrogeol groundwater have been ide the contaminants have been	entified.	The ch	s influencing nemical and	g the mo physical cl	vement of haracter of
5 The CSA sufficiently chara groundwater and soil conta be developed.	acterizes mination	the ca	ause, signific that a Correc	cance, and ctive Action	l extent of n Plan can
If any of the above statements had detailed explanation. Failure to initial ar lack thereof will result in immediate return	ny item o of the C	r to pr SA to t	ovide writte the responsi	n justificati	provide a on for the
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GW-100 (csa) 3/17/97

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LIMITATIONS

This report has been prepared under the guidance of a North Carolina Licensed Geologist to meet the requirements of the North Carolina Department of Environment and Natural Resources. The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of samples associated with this report were performed by a subcontracted, independent, and certified laboratory. All data and parameters have been reviewed for accuracy and, excepting obvious errors, have been accepted as correct. SEI Engineering and Geological Services, P.C. reserves the right to revise estimates of performance as required by changes in the data supplied by Environmental Conservation Laboratories and Environmental Science Corporation.

EXECUTIVE SUMMARY

The Pantry #486 is a retail gasoline and convenience store located at 6605 Raeford Road in Fayetteville, Cumberland County, North Carolina. The site is currently active and contains three 10,000-gallon underground storage tanks (USTs).

The January 2001 statistical inventory reconciliation (SIR) data for this site showed a "fail" for the 10,000-gallon premium gasoline UST. When The Pantry, Inc. received the SIR report in February 2001, they immediately ordered a tank tightness test. The February 26, 2001, tightness test on the premium UST indicated a "pass." The February 2001 SIR data, which was reported in March 2001, indicated an "inconclusive" result for the premium UST, due to the fact that it had been pumped out by The Pantry, Inc. On March 21, 2001, a release was discovered when store personnel found a hole in the bottom of the premium UST near the fill port.

SEI Environmental, Inc. initiated a Limited Site Assessment (LSA) to assess soil and groundwater quality at the site. Soil samples collected during the LSA indicated the presence of free product in the monitoring wells and recovery wells adjacent to the UST area. During the groundwater sampling events, certain petroleum constituents were detected in all of the groundwater monitoring wells located on site at levels greater than the 15A NCAC 2L standards, but less than the Gross Contaminant Levels (GCLs). A Limited Site Assessment Report was submitted by SEI Engineering and Geological Services, P.C. on July 5, 2001.

From March 2001 to February 2002, ten aggressive fluid vapor recovery events conducted on site were successful in removing approximately 20,157 gallons of contaminated groundwater, 2,998.93 pounds of petroleum vapors, and 1,882 gallons of free product.

Due to the presence of water supply wells in the area surrounding the site, the site has been given a priority rank of high risk. In accordance with Division of Waste Management, UST Section guidelines, a Comprehensive Site Assessment (CSA) was initiated by SEI Environmental, Inc. and SEI Engineering and Geological Services, P.C. in order to delineate the free product and groundwater contaminant plume.

Laboratory results indicate that petroleum contaminated soil and groundwater were detected during sampling at the subject site. During the LSA, soil samples collected from around the UST area revealed the presence of free product. Free product was not observed in the soil column of any of soil boring conducted as part of the CSA. Petroleum constituents were detected in certain groundwater monitoring wells located on site at concentrations greater than the 15A NCAC 2L standards, however all concentrations were below the GCLs. During the February 26, 2003, sampling event, free product was detected in six of the thirteen monitoring wells located on and off site. Delineation of the free product and groundwater contaminant plumes was not achieved due to refusal of offsite access from a neighboring property.

SEI Engineering and Geological Services, P.C. recommends that a Corrective Action Plan be developed for this site, including a soil investigation to determine the extent of free product in the soil surrounding the USTs. Additional monitoring wells will be required to the east of the site to fully delineate the free product and groundwater contaminant plumes, and one additional

monitoring well will be required to the west of monitoring well MW-6 to fully delineate the benzene groundwater contaminant plume. One additional type III telescoping well will be required to the south of monitoring well MW-5 to fully determine the vertical extent of the groundwater contaminant plume.

1.0 SITE HISTORY AND SOURCE CHARACTERIZATION

The Pantry #486 is a retail gasoline and convenience store located at 6605 Raeford Road in Fayetteville, Cumberland County, North Carolina. Figure 1 is an excerpt from a United States Geological Survey (USGS) 7.5 minute topographical quadrangle map showing the location of the site, as well as cultural and topographic features. The site is currently active and contains three 10,000-gallon underground storage tanks (USTs). Figure 2 is a site map showing the site features and the UST locations.

The January 2001 statistical inventory reconciliation (SIR) data for this site showed a "fail" for the 10,000-gallon premium gasoline UST. When The Pantry, Inc. received the SIR report in February 2001, they immediately ordered a tank tightness test. The February 26, 2001, tightness test on the premium UST indicated a "pass." The February 2001 SIR data, which was reported in March 2001, indicated an "inconclusive" result for the premium UST, due to the fact that it had been pumped out by The Pantry, Inc. On March 21, 2001, a release was discovered when store personnel found a hole in the bottom of the premium UST near the fill port.

On March 22, 2001, The Pantry, Inc. contracted SEI Environmental, Inc. to investigate the release. This included installing three 4-inch diameter recovery wells and recovering free product via aggressive fluid vapor recovery (AFVR). The four AFVR events were successful in removing approximately 561 gallons of free product, 9,543 gallons of contaminated groundwater, and 786.91 pounds of petroleum vapors. A 20 Day and Free Product Report for the AFVR events was submitted to the NCDENR Division of Waste Management, UST Section on May 2, 2001.

SEI Environmental, Inc. initiated a Phase I Limited Site Assessment (LSA), which included the installation of one type II groundwater monitoring well (MW-1). Due to the fact that free product was observed in the well, SEI Environmental, Inc. did not collect a groundwater sample and went immediately to a Phase II LSA. The Phase II LSA included the installation of three type II groundwater monitoring wells (MW-2 through MW-4), and one type III groundwater monitoring well (MW-5).

Soil samples collected during the LSA indicated the presence of free product in the monitoring wells and recovery wells adjacent to the UST area. During the groundwater sampling events, certain petroleum constituents were detected in all of the groundwater monitoring wells located on site at levels greater than the 15A NCAC 2L standards, but less than the Gross Contaminant Levels (GCLs). A Limited Site Assessment Report was submitted by SEI Engineering and Geological Services, P.C. on July 5, 2001.

From June 2001 through February 2002, six AFVR events conducted on site were successful in removing approximately 10,614 gallons of contaminated groundwater, 2,212.02 pounds of petroleum vapors, and 1,321 gallons of free product. A Free Product Recovery Report was submitted by SEI Engineering and Geological Services, P.C. on March 4, 2002.

A July 12, 2001, Notice of Regulatory Requirements from the Division of Waste Management (DWM), UST section required a Comprehensive Site Assessment (CSA) for this site. In accordance with DWM UST Section guidelines, a CSA was initiated by SEI Environmental, Inc. and SEI Engineering and Geological Services, P.C. in order to delineate the free product and groundwater contaminant plume. This report summarizes the results of the installation of eight monitoring wells on October 15, 2001, and February 26, and March 1, 2002, and groundwater samples collected from site monitoring wells on October 16, 2001, March 4, 2002, and February 26, 2003. A slug test was also performed in order to determine the hydrogeologic conditions at the site.

2.0 POTENTIAL RECEPTORS AND MIGRATION PATHWAYS

2.1 Receptor Information and Risk Characterization

The subject property is currently active, and is zoned planned commercial. The properties to the west, south and east are also zoned planned commercial. US Highway 401 borders the property to the north. The undeveloped property north of US Highway 401 is zoned planned commercial. Properties further to the south, southwest, and southeast of the site are zoned residential. Figure 2 is a site map showing the site features and the UST pit location.

The properties immediately adjacent to the subject property contain businesses, undeveloped land, a shopping center, residences, and a highway. Figure 4 is a surrounding properties map showing the properties within a 500-foot radius of the site. Table B-6 summarizes surrounding property owner information.

A 1,500-foot radius receptor survey was performed. Several potable wells were noted in the surrounding area, the closest of which is located approximately 350 feet south of the UST bed. The City of Fayetteville confirmed that public water is available to the site and to part of the surrounding area, although people are not required to connect to public water. The City of Fayetteville obtains its water from the Cape Fear River and Glenville Lake. Brookwood Water Corporation also provides residential water supply service to several homes in the surrounding area. Brookwood Water Corporation obtains its water from water supply wells, the closest of which is located approximately 1,400 feet northeast of the site. The nearest surface water is a small stream located approximately 650 feet northeast of the site. Figure 3 is a vicinity map showing the properties within a 1,500-foot radius of the site.

To date, there are no state recognized wellhead protection areas as defined in 42 USC 300h-7(e) within a 1,500 foot radius of the site. The site is located in the Middendorf Formation of the Coastal Plain Physiographic Province. According to the National Water Summary (1987), the site is located in an area where there is recharge to the crystalline rock aquifer, which is a semiconfined to confined aquifer that may be used as a source of drinking water. Subsurface structures with potential to contain explosive vapors were not located near the release area.

2.2 Migration Pathways

Water, underground electric, telephone, and gas lines are located on site. Figure 2 is a site map identifying underground utility lines. Backfill used in utility line trenches commonly has a higher conductivity than the surrounding native soil, therefore, utility lines may present potential migration pathways for petroleum vapors and impacted groundwater. Typically, underground utilities are installed to an average depth of two to five feet bls.

3.0 GEOLOGY AND SOIL SAMPLING

3.1 Regional Geology

The site is located within the sands of the Middendorf Formation of the Coastal Plain Physiographic Province. According to the Geologic Map of North Carolina (Brown, et al., 1985), the formation is characterized by sand, sandstone, and mudstone that is gray to pale gray with an orange cast. Clay balls and iron-cemented concretions are common. Bedding is laterally discontinuous, with cross-bedding common.

3.2 Site Geology and Soil Sampling

As reported in the LSA, on March 22 and 23, 2001, three soil borings (MW-1 through MW-3) were advanced to the northeast and south of the UST bed to a depth of 30 feet bls. On April 26 and 27, 2001, two soil borings were advanced at the site, MW-4 to a total depth of 30 bls, and MW-5 to a depth of 45.5 feet bls. Due to the presence of free product in the soil, soil samples were not collected. Free product was observed in the soil at approximately sixteen feet bls in monitoring wells MW-1, MW-2, MW-4, and MW-5. Groundwater was encountered at approximately nineteen feet bls. The soil encountered while performing the soil borings was primarily a yellow-brown to tan-gray silty sand and gray-tan clayey sand.

On October 15, 2001, five soil borings (MW-6 through MW-10) were advanced on and off the site in order to delineate the contaminated groundwater. Soil borings MW-6 and MW-9 were advanced to a total depth of 30 feet bls. Soil borings MW-7 and MW-8 were advanced to a total depth of 25 feet bls. Soil boring MW-10 was advanced to a total depth of 28 feet bls. Free product was not observed as part of the soil column in any of the soil borings. The soil encountered while performing the soil borings was primarily red-brown to tan-brown silty to sandy clay and yellow-brown to tan-brown silty sand.

On February 26, and March 1, 2002, three soil borings (MW-11 through MW-13) were advanced on and off the site in order to delineate the contaminated groundwater. Soil borings MW-11 through MW-13 were advanced to a total depth of 30 feet bls. Free product was not observed as part of the soil column in any of the soil borings. The soil encountered while performing the soil

borings was primarily red-brown to tan-brown silty to sandy clay and yellow-brown to tan-brown silty sand.

The soil boring locations are shown on Figure 2. Figure 5 shows the lines of geologic cross section, and generalized geologic cross sections through the site are included as Figures 6 and 7. Soil Boring Logs are included in Appendix A.

During drilling activities, suspected contaminated soil was placed into drums and left on site. Soil Solutions, Inc. removed one drum of soil on January 2, 2002, and three drums of soil on March 5, 2002, and transported the drums to its facility in Winston Salem, North Carolina, for proper treatment and disposal. A copy of the Certificates for Acceptance for the drums is included in Appendix B.

4.0 MONITORING WELL CONSTRUCTION

The well construction details for monitoring wells MW-1 through MW-5 are included in the LSA. On October 15, 2001, five type II monitoring wells (MW-6 through MW-10) were installed. Monitoring wells MW-6 and MW-9 were installed to a depth of 30 feet bls, and were completed with ten feet of 2 inch Schedule 40 PVC casing and twenty feet of 0.010 inch slot PVC screen. Monitoring wells MW-7 and MW-8 were installed to a depth of 25 feet bls, and were completed with ten feet of 2 inch Schedule 40 PVC casing and fifteen feet of 0.010 inch slot PVC screen. Monitoring well MW-10 was installed to a depth of 28 feet bls, and was completed with eight feet of 2 inch Schedule 40 PVC casing and twenty feet of 0.010 inch slot PVC screen.

On February 26, 2002, two type II monitoring wells (MW-11 and MW-13) were installed to a depth of 30 feet bls, and were completed with ten feet of 2 inch Schedule 40 PVC casing and twenty feet of 0.010 inch slot PVC screen. On March 1, 2002, one type II monitoring well (MW-12) was installed to a depth of 30 feet bls, and was completed with ten feet of 2 inch Schedule 40 PVC casing and twenty feet of 0.010 inch slot PVC screen. The locations of the monitoring wells are noted on Figure 2.

The annulus of each well was filled with a sand filter pack to two feet above the top of the screened interval. A bentonite seal was placed above the sand filter pack and hydrated with water. The remaining well bore was filled with grout to the surface. Monitoring wells MW-6 through 9, MW-11, and MW-12 were completed flush to grade with a locking cap, watertight seal, and a bolt-down manhole. Monitoring wells MW-10 and MW-13 were completed with a locking cap, watertight seal, and an above-grade manway. A Monitoring Well Construction Summary is presented as Table B-7. Well Construction Records are presented in Appendix A.

5.0 GROUNDWATER SAMPLING AND HYDROGEOLOGY

5.1 Groundwater Sampling

Each monitoring well on site was gauged prior to each sampling event with an electronic oil/water interface probe to measure depth to water and to detect any free product. On October 16, 2001, monitoring wells MW-6 through MW-10 were sampled. On March 4, 2002, monitoring wells MW-12 and MW-13 were sampled. Monitoring well MW-11 was not sampled on March 4, 2002, due to the presence of free product. On February 26, 2003, monitoring wells MW-5 through MW-8, MW-10, MW-12, and MW-13 were sampled. Monitoring wells MW-1 through MW-4, MW-9, and MW-11 were not sampled on February 26, 2003, due to the presence of free product. Historical groundwater elevation data are included in Table B-8.

The monitoring wells were purged prior to sampling by removing a minimum of three well volumes of water. Groundwater samples were collected after the wells were allowed to recover. The samples were collected using new, disposable Teflon[®] bailers and placed in laboratory supplied, clean containers. The groundwater samples collected on October 16, 2001, and March 4, 2002, were maintained at 4°C and submitted to Environmental Conservation Laboratories (ENCO) in Cary, North Carolina, under proper chain-of-custody procedures, for analysis. The groundwater samples collected on February 26, 2003, were maintained at 4°C and submitted to Environmental Science Corporation (ESC) in Mt. Juliet, Tennessee, under proper chain-of-custody procedures, for analysis. The groundwater samples were analyzed by EPA methods 601 and 602 (extended to detect IPE and MTBE), MADEP method VPH, and standard method 3030c for lead. In addition, the initial groundwater samples from MW-6 through MW-10, MW-12, and MW-13 were analyzed by EPA method 504.1 for EDB.

5.2 Site Hydrogeology

Figures 8 and 9 are the groundwater elevation contour maps for the February 26, 2003, and April 16, 2003, gauging events. They consistently show groundwater flowing toward the east. Figure 10 is a free product thickness map for February 26, 2003, gauging event.

Slug tests were performed on monitoring wells MW-6 and MW-9 on April 16, 2003. The

hydraulic conductivity (K) value at the site ranged from an average of 6.362 feet/day in MW-9 to an average of 11.64 feet/day in MW-6. Groundwater flow velocity (v=Ki/n) was estimated using this range of hydraulic conductivity values, the range of hydraulic gradient (i) values on the property estimated from the water table elevation contour map (Figure 8), and assumed an effective porosity (n) of 0.2, which is a typical value for sand. Using combinations of these parameters, the shallow groundwater flow velocity at the site appears to range from 0.0945 feet/day to 0.173 feet/day. Slug Test Results are presented in Appendix C.

6.0 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples were collected from monitoring wells MW-6 through MW-10 on October 16, 2001, from monitoring wells MW-12 and MW-13 on March 4, 2002, and from monitoring wells MW-5 through MW-8, MW-10, MW-12, and MW-13 on February 26, 2003. The samples were analyzed by EPA methods 601 and 602 (extended to detect IPE and MTBE), MADEP method VPH, and standard method 3030c for lead. The initial groundwater samples collected from MW-6 through MW-10, MW-12, and MW-13 were also analyzed by EPA method 504.1 for EDB.

Petroleum hydrocarbons were detected at concentrations above the 15A NCAC 2L groundwater standards in three of the seven monitoring wells (MW-5, MW-6, and MW-10) sampled on February 26, 2003. A maximum concentration of benzene (410 micrograms per liter (µg/L)) was detected in monitoring well MW-10. Maximum concentrations of MTBE (1,400 µg/L), aliphatics in the C5-C8 range (4,000 µg/L), and aromatics in the C9-C10 range (370 µg/L) were detected in monitoring well MW-5. Ethylbenzene, toluene, total xylenes, IPE, lead, and aliphatics in the C9-C12 range were not detected in the groundwater samples at concentrations above the 15A NCAC 2L standards. The groundwater sample laboratory results are summarized in Tables B-4, and a copy of the laboratory reports and chain-of-custody forms is included in Appendix D.

Hydrocarbon concentration isopleths for the February 26, 2003, sampling event are presented as Figures 11 through 16. Figures 17 and 18 present the vertical benzene concentration isopleths.

Delineation of the free product and groundwater contaminant plumes was not achieved due to refusal of offsite access from a neighboring property. Additional monitoring wells will be required to the east of monitoring well MW-11 to fully delineate the free product and groundwater contaminant plumes, and an additional monitoring well will be required to the west of monitoring well MW-6 to fully delineate the benzene contaminant plume. One additional type III telescoping well will be required to the south of monitoring well MW-5 to fully determine the vertical extent of the groundwater contaminant plume.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The subject property is zoned planned commercial and potential future use indicates that it will remain zoned planned commercial. A 1,500-foot radius potable well search was performed, which revealed several potable wells in the surrounding area, the closest of which is located approximately 350 feet south of the UST bed. The City of Fayetteville confirmed that public water is available to the site and to part of the surrounding area, although people are not required to connect to public water. The City of Fayetteville obtains its water from the Cape Fear River and Glenville Lake. Brookwood Water Corporation provides residential water supply service to several homes in the surrounding area. Brookwood Water Corporation obtains its water from water supply wells, the closest of which is located approximately 1,400 feet northeast of the site. The nearest surface water is a small stream located approximately 650 feet northeast of the site.

Laboratory results indicate that petroleum contaminated soil and groundwater were detected during sampling at the subject site. During the LSA, soil samples collected from around the UST area revealed the presence of free product. Free product was not observed in the soil column of any of soil boring conducted as part of the CSA. Petroleum constituents were detected in certain groundwater monitoring wells located on site at concentrations greater than the 15A NCAC 2L standards, however all concentrations were below the GCLs. During the February 26, 2003, sampling event, free product was detected in six of the thirteen monitoring wells located on and off site.

Due to the presence of water supply wells in the area surrounding the site, the site has been given a priority rank of high risk. SEI Engineering and Geological Services, P.C. recommends that a Corrective Action Plan be developed for this site, including a soil investigation to determine the extent of free product in the soil surrounding the USTs. Delineation of the free product and groundwater contaminant plumes was not achieved due to refusal of offsite access from a neighboring property.

Additional monitoring wells will be required to the east of the site to fully delineate the free product and groundwater contaminant plumes, and one additional monitoring well will be required

to the west of monitoring well MW-6 to fully delineate the benzene groundwater contaminant plume. One additional type III telescoping well will be required to the south of monitoring well MW-5 to fully determine the vertical extent of the groundwater contaminant plume.

8.0 REFERENCES

Brown, P.M. et al., "Geologic Map of North Carolina," Scale 1:500,000, North Carolina Geological Survey, 1985.

Heath, R.C., "Basic Elements of Ground-Water Hydrology with Reference to Conditions in North Carolina," U.S. Geological Survey Water-Resources Investigations Open-File Report 80-44, Raleigh, North Carolina, 1980.

NCDENR Division of Water Quality, Groundwater Section, "Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater, Volume II: Petroleum Underground Storage Tanks," January 2, 1998.

North Carolina Administrative Code (NCAC) Title 15A Subchapter 2L, "Classifications and Water Quality Standards Applicable to the Groundwater of North Carolina," November 1993.

SEI Engineering and Geological Services, P.C., "Free Product Recovery Report," March 4, 2002.

SEI Engineering and Geological Services, P.C., "Limited Site Assessment Report," July 5, 2001.

SEI Engineering and Geological Services, P.C., "20 Day and Free Product Recovery Report," May 2, 2001.

U.S. Geological Survey Water-Supply Paper 2275, "North Carolina Ground-Water Resources."

Site History UST System Information

The Pantry #486
6605 Raeford Road
Fayetteville, Cumberland, County, North Carolina
Facility ID Number: 0-023655
Incident Number: 23062
SEI Project Number: 501430

UST ID Number	Product	Capacity (gallons)	Date Installed	Permanent Closure Date Or Currently in Use	Was Release Associated With UST System? (Y/N)
1	Gasoline	10,000	05/06/1986	Currently in Use	Y
2	Gasoline	10,000	05/06/1986	Currently in Use	Y
3	Gasoline	10,000	05/06/1986	Currently in Use	Y

Site History UST Owner/Operator Information

The Pantry #486
6605 Raeford Road
Fayetteville, Cumberland, Gounty, North Carolina
Facility ID Number: 0-023655
Incident Number: 23062
SEI Project Number: 501430

UST ID Number	Dates of Ownership / Operation	Name of Owner or Operator	Owner or Operator?
1	05/06/86 to Present	The Pantry, Inc.	Both
		Address	Telephone Number
M60 10		Post Office Box 1410 Sanford, North Carolina 27330	(919) 774-6700
UST ID Number	Dates of Ownership / Operation	Name of Owner or Operator	Owner or Operator?
2	05/06/86 to Present	The Pantry, Inc.	Both
		Address	Telephone Number
		Post Office Box 1410 Sanford, North Carolina 27330	(919) 774-6700
UST ID Number	Dates of Ownership / Operation	Name of Owner or Operator	Owner or Operator?
3	05/06/86 to Present	The Pantry, Inc.	Both
		Address	Telephone Number
		Post Office Box 1410 Sanford, North Carolina 27330	(919) 774-6700

Soil Sample Analytical Results from Limited Site Assessment

Fayetteville, Cumberland, County, North Carolina Facility ID Number: 0-023655 SEI Project Number: 501430 Incident Number: 23062 6605 Raeford Road The Pantry #486

sobsmorA 019-69 (gal/gq)					34,000	469,000
C9-C12 Aliphatics (µg/kg)					3,255,000	000'98£'6
CS±C8 Aliphatics (µg/kg)					72,000	939,000
(hāggā) Milbe	Present	Present	Present	Present	920	156,000
Total Xylenes (µg/kg)	Free Product Present	Free Product Present	Free Product Present	Free Product Present	5,000	32,000,000
Ethylbenzene (µg/kg)			rianalization de la company de		240	1,560,000
Toluene (lug/kg)			777		7,000	3,200,000
(hājrā) Benzene					5.6	22,000
(wdd) VAO					r MSCCs	SCCs
Date Sampled	03/22/01	03/23/01	03/23/01	03/23/01	NCDWM Soil-to-Groundwater MSCCs	NCDWM Residential MSCCs
Sample Depth (feet)	1	1	ł	ł	M Soil-to-(DWM Res
Sample Location	MW-1	RW-1	RW-2	RW-3	NCDW	NC

ppm - parts per million

11 pg/kg - micrograms per kilogram

BDL - Below detection limits

12 Bold denotes concentrations above the Soil-to-Groundwater Maximum Soil Contaminant Concentrations (MSCC)

		C9-C10 Aromatics (µgL)					9,800				\$2	370	29	<100	<20	<100	36	<100					
	Groundwater Analytical Results The Pantry #486 6605 Raeford Road retteville, Cumberland, County, North Carolina Facility ID Number: 0-023655 Incident Number: 23062 SEI Project Number: 501430	C9-C12 Aliphatics (µgL)										18,000				49	620	<20	<100	<20	<100	<20	<100
		CS-C8 Aliphatics (µg/L)					38,000	38,000			260	4,000	<40	1,200	50	<100	78	<100					
		EDB (4g/L)	esent	esent	esent	esent	<0.020	esent	esent	Not Sampled – Free Product Present	<0.020	NA	<0.020	NA	<0.020	NA	<0.020	NA					
2		Lead (489L)	Product Pr	Product Pr	Product Pr	Product Pr	<11	Product Pr	Product Pr		<11	<5.0	100	5.9	<11	7.1	<11	<5.0					
Groundwater Analytical Results	The Pantry #486 6605 Raeford Road fe, Cumberland, County, North Facility ID Number: 0-023655 Incident Number: 23062 SEI Project Number: 501430	168)	Not Sampled - Free Product Present	<1,000	1,900 <1,000	Not Sampled - Free Product Present		3.7	<50	<1.0	<5.0	<1.0	<5.0	<1.0	<5.0								
ater Amaly	The Pantry #486 6605 Raeford Road Cumberland, County, No cility ID Number: 0-0236 Incident Number: 23062	MTBE (ug/L)	Not Samp	Not Sarm	Not Sam	Not Sam	1,900	Not Sam	Not Samp	Not Sam	78	1,400	<1.0	<5.0	<1.0	<5.0	1.8	<5.0					
Groundw	The 660: He, Cumbe Facility II Incides	Total Xylenes (µg/L)					14,000				32.9	160	4.3	12	10.0	<3.0	20.9	3.1					
	Fayettevi	Toluene (ug/L)					24,000				5.8	50	2.0	<5.0	20	<5.0	37	<5.0					
		Ethytbenzene (µg/L)					2,400				1.1	11	<1.0	<1.0	2.2	<1.0	3.6	<1.0					
		Benzene (µg/L)					4,700				1.2	120	<1.0	4.3	2.1	<1.0	7.0	<1.0					
		Date Sampled	04/30/01	02/26/03	04/30/01	02/26/03	04/30/01	02/26/03	04/30/01	02/26/03	04/30/01	02/26/03	10/16/01	02/26/03	10/16/01	02/26/03	10/16/01	02/26/03					
		Sample	MW-1	I	MW-2	· · · · ·	MW-3		MW-4	l	MW-5		9-MM	<u> </u>	MW-7		MW-8	I					

TABLE B-4 (Continued)

					Groundy	vater Anal	Groundwater Analytical Results	lt's				
				Fayettev	1 66 ille, Cumi Facility Incide SEI Pro	The Pantry #486 6605 Raeford Road Cumberland, County, No cility ID Number: 0-0236 Incident Number: 23062	The Pantry #486 6605 Raeford Road 6605 Raeford Road Fayetteville, Cumberland, County, North Carolina Facility ID Number: 0-023655 Incident Number: 23062 SEI Project Number: 501430	SS Carolli	3			
Sample Location	Date Sampled	Benzene (µg/L)	Ethylbenzene (ug/L)	Toluene (ug/L)	Total Xylenes (ug/L)	MTBE (#g/L)	IPE (Light)	Lead (ug/L)	EDB (ugL)	CS-C8 Aliphatics (µg/L)	C9-C12 Aliphatics (t/g/L)	C9-C10 Aromatic (ug/L)
6-MJW	10/16/01	5,100	1,900	25,000	9,800	<200	<200	<11	<0.020	37,000	13,000	5,400
	02/26/03					Not San	Not Sampled - Free Product Present	Product P	resent			
MW-10	10/16/01	89	4.1	150	0/	<1.0	<1.0	<11	<0.020	089	73	37
	02/26/03	410	20	009	240	450	<5.0	5.4	NA	2,700	520	100
MW-11	03/04/02					Not San	Not Sampled - Free Product Present	Product P	resent			
	02/26/03					Not Sam	Not Sampled - Free Product Present	Product P	resent			
MW-12	03/04/02	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<11	<0.020	<40	<20	<20
	02/26/03	<1.0	<1.0	<5.0	<3.0	<5.0	<5.0	<5.0	NA	<100	<100	001>
MW-13	03/04/02	<1.0	<1.0	1.3	<3.0	<1.0	<1.0	<11	<0.020	<40	<20	22
	02/26/03	<1.0	<1.0	<5.0	<3.0	<5.0	<5.0	<5.0	NA	<100	<100	<100
2L Standards	ndards	1	29	1,000	530	200	70	15	0.004	420	4.200	210
10 x 2L Standards	tandards	10	290	10,000	5,300	2,000	200	150	0.004	4,200	42,000	2,100
GCLs	Ls	5,000	29,000	257,500	87,500	200,000	70,000	15,000	ZE	NE	NE	NE

pg/L - micrograms per liter

Bold denotes concentration is greater than the 15A NCAC 2L Standard

NE - Not established

NA - Not analyzed

GCL - Gross Contamination Level

Water Supply Well Information

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The Pantry #486 6605 Raeford Road mherland, County.	Facility ID Number: 0-023655 Incident Number: 23062 SEI Project Number: 501430
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The Pantry #486 6605 Raeford Road systewille Cumberland County, North Carolina	
San Paris San San	• 234 4 Ag (4 €)
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- Table 1	

			-
Cardinal Direction from release	S	NE	S
Distance from source area of release (feet)	350	1,400	1,700
Well Screen Interval (feet bls)	Unk	Unk	Unk
Well Casing Depth (feet bls)	Unk	Unk	Unk
Type of Well	Unk	Unk	Unk
thqeGl NeW (sid reef)	Unk	Unk	Unk
eal Use	Potable	Potable	Potable
Бросе Литрек	Unk	(910) 867-4486	(910) 867-4486
Physical Address	880 Strickland Bridge Road Fayetteville, NC 28304	Jet Circle	Bostian Drive
Well Owner	Mary Morton Griffin Heirs 1104 Strickland Bridge Road Fayetteville, NC 28304	Brookwood Water Corporation 5948 Fisher Road, Ste. 101 Fayetteville, NC 28304	Brookwood Water Corporation 5948 Fisher Road, Ste. 101 Favetteville, NC 28304
# 119.66	ww-1	WW-2	WW-3

Unk - Unknown Information

TABLE B-5B

Water Supply Well Analytical Results from Limited Site Assessment

The Pantry #486 6605 Raeford Road

Fayetteville, Cumberland, County, North Carolina

Facility ID Number: 0-023655 Incident Number: 23062 SEI Project Number: 501430

	Standards CLs	10 5,000	290 29,000	10,000 257,500	5,300 87,500	2,000 200,000	700 70,000
	andards	1	29	1,000	530	200	70
WW-1	04/30/01	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0
Sample Location	Date Sampled	Benzene (µg/L)	Ethylbenzene (µg/L)	Toluene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	IPE (µg/L)

μg/L - micrograms per liter

Bold denotes concentration is greater than the 15A NCAC 2L Standard

NE - Not established

GCL - Gross Contamination Level

TABLE B-6

Property Owners/Occupants

The Pantry #486
6605 Raeford Road
Fayetteville, Cumberland, County, North Carolina
Facility ID Number: 0-023655
Incident Number: 23062
SEI Project Number: 501430

Map	Property Owner	Mailing Address	Tenant
1	Sharlene R. Williams	PO Box 53646 Fayetteville, NC 28305	Undeveloped Property
2,3,4	William H. Elliot, Jr.	P O Box 9267 Fayetteville, NC 28311-7696	Shopping Center
5	Helen D. Autry	PO Box 41526 Fayetteville, NC 28309	Residence/Business
6	In Kyung Song	874 Strickland Bridge Rd. Fayetteville, NC 28304	Residence
7	Joseph H. Gillis Betty H. Gillis James D. Gillis	PO Box 736 Fayetteville, NC 28302	Site Undeveloped Property

TABLE B-7

Monitoring Well Construction Summary

The Pantry #486 6605 Raeford Road

Fayetteville, Cumberland, County, North Carolina

Facility ID Number: 0-023655 Incident Number: 23062 SEI Project Number: 501430

Monitoring Well	Date Installed	Total Depth (feet bls)	Screen Interval (feet bls)	Date Abandoned
MW-1	03/22/01	30	10-30	NA
MW-2	03/23/01	30	10-30	NA
MW-3	03/23/01	30	10-30	NA
MW-4	04/26/01	30	10-30	NA
MW-5	04/26-27/01	45.5	41.1-45.5	NA
MW-6	10/15/01	30	10-30	NA
MW-7	10/15/01	25	10-25	NA
MW-8	10/15/01	25	10-25	NA
MW-9	10/15/01	30	10-30	NA
MW-10	10/15/01	28	8-28	NA
MW-11	02/26/02	30	10-30	NA
MW-12	03/01/02	30	10-30	NA
MW-13	02/26/02	30	10-30	NA
RW-1	03/23/01	30	10-30	NA
RW-2	03/23/01	30	10-30	NA
RW-3	03/23/01	30	10-30	NA

NA - Not applicable

TABLE B-8

Historical Groundwater Elevation Data

The Pantry #486 6605 Raeford Road Fayetteville, Cumberland, County, North Carolina

Facility ID Number: 0-023655 Incident Number: 23062 SEI Project Number: 501430

Well Location	Sample Date	Top of Casing Elevation (feet)	Depth to Product (feet)	Depth to Groundwater (feet)	Groundwater Elevation* (feet)	
MW-1	03/23/2001	496.98	16.55	19.70	479.80	
	03/27/2001		16.61	19.58	479.78	
	04/03/2001		16.54	19.25	479.90	
	04/06/2001		16.54	19.25	479.90	
	04/10/2001		16.51	19.11	479.95	
04/17/2 04/30/2 04/30/2 06/15/2 06/22/2 10/09/2 10/16/2 11/15/2 11/30/2 12/12/2 12/27/2 01/10/2 01/22/2 02/07/2 05/23/2	04/12/2001	·	16.55	19.10	479.92	
		04/17/2001		16.52	19.08	479.95
		04/30/2001		16.52	18.87	479.99
	06/15/2001		16.85	19.04	479.69	
		06/22/2001		16.87	19.21	479.64
		10/09/2001		17.64	19.58	478.95
	10/16/2001		17.62	19.66	478.95	
		11/15/2001		17.90	19.84	478.69
		11/30/2001		17.96	19.82	478.65
	12/12/2001		18.08	19.88	478.54	
	12/27/2001		18.12	19.93	478.50	
	01/10/2002		18.16	19.88	478.48	
		01/22/2002		18.20	19.81	478.46
		02/07/2002		18.19	19.74	478.48
		02/21/2002		18.17	19.68	478.51
	05/23/2002	·	18.18	19.55	478.53	
	02/26/2003		17.92	18.51	478.94	
	04/16/2003		16.65	16.79	480.30	
MW-2	03/23/2001	498.65	17.91	22.14	479.89	
	03/27/2001	1	18.09	21.68	479.84	
	04/03/2001	1	18.02	21.27	479.98	

TABLE B-8 (continued)

Historical Groundwater Elevation Data

The Pantry #486 6605 Raeford Road

Fayetteville, Cumberland, County, North Carolina

Facility ID Number: 0-023655 Incident Number: 23062 SEI Project Number: 501430

Well Location	Sample Date	Top of Casing Elevation (feet)	Depth to Product (feet)	Depth to Groundwater (feet)	Groundwater Elevation* (feet)
MW-2	04/06/2001	498.65	18.00	21.15	480.02
(continued)	04/10/2001	Ţ	18.00	21.05	480.04
	04/12/2001		18.02	21.00	480.03
	04/17/2001	Ī	18.02	20.92	480.05
	04/30/2001		18.02	20.71	480.09
	06/15/2001		18.44	20.38	479.82
	06/22/2001		18.48	20.71	479.72
	10/09/2001		19.26	21.05	479.03
	10/16/2001		19.25	21.09	479.03
	11/15/2001		19.50	21.34	478.78
	11/30/2001		19.58	21.35	478.72
	12/12/2001		19.66	21.42	478.64
	12/27/2001		19.75	21.45	478.56
	01/10/2002		19.76	21.42	478.56
	01/22/2002		19.85	21.34	478.50
	02/07/2002		19.78	21.32	478.56
	02/21/2002		19.80	21.20	478.57
	05/23/2002		19.80	21.08	478.59
	02/26/2003		19.50	20.32	478.99
	04/16/2003		17.81	19.69	480.46
MW-3	03/23/2001	496.65		17.04	493.24
	03/27/2001			17.08	493.23
	04/03/2001	1		16.94	493.26
	04/06/2001	1	parame	16.91	493.27
	04/10/2001			16.89	493.27
	04/12/2001	·		16.89	493.27
	04/17/2001	1		16.87	493.28

Historical Groundwater Elevation Data

The Pantry #486 6605 Raeford Road

Fayetteville, Cumberland, County, North Carolina

Facility ID Number: 0-023655 Incident Number: 23062 SEI Project Number: 501430

Well Location	Sample Date	Top of Casing Elevation (feet)	Depth to Product (feet)	Depth to Groundwater (feet)	Groundwater Elevation* (feet)
MW-3	04/30/2001	496.65		16.85	493.28
(continued)	06/15/2001		17.12	17.15	479.52
,	06/22/2001	•	17.14	17.16	479.51
	10/09/2001		17.75	18.13	478.82
	10/16/2001		17.75	18.15	478.82
	11/15/2001		17.98	18.45	478.58
	11/30/2001		18.03	18.46	478.53
	12/12/2001		18.07	18.54	478.49
	12/27/2001		18.18	18.81	478.34
	01/10/2002		18.17	18.57	478.40
	01/22/2002		18.17	18.61	478.39
	02/07/2002		18.18	18.56	478.39
	02/21/2002		18.15	18.51	478.43
	05/23/2002		18.07	18.71	478.45
	02/26/2003		17.61	18.16	478.93
	04/16/2003			16.35	480.30
MW-4	04/30/2001	499.26	18.70	20.07	480.29
	06/15/2001		19.05	21.17	479.79
	06/22/2001		19.10	21.10	479.76
	10/09/2001		19.87	21.61	479.04
	10/16/2001		19.85	21.68	479.04
	11/15/2001		20.13	21.89	478.78
	11/30/2001]	20.20	21.88	478.72
	12/12/2001		20.29	21.92	478.64
	12/27/2001		20.37	22.04	478.56
	01/10/2002		20.39	21.93	478.56
	01/22/2002	1	20.45	21.91	478.52

Historical Groundwater Elevation Data

The Pantry #486 6605 Raeford Road

Fayetteville, Cumberland, County, North Carolina

Facility ID Number: 0-023655 Incident Number: 23062 SEI Project Number: 501430

Well Location	Sample Date	Top of Casing Elevation (feet)	Depth to Product (feet)	Depth to Groundwater (feet)	Groundwater Elevation* (feet)
MW-4	02/07/2002	499.26	20.40	21.79	478.58
(continued)	02/21/2002		20.42	21.65	478.59
	05/23/2002		20.43	20,45	478.83
	02/26/2003		20.05	20.65	479.09
	04/16/2003	·	18.57	19.68	480.47
MW-5	04/30/2001	496.88		17.10	479.78
	05/23/2002			18.44	478.44
	02/26/2003			18.00	478.88
	04/16/2003			16.60	480.28
MW-6	05/23/2002	500.12		21.35	478.77
	02/26/2003			20.92	479.20
	04/16/2003			19.48	480.64
MW-7	02/26/2003	497.28		18.25	479.03
	04/16/2003			16.86	480.42
MW-8	02/26/2003	495.10		16.45	478.65
	04/16/2003		, and sales	15.17	479.93
MW-9	05/23/2002	499.74		21.05	478,69
•	02/26/2003		20.60	20.63	479.13
	04/16/2003		÷	19.15	480.59
MW-10	05/23/2002	503.46		24.93	478.53
	02/26/2003	<u> </u>		24.50	478.96
	04/16/2003			23.05	480.41
MW-11	05/23/2002	496.10	17.40	19.30	478.32
	02/26/2003		17.15	18.16	478. 7 5
	04/16/2003		15.74	16.99	480.11

Historical Groundwater Elevation Data

The Pantry #486 6605 Raeford Road

Fayetteville, Cumberland, County, North Carolina

Facility ID Number: 0-023655 Incident Number: 23062 SEI Project Number: 501430

Well Location	Sample Date	Top of Casing Elevation (feet)	Depth to Product (feet)	Depth to Groundwater (feet)	Groundwater Elevation* (feet)
MW-12	02/26/2003	498.60		19.36	479.24
	04/16/2003			17.86	480.74
MW-13	02/26/2003	506.49		27.48	479.01
	04/16/2003	· [26.00	480.49
RW -1	03/23/2001	497.67	17.17	20.46	479.84
	03/27/2001		17.20	20.68	479.77
	04/03/2001		17.17	20.16	479.90
	04/06/2001		16.74	19.55	480.37
	04/10/2001		17.15	19.99	479.95
	04/12/2001		17.20	19.86	479.94
	04/17/2001		17.16	19.82	479.98
	04/30/2001	Ī	17.18	19.63	480,00
	06/15/2001		17.51	19.85	479.69
	06/22/2001		17.55	19.88	479.65
	10/09/2001	·	18.32	20.22	478.97
	10/16/2001		18.30	20.25	478.98
	11/15/2001		18.57	20.48	478.72
	11/30/2001		18.64	20.44	478.67
	12/12/2001	Ĩ	18.75	20.50	478.57
	12/27/2001		18.82	20.58	478.50
	01/10/2002		18.83	20.52	478.50
	01/22/2002		18.90	20.45	478.46
	02/07/2002		18.84	20.40	478.52
	02/21/2002		18.86	20.33	478.52
	05/23/2002		18.86	20.21	478.54
	02/26/2003	Ī	18.61	19.10	478.96

Historical Groundwater Elevation Data

The Pantry #486 6605 Raeford Road

Fayetteville, Cumberland, County, North Carolina

Facility ID Number: 0-023655 Incident Number: 23062

SEI Project Number: 501430

Well Location	Sample Date	Top of Casing Elevation (feet)	Depth to Product (feet)	Depth to Groundwater (feet)	Groundwater Elevation* (feet)
RW-2	03/23/2001	498.14	17.54	21.10	479.89
	03/27/2001		17.64	21.04	479.82
	04/03/2001		17.59	20.63	479.94
	04/06/2001		17.59	20.50	479.97
	04/10/2001		17.58	20.44	479.99
	04/12/2001		17.62	20.33	479.98
	04/17/2001		17.60	20.28	480.00
	04/30/2001		17.63	20.05	480.03
	06/15/2001		17.97	20.27	479.71
	06/22/2001		18.00	20.27	479.69
	10/09/2001		18.76	20.66	479.00
	10/16/2001		18.76	20.69	478.99
	11/15/2001		19.03	20.89	478.74
	11/30/2001	Ţ	19.09	20.90	478.69
	12/12/2001		19.20	20.90	478.60
	12/27/2001		19.28	21.00	478.52
	01/10/2002		19.30	20.95	478.51
	01/22/2002		19.35	20.88	478.48
	02/07/2002		19.33	20.82	478.51
	02/21/2002		19.32	20.74	478.54
	05/23/2002		19.33	20.68	478.54
	02/26/2003		19.04	19.70	478.97
RW-3	03/23/2001	497.22	16.68	20.15	479.85
	03/27/2001		16.79	20.06	479.78
	04/03/2001		16.75	19.67	479.89
	04/06/2001		17.17	20.04	479.48
	04/10/2001		16.72	19.52	479.94

Historical Groundwater Elevation Data

The Pantry #486 6605 Raeford Road

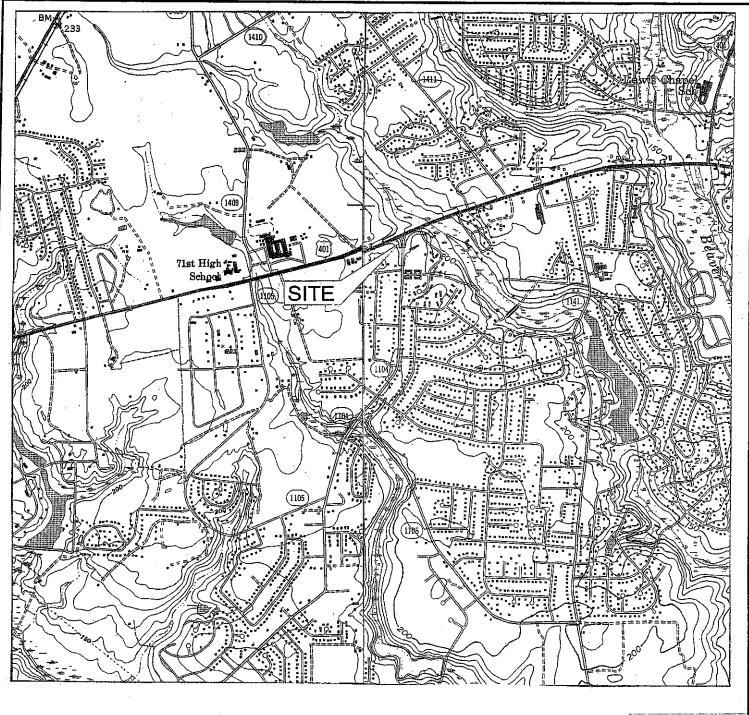
Fayetteville, Cumberland, County, North Carolina

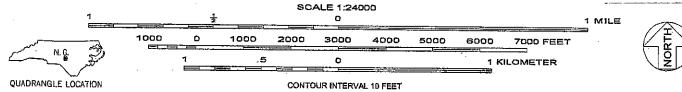
Facility ID Number: 0-023655 Incident Number: 23062 SEI Project Number: 501430

Well Location	Sample Date	Top of Casing Elevation (feet)	Depth to Product (feet)	Depth to Groundwater (feet)	Groundwater Elevation* (feet)
RW-3	04/12/2001	497.22	16.77	19.39	479.93
(continued)	04/17/2001		16.73	19.36	479.96
,	04/30/2001	[16.75	19.10	480.00
	06/15/2001		17.08	19.42	479.67
	06/22/2001		17.10	19.42	479.66
	10/09/2001		17.88	19.79	478.96
	10/16/2001		17.86	19.88	478.96
	11/15/2001		18.11	20.03	478.73
	11/30/2001		18.20	20.02	478.66
	12/12/2001		18.32	20.09	478.55
	12/27/2001	·	18.39	21.13	478.28
	01/10/2002	·	18.40	20.08	478.48
	01/22/2002		18.45	19.88	478.48
	02/07/2002		18.45	19.98	478.46
	02/21/2002		18.42	19.88	478.51
	05/23/2002		18.42	19.74	478.54
	02/26/2003		18.17	18.80	478.92

Top of casing elevations based on a survey by Chas. H. Sells, Inc.

^{*}Groundwater Elevation = [(Top of Casing Elevation) - (DTW)] + (0.8*Product Thickness) ---- where applicable





CLIFDALE, N.ºC. SE/4 CLIFDALE 15' QUADRANGLE N3500-W7900/7.5

> 1948 PHOTOREVISED 1982 DMA 5154 II SE-SERIES V842

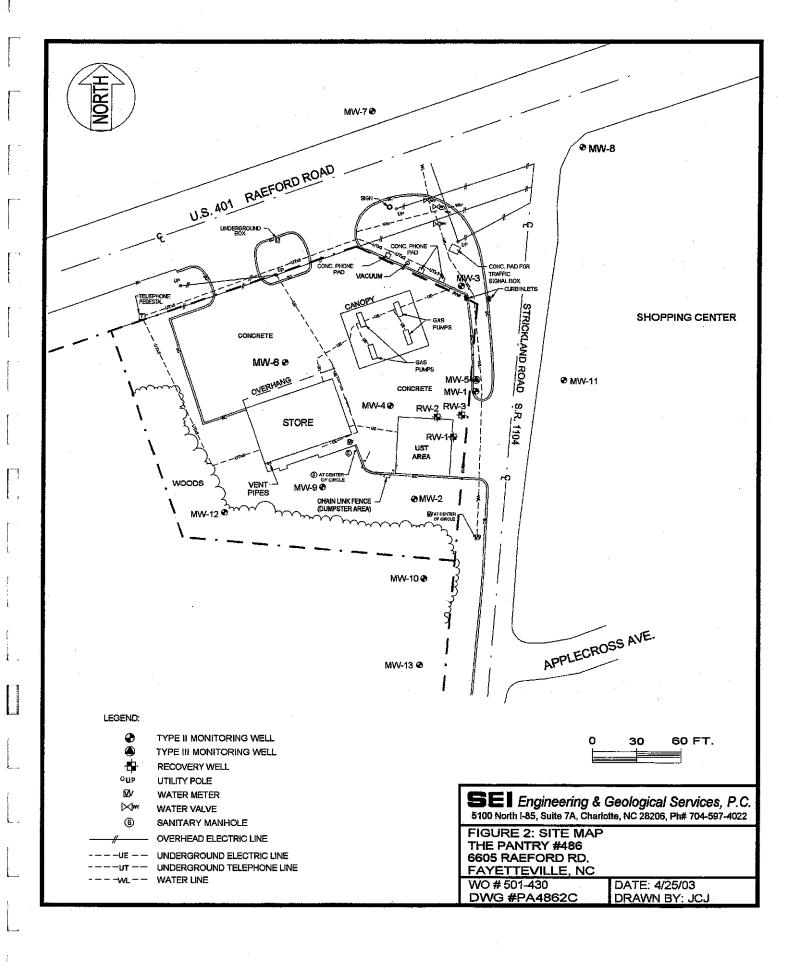
FAYETTEVILLE, N. C.

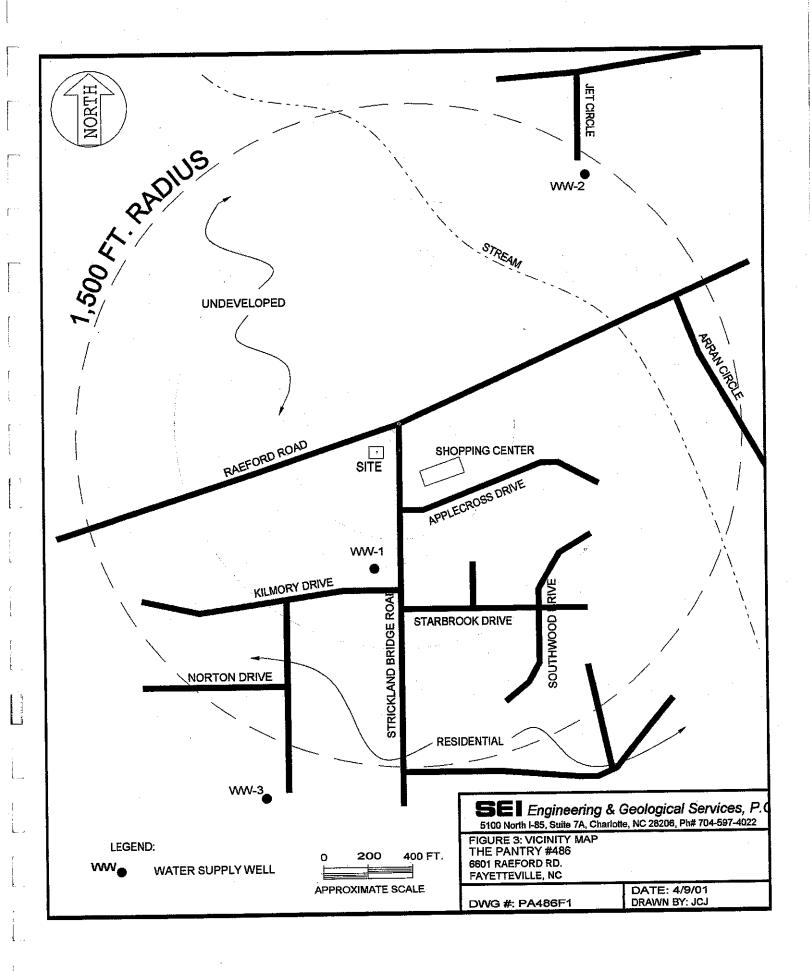
SW/4 FAYETTEVILLE 15' QUADRANGLE 35078-A8-TF-024

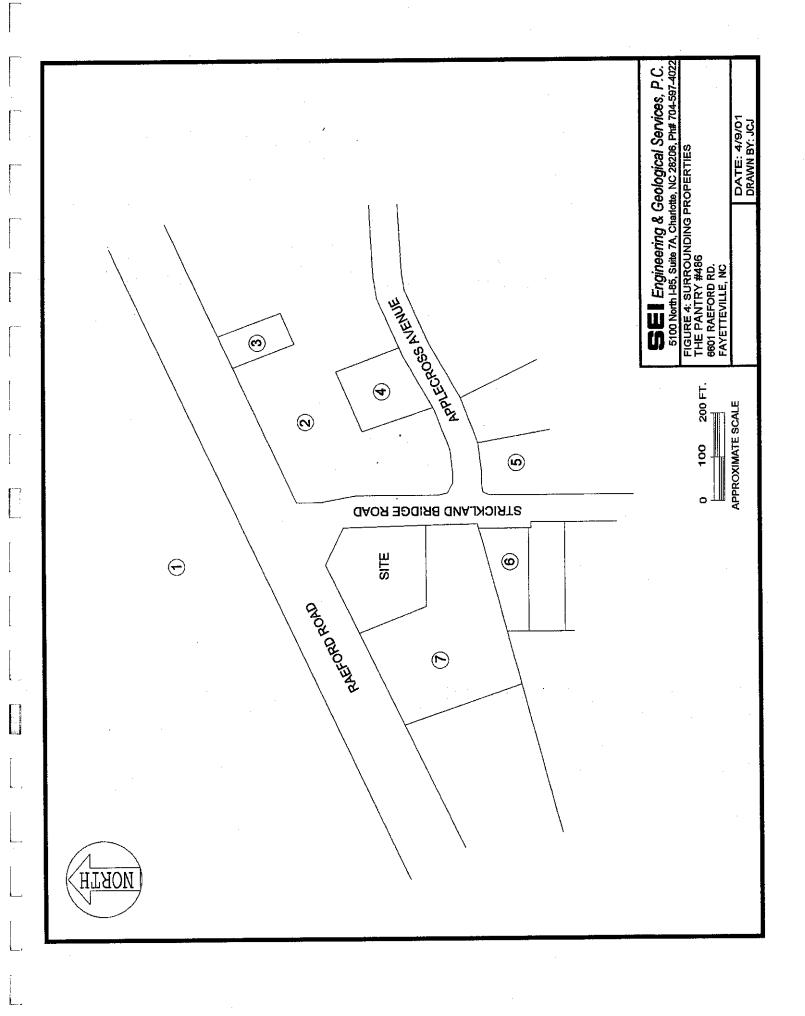
1957 PHOTOREVISED 1987 DMA 5254 III SW-SERIES V842

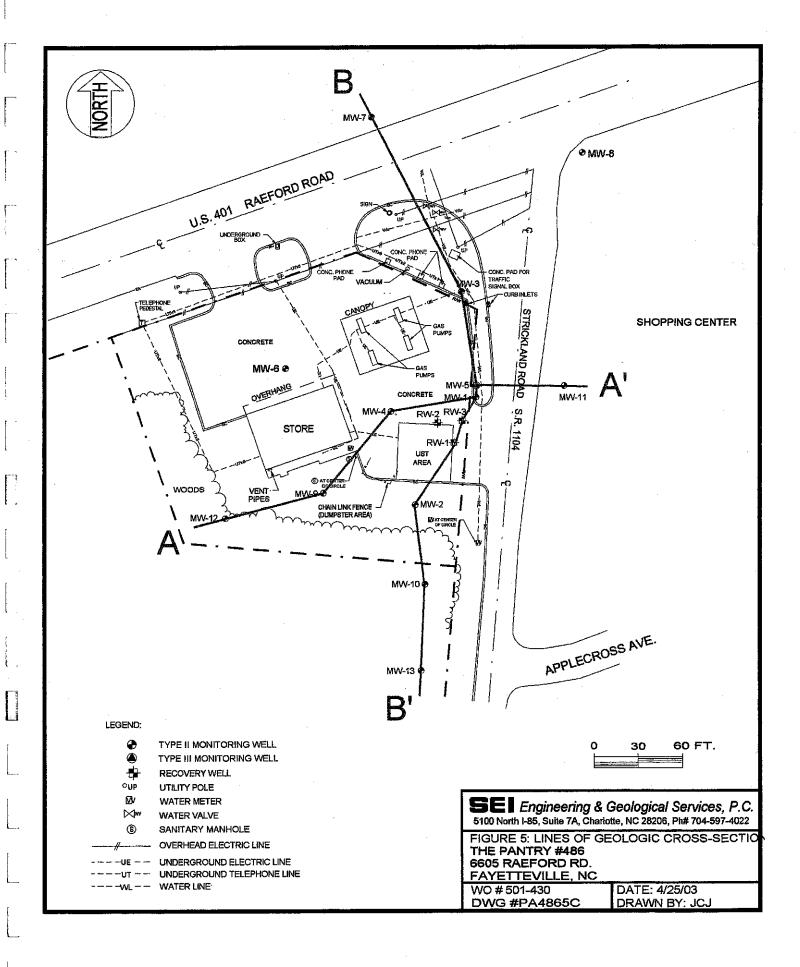
SEI Engineering & Geological Services, P.C. 5100 North I-85, Suite 7A, Charlotte, NC 28206, Ph# 704-597-4022

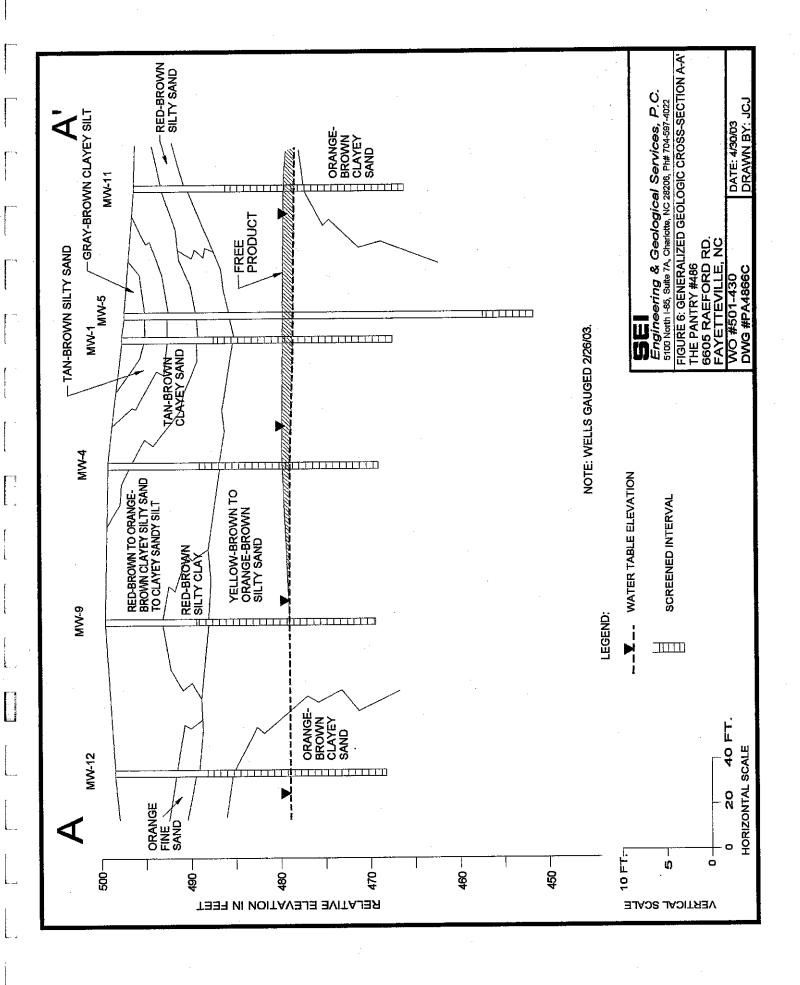
FIGURE 1: USGS QUADRANGLE MAP THE PANTRY #486 6605 RAEFORD ROAD FAYETTEVILLE, NO

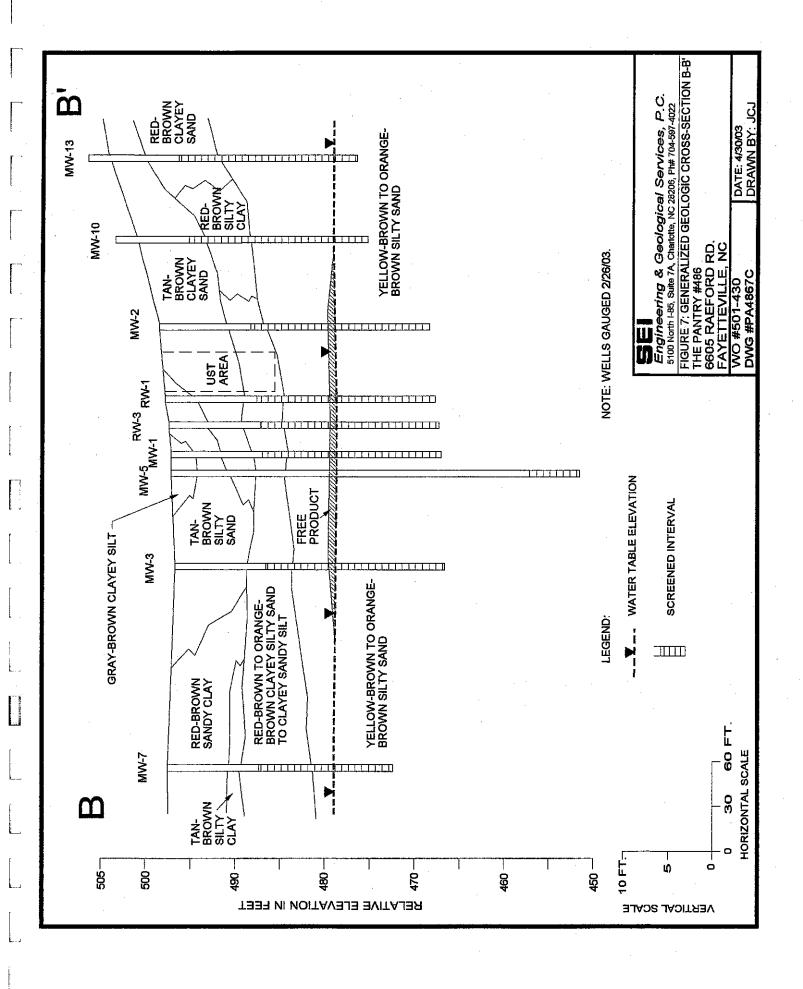


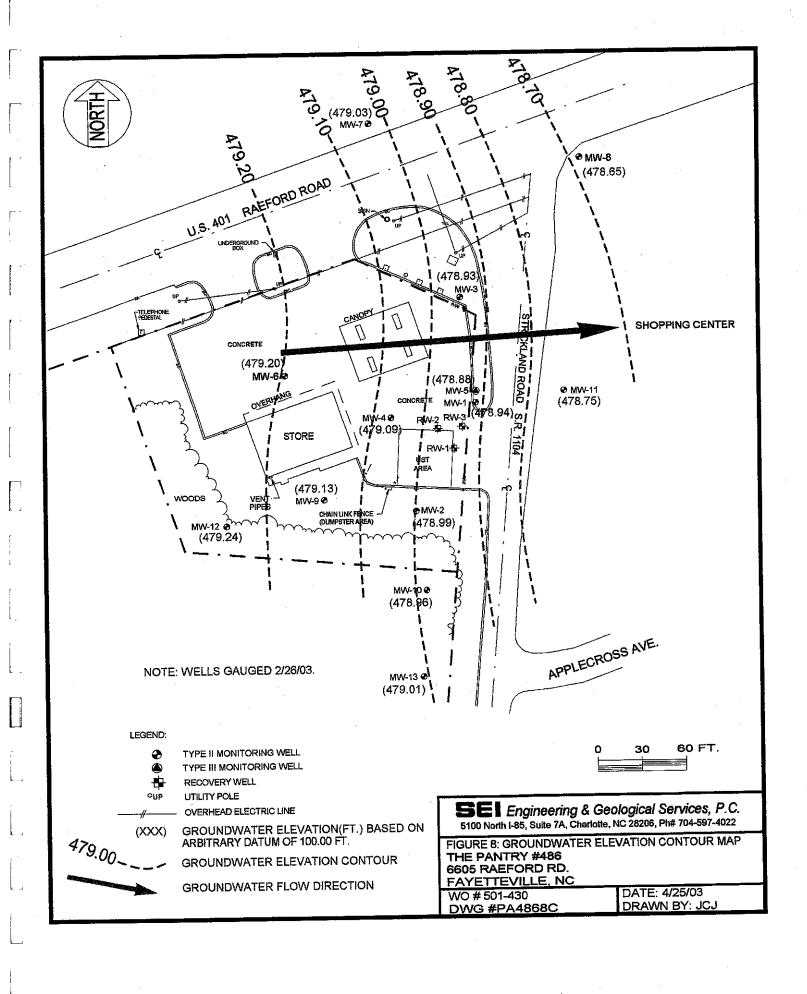


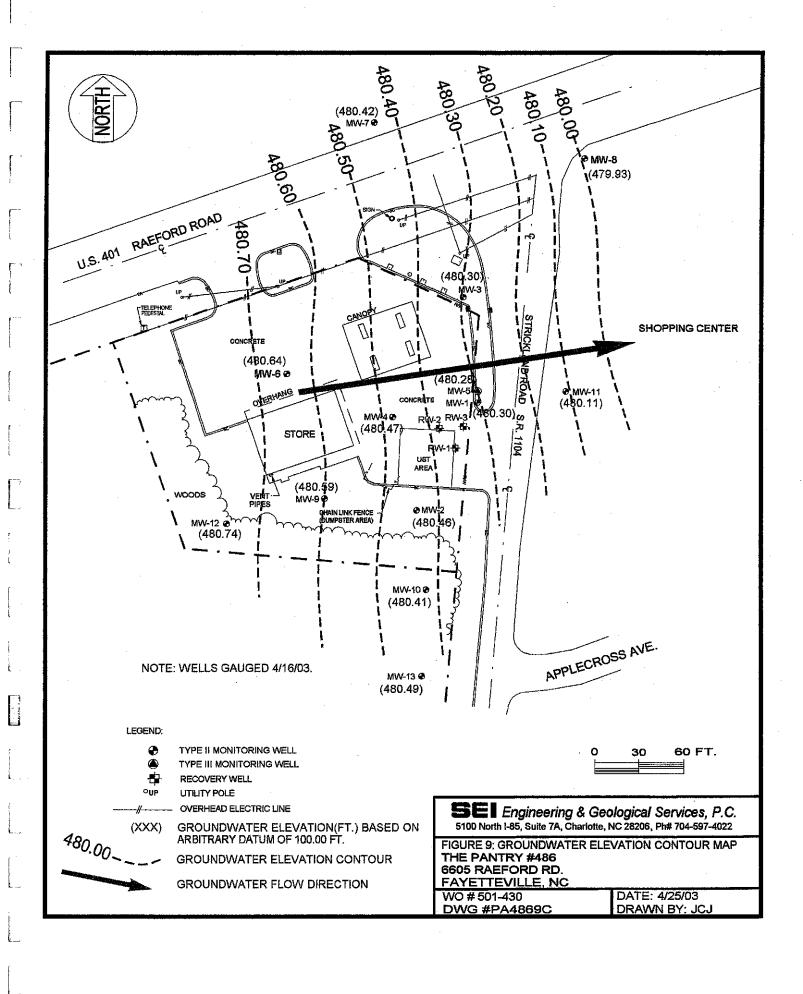


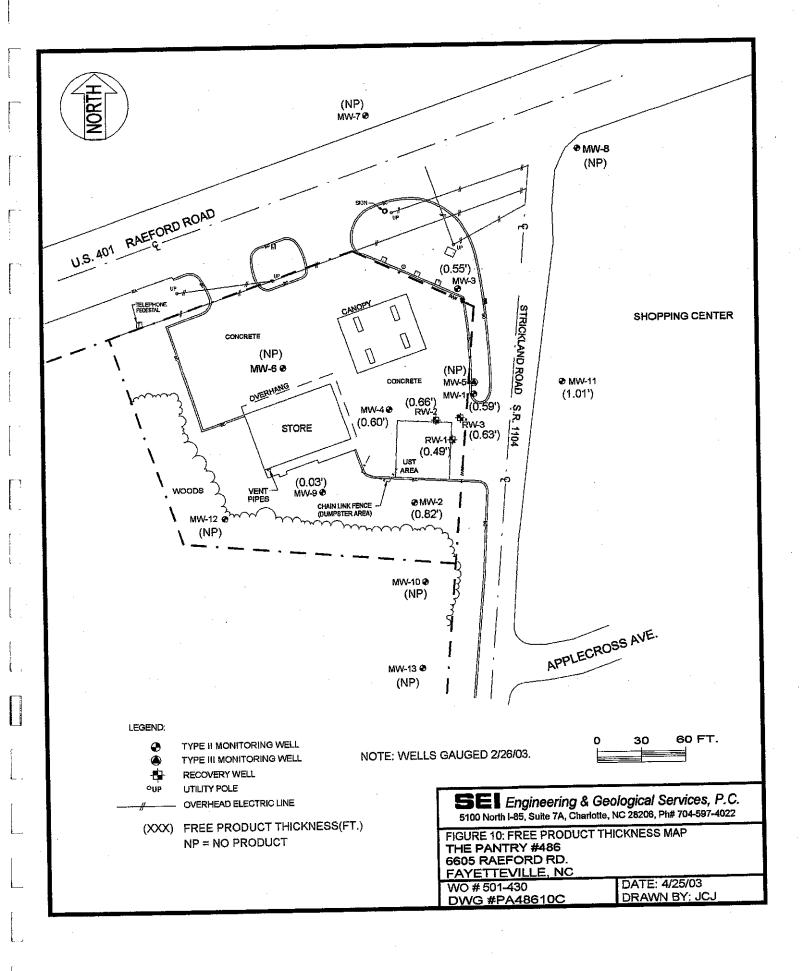


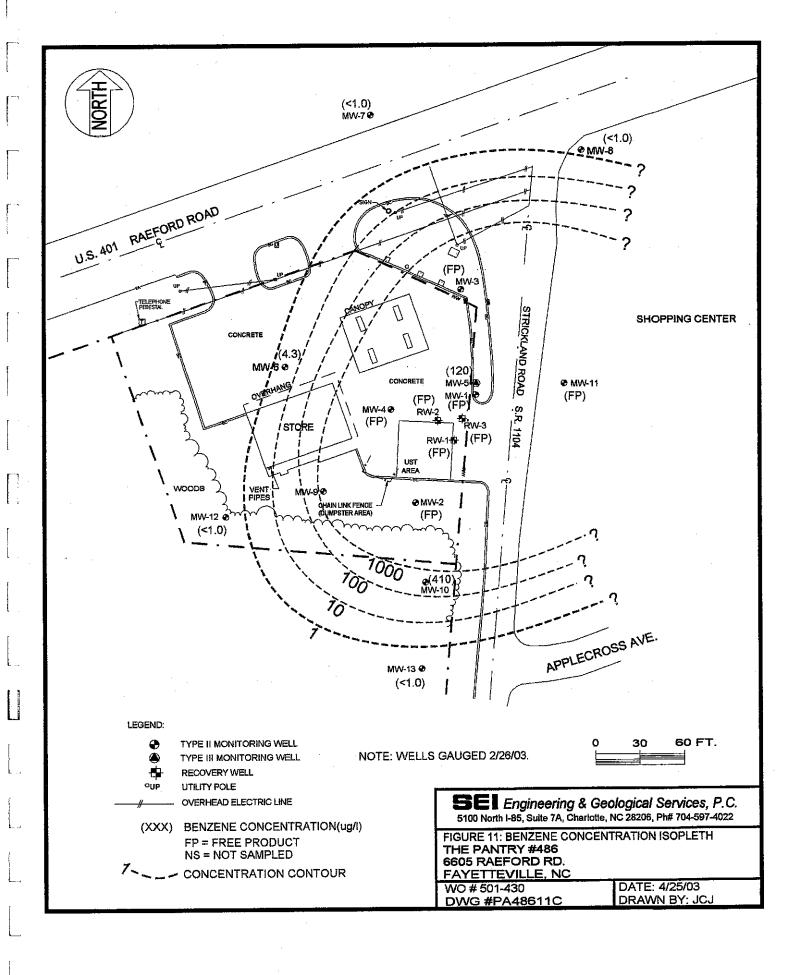


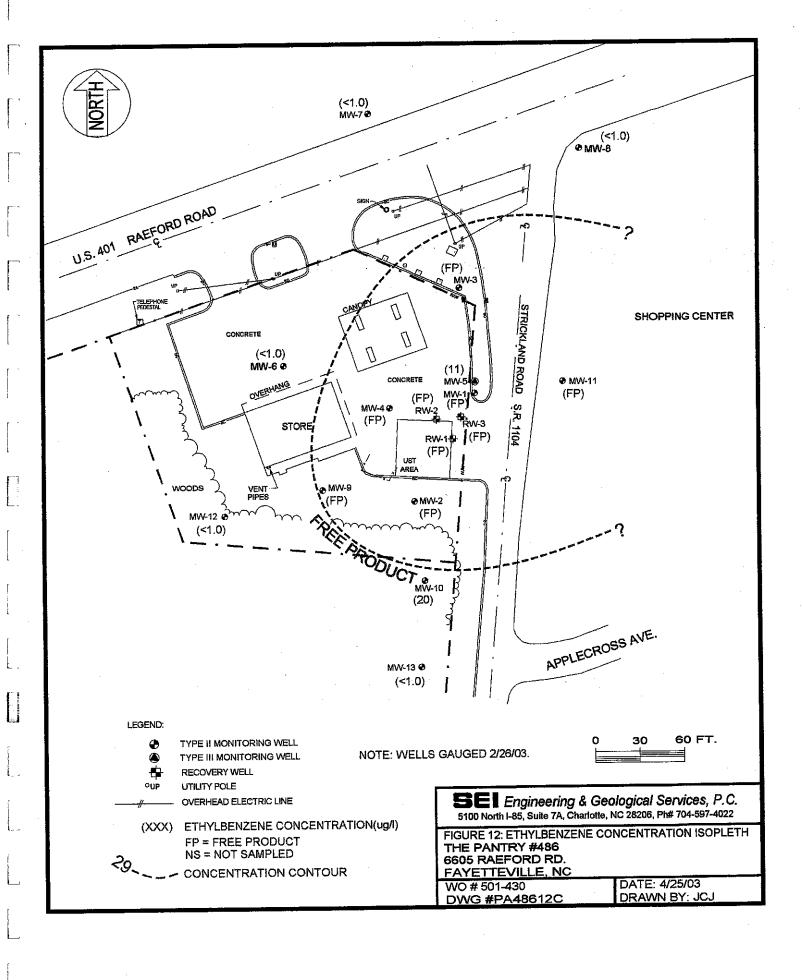


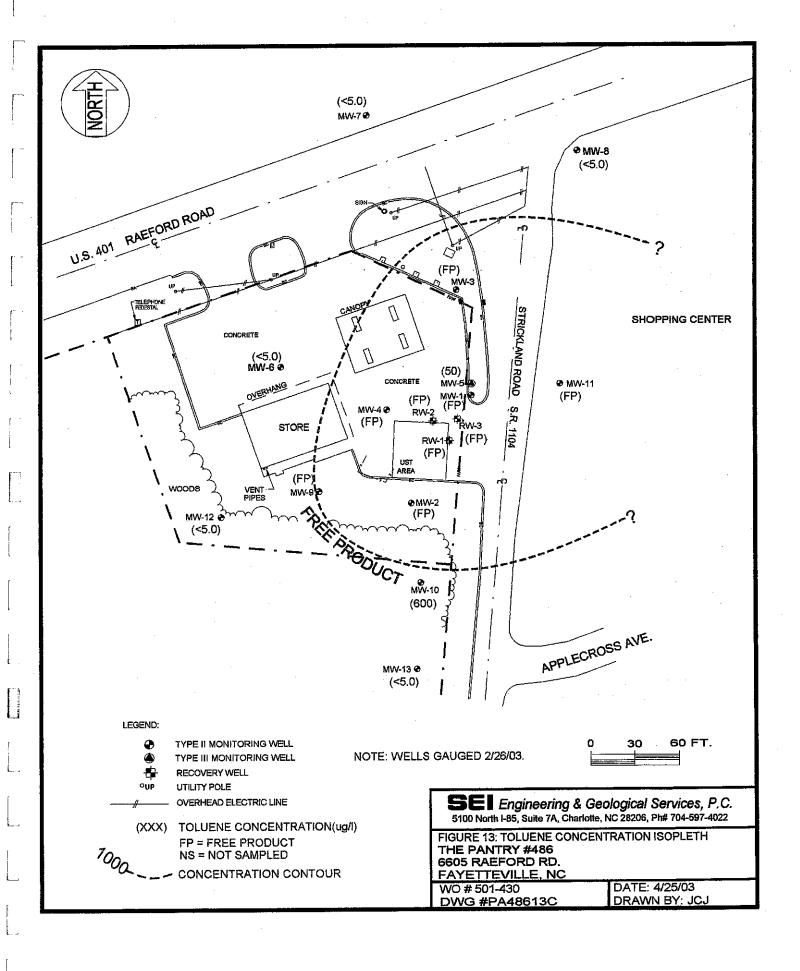


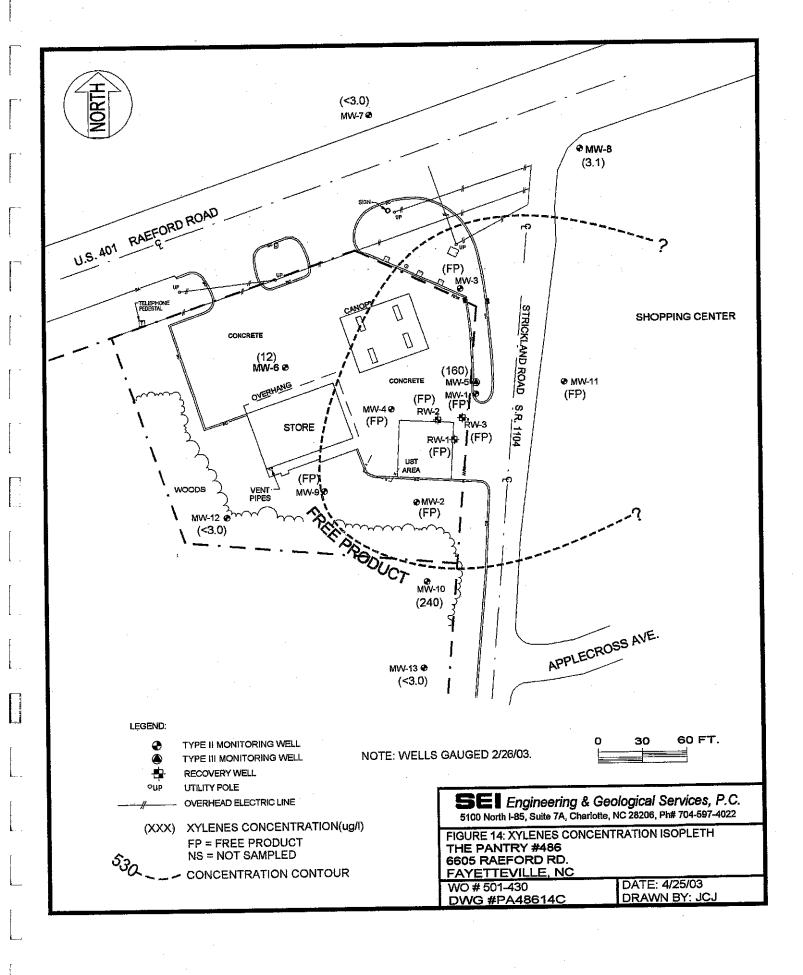


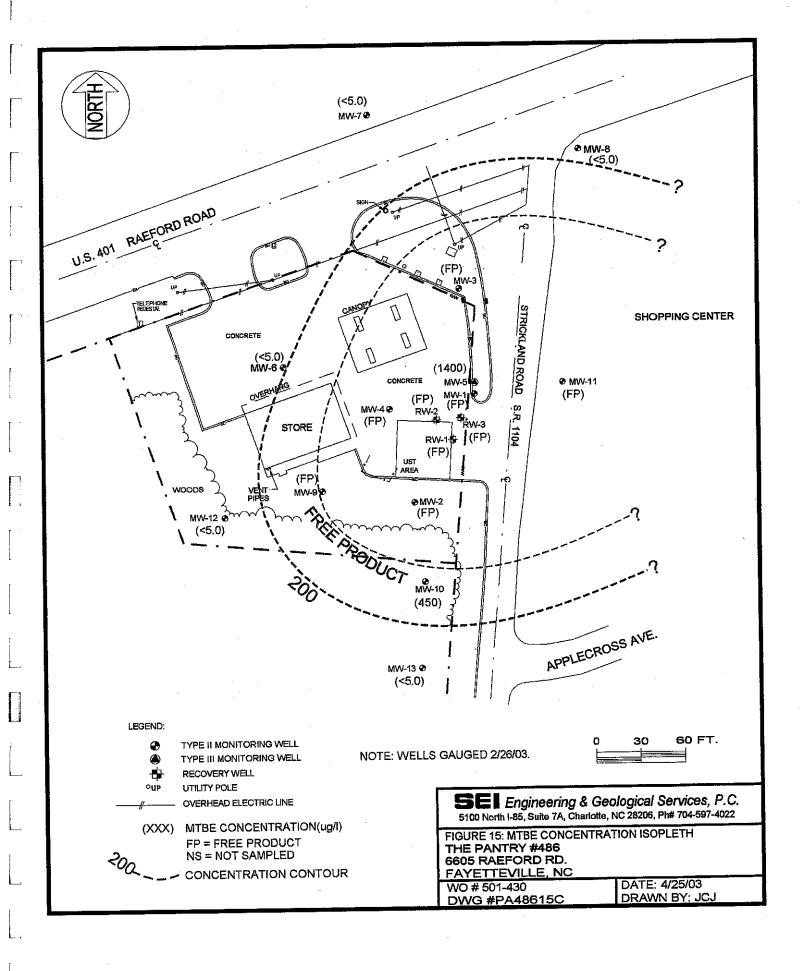


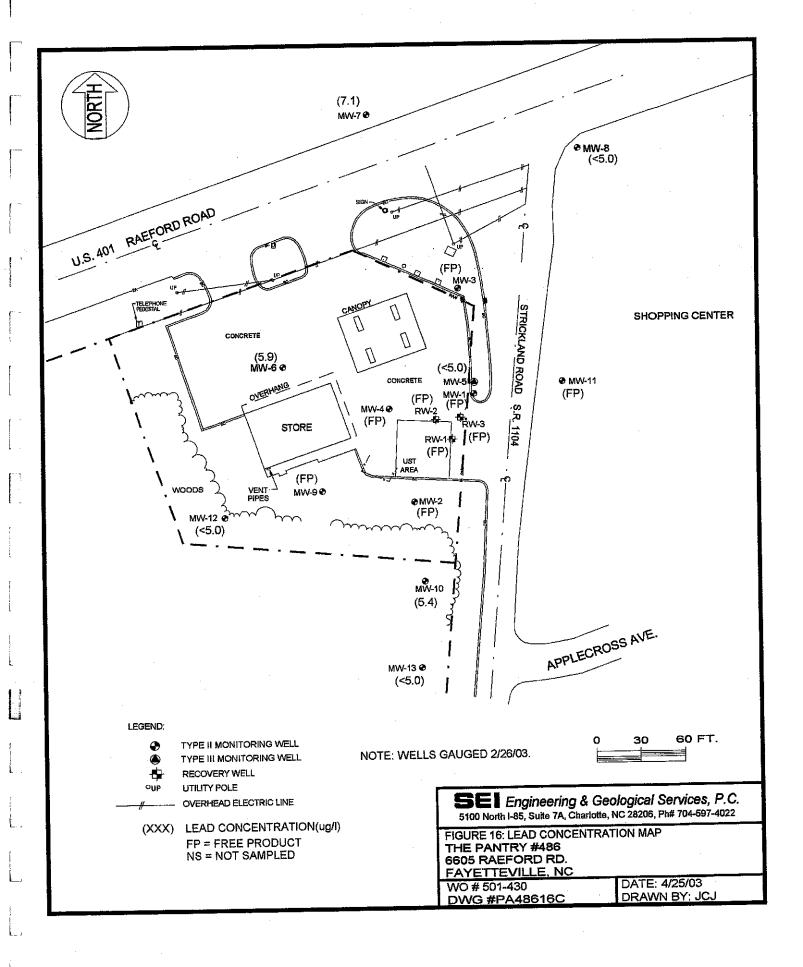


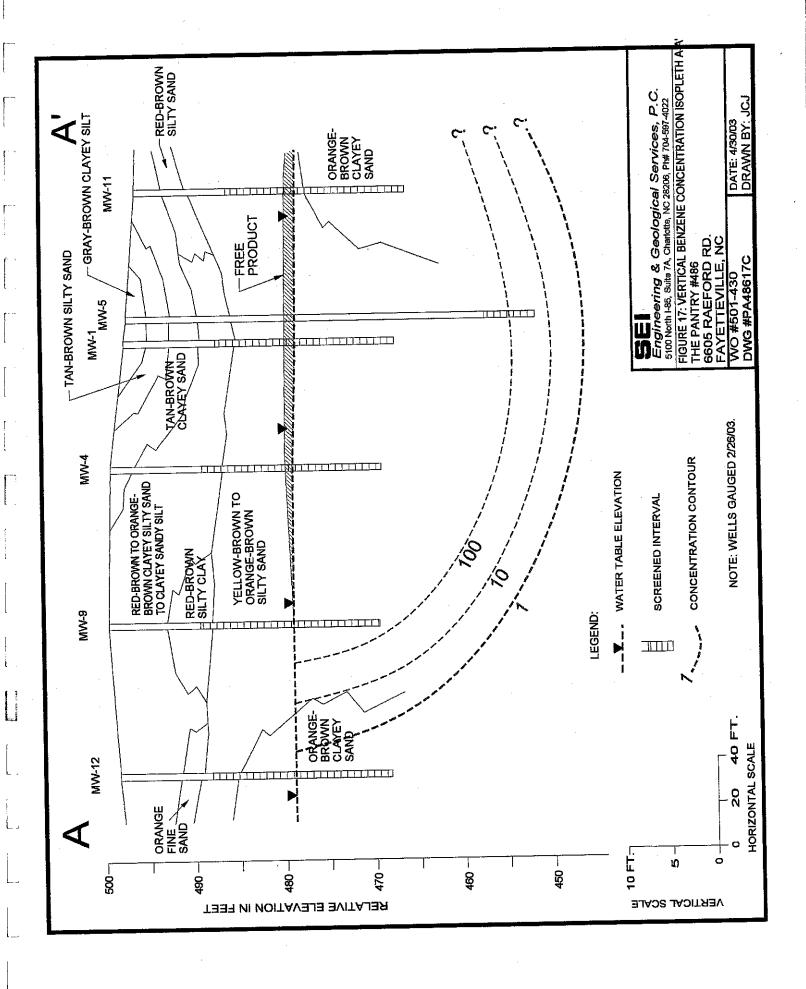


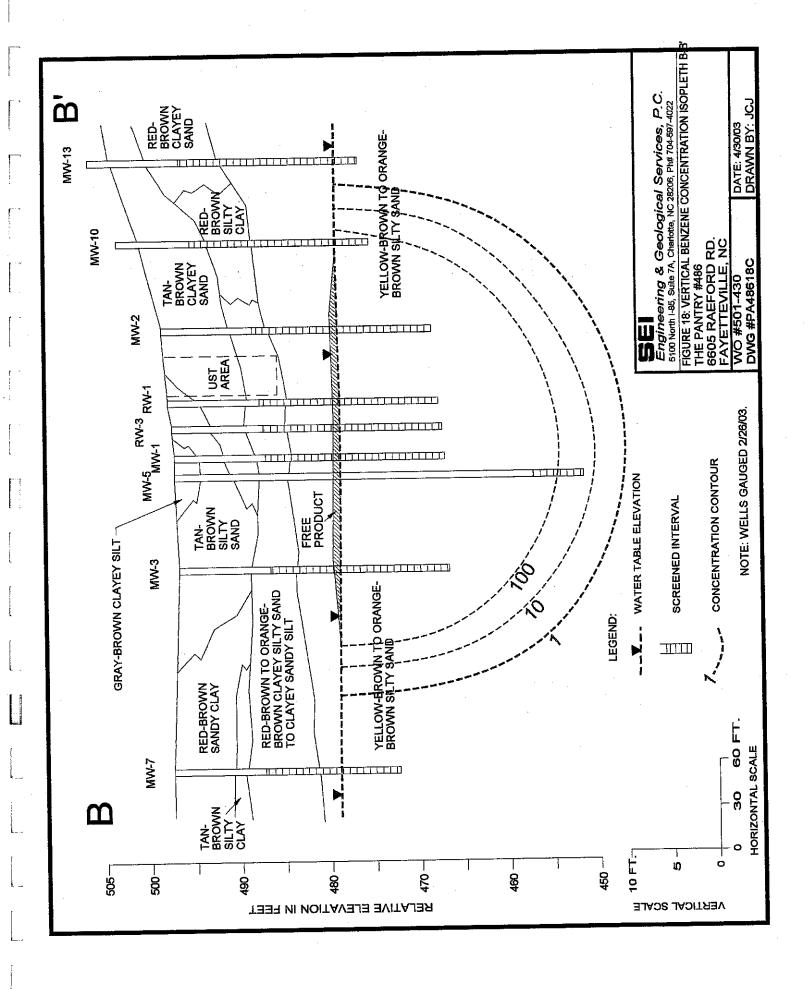




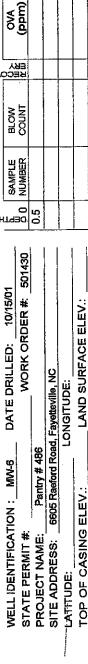


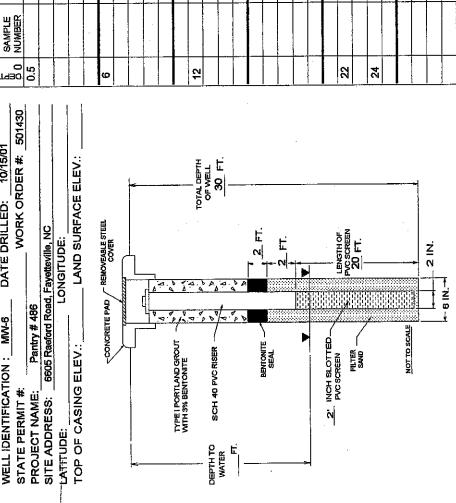






APPENDIX A





MM-6 DATE DRILLED: 10/15/01 WORK ORDER # 501430	HTGBQ	SAMPLE	BLOW	RECO/	OVA (ppm)	UNIFIED	DESCRIPTIVE LOG
intry # 486	0.5						Congrete
aeford Road, Fayetteville, NC							Red-brown to gray-brown silty sand
: LAND SURFACE ELEV.:				1			
	ď			1			
ONCRETE PAU COVER	P						Bed how eith clay
The state of the s							Ned-brown siny diay
A 4 9							A CALL THE REAL PROPERTY AND THE PROPERT
170							
(a.	12			-			7
	!						Tan-brown to yellow-brown silty fine sand to silt
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b A							
- 2 FT.							

- 2 - H.						ì	
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				_			
TENGTH OF MAC SOREEN	22						
28 F.	<u></u>						Gray-brown silty clay
	24						
							Tan-brown silty medium to coarse sand
O SCALE							
2 2 2 2 2 2 2 2 2 2							
		The state of the s					
To the second se	္က			1			
Siem Auger							Bottom of Boring
20/40 Silica Sand	<u> </u>						
				1			
				 			
The state of the s				1			
			_	_			

DRILLING METHOD: Hollow Stem Auger

GRAVEL PACK SIZE: SAMPLING METHOD:

SLOT SIZE: .010

COMMENTS:

Yellow-brown medium to coarse sand Red-brown clayey silt to fine sand DESCRIPTIVE LOG Tan-brown sli. silty clay Red-brown sandy clay Bottom of Boring UNIFIED ovA (ppm) RECOV-BLOW SAMPLE NTY O π 22 œ WORK ORDER #: 501430 10/15/01 LAND SURFACE ELEV.: TOTAL DEPTH OF WELL 25 FT. DATE DRILLED: CONCRETE PAD REMOVEABLE STEEL PROJECT NAME: Pantry # 486
SITE ADDRESS: 6605 Raeford Road, Fayetteville, NC 2 FT. PVC SCREEN **LONGITUDE:** Ė <u>Z</u> N GRAVEL PACK SIZE: 20/40 Silica Sand DRILLING METHOD: Hollow Stem Auger WELL IDENTIFICATION: MW-7 BENTONITE SEAL NOT TO SCALE 2' INCH SLOTTED. TOP OF CASING ELEV : SCH 40 PVCRISER SAND SAMPLING METHOD: SLOT SIZE: .010 STATE PERMIT #: COMMENTS: LATITUDE: DEPTH TO WATER

	DESCRIPTIVE LOG	Topsoft	Red-brown to brown sandy clay				Red-brown clayey silt to fine sand	
	UNIFIED				-			
	OVA (ppm)							
- /\(EBA BECC							L
	BLOW							
	SAMPLE							
Н	тч <u>э</u> а О	0.5				စ		_
	WELL IDENTIFICATION: MW-8 DATE DRILLED: 10/15/01 STATE PERMIT #: 501430		ESS: 6605 Raeford Rox	LATITUDE	TOP OF CASING ELEV.: LAND SURFACE ELEV.:	CONCRETE PAD REMOVERBLE STEEL CONCRETE PAD COVER		

9					12					17					 25								
CONCRETE PAD / REMOVE/ABLE STEEL	The state of the s	<u>a</u>	1	WITH 3% BENTONITE	,	P. a .	5. 6	A	BENTOMTE - 2 FT.			2' INCH SLOTTED STATE I PACSOREIN	NEU SONG SONG SONG SONG SONG SONG SONG SONG	3M0 13 FT.	The state of the s	NOT TO SCALE	N H	₹ .N. 9 -¥	CALCING METUOD. TORIOW SIGHT AUGER	GRAVEL PACK SIZE: 20/40 Silloa Sand	SLOT SIZE: .010	COMMENTS:	

DESCRIPTIVE LOG	Topsoff	Red-hours to hours condy alm	Control of Down Sailey Clay	- Andrews		Red-brown clavev silt to fine sand				Yellow-brown to light tan-white fine sand			- Anna Carlo	Yellow-brown sli. silty medium to coarse sand	Pino Composition of the composit			and the second s			Bottom of Boring								
UNIFIED				****																									
OVA (ppm)																			ü										
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BLOW																													
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	Н			ا	
IION: MW-9 DATE DRILLED: 10/15/0	 14∃	SAMPLE	BLOW	SV ECC	 ≸(
STATE PERMIT #: 501430		$\overline{}$	COUNT	19	mad)
PROJECT NAME: Pantry # 486					
SITE ADDRESS: 6605 Raeford Road, Fayetteville, NC	<u> </u>				
LATITUDE:					
TOP OF CASING ELEV.: LAND SURFACE ELEV.:					
	TC.				
CONCRETE PAD / REMOVEABLE STEEL	<u> </u>			_	
	_				
	<u> </u>				
	<u> </u>				
V					
TYPE! PORTLAND GROUT	<u> </u>				
- A - A	7				
SCH 40 PVCRISER					
WATER WATER	:				
2 FT.	<u> </u>				
Telson Telson					
F2					
2' INCH SLOTTED					
NEW COLUMN					
Swe 20 F.		-			

DESCRIPTIVE LOG	Red-brown to orange-brown sli. clayey silty sand			Medium gray sli. sandy silty clay		Red-brown silty clay to clayey silt				Tan-brown silty medium sand									and the second s		Called Control of the		Bottom of Boring					
UNIFIED												-																
OVA (ppm)																												
RECO/	-	 										 																
BLOW																										١ .		
SAMPLE																												
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715/01			 ı				ļ —			<u> </u>			I	<u></u>	4			•		· •								

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NOT TO SCALE

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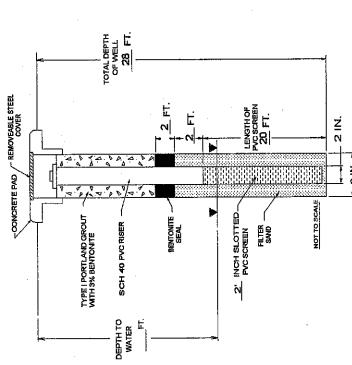
GRAVEL PACK SIZE: 20/40 Silica Sand

SLOT SIZE: .010 COMMENTS:

DRILLING METHOD: Hollow Stem Auger

SAMPLING METHOD:

-۸ WORK ORDER #: 501430 10/15/01 LAND SURFACE ELEV.: DATE DRILLED: PROJECT NAME: Partry # 486
SITE ADDRESS: 6605 Raeford Road, Fayetteville, NC LONGITUDE: WELL IDENTIFICATION: MW-10 Pantry # 486 TOP OF CASING ELEV .: STATE PERMIT #: LATITUDE:



<u>+- N 9 +</u>	DRILLING METHOD: Hollow Stem Auger	SAMPLING METHOD:	GRAVEL PACK SIZE: 20/40 Silica Sand	SLOT SIZE: .010	COMMENTS:		

DESCRIPTIVE LOG	Tap-how of brea enit vevelo mond be of month of	Cav					Red-brown silty clay				Yellow-brown silty fine sand		The state of the s			Company of the second s			elin de la companya de seguin de manage de la companya de la companya de la companya de la companya de la comp	Bottom of Boring			The state of the s		The shall describe the service of th	
UNIFIED											21												-			
OVA (mag)																									***************************************	
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BLOW																										
SAMPLE		-							-																	
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	_	۷					
	SAMPLE	NO NUMBER					
Н	114	0		7		4	
	WELL IDENTIFICATION: MW-11 DATE DRILLED: 02/26/02	STATE PERMIT #: 501430	PROJECT NAME: Pantry # 486	SITE ADDRESS: 6605 Raeford Road, Fayetteville, NC	-LATITUDE;	TOP OF CASING ELEV .: LAND SURFACE ELEV .:	CONCRETE PAD / REMOVEABLE STEEL

UNIFIED DESCRIPTIVE LOG	Orangish-brown fine, clayey sand		Reddish-orange fine silty sand	- And Andrews -	Orangish-yellow fine sand									Orange fine clayey sand							Bottom of Boring	THE STATE OF THE S					
	1														 									 		_	
OVA (mag)																											L
EEV SECON																										_	_
BLOW																											
SAMPLE			A STATE OF THE STA																								
HIMBO		2		4									48							30							
702	2					-	•	-																			

			9	<u> </u>				8			
CONCRETE PAD REMOVERALE STEEL COVER	TYPE I PORTLAND GROUT WITH 3% BENTONITE	,	BENTONITE SEAL		PVC SCREEN FILTER FILTER SAND 2. INCH SLOTTED LENGTH OF PVC SCREEN 2. FT.	NOT TO SCALE	2 IN.	DRILLING METHOD: Hollow Stem Auger	SAMPLING METHOU: GRAVEL PACK SIZE: 20/40 Silica Sand	1 1	

E SAMPLE BLOW ON DEED OUNT DEED		2						8		9.5			13						
WELL IDENTIFICATION: MW-12 DATE DRILLED: 03/01/02 STATE PERMIT #: 501430	PROJECT NAME: Pantry # 486	SITE ADDRESS: 6605 Raeford Road, Fayetteville, NC	LONGITUDE:	TOP OF CASING ELEV .: LAND SURFACE ELEV .:	•	CONCRETE PAD / REMOVERBLE STEEL CONCRETE PAD / COVER	hammanah		T A	4. 9	WITH 3% BENTONITE	TOTAL DEPTH	SCH 40 PVC RISER	WATER	-	4.5FT.	TVES	2 H.	

BED DESCRIPTIVE LOG	МЕТНОВ	Dark brown organic topsoil		Orangish-brown medium fine clayey sand	and the state of t			Orangish fine graded sand, 2" coarse layer, then	fine faver	Yellowish-brown fine silty sand	The same of the sa		Orangish-brown clayey sand						Orangish-brown medium clayey sand			and the second s		Bottom of Boring					The state of the s		
	(bbm) MET					-																_					 ,	 -		·	
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HTG	MOMBER		7				α	,	ur)			13						23		-			30		 •••			 ·			
2	501430																									}		ŗ.			

LENGTH OF PVC SCREEN 20 FT.

2' INCH SLOTTED.

SAND

Z Z

NOT TO SCALE

GRAVEL PACK SIZE: 20/40 Silica Sand

SLOT SIZE: .010 COMMENTS:

DRILLING METHOD: Hollow Stem Auger

SAMPLING METHOD: _

	-	_	-	-
HT430 O			က	
WELL IDENTIFICATION: MW-13 DATE DRILLED: 02/26/02 STATE PERMIT #: 501430	PROJECT NAME: Pantry # 486	SITE ADDRESS: 6605 Raeford Road, Fayetteville, NC	LATITUDE: LONGITUDE:	TOP OF CASING ELEV .: LAND SURFACE ELEV .:

	тота, рертн ор well. 30 гт.	-	· · ·	
CONCRETE PAD REMOVEABLE STEEL CONCRETE PAD COVER COVER TYPE I PORTLAND GROUT WITH 3% BENTONITE	DEPTH TO SCH 40 PVC RISER WATER FT.	00000000000000000000000000000000000000	2' INCH SLOTTED LENGTH OF PUCSCREEN SWIND SAND	NOTTO SCALE

							21						 30								
ه ۲۶	TOTAL DEPTH OF WELL 30 ET				2 FT.		LENGTH OF	20 FT.				N. O. I. V.	 Maliger		7 - 0 - 10	ZU/40 Silica Sariu					
TYPE I PORTLAND GROUT WITH 3% BENTONITE	DEPTH TO SCH 40 PVCRISER	4.10	\neg	Jes			2' INCH SLOTTED PVC SCREEN	SAND	1111	999	NOT TO SCALE	<u> </u>	DRILLING METHOD: Hollow Stem Auger	SAMPLING METHOD:		SIOT SIZE: 010	1		A CONTRACTOR OF THE CONTRACTOR		

DESCRIPTIVE LOG		Dark brown clayey medium sand		The second state of the se	Reddish-brown medium fine clayey sand		The division of the state of th		Orange fine silty sand to yellow very fine	sandy silt		Orangish-brown clayey sand					Orangish-brown fine clayey sand	A and an analysis of the second secon					Bottom of Boring	The state of the s					
UNIFIED																				-									
OVA	(HIDD)													•															
LSA ECON	9 3	-	+	_							1				 	 					+	1			····	-			~-
BLOW																													
SAMPLE	NO MORE																												
нтчэ				,7				10								21						ន្ត							_

NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT DIVISION OF ENVIRONMENTAL MANAGEMENT - GROUNDWATER SECTION P.O. BOX 27587 - RALEIGH, N.C. 27611, PHONE (919) 733-3221

WELL CONSTRUCTION RECORD

Quad. No	Serial No	·
Lat.	Long.	Pc
Minor Basin		
Basin Code		
Header Ent.	GW-	1 Eut.

From To Construct	PRILLING CONTRACTOR Geologic Exploration - Mark Gettys	STATE WELL CONSTRUCTION	
Nearest Town:	RILLER REGISTRATION NUMBER 2345 MW-6	PERMIT NUMBER:	N/A
Seption From To Formatic Road, Community, or Subdivision and Lot No.) 0 0.5 Concrete	. WELL LOCATION: (Show sketch of the location below)	County:Cumberland	
Concrete	· · · · · · · · · · · · · · · · · · ·	 -	DRILLING LOG
2. OWNER		_	Formation Description
ADDRESS PO Box 1410 Stansford City or Town City or Town State Zip Code DATE DRILLED 10/15/01 USE OF WELL Monitoring TOTAL DEPTH 30 CUTTINGS COLLECTED Yes XI No DOES WELL REPLACE EXISTING WELL? Yes XI No STATIC WATER LEVEL FI. Above TOP OF CASING. STATIC WATER LEVEL FI. Above TOP OF CASING. YIELD (ggm): N/A WATER ZONES (depth): WATER ZONES (depth): N/A CHAORINATION: Type N/A Amount N/A O. CASING: Depth Diameter or Weight/PL FROM TO FI GROUT: Depth Material FROM TO FI GROUT: Depth Dismeter or Weight/PL FROM TO FI GROUT: Depth Material FROM TO FROM TO FI GROUT: Depth Material FROM TO FI GROUT: GROUT		0.5	Contrete
Sanford (Street or Route No.) Sanford NC 27330 6 12 Red-brown is slity sand Red-brown is State Zip Code DATE DRILLED 10/15/01 USE OF WELL Monitoring 12 22 Tan-brown to slity fine sand TOTAL DEPTH 30 CUTTINGS COLLECTED Yes No. 22 24 Gray-brown is State St	· ·	0.5	Red-brown to gray-brown
Sanford NC 27330 6 12 Red-brown signed City or Town State Zip Code	ADDRESS PO Box 1410 (Street or Route No.)		
City of Town State Zip Code DATE DRILLED 10/15/01 USE OF WELL Monitoring TOTAL DEPTH 30' CUTTINGS COLLECTED Yes No 22 24 Gray-brown is silty fine same professor of the provided of the pr	Sanford NC 27330	6 12	Red-brown silty clay
TOTAL DEPTH 30' CUTTINGS COLLECTED Yes No 22 24 Gray-brown s DOES WELL REPLACE EXISTING WELL? Yes No 24 30 Tan-brown si STATIC WATER LEVEL FT. Above TOP OF CASING. SHE Delow TOP OF CASING IS 0 FT. ABOVE LAND SURFACE. YIELD (gem): N/A METHOD OF TEST N/A SHE DELOW SURFACE. WATER ZONES (depth): N/A Amount N/A CASING: Depth Diameter or Weight/FL. Material FROM 0 TO FT 2" Sch 40 PVC FROM TO FT SCREEN: Depth Material Method Sthurry FROM TO FT SCREEN: Depth Size Material FROM TO FT 2 in 0.10 in PVC FROM TO FT in in in GRAVEL PACK: Depth Size Material FROM TO FT 20/40 Silica Sand FROM TO FT 10 Size Material FROM TO TO FT 10 Size Material FROM TO TO FT 10 Size Material FROM TO TO	City or Town State Zip Code		,
DOES WELL REPLACE EXISTING WELL?	DATE DRILLED 10/15/01 USE OF WELL Monitoring	12 22	Tan-brown to yellow-brow
DOES WELL REPLACE EXISTING WELL? Yes \(\times \) No STATIC WATER LEVEL FT. Above TOP OF CASING. EX Below TO OF CASING IS O FT. ABOVE LAND SURFACE. YIELD (ggm): N/A METHOD OF TEST N/A WATER ZONES (depth): N/A CASING: Wall Thickness Depth Diameter or Weight/Ft. Maderial FROM TO FT Wall Thickness FROM TO FT Maderial FROM TO FT Surface or Weight/Ft. Maderial F	TOTAL DEPTH 20° CHIPPINGS COLLECTED V. V. VINI.		silty fine sand to fine silt
STATIC WATER LEVEL FT. Above TOP OF CASING. Selection is general properties. TOP OF CASING IS 0 FT. ABOVE LAND SURFACE. TOP OF CASING IS 0 FT. ABOVE LAND SURFACE. WATER ZONES (depth): N/A METHOD OF TEST N/A LOCATION SKETCH (Show direction and distance from at least two State I map reference points). CHIORINATION: Type N/A Amount N/A CASING: Depth Diameter or Weight/Pt. Material FROM TO FT 2" Sch 40 PVC GROUT: Depth Material Method Shurry FROM TO FT Size Material Schery FROM TO TO STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.		22 24	Gray-brown silty clay
STATIC WATER LEVEL FT. Above TOP OF CASING. Below Coarse sand TOP OF CASING IS 0 FT. ABOVE LAND SURFACE. If additional spaces is needed use back of for ST. ABOVE LAND SURFACE. If additional spaces is needed use back of for LOCATION SKETCH (Show direction and distance from at least two State I map reference points). CHLORINATION: Type N/A Amount N/A CASING: Wall Thickness Depth Diameter or Weight/Ft. Material FROM 0 TO 10 FT 2" Sch 40 PVC FROM TO FT Sch 40 PVC GROUT: Depth Material Method Shurry FROM TO FT in 0.10 in PVC FROM TO FT in in in GRAVEL PACK: Depth Size Material FROM 5 TO 30 FT 2.0/40 Silica Sand FROM TO FT REMARKS: Bentonite seal from 6' to 8' REMARKS: Bentonite seal from 6' to 8' TO HET THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTED STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.	DOES WELL REPLACE EXISTING WELL? Yes X No		
TOP OF CASING IS 0 FT ABOVE LAND SURFACE. YIELD (gpm): N/A METHOD OF TEST N/A If additional spaces is needed use back of for CASING: WATER ZONES (depth): N/A Amount N/A CASING: Depth Diameter or Weight/Ft. Material FROM 0 TO 10 FT 2" Sch 40 PVC GROUT: Depth Material Method FROM TO FT SCREEN: Depth Diameter Slot Size Material FROM 10 TO 30 FT 2 in .010 in PVC FROM TO FT in in in GRAVEL PACK: Depth Size Material FROM 10 TO FT REMARKS: Bentonite seal from 6' to 8' 1 DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTOR STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.	STATIC WATER LEVEL FT. Above TOP OF CASING.	24 30	Tan-brown silty medium to
WATER ZONES (depth): N/A METHOD OF TEST N/A LOCATION SKETCH WATER ZONES (depth): N/A Amount N/A CHLORINATION: Type N/A Amount N/A CASING: Wall Thickness Depth Diameter or Weight/Ft. Material FROM 0 TO 10 FT 2" Sch 40 PVC FROM TO FT SCREEN: Depth Diameter Slot Size Material FROM 10 TO 30 FT 2 in 0.10 in PVC FROM TO FT in in in GRAVEL PACK: Depth Size Material FROM 8 TO 30 FT 2 in 0.10 in PVC FROM TO FT REMARKS: Bentonite seal from 6' to 8' IDO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTURE STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN, PROVIDED TO THE WELL OWNER.	Xi Below		coarse sand
WATER ZONES (depth): N/A	TOP OF CASING IS 0 FT. ABOVE LAND SURFACE.	Tf-dditional manas is as	adad waa baale -66
WATER ZONES (depth): N/A CHLORINATION: Type N/A Amount N/A CASING: Depth Diameter or Weight/Ft. Material FROM 0 TO 10 FT 2" Sch 40 PVC GROUT: Depth Material Method FROM TO FT SCREEN: Depth Diameter Slot Size Material FROM 10 TO 30 FT 2 in 0.10 in PVC FROM TO FT in in in GRAVEL PACK: Depth Size Material FROM 8 TO 30 FT 20/40 Silica Sand FROM TO FT REMARKS: Bentonite seal from 6' to 8' I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTED STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.	YIELD (gpm): N/A METHOD OF TEST N/A		
CASING: Depth Diameter or Weight/Ft. Material Method	WATER TONIES (double). N/A		
FROM TO FT Depth Material Method FROM 0 TO 6 FT Portland Shurry FROM TO FT SCREEN: Depth Dismeter Slot Size Material FROM 10 TO 30 FT 2 in .010 in PVC FROM TO FT in in GRAVEL PACK: Depth Size Material FROM 8 TO 30 FT 20/40 Silica Sand FROM TO FT I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTED TO THE WELL OWNER.	Wall Thickness Depth Diameter or Weight/Ft. Material		(inu
Depth Material Method FROM 0 TO 6 FT Portland Shurry FROM TO FT SCREEN: Depth Diameter Slot Size Material FROM 10 TO 30 FT 2 in .010 in PVC FROM TO FT in in in GRAVEL PACK: Depth Size Material FROM 8 TO 30 FT 20/40 Silica Sand FROM TO FT REMARKS: Bentonite seal from 6' to 8' I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTED STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.			SHOTHOLOGER
FROM TO FT SCREEN: Depth Diameter Slot Size Material FROM 10 TO 30 FT 2 in .010 in PVC FROM TO FT in in in GRAVEL PACK: Depth Size Material FROM 8 TO 30 FT 20/40 Silica Sand FROM TO FT REMARKS: Bentonite seal from 6' to 8' I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTION OF THE WELL OWNER.			
SCREEN: Depth Diameter Slot Size Material FROM 10 TO 30 FT 2 in .010 in PVC FROM TO FT in in in GRAVEL PACK: Depth Size Material FROM 8 TO 30 FT 20/40 Silies Sand FROM TO FT REMARKS: Bentonite seal from 6' to 8' I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTED STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.	· · · · · · · · · · · · · · · · · · ·		
SCREEN: Depth Diameter Slot Size Material FROM 10 TO 30 FT 2 in .010 in PVC FROM TO FT in in in GRAVEL PACK: Depth Size Material FROM 8 TO 30 FT 20/40 Silica Sand FROM TO FT REMARKS: Bentonite seal from 6' to 8' I DO HERBBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTED STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.		1 1 2	
Depth Diameter Slot Size Material FROM 10 TO 30 FT 2 in .010 in PVC FROM TO FT in in in GRAVEL PACK: Depth Size Material FROM 8 TO 30 FT 20/40 Silica Sand FROM TO FT I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTOR STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.			
FROM 10 TO 30 FT 2 in .010 in PVC FROM TO FT in in Depth Size Material FROM 8 TO 30 FT 20/40 Silica Sand FROM TO FT I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTORS TO STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.		\	-311
GRAVEL PACK: Depth Size Material FROM 8 TO 30 FT 20/40 Silies Sand FROM TO FT REMARKS: Bentonite seal from 6' to 8' I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTORS OF THE WELL OWNER.	-	M2-18	* /
GRAVEL PACK: Depth Size Material FROM 8 TO 30 FT 20/40 Silica Sand FROM TO FT I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTION OF STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.		194-00-1	SPACONON NO.
Depth Size Material Silica Sand Silica San			111
FROM 8 TO 30 FT 20/40 Silica Sand FROM TO FT I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTORS STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.			90 00FT.
FROM TO FT REMARKS: Bentonite seal from 6' to 8' I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTED STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.	Depth Size Material		TABLE Engineering & Geotopical Services, P.C.
REMARKS: Bentonite seal from 6' to 8' I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTED STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.	FROM 8 TO 30 FT 20/40 Silica Sand	Institute's reference in Institute's reference in Institute in the institute i	1 THE PANTRY #405
I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER.	FROM TO FT		PAYETTEVELE, NC
	I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED	D IN ACCORDANCE WITH 15 NCAC 2C, W PROVIDED TO THE WELL OWNER.	VELL CONSTRUCTION
11/18		1 OK	10/15/01
	SIGNATUR	E OF CONTRACTOR OR AGENT	DATE

NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT DIVISION OF ENVIRONMENTAL MANAGEMENT - GROUNDWATER SECTION P.O. BOX 27587 - RALEIGH, N.C. 27611, PHONE (919) 733-3221

WELL CONSTRUCTION RECORD

pad. No	Serial No.	
at	Long	Pc_
inor Basin		
asin Code		
eader Ent.	GW-	1 Ent.

DRILLING CONTRACTOR Geologic Exploration - Mark Gettys DRILLER REGISTRATION NUMBER 2345		TE WELL CONSTRUCTION ATT NUMBER:	N/A
1. WELL LOCATION: (Show sketch of the location below)		County: <u>Cumberland</u>	
Nearest Town: Favetteville 6605 Raeford Road	4-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	<u>Depth</u> From To	DRILLING LOG Formation Description
(Road, Community, or Subdivision and Lot No.)		0 7	Red-brown sandy clay
2. OWNER The Pantry, Inc The Pantry #486 ADDRESS PO Box 1410		7 8	Tan-brown sli. silty clay
(Street or Route No.) Sanford NC	27330	8 15	Red-brown clayey silt to fi
City or Town State	Zip Code -		sand
3. DATE DRILLED <u>10/15/01</u> USE OF WELL <u>Monitori</u>	ng	15 25	Yeliow-brown medium to
4. TOTAL DEPTH <u>25'</u> CUTTINGS COLLECTED Yes X	No		coarse sand
5. DOES WELL REPLACE EXISTING WELL? Yes X No			
. STATIC WATER LEVELFTAbove TOP OF CASIN	1G		
TOP OF CASING IS 0 FT. ABOVE LAND SURFACE.	•••		
V. YIELD (gpm): N/A METHOD OF TEST N/A		If additional spaces is need	ied use back of form.
		LOCA (Show direction and distance from a	TION SKETCH
. WATER ZONES (depth): N/A		(Snow direction and distance from a map reference points).	ii ieasi iwo state Koaos, or oir
•	Material PVC Method Shurry		PERMICAGES
FROM TO FT			4 1
2. SCREEN:		magness of many	
Depth Diameter Slot Size	Material		
FROM 10 TO 25 FT 2 In .010 in			THE PERSON NAME.
FROM TO FT In in		100 to 10	۱۱۱
3. GRAVEL PACK: Depth Size A	Asterial	COMPANY TYPE I MONTTOWN MILL TYPE I MONTTOWN MILL DECOMPT MILL TO MONTTOWN	8 SG 40 FT.
•	lica Sand	Principal del Terri	STREET Projecting & Gookpaint Strains, P.C. See Rate 14 date 14, Combin. 145 2000, For 794-007400 Projection 26 181712 MAP
FROM TO FT	The same of the sa		THE PARTITY WHILE SECONDARY OF THE SECONDARY OF T
4. REMARKS: Bentonite seal from 6' to 8' I DO HEREBY CERTIFY THAT THIS WELL WAS CON	ISTRUCTED IN ACCO	RDANCE WITH 15 NCAC 2C, W	
STANDARDS, AND THAT A COPY OF THIS RECORD	HAS BEEN PROVIDE	D POTHE WELL OWNER	
	COLUMN COLOR	TO A COTTON	10/15/01
	SIGNATURE OF CONT	RACTUR OR AGENT on of Environmental Management s	DATE

NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT DIVISION OF ENVIRONMENTAL MANAGEMENT - GROUNDWATER SECTION P.O. BOX 27587 - RALEIGH, N.C. 27611, PHONE (919) 733-3221

WELL CONSTRUCTION RECORD

	RILLING CONTRACTOR Geologic Exploration – Mark Gettys RILLER REGISTRATION NUMBER 2345 MW-8	STATE WELL CONSTRUCTION PERMIT NUMBER:	N/A
1.	WELL LOCATION: (Show sketch of the location below)	County: Cumberland	
	Nearest Town: Fayetteville	<u>Depth</u> From To	DRILLING LOG Formation Description
	6605 Raeford Road (Road, Community, or Subdivision and Lot No.)	0 0.5	Topsoil
2.	OWNERThe Pantry, Inc The Pantry #486	0.5 6	Red-brown to brown sandy
	ADDRESS PO Box 1410 (Street or Route No.)		clay
	Sanford NC 27330	6 12	Red-brown clayey silt to fine
	City or Town State Zip Code		sand
3.	DATE DRILLED 10/15/01 USE OF WELL Monitoring	12 17	Yellow-brown to light tan-
4.	TOTAL DEPTH 25' CUTTINGS COLLECTED Yes No		white fine sand
		1725	Yellow-brown sli. silty
5.			medium to coarse sand
6.	STATIC WATER LEVEL FT. Above TOP OF CASING.		
	TOP OF CASING IS 0 FT. ABOVE LAND SURFACE.		
7	YIELD (gpm): N/A METHOD OF TEST N/A	If additional spaces is ne	
٠.	•		ATION SKETCH at least two State Roads, or other
8.	WATER ZONES (depth): N/A	map reference points).	
9.	CHLORINATION: Type N/A Amount N/A		
10.	CASING: Wall Thickness Depth Diameter or Weight/Ft. Material FROM 0 TO 10 FT 2" Sch 40 PVC FROM TO FT TO TO		Come
11.	GROUT: Depth Material Method FROM 0 TO 6 FT Portland Shurry FROM TO FT FT		
12.	SCREEN:	A STATE OF THE PARTY OF THE PAR	
	Depth Diameter Slot Size Material		 } !
	FROM 10 TO 25 FT 2 In .010 in PVC		THE PERSON NO.
	FROM TO FT In in		
13.	GRAVEL PACK: Denth Size Material	The second secon	0 36 00PT.
		COUNTY POINT THAT MATTER DO SATURA MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MATTER MAT	September & Benjagian Services, P.C.
	FROM 8 TO 25 FT 20/40 Silica Sand		PROLAND IN MITTER MADE THE PAINTEN WASC MINIST PARTY OF D. P.A.Y. ETTEVAL S. N.C.
	FROM TO FT		WITH BOX-430 COMMM AT JULY
14.	REMARKS: Bentonite seal from 6' to 8' I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN SIGNATURE.	D IN ACCORDANCE WITH 15 NCAC 2C, VLPROVIDED TO THE WELL OWNER. E OF CONTRACTOR OR AGENT	WELL CONSTRUCTION 10/15/01 DATE
		nal to Division of Environmental Management	

FOR OFFICE USE ONLY

Long.

Serial No.

GW-1 Ent.

Quad. No.

Minor Basin Basin Code

Header Ent.

Lat

NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT DIVISION OF ENVIRONMENTAL MANAGEMENT - GROUNDWATER SECTION P.O. BOX 27587 - RALHIGH, N.C. 27611, PHONB (919) 733-3221

WELL CONSTRUCTION RECORD

DRILLING CONTRACTOR Geologic Exploration – Mark Gettys			
DRILLER REGISTRATION NUMBER 2345	MW-9	STATE WELL CONSTRUCTION PERMIT NUMBER:	N/A
WELL LOCATION: (Show sketch of the location below)		County: Cumberland	
Nearest Town: Fayetteville 6605 Racford Road		<u>Depth</u> From To	DRILLING LOG Formation Description
(Road, Community, or Subdivision and Lot No.)		0 5	Red-brown to orange-brown
2. OWNER The Pantry, Inc The Pantry #486			sli. clayey silty sand
ADDRESS PO Box 1410		5 · · · 7	Medium gray sli. sandy silty
(Street or Route No.)	05000		clay
Sanford NC City or Town State	27330 Zip Code	7 12	Red-brown silty clay
3. DATE DRILLED 10/15/01 USE OF WELL M	•	12 30	Tan-brown silty medium san
4. TOTAL DEPTH 30' CUTTINGS COLLECTED Yes	X No		<u></u>
			
5. DOES WELL REPLACE EXISTING WELL? Yes X ?	NO		
	CASING.		
TOP OF CASING IS0 FT. ABOVE LAND SURFA	CE.		
		If additional spaces i	s needed use back of form.
			OCATION SKETCH
8. WATER ZONES (depth): N/A		map reference points).	rom at least two State Roads, or other

9. CHLORINATION: Type N/A Amount	N/A		
10. CASING:		, 💝	(2000)
Wall Thic Depth Diameter or Weight		The set seems to see the	
FROM 0 TO 10 FT 2" Sch 4		- M C)	
FROM TO FT			
11. GROUT:			RE-
Depth Material	Method	المستر المسا	
FROM 0 TO 6 FT Portland	Slurry		
FROM TO FT			2/="h-i
		The state of the s	
12. SCREEN: Depth Diameter Slot	Size Material] []
FROM 10 TO 30 FT 2 In .01			1 11 Company
FROM TO FT In	in		The state of the s
10 CD ATTO DACK		# TAMA IN NOTICE AND PARTY # EAST HOUSE COME AND PARTY FROM PROPERTY	0 30 80FT.
13. GRAVEL PACK: Depth Size	Material	45. Operatorymit. The state of	SHE'S Engineering & Goodspiel Switzer, P.C.
FROM 8 TO 30 FT 20/40	Silica Sand	Author Receipt Tell Printed Receipt Tell Author Receipt Tell Author Receipt Tell	PICLIFIE THE MAP
FROM TO FT	Giller Colle		GARS PAREFORD FO. PRYSTTEVALE, NO. WO = 901-450 DATE 4/34/3 COMO = PAREFORD DRUMM SY JC)
14. REMARKS: Bentonite seal from 6' to 8' I DO HEREBY CERTIFY THAT THIS WELL WA	AS CONSTRIBUTED T	N ACCORDANCE WITH 15 NCAC 2	C. WELL CONSTRUCTION
STANDARDS, AND THAT A COPY OF THIS RE	CORD HAS BEEN P	OVIDED TO THE WELL OWNER.	o, name constituenton
	A A	12	10/15/01
	SIGNATURE O	OF CONTRACTOR OR AGENT	DATE
GW-1 Revised 6/88		to Division of Environmental Managen	nent and copy to well owner.

FOR OFFICE USE ONLY

Long.

Serial No.

GW-1 Ent.

Quad. No.

Lat. ____ Minor Basin

Basin Code

Header Ent.

DRILLING CONTRACTOR Geologic Exploration - Mark Gettvs

R OFFICE USE ON	<u>LY</u>
Serial No.	
Long.	Pc
GW-	1 Ent.
	Serial No

DRILLER REGISTRATION NUMBER 2345 MW-10	STATE WELL CONSTRUCTION PERMIT NUMBER:	N/A
1. WELL LOCATION: (Show sketch of the location below)	County:Cumberland	
Nearest Town: Fayetteville	Depth	DRILLING LOG
6605 Raeford Road	From To	Formation Description
(Road, Community, or Subdivision and Lot No.)	0 8	Tan-brown to red-brown clay
2. OWNER The Pantry, Inc The Pantry #486		ey fine sandy to sandy clay
ADDRESS PO Box 1410	<u>8 13</u>	Red-brown silty clay
(Street or Route No.)		
Sanford NC 27330 City or Town State Zip Code	13 28	Yellow-brown silty fine sand
City of Your Blate Zip Code		
3. DATE DRILLED 10/15/01 USE OF WELL Monitoring		
4. TOTAL DEPTH 28' CUTTINGS COLLECTED Yes No		
5. DOES WELL REPLACE EXISTING WELL? Yes X No		
5. STATIC WATER LEVELFT. Above TOP OF CASING.	· · · · · · · · · · · · · · · · · · ·	
TOP OF CASING IS 0 FT. ABOVE LAND SURFACE.		
	If additional spaces is ne	eeded use back of form.
7. YIELD (gpm): N/A METHOD OF TEST N/A		ATION SKETCH
8. WATER ZONES (depth): N/A	(Show direction and distance from map reference points).	n at least two State Roads, or other
9. CHLORINATION: Type <u>N/A</u> Amount <u>N/A</u>		
IO. CASING:		
Wall Thickness	W. O. Landson	
Depth Diameter or Weight/Ft. Material	The same of the sa	
FROM 0 TO 8 FT 2" Sch 40 PVC FROM TO FT FT		SALVE I
TROM TO TI	F	
1. GROUT:		22.11.11
Depth Material Method		
FROM 0 TO 4 FT Portland Shurry	1 3	
FROM TO FT		
12. SCREEN:		
Depth Diameter Slot Size Material		
FROM 8 TO 28 FT 2 In .010 in PVC		NAME AND AND
FROM TO FT In in		
ODATES BACK.	Lideric,	9 86 80FT.
13. GRAVEL PACK: Depth Size Material	OF WELLY WILL OF WELLY WILL OF WELLY MATTER	THE Exphanish & Geological Stavious, P.C.
FROM 6 TO 28 FT 20/40 Silica Sand	Description Company Description Company	CHEFT Expressing & Geological Services, P.C. SER Medical Expression, PROS. For Viscourings Producing & SERVICE And THE PARTIES WHILE BEES ANAPTED WHILE BEES ANAPTED TO.
FROM TO FT	ACCORDANGE AND ACCORD	PARTITION DATE 47200 PARTITION DATE 47200 PARTITION DATE 47200 PARTITION DATE 47200
	-	
14. REMARKS: Bentonite seal from 4' to 6' I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED	IN ACCORDANCE WITH 15 NOAC 2C	WELL CONSTRUCTION
STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN		" TEE OOM INCOLION
# 20	7/X _	
OTAMATI IDE	OF CONTRACTOR OR AGENT	10/15/01 DATE
	al to Division of Environmental Managemen	

FO	R OFFICE USE ON	<u>ILY</u>			
Quad. No.	Serial No.				
Lat.	Long. Pc				
Minor Basin		<u> </u>			
Besin Code					
Header Ent.	GW-1 Ent.				

DRILLING CONTRACTOR Geologic Exploration - Ricky Brady	STATE WELL CONSTRUCTION	
DRILLER REGISTRATION NUMBER 2438 MW-11	PERMIT NUMBER:	N/A
WELL LOCATION: (Show sketch of the location below)	County: Cumberland	
Nearest Town: Favetteville	<u>Depth</u> From To	DRILLING LOG Formation Description
6605 Racford Road (Road, Community, or Subdivision and Lot No.)	0 2	Orangish-brown fine, clayey sand
2. OWNER The Pantry, Inc The Pantry #486	2 4	Reddish-orange fine silty sand
ADDRESS PO Box 1410 (Street or Route No.) Sanford NC 27330	4 18	Orangish-yellow fine sand
City or Town State Zip Code		
3. DATE DRILLED 02/26/02 USE OF WELL Monitoring	18 30	Orange fine clayey sand
4. TOTAL DEPTH 30' CUTTINGS COLLECTED Yes X No	4-11-4-1-4-1	
5. DOES WELL REPLACE EXISTING WELL? Yes X No 6. STATIC WATER LEVEL. FT. Above TOP OF CASING.		
6. STATIC WATER LEVELFT. Above TOP OF CASING. \[\sum_{\text{I}} \text{Below} \] TOP OF CASING IS0 FT. ABOVE LAND SURFACE.	<u> </u>	· · · · · · · · · · · · · · · · · · ·
		needed use back of form.
7. YIELD (gpm): N/A METHOD OF TEST N/A 8. WATER ZONES (depth): N/A		CATION SKETCH om at least two State Roads, or other
	-	
9. CHLORINATION: Type N/A Amount N/A		
10. CASING: Wall Thickness Denth Diameter or Weight/Ft. Material	HE OF THE PROPERTY.	Come
Depth Diameter or Weight/Ft. Material	N. T. C.	
FROM TO FT		DESCRIPTION COMMON
11. GROUT: Depth Material Method		
FROM 0 TO 6 FT Portland Siurry		
FROM TO FT		
12. SCREEN: Depth Diameter Slot Size Material] []
FROM 10 TO 30 FT 2 In .010 in PVC FROM TO FT In in		MAN EL MAN ME
TROM TO TO	## Albaid in ministration of party. ### Albaid in mountaining surjey. Fraction:	G 30 60 FT.
13. GRAVEL PACK: Depth Size Material	d). encountervent. "I surpre instance phot surpre instance do necessary translate.	ESE Segimenty & Goodpical Services, P.C. Goodpical Services, Inc. Inc. Conference on the Principle of Services, P.C. Principle 2 Service May 2004, Principle of Services, P.C. Principle 2 Service May 2004, Principle of Services, P.C. Principle 2 Services, P.C. Principle 2 Services, P.C. Principle 2 Services, P.C. Principle 3 Services, P.C. Principle 4 Services, P.C. Principle 5 Services, P.C. Principle 6 Services, P.C. Principle 7 Services, P.C. Principle 8 Servi
FROM 8 TO 30 FT 20/40 Silica Sand FROM TO FT	——————————————————————————————————————	THE PARTY SHOW AND SECURE 2 SHEET SHOW AND SECURE 35 CONTRACTOR SHOW AND SECURE 35 CONTRAC
7.4 P. C. L.		· · · · · · · · · · · · · · · · · · ·
14. REMARKS: Hemonie seat from 0 to 8 I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUCTED STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN	O IN ACCORDANCE WITH 15 NCAC 20 LPROVIDED TO THE WELL OWNER.	C, WELL CONSTRUCTION
The second secon		02/26/02
SIGNATUR GW-1 Revised 6/88 Submit origi	E OF CONTRACTOR OR AGENT nal to Division of Environmental Managem	DATE ent and copy to well owner.

FO	R OFFICE USE OF	NLY
Quad. No.	Serial No)
Lat	Long.	Pc
Minor Basin Basin Code		
Basin Code		
Header Ent.	GW-	-1 Ent

DRILLER REGISTRATION NUMBER 2438 MW-12	STATE WELL CONSTRUCTION PERMIT NUMBER:	N/A
	County: Cumberland	
1. WELL LOCATION: (Show sketch of the location below)		DRILLING LOG
Nearest Town: Fayetteville	<u>Depth</u> From To	Formation Description
6605 Raeford Road (Road, Community, or Subdivision and Lot No.)	0 2	Dark brown organic topsoil
2. OWNER The Pantry, Inc The Pantry #486	2 8	Orangish-brown medium fine
ADDRESS PO Box 1410 (Street or Route No.)		clayey sand
Sanford NC 27330	8 9.5	Orangish fine graded sand, 2"
City or Town State Zip Code	; 	coarse layer then fine layer
DATE DRILLED 03/01/02 USE OF WELL Monitoring	9.5 13	Yellowish-brown fine silty
CHESTING ON LECTED VON VINO		sand
-	<u>13</u> 23	Orangish-brown clayey sand
DOES WELL REPLACE EXISTING WELL? Yes No		O Children
STATIC WATER LEVELFT. Above TOP OF CASING.	23 30	Orangish-brown medium
X Below	**************************************	clayey sand
TOP OF CASING IS0 FT. ABOVE LAND SURFACE.	If additional spaces is a	needed use back of form.
7. YIELD (gpm): N/A METHOD OF TEST N/A	- LOC	CATION SKETCH
B. WATER ZONES (depth): N/A		m at least two State Roads, or other
o. WAIER ZONES (Ceptit).	map reference points).	
O. CHLORINATION: Type N/A Amount N/A 10. CASING: Depth Diameter or Weight/Ft. Material		
FROM TO FT		2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
FROM 0 TO 3 FT Portland Slurry	1 1 1 - 1	
FROM TO FT] = []
FROM TO T		
12. SCREEN:		
Depth Diameter Slot Size Materia		
FROM 10 TO 30 FT 2 In .010 in PVC	^	was stated to
FROM TO FT In in		' ' ' '
13. GRAVEL PACK:	The state of	90 PT.
Depth Size Material	Was greater with a gr	EDES & Stringing & Control of Services, P.C.
FROM 7.5 TO 30 FT 20/40 Silica Sand	d commentered	PROCESS STEEMAN THE PARTY SAR SIDE NATION HO. PAYETTEVELS, NO.
FROM TO FT	analysis and the second	DAVID STREAMS CONTRACTOR OF STREAMS CONTRACT
	·	
14. REMARKS: Bentonite seal from 3' to 7.5' I DO HEREBY CERTIFY THAT THIS WELL WAS CONSTRUC STANDARDS, AND THAT A COPY OF THIS RECORD HAS BI	TED IN ACCORDANCE WITH 15 NCAC 2C EEN PROVIDED TO THE WELL OWNER.	, WELL CONSTRUCTION
7	- COC	03/01/02
SIGNAT	TURE OF CONTRACTOR OR AGENT	DATE
GW-1 Revised 6/88 Submit of	original to Division of Environmental Manageme	ent and copy to well owner.

FO	R OFFICE USE OF	<u>vly</u>
Quad. No.	Serial No	۸ <u></u>
Lat.	Long.	Pc_
Minor Basin		
Basin Code		
Header Ent.	GW-	-1 Ent.

DRILLING CONTRACTOR Geologic Exploration - Ricky Brady	STATE WELL CONSTRUCTION
DRILLER REGISTRATION NUMBER 2438 MW-13	PERMIT NUMBER: N/A
WELL LOCATION: (Show sketch of the location below)	County: Cumberland
Nearest Town: Favetteville	Depth DRILLING LOG
6605 Raeford Road	From To Formation Description
(Road, Community, or Subdivision and Lot No.)	0 3 Dark brown clayey medium
2. OWNER The Pantry, Inc The Pantry #486	sand
ADDRESS PO Box 1410	3 10 Reddish-brown medium fir
(Street or Route No.)	clayey sand
Sanford NC 27330 City or Town State Zip Cod	le 21 Orange fine silty sand to
	yenow very line sandy-sat
3. DATE DRILLED <u>02/26/02</u> USE OF WELL <u>Monitoring</u>	21 30 Orangish-brown fine clayer
4. TOTAL DEPTH 30' CUTTINGS COLLECTED Ses XI	
5. DOES WELL REPLACE EXISTING WELL? Yes X No	
6. STATIC WATER LEVELFT. ☐ Above TOP OF CASING. ☐ Below	
TOP OF CASING IS0FT. ABOVE LAND SURFACE.	
7. YIELD (gpm): N/A METHOD OF TEST N/A	If additional spaces is needed use back of form. LOCATION SKETCH
	(Show direction and distance from at least two State Roads or other
8. WATER ZONES (depth): N/A	map reference points).
9. CHLORINATION: Type N/A Amount N/A 10. CASING: Wall Thickness	ial us at succession of the su
Depth Diameter or Weight/Ft Materia	al al
FROM TO FT	-
11. GROUT:	
Depth Material Method	
FROM 0 TO 6 FT Portland Slurry	
FROM TO FT	
12. SCREEN:	1
Depth Diameter Slot Size Mater	ial ""
FROM 10 TO 30 FT 2 In .010 in PV	c
FROM TO FT In in	
IO ODATE DAOK.	Topic accomplismed wills.
13. GRAVEL PACK: Depth Size Material	de contractivos. Inspiratorios Ins
FROM 8 TO 30 FT 20/40 Silica San	SECURITY SEC
FROM TO FT	
14. REMARKS: Bentonite seal from 6' to 8' LDO HERERY CERTIFY THAT THIS WELL WAS CONSTRUCTED.	CTED IN ACCORDANCE WITH 15 NCAC 2C, WELL CONSTRUCTION
STANDARDS, AND THAT A COPY OF THIS RECORD HAS E	BEEN PROVIDED TO THE WELL OWNER.
	CC U.S. 02/26/02
SIGNA	ATURE OF CONTRACTOR OR AGENT DATE
GW-1 Revised 6/88 Submit	original to Division of Environmental Management and copy to well owner.

APPENDIX B



CERTIFICATE OF ACCEPTANCE

Soil Solutions, Inc. does hereby certify that 1 drum of non-hazardous contaminated material received on 01/02/2002 from:

Generator:

The Pantry #486

Originating at:

6605 Raeford Road

Fayetteville, NC

SSI Waste ID#:

120123

has been accepted by Soil Solutions, Inc. and will be remediated in their Soil Treatment Facility in Winston-Salem, North Carolina. Soil Solutions, Inc. guarantees the contaminated material will be treated to below regulatory standards established by the North Carolina Department of Environment and Natural Resources for clean soil.

Signature W. Hammet

Thomas W. Hammett Senior Vice President Soil Solutions, Inc.



CERTIFICATE OF ACCEPTANCE

Soil Solutions, Inc. does hereby certify that 3 drums of non-hazardous contaminated material received on 03/05/2002 from:

Generator:

The Pantry #486

Originating at:

6605 Raeford Road

Fayetteville, NC

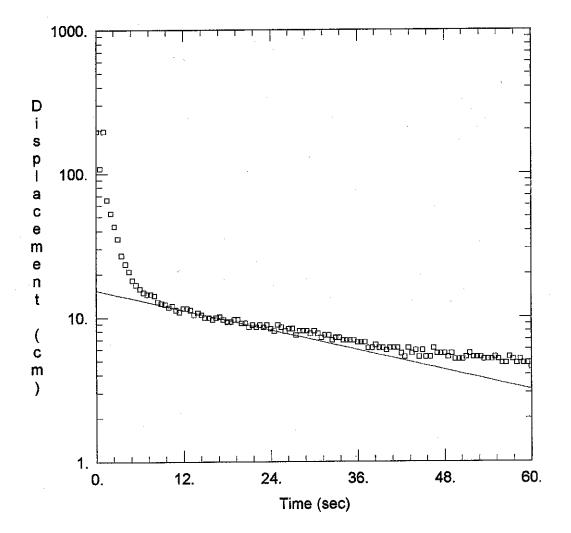
SSI Waste ID#:

030211

has been accepted by Soil Solutions, Inc. and will be remediated in their Soil Treatment Facility in Winston-Salem, North Carolina. Soil Solutions, Inc. guarantees the contaminated material will be treated to below regulatory standards established by the North Carolina Department of Environment and Natural Resources for clean soil.

Hone W. Hammett
Signature

Thomas W. Hammett Senior Vice President Soil Solutions, Inc. **APPENDIX C**



WELL TEST ANALYSIS

Data Set: C:\DOCUME~1\MICHAE~1\DESKTOP\MIKE'S~1\SITEFI~1\PA486~1\SLUGTE~1\MW-6.AQT

Date: 04/25/03

Time: 16:42:32

PROJECT INFORMATION

Client: The Pantry, Inc.

Project: <u>501430</u>

Test Location: The Pantry #486

Test Well: MW-6
Test Date: 4/16/03

AQUIFER DATA

Saturated Thickness: 3048.cm

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 196. cm Casing Radius: 5.08 cm

Screen Length: 609.6 cm

Water Column Height: 320.7 cm
Wellbore Radius: 20.32 cm
Gravel Pack Porosity: 0.2

SOLUTION

Aquifer Model: <u>Unconfined</u> Solution Method: Bouwer-Rice K = 11.64 ft/dayy0 = 15.4 cm

AQTESOLV for Windows

Data Set: C:\DOCUME~1\MICHAE~1\DESKTOP\MIKE'S~1\SITEFI~1\PA486~1\SLUGTE~1\MW-6.AQT

Date: 04/25/03 Time: 16:42:38

PROJECT INFORMATION

Client: The Pantry, Inc.

Project: 501430

Location: The Pantry #486

Test Date: 4/16/03 Test Well: MW-6

AQUIFER DATA

Saturated Thickness: 3048. cm Anisotropy Ratio (Kz/Kr): 1.

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: MW-6

X Location: 0. cm Y Location: 0. cm

No. of observations: 599

Obser	vation	Data
-------	--------	------

Time (sec)	Displacement (cm)	Time (sec)	Displacement (cm)	Time (sec)	Displacement (cm)
0.5	107.5	100.5	2.4	200.5	1.3
1.	196.	101.	2.1	201.	1.3
1.5	65.6	101.5	2.1	201.5	1.1
2.	52.5	102.	2.1	202.	1.3
2.5	42.9	102.5	2.9	202.5	8.0
3.	35.2	103.	2.7	203.	1.6
3.5	26.9	103.5	2.7	203.5	1.1
4.	23.5	104.	1.9	204.	1.3
4.5	20.8	104.5	1.9	204.5	1.1
5.	18.1	105.	1.9	20 5.	0.8
5.5	16.8	105.5	2.1	205.5	1.1
6.	15.7	106.	1.9	206.	1.1
6.5	14.9	106.5	1.9	206.5	1.6
7.	14.4	107.	1.6	207.	8.0
7.5	14.4	107.5	2.1	207.5	8.0
8.	. 14.1	108.	1.9	208.	0.8
8.5	12.8	108.5	2.1	208.5	1.1
9.	12.5	109.	2.1	209.	0.8
9.5	12.3	109.5	1.9	209.5	1.3
10.	11.7	110.	2.4	210.	1.3

Time (sec) D	isplacement (cr	n) Time (sec) Di	splacement (c	m) Time (sec) Dis	splacement (cm)
10.5	12.	110.5	2.1	210.5	0.8
11.	11.2	111.	1.9	211.	1.3
11.5	10.9	111.5	1.9	211.5	0.8
12.	11.5	112.	1.6	212.	8.0
12.5	11.5	112.5	1.6	212.5	0.5
13.	11.2	113,	2.1	213.	0.5
13.5	10.4	113.5	1.9	213.5	0.8
14.	10.7	114.	2.1	214.	1.1
14.5	10.4	114.5	2.1	214.5	0.8
15.	9.9	115.	1.9	215.	1.1
15.5	9.9	115.5	2.1	215.5	1.1
16.	9.6	116.	2.4	216.	1.1
16.5	9.9	116.5	1.9	216.5	0.8
17.	10.1	117.	2.1	217.	1.3
17.5	9.6	117.5	2.1	217.5	1.1
18.	9.3	118.	2.7	218.	0.8
18.5	9.3	118.5	2.1	218.5	1.3
19.	9.6	119.	2.1	219.	0.8
19.5	9.6	119.5	1.9	219.5	0.8
20.	9.1	120.	2.1	220.	0.5
20.5	9.1	120.5	1.9	220.5	0.8
21.	8.5	121.	2.1	221.	1.1
21.5	8.8	121.5	1.9	221.5	1.6
22.	8.5	122.	1.9	222.	1.3
22.5	8.8	122.5	1.6	222.5	0.8
23.	8.5	123.	1.6	223.	0.8
23.5	8.8	123.5	1.6	223.5	1.3
24 .	8.3	124.	1.9	224.	1.1
24.5	8.	124.5	1.9	224.5	1.1
25.	8.8	125.	1.9	225.	0.5
25.5	8.5	125.5	1.6	225.5	0.5
26.	8.	126.	1.3	226.	1.1
26.5	8.3	126.5	1.6	226.5	0.5
27.	8.3	127.	1.6	227.	0.8
27.5	7.5	127.5	1.9	227.5	0.8
28.	8.	128.	1.6	228.	1.3
28.5	8.	128.5	1.3	228.5	0.8
29.	8.	129.	1.9	229.	1.1
29.5	7.7	129.5	1.6	229.5	0.8
30.	8.	130.	1.9	230.	0.3
30.5	7.7	130.5	1.6	230.5	0.5
30.5 31.	7.7 7.2	131.	1.3	231.	1.1
31.5	7.2 7.5	131.5	1.6	231.5	0.8
32.	7.5	132.	1.9	232.	0.8
32.5	6.9	132.5	2.1	232.5	0.5
32.5 33.	7.2	133.	1.3	233.	0.5
33.5	7.2 7.2	133.5	1.3	233.5	0.8
33.5 34.	6.9	134.	1.9	234.	1.3
34.5	6.9	134.5	1.3	234.5	1.1
	-·-		- • -		

Time (sec) D	isplacement (c	m) Time (sec) Di	splacement (c	m) Time (sec) Di	splacement (cm)
35.	6.9	135.	1.1	235.	0.5
35.5	6.9	135.5	1.1	235.5	0.5
36.	6.7	136.	1.3	236.	0.
36.5	6.7	136.5	0.5	236.5	0.8
37.	6.7	137.	0.8	237.	1.1
37.5	6.1	137.5	1.1	237.5	1.3
38.	6.1	138.	0.8	238.	1.6
38.5	6.4	138.5	0.8	238.5	1.1
39.	6.1	139.	1.1	239.	1.3
39.5	6.1	139.5	1.3	239.5	1.3
40.	5.9	140.	1.1	240.	1.3
40.5	6.1	140.5	1.6	240.5	1.1
41.	6.1	141.	1.1	241.	1.1
41.5	6.1	141.5	1.3	241.5	1.1
42.	5.6	142.	1.1	242.	0.8
42.5	5.3	142.5	1.3	242.5	0.8
43.	6.1	143.	1.6	242.5 243.	0.5
43.5	5.6	143. 143.5	1.0	243. 243.5	0.5 0.5
43.5 44.	5.9	144.	1.1	243.5 244.	
44.5	5.3	144.5	1.3	244.5	0.5
44.5 45.					1.1
45. 45.5	5.9	145.	1.3	245.	0.5
45.5 46.	5.3	145.5	1.3	245.5	1.1
	5.3	146.	1.9	246.	1.3
46.5	6.1 5.6	146.5	1.3	246.5	1.1
47.	5.6 5.6	147.	1.3	247.	1.3
47.5	5.6	147.5	1.3	247.5	1.6
48.	5.6	148.	1.3	248.	-0.3
48.5	5.3	148.5	0.8	248.5	1.1
49.	5.6	149.	1.1	249.	1.3
49.5	5.1	149.5	0.8	249.5	1.1
50.	5.1	150.	1.1	250.	1.3
50.5	5.1	150.5	1.1	250.5	1.3
51.	5.3	151.	1.1	251.	0.8
51.5	5.6	151.5	1.3	251.5	1.3
52.	5.3	152.	1.1	252.	1.3
52.5	5.3	152.5	1.3	252.5	1.3
53.	5.3	153.	1.6	253.	0.8
53.5	5.1	153.5	0.8	253.5	0.8
54.	5.1	154.	1.1	254.	0.5
54.5	5.1	154.5	1.3	254.5	0.8
55.	5.3	155.	1.1	255.	8.0
55.5	5.1	155.5	1.3	255.5	0.5
56 .	4.8	156.	1.1	256.	8.0
56.5	4.8	156.5	1.3	256.5	8.0
57.	5.3	157.	0.5	257.	8.0
57.5	5.1	157.5	1.1	257.5	0.8
58.	4.8	158 <i>.</i>	. 1.1	258.	8.0
58.5	5.1	158.5	1.3	258.5	0.8
59.	4.8	159.	1.3	259.	1.3

Time (sec)	Displacement (c	m) <u>Time (sec) Di</u>	splacement (c	m) Time (sec) Di	isplacement (cm)
59.5	4.8	159.5	1.3	259.5	1.3
60.	4.5	160.	1.3	260.	1.1
60.5	4.8	160.5	1.6	260.5	0.8
61.	4.5	161.	1.3	261.	0.5
61.5	4.5	161.5	1.1	261.5	1.1
62.	4.5	162.	1.6	262.	0.8
62.5	4.5	162.5	1.6	262.5	0.8
63.	4.8	163.	1.3	263.	0.8
63.5	4.8	163.5	1.1	263.5	0.8
64.	4.8	164.	1.3	264.	1.1
64.5	4.5	164.5	0.8	264.5	1.3
65 <i>.</i>	4.3	165.	1.6	265.	1.3 1.3
65.5	4.	165.5	1.3	265.5	1.3 1.1
66.	4.3	166.	1.6		
66.5				266.	1.9
67.	4.5	166.5	1.6	266.5	1.3
	4.	167.	1.9	267.	1.6
67.5	4.5	167.5	1.6	267.5	1.3
68.	4.	168.	1.1	268.	1.3
68.5	4.3	168.5	1.6	268.5	1.1
69.	3,5	169.	1.3	269.	0.8
69.5	4.	169.5	1.1	269.5	8.0
70.	4.	170.	1.3	270.	1.3
70.5	4.	170.5	1.6	270.5	1.1
71.	3.7	171.	1.9	271 .	1.1
71.5	4.	171.5	1.3	271.5	1.3
72 .	4.3	172.	1.3	272.	1.1
72.5	3.7	172.5	1.9	272.5	1.3
73.	4.	173.	1.6	273 .	1.3
73.5	3.7	173.5	1.6	273.5	1.3
74.	4 .	174.	1.3	274.	1.6
74.5	3.5	174.5	1.3	274.5	1.6
75 .	3.5	175.	1.1	275.	0.8
75.5	3.7	175.5	1.1	275.5	0.5
76.	3.7	176.	1.3	276.	0.5
76.5	4.	176.5	1.1	276.5	0.8
77.	4.	177.	1.3	277.	1.1
77.5	4.3	177.5	1.9	277.5	0.8
78.	3.5	178.	1.6	278.	0.8
78.5	4.	178.5	1.6	278.5	1.1
79.	3.7	179.	1.1	279.	1.3
79.5	4.	179.5	1.3	279.5	1.3
80.	3.5	180.	1.1	280.	0.8
80.5	3.7	180.5	1.3	280.5	1.3
81.	3.7	181.	1.3	281.	1.3
81.5	3.5	181.5	1.6	281.5	1.6
82.	3.2	182.	1.3	282.	0.8
82.5	3.5	182.5	1.3	282.5	0.8
83.	3.2	183.	1.9	283.	1.1
83.5	3.5	183.5	2.1	283.5	0.5
55.5	0.0	100.0	۷. ا	200.0	0.5

Time (sec) Di	splacement (c	m) Time (sec) Di	splacement (ci	m) Time (sec) Di	splacement (cm)	
84.	3.5	184.	1.6	284.	1.1	
84.5	3.2	184.5	1.6	284.5	0.5	
85.	2.9	18 5.	1.6	28 5.	1.1	
85.5	2.9	185.5	1.1	285.5	1.6	
86.	3.2	186.	1.6	286.	0.8	4
86.5	3.2	186.5	1.3	286.5	1.1	
87.	2.9	187.	1.3	287.	1.1	
87.5	2.9	187.5	1.3	287.5	1.3	
88.	3.2	188.	1.6	288.	1.6	
88.5	3.5	188.5	1.3	288.5	1.6	
89.	2.7	189.	1.9	289.	1.1	
89.5	3.2	189.5	0.8	289.5	0.8	
90.	2.9	190.	1.3	290.	0.8	
90.5	3.2	190.5	1.3	290.5	1.1	
91.	3.2	191.	0.8	291.	0.8	
91.5	2.9	191.5	1.3	291.5	0.8	
92.	2.7	192.	1.1	292.	1.3	
92.5	2.7	192.5	8.0	292.5	1.6	
93.	2.4	193.	1.6	293.	0.8	
93.5	3.2	193.5	1.3	293.5	1.3	
94.	2.4	194.	1.3	294.	1.6	
94.5	2.7	194.5	8.0	294.5	1,1	
95 .	2.4	195.	1.1	295.	0.8	
95.5	2.4	195.5	1.3	295.5	1.3	
96.	2.4	196.	0.8	296.	1.3	
96.5	2.4	196.5	0.8	296.5	0.8	
97.	2.1	197.	0.8	297.	8.0	
97.5	2.1	197.5	1.3	297.5	0.8	-
98.	1.6	198.	1.3	298.	0.8	
98.5	2.1	198.5	1.3	298.5	1.1	
99.	2.1	199.	1.6	299.	1.1	
99.5	2.1	199.5	1.6	299.5	0.8	
100.	2.1	200.	1.3			

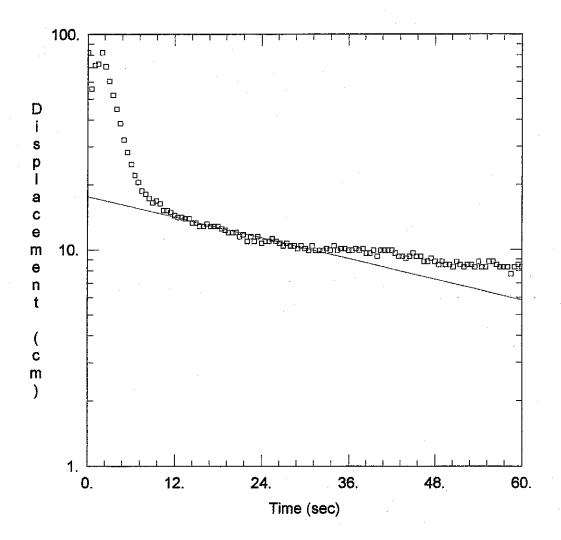
SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	11.64	ft/day
v0	15.4	cm



WELL TEST ANALYSIS

Data Set: C:\DOCUME~1\MICHAE~1\DESKTOP\MIKE'S~1\SITEFI~1\PA486~1\SLUGTE~1\MW-10.AQT

Date: 04/25/03 Time: 16:42:49

PROJECT INFORMATION

Client: The Pantry, Inc.

Project: 501430

Test Location: The Pantry #486

Test Well: MW-9
Test Date: 4/16/03

AQUIFER DATA

Saturated Thickness: 3048. cm Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Initial Displacement: 82.1 cm
Casing Radius: 5.08 cm
Screen Length: 609.6 cm

Water Column Height: 150.9 cm Wellbore Radius: 20.32 cm Gravel Pack Porosity: 0.2

SOLUTION

Aquifer Model: <u>Unconfined</u> Solution Method: Bouwer-Rice K = 6.362 ft/dayy0 = 17.68 cm

AQTESOLV for Windows

Data Set: C:\DOCUME~1\MICHAE~1\DESKTOP\MIKE'S~1\SITEFI~1\PA486~1\SLUGTE~1\MW-10.AQT

Date: 04/25/03 Time: 16:42:54

PROJECT INFORMATION

Client: The Pantry, Inc.

Project: 501430

Location: The Pantry #486

Test Date: 4/16/03 Test Well: MW-9

AQUIFER DATA

Saturated Thickness: 3048. cm Anisotropy Ratio (Kz/Kr): 1.

OBSERVATION WELL DATA

Number of observation wells: 1

Observation Well No. 1: MW-10

X Location: 0. cm Y Location: 0. cm

No. of observations: 615

Observation Data

Time (sec) Displa	acement (cm)]	ime (sec) Displa	cement (cm) 7	Time (sec) Displac	cement (cm)
0.5	55.7	103.	6.1	205.5	4.
1.	71.7	103.5	5.9	206.	4.
1.5	72.8	104.	6.4	206.5	3.5
2.	82.1	104.5	6.4	207.	4.3
2.5	70.7	105.	6.4	207.5	4.
3.	60.5	105.5	6.1	208.	4.
3.5	52.	106.	5.9	208.5	3.7
4 .	44.8	106.5	6.1	209.	3.7
4.5	38.4	107.	6.4	209.5	3.7
5.	32.3	107.5	6.1	210.	3.2
5.5	28.3	108.	6.1	210.5	3.2
6.	24.8	108.5	6.4	211 .	3.5
6.5	22.1	109.	6.9	211.5	3.5
7.	20.5	109.5	6.4	212.	4.
7.5	18.7	110.	6.4	212.5	3.7
· 8.	18.1	110.5	5.6	213.	4.
8.5	17.3	111.	5. 9	213.5	3.5
9.	16.5	111.5	5.3	214.	4.
9.5	16.8	112.	5.9	214.5	3.5
10.	16.3	112.5	5.9	215.	3.7

Time (sec) D	isplacement (c	m) Time (sec) Di	splacement (d	cm) Time (sec) Di	splacement (cm	1)
10.5	15.2	113.	6.1	215.5	4.	. <u></u>
11.	15.2	113.5	5.9	216.	3.5	
11 <i>.</i> 5	14.9	114.	6.7	216.5	4.	
12.	14.4	114.5	6.1	217.	3.7	•
12.5	14.1	115.	5.9	217.5	2.9	
13.	14.1	115.5	6.1	218.	3.2	
13.5	13.9	116.	5.6	218.5	3.5	
14.	13.9	116.5	5.9	219.	3.2	
14.5	13.3	117.	5.9	219.5	3.2	
15.	13.3	117.5	5.3	220.	3.2	
15.5	12.8	118.	5.6	220.5	2.9	
16.	12.8	118.5	5.1	221.	2.7	
16.5	13.1	119.	5.9	221.5	2.9	
17.	12.8	119.5	5.9	222.	2.9	
17.5	12.8	120.	5.6	222.5	2.7	•
18.	12.8	120.5	5.6	223.	3.2	
18.5	12.5	121.	5.6	223.5	3.2	
19.	12.3	121.5	5.6	224.	3.2 3.2	
19.5	12.	122.	5.9	224.5	3.5	
20.	12.	122.5	5.9	225.	2.9	
20.5	12.	123.	5.9	225.5	3.2	
21.	11.5	123.5	5.9 5.9	225.5 226.		
21.5	11.7	124.	5.9	226.5	3.5	
22.	10.9	124.5	5.3		3.2	
22.5	11.5	125.	5.3	227.	2.9	
23.	10.9	125.5	5.3 6.1	227.5	2.7	
23.5	11.5	125.5 126.	5.3	228. 228.5	2.4	
24.	10.7	126.5	5.6		2.9	
24.5	10.9	120.5 127.	5.8 5.3	229.	3.2	
25.	10.9	127.5	5.3 5.1	229.5	2.4	
25.5	11.2	127.5	5.1 5.3	230.	3.5	
26.	10.9	128.5		230.5	3.5	
26.5	10.7	120.5	4.8 5.0	231.	3.2	
20.5 27.	10.4	. —	5.9	231.5	2.7	
27.5	10.7	129.5 130.	6.1	232.	3.2	
28.	10.7	130.5	5.3	232.5	3.2	
28.5	10.4		5.6	233.	3.2	
29.	10.4	131.	5.3	233.5	3.2	
29.5	10.1	131.5	5.3	234.	2.4	
29.5 30.		132.	5.6	234.5	3.2	
	10.1	132.5	5.9	235.	3.2	
30.5	9.9	133.	5.6	235.5	3.2	
31.	10.4	133.5	5.6	236.	3.2	
31.5	9.9	134.	5.1	236.5	3.2	
32.	9.9	134.5	5.3	237.	3.2	
32.5	9.9	135.	6.1	237.5	3.2	
33.	10.1	135.5	5.6	238.	2.9	
33.5	9.9	136.	5.3	238.5	3.2	
34.	10.4	136.5	5.1	239.	3.2	
34.5	9.9	137.	5.1	239.5	3.2	

Time (sec) Displac				ime (sec) Displa	cement (cm)
35 .	10.1	137.5	5.3	240.	2.9
35.5	10.1	138.	5.3	240.5	2.4
36.	9.9	138.5	5.1	241.	2.7
36.5	9.9	139.	5.6	241.5	2.7
37.	10.1	139.5	5.3	242.	2.4
37.5	9.9	140.	5.9	242.5	2.7
38.	10.1	140.5	5.6	243.	2.9
38.5	9.6	141.	5.1	243.5	2.4
39.	9.6	141.5	5.6	244.	2.9
39.5	9.9	142.	5.1	244.5	2.4
40.	9.3	142.5	5.6	245.	2.7
40.5	9.9	143.	5.6	245.5	2.1
41.	9.9	143.5	5.3	246.	2.7
41.5	9.9	144.	5.3	246.5	2.7
42.	9.9	144.5	5.3	247.	1.9
42.5	9.6	145.	5.6	247.5	2.4
43.	9.3	145.5	5.1	248.	2.9
43.5	9.3	146.	5.1	248.5	2.1
44.	9.1	146.5	5.6	249.	2.4
44.5	9.3	147.	5.6	249.5	2.4
45.	9.6	147.5	5.3	250.	2.4
45.5	9.3	148.	5.6		
46.	9.3	148.5		250.5	2.4
46.5			5.6	251.	2.4
46.5 47.	8.8	149.	5.1	251.5	2.7
	8.8	149.5	5.1	252.	2.4
47.5	9.1	150.	4.8	252.5	1.9
48.	8.8	150.5	5.1	253.	2.1
48.5	8.5	151.	5.1	253.5	2.4
49.	8.8	151.5	4.8	254 <i>.</i>	2.7
49.5	8.5	152.	4.5	254.5	2.7
50.	8.5	152.5	4.8	255.	2.7
50.5	8.3	153.	5.1	255.5	2.9
51.	8.8	153.5	5.1	256.	2.7
51.5	8.5	154.	4.5	256.5	2.4
52.	8.3	154.5	4.8	257.	2.1
52.5	8.5	155.	4.8	257.5	2.4
53.	8.5	155.5	5.1	258.	2.4
53.5	8.3	156.	4.8	258.5	2.4
54.	8.8	156.5	4.3	259.	2.4
54.5	8.3	157.	4.8	259.5	2.7
5 5.	8.3	157.5	4.8	260.	2.1
55.5	8.8	158.	5.1	260.5	2.1
56.	8.8	158.5	4.8	261.	2.4
56.5	8.5	159.	4.8	261.5	2.4
57.	8.3	159.5	4.8	262.	1.6
57.5	8.3	160.	4.3	262.5	2.1
58.	8.3	160.5	4.8	263.	2.1
58.5	7.7	161.	5.1	263.5	2.1
59 <i>.</i>	8.3	161.5	4.8	264.	2.1

59.5	ispiacement (c 8.5	<u>m)</u> <u>Time (sec) Di</u> 162.	splacement (c 4.5	264.5	ispiacement (cm 1.9	1
60.	8.3	162.5	4.5	265.	1.9	
60.5	8.3	163.	4.3	265.5	2.4	
61.	8.3	163.5	4.5	266.	2.4	
61.5	8.3	164.	4.5	266.5	2.1	
62.	8.3	164.5	4.5	267.	2.4	
62.5	8.3	165.	4.8	267.5	2.4	
63.	8.3	165.5	5.1	268.	2.4	
63.5	8.	166.	4.3	268.5	2.1	
64.	8.3	166.5	4.5	269.	2.1	
64.5	8.5	167.	4.3	269.5	1.9	
65.	8.5	167.5	4.5	270.	2.1	
65.5	8.3	168.	4.5	270.5	2.1	
66.	8.	168.5	4.3	271.	1.9	
66.5	8.5	169.	4.5	271.5	1.9	
67.	8.	169.5	4.5	272.	2.1	
67.5	8.	170.	4.3	272.5	1.9	
68.	8.3	170.5	4.5	273.	1.9	
68.5	7.7	171.	4.3	273.5	2.1	
69.	7.7	171.5	4.3	274 .	1.9	
69.5	7.7	172.	4.3	274 <i>.</i> 5	2.1	
70.	7.2	172.5	4.5	275.	2.4	
70.5	7.5	173.	4.	275.5	2.1	
71.	7.5	173.5	4.	276.	1.9	
71.5	7.5	174.	4.3	276.5	1.9	
72 .	7.7	174.5	4.5	277.	1.9	
72.5	7.7	175.	4.3	277.5	2.4	
73 .	7.2	175.5	4.3	278.	1.9	
73.5	7 <i>.</i> 5	176 <i>.</i>	4.3	278.5	1.6	
74.	6.9	176.5	4.3	279.	1.9	
74.5	7.2	177.	4.5	279.5	1.9	
75 .	6.9	177.5	4.	280.	1.6	
75.5	7.7	178.	4.	280.5	2.4	
76 .	7.5	178.5	4.	281.	2.4	
76.5	7.5	179.	4.3	281.5	2.1	
7 7.	7.2	179.5	4.5	282.	1.9	
77.5	7.2	180.	4.5	282.5	2.1	
78 .	7.2	180.5	4.5	283.	1.9	
78.5	7.5	181.	4.8	283.5	1.9	
79.	7.2	181.5	4.8	284.	2.1	
79.5	7.2	182.	4.3	284.5	1.9	
80.	7.2	182.5	4.5	285.	1.3	
80.5	6.9	183.	4.5	285.5	2.1	
81.	7.2	183.5	4.5	286.	2.4	
81.5	7.2	184.	4.5	286.5	1.9	
82.	6.7	184.5	4.3	287.	2.1	
82.5	7.5	185.	4.8	287.5	1.9	
83.	7.3 7.2	185.5	4.8	288.	1.9	
83.5	7.7	186.	4.8 4.8	288.5	1.9	
00.0	1.1	100.	4.0	200.0	1.0	

Time (sec)	Displacement (cr	n) Time (sec) Di	splacement (c	m) Time (sec) Dis	splacement (cm	1)
84.	7.2	186.5	4.5	289.	1.9	_
84.5	7.5	187.	4.3	289.5	1.9	
85.	6.9	187.5	4.5	290.	2.1	
85.5	6.9	188.	4.5	290.5	2.1	
86.	7.5	188.5	4.3	291.	2.4	
86.5	7.2	189.	4.3	291.5	2.1	
87.	7.2	189.5	4.	292.	2.1	
87.5	7.2	190.	3.7	292.5	1.9	
88.	7.2	190.5	3.7	293.	2.4	
88.5	7.2	191.	4.3	293.5	1.9	
89.	7.2	191.5	4.3	294.	2.1	
89.5	7.2	192.	4.3	294.5	2.1	
90.	6.7	192.5	4.8	295.	2.1	
90.5	7.2	193.	4.3	295.5	1.9	
91.	6.9	193.5	4.3	296.	1.6	
91.5	6.7	194.	4.3	296.5	1.9	
92.	7.2	194.5	4.3	297.	1.3	
92.5	6.7	195 .	4.3	297.5	1.6	
93.	6.7	195.5	4.3	298.	1.3	
93.5	6.7	196.	3.5	298.5	1.9	
94.	6.1	196.5	3.7	299.	1.9	
94.5	6.4	197.	4.	299.5	1.6	
95.	6.4	197.5	4.3	300.	1.6	
95.5	6.7	198.	4.	300.5	1.3	
96.	6.4	198.5	4.	301.	1.6	
96.5	6.7	199.	4.3	301.5	1.6	
97.	6.9	199.5	3.5	302.	1.1	
97.5	6.9	200.	3.5	302.5	1.1	
.98,	6.7	200.5	3.5	303.	1.1	
98.5	6.7	201.	3.7	303.5	1.1	
99.	6.7	201.5	3.5	304.	1.3	
99.5	6.7	202.	3.7	304.5	1.1	
100.	6.7	202.5	4.	305.	1.1	
100.5	6.4	203.	3.7	305.5	1.1	
101.	6.7	203.5	3.7	306.	0.8	
101.5	6.7	204.	4.	306.5	0.8	
102.	6.7	204.5	4.	307.	0.8	
102.5	6.4	205.	3.7	307.5	8.0	

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter Estimate

04/25/03

K y0

04/25/03

6.362 17.68

ft/day cm

6

16:42:54

9307 Monroe Road, Suite K Charlotte, North Carotina 28270 T 704.846.8853 F 704.846.3271 enviroassessments.com



enviroassessments

KANGAROO STATION

RECEIVED

March 22, 2012

APR - 2 2012

Frank Moody C/o 6157 Crystal Dr., LLC Dunn, North Carolina DENR -FAYETTEVILLE REGIONAL OFFICE

Attention:

Mr. Frank Moody

Reference:

Phase II Environmental Site Assessment

Kangaroo Station

6605 Raeford Road (Highway 401)

Fayetteville, Cumberland County, North Carolina

EA Project No. 12-9183.1

Dear Mr. Moody:

EnviroAssessments (EA) has completed a Phase II Environmental Site Assessment (ESA) of the Kangaroo Station property (the "Project"), located at 6605 Raeford Road (Highway 401) in Fayetteville, Cumberland County, North Carolina. A Site Location Map is attached as **Figure 1**. The purpose of the Phase II ESA was to evaluate the Project with respect to potential contamination issues and concerns for a pending real estate transaction because the site operates as a gasoline station. Therefore, 6157 Crystal Dr., LLC requested a Phase II environmental site assessment (ESA) be performed for the Project to evaluate the potential for undocumented petroleum releases. Specifically, the Phase II ESA evaluated for the presence of petroleum and/or solvent compounds in the soil and groundwater at the Project from potential undocumented releases associated with the on-site UST system.

1.0 PROJECT HISTORY

The Project operates as a retail gasoline station/convenience store located in the southwest corner of the intersection of Raeford Road and Strickland Bridge Road at 6605 Raeford Road in Fayetteville, North Carolina. The Project is developed with a one-story convenience store building. According to the attached Notification for Underground Storage Tanks, dated May 1986, three 10,000-gallon gasoline USTs were installed in 1986 and are located in a tank basin east of the store building. The tanks were upgraded in 1994 to meet 1998 upgrade requirements. A copy of the most recent UST system inspection (UST-10B Form) on February 25, 2010 is also attached, no violations were reported. The current active UST system is a potential ongoing source of petroleum contamination to soil and/or groundwater at the Project and to nearby off-site properties. Spills and overfills of fuel during bulk fuel transfers to the UST systems and the current automobile filling operations from the dispensers are sources of petroleum contamination to soil and groundwater. The assessment and remediation of

petroleum contamination are state-regulated activities that are often expensive and time-consuming. The presence of contamination may adversely-affect the "financeability" and "marketability" of the Project.

The Client (Frank Moody) authorized EA to complete this Phase II ESA to evaluate the Project with respect to potential contamination issues and concerns for a pending real estate transaction because the site operates as a gasoline station and to determine the likelihood that the Project property has been impacted from the on-site UST system.

Phase II assessment activities were performed by EA personnel and their subcontractors on March 1, 2012, which consisted of collecting eight (8) soil samples (S-1-16, S-2-12, S-3-12, S-4-12, S-5-4, S-6-4, S-7-4 and S-8-4) and three (3) groundwater samples (MW-2, MW-15 and MW-17) from existing on-site groundwater monitoring wells associated with the on-site petroleum release incident (Incident Number 23062) at the Project. In Summary, one of the eight (8) soil samples revealed concentrations of target analytes which exceed their respective NCDENR reportable Action Levels of 10 milligrams per kilograms (mg/kg) for TPH. Laboratory analysis of soil sample S-8-4 revealed a TPH-DRO concentration of 47.6 mg/kg and TPH-GRO concentration of 115 mg/kg, which exceed the NCDENR reportable action level of 10 mg/kg for TPH.

Two (2) of the three (3) groundwater samples (MW-2 and MW-17) revealed concentrations of target analytes which exceed their respective NCAC 2L Groundwater Quality Standards (2L Standard).

Laboratory analysis of groundwater sample MW-2 revealed a Benzene concentration of 697 micrograms per liter (ug/L), which exceeds the 2L Standard of 1 ug/L for Benzene. In addition, groundwater sample MW-2 revealed concentrations of Toluene (3,030 ug/L), total Xylenes (3,000 ug/L), Naphthalene (73.7J ug/L), n-Propylbenzene (115 ug/L), 1,2,4-Trimethylbenzene (992 ug/L), MTBE (95.6 ug/L) and 2-Methylnaphthalene (37.6 ug/L), all of which exceed their respective 2L Standards. A 1-Methylnaphthalene concentration of 19.4 ug/L was also detected in MW-2. Currently there is not a 2L Standard established for 1-Methylnaphthalene. Several other target analytes were also detected in MW-2, all of which were below their respective 2L Standards.

No detectable concentrations of target analytes were identified in groundwater sample MW-15.

Laboratory analysis of groundwater sample MW-17 revealed a Benzene concentration of 105 ug/L, which exceeds the 2L Standard of 1 ug/L for Benzene. In addition, groundwater sample MW-17 revealed concentrations of Ethylbenzene (693 ug/L), total Xylenes (3,560^a ug/L), n-Butylbenzene (82.6 ug/L), Naphthalene (180 ug/L), n-Propylbenzene (525 ug/L), 1,2,4-Trimethylbenzene (2,700^a ug/L), 1,2,5-Trimethylbenzene (911 ug/L), MTBE (30.9 ug/L) and 2-Methylnaphthalene (79.8 ug/L), all of which exceed their respective 2L Standards. A 1-Methylnaphthalene concentration of 35.9 ug/L was also detected in MW-17. Several other target analytes were also detected in MW-17, all of which were below their respective 2L Standards.

In addition, EA personnel gauged several of the existing groundwater monitoring wells and measured free phase petroleum thicknesses of approximately 0.05 feet in monitoring well MW-4 (located to the northwest of the UST basin) and approximately 0.90 feet in an unidentified four-inch diameter recovery well (located to the east of the UST basin).

On March 5, 2012, EA personnel contacted Mr. James Brown with the North Carolina Department of Environment and Natural Resources (NCDENR), Fayetteville Regional Office, Division of Waste Management, Underground Storage Tank (UST) Program to obtain information and status of several monitoring and recovery wells located at the Project. According to Mr. Brown, the Project, identified as Pantry 486 (Facility ID 0-023655), has an open release incident (No. 23062) that was reported on March 21, 2001. Mr. Brown stated that the Project is undergoing Free Product Assessment activities and the most recent monitoring report was dated January 17, 2012. No reports or additional information was made available to EA.

The Project site is an "open" contamination incident that is being addressed by The Pantry, Inc., the responsible party or RP. The contamination found during this Phase II ESA appears to be associated with the past release and in accordance with NCDENR guidelines, it would be addressed by the RP as part of the ongoing work.

Based on the conclusions of the Phase II ESA, EA recommends the following:

• EA recommends reporting the findings of this investigation to the North Carolina Department of Environment and Natural Resources (NCDENR), Fayetteville Regional Office, Division of Waste Management, Underground Storage Tank (UST) Program. The NCDENR will determine if the identified soil and groundwater contamination correlates with the data on file for the open release incident (Incident # 23062) and if additional soil and/or groundwater assessment will be required based on the findings. The NCDENR will provide a determination as to whether any additional assessment or remediation work, if required, will remain the responsibility of The Pantry or whether the data points to a new contaminant source and warrants additional investigation by a prospective buyer of the property.

2.0 FIELD ACTIVITIES

2.1 Subsurface Utility Locating

EA personnel contacted the North Carolina One Call Center and requested that the local utility services conduct an Electromagnetic (EM) Survey in the area of concern at the Project to determine the orientation and location of underground utility lines for optimal sampling locations. At the time of the assessment, underground utility lines appeared to be marked up to the Project boundaries. However, public utilities are not authorized to locate underground lines on private property.

On March 1, 2012, EA and its subcontractor, KCI Associates (KCI), conducted an on-site ground-penetrating radar (GPR) survey and EM Survey at the Project to determine the orientation and location of the existing petroleum underground storage tanks (USTs) and on-site subsurface utilities in order to determine optimal sampling locations. All items located were marked directly on the surface using paint.

2.2 Soil Assessment

On March 1, 2012, EA and its subcontractor utilized a Geoprobe® sampling device to advance soil sample points in eight (8) locations (S-1 through S-8) of the Project. A total of eight (8) soil samples (S-1-16, S-2-12, S-3-12, S-4-12, S-5-4, S-6-4, S-7-4 and S-8-4) were collected from the eight (8) soil sample point locations depicted on the attached **Figure 2.** EA personnel screened the soil columns for Volatile Organic Compounds (VOCs) from each boring at four-foot intervals using a Photo Ionization Detector (PID), and visual and olfactory indicators. PID screening results for each soil boring are detailed in **Table 1** below. Soil boring logs are included in **Appendix 1** which detail soil descriptions, sampling depths and field screening results.

Soil boring S-1 was advanced to the south of the UST basin to a depth of sixteen (16) feet below grade (BG). Soils encountered consisted of orange sand at depths of 0-3 feet BG underlain by brown-tan sand at depths of 3-5 feet BG, orange silt and sand at depths of 5-8 feet BG, Tan and orange sand and silt at depths of 8-12 feet BG and tan silt and sand at depths of 12-16 feet BG. Petroleum odors were noted in soil boring S-1 at depths of 3-4 feet BG and 5-16 feet BG. One (1) soil sample (S-1-16) was collected at a depth of sixteen (16) feet BG from soil boring S-1.

Soil boring S-2 was advanced to the west of the UST basin to a depth of twelve (12) feet BG. Soils encountered consisted of orange sand at depths of 0-4 feet BG underlain by brown sand and clay at depths of 4-8 feet BG and orange sand at depths of 8-12 feet BG. Soils were observed to be moist at approximately seven (7) feet BG. Petroleum odors were noted in soil boring S-2 at depths of 4-12 feet BG. One (1) soil sample (S-2-12) was collected at a depth of twelve (12) feet BG from soil boring S-2.

Soil boring S-3 was advanced to the east of the UST basin to a depth of twelve (12) feet BG. Soils encountered consisted of brown and black sand at depths of 0-4 feet BG underlain by orange silty clay with some sand at depths of 4-8 feet BG and orange-tan sand and silt at depths of 8-12 feet BG. Petroleum odors were noted in soil boring S-3 at depths of 4-12 feet BG. One (1) soil sample (S-3-12) was collected at a depth of twelve (12) feet BG from soil boring S-3.

Soil boring S-4 was advanced to the north of the UST basin to a depth of twelve (12) feet BG. Soils encountered consisted of brown sand at depths of 0-4 feet BG underlain by brown clay and sand at depths of 4-8 feet BG and orange silt and sand at depths of 8-12 feet BG. Petroleum odors were noted in soil boring S-4 at depths of 4-12 feet BG. One (1) soil sample (S-4-12) was collected at a depth of twelve (12) feet BG from soil boring S-4.

Soil boring S-5 was advanced to the east and down-gradient of the gasoline product lines, approximately half the distance between the UST basin and the fuel dispensers to a depth of four (4) feet BG. Soils encountered consisted of brown and orange sand at depths of 0-4 feet BG. Petroleum odors were noted throughout soil boring S-5. One (1) soil sample (S-5-4) was collected at a depth of four (4) feet BG from soil boring S-5.

Soil boring S-6 was advanced adjacent to the east of the northeastern-most fuel dispenser island to a depth of four (4) feet BG. Soils encountered consisted of orange sand at depths of 0-4 feet BG. No petroleum odors were noted throughout soil boring S-6. One (1) soil sample (S-6-4) was collected at a depth of four (4) feet BG from soil boring S-6.

Soil boring S-7 was advanced adjacent to the east of the southern-most fuel dispenser island to a depth of four (4) feet BG. Soils encountered consisted of orange sand at depths of 0-4 feet BG. No petroleum odors were noted throughout soil boring S-7. One (1) soil sample (S-7-4) was collected at a depth of four (4) feet BG from soil boring S-7.

Soil boring S-8 was advanced adjacent to the east of the southern-most fuel dispenser island to a depth of four (4) feet BG. Soils encountered consisted of orange-brown sand at depths of 0-4 feet BG. Petroleum odors were noted throughout soil boring S-8. One (1) soil sample (S-8-4) was collected at a depth of four (4) feet BG from soil boring S-8.

Table 1 – PID Soil Screening Results

Soil Boring	Depth (Feet Below Grade)	PID Reading – Parts Per Million
	4	0
S-1	8	1.6
5-1	12	83.2
	16	677
	4	0
S-2	8	21.8
	12	95.7
	4	21.2
S-3	8	25.8
	· 12	212
	4	2.4
S-4	8	20.2
	12	173.2
S-5	4	6.2
S-6	4	0
S-7	4	. 0
S-8	4	1,018

The soil samples were placed into appropriate sample containers and labeled with the project name, time and date of collection, and analysis to be performed. The filled sample containers were placed in a cooler containing ice and transported/shipped to Accutest Laboratories in Orlando, Florida (a North Carolina-certified laboratory). A chain-of-custody form was maintained with the samples. All soil samples were submitted and analyzed for Total Petroleum Hydrocarbons (TPH) – Gasoline Range Organics (GRO) and TPH – Diesel Range Organics (DRO). A copy of the laboratory analytical report is attached as **Appendix 2**. The soil results are discussed in **Section 3.0** of this report and are summarized in **Table 2**.

2.3 Groundwater Assessment

On March 1, 2012, EA personnel sampled three (3) existing on-site groundwater monitoring wells (MW-2, MW-15 and MW-17) associated with the on-site petroleum release incident (Incident Number 23062). Groundwater monitoring wells MW-2, MW-15 and MW-17 are depicted on the attached **Figure 2**, along with several other unidentified monitoring wells, and Monitoring Well Construction Information for the sampled wells is included in **Table 3**.

Groundwater monitoring well MW-2 is located to the south of the UST basin, groundwater monitoring well MW-15 is located to the northeast of the UST basin and groundwater monitoring well MW-17 is located to the northeast of the fuel dispensers. The depth of groundwater measured in the monitoring wells ranged from 18.70 feet below top of well casing (TOC) in monitoring well MW-17 to 19.35 feet TOC in monitoring well MW-2.

In addition, EA personnel gauged several of the existing groundwater monitoring wells and measured free phase petroleum thicknesses of approximately 0.05 feet in monitoring well MW-4 (located to the northwest of the UST basin) and approximately 0.90 feet in an unidentified four-inch diameter recovery well (located to the east of the UST basin).

The groundwater samples were placed into appropriate sample containers and labeled with the project name, time and date of collection, and analysis to be performed. The filled sample containers were placed in a cooler containing ice and transported/shipped to Accutest Laboratories in Orlando, Florida (a North Carolina-certified laboratory). A chain-of-custody form was maintained with the samples. All Groundwater samples were submitted and analyzed for Volatile Organic Compounds (VOCs) by EPA Method 8260 and for Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270. A copy of the laboratory analytical report is attached as **Appendix 2**. The groundwater results are discussed in **Section 3.0** of this report and are summarized in **Table 4**.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Soil Assessment

EA collected a total of eight (8) soil samples (S-1-16, S-2-12, S-3-12, S-4-12, S-5-4, S-6-4, S-7-4 and S-8-4) in the locations shown on **Figure 2**. A copy of the laboratory analytical report is attached as **Appendix 2** and a summary of the soil sampling results is presented in **Table 2**. In Summary, one of the eight (8) soil samples revealed concentrations of target analytes which exceed their respective NCDENR reportable Action Levels of 10 milligrams per kilograms (mg/kg) for TPH.

Laboratory analysis of soil sample S-8-4 revealed a TPH-DRO concentration of 47.6 mg/kg and TPH-GRO concentration of 115 mg/kg, which exceed the NCDENR reportable action level of 10 mg/kg for TPH.

Laboratory analysis of soil sample S-1-16 revealed a TPH-DRO concentration of 3.71J mg/kg and TPH-GRO concentration of 3.61J mg/kg, which are below the NCDENR reportable action level of 10 mg/kg for TPH. The "J" value indicates an estimated value.

No detectable concentrations of target analytes were identified in soil samples S-2-12, S-3-12, S-4-12, S-5-4, S-6-4 and S-7-4.

Refer to Section 4.0 for EA's recommendations.

3.2 Groundwater Assessment

EA collected a total of three (3) groundwater samples from three (3) existing on-site groundwater monitoring wells (MW-2, MW-15 and MW-17) which are shown on **Figure 2**. A copy of the laboratory analytical report is attached as **Appendix 2** and a summary of the groundwater sampling results is presented in **Table 4**. In summary, two (2) of the three (3) groundwater samples (MW-2 and MW-17) revealed concentrations of target analytes which exceed their respective NCAC 2L Groundwater Quality Standards (2L Standard).

Laboratory analysis of groundwater sample MW-2 revealed a Benzene concentration of 697 micrograms per liter (ug/L), which exceeds the 2L Standard of 1 ug/L for Benzene. In addition, groundwater sample MW-2 revealed concentrations of Toluene (3,030 ug/L), total Xylenes (3,000 ug/L), Naphthalene (73.7J ug/L), n-Propylbenzene (115 ug/L), 1,2,4-Trimethylbenzene (992 ug/L), MTBE (95.6 ug/L) and 2-Methylnaphthalene (37.6 ug/L), all of which exceed their respective 2L Standards. A 1-Methylnaphthalene concentration of 19.4 ug/L was also detected in MW-2. Currently there is not a 2L Groundwater Quality Standard established for 1-Methylnaphthalene. Several other target analytes were also detected in MW-2, all of which were below their respective 2L Standards.

No detectable concentrations of target analytes were identified in groundwater sample MW-15.

Laboratory analysis of groundwater sample MW-17 revealed a Benzene concentration of 105 ug/L, which exceeds the 2L Standard of 1 ug/L for Benzene. In addition, groundwater sample MW-17 revealed concentrations of Ethylbenzene (693 ug/L), total Xylenes (3,560° ug/L), n-Butylbenzene (82.6 ug/L), Naphthalene (180 ug/L), n-Propylbenzene (525 ug/L), 1,2,4-Trimethylbenzene (2,700° ug/L), 1,2,5-Trimethylbenzene (911 ug/L), MTBE (30.9 ug/L) and 2-Methylnaphthalene (79.8 ug/L), all of which exceed their respective 2L Standards. A 1-Methylnaphthalene concentration of 35.9 ug/L was also detected in MW-17. Several other target analytes were also detected in MW-17, all of which were below their respective 2L Standards.

Refer to Section 4.0 for EA's recommendations.

4.0 CONCLUSIONS AND RECOMMENDATIONS

In Summary, one of the eight (8) soil samples revealed concentrations of target analytes which exceed their respective NCDENR reportable Action Levels of 10 milligrams per kilograms (mg/kg) for TPH. Laboratory analysis of soil sample S-8-4 revealed a TPH-DRO concentration of 47.6 mg/kg and TPH-GRO concentration of 115 mg/kg, which exceed the NCDENR reportable action level of 10 mg/kg for TPH.

Two (2) of the three (3) groundwater samples (MW-2 and MW-17) revealed concentrations of several target analytes which exceed their respective 2L Standard.

Laboratory analysis of groundwater sample MW-2 revealed a Benzene concentration of 697 micrograms per liter (ug/L), which exceeds the 2L Standard of 1 ug/L for Benzene. In addition, groundwater sample MW-2 revealed concentrations of Toluene (3,030 ug/L), total Xylenes (3,000 ug/L), Naphthalene (73.7J ug/L), n-Propylbenzene (115 ug/L), 1,2,4-Trimethylbenzene (992 ug/L), MTBE (95.6 ug/L) and 2-Methylnaphthalene (37.6 ug/L), all of which exceed their respective 2L Standards. A 1-Methylnaphthalene concentration of 19.4 ug/L was also detected in MW-2. Currently there is not a 2L Standard established for 1-Methylnaphthalene. Several other target analytes were also detected in MW-2, all of which were below their respective 2L Standard.

No detectable concentrations of target analytes were identified in groundwater sample MW-15.

Laboratory analysis of groundwater sample MW-17 revealed a Benzene concentration of 105 ug/L, which exceeds the NCAC 2L Groundwater Standard of 1 ug/L for Benzene. In addition, groundwater sample MW-17 revealed concentrations of Ethylbenzene (693 ug/L), total Xylenes (3,560° ug/L), n-Butylbenzene (82.6 ug/L), Naphthalene (180 ug/L), n-Propylbenzene (525 ug/L), 1,2,4-Trimethylbenzene (2,700° ug/L), 1,2,5-Trimethylbenzene (911 ug/L), MTBE (30.9 ug/L) and 2-Methylnaphthalene (79.8 ug/L), all of which exceed their respective 2L Standard. A 1-Methylnaphthalene concentration of 35.9 ug/L was also detected in MW-17. Several other target analytes were also detected in MW-17, all of which were below their respective 2L Standard.

In addition, EA personnel gauged several of the existing groundwater monitoring wells and measured free phase petroleum thicknesses of approximately 0.05 feet in monitoring well MW-4 (located to the northwest of the UST basin) and approximately 0.90 feet in an unidentified four-inch diameter recovery well (located to the east of the UST basin).

On March 5, 2012, EA personnel contacted Mr. James Brown with the NCDENR, Fayetteville Regional Office, Division of Waste Management, UST Program to obtain information and status of several monitoring and recovery wells located at the Project. According to Mr. Brown, the Project, identified as Pantry 486 (Facility ID 0-023655), has an open release incident (No. 23062) that was reported on March 21, 2001. Mr. Brown stated that the Project is undergoing Free Product Assessment activities and the most recent monitoring report was dated January 17, 2012. No reports or additional information was made available to EA.

Based on the conclusions of the Phase II ESA, EA recommends the following:

• EA recommends reporting the findings of this investigation to the North Carolina Department of Environment and Natural Resources (NCDENR), Fayetteville Regional Office, Division of Waste Management, Underground Storage Tank (UST) Program. The NCDENR will determine if the identified soil and groundwater contamination correlates with the data on file for the open release incident (Incident # 23062) and if additional soil and/or groundwater assessment will be required based on the findings. The NCDENR will provide a determination as to whether any additional assessment or remediation work, if required, will remain the responsibility of The Pantry or whether the data points to a new contaminant source and warrants additional investigation by a prospective buyer of the property.

5.0 CLOSURE

EA appreciates the opportunity to be of service to you on this project. Please call the undersigned at (704) 846-8853 if you desire additional information.

Sincerely,

EnviroAssessments, PLLC

Amanda L. Petoskey Environmental Scientist

Attachments

CAROLANDE SEAL 1359 LUNDS

Cliff R. Lundgren, P.G. Project Manager

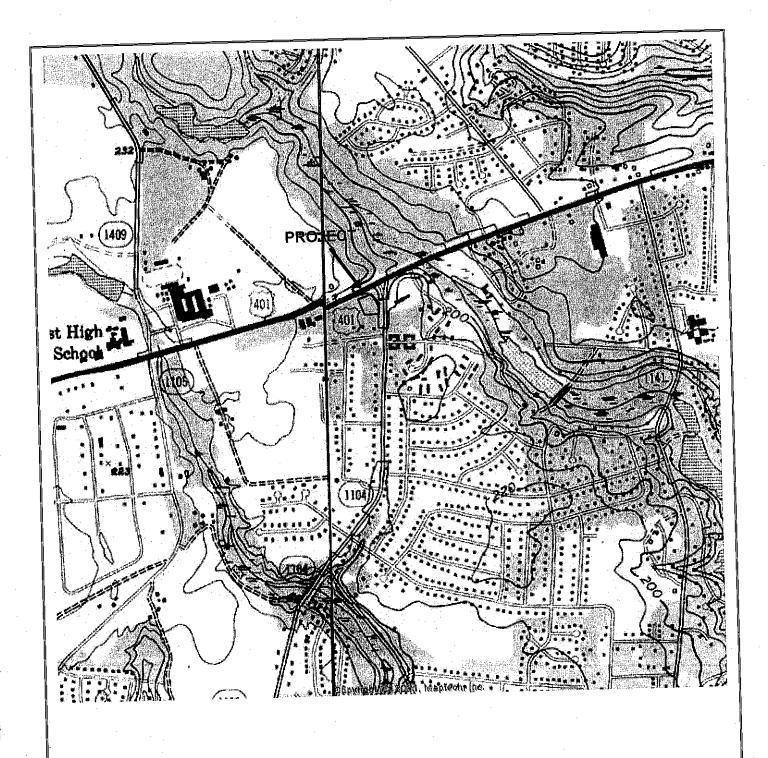


Figure 1 - Site Location Map

Source: USGS 7.5 Minute Topographic Map Fayetteville, NC Quadrangle 1957, Revised 1987

Scale: 1: 24,000 N1



9387 Monrae Road, Suite K Charlotte, North Caroline 28270 1 704,844,8953 F 704,844,3271 enviroassessments.com

enviroassessments

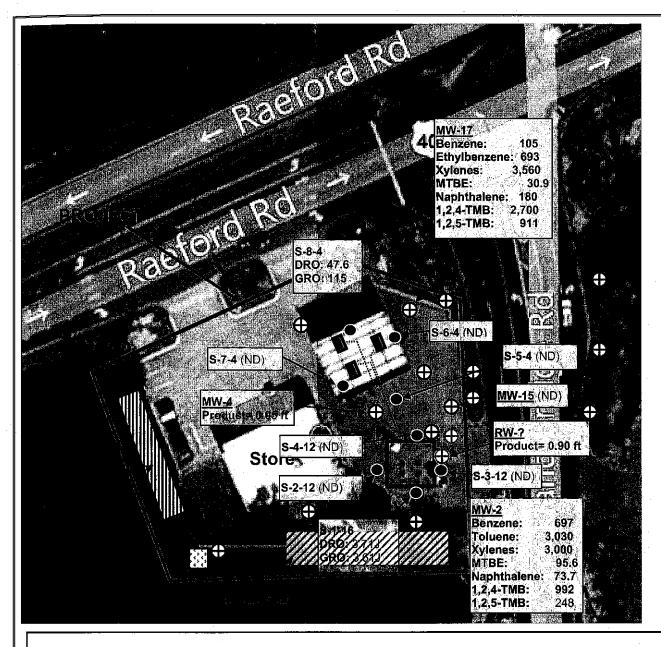
Site Name:

Kangaroo Station 6605 Raeford Road (Hwy 401) Fayetteville, Cumberland Co,

North Carolina

EA Project Number:

12-9183.1



KEY

- Soil Sample Location
- Approximate Existing Monitoring Well Location
- Approximate Existing Recovery Well Location
 - Current Gasoline UST Basin
 - Fuel Product Lines



Gasoline Dispenser

- *Refer to Table 4 for all other detected target analytes in groundwater
- * Soil concentrations are reported in milligrams per kilograms (mg/kg).
- * Groundwater concentrations are reported in micrograms per liter (ug/L).
- *BOLD depicts target analytes which exceed state standards

Figure 2: Site Plan

9307 Monsoe Road, Suite K Charlotte, North Carolina 28270 T 704,846,8853 F 704,846,3271

enviroassessments.com



Site Name: Kangaroo Station

6605 Raeford Road (Hwy 401) Fayetteville, Cumberland Co,

Scale: NTS

North Carolina

EA Project # 12-9183.1

Source: Bing Maps



enviroassessments

TABLE 2

FAYETTEVILLE, CUMBERLAND COUNTY, NORTH CAROLINA **ENVIROASSESSMENTS PROJECT NO. 12-9183.1** 6605 RAEFORD ROAD (HIGHWAY 401) SOIL ANALYTICAL RESULTS KANGAROO STATION

-										
Sample ID		S-1-16	S-2-12	S-3-12	S-4-12	S-5-4	S-6-4	S-7-4	S-8-4	MC A officer
Sample Depth (ft, bgs)	Analytical	16	12	12	12	4	4	4	4	INC. ACTIOIL
Collection Date	Memod	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012	3/1/2012	FCYCI
Total Petroleum Hydrocarbons(TPH) -	TPH) - Gasoline Range Org	e Organics (GRO	RO)							
ТРН	GRO	3.61 J	QN	QN	ND	QN	ND	ND	115	10
Total Petroleum Hydrocarbons (TPH) -	Diesel Range	Organics (DRO	e e							
ТРН	DRO	3.71 J	ΠN	QN	ND	QN	ND	ND	47.6	10

Notes:

All concentrations are reported in milligrams per kilogram (mg/kg). **BOLD** results exceed the NC Action Level of 10 mg/kg for TPH

ft, bgs - feet below ground surface

ND - Not Detected

J - Estimated value above laboratory method detection limits and below laboratory reporting limits.

TABLE 3

MONITORING WELL CONSTRUCTION/WATER LEVEL INFORMATION KANGAROO STATION 6605 RAEFORD ROAD (HIGHWAY 401) FAYETTEVILLE, CUMBERLAND COUNTY, NORTH CAROLINA ENVIROASSESSMENTS, PLLC - PROJECT NO. 12-9183.1

Well I.D.	Installation Date	Well Inner Diameter (in.)	Total Well Depth (ft.,bgs)	Screened Interval (ft., bgs)	DTP 3/1/2012 (ft. TOC)	DTW 3/1/2012 (ff., TOC)
Recovery Well*	Unknown	4	Unknown	Unknown	18.30	19.20
MW-2*	Unknown	2	Unknown	Unknown	NA	19.35
MW-4	4/26/2001	2	30	10-30	19.94	19.99
MW-15	11/7/2003	2	99	99-19	NA	19.50
MW-17	10/1/2011	2	30	10-30	NA	18.70

bgs = below ground surface

TOC = top of casing.

DTW = depth to water.

DTP = depth to product.

NA = Not Applicable

* No well tag was noted in the recovery well. *MW-2 well tag was grouted inside well and was not legible.

TABLE 4

GROUNDWATER SAMPLING ANALYTICAL RESULTS KANGAROO STATION 6605 RAEFORD ROAD (HIGHWAY 401) FAYETTEVILLE, CUMBERLAND COUNTY, NORTH CAROLINA ENVIROASSESSMENTS, PLLC PROJECT NO. 12-9183.1

Sample ID	Analytical	MW-2	MW-15	MW-17		Gross Contamiantion Level (GCL)
Collection Date	Method	3/1/2012	3/1/2012	3/1/2012	Standard	
Volatile Organic Compounds by EF	A Method 82	60B				
Acetone	8260B	613 J	ND	ND	6000	6000000
Benzene	8260B	697	ND	105	11	5000
Toluene	8260B	3030	ND	575	600	260000
Ethylbenzene	8260B	491	ND	693	600	84500
Isopropylbenzene	8260B	36.9 J	ND	ND	70	25000
Xylenes, total	8260B	3000	ND	3560°	500	85500
n-Butylbenzene	8260B	ND	ND	82.6	70	6900
sec-Butylbenzene	8260B	ND	ND	53.2	70	8500
p-Isopropyltoluene	8260B	ND	ND	26.1	NE	NE
Naphthalene	8260B	73.7 J	ND	180	6	6000
n-Propylbenzene	8260B	115	ND	525	70	3000
1,2,4-Trimethylbenzene	8260B	992	ND	2700°	400	28500
1,2,5-Trimethylbenzene	8260B	248	ND	911	400	25000
Methyl Tert-Butyl Ether (MTBE)	8260B	95.6	ND	30.9	20	20000
Polycyclic Aromatic Hydrocarbons	(PAH) by EP.	A Method 827	0C			
Fluorene	8270C	ND	ND	0.52 J	300	990
1-Methylnaphthalene	8270C	19.4	ND	35.9	NE	NE
2-Methylnaphthalene	8270C	37.6	ND	79.8 ^a	30	12500
Naphthalene	8270C	68.5 ⁿ	ND	76.3 ^a	6	6000
Phenanthrene	8270C	0,30 J	ND	0.43 J	200	410

All concentrations are reported in micrograms per liter(ug/L). **BOLD** results exceed their respective NCAC 2L Groundwater Standard.

ND - Not Detected

NE - Not Established

J - Estimated value above laboratory detection limits and below laboratory reporting limits.

a - Result is from Run #2

WITHERS & RAVENEL

ENGINEERS | PLANNERS | SURVEYORS

September 4, 2015

Division of Waste Management UST Section Fayetteville Regional Office Systel Building, Suite 714 225 Green Street Fayetteville, North Carolina 28301

Attn: Mr. James Brown

Re: Active Remediation Monitoring Report

Pantry #486

6605 Raeford Road

Fayetteville, Cumberland County, North Carolina

Incident # 23062

W&R Project No. 02071121.0

Dear Mr. Brown:

Withers & Ravenel (W&R) has prepared this report summarizing results of groundwater monitoring completed at the above referenced site in May 2015. The following paragraphs provide background information and summarize the groundwater monitoring data collected from the site.

Sincerely,

WITHERS & RAVENEL, INC.

Matt James, P.G. Project Manager

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Section A. Site Identification

1. Site Identification

Date of Report:

September 4, 2015

Facility ID: Site Name: 0-023655

Pantry #486

Site Street Address:

6605 Raeford Road

Site City/Town:

Favetteville

Zip: 28304

UST Incident No: 23062

County: Cumberland

Site Risk/Ranking: 1175D

Description of Geographical Data Point: Close to Source Area

Location Method (GPS, topo map, other): topo map

Latitude (decimal degrees): N 35° 02' 24"

Longitude (decimal degrees): W 78° 59' 50"

2. Contact Information

UST Owner: The Pantry, Inc.

Address: 305 Gregson Drive, Cary, North Carolina 27511

Tel: 919.774.6700

UST Operator: The Pantry, Inc.

Address: 305 Gregson Drive, Cary, North Carolina 27511

Tel: 919.774.6700

Property Owner: 6157 Crystal Drive LLC

Address: P. O. Box 926, Dunn, North Carolina 28335

Tel: Unknown

Property Occupant: The Pantry, Inc.

Address: 305 Gregson Drive, Cary, North Carolina 27511

Tel: 919.774.6700

Consultant/Contractor: Withers & Ravenel, Inc.

Address: 111 MacKenan Drive, Cary, NC 27511

Tel: 919.469.3340

Analytical Laboratory: Environmental Science Corporation (ESC)

State Certification #:ENV375

Address: 12065 Lebanon Road, Mount Juliet, TN 37122

Tel: 615.758.5859

3. Release Information:

Date Discovered: March 21, 2001

Estimated Quantity of Release: Unknown

Cause of Release: UST system Source of Release: UST /Piping

Type of material release occurred: Gasoline fuel

Sizes & Contents of UST system(s) from which release occurred: 3 ~10,000-Gallon

4. Information about the Monitoring Report

Dates of Groundwater Monitoring:

May 19 & 20, 2015

Period of Time Reported:

1st Semester 2015

Type of Monitoring Report:

Active Remediation Monitoring

5. Certification

I, _______ Professional Enginee/Licensed Geologist for Withers & Ravenel, Inc., do certify that the information contained in this report is correct and accurate to the best of my knowledge.

(Please Affix Seal and Signature)

Withers & Ravenel, Inc. is licensed to practice geology/engineering in North Carolina. The certification numbers are C-293 (Geology) and C-0451 (Engineering).

ENGINEERS | PLANNERS | SURVEYORS

ACTIVE REMEDIATION MONITORING REPORT

PANTRY #486
6605 Raeford Road
Fayetteville, Cumberland County, North Carolina
Incident # 23062
Facility I.D. Number: 0-023655

Risk Classification: Intermediate Ranking: I175D Land Use Category: Residential

Responsible Party:
The Pantry, Inc.
305 Gregson Drive
Cary, North Carolina 27511
(919) 774-6700

Current Property Owner: 6157 Crystal Drive LLC Post Office Box 926 Dunn, North Carolina 28335

Report Prepared By:
Withers & Ravenel, Inc.
115 MacKenan Drive
Cary, North Carolina 27511
(919) 469-3340
W&R Project #02071121.0

Release Discovered:

March 21, 2001

Release Quantity:

Unknown

Cause/Source of Release:

Apparent UST System

UST System:

3 - 10,000 Gallon Gasoline USTs

Latitude:

N 35° 02' 24"

Longitude:

W 78° 59' 50"

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1 BACKGROUND

The Pantry #486 property is currently occupied by a retail gasoline and convenience store located at 6605 Raeford Road in Fayetteville, NC. The onsite facility is currently active and contains three 10,000-gallon gasoline underground storage tanks (USTs).

In January 2001 the statistical inventory reconciliation (SIR) data for the site indicated a "fail" for the 10,000-gallon premium gasoline UST. As a result, the Pantry, Inc. (Pantry) ordered a tank tightness test. The test was conducted in February 2001 and indicated a "pass". The Pantry pumped out the contents of the tank and inspected the interior where a hole was discovered in the bottom of the UST near the fill port end.

In March 2001, the Pantry contracted SEI Environmental, Inc. (SEI) to investigate the release. Recovery wells were installed and four AFVR events were conducted. A 20-Day Report and AFVR Reports were submitted to the NCDENR Division of Waste Management, UST Section in May 2001.

SEI conducted Phase I and II LSA activities and submitted a report in July 2001. Free product was present in recovery wells and monitoring wells adjacent to the source area.

Contaminant levels in groundwater were determined to be above 15A NCAC 2L Standards and less than Gross Contaminant Levels (GCLs). A total of six AFVR events were conducted at the site from June 2001 to February 2002. The report for the events was submitted by SEI in March 2002.

In July 2001, the NC Division of Waste Management, UST Section (NCDWM-UST) issued a Notice of Regulatory Requirements requiring the completion of a Comprehensive Site Assessment (CSA) for the subject site. SEI conducted CSA activities between October 2001 and February 2003. The CSA report was submitted to the NCDWM-UST Section in April 2003. Following the completion of the CSA, SEI recommended the development of a Corrective Action Plan (CAP) for the site, including a soil investigation to determine the extent of free product in soil surrounding the UST basin. Copies of the historical groundwater monitoring data tables from the previous sampling conducted by SEI are attached in **Appendix A**.

In January/February 2008, October 2009, May 2010, June 2010, and December 2010, W&R completed additional rounds of groundwater monitoring activities and updated the receptor survey for the site. Groundwater monitoring data collected over these events has illustrated that groundwater results have fluctuated over time in MW-5 through MW-8, MW-14, and MW-15. Whereas wells MW-1 through MW-4 and MW-9 have contained NCAC 2L groundwater violations throughout the monitoring events. Based on the results of a May 2010 updated receptor survey, no active water supply wells are located within 1,000 feet of the site. However, one inactive water supply well is situated approximately 445 feet south of the site (see Figure 2). Groundwater flow on the site has been shown to be towards the northeast and away from this well.

A NORR was issued on January 28, 2011 reducing the risk of the site from High to Intermediate based on the results of previous monitoring events and receptor survey update.

In March and October 2011, W&R mobilized to the site to complete free product recovery activities, which consisted of free product gauging as well as bailing of free product. Historically, free product has been observed in wells MW-1 through MW-4, MW-16 through MW-21, and RW-1 through RW-3. Since the completion of several aggressive fluid vapor recovery (AFVR) events at the site between June 2001 and February 7, 2002 under the supervision of SEI, free product thicknesses have ranged from 0.01 feet to 1.01 feet, which was a reduction of approximately 50% from the pre-AFVR range.

W&R completed a groundwater monitoring event at the site in June/July 2012 that included free product monitoring and recovery activities. Mobile multi-phase extraction (MMPE) events have been completed at the site under W&R's supervision in June 2010, November-December 2010, and July 2012. A total of 32,866 gallons of water, 144 gallons of free phase product and 650.77 gallons of vaporized product were removed during the combined MMPE events. Free product thicknesses have ranged from 0.01 feet to 0.52 feet, which was a reduction of approximately 50% from the SEI-AFVR range.

W&R completed a groundwater monitoring event at the site in April/May 2013 that included free product monitoring and recovery activities. An MMPE event was completed at the site in April 2013. During the event approximately 10,806 gallons of VOC impacted water were recovered. An estimated 20 gallons of free product was removed as liquid. Based on mass removal calculations, 2,358.11 pounds or 383.31 gallons of VOCs as gasoline was removed as vapor. Free product thicknesses have ranged from 0.01 feet to 0.16 feet prior to the event. Immediately following the event, free product was only identified in monitoring well MW-19 at a thickness of 0.15 feet.

W&R completed free product monitoring and recovery events on October 31, November 18, and December 16, 2013. Free product was detected in wells RW-1, RW-3, MW-19, and MW-20 with product thicknesses ranging from 0.01 to 0.87 feet in the October event. During the November event, free product was detected in wells RW-3, MW-19, and MW-20 with product thicknesses ranging from 0.03 to 0.90 feet. Finally, free product was only detected in wells MW-19 and MW-20 with product thicknesses of 0.09 and 0.39 feet in December 2013. W&R personnel removed free product using a peristaltic pump during each event. A total of 31 gallons of liquid was removed from wells with detected levels of free product with an estimated 10 gallons of free product or non-aqueous phase liquid (NAPL) removed. Following the free product monitoring and recovery events, W&R completed a groundwater monitoring event on December 27, 2013. Groundwater samples were collected from wells MW-5, MW-6, MW-7, MW-9, MW-10, MW-13, MW-14, MW-15, MW-17, MW-18, MW-21, and MW-22. Monitoring wells MW-1 through MW-4, MW-19, and MW-20 were not sampled due to the presence of free product. Analytical results indicated that petroleum related compounds were detected above their respective standards defined by NCAC Title 15A, Subchapter 2L, Section .0202 (2L Standards) in monitoring wells MW-9 and MW-21. No targeted compounds were detected above GCLs.

In January 2014, W&R completed a New Technology Cleanup Plan recommending to replace the proposed onsite dual-phase extraction with air sparging remediation strategy

set forth in the March 2004 Corrective Action Plan (CAP) with an onsite Air Sparge and Soil Vapor Extraction (SVE) system along with monthly offsite free phase product recovery events via peristaltic pumps and/or bailing.

A groundwater sampling event completed in September 2014 revealed a GCL violation for benzene in MW-4 and 2L violations in monitoring wells MW-1, MW-2, MW-3, MW-4, MW-9, MW-16, MW-17, MW-21, and MW-22. Free phase product detected in MW-19 and MW-20 during the groundwater sampling event.

2 Free Product Monitoring and Recovery

W&R completed free product monitoring and recovery activities at the site on a monthly basis from January through September 2014. During these events, monitoring wells MW-1 through MW-4 and MW-16 through MW-22 as well as remediation wells RW-1 through RW-3 were monitored for the presence of free phase product. Wells in which the free product was identified were pumped or bailed until free phase product was no longer visible in the recovered groundwater. These activities are described in the following sections.

On January 22, 2014, free product was detected in wells MW-2, MW-19, and RW-3 with free product thicknesses ranging from 0.01 feet (RW-3) to 0.67 feet (MW-19). W&R personnel pumped approximately 10.5 gallons of groundwater/petroleum mixture consisting of approximately 0.75 gallons of NAPL from the three wells.

On February 17, 2014, free product was detected in wells MW-2 and MW-19 with free product thicknesses ranging from 0.04 feet (MW-2) to 0.64 feet (MW-19). W&R personnel pumped approximately 9 gallons of groundwater/petroleum mixture consisting of approximately 0.9 gallons of NAPL from the two wells.

On March 20, 2014, free product was detected in wells MW-2 and MW-19 with free product thicknesses ranging from 0.08 feet (MW-2) to 0.91 feet (MW-19). W&R personnel pumped approximately 6 gallons of groundwater/petroleum mixture consisting of approximately 1 gallon of NAPL from the two wells.

On April 22, 2014, free product was detected in well MW-19 with a free product thickness reading of 1.17 feet. W&R personnel pumped approximately 2.5 gallons of groundwater/petroleum mixture consisting of approximately 1.5 gallons of NAPL from the well.

On May 22, 2014, free product was detected in well MW-19 with a free product thickness reading of 0.67 feet. W&R personnel pumped approximately 2 gallons of groundwater/petroleum mixture consisting of approximately 0.5 gallons of NAPL from the well.

On June 19, 2014, free product was detected in wells MW-2 and MW-19 with free product thicknesses ranging from 0.02 feet (MW-2) to 0.11 feet (MW-19). W&R personnel pumped approximately 4 gallons of groundwater/petroleum mixture from the two wells.

On July 24, 2014, free product was detected in wells MW-2, MW-19, MW-20 and RW-3 with free product thicknesses ranging from 0.08 feet (MW-20) to 0.55 feet (MW-19). W&R personnel pumped approximately 3.5 gallons of groundwater/petroleum mixture consisting of approximately 0.6 gallons of NAPL from the wells.

On August 22, 2014, free product was detected in wells MW-2, MW-19, MW-20, and RW-3 with free product thicknesses ranging from 0.01 feet (MW-2) to 0.67 feet (MW-20). W&R personnel pumped approximately 7.0 gallons of groundwater/petroleum mixture from the four wells.

On September 11, 2014, free product was detected in wells MW-19 and MW-20 with free product thicknesses ranging from 0.11 feet (MW-20) to 0.29 feet (MW-19). W&R personnel pumped approximately 5.5 gallons of groundwater/petroleum mixture from the two wells.

During the May 2015 groundwater sampling event, FFP was measured in MW-19, MW-20, and RW-3 at thicknesses of 0.68 ft., 0.11 ft., and 0.08 ft., respectively.

Table 7 summarizes the current and historical free product and recovery events. **Table 8** summarizes the historical free phase product recovery volumes. To date, approximately 63,966 gallons of groundwater/petroleum mixture consisting of approximately 2,071 gallons of NAPL has been recovered from the site via AFVR, MMPE, and pumping methods.

GROUNDWATER MONITORING PROGRAM

Groundwater monitoring activities were completed at the site on May 19 and 20, 2015. Groundwater monitoring activities and results are described below.

3.1 Groundwater Elevations

On May 19 & 20, 2015, monitoring wells MW-1 through MW-22 as well as RW-1 through RW-3 were gauged for depths to groundwater and free product prior to groundwater sampling activities. Depth to water and depth to product measurements were collected from the wells using a decontaminated Solinst® interface meter and checked with a disposable bailer and string. Measurable free phase product (FPP) was observed and confirmed in monitoring wells MW-19, MW-20, and RW-3. Product thickness were measured to be 0.68 ft. in MW-19, 0.11 ft. I MW-20, and 0.08 ft. in RW-3. Free product thicknesses from this event are displayed on Table 7. The distribution of free product during this gauging event is shown on the attached Figure 10. Free product is shown to extend offsite to the east with the eastern edge of the product plume not yet delineated.

Groundwater depths were subtracted from top of casing elevations to obtain groundwater elevations. Using the groundwater elevations calculated from data collected during the May 2015 event, a groundwater potentiometric surface map has been completed and provided in Figure 4 that depicts groundwater flow to be generally toward the east/northeast. Historical groundwater elevation data is presented in Table 5. The groundwater flow generally appears to be consistent, based on historical maps, with the direction of historical groundwater flow toward the north, east, or northeast.

Groundwater Quality

Groundwater samples were collected from twenty (18) of the monitoring wells at the site (that included MW-1 through MW-7, MW-9, MW-10, MW-12 through MW-18, MW-21, and MW-22) and two (2) recovery wells (RW-1 and RW-2). Collected samples were decanted into laboratory provided bottleware, placed into a clean cooler containing ice, and tensported under chain-of-custody to ESC Lab Sciences in Mt. Juliet, Tennessee for malysis of volatile organic compounds (VOCs) by EPA Method 6200B.

wiltoring wells MW-19, MW-20, RW-3 were identified as having free product were not during this monitoring event.

diory of the collected groundwater samples revealed the following exceedances to standard:

MW-1: Benzene; and

Benzene.

of the collected groundwater samples revealed the following monitoring /

MW-1, MW-2, MW-3, MW-4, MW-9, MW-16, MW-17, MW-21, MW-22, RW-1, and RW-2

A summary of the May 2015 analytical results is presented in **Table 4**. A summary of the historical water quality data is included in **Table 6**. The laboratory analytical report and chain-of-custody is included in **Appendix A**.

Groundwater isocontour mapping was completed for benzene and free phase product. These maps are presented as **Figures 6** and **7**, respectively. Groundwater plumes associated with each of these constituents extend offsite to the east and northeast, and are not delineated in those directions.

3.3 Groundwater Receptors

Previous receptor surveys have identified no active water supply wells within 1,000 feet of the subject site. However, one inactive water supply well is situated approximately 445 feet south of the site (see Figure 2) that was identified during the last receptor survey conducted for the site on May 29, 2010. Historical groundwater flow on the site has been shown to be towards the east-northeast, as was the case during the May 2015 monitoring event, and away from this inactive water supply well. Water supply well information is presented in Table 2, while contiguous property information is present in Table 1.

4 CONCLUSIONS

W&R has developed the following conclusions based on the results of the September 2014 groundwater assessment and delineation at the site.

- Benzene was detected in monitoring well MW-1 and recovery well RW-2 at a concentration above GCLs.
- Targeted compounds were detected above 2L standards in monitoring wells MW-1, MW-2, MW-3, MW-4, MW-9, MW-16, MW-17, MW-21, MW-22, RW-1, and RW-2
- Measurable free phase product was detected in MW-19, MW-20, and RW-2.
- W&R is in the process of implementing the approved New Technology Cleanup Plan to actively remediate the site.

Please contact us if you have any questions or comments regarding this report.

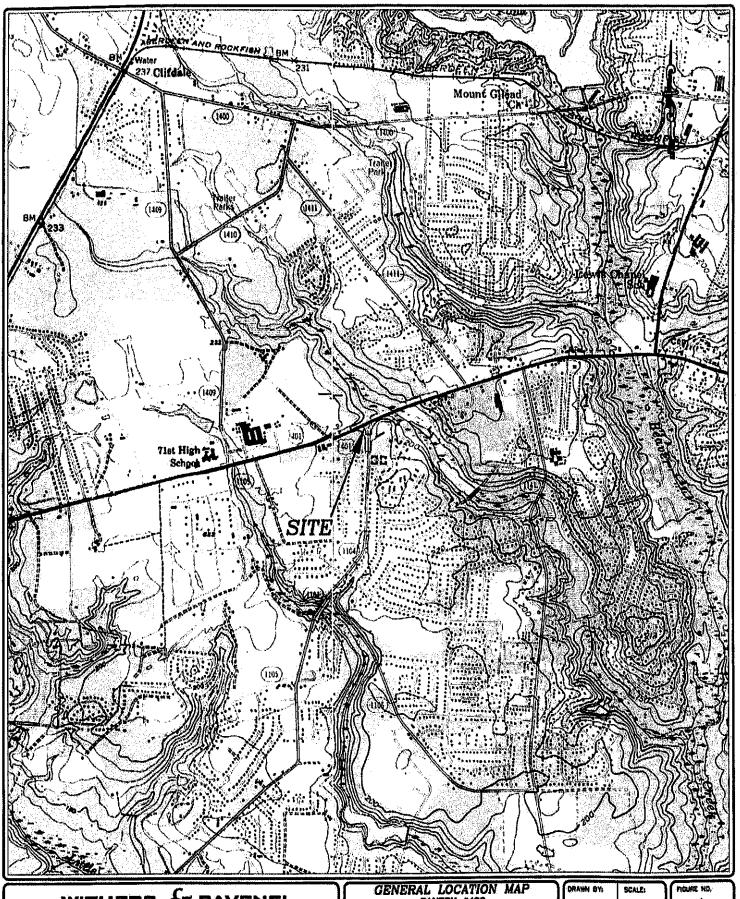
Sincerely,

WITHERS & RAVENEL, INC.

Matt James, P.G. Project Manager

Chan Bryant, P.E.

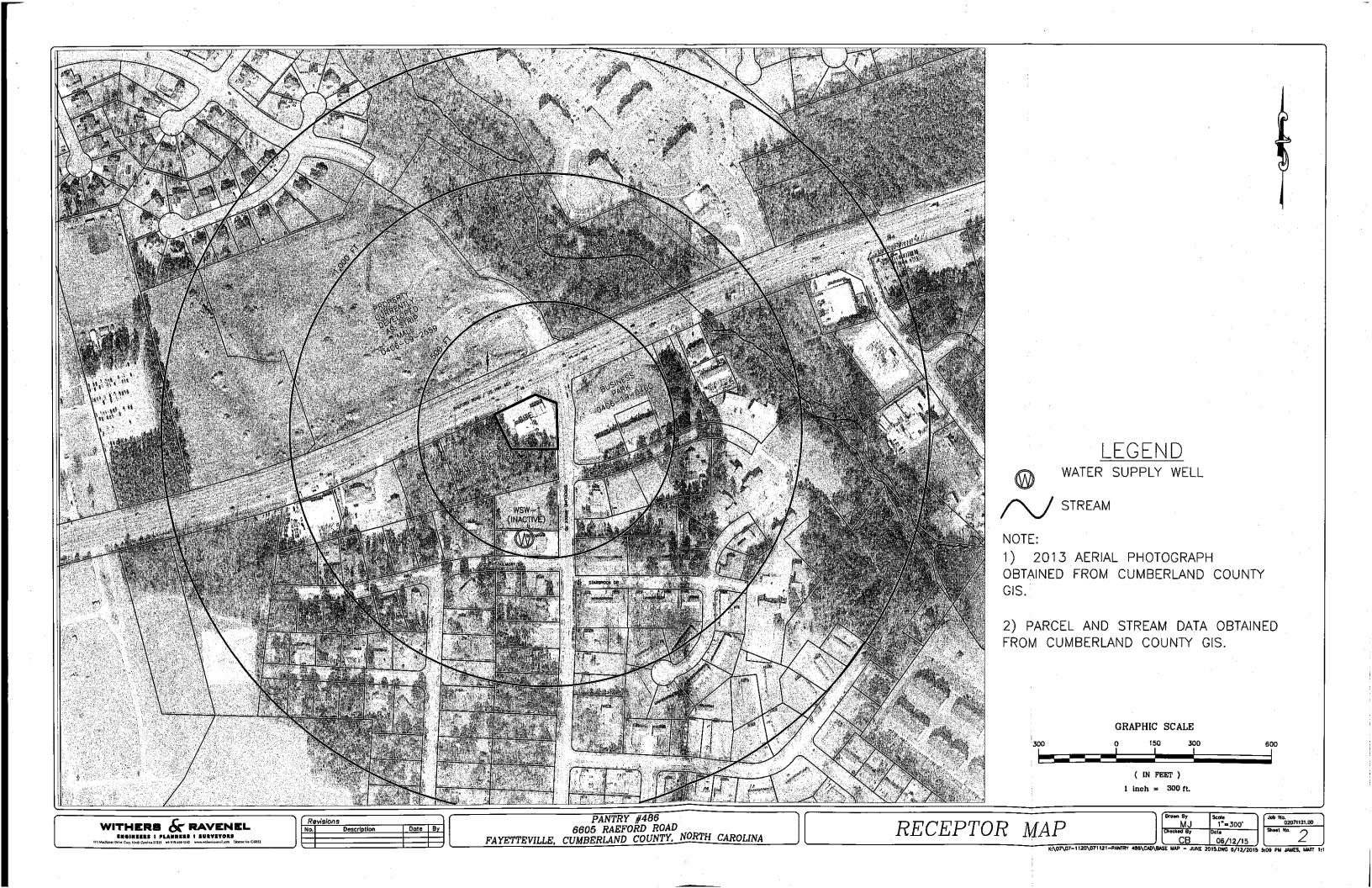
Vice President - Environmental Services

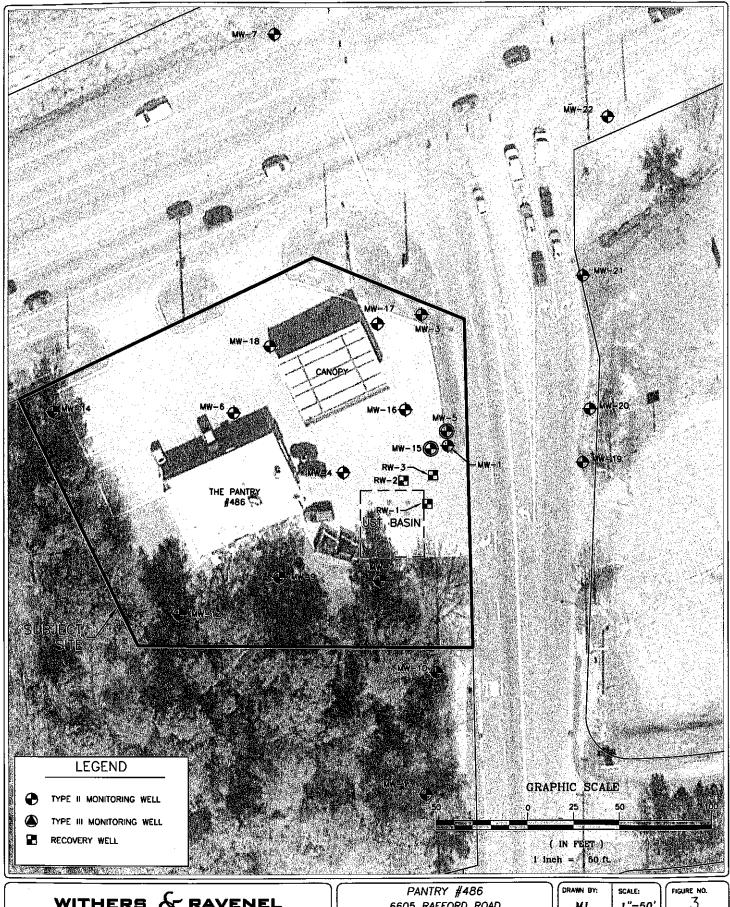


WITHERS & RAVENEL

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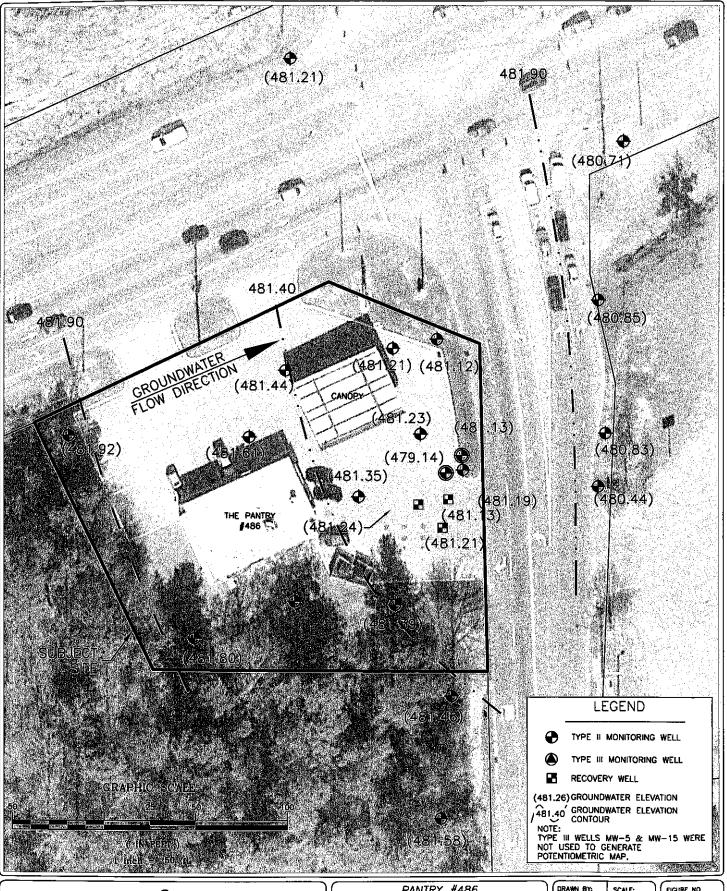


lel: 919-4469-3340 fox: 919-467-6008

6605 RAEFORD ROAD FAYETTEVILLE, CUMBERLAND COUNTY, NC SITE MAP

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APPROVED BY:	DATE:		
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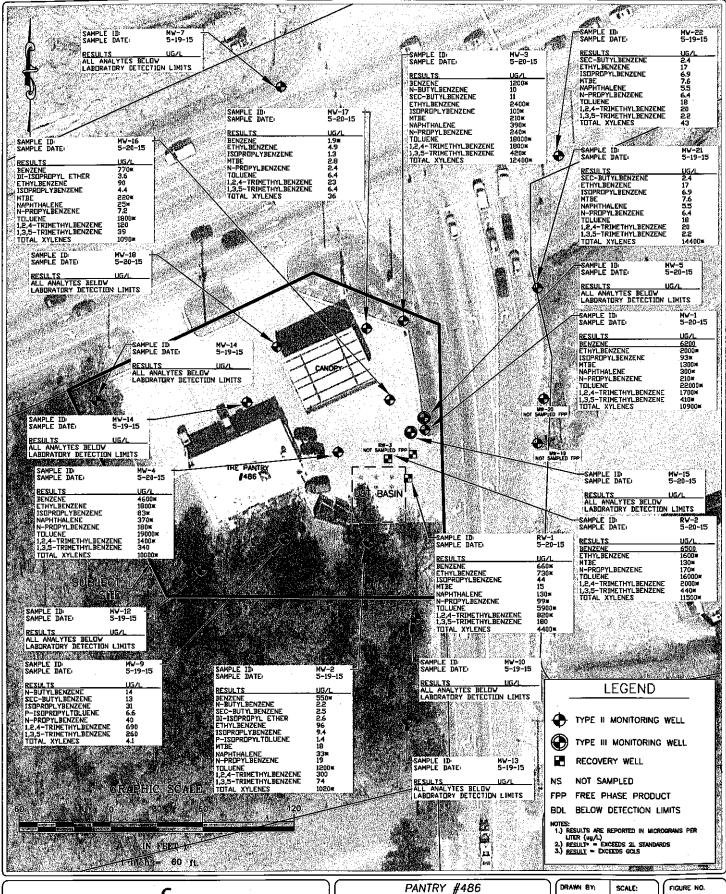


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PANTRY #486 6605 RAEFORD ROAD FAYETTEVILLE, CUMBERLAND COUNTY, NC

POTENTIOMETRIC MAP - SEPTEMBER 2014

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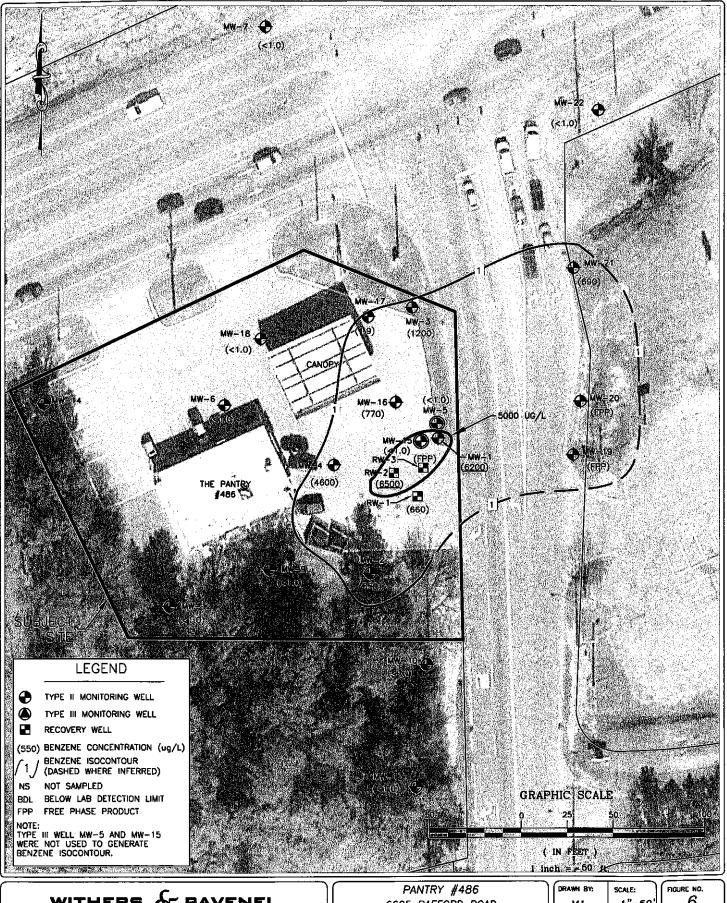


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115 MacKenan Drive Cary, North Caralina 27511 www.nithersravenel.com tel: 919-4469-3340 (ax: 919-457-6008 PANIRY #486 6605 RAEFORD ROAD FAYETTEVILLE, CUMBERLAND COUNTY, NC GROUNDWATER ANALYTICAL RESULTS

DRAWN BY:	SCALE: 1"=60'	FIGURE NO.
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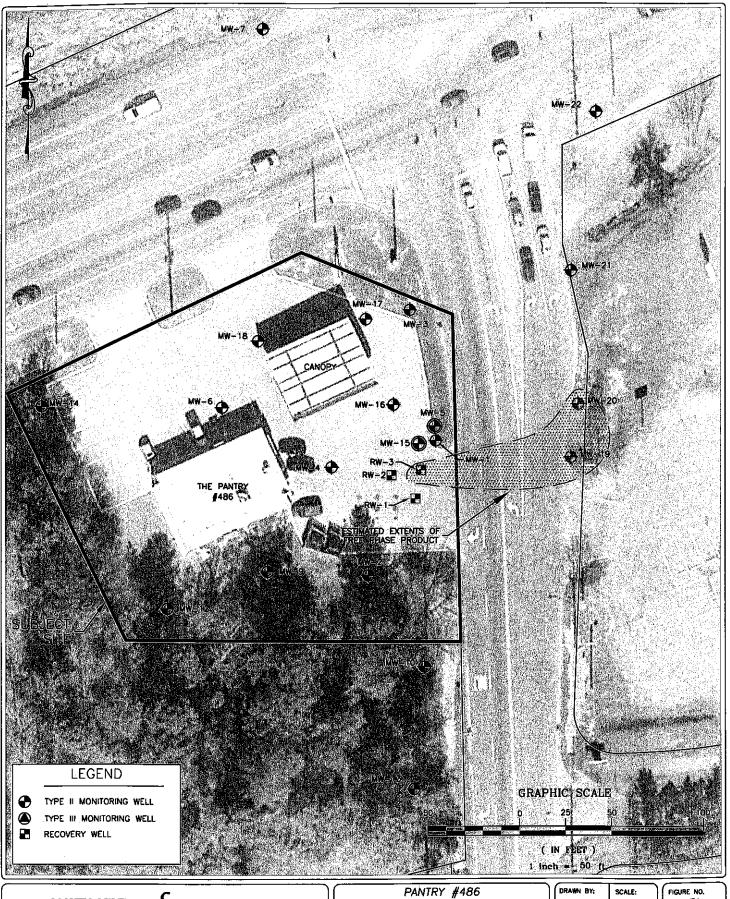
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6605 RAEFORD ROAD FAYETTEVILLE, CUMBERLAND COUNTY, NC BENZENE ISOCONCENTRATION MAP

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PANTRY #486 6605 RAEFORD ROAD FAYETTEVILLE, CUMBERLAND COUNTY, NC

FREE PRODUCT MAP-MAY 2015

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DRAWN BY:	SCALE: 1"=50'	FIGURE
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TABLE 1
PROPERTIES CONTIGUOUS TO THE SITE
Pantry #486

6605 Raeford Rd.

Fayetteville, Cumberland County, North Carolina

Parcel ID Number	Current Owner and Owner Address	Property Address	Location Relative to Source
SITE 0406-09-6372	Joseph H. Gillis P.O. Box 736 Fayetteville, NC 28302	6605 Raeford Road Fayetteville, NC	SITE
0406-09-5137	Joseph H. Gillis P.O. Box 736 Fayetteville, NC 28302	(undeveloped) Raeford Road Fayetteville, NC	Southwest
0406-09-0781	Sharlene R. Williams P.O. Box 53646 Fayetteville, NC 28305	(undeveloped) Raeford Road Fayetteville, NC	North
0406-19-0460	Frances H. Elliot Trustee 1470 Elliot Bridge Road Fayetteville, NC 28311	6545 / 6543 Strickland Bridge Road Fayetteville, NC	East
0406-09-9002	First Spanish Baptist Church P.O. Box 42534 Favetteville, NC 28304	1041 Strickland Bridge Road Fayetteville, NC	Southeast

Notes: Parcel numbers are depicted on Figure 2.

				Direction From Source		South	
				Municipal Water		Yes	
				Use Of Well		Currently Inactive*	
TABLE 2 WATER SUPPLY WELL SURVEY	Pantry # 486	6605 Raeford Road	Fayetteville, Cumberland County, North Carolina	Property Address		1044 Strickland Bridge Rd. Fayetteville, NC	dius of subject release area.
WATER SUI	ů.	9099	Fayetteville, Cumbe	Current Owner and Owner Address		Carolina Conference of Seventh Day 2701 East W.T. Harris Blvd. Charlotte, NC 28213	Information taken from returned WSW surveys and personal interviews This list is not to be considered as a complete listing of all WSW's within a 1,500' radius of subject release area. * Well may be reactivated once the church is occupied.
				Approx. Distance Form Release	Source (it)	445'	Information taken from This list is not to be con * Well may be reactival
				WSW No. (See Fig. 3)		WSW-1	Notes:

TABLE 3 WELL CONSTRUCTION INFORMATION AND CURRENT GROUNDWATER ELEVEATION DATA Pantry #486 6605 Raeford Road

Fayetteville, Cumberland County, North Carolina

Well ID	Date Installed	Total Depth	Screened Interval ²	Top of Casing Elevation	Free Phase Product Thickness	Depth to Water ¹ (ft bls) 5/19/15	Groundwater Elevation 5/19/15
			Type	II Monitoring Wells			
MW-1	3/22/2001	30	10 - 30	496.98		15.79	481.19
MW-2	3/23/2001	30	10 - 30	498.65	-	17.26	481.39
MVV-3	3/23/2001	30	10 - 30	496.65	-	15.53	481.12
MW-4	4/26/2001	30	10 - 30	499.26	-	17.91	481.35
MW-6	10/15/2001	30	10 - 30	500.12	-	18.51	481.61
MW-7	10/15/2001	25	10 - 25	497.28	-	16.21	481.07
MW-9	10/15/01	30	10 - 30	499.74	-	18.14	481.60
MW-10	10/15/01	28	8 - 28	503.46	-	22.00	481.46
MW-12	03/01/02	30	10 -30	498.60	-	16.80	481.80
MW-13	02/26/02	30	10 - 30	506.49	-	24.91	481.58
MW-14	11/07/03	30	10 - 30	500.66	-	18.74	481.92
MW-16	10/18/11	30	10 - 30	497.88	-	16.65	481.23
MW-17	10/18/11	30	10 - 30	498.01	-	16.80	481.21
MW-18	10/18/11	30	10 - 30	499.28	-	17.84	481.44
MW-19	10/19/11	30	10 - 30	496.39	0.68	15.95	480.44
MW-20	10/19/11	29	10 - 29	495.63	0.11	14.80	480.83
MW-21	10/19/11	29	10 - 29	495.03	-	14.18	480.85
MW-22	10/19/11	30	10 - 30	496.04	-	15.33	480.71
RW-1	03/23/01	30	10 - 30	497.67	-	16.46	481.21
RW-2	03/23/01	30	10 - 30	498.14	-	16.90	481.24
RW-3	03/23/01	30	10 - 30	497.22	0.08	16.09	481.13
			Туре	III Monitoring Well			
MW-5	04/26-27/01	45.5	41.5 - 45.5	496.88	-	15.75	481.13
MW-15	11/5-6/03	66	61 - 66	495.94	-	16.8	479.14

Notes:

All measurements in feet.

- 1 Values in this column corrected using the equation for correction to compute hydraulic head in wells containing free product as described in Chapter 3 of the EPA document "How to Effectively Recover Free Product at LUST Sites: A Guide for Regulators".
- 2 2"-I.D. Sch. 40 0.010" stotted PVC screen

Wells were installed & surveyed by another consultant during previous assessment activities.

NM - Not measured

MW-10, MW-12, MW-13, & MW-15 are stick-up wells.

TABLE 4 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS -September 2014 PANTRY # 485 6605 Reselord Road Fayetteville, Cumberland County, North Carolina

	Client Sample ID			MW-1	ız T	MW-1	3	MW-1	4	MW-1	5	MW-1		MW-1		MW-1		MW-1	19	MW-20	MW	-21	MW-2	22	RW-1		RW-2	-		Gross
	Collect Date			5/19/20		5/19/20		5/19/20		5/20/20		5/20/20		5/20/20		5/20/20					5/19/		5/19/20		5/20/20		5/20/201	_	NC 2L Standard	Contamination
Method	Parameter	CAS#	Units	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value C		Quai	Value	Qual	Value	Qual	Value	Qual	(µg/L)	Levels for Groundwater (µg/L)
6200B-1997	Acetone	67-64-1	μg/l	<50		<50		<50		<50		<50		<50		<50		NS - FFP		NS - FFP	<500	_	<50	1-1	<500		<5000		6,600	6,000,006
6200B-1997	Acrolein	107-02-8	μg/I	<50	J3	<50	J3	<50	J3	<50	J3	<50	J3	<50	J3	<50	J3	NS - FFP		NS - FFP	<500	J3	<50	J3	<500	J3	<5000	J3	NL	NL
6200B-1997	Acrylonitrile Benzene	107-13-1 71-43-2	μg/t	<10 <1.0	\vdash	<10 <1,0		<10 <1,0		<10 <1.0		<10 770	 -	<10 1.9		<1.0		NS - FFP	1	NS - FFP	<100	68	<10	\vdash	<100 660		<1000 6500 //		NL .	NL 5000
6200B-1997 6200B-1997	Bromobenzene	108-86-1	μg/l μg/l	<1.0	\vdash	<1.0		<1.0		<1.0		<1.0	┼ -	<1.0		<1.0		NS - FFP	1 1	NS-FFP	<10	39	<1.0 <1.0	1	<10	-	<100		1 NL	5,000 NL
6280B-1997	Bromodichloromethane	75-27-4	μg/l	<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		NS-FFP		NS - FFP	<10		<1,0		<10	11	<100		0,6	NL NL
62008-1997	Bromoform	75 -25- 2	μg/l	<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		NS - FFP		NS-FFP	<10		<1.0		<10		<100		4	NL.
6200B-1997	Bromomethane	74-83-9	µg/l	<5.0		<5.0	\vdash	<5.0		<5.0	\vdash	<5.0 <1.0	-	<5.0	ļ	<5.0 <1.0	_	NS - FFP NS - FFP		NS - FFP	<50		<5.0	\vdash	<50	<u> </u>	<500		100	100,000
6200B-1997 6200B-1997	n-Butylbenzene sec-Butylbenzene	104-51-8 135-98-8	pg/l pg/l	<1,0 <1,0		<1.0		<1,0 <1,0		<1.0 <1.0		<1.0	 	<1.0 <1.0		<1.0		NS-FFP		NS-FFP	13	+	<1.0 2,4	+	<10 <10	 	<100 <100		70 70	6,900 8,600
62008-1997	tert-Butylbenzene	98-06-6	μg/l	<1.0		<1.0		<1.0		<1.0		<1.0		<1.0	\vdash	<1.0		NS - FFP		NS - FFP	<10		<1.0		<10		<100		70	15,000
62008-1997	Carbon tetrachloride	56-23-5	µg/I	<1.0		<1.0		<1,0		<1,0		<1.0	ļ	<1.0		<1,0		NS - FFP		NS - FFP	<10		<1.0		<10		<100		0.3	· NL
6200B-1997 6200B-1997	Chlorobenzena Chlorodibromomethane	108-90-7 124-48-1	µg/l	<1.0 <1.0	 	<1.0 <1.0		<1.0 <1.0		<1,0 <1,0		<1.0 <1.0	├-	<1.0 <1.0	_	<1.0 <1.0		NS - FFP	\vdash	NS-FFP NS-FFP	<10 <10		<1.0 <1.0	\vdash	<10 <10	<u> </u>	<100 <100		50	50,000
6200B-1997	Chloroethane	75-00-3	μg/l μg/l	<5.0	+	<5,0		<5.0		<5.0		<5,0	-	<5,0		<5.0		NS - FFP	Н	NS-FFP	<50	+	<5,0	+	<50	<u> </u>	<500		NL 3,000	NL NL
6200B-1997	Chloroform	67-66-3	μg/l	<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		<5.0		NS - FFP		NS-FFP	<50		<5.0		<50		<500		70	70,000
6200B-1997	Chloromethane	74-87-3	μg/l	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		NS - FFP		NS - FFP	<25		<2.5	\Box	<25		<250	二	3	3,000
6200B-1997 6200B-1997	2-Chlorotaluene 4-Chlorotaluene	95-49-8 106-43-4	μg/l μg/l	<1.0 <1.0	 	<1.0	├─┤	<1.0		<1.0 <1.0		<1,0 <1.0	<u> </u>	<1.0 <1.0		<1.0 <1.0		NS - FFP		NS-FFP NS-FFP	<10 <10	-	<1.0 <1.0	\vdash	<10 <10	 	<100		100 24	NL 7,500
6200B-1997	1,2-Dibromo-3-Chloropropane	96-12-8	µg/l	<5.0	╁┈╾	<5.0		<5.0		<5.0		<5.0		<5.0		<5.0	 	NS - FFP	-	NS-FFP	<50	+-	<5.0	\vdash	<50	\vdash	<500		0.04	7,500 NL
62008-1997	1,2-Dibromoethane	106-93-4	hā/l	<1.0		<1.0		<1.0		<1,0		<1.0	<u> </u>	<1.0		<1.0		NS - FFP		NS - FFP	<10		<1.0		<10		<100		NL.	NL
6200B-1997	Dibromomethane	74-95-3	µg/I	<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		NS - FFP		NS - FFP	<10		<1.0		<10		<100		NL	NL
6200B-1997 6200B-1997	1,2-Dichlorobenzene 1,3-Dichlorobenzene	95-50-1 541-73-1	μg/l μg/l	<1.0 <1.0	\vdash	<1.0	1	<1,0 <1,0		<1,0 <1,0	\vdash	<1.0 <1.0	-	<1.0 <1.0	├ .—	<1,0 <1,0		NS - FFP	\vdash	NS-FFP NS-FFP	<10 <10		<1,0 <1,0	1	<10 <10		<100 <100		200	20,000 61,500
6200B-1997	1,4-Dichlorobenzene	108-46-7	µg/l	<1.0	\vdash	<1.0		<1.0		<1.0		<1.0		<1.0		<1.0	-	NS - FFP	+	NS - FFP	<10	+	<1.0	1	<10		<100		200 6	6,000
6200B-1997	Dichlorodifluoromethane	75-71-8	μg/l	<5.0		<5,0		<5.0		<5,0		<5,0		<5.0	<u> </u>	<5,0		NS - FFP		NS FFP	<50		<5,0		<50		<500		1,008	140,000
6200B-1997	1,1-Dichloroethane	75-34-3	µg/l	<1.0		<1,0		<1.0		<1.0	i	<1.0		<1.0		<1.0		NS - FFP		NS - FFP	<10		<1.0		<10		<100		6	6,000
6200B-1997 6200B-1997	1,2-Dichloroethane	107-06-2 75-35-4	μg/l μg/l	<1.0 <1.0	 	<1.0 <1.0	- 	<1.0 <1.0	L	<1.0 <1.0	\vdash	<1.0 <1,0	-	<1.0 <1.0		<1.0 <1,0		NS - FFP	\vdash	NS - FFP	<10 <10		<1.0 <1.0	\vdash	<10 <10	-	<100 <100		0.4 7	7,000
6200B-1997	cls-1,2-Dichloroethene	156-59-2	pg/l	<1.0		<1.0		<1.0		<1.0		<1,0	 	<1.0	_	<1.0		NS - FFP		NS - FFP	<10	+-	<1.0	┼┼	<10	1	<100	\dashv	70	70,000
6200B-1997	trans-1,2-Dichloroethene	156-60-5	µg/l	<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		NS - FFP		NS - FFP	<10		<1.0		<10		<100		100	100,000
6200B-1997	1,2-Dichloropropane	78-87-5	µg/l	<1.0		<1.0		<1.0		<1.0		<1,0		<1.0		<1.0		NS - FFP		NS - FFP	<10		<1.0	\sqcup	<10 .		<100		0.6	600
6200B-1997 6200B-1997	1,1-Dichloropropene 1,3-Dichloropropane	563-58-6 142-28-9	µg/l µg/l	<1.0 <1.0	\vdash	<1.0	H	<1.0 <1.0		<1.0 <1.0	-	<1,0 <1,0	-	<1.0 <1.0	-	<1,0 <1,0	-	NS - FFP	 	NS - FFP NS - FFP	<10 <10	+	<1.0 <1.0		<10 <10		<100 <100	_	NL NL	NL NL
6200B-1997 6200B-1997	2,2-Dichloropropane	594-20-7	µg/I	<1.0		<1.0	 	<1.0		<1.0		<1,0		<1.0	\vdash	<1,0		NS - FFP		NS - FFP	<10	+	<1.0		<10		<100		NL NL	NL NL
6200B-1997	Di-isopropyl ether	108-20-3	μg/l	<1.0		<1.0		<1.0		<1.0		3.6		<1.0		<1,0		NS - FFP		NS - FFP	<10		<1.0		<10		<100		70	70,000
6200B-1997	Ethylbenzene	100-41-4	μg/l	<1.0		<1.0		<1.0		<1.0	<u> </u>	90	<u> </u>	4.9	ļ.,	<1.0		NS - FFP		NS - FFP	2800	3	17		730		1600		600	84,500
6200B-1997 6200B-1997	Hexachloro-1,3-butadiene Isopropylbenzene	87-68-3 95-82-8	μg/l μg/l	<1.0 <1.0		<1.0 <1.0		<1.0 <1.0		<1.0 <1.0	- 	<1,0 4.4		<1.0 1.3		<1,0 <1.0		NS - FFP	\vdash	NS - FFP	<10 100		<1.0 6.9	\vdash	<10 44	╁	<100 <100		70	400 25,000
6200B-1997	p-tsopropyltofuene	99-87-6	μg/l	<1.0		<1.0		<1.0		<1.0	\vdash	<1.0	 	<1.0		<1.0		NS-FFP	\Box	NS - FFP	<10	100	<1.0		<10	\vdash	<100		25	11,700
6200B-1997	2-Butanone (MEK)	78-93-3	μg/l	<10		<10		<10		<10		<10		<10		<10		NS - FFP		NS - FFP	<100		<10		<100		<1000		4,000	4,000,000
62008-1997	Methylene Chloride	75-09-2	μg/l	<5.0	\sqcup	<5.0		<5.0		<5.0		<5.0	_	<5.0		<5.0		NS - FFP		NS - FFP	<50	╀	<5.0		<50	├ ─┤	<500		5	5,000
6200B-1997 6200B-1997	4-Methyl-2-pentanone (MIBK) Methyl tert-butyl ether	108-10-1 1634-04-4	μg/l μg/l	<10 <1.0	-	<1.0	\vdash	<10 <1,0		<10 <1,0		<10 220	1	<10 2,8		<10 <1,0		NS - FFP	1	NS - FFP NS - FFP	<100	20	<10 7.6	\vdash	<100 15	 ,	<1000		100 20	100,000
6200B-1997	Naphthalene	91-20-3	μg/l	<5.0	1	<5.0		<5.0		<5.0		25	1	<5.0		<5.0	\vdash	NS-FFP	 	NS-FFP	360	2	5.5		130	 	<500		8	6,000
6200B-1997	n-Propylbenzene	103-65-1	μg/l	<1.0		<1.0		<1.0		<1.0		7.2		2,4	L	<1,0		NS - FFP		NS - FFP	270	2	6.4		98		170		70	3,000
6200B-1997	Styrene	100-42-5	μg/l	<1.0	\vdash	<1.0		<1.0		<1,0		<1.0	 	<1.0	<u> </u>	<1.0		N8 - FFP	\vdash	NS - FFP	<10	_	<1,0	\vdash	<10		<100		70	70,000
6200B-1997 6200B-1997	1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane	630-20-6 79-34-5	μg/l μg/l	<1.0 <1.0	\vdash	<1.0		<1.0 <1.0	$\vdash \vdash \vdash$	<1.0 <1,0		<1.0 <1.0		<1.0		<1.0 <1.0	$\vdash \vdash \vdash$	NS - FFP	+-+	NS - FFP	<10 <10	+-	<1,0 <1,0	++	<10 <10	 	<100 <100		0.2	1,000 200
6200B-1997	Tetrachloroethene	127-18-4	μg/l	<1.0	 	<1.0		<1.0	_	<1.0		<1.0	—	<1.0		<1.0		NS-FFP		NS - FFP	<10	+	<1.0	\Box	<10	\vdash	<100	_	0.7	700
62008-1997	Toluane	108-88-3	µg/l	<5.0		<5.0		<5.0		<5.0		1800		6.4		<5.0		NS - FFP		NS-FFP	17000	7	18		5900		16000		600	260,000
5200B-1997	1,2,3-Trichlarobenzene	87-61-6	μg/l	<1.0	\Box	<1.0	Щ	<1.0		<1.0		<1.0		<1.0	 	<1.0	ert = ert	NS - FFP		NS - FFP	<10	4	<1.0	$\vdash \vdash$	<10	 	<100		NL_	NL
52008-1997 62008-1997	1,2,4-Trichlorobenzene	120-82-1 71-55-6	µg/l µg/l	<1.0 <1.0	+1	<1.0 <1.0	\vdash	<1.0 <1.0		<1.0 <1.0		<1.0 <1.0		<1.0 <1.0		<1.0 <1.0	$\vdash \vdash$	NS - FFP	 	NS - FFP	<10 <10	+	<1.0 <1.0	++	<10 <10	 +	<100 <100	-	70 200	70,000 200,000
6200B-1997	1,1,2-Trichforoethane	79-00-5	ug/l	<1.0	 	<1.0	\vdash	<1.0		<1.0		<1.0		<1.0		<1.0		NS - FFP		NS - FFP	<10		<1.D		<10	<u>t</u> +	<100		0,6	600
6200B-1997	Trichloroethene	79-01-6	µg/l	<1.0		<1.0		<1.0		<1,0		<1.0		<1.0		<1.0		NS - FFP		NS - FFP	<10		<1,0		<10		<100		3	3,000
6200B-1997	Trichlorofluoromethane	75-69-4	μg/l	<5.0	+	<5.0	\Box	<5.0	\vdash	<5.0		<5.0	_	<5.0	 	<5.0 <2.5	$\vdash \vdash$	NS - FFP	 	NS-FFP	<5D <25		<5.0 <2.5		<50 <25		<500		2,000	2,000,000
62008-1997 62008-1997	1,2,3-Trichloropropane 1,2,4-Trimethylbenzene	95-18-4 95-63-6	µg/l	<2.5 <1.0	+ - 1	<2.5 <1.0		<2.5 <1.0		<2.5 <1.0		<2,5 120	1	<2.5 23	-	<2.5 <1.0		NS - FFP	 	NS - FFP	<25 1800	<u> </u>	<2.5 20	1 1	<25 820	 	<250 2000	\dashv	0,005 400	NL 28,500
6200B-1997	1,3,5-Trimethylbenzene	108-67-8	µg/l µg/l	<1.0	+	<1.0	$\vdash \vdash$	<1.0		<1.0		39	 	6.4		<1.0	-	NS - FFP		NS - FFP	460	95	2.2		180		440	-	400	25,000
6200B-1997	Vinyl chloride	75-01-4	μg/l	<1.0		<1,0		<1.0		<1.0		<1.0		<1.0		<1.0		NS - FFP		NS - FFP	<10	<u> </u>	<1.0		<10		<100		0.03	30
62008-1997	o-Xylene	95-47-6	μg/l	<1,0		<1.0		<1.0		<1.0	<u> </u>	450		11	├	<1.0		NS - FFP		NS - FFP	4900	E .	21		1600	 	4100		500	85,500
6200B-1997	m&p-Xylenes	1330-20-7	µg/l	<2.0	\vdash	<2.0 <2.0	 	<2.0 <2.0	\vdash	<2.0 <2.0	┝	640 h	├-	25 36	\vdash	<2.0 <2.0	\vdash	NS - FFP	 	NS - FFP	9500 14400	73 3-	22 43	 	280Q 4400	- 1	7400 mil	-	500 500	85,500 85,500
Catculated	Xylenes (Total)	1330-20-7	μg/l	<2.0		< Z.Ü		~2.0	بــــــا	~2,U		1030	Щ.			-2.0		.40 - I I P		140 -111E	Language Control		+3	<u> k</u>	au zasta sal	<u> </u>	1 (30,000)			20,000

Notes:

µgf - micrograms per liter or ppb.

NL - No Listing
NAPL - Non-Aqueous Phase Liquid
NS - Not Sampled
FPP - Free Phase Product

Result | Result Exceeds Laboratory Detection Limits
Result | Result Exceeds 2L Standard

Result Exceeds GCL Value

Qualifiers: J3 - The associated batch QC was outside the established quality control

TABLE 4 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS -September 2014 PANTRY # 485 6905 Raeford Road Fayetteville, Cumberland County, North Carolina

Method 82008-1997 62003-1997 82008-1997 82008-1997 62008-1997 62008-1997 62008-1997 62008-1997 62008-1997 62008-1997	Cilent Sample ID Collect Date Parameter Acetone Acrolein Acrylonitrile Banzans Bromodenizene Bromodichioromethane Bromodom	CAS# 67-64-1 107-02-8 107-13-1	Units pg/l pg/l	MW-1 5/20/20 Value <2500		MW-2 5/19/201 Value	15	MW-3 5/20/201		MW-4 5/20/20		MW-5 5/20/201	_	MW-6 5/19/20	_	MW-1		MW-		MW-5		MW-1: 5/19/20		MW-1	1	NC 2L Standard	Gross Contamination
62008-1997 62008-1997 62008-1997 62008-1997 62008-1997 62008-1997 62008-1997 62008-1997	Parameter Acetone Acrolein Acrylonitrile Benzene Bromodichloromethane	67-64-1 107-02-8 107-13-1	µg/l	Value			r 1	5/20/201	15	5/20/20	15	5/20/201	15	5/19/20	15	5/19/20	115	1 -		5/19/20	15	5/19/20	16			NC 2L Standard	
62008-1997 62008-1997 62008-1997 62008-1997 62008-1997 62008-1997 62008-1997 62008-1997	Acetone Acrolein Acrylonitrile Benzene Bromodichloromethane	67-64-1 107-02-8 107-13-1	µg/l	<u> </u>	Qual	Value	Ι			_											15					···· canualu	lavala fac
62003-1997 62008-1997 62008-1997 62008-1997 62008-1997 62008-1997 62008-1997 62008-1997	Acrolein Acrylonitrile Benzene Bramobenzene Bromodichloramethane	107-02-8 107-13-1		<2500			Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	/ (μg/L)	Levels for Groundwater (µg/L)
62008-1997 6200B-1997 6200B-1997 6200B-1997 6200B-1997 6200B-1997 6200B-1997	Acrylonitrile Banzene Bromobenzene Bromodichloromethane	107-13-1	untl	1		<50		<500		<2500		<50		<50		<50		Destroyed		<50		<50		NS	- "	6,000	6,000,000
6200B-1997 6200B-1997 6200B-1997 6200B-1997 6200B-1997 6200B-1997	Benzene Bromobenzene Bromodichloromethane			<2500	J3	<50	J3	<500	J3	<2500	J3	<50		<50	J3	<50	J3	Destroyed		<50	J3	<50	J3	NS		NL	NL
6200B-1997 6200B-1997 6200B-1997 6200B-1997 6200B-1997	Bromobenzene Bromodichloromethane		µg/l	<500		<10		<100		<500	-	<10	_	<10		<10	ļ	Destroyed	_	<10		<10		NS		NL.	NL
6200B-1997 6200B-1997 6200B-1997 6200B-1997	Bromodichloromethane	71-43-2 108-88-1	μg/l	6200 <50	 	550 <1.0	\vdash	1200 C		4600 <50		<1.0		<1.0 <1.0		<1.0 <1.0	ļ	Destroyed Destroyed	<u> </u>	<1.0 <1.0	 	<1.0 <1.0		NS NS		1	5,000
6200B-1997 6200B-1997 6200B-1997		75-27-4	µg/l µg/l	<50 <50		<1.0		<10		<50 <50		<1.0 <1.0		<1.0		<1.0		Destroyed		<1.0	\vdash	<1.0		NS NS		NL 0.6	NL NL
6200B-1997		75-25-2	µg/l	<50		<1.0		<10		<50		<1.0		<1.0		<1.0	\vdash	Destroyed		<1,0		<1.0		NS		4	4,000
	Bromomethane	74-83-9	µg/l	<250		<5.0		<50		<250		<5.0		<5.0		<5.0		Destroyed		<5.0		<5.0		NS		100	100,000
6200B-1997	n-Butylbenzene	104-51-8	µg/l	<50		2.2		10		<50		<1.0		<1.0		<1.0		Destroyed		14		<1.0		NS		. 70	6,900
	sec-Butylbenzene	135-98-8	µg/l	<50		2.5		11		<50		<1.0		<1.0		<1.0		Destroyed		13		<1.0		NS		70	8,500
6200B-1997	tert-Butylbenzene	98-06-6 56-23-5	µg/l	<50 <50	 	<1.0	\vdash	<10 <10		<50 <50	-	<1.0		<1.0		<1.0 <1.0		Destroyed Destroyed		<1.0 <1.0	-	<1.0		NS NS		70	15,000
6200B-1997 6200B-1997	Carbon tetrachloride Chlorobenzene	108-90-7	μg/l μg/l	<50 <50		<1.0 <1.0		<10		<50		<1.0 <1.0		<1.0 <1.0		<1.0		Destroyed		<1.0		<1.0 <1.0		NS NS		0.3 50	NL 50,000
6200B-1997	Chlorodibromomethane	124-48-1	µg/l	<50	-	<1.0		<10		<50		<1.0		<1.0		<1.0		Destroyed		<1.0		<1.0		NS		0.4	400
6200B-1997	Chloroethane	75-00-3	µg/l	<250		<5.0		<50		<250		<5.0		<5,0		<5,0		Destroyed		<5.0		<5.0	$\overline{}$	NS		3,000	NL
6200B-1997	Chloroform	67-66-3	µg/l	<250		<5.0		<50		<250		<5.0		<5.0		<5.0		Destroyed		<5.0		<5.0		NS		70	70,000
6200B-1997	Chloromethane	74-87-3	µg/l	<120	\Box	<2.5		<25		<120		<2.5		<2.5		<2.5	lacksquare	Destroyed		<2.5	\Box	<2.5		NS		3 .	3,000
6200B-1997	2-Chlorotoluene	95-49-8	μg/l	<50	$\vdash \vdash \vdash$	<1,0		<10		<50	├	<1.0		<1.0		<1.0	 	Destroyed	\vdash	<1.0	 	<1.0	ļ	NS		100	NL
6200B-1997 6200B-1997 1	4-Chlorotoluene 1,2-Dibromo-3-Chloropropane	106-43-4 96-12-8	μg/l μg/l	<50 <250	 	<1.0 <5.0		<10 <50		<50 <250	\vdash	<1.0 <5.0		<1.0 <5.0		<1.0 <5.0	-	Destroyed Destroyed		<1.0 <5.0	 	<1.0 <5.0		NS NS		0.04	7,500 NL
6200B-1997 6200B-1997	1.2-Dibromoethane	106-93-4	µдл µдЛ	<50		<1.0		<10		<50		<1.0		<1.0		<1.0	-	Destroyed		<1,0		<1.0		NS		0,02	50
6200B-1997	Dibromomethane	74-95-3	µg/l	<50		<1.0	- 	<10		<50		<1.0		<1.0		<1.0		Destroyed		<1,0		<1.0		NS		NL NL	NL NL
6200B-1997	1,2-Dichlorobenzene	95-50-1	μg/(<50		<1.0		<10		<50		<1.0		<1,0		<1,0.		Destroyed		<1,0		<1.0		NS		20	20,000
6200B-1997	1,3-Dichlorobenzene	541-73-1	µg/l	<50		<1.0		<10		<50		<1.0		<1,0		<1,0		Destroyed		<1.0		<1.0		NS		200	61,500
6200B-1997	1,4-Dichlorobenzene	108-46-7	μgA	<50	\sqcup	<1.0		<10		<50		<1.0		<1.0		<1.0		Destroyed		<1.0	\vdash	<1.0		N8		6	6,000
6200B-1997	Oichlorodifluoromethane	75-71-8	µg/l	<250 450	\vdash	<5.0		<50		<250 <50	-	<5.0		<5.0	-	<5.0		Destroyed		<5.0	\vdash	<5.0 <1.0	\vdash	N8		1,000	140,000
6200B-1997 6200B-1997	1,1-Dichloroethane 1,2-Dichloroethane	75-34-3 107-06-2	µg/l µg/l	<50 <50	┝─┤	<1.0 <1.0		<10 <10		<50	-	<1.0 <1.0		<1.0 <1.0		<1.0 <1.0		Destroyed Destroyed		<1.0 <1.0	 	<1.0		NS NS		0.4	6,000 406
6200B-1997	1,1-Dichloroethene	75-35-4	µg/l	<50		<1.0		<10		<50		<1.0		<1.0		<1.0		Destroyed		<1.0		<1.0		NS		7	7,000
6200B-1997	cis-1,2-Dichlaroethene	156-59-2	рgA	<50		<1,0		<10		<50		<1.0		<1.0		<1.0		Destroyed		<1.0		<1.0		NS		70	70,000
6200B-1997	trans-1,2-Dichloroethene	156-60-5	μg/l	<50		<1.0		<10		<50		<1.0		<1.0		<1.0		Destroyed		<1.0		<1.0		NS		100	100,000
6200B-1997	1,2-Dichloropropane	78-87-5	μg/l	<50		<1,0		<10		<50		<1.0		. <1.0		<1.0		Destroyed		<1.0		<1.0		NS		0.6	600
62008-1997	1,1-Dichloropropana	563-58-6	µg/l	<50	\vdash	<1,0		<10		<50		<1.0		<1.0	-	<1.0	<u> </u>	Destroyed		<1.0	\vdash	<1.0		NS NS		NL	NL .
62008-1997 62008-1997	1,3-Dichloropropane 2,2-Dichloropropane	142-28-9 594-20-7	µg/l µg/l	<50 <50	 	<1,0 <1,0		<10 <10		<50 <50		<1.0 <1,0		<1.0 <1.0		<1.0 <1.0		Destroyed Destroyed	 -	<1.0 <1.0		<1.0	-	NS NS		NL NL	NL NL
6200B-1997	Di-isopropyl ether	108-20-3	μg/l	<50	 	2.6		<10		<50		<1.0		<1.0		<1.0	\vdash	Destroyed		<1.0	\vdash	<1.0		NS		70	70,000
62008-1997	Ethylbenzene	100-41-4	μg/l	2000		96		2400	-	1800		<1.0		<1.0		<1.0		Destroyed		<1.0		<1.0		NS		600	84,500
6200S-1997	Hexachloro-1,3-butadiene	87-68-3	μg/l	<50		<1.0		<10		<50		<1.0		<1.0		<1.0		Destroyed		<1.0		<1.0		NS		0.4	400
6200B-1997	Isopropylbenzene	95-62-6	μg/l	93		9.4		100		e, 83 e		<1.0		<1.0		<1.0		Destroyed		31		<1.0		NS		70	25,000
6200B-1997	p-Isapropyltoluene	99-87-6	µg/l	<50	\sqcup	1.4		<10		<5D		<1,0		<1.0		<1.0		Destroyed		6,6		<1.0		NS NS		25	11,700
6200B-1997 6200B-1997	2-Butanone (MEK) Methylene Chloride	78-93-3 75-09-2	μg/l μg/l	<500 <250	┝╌┤	<10 <5.0		<100 <50		<500 <250	\vdash	<10 <5.0		<10 <5.0		<10 <5.0		Destroyed Destroyed		<10 <5.0	\vdash	<10 <5.0	\vdash	NS NS	\vdash	4,000	4,000,000 5,000
	4-Methyl-2-pentanone (MIBK)	108-10-1	μg/l	<500	 	<10	\vdash	<100		<500		<10		<10		<10		Destroyed		<10		<10		NS	\vdash	100	100,000
6200B-1997	Methyl tert-butyl ether	1634-04-4	μg/l	1300*		18		210		<50		<1.0		<1.0		<1.0		Destroyed		<1.0		<1.0		NS		20	20,000
6200B-1997	Naphthalene	91-20-3	μg/l	300		33		380		370 🚁		<5.0		<5.0		<5.0		Destroyed		<5.0		<5.0		NS		6	6,000
6200B-1997	n-Propylbenzena	103-65-1	μg/l	210	آتا	19		240		0180	L [<1.0		<1.0		<1.0	L	Destroyed		40		<1.0		NS		70	30,000
6200B-1997	Styrene	100-42-5	μg/l	<50		<1.0		<10		<50 <50		<1.0		<1.0	\vdash	<1.0	\vdash	Destroyed		<1.0	 	<1.0	-	NS NB	$\vdash \dashv$	70	70,000
6200B-1997 6200B-1997	1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane	630-20-6 79-34-5	µg/l µg/l	<50 <50	 	<1.0 <1.0	-	<10 <10		<50 <50	\vdash	<1.0 <1.0		<1.0 <1.0		<1.0 <1.0	\vdash	Destroyed Destroyed	ļ	<1.0 <1.0	 -	<1.0 <1.0		NS NS		0.2	1,000 200
6200B-1997 6200B-1997	1,1,2,2-retrachicroethane Tetrachicroethene	127-18-4	µg/l	<50	 	<1.0	┯┪	<10		<50	\vdash	<1.0		<1.0	\vdash	<1.0	\vdash	Destroyed		<1.0	 	<1.0		NS	 	0.7	700
6200B-1997	Toluene	108-88-3	µg/l	22000		1200		18000		19000	\vdash	<5.0		<5.0	\Box	<5.0		Destroyed		<5.0		<5.0		NS		600	260,000
6200B-1997	1,2,3-Trichlorabenzene	87-61-6	μg/l	<50		<1.0		<10		<50		<1.0		<1.0		<1.0		Destroyed		<1.0		<1.0		NS		NL	NL
62008-1997	1,2,4-Trichlorabenzene	120-82-1	μg/l	<50		<1.0		<10		<50		<1,0		<1,0		<1.0		Destroyed		<1.0		<1.0		NS		j 70	70,000
6200B-1997	1,1;1-Trichloroethane	71-55- 6	µg/l	<50	$oxed{oxed}$	<1.0		<10		<50		<1.0		<1.0	L	<1.0		Destroyed		<1.0	\sqcup	<1.0	$\sqcup \sqcup$	NS	L	- 200	200,000
6200B-1997	1,1,2-Trichloroethane	79-00-5	μg/l	<50	 	<1.0		<10		<50	$\vdash \vdash$	<1.0		<1.0	├	<1.0	\vdash	Destroyed		<1.0	$\vdash \vdash$	<1.0 <1,0	$\vdash\vdash\vdash$	NS NC	┝─┤	0.6	600
6200B-1997 6200B-1997	Trichloroethene Trichlorofluoromethane	79-01-6 75-69-4	μg/l μg/l	<50 <250	 	<1.0 <5.0	\vdash	<10 <50	\vdash	<50 <250	\vdash	<1.0 <5.0		<1.0 <5.0	$\vdash\vdash\vdash$	<1,0 <5.0	\vdash	Destroyed Destroyed		<1.0 <5.0	\vdash	<1,U <5.0	\vdash	NS NS	-	2,000	3,000 2,000,000
6200B-1997 6200B-1997	1,2,3-Trichloropropane	96-18-4	µg/l	<120	┝─┤	<2.5		<25		<120	\vdash	<2.5		<2.5		<2.5	\vdash	Destroyed	 	<2.5	\vdash	<2.5	\vdash	NS	 	0.005	2,000,000 NL
6200B-1997	1,2,4-Trimethy/benzene	95-63-6	µg/l	1700		300	\vdash	1800		1400		<1.0		<1.0		<1.0		Destroyed		890		<1.0	\vdash	NS	-	400	28,500
6200B-1997	1,3,5-Trimethylbenzene	108-67-8	µg/l	410		74		420		340		<1.0		<1.0		<1.0		Destroyed		260		<1.0		NS		400	25,000
6200B-1997	Vinyl chloride	75-01-4	μg/l	<50		<1.0		<10		<50		<1.0		<1.0		<1.0		Destroyed		<1.0		<1.0		NS		0.03	30
6200B-1997	o-Xylene	95-47-6	μg/l	A 4000 S	口	350		3800		3600 🕠		<1.0		<1.0		<1.0		Destroyed		<1.0	\Box	<1.0		aN		500	85,500
6200B-1997	m&p-Xylenes	1330-20-7	μg/l	6900	$\vdash \vdash \vdash$	670	igsqcut	8600		6400	 	<2.0		<2.0	\vdash	<2.0	\vdash	Destroyed		4,1		<2.0	L	NS NO	\vdash	500	85,500
Calculated	Xylenes (Total)	1330-20-7	μg/l	10900		1029		12480		10000		<2,0		<2,0		<2,0		Destroyed		4.1	ш	<2,0		NS		500	85,500

Notes:

µg/i - micrograms per liter or ppb.

NL - No Listing

NAPL - Non-Aqueous Phase Liquid

NS - Not Sampled

NS - Not Sampled

PPP - Free Phase Product

Result = Result Exceeds Laboratory Detection Limits

Result = Result Exceeds 2L Standard

Result = Result Exceeds GCL Value

Qualifiers:

J3 - The associated batch QC was outside the established quality control range for precision.

TABLE 5 HISTORICAL GROUNDWATER ELEVATION DATA Pantry #486 6605 Raeford Road Fayetteville, Cumberland County, North Carolina

Welf ID	Date Measured	Top of Casing Elevation	Depth to Water	Groundwater Elevation
	2/26/2003		18.51	478.47
	4/16/2003		16,79	480.30
	2/9/2004		15.99	481.12
	1/28/2008		*18.01	478.97
	10/6/2009		*17.22	479.76
MW-1	6/3/2010	496.98	15.42	481.56
11171-1	12/15/2010	430.30	16.89	480.09
	7/26/2012		18.57	478.41
	5/8/2013		17.14	479.84
	12/27/2013		*16.82	480.16
	9/11/2014		16,03	480.95
	5/19/2015		15.79	481.19
	2/26/2003		20.32	478.99
	4/16/2003		19,69	480.46
	2/9/2004		17.81	481.28
	1/28/2008		*19.63	479.02
	10/6/2009		*18.78	479.87
MW-2	6/3/2010	498.65	16.93	481.72
1811-2	12/15/2010	430.03	*18,44	480.21
	7/26/2012		19.12	479.53
	5/8/2013		*18.85	479.80
	12/27/2013		18,73	479.92
	9/11/2014		17.60	481,05
	5/19/2015		17.26	481.39
	2/26/2003		18,16	478.93
	4/16/2003		16.35	480.30
	2/9/2004		15.60	481.05
	1/28/2008		1 7.70	478.95
	10/6/2009		*17.00	479.65
MW-3	6/3/2010	496.65	15.12	481.53
	12/15/2010	100.00	*16.64	480.01
	7/26/2012		17.26	479.43
	5/8/2013		*16.86	479.79
	12/27/2013		*16.53	481.05 478.95 479.65 481.53 480.01 479.43 479.79 480.12 480.90 481.12 479.09 480.47 481.20 479.04 479.88 481.69 480.15
	9/11/2014		15.75	
	5/19/2015		15.53	481.12
	2/26/2003		20.65	479.09
	4/16/2003		19.68	480.47
	2/9/2004		18.41	481.20
	1/28/2008		*20,22	
	10/6/2009		*19.38	
MW-4	6/3/2010	499.26	17.57	
	12/15/2010		*19.11	
	7/26/2012		19.71	479,56
	5/13/2013		*19.46	479.80
	12/27/2013		19.01	480.25
	9/11/2014	'	18.17	481.09
	5/19/2015	· ·	17.91	481.35
	2/26/2003		18.00	478.88
	4/16/2003		16.60	480.28
	2/9/2004	i	15.79	481.09
	1/28/2008		17.95	478.93
	10/7/2009		17.09	479.79
MW-5	6/3/2010	496.88	15.36	481.52
	12/15/2010		16.82	480.06
	7/26/2012		18.53	478.35
	5/8/2013		17.10	479.78
	12/27/2013	i	16,74	480.14
	9/11/2014		16.00	480.88
			15.75	481.13

* Water depth has been adjusted for free product by: DTW + (FP thickness X 0.73).

** MW-5 & MW-15 are Type III wells.

TABLE 5 HISTORICAL GROUNDWATER ELEVATION DATA Pantry #486 6605 Raeford Road Fayetteville, Cumberland County, North Carolina

Well ID	Date Measured	Top of Casing Elevation	Depth to Water	Groundwater Elevation
	2/26/2003		20.92	479.20
	4/16/2003		19.48	480.64
	2/9/2004		18.62	481.50
	1/28/2008		17.78	482.34
	10/6/2009		19.95	480.17
Mvv-6	6/3/2010	500,12	18.20	481.92
, -	12/15/2010	*******	19.38	480.74
	7/26/2012		20.36	479.76
	5/8/2013		20.02	480.10
	12/27/2013		19.64	480.48
	9/11/2014		18.78	481.34
	5/19/2015		18.51	481.61
	2/26/2003		18.25	479.03
	4/16/2003		16.86	480.42
	2/9/2004		16.22	481.06
	1/28/2008		18.21	479.07
	10/7/2009 6/3/2010		17.51 15.61	479.77 481.67
MW-7	12/15/2010	497.28	16.95	480.33
	7/26/2012		17.76	479.52
	5/8/2013		17.45	479.83
	12/27/2013		17.08 16.35	480.20 480.93
	9/11/2014 5/19/2015		16.35 16.21	480.93 481.07
	2/26/2003		16.45	478.65
	4/16/2003		15.17	479.93
	2/9/2004		14.52	480.58
MW-8	1/28/2008 10/7/2009	495.1	16.45 15.72	478.65 479.38
	6/3/2010		13.88	481.22
	12/15/2010		15.23	479.87
	7/26/2012			royed
	2/26/2003		20.63	479.13
	4/16/2003 2/9/2004		19.15 18.26	480.59 481.48
	1/28/2008	i	20.53	479.21
	10/6/2009		19.65	480.09
MW-9	6/3/2010	499.74	17.82	481.92
	12/15/2010 7/26/2012		19.38 20.05	480.36 479.69
	5/8/2013		19.68	480.06
	12/27/2013		19.29	480.45
	9/14/2014		18.42	481.32
	5/19/2015 2/26/2003		18.14 24.5	481.60 478,96
	4/16/2003		23.05	480,41
	2/9/2004		22.17	481.29
	1/28/2008		24.35	479.11
	10/6/2009 6/3/2010		23.49 21.75	479.97 481.71
MW-10	12/15/2010	503.46	23.26	480.20
	7/26/2012		23.95	479.51
	5/13/2013		23.57	479.89
	12/27/2013		23.17	480.29
	9/11/2014 5/19/2015		22.35 22.00	481.11 481.46
	2/26/2003		18.16	478.75
	4/16/2003		16.99	480.11
	2/9/2004		16.02	480.90
MW-11	1/28/2008 10/6/2009	496.1	*17.35 NM	478.75 NM
	6/3/2010		- NM	NM
	12/15/2010		NM	NM
	7/26/2012			royed
	2/26/2003		19.36 17.86	479.24 480.74
	4/16/2003 2/9/2004		16.98	481.62
	1/28/2008		NM	NM
	10/7/2009		NM	NM
MW-12	6/3/2010	498.6	16.52	482.08
	12/15/2010 7/26/2012		18.11 NM	480.49 NM
	12/27/2013		Dry	Dry
	9/11/2014		17.03	481.57
	5/19/2015		16.80	481.80
Notes:	NM - Not Measured, well * Water depth has been a	prior to 10/07 were collect is obstructed with organic	ed by a previous consultar debris. y: DTW+(FP thickness X	
	NA - Not Applicable MW-5 & MW-15 are Ty	pe III wells.		

TABLE 5 HISTORICAL GROUNDWATER ELEVATION DATA Pantry #486 6605 Reeford Road Fayetteville, Cumberland County, North Carolina

Well ID	Date Measured	Top of Casing Elevation	Depth to Water	Groundwater Elevation
	2/26/2003	FIGATION	27.48	479.01
	4/16/2003		26.00	480.49
	2/9/2004		25.08	481.41
	1/28/2008 10/6/2009		27.76 26.45	478.73 480.04
1881.40	6/3/2010	F00 40	24.68	481.81
MW-13	12/15/2010	506.49	26.05	480.44
	7/26/2012		20.92	485.57
	5/13/2013 12/27/2013		26.54 26.11	479.95 480.38
	9/11/2014		25.25	481.24
	5/19/2015		24.91	481.58
	11/12/2003		17.97	482.69
	2/9/2004		18.91	481.75
	1/28/2008 10/6/2009		20.15 19,49	480.51 481.17
	6/3/2010		19,49	481.17
MW-14	12/15/2010	500.66	19.92	480.74
	7/26/2012		20.66	480.00 480,37
	5/8/2013 12/27/2013		20.59 19.89	480,37
	9/11/2014		19.03	481,63
	5/19/2015		18.74	481.92
	11/12/2003		15.93	480.01
	2/9/2004 1/28/2008		16.35	479.59
	10/7/2009		18.45 17.57	477.49 478.37
	6/3/2010		17.57	478.37
MW-15	12/15/2010	495.94	17.02	478.92
	7/26/2012		17.95	477.99
	5/13/2013 12/27/2013		17,63 16,72	. 478.31 479.22
	9/11/2014		16,72	479.22 479.49
	5/19/2015		16.80	479.14
	10/18/2011		18,37	479.51
L4141 40	5/13/2013	407.00	18.08	479.80
MW-16	12/27/2013 9/11/2014	497.88	17.62 16,86	480.26 481.02
	5/19/2015		16.65	481.23
	10/18/2011		18.48	479.53
	5/8/2013		18.13	479.88
MW-17	12/27/2013	498.01	17.77	480.24
	9/11/2014 5/19/2015		16.97 16.80	481.04 481.21
	10/18/2011		20.35	478.93
	5/13/2013		19.28	480.00
MW-18	12/27/2013	499.28	18.86	480.42
	9/11/2014		18.03	481.25
	5/19/2015 10/19/2011		17.84 17.14	481.44 479.25
	5/8/2013		*16.61	479.78
MW-19	12/27/2013	496.39	"17.14	479.25
	9/11/2014		*16.11	480.28
	5/19/2015		*16.45	479.94
	10/19/2011 5/8/2013		16.40 *16.06	479.23 479.57
MW-20	12/27/2013	495.63	*15.73	479.90
	9/11/2014		*15.13	480.50
	5/19/2015		*14.88	480.75
	10/19/2011 5/8/2013		17.80 *15.43	477.23 479.60
MW-21	12/27/2013	495.03	15.11	479.92
	9/11/2014		14.38	480.65
	5/19/2015		14.18	480.85
	10/19/2011		16.84	479.20
M/A/_22	5/8/2013	496.04	16.51 16.19	479.53 479.85
MW-22	12/27/2013 9/11/2014	496.04	15.50	479.85 480.54
	5/19/2015		15,33	480.71
	2/26/2003		19.10	478.96
	2/9/2004		16.58	481.09
	6/3/2010		*16.11	481.56 481.56
RW-1	7/26/2012 5/13/2013	497.67	19.00 *17.97	481.56 479.70
	12/27/2013		Not Gauged	Not Gauged
	9/11/2014		16.70	480.97
	5/19/2015		16.46	481.21
	2/26/2003 2/9/2004		19.70 17.10	478.97 481.18
	6/3/2010		16.54	481.60
RW-2	7/26/2012	498.14	18.88	479.26
R. VV-Z	5/13/2013	480.14	*18.38	479.76
	12/27/2013		Not Gauged	Not Gauged
	9/11/2014 5/19/2015		17.12 16.90	481.02 481.24
	2/26/2003		18.80	478.92
	2/9/2004		16.20	481.02
	6/3/2010		*15.65	481.57
RW-3	7/26/2012	497,22	17.89	479.40
	5/13/2013 12/27/2013		*17.49 Not Gauged	479.73 Not Gauged
			16,26	480.96
	9/11/2014			
	9/11/2014 5/19/2015		*16.15	481.07
loles;	5/19/2015 All measurements in feet.			
'oles;	5/19/2015 All measurements in feet.	prior to 10/07 were collect	led by a previous consultar	

												TABLE	99													
										HSTORICA	L GROUNDW	PATER ANALYTICAL	YTICAL RESU	HISTORICAL GROUNDWATER ANALYTICAL RESULTS - PANTRY #488	Y#486											
										_	ayetteville, C	tumberland C	sees racions room Fayetteville, Cumberland County, North Carolina	Carolina												
	L			IIIV4			ŀ			PWW-2						PMM-2					MWA	Ĺ		NO	NGAC 2L STD	ē
Sampanna	6/4/2010	6/4/2010 12/15/2010 7/25/2012 698/2013	725/2012 1	518/2013 12	12/27/2013 9/12/201		5/20/2014 6	642010 12	5/2010 7/2	12/16/2010 7/26/2012 12/27/2013 9/12/2016 5/19/2015	72013 9/12/	2016 57972	2015 8/4/ZL	8/4/2010 12/16/2010	110 7725/2012	12/27/2013	7/25/2012 12/27/2013 8H2/2014	5/20/2016	<u>. </u>	12/15/2010	6/4/2010 12/15/2010 7/26/2012 12/27/2013	2/27/2013	BM17734 E	6720/2016	(nat)	Gen
Volatile Organic Compounds (VOCs) by GPA Method 62008	Cs) by GPA Me.	thed 6200B																					1			
Benzane	2008/6	25 const.	NS K	- 300 E-		- 000 000 000 000 000 000 000 000 0	9,2002,9	発性研究	SN SN	W. HOUSE	\$2.85×5%	日本大学を	AND STREET	SN NA	NS		7.09B	* 900 F - 007 H - 1806 F	1,800	坚	≅		C.5500 - 0.0500	3.C.B80	1.0	2,000
CH-Soprapy other (IPE)	Taa	901	SN	BOL	_	Jaa	BDL	109	SN SN	108	B	BDL 2.8	<u>a</u>	SN 1	NS.	_	301	apr.	ā	NS	NS	1_	100	90.	92	200 07
Ethylhenzene	200	5 2 SD01 5	NS 85	0.000	盛	** 1 ZOUS \$ 4 Z COURS		왕	SN	100	9	26		SN WEST	SN .	_	THE REPORT	25 peter - 2 and	4.200 ×	SH.	S.	12	- 10.000	10 mm	909	84.500
Bapyopylbenzane	27	108	NS	BDL	_	19		BDL	NS SECTION	100%	5,8	5,2	ē.	SN NS	2	_	A LONG	TO THE PERSON AND ADDRESS.	_	¥	SS.	<u> </u>	1306	The second	20	25,000
Methyl tertlary-butyl ether (MTBE)	2000/25 pes	3,000 ZS-	寒 SN	1.200 F.		STANDARY NO.	September 1 septem	2500 to	NS W	A 10.00	1.1	19 18	0 Sec. 18.	SN MA	SN		N. HELDER	無数の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の	300	NS	Ş	<u></u>	BDL	901	20	20,000
Naphthalone	C. 12	BDL	NS	BDL		THE REAL PROPERTY.		BDL.	SN SN	A 10 TO 10	77.	A. C.	108	SN 7	SN			100 mg	ida	ž	5€	_	108	247.976.23	۰	900
n-Propylbanzana	9	BEH 029 14 15	NS	BDF	i i	(4) 4(4) (1) 4(4) (4) (4) (4) (4) (4) (4) (4) (4)	SEID OF SEA	(Sept.)	NS	_	19	9 18	1	SN SSSS	SN		STATE OF THE PARTY.	Section Section	第一种种种的	SN	SN	188	4.200 E	2000年の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の	e.	30,000
P-Isopropyffoliane	Ŧ	BDI.	NS	BDI	į	HO!	BDI,	BDL	NS	10E	ig L	7. 1.4	4 80.	SN	Ş	ı E	da	īg.	108	SN	SN	- I	982	IDE	호	ž
n-Butytbenzana	BD(BOL (NS	BDI.		10	BDL	BDL	NS	2.3	1.7	7 2.2	2 BD(SN NS	2	_	TQB	₽	108	SN	SN		- OBD	108	202	006.9
ee-Bulylpenzeue	BDL	108	NS I	BDL		9.9	BDL	901	SN	1.8	1.7	7 2.5	H	L NIS	SM		108	-14	TOB	NS.	NS	_	BOF	801	70	8,500
Toluene	* 41,800 kg - 310,000 kg	200 000	SE SE	24 Pod	*	SACISTOR SECTIONS SECTIONS	22,000,000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SN	200 Table 1886	225	10 AND 10	HANDERS OF REPORTS	SN WE	Ş	_	10 m	THE PROPERTY OF THE PROPERTY O	\$ 100 E	NS.	Š	LES	S40000 8 213 000	2000年	8	260,000
1,2,4-Trimethylbenzene	101 2 10 00 Ye	4. 10t. P	NE NE	K. Alboury	*	SE SECTION	1620034 KEN	STATISTICS.	62	260	480	300	0	SN	NS		THE PERSON NAMED IN COLUMN	A STATE OF THE STA	STATE OF THE PARTY	SN	SN	i Si	CATACON CONTRACTOR	会はの数の対象	400	28.50b
1,3,5-Trimethylbenzene	140	表数的数数		380		310	200	190	SN	25	4	4 .74	5002	SN 1	SI		320	200	240	NS	ž		E-4300 - 23	24	904	25,000
Xylenes, Total	SALES SECTIONS	3521.200.80	SN	AND COLORS	K∯.	SOME STREET, S	化成物的物	TE SOUNT IN	SN SN	A PROPERTY AND A PROP	C	CALC BURE SILVERS 1920 C.S.	200 A 100 A	NS NS	SN	_	SECOND SECOND	SALTHANDS FOR GROUPES	\$500B \$ 500	SS	9	Œ	C. BELLOO ALC DOOR	THE PROPERTY.	.009	86,500
Notes:	<u>بر</u>																									
	All results in y	All results in µg/L - (micrograms per liter); BDL = Below Detection Limit, NA = Not Analyzed by particular method	ms per filer); i	50L = Below\	Detection Lin	att NA = Not A	natyzad by par	ricular method																		
	GCL = Grass	GCL = Gross Contaminant Level; NL = Not Listed	wel; NL = Not	t Lisbod																						
	2L STD - Grat.	21, STD - Groundwater Quality Standard (15A NGAC Subchapter 21.)	V Standard (1	SA NCAC Sur	behapter 21)																					
	Parameters m	Parameters not listed were tratow detection limits - see complete laboratory report for details	alow detection	- firmits - see c	complete labo	or altery report for	ır details																			
	NAPL - Non-A	NAPL - Non-Aqueous Phase Liguid present	Liquid presen	,																						
	Result	Result - Result Exceeds Laboratory Detection Limits	to Laboratory	Defection Lin	看																					_
	W. Translith	資気をおいれる - Result Exceeds 21. Standard	ts 2L Standar	P																						_

_	Γ.	-		_	무	8	8	8	٥	8		٥	٥	00	Ŕ	8	8	
	O GOL			90°S	70,000	84,500	25,000	20,000	8,000	30.00	IN NE	6,900	8,500	000 09Z	28,500	25,000	95,500	
	NCAC 2L STD	(E-6)		1,0	22	009	02	02	ø	0.2	IN	0.4	02	909	007*	400	200	<u> </u>
		549/2016		ig Bi	BD	1GB	TOB	1GB	109 101	BDF	าตย	1 0 8	BDI	BDI	BDL	108 BDT	FDF	
		9/1/2014		BDL	BOL	10g	TOR	TOR	HOL	TOB.	BDL	BDI,	TOB _	BD.	BDT	BDT	BDL	
		12/27/2013		109	ä	EDI	TG8	TOS	BDL	108	108	BDL	108	BDL	708	305	1CB	
		5/13/2013		BDL	901	108	108	708	BDL	BD1	BDL	BDL	BDL	BOL	BDL	BDT	BOL	
	Ļ	7/26/2012		BOL	BDI.	BDL	BDL	BDI.	108	BDL	BDI.	BDF	BDF.	BOL	300	900,	BDL	
	5-MM	77200 6422010 121612010 772612012 ERZO12 ERZO13 122712013 12172013 SY22014 EZU2016 EZU2016 122712013 12271		10 miles	3D),	3DF	BDL	307	BDL	BDL	BDL	BOL	BDL	BOL	BDL	BDL	BDL	
,		12/18/2010			BD1,	BDL	BDL	BDL	BDL	108	108	30.	900	BDI,	BDI.	BDI	BOL	
		6/4/ZD10		100	7Q8	708	BDL.	108	BDL	BOL	BOL	BDL	BD(BDL	BDL	BDL	BDL	
NIS JONIOAL GROONDING RAWALT IIOAL RESULTS - FANI KT RASS BESE Ractor Road Fayetteville, Quanchard Colony, North Garolina		40/5/2009		18 V	BD(109	1.1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.0	BDI.	BDL	
Fayetteville, Quanberland Golardy, North Carolina		2/25/2008		30E	BDL	901	BDL	BDI.	901	BDL	108	BDL	BDL	BDI.	HD,	HD.	BDI.	
KS05 F		5/20/2015		HD1.	BD(BOL	BDI	PD(BDL	BOI,	BDI.	BD.	BDI	BDL	BD.	BDI.	BDL	P _Q
Fayetter		9/12/2014		108	3DF	80f	801	BDL	BDL	BDL	901	90,5	30,	108	108	306	301	varkaular met
Ê		1227/2013		BD1.	BD1.	BD/L	BDC	23	BDL	BOL	BD.	BOL.	BD/.	BDT	BDL	BDL	BD.	(rikicagams per Bay BDL = Bahav Dekaddan Linit NA = Net Arabyzed by particular method annimat (versit NL = Net Linit Subset) and versit of the Subset of th
		6/8/zu13		306	108	BDL	BDL	1.3	BDL	306	BDL	30.	8DI,	BDI.	80F	BDI	BDL	mit; NA = Nat oratory report
	988	7726/2012		BD(BDL	BOL	BD1,	BDT	BOL	BDL	BOL	BDT	BDL	BDL	BDL	BD:	BOL	/ Detaction Li ubchapter 24 complete lab
		12/16/2010		108	108	901	BOL	2"3	BOI.	BDI.	BDI,	BD.	BDL	ē	2.6	BDL	3,5	BDL = Balav of Listed (15A NCAC 5 on finits - see set y Detection L
		6/4/2010		108	BDL	BDI	BDL	TG8	BDL	BDL	BDL	BDL	BDI	BDL	BDL	HD).	BDL	ams per Bot) Leves NL = N Illy Standard Delow detecti or Uquid press or Laborato ects 21, Shand ects 21, Shand
		ģ	80029 poup	- TOB	BDL	BDL	BD.	2,1	- TOB	BDC	BD(BDC	BDI.	BDL	90F	109	BDL	ag/L - (microgi Contaminant undwater Que of Ested were squetts Phas = Result Exce
		4/28/2008	s) by EPA Me	BOL	TG8	BDL	BDL	25 W 35.C	BDL	BDL	60,	BDL	BOI,	BDL (BDL	BDL	HOF	Alexade in logic (releagemen per littig EB). = Blaww Devotedon Linit; NA = Not Amargest CG12 - CG2 - CG2 - CG2 - CG3
		Campadha	olatile Organic Compounds (VOCs) by EPA Methor	up.	DHsopropyl ether (IPE)	Eliyibanzana	Sopropylbenzene	Mothy) tertlary-butyl ather (MTBE)	Japhthalene	-Propylanzene	p-fsopropy(in)terns	Bulyfbanzette	soc-Butylbenzene	al	2.4-Trimethylbonzane	3,5-Trimothytbonzana	Xylenes, Total	Notes:
	L		Votabli	Benzene	OHSop	Ethylbe	Sopra	Mothyl	Naphth	Prop.	Meap	P-Buly	sec-Bu	Toluane	12.4	1,3,5-1	Xyene	

									EST 5	RICAL GROL	INDWATER A	TER ANALYTICAL	HISTORICAL GROUNDWATER ANALYTICAL RESULTS - PANTRY #486	NTRY #486										
										Fayettev	about Alle, Cumberla	ind County.	Fayetteville, Cumberland County, North Carolina											_
					2-MH				l			MW-6						8-MM					NGAC 2L STD	90,
Compound	2/25/2008	2/25/2008 10/7/2009		6/4/2010 12/18/2010 7/26/2012	7/26/2012	5/8/2013	13 5/8/2013	9/11/2014	5/13/2015	1/29/2008	10/7/2009	6/4/ZD/ID 1:	12/18/2010 7/2	7726/2012 1/28/	1/28/28/08 10/6	10/6/2009 6/4/	6/4/2010 12/15/2010	5010 7726/2012	012 5/8/2013	113 5/8/2013	3 9/11/2014	4 5/19/2015	(had)	(hgd)
Volatite Organic Compaunds (VOCs) by EPA Method 5200B	Cs) by EPA III.	ethod 5200B																						
Benzene	BDf	108	108	1GB	109	BD.	109	HD4	109	108	日本の 日本の 日本	108	109	ř	801 8	1,08	30T BD	108	_	708	TOR	TOB	1,0	5,000
Di-Isaptapyl other (IPE)	-TOE	BDL	108	- BD	109	301	BDL	100	BDL	BOL	BDL	1aa	BDf.	ď	eor e	BDT BI	aor ab		108	_	TGB	BDL	70	70,000
Ethylbenzene	BDI.	108) OB	BD.	108	3DF	BDI	BD.	BDL	BD(BDL i	BDL	BDL	7			37 BD	4,3		H	708	109	009	84.500
Isopropylbenzane	-JGB	BOL	JOB .	BDI	108	301	BDL	ia	TOB		108	П	109		2000	F 45 9	784.00		H	88	6	£	70	25,000
Methyl tertiary-butyl other (MTBE)	BDI	TOS	108	σz	108	108	BDL	108	BOL		400	218	建设设施的			30	.or BD	TOB BDIT	L	108	BDF	BDL	02	20,000
Naphthalene	108	HDF	108	BD£	TGB	TOB	BDL	HOL	108	BDI	109	BDI.	108	ř.	200		1	49	TOB SSA	L L	BDE	109	65	6.000
n-Propylbenzene	ROF	10 9	108	BDF	1GB	1 0 8	BDL	HD1.	801	BDL	BDL	BDL	108	â	280% 拳 320%		DPZ 16 16 16 18 18 18 18 18 18 18 18 18 18 18 18 18	100	28	SDOL XX	188	40	02	30,000
p-Isopropyfloluene	BDL	7.08	BDI.	BD.	BDL	108	BDL	HD).	HOL	BDf	108	BDL	BO!						L	-	7.2	9'9	'N	¥
n-Butyfbenzene	901	BOL	BDL	BDL	BDL	BOL	BDL	∃ga	BOL	BD/L	HOT I	BDL	BDL	a	, 108	12 BI	DT B6	45	16	14	14	14	٤	6,900
sec-Butylbenzane	108	108	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		16 E	1 1	13 801	-	13		15	43	QZ .	6,500
Tokusha	BDL	801	BDL	80.	BDL	BDL	BDL	BDL	BOL	BDL	BDI.	BDL	HDI.	ă		BOL BDL	DL 1901		BOL BDL	I BDL	BDL	BDL	600	280,000
1,2,4-Trimethylbanzona	BDL	109	-lae	BDL	nga	BDI.	TOB	108	TOR	109	BDL	HD.	BDI.		2000 (NI) 1007'1	经验证的	8	2	008) A 300	0074××200	100 THE REST	2 G69 % SA	400	28,500
1,3,5-Trimethytbenzone	BOL	BDL	8	BDL	HOL	108	BOL	BDL	HOY	SDI,	BDL i	BDI	HDI.	N.			350 000000	(紫景 220	_	1 400	<072		400	25,000
Xylenes, Total	108	BOL	BDL	BDL	BDL	BDL	807	BOL	BDL	BDL	BDL	BDL	BOL.		2 (SECTION 2	270	:12 380		1 BDL	_	Ŧ	7	005	65,500
Motes																								Γ
	All results in s	ug/L - (misro	grams per lite	All results in ug/L - (micrograms per liter); BDL = Below Detection Limit; NA	w Detection L	×	Not Analyzed by perfoular method	perfoular me	thad															_
	SCL = Gross	3 Contaminan	GCL = Gross Contaminant Level, NL = Not Listed	Not Listed																				
	2L STD-Gn	sundwater Qt.	uality Standar.	2L STD - Groundwaler Quality Standard (15A NCAC Subchapler 2L)	Subchapler 2.	9																		_
	Parametars n	yot listed were	a below detec	Perameters not listed were below detection limits - see complote laboratory	a complete la		aport for details																	
	NAPL - Non-	Aqueous Pha	MAPL - Non-Aqueous Phase Liquid present	sent																				_
	Result	= Result Exc	coeds Labora:	tory Detection	Limits																			_
	PRESIDEN	= Result Ext	2000s 2L Star	ASSESSED Result Exceeds 2L Standard																				
	が活動を	to Recuit Eye.	A Land	4110																				-

									¥	TORICAL GI	TAE ROUNDWATI BB	TABLE 6 (Confinuer NATER ANALYTICAL I 6505 Raeford Road	TABLE 6 (Confinued) HISTORICAL GROUNDWATER ANALYTICAL RESULTS - PANTRY #485 BBGS Raeford Road	PANTRY #486	/4										
					MW-10				ŀ	Lay.	ITEVINE, DUI	IIIM-12	rayettevire, Dumbelland County, North Catolina MA-12	6	L				MW-43					NCAC 21 STD	SCI
Compound	1/29/2008 10/6/2009 6/4/2010 12/19/2010 7/27/2012	6002/5/0	54/2010 12	718/2010 7	72772012 \$	5H3/2013 12/27/20	22772013 8	13 8/11/2014 EM	6719/2015 6/	172010 127	18/2010 7/2	77.2012 12.72.	6/4/2010 12/18/2010 7/2/2012 12/2/2013 SH1/2014 6/18/2015	014 6/19/20	1/29/2008		9 6 6/4/2010	10/6/2009 6/4/2010 12/4/2010 7/2/2012 5/13/2013 12/2/2013 8/1/2014	772772012	5/13/2013	12/27/2013	BH1/2014	5/19/2015	(Ban)	(Jean)
Volatile Organic Compounds (VOCs) by EPA Method 6200B	3) by EPA Meth	10d 6200B																							
Benzone	108	BD!	109	301	- TOB	109	108	108	100	HOF	108	708	Œ	H	TGB	108 	10B	108)QB	JOS	HDF.	108	BDL	1.0	5,000
Di-Sopropyl ethor (IPE)	TOE	BD1.	BOL	ä	100	BDL	ī	BOL		BDL	700	BD1.	108	JGB T	B	108	TOB	TQ8	TGB	BDL	708	108 101	BDL	5	70,000
Ethylbenzene	108	BDf,	BDL	BDL	BDL	BDL	BOL	BDI	80ř	BO.		BOL	8	108 T	BDL	10B }	TIGE	108	108	108	108	BDL	EDI.	600	84,500
kopropyľbenžene	HD1.	BD1.	PDF	108	ig Bor	BDL	ig B	108			100	BDL	9		90	TOB	TOG	BD1,	BDL	108	100	ă	1GB	2	25,000
Methyl britany-bunyl ether (MTBE)	108	- TGB	HO.	901	apr	108	108	BDT	709	BOL	300	BOL	108		TOS .	7 0 8	BDL	108	1G8	HOI.	108	BDL	108	20	20,000
Naphthalene	108	TOB	BDL	ğ	301)GB	BOL	BOL	H		H	BDI.	90	TGB T	BDI	GDC	BDI	BDF	109	108	BDL	렱	ide	9	6,000
n-Propylbenzene	109	HDI,	HD1,	901	edor.	1G8	HOI	BDT	_	BOL	108	BOL	BDI		_	∃GB	BDL	708	108	108	BDI	10g	TOB	0,2	30,000
p-fsapropyiloluene	108	HDL	BDA.	108	BD1.	BDL	FDI.	BD(BD.		HDI.	BDL	90	L	L	TOB	BDL	HDF	108	708	108	ם	TOB	Z	¥
n-Butylbenzena	BDL	108	HD.	90(BD1.	BDL	BDI.	BDI,	BOL	BOL	L	BOL	TOS	r BDL	901	BDC	BDI.	TGB	108	TOB	BDL	ig.	TOB	02	6,900
sec-Butylbenzana	108	306	BD.	108	108	BDL	109	BDT	301	BDL	HOP.	BDL	108	ר ו פטר	BDF	BDL	305	108	108	TGB	108	DOC	108	02	8,500
Toluene	BDT	109	307	109	108	BOL	BDL	Tae	108	TOB	_	BOL	ICB	TOB T	108	BDL	306	108	306	108	ã	JOB	108	900	260,000
1,2,4-Trimothylbenzene	1GB	BDL	108	100	BOL	1QB	1.3	HD.	BOL	aor	708	BDL	108	ר פטר	BDL	BDL	305	108	708	HD1.	BDL	BDF	BDL	900	28,500
1,3,5-Trimathylbenzane	BDt	BDL	108	ig H	BOL	BDF	BDL	308	108	_	301	BDL	BDI	ר פסר	108	BDL	TGB	BDI	30F	TGB	7Q8	BOL	BDL	400	25,000
Xylenas, Total	Tos	nge .	BDI,	HDI.	BOL	BDI.	3,8	BDL	BDL	BDL		BDL	BDL	L BDL		BDL	801	BDI	γgg	709	BDF	PDF	108	. DOS	85,500
Notes:	Alfresults in µg't (micrograms per filer). BDL = Belew Detection Limit, NA = Net Analyzee	?L - (microgra	ms per Rer); B	DL = Balow	Detection Lim	It, NA = Not /	id id pazifeu	i by particular method	T									-							
	2L STD - Groundwaler Quelity Standard (15A NGAC Subchepter 2t)	Avater Quelle	eyer, NL = Net ly Standard (15	SA NCAC SU	bchapter 2(.)																				
	Parameters not listed were below detection limits - see complete laboratory report for details	fisted were t	notoetec wele	mits - 598	complete labo	ratory report	for details																		
		Result Excess	Regult F. Rosulf Excepts Light present	Detaction Lin	2																				
	※SRESEMEN = Result Exceeds 2L Standard	Result Exceo	ds 21. Standard																						
		Result Exces	ds GCL Value																						

				-					HIST	HISTORICAL GROUNDWATER ANALYTICAL RESULTS - PANTRY #486	UNDWATER.	ANALYTICAL	RESULTS - 1	ANTRY #48	w										
-										Fayette	6605 ; ville, Cumber,	1605 Raeford Road Inberland County,	6605 Raeford Road Fayetteville, Cumberland County, North Carolina	g											
					MW-14									MW-15				-		ĺ	MW-15		W	NCAC 2L STD	8
Campacad	1/29/2008	1/29/2008 10/5/2009	6/4/2010	64/2010 12/15/2010 7/26/2012	7/26/2012	5/8/2013	5/8/2013 12/30/2013 9/11/2014 6/19/2015	9M172014	5/19/2015	1/28/2008	10/7/2009	6/4/2010	12/15/2010 7/26/2012 SH3/2013 B/13/2013 SH2/2014 6/20/2016	726/2012	5M3/2013	V13/2013	H222014	720/2016	-	5M3/2013 12/30/2013 9/12/2014	20/2013 S		5/26/2015	(hear)	(Mari)
Volatile Organic Compounds (VDCs) by EPA Method \$200B	Cs) by EPA Ma	Hhod \$200B																		_					ľ
Benzens	HD4	108	108	- Ide	108	108	708	708	108	4 6 GZ	BDL	708	BDL	TOB	108	7 08	f 108	HD(SN	- C9.	an.	- 412 - D9	34.00 31.00	1,0	5,000
Dispinable other (IPE)	HD!	BOL.	108	BDL	BDL	301	BDL	305	BD.	708	BOL	TOB	BDL	BDL	901	TOE	108	BD(ı	ig.	<u> </u>	FDI.	3,6	6	70,000
Ethylbenzene	108	BD(BDL	9Dt	BDL	ĕ	BDL	7GB .	108	2.5	108	TOB	108	BD.	108	- TOP	108	BD(- SN	34	_	11	96	009	84,500
Sopropylbenzene	1gg	BDL	108	BD1.	TOB	ī	BD(BDL	108	8DI	BDL	BOL	108	BDL	30F	TGB	108	- TGB	SN	2	L_	1.5	4.4	70	25,000
Methyl tertiary-butyl ether (MTBE)	108	108	901	9	4,6	TC8	1QB	708	HD4	2.8	BDL	1.1	6.8	TOB	BDL	- TOB	108	- TOB	SN SN	Sec. 22.	Š,	A	200 PT 200	20	20,000
Naphthalone	-BDI	BDL	108	108	109	109	108	708	109	108	109	ΉOΒ	BDL	HDF.	108	1da	108	-Taa	NS SN	がなり		W TOB	390	8	6,000
n-PropyBonzone	- TOB	BDL	108	BDL	าดต	HD1	108	708	HOI,	108	BDL	HDL	HDE.	BDL	HDI	BD1,	108	TOB	82	4		า	7.2	02	30,000
p-laopropylkoluono	708	- BDL	108	108	709	BDL	108	BDF	PDF	708	BDL	HD/L	108	BDL	HOL	BOL	BOL	BDL	NS	BD1.	_	108	BDI	ī	¥
n-Butyfbanzene	301	TGB	BDL	108	709	BDL	108	TOB	BOL	108	ED1	1GB	BDI,	BDL	108	BDL	TOS	BDL	SN	BDL	<u> </u>	- TGB	BDL	5	6,900
sec-Butylbenzane	HOT I	BDL	BDL	108	108	108	1GB	108	108	708	BDL	TOB	109	BDL	108	BDL	HDL	BDI.	en en	BDL		BDL +	301	R	8,500
Tofuerta	TOB .	108	BDL	BDL	BOL	BDL	BDL	BDL	- BD/	\$4	BDL	HDL	108	BDL	HDF.	BDL	108	BDL	SN	200	L	SB	25 (400)	600	250,000
1,2,4-Timethybenzene	BDL	TOS	1GB	2	2.2	BOL	708	108	ADL.	1'8	BDf,	BDL	BDL.	BDL	BDL	BDL	108	BDL	92	69		74	120	400	28,500
1,3,5-Trimethytbenzene	BDI	PDI.	HDI.	BDL	108	BDL	305	108	10B	0.2	HDF	BDL.	901	BDL	108	BDL	108	100	SN	45	L	7.5	38	400	25,000
Xylenes, Total	- BDL	709	BDL	109	308	BDL	108	108	BDL	19.6	BDL	BDL	BDL	BDL	BDL	BDI.	BDI	BDI.	en en	230	L	111	30.2080 S.S.	200	85,500
Notes	١																								
	Al results in s	- Ryr - (microgi	rams por Rer	t; BDL = Belo	w Detection	Imit NA - N	All results in 18/1 (micrograms per Red); BDL = Below Detection Limit; NA = Not Analyzed by particular method	mariloniar m.	thod:																_
	CCL = Gross	GCL = Gross Contaminant Levet NL = Not Listed	Levet NL = 1	lot Lisked																					
	2L STD-Gro	2L STD - Groundwater Quelly Standard (15A NCAC Subchapter 2L)	My Standard	(15A NCAC)	Subchapler 2	5																			_
	Perameters n	Perameters not listed were below detection limits - see complete laboratory	below detect	es similar	e complete la	botefory repo	report for details																		•
	NAPL - Non-	NAPL - Non-Aqueous Phase Liquid present	to Liquid pres	am																					
	Restil	Result = Rosult Excoods Laboratory Detection Limits	octs Laborate	vry Detection	Limits																				
	TO PRODUCE TO	京のPeant記載 = Result Exceeds 21. Standard	ade 2L Stant	Pin																					

										ğ	ICAL GROUN	DWATER AN	HISTORICAL GROUNDWATER ANALYTICAL RESULTS - PANTRY #486	SULTS - FAN.	KT #465											
											Fayettevilk	t, Cumbertar	Fayetteville, Cumberfand County, North Carolina	th Carolina												
		*	NW-47		-		N.	48	I !	L	EP-WW			IGW-ZD	dZ-,			MW-Z		L		MW-22	-22		NCAC 2L STD	150 361
Companie	7726/2012	772672012 58872013 122772013 9/11/2014 6/20/2016 7/26/2012 6/13/2013 12/30/2013 9/11/2014	127/2013 5	1112014 GL	20/2015 7/26	72012 5713	2013 12/30	2013 9/11/	2014 5/20/2016	12/30/2013	13 8/11/201	SM172014 5/20/2015	7/27/2012	12/30/2013	2105/05/2 4105/119 E105/06/21 5105/15/7	5/20/2015	7/27/2012 12/30/2013 8/12/2014	2302013 \$	112/2014 G	5/13/2016 7/21	7/27/2012 6/8/	2013 12/30	72013 9/12/2	6/8/2013 12/30/2013 9/12/2014 5/19/2015	(legal)	(fight)
Volable Organic Compounds (VOCs) by EPA Method S200B	ics) by EPA Men	thed 6200B																								
Benzere	108	6.2	BDE	W YOR		Design Control	П	7CB 108	H	L	L	_	1000				500-12 976.00 540:00 890	Transfer S	(2) (2) (2) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	Ц	108	108 TOB	3r 8DF	. BD1.	0.1	5,000
Di-Sapropyl either (IPE)	308	1GB	108	TGB	BDL	108	Γ	108 109	F				BDL	_			BDL BDC)OS	BOL	709	BDL B	108	<u> </u>	BD(70	000'02
Ethylbenzane	305	1GB	301	1.4	4,9	10 E.	E,3 BC	BDL BDL), BDL	_			2.80g				2500 X	6,300 cm	2,000			L	L	L	900	84,500
Isopropylbenzene	ã		ig B	108	- F	9	7.6 BE	HDF BDT	H	-			108				H30 10 10 10 10 10 10 10 10 10 10 10 10 10	A 278 C		L	BDf. B	BDI BI	L	6,9	70	25,000
Methyl tertary-butyl ether (MTBE)	108	108	덚	108	2.8	10 E.	18 8.3	BD1 BD1	_			_	* 25 gdb * 3				2 (012) See (11)	270	002		6.9	1,P BD	-	9"2	20	20,000
Naphthalene	BDL	aDi.	IGE	TOB	BDT B	BD. BG	adr BE	BDT BOL	ו (ממר			_	108		_		RDI 🛣			ш	BDI. BI	Н	T Specifical	90 27	9	6,000
n-Propyfbertzens	BDL	H	108	8.6	BD.	5	24.0 BE	BDI BOL		, age	10.00	MAD	BDL	MAD	200	1092	100 LX 100 B 1	新教育		1 1000	BDI, BI	108 TOB	Γ.	6.4	22	30,000
p-isopropylibluene	108	1QS	HDI.	TOS	-TGB	1 6	38 0'9	109 109	_				108		Š		108	BDI	108		101 H BI	108 108	ור ו פסו	BDL	N.	'n
n-Butybenzene	301	apr	108	BDL	ā	2.2	27.0 BE	108 ROL	ור פוסר				BDL	_			BDL	BDL	BOL	11 E	BDr (BI	108	109 70	708	2	6,900
sec-Butylberzane	108	108	108	HDT.	708	3 4.	12.0 BE	108 10B	_				BDL	_			801	BDL	BDT.	Ц	BDT BI	BDI BDI	L	L	22	8,500
Totalene	BDL	53	108	5,5	6,4 B	BDL BI	108 BDT	BDF BC	80F (80F				30 000				11,00051	24 18 JOHN 14	44 (44)	200021	BDT BI				600	260,000
1,2,4-Trimathythenzone	HDL	32	2.1	12	23	62 4	110 BE	Н	H				KINTON S			لتكم	Contain Second Second	** CODE	S. STORY		BDr BE	108 108)L 230	20	400	28,500
1,3,5-Trimethylbenzene	BDI	12	108	1.7	6.4	27 5	16 29	BOL BDL)(BDL	П			BDL			القص	- euto : 1,200f - seato 1.	1.300	Seattle S			na i no)L	100	400	25,000
Xylenes, Total	109	5	8,1	13	36	73 36	36.2 BE	BOL BDL	L				SUPPLIES OF STREET			***	SATINGES	25 E0b	318.2db 32.	H	BDI, BI	BDL BE	BD(************************************	43	200	85,500
Notes																										
	Alt tosults in p	Alt tosults in µg/L - (micrograms per liter); BDL = Below Detection Litrit; NA = Not Analyzed by particular mathod	ns per (fer);	BDL = Below C	Velbodion Urrat; i	VA = Not Anal	yzad by partic.	ular method																		
	GCL = Gross	GCL = Gross Contaminant Level; NL = Not Listed	vel; NL = No	t Listed																						
	2L STD - Glos.	2L STD - Groundwater Quality Standard (15A NGAC Subchapter 2L)	* Shandard (1	5A NCAC Sub	chapter 24,																					
	Parameters no	Parameters not listed were below detection limits - see complete laboratory report for details	low detection	1 limits - sue co.	resplote laborati	ny report for a	letails																			
	MAPL - Non-A	NAPL - Non-Aqueous Phase Liquid present	Lkquid prese	*																						
	Result	Result - Rosult Exceeds Laboratory Detection Limits	ts Laboratory	- Detection Lim	4																					
	Part of	Resident - Result Exceeds 2L Standard	is 2L Slands	ē																						
	200 May 1	Kesuit Exceeds GCL Value	is occ value																							

TABLE 7 FREE PRODUCT MONITORING AND RECOVERY HISTORICAL SUMMARY Pantry #486 (Incident: #23062, Facility ID: 0-023655) 6606 Raeford Road

Monitoring/R	evovery Date	May 19	, 2015	Septembe	11, 2014	August 2	22, 2014	July 2	, 2014	June 1	9, 2014	May 22	, 2014	April 22	2, 2014	March 2	0, 2014
Well ID	Screened Interval	Depth to Water Uncorrected (feet)	Free Product Thickness (feet)														
MW-1	10 - 30	15.79	-	16.03	-	16.03	1	15.87	-	15.51	-	14.96		15.32		15.11	-
MW-2	10 - 30	17.26	-	17.60	-	17.56	0.01	17.89	0.09	16.81	0.02	16.44	-	16.37	-	16.79	0.08
MW-3	10 - 30	15.53	-	15.75	-	15.77	•	15.64	-	15.09	•	14.72	-	15.16	-	15.01	-
MW-4	10 - 30	17.91	-	18.17	•	18.20	•	18.03		17.31		17.09	-	17.49	-	17.21	
MW-16	10 - 30	16.65	-	16.86	-	16.90	-	16.75	•	16.19	-	. 15.81	-	16.19	-	16.05	_
MW-17	10 - 30	16.80	_	16.97	_	17.03	-	16.92	-	16.29	-	15.95	-	16.41	-	16.15	-
MW-18	10 - 30	17.84	-	19.03	-	N/A	N/A										
MW-19	10 - 30	15.95	0.68	15.90	0.29	15,90	0.30	15.95	0.55	15.30	0.11	15.20	0.67	15,90	1.17	16.16	0.91
MW-20	10 - 29	14.80	0.11	15.05	0.11	15.10	0.67	14.88	0.08	14.30	-	13.96	-	14.22	-	14.78	
MW-21	10 - 29	14.18		14.38	-	14.40		14.29	-	13.75	-	13.44	-	13.71	•	14.39	-
MW-22	10 - 30	15.33	-	15.50	-	15.53	-	15.45		14.96	-	14.60	-	14.98	-	14.98	-
RW-1	10 - 30	16.46	•	16.70	-	16.70		16.51		16.12		N/A	N/A	15.60	-	16.05	_
RW-2	10 - 30	16.90		17.12	•	17.15	-	16.97	-	16.39	-	N/A	N/A	15.98	•	16.15	-
RW-3	10 - 30	16.09	0.08	16.26	-	16.26	0.02	16.22	0.16	16.25	-	N/A	N/A	16.42	-	16.08	•
Recover	y Method	Bai	ler	Peristalt	c Pump	Peristalt	ic Pump	Peristal	с Ритр	Ba	ller	Peristalt	c Pump	Peristalt	ic Pump	Peristalti	c Pump
Recover	y Volume	~6 Gallons Water/	Petrolaum Mixture	~5.5 Gallons Water	/Petroleum Mixture	~7.0 Gailo⊓s Water	/Petroleum Mixture	~3.5 Galions Water ~0.6 Gall		~4,0 Gallons Water	/Petrolaum Mixture	~2.0 Gallons Water ~0.5 Gallo		~2.5 Gallons Water ~1.5 Gallo		~6.0 Gallons Water/ ~1.0 Gallo	

Notes:

1.) Depth-to-Water and Free Product Thickness measurements represent conditions prior to the associated recovery event

TABLE 7 FREE PRODUCT MONITORING AND RECOVERY HISTORICAL SUMMARY Pantry #486 (Incident: #23062, Facility ID: 0-023655) 6605 Raeford Road

Monitoring/R	Revovery Date	February	17, 2014	January .	22, 2014	Decembe	r 16, 2013	Novembe	r 18, 2013	October	31, 2013	March	8, 2013	July 26	, 2012
Well ID	Screened Interval	Depth to Water Uncorrected (feet)	Free Product Thickness (feet)	Depth to Water Uncorrected (feet)	Free Produc Thickness (feet)										
MW-1	10 - 30	16.30	-	16.35	-	16.70	-	16.53		16.29	-	17.62	0.20	18.54	0.04
MW-2	10 - 30	17.92	0.04	17.99	0.10	N/A	N/A	N/A	N/A	N/A	· N/A	19.05	<u>-</u>	19.12	-
MW-3	10 - 30	15.98	-	16.05	-	16.37		N/A	N/A	16.03	-	17.20	0.05	17.22	0.05
MW-4	10 - 30	18.48	_	18.51	-	17.90	-	18,68	-	N/A	N/A	19.64		19.70	0.02
MW-16	10 - 30	17.14		17.21		17.55	-	17.38	-	16.15	_	18.30		18.36	0,01
MW-17	10 - 30	17.27		17,32	-	17.65	-	17.81	-	16.30		18.43	_	18.48	-
MW-18	10 - 30	N/A	N/A	19.52		20.35	-								
MW-19	10 - 30	16.50	0.64	16,50	0.67	16.63	0.39	16.83	0.90	16.58	0.87	17.00	0.01	17.13	0.01
MW-20	10 - 29	15.19	-	15.23	-	15.68	0.09	15.57	0.17	15.46	0,30	16.33	-	16.40	-
MW-21	10 - 29	14.59	-	N/A	N/A	14.98	-	14.85	-	N/A	N/A	15.69	-	17.80	-
MW-22	10 - 30	15.68	-	N/A	N/A	16.06	-	15.97	-	N/A	N/A	16.75	-	16.84	-,
RW-1	10 - 30	17.10	-	17.05	-	17.39	-	17.21	0.03	16.97	0.01	18.07	0.02	18.62	0.52
RW-2	10 - 30	17.45	-	17.48	-	17.81	-	17.65	-	16.44	0.02	18.53	0.02	18.76	0.16
RW-3	10 - 30	16.55	-	16.59	0.01	16.95		16.80	-	16.69	0.20	17.40	0.02	17.82	0.09
Recover	ry Method	Peristalti	ic Pump	Peristalt	ic Pump	Peristaltic P	ump & Bailer	Peristal	ic Pump	Peristalt	ic Pump	MMPE Eve	ent (4/1/13)	NA - Post MM	PE Monitoring
Recover	ry Volume	~9,0 Gallons Water ~0.9 Gallo		~10.5 Gallons Wate ~0.75 Gall		~10 Gallons Water ~3.0 Gall		~9.0 Gallons Water ~1.0 Gallo		~12 Gallons Water		~10,806 Gallons Wat ~20 Gallo	er/Petroleum Mixture ons NAPL	No	ne

Notes:

^{1.)} Depth-to-Water and Free Product Thickness measurements represent conditions prior to the associated recovery even

TABLE 7 FREE PRODUCT MONITORING AND RECOVERY HISTORICAL SUMMARY Pantry #486 (Incident: #23062, Facility ID: 0-023655) 6606 Raeford Road

Monitoring/F	Revovery Date	June 18	3, 2012	October	31, 2011	March 1	16, 2011	Decembe	15, 2010	Novembe	r 29, 2010	May 24	4. 2010	October	6, 2009
Well ID	Screened Interval	Depth to Water Uncorrected (feet)	Free Product Thickness (feet)	Depth to Water Uncorrected (feet)	Free Produ Thickness (feet)										
MW-1	10 - 30	17.58	0.20	17.75	0.20	17.25	0.02	16.89	-	16.92	0.10	NM	NM	17.20	0.08
MW-2	10 - 30	19.01	-	19.22	-	18.87	0.02	18.51	0.10	18.63	0.28	NM	NM	18.74	0.18
MW-3	10 - 30	17,47	0,02	17.60	0.02	17.00	0.07	16.71	0.20	17.51	1.01	NM	NM	16.93	0.29
MW-4	10 - 30	19.87	0.15	19.92	0.12	19.47	0,02	19.16	0.20	19.10	0.10	NM:	NM	19.30	0.33
MW-16	10 - 30	18.61	0,06	18.30	0.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-17	10 - 30	18.44	0.04	18.62	0.01	N/A	N/A	N/A	N/A	N/A	N/A	. N/A	N/A	N/A	. N/A
MW-18	10 - 30	19.50	-	18.82	•	N/A	N/A	N/A	N/A	N/A	· N/A	N/A	N/A	N/A	N/A
MW-19	10 - 30	18.22	0.04	18.40	0.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	· N/A
MW-20	10 - 29	17.18	0.04	17.41	0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-21	10 - 29	16.05	0.04	16.20	0.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-22	10 - 30	17.76	-	17.98	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RW-1	10 - 30	18.16	0.07	18.31	0.04	17.94	0.01	N/A	N/A	17.77	0.77	N/A	N/A	N/A	N/A
RW-2	10 - 30	18.54	0.02	18.35	0.01	17.50	0.01	N/A	N/A	18.02	0.02	N/A	N/A	N/A	N/A
RW-3	10 - 30	17.79	0.18	17.98	0.16	17.54	-	N/A_	N/A	17.20	0.12	N/A	N/A	N/A	N/A
Recove	ry Method	ММРЕ	Event	Ва	iler	N/A - Monit	toring Event	N/A - Monit	oring Event	MMPE	Event	MMPE	Event	N/A - Monit	oring Event
Recove	ry Volume	~11,397 Gallons Wat ~46 Gallo		~20 Gallons Water ~8,0 Gallo	/Petroleum Mixture ons NAPL	No	one .	No	ne	~12,967Gallons Wat ~44 Gallo		~8,502 Gallons Wate ~54 Gallo	er/Petroleum Mixture ons NAPL	No	ne

Notes:

1.) Deoth-to-Water and Free Product Thickness measurements represent conditions prior to the associated recovery event.

TABLE B-8 FREE PRODUCT RECOVERY INFORMATION

Pantry #486 6605 Raeford Road Fayetteville, Cumberland County, North Carolina Facility ID Number: 0-023655

Incident Number: 23062

Date of Events	Type of Event	Total Gallons Recovered (Water / Product)	Estimated Gallons of Free Product Recovered	Estimated Pounds of Petroleum Vapors Removed
3/27/2001	AFVR	2,299	162	55.74
4/3/2001	AFVR	2,420	171	130.04
4/10/2001	AFVR	2,591	111	198.02
4/17/2001	AFVR	2,233	117	403.11
6/15/2001	AFVR	1,582	150	430.28
10/9/2001	AFVR	752	203	283.62
11/15/2001	AFVR	2,029	113	156.56
12/12/2001	AFVR	2,125	295	357.64
1/10/2002	AFVR	1,765	330	438.10
2/7/2002	AFVR	2,361	230	545.81
5/24/2010 - 5/28/2010	MMPE	8,502	54	1,224.14
11/29/2010 - 12/3/2010	MMPE	12,967	44	1,711.13
10/31/2011	Bailing	20	8	_
6/18/2012 - 6/22/2012	MMPE	11,397	46	1,068.31
4/1/2013 - 4/5/2013	MMPE	10,806	20	2,358.11
10/31/2013	Peristaltic Pump	12	6	-
11/18/2013	Peristaltic Pump	9	1	-
12/16/2013	Peristaltic Pump	10	3	-
1/22/2014	Peristaltic Pump	10.5	0.75	-
2/17/2014	Peristaltic Pump	9 .	0.9	-
3/20/2014	Peristaltic Pump	6	1	-
4/22/2014	Peristaltic Pump	2.5	1.5	-
5/22/2014	Peristaltic Pump	2	0.5	-
6/19/2014	Bailing	4	_	-
7/24/2014	Peristaltic Pump	3.5	0.6	-
8/22/2014	Peristaltic Pump	7	-	-
9/11/2014	Peristaltic Pump	5.5	-	-
5/19/2015	Bailing	6	2.00	-
TOTALS 63,966 2,071				13,283.13
TOTAL EMISSIONS AS GALLONS (POUNDS / 6.152)				2,159.16
TOTAL ESTIMATD GALLONS OF FREE PRODUCT REMOVED AS LIQUID AND VAPOR				4,230.41

Notes:

Events Prior to 2010 were completed by SEI, Inc.

AFVR = Aggressive Fluid Vapor Recovery. MMPE = Mobile Multi-Phase Extraction.