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Exxon Mobil Corporation

UST Closure and 20-Day Report Former Exxon 99 GNC 5009 Summit Avenue Greensboro, North Carolina

March 2002

ERM NC, PC 7300 Carmel Executive Park Suite 200 Charlotte, NC 28226



UNDERGROUND STORAGE TANK CLOSURE REPORT

The closure report should contain, at a minimum, the following information. Any other information that is pertinent to the site should be included.

I. General Information

A. Ownership of UST(s)

1. Name of UST owner:

2. Owner address and telephone number:

(See Table B-2)

Mabel L. Chilton Estates

5005 Summit Ave.

Greensboro, NC 27405

(770) 428-4236

B. Facility Information

1. Facility name:

2. Facility ID #:

3. Facility address, telephone number and county:

99 GNC

Not Available

5009 Summit Ave.

Greensboro, NC 27405

Phone: None

C. Contacts

1. Name, address, telephone number and job title of primary contact person:

Mr. James F. Medlin, Environmental Remediation Territory Manager Exxon Mobil Corporation
77 Center Drive, Bldg. 5601
Suite 200
Charlotte, NC 28217-0735
(704) 529-4263

2. Name, address and telephone number of closure contractor:

Piedmont Industrial Services P.O. Box 5061 Winston-Salem, NC 27113 336-767-7522

3. Name, address and telephone number of primary consultant:

ERM NC, PC Suite 200 7300 Carmel Executive Park Charlotte, NC 28226 (704) 541-8345

4. Name, address, telephone number, and State certification number of laboratory:

TestAmerica 2960 Foster Creighton Drive Nashville, TN 37204 (800) 765-0980 NC Certification Number: 387

D. UST Information

See Table B-1

E. Site Characteristics

1. Describe any past releases at this site:

Based on a review of the NCDENR ground water incident database, there are no previous ground water incidents that have been documented at the site:

Incident Number	Date of Release Discovery	Suspected Source of Release	Incident Closure Date
None	*** 		

2. Is the facility active or inactive at this time? If the facility is inactive note the last time the USTs were in operation:

The facility is an inactive gasoline retail and convenience store. The store was in operation from the 1930's to the early 1960's.

3. Describe surrounding property use (for example, residential, commercial, farming, etc.)

The site is located within a rural area approximately 0.15 miles northeast of the Greensboro city limits. The property to the west of the site is wooded and undeveloped. The land in the other cardinal directions has been developed for residential and limited commercial use. Along Summit Ave approximately 0.3 miles north is a Texaco Gas Station, to the southeast is a restaurant. The remaining areas are residential housing.

4. Describe site geology/hydrogeology:

The site is located in the Carolina Slate belt geologically and in the Piedmont physiographic province of North Carolina. According to the Geologic Map of North Carolina (NCGS, 1985), the site is underlain by metamorphosed granitic rock.

There are generally two aquifers present within the Piedmont region. These aquifer units are described in detail below.

Saprolite Aquifer - The saprolite aquifer is the uppermost aquifer across much of the region, but is locally absent where the water table occurs below the top of bedrock. The thickness of the saprolite aquifer is typically less than 50 feet, but may extend to more than 100 feet. The aquifer matrix is composed of unconsolidated residual soil, saprolite, and partially weathered bedrock. The saprolite aquifer zone includes the transition (partially weathered rock) zone just above competent bedrock. The transition zone is generally characterized by enhanced permeability in the regional piedmont aquifer system. Ground water flow through the aquifer is by advective movement of ground water through pore spaces within the unconsolidated aquifer matrix. Moving downward to the partially weathered rock zone, ground water flow becomes progressively more confined to relict fractures and moves less through the porous media. The potentiometric surface of ground water in the saprolite aquifer is generally a subdued replica of the topography. The shallow ground water generally discharges to streams and rivers. There is generally limited downward flow of ground water into the underlying bedrock aquifer.

<u>Bedrock Aquifer</u> - The bedrock aquifer extends from the top of competent bedrock to depths where ground water flow becomes limited due to the absence of open fractures. Ground water flow within the bedrock aquifer is primarily through fractures in the bedrock and is strongly controlled by subsurface geologic structures such as faults, fracture zones, and lithologic contacts. The base of the bedrock aquifer generally extends to depths of approximately 250 to 700 feet.

5. Describe results of a receptor survey (water wells, basements, etc., within 1500 feet of the facility). To be performed if a release has occurred.

According to the Preliminary Site Assessment conducted by URS Corporation (3/01) on behalf of the North Carolina Department of Transportation (NCDOT) there is a water well on the subject property located north of the building although URS was unable to identify the location of the well. Their report also stated to most of the houses in the surrounding area have drinking water wells, and do not use city supplied water. A Sensitivity Receptor Survey by ERM is pending.

II. Closure Procedures

A. Describe preparations for closure including the steps taken to notify authorities, permits obtained and the steps taken to clean and purge the tanks:

In preparation for the closure-in-place of the USTs the NCDENR Division of Waste Management – UST Section was notified of the planned UST closure activities on February 4, 2002 by submittal of a GW/UST-3 form (See Appendix A). The local fire marshall was also notified of the planned UST removals on February 5, 2002.

In preparation for the closure-in-place, Piedmont Industrial Services exposed the tops of the USTs. Four Seasons Environmental then cut open the USTs and extracted any vapors, dirt, gasoline, or sludge from the tanks. Four Seasons then proceeded with a Triple Rinse sequence with Mirachem 500 and hot water wash until the tanks were clean. Finally, Four Seasons utilized a vacuum truck to remove all fluids from the UST's.

B. Note the amount of residual material pumped from the tank(s):

Approximately 388 gallons of rinsewater, residual gasoline, and sludge were pumped from the tanks prior to being filled with foam.

C. Describe the storage, sampling and disposal of the residual material:

Four Seasons Environmental of Greensboro, North Carolina used a vacuum truck to remove the residual fluids and rinse water. The fluids were stored in the vacuum truck prior to transport to the Four Seasons Greensboro, NC facility for treatment and disposal. A disposal manifest is provided in Appendix D.

D. Excavation

Note: Refer to the "Groundwater Section Guidelines for the Investigation and Remediation of Soils and Groundwater" on limiting excavations. The Trust Fund will not pay for excessive excavation unless it is justified and verified by laboratory results.

1. Describe excavation procedures noting the condition of the soils and the dimensions of the excavation in relation to the tanks, piping and/or pumps:

The USTs were located in a gravel-paved area of the site. Overburden gravel and soil from the top of the UST's was removed and stockpiled separately from construction debris. Excavation was limited to only exposing the tops of the UST's sufficient for access during the cleaning and for the closure-in-place of the tanks.

All soil excavated during the UST closure activities was stockpiled on-site in accordance with NCDENR protocol pending laboratory analysis of composite stockpile samples, and disposal of the stockpiled soil.

2. Note the depth of tank burial(s) (from land surface to top of tank):

UST	Depth of Burial (ft. BGL)
Gasoline and diesel USTs	4

3. Quantity of soil removed:

An estimated total of 5 cubic yards of gravel and soil were removed from the UST system excavations. Disposal of this material is pending.

4. Describe soil type(s):

Clayey SILT saprolite soil was observed from 2 to 32 feet below ground surface in borings by URS Corporation (3/01).

5. Type and source of backfill used:

Gravel was used to backfill from to top of the tanks to ground surface. No soil or gravel that was excavated from the site was used as backfill

E. Contaminated Soil

Note: Suspected contaminated soil should be segregated from soil that appears to be uncontaminated and should be treated as contaminated until proven otherwise. It should not be used as backfill.

1. Describe how it was determined to what extent to excavate the soil:

For reasons set forth by NCDOT regulations for excavation in right-of-ways only the overlaying soil and gravel was removed from the USTs.

2. Describe method of temporary storage, sampling and treatment/disposal of soil:

A summary of soil disposal methods for stockpiled soils is provided in Table B-3. All soil and gravel excavated during the UST closure activities was stockpiled on-site in accordance with NCDENR protocol pending laboratory analysis of composite stockpile samples. Stockpiled petroleum-affected soil/gravel that require offsite treatment and disposal will be transported to the Four Seasons treatment facility in Greensboro, North Carolina. Soil disposal manifests for the petroleum-affected soil will be submitted under separate cover when they become available.

III. Site Investigation

A. Provide information on field screening and observations, include methods used to calibrate field screening instrument(s):

Soil samples collected during the UST closure were screened using a Bacharach TLV portable gas detection system calibrated to 500-ppm hexane. Soil samples were screened in the field using the headspace organic vapor screening method. Field screening data are provided in Table B-3.

B. Describe soil sampling points and sampling procedures used, including:

Note: Refer to the "Groundwater Section Guidelines for the Investigation and Remediation of Soils and Groundwater" for information about sampling requirements.

Location of samples:

- Type of samples (from excavation, stockpiled soil, etc.):

- Sample collection procedures (grab, split spoon, hand auger, etc.):

- Depth of soil samples (below land surface):

- Whether samples were taken from side or floor of an excavation:

- Sample identification:

- Sample analyses:

See Figure 2 & 3

See Table B-3

Grabbed by hand auger and

GeoProbe

See Table B-3

Sides and above the UST system

See Table B-3

See Table B-3

UST closure soil samples were collected via hand auger by ERM personnel from undisturbed soil at the sides and above the tanks. Soil samples collected during the Preliminary Site Assessment (URS 3/01) were collected via GeoProbe.

C. Describe groundwater or surface water sampling procedures used, including:

Note: Refer to the "Groundwater Section Guidelines for the Investigation and Remediation of Soils and Groundwater" for information about sampling requirements.

Location of samples
 Sample collection procedures (grab, bailer, etc.)
 Sample identification
 Sample analyses
 None

D. Quality control measures

Describe sample handling procedures including sample preservation and transportation:

A new pair of Latex gloves were worn during the collection of each sample. The samples were placed in laboratory-provided containers, labeled, and placed in an ice filled cooler. The cooler was shipped to the laboratory via overnight courier. Appropriate chain-of-custody forms were maintained throughout sampling and sample shipment (see Appendix E).

- Describe decontamination procedures used:

New gloves and unused clean sampling jars from the laboratory were used. Sampling tools (e.g. trowel or hand auger) were cleaned using a phosphate detergent and tap water rinse prior to the collection of each soil sample.

- Describe time and date samples were collected and date submitted to lab:

Sample collection and shipment dates are shown in the chain-of-custodies contained in Appendix E. Sample collection dates are also summarized in Table B-3.

- Describe samples collected for quality control purposes (e.g. duplicates, field blanks, trip blanks, etc.) Include methods used to obtain these samples and analytical parameters:

No trip blanks, field blanks or duplicate samples were collected for the soil samples.

 Discuss how results of quality control samples may have affected your interpretation of soil, groundwater or surface water sample results:

No QA/QC data were collected.

E. Investigation results

Describe results of Site Sensitivity Evaluation (SSE), (if SSE was not conducted, explain why not):

The SSE is not applicable at this petroleum UST site.

- Describe methods of analyses used (include U.S. EPA method number): See Table B-3
- Describe analytical results for samples; discuss in relation to site specific cleanup level or action level, as appropriate:

A summary of maximum soil contaminant concentrations (MSCCs) for unexcavated soil remaining at the site is provided below (only detected compounds are shown).

Compound	Maximum Concentration (mg/kg)	Soil-to-Ground water MSCC (mg/kg)	Residential MSCC (mg/kg)	Industrial/Commercial MSCC (mg/kg)
TPH – Gasoline range	14,200	10	NA	NA
TPH - Diesel range	11,100	10	NA	NA
Benzene	29.4	0.0056	22	200
Ethylbenzene	311	0.24	1560	40,000
Toluene	716	7	3,200	82,000
Xylenes	1,620	5	32,000	200,000

MSCC = Maximum soil contaminant concentration Results shown in bold exceed soil-to-groundwater MSCCs

No ground water samples have been collected at the site.

IV. Conclusions and Recommendations

Include probable sources of contamination, further investigation or remediation tasks, or whether no further action is required.

Evidence of a suspected petroleum release was discovered during a Preliminary Site Assessment (3/01).

Laboratory analysis of the soil samples collected during the February 2002 UST closure by removal indicate that petroleum-affected soil remains in place beneath and around the tanks. At the current time only the soil directly above the tanks has been excavated due to the Department of Transportation regulations on excavating in the right of way.

Six petroleum hydrocarbon compounds and/or petroleum hydrocarbon fractions have been detected in soil at the site in concentrations above NCDENR risk-based soil-to-ground water maximum soil contaminant concentrations (MSCCs). Residential MSCCs for benzene also are exceeded in soil at the site.

The soil quality data collected during the February 2002 UST closure indicate that additional soil and ground water assessment may be required. The results of a Preliminary Site Assessment that was completed URS Corporation (on behalf of NCDOT) in April 2001 indicated that there are water supply wells within 1,500 feet of the site.

V. Signature of Professional Engineer or Licensed Geologist



■Licensed Geologist License #: 1175

Jerry Prosser, P.G. March 18, 2002

VI. Enclosures

A. Figures

1. Area Map(s) (can be USGS Topographic Quadrangle) showing:

FIGURE 1

- Adjacent streets, roads, highways with names and numbers
- Buildings
- Known distance to public water supply well(s)
- Distance to known private water supply well(s)
- Surface water bodies
- Groundwater flow direction (if available)
- Scale
- North arrow
- 2. Site map of UST excavation area drawn to scale, showing:

FIGURES 2 & 3

- Buildinas
- Underground utilities such as sewer lines and other conduits
- Orientation of UST(s), pumps, and product lines
- Length, diameter and volume of USTs
- Type of material(s) stored in USTs (currently and previously)
- Sample locations (identified by letter or number)
- Final limits of excavation
- North arrow
- Scale
- 3. Maps depicting analytical results, to include:

FIGURES 2 & 3

ATTACHED

- Orientation of UST(s), pumps, and product lines
- Sample locations, depths, and identifications

Appendix A: Notification of intent to close (GW/UST-3)

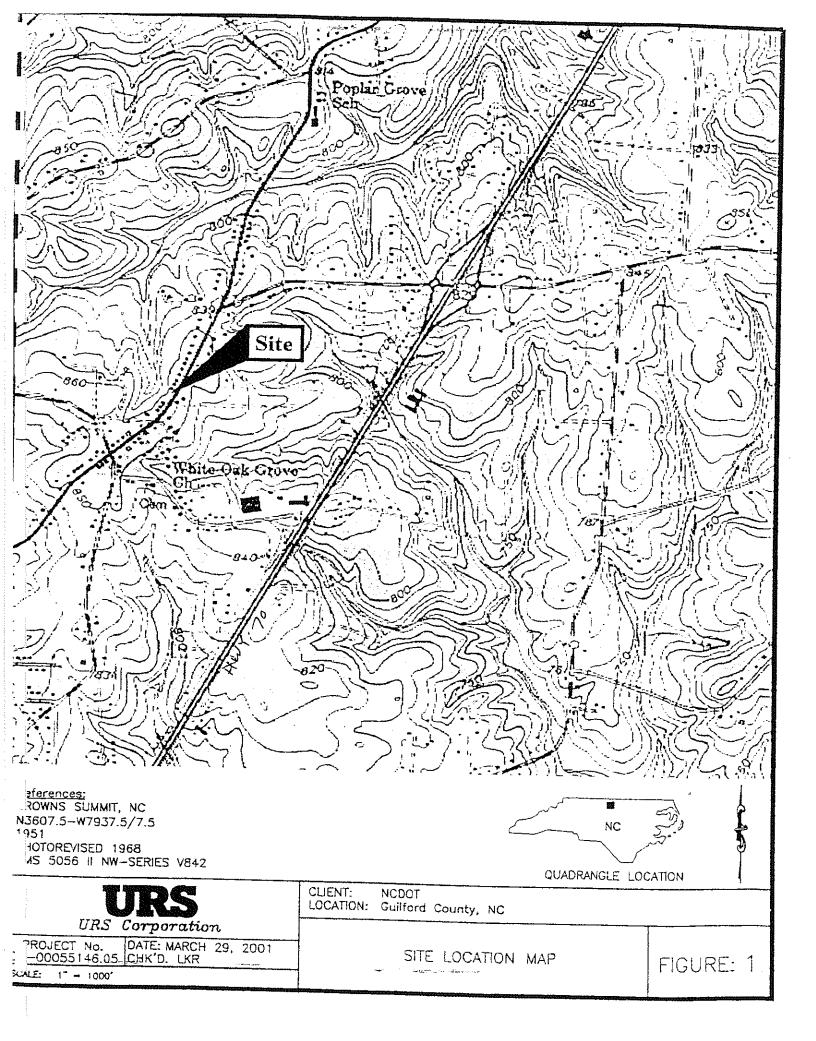
- Analytical results
- Final limits of excavation(s)

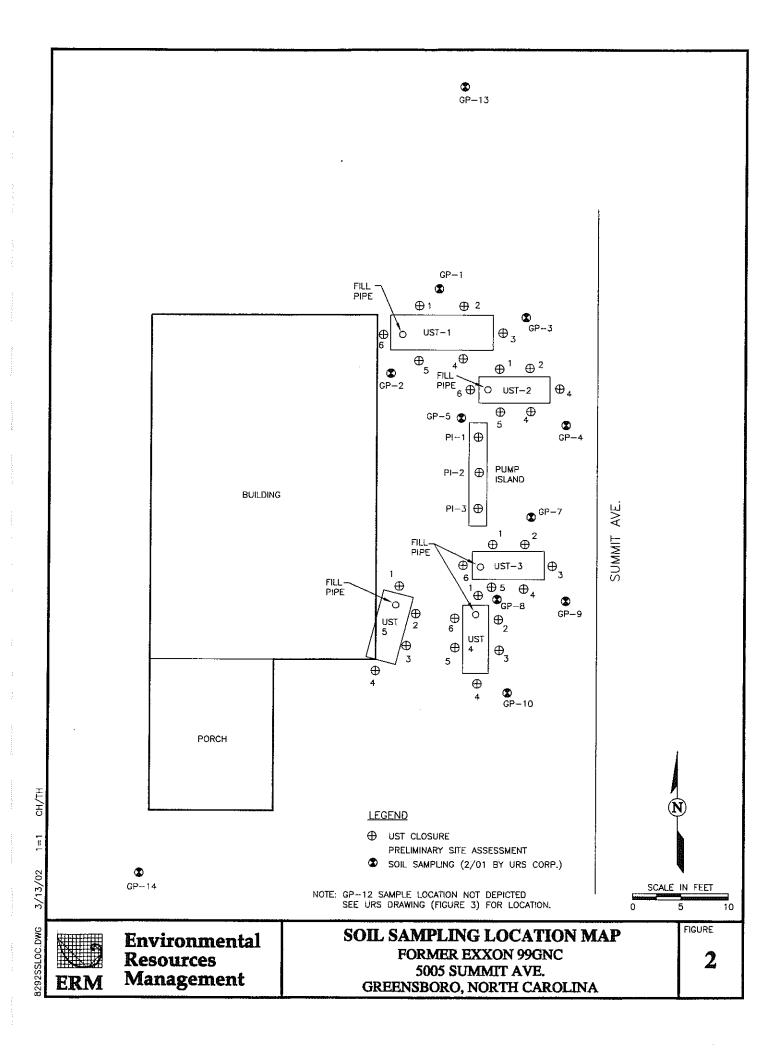
B. Tables

1.	Field screening results	TABLE B-3
2.	Sample identifications, depths and analyses	TABLE B-3
3.	Sample identifications with results and dates that samples were taken	TABLE B-3
5.	Ground water analytical results	NONE
6.	Ground water elevation data	NONE

C. Appendices

Appendix B:	Site Investigation Report for Permanent Closure	
	or Change-in-Service of UST (GW/UST-2)	ATTACHED
Appendix C:	Certificate of Closure/In-Place Abandonment for USTs	ATTACHED
Appendix D:	Soil, water, sludge disposal manifests	ATTACHED
Appendix E:	Copy of all soil laboratory analytical records	ATTACHED
	Copy of all ground water laboratory analytical records	NOT APPLICABLE
Appendix G:	Site Sensitivity Evaluation (SSE) (if applicable)	NOT APPLICABLE
	Photographs of Closure Activities (optional)	NOT AVAILABLE
Appendix I:	Geologic logs for excavation(s)	NOT AVAILABLE





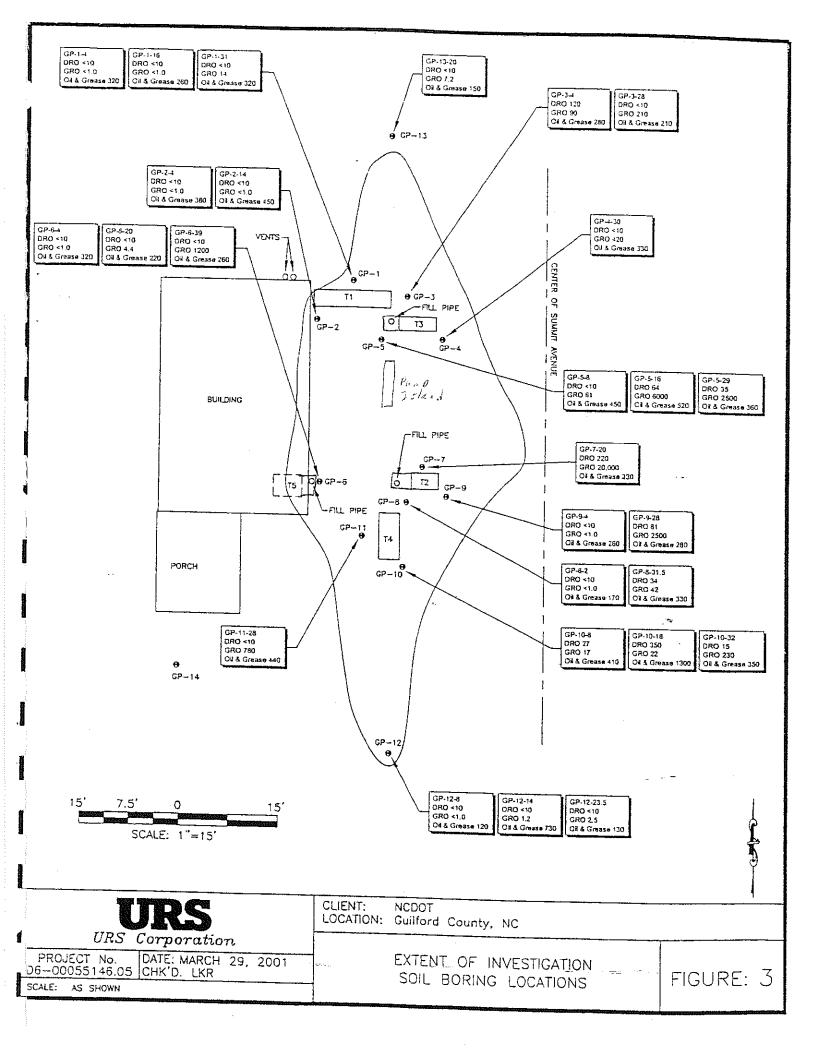


TABLE B-1

Date:

SITE HISTORY

UST System Information

March 8, 2002

Incident Number and Name: Pending - EXXON 99 GNC

	į.	1			was Release	.1
UST ID Number	Product	Capacity (gallons)	Date Installed	Date Permanently Closed, or Still in Use*	Associated with US System? (Yes/No)	
1	Gasoline / Diesel	1,100	1930's	February 22, 2002		=
2	Gasoline / Diesel	560	1930's	February 22, 2002		_
3	Gasoline / Diesel	560	1930's	February 22, 2002		
4	Gasoline / Diesel	560	1930's	February 22, 2002		1
5	Gasoline / Diesel	560	1930's	February 22, 2002		
		<u> </u>				
						_
:						

	s not permanently clo		FRP = Fiberglass r			
TABLE B-2		SITE H ner/Operator Info	·	•		lity I.D.: Not Available
Date: UST ID Number	March 14, 2002	Name of Owner or C		nt Number and Name:		0
1,2,3,4,5		Mabel L. Chilton Est		Dates of Ownership/Oper 1930's	1960's	Owner or Operator? Owner & Operator
Address	<u></u> 1			.0000	10000	Telephone Number
5005 Summit Ave. Greensboro, NC 274 (770) 428-4236	405					770-428-4236
UST ID Númber		Name of Owner or C	nerator	Dates of Ownership/Opera	ation	Owner or Operator?
		1101110 01 0111101 01 0	po. 2.0.	odios of ownerality open	2,1011	owner or operator:
Address						Telephone Number
UST ID Number		Name of Owner or O	perator	Dates of Ownership/Opera	ation	Owner or Operator?
Address						Telephone Number

TABLE B-3

SUMMARY OF SOIL SAMPLING RESULTS

Date:

14-Mar-02

Incident Number and Name:

Pending - EXXON 99 GNC

Facility I.D.: Not Available

Ana	alytical Meth	od	Field Screening	TPH	Method 801	5/9071	EPA 8021B			
Sample ID	Date	Depth (ft. BGL)	VOCs - ppm (TLV)	Gasoline Range	Diesel Range	Oil ~ Grease	Benzene	Ethylbenzene	Tolouene	Xylenes
Preliminary	Site Assess	ment			T					
GP-1-4	2/9/2001	4	N/A	<1.0	<10	320				
GP-1-16	2/9/2001	16	N/A	<1.0	<10	260				
GP-1-31	2/9/2001	31	N/A	14	<10	320		-		
GP-2-4	2/9/2001	4	N/A	<1.0	<10	380				
GP-2-14	2/9/2001	14	N/A	<1.0	<10	450			-	
GP-3-4	2/9/2001	4	N/A	90	120	280	-4			
GP-3-28	2/9/2001	28	N/A	210	<10	210				
GP-4-30	2/9/2001	30	N/A	240	<10	330				
GP-5-8	2/9/2001	8	N/A	61	<10	450		-		
GP-5-16	2/9/2001	16	N/A	6,000	64	520				
GP-5-29	2/9/2001	29	N/A	2,500	35	360				-
GP-6-4	2/9/2001	4	N/A	<1.0	<10	320		-		
GP-6-20	2/9/2001	20	N/A	4.4	<10	220				-
GP-6-39	2/9/2001	39	N/A	1,200	<10	260			-	
GP-7-20	2/9/2001	20	N/A	20,000	220	330			-	_
GP-8-2	2/9/2001	2	N/A	<1.0	<10	170				
GP-8-31.5	2/9/2001	31.5	N/A	42	34	330				
GP-9-4	2/9/2001	4	N/A	<1.0	<10	260				-
GP-9-28	2/9/2001	28	N/A	2,500	81	280				
GP-10-8	2/9/2001	8	N/A	17	27	410				
GP-10-18	2/9/2001	18	N/A	22	350	1,300			-	-
GP-10-32	2/9/2001	32	N/A	230	15	350	- -			[
GP-11-28	2/9/2001	28	N/A	780	<10	440				-
GP-12-8	2/9/2001	8	N/A	<1.0	<10	120				
GP-12-14	2/9/2001	14	N/A	1.2	<10	730				
GP-12-23.5	2/9/2001	23.5	N/A	2.5	<10	130				
GP-13-20	2/9/2001	20	N/A	7.2	<10	150	- :		**	_ [
			=							
Soil-Groundy				10	10	250	0.0056	0.24	7	5
Residential N				NA	NA	250	22	1,560	782	32,000
Industrial/Co	mmercial M	SCC		NA	NA	NA	200	40,000	20,440	200,000

Results shown in bold exceed soil-groundwater MSCC mg/kg=Milligrams/kilogram

Only detected compounds are shown in table

BGL = Below ground level

-- = Not analyzed

FP= Fill Pipe

ND = Not detected

NE = Not established

N/A = Not Applicable

SUMMARY OF SOIL SAMPLING RESULTS

Date:

14-Mar-02

Incident Number and Name:

Pending - EXXON 99 GNC

Facility I.D.: Not Available

Date:	Date: 14-Mar-02 Incl							- EXXON 99 GNC Facility I.D.			
Ar	alytical Meth	Field Screening				EPA 8021B					
Sample IE	Date	Depth (ft. BGL)	VOCs - ppm (TLV)	Gasoline Range	Diesel Range	Oil ~ Grease	Benzene	Ethylbenzene	Tolouene	Xylenes	
UST Field					T .					T	
UST 1-1	2/22/2002	7	40	< 6.26	<12.5		<0.0125	<0.0125	<0.0125	<0.0125	
UST 1-2	2/22/2002	7	50	<6.87	<13.5		<0.0137	<0.0137	<0.0137	<0.0137	
UST 1-3	2/22/2002	7	6,000	2,950	341		5.81	57.7	77.9	240	
UST 1-4	2/22/2002	7	60	<7.02	<13.9		<0.0140	1	<0.0140	1	
UST 1-5	2/22/2002	7	40	<6.66	<123.2		<0.0133	<0.0133	<0.0133	<0.0133	
UST 1-6	2/22/2002	7	90	1,830	1,120		<1.17	17.6	2.58	141	
UST 1-FP	2/22/2002	2	40	<6.43	<12.8		<0.0129	<0.0129	<0.0129	1	
UST 2-1	2/22/2002	7	>10,000	1,750	287		<1.35	30.6	17.9	161	
UST 2-2	2/22/2002	7	6,000	<6.75	<13.3		0.0148	0.0297	0.0445	0.174	
UST 2-3	2/22/2002	7	650	<6.31	<12.4		<0.0126	<0.0126	0.0126	<0.0126	
UST 2-4	2/22/2002	7	4,000	92.9	33.6		<0.0144		0.501	6.31	
UST 2-5	2/22/2002	7	>10,000	3,270	32.4		<1.41	59	47	236	
UST 2-6	2/22/2002	7	>10,000	3,940	86.1		4.73	60.2	58.4	199	
UST 2-FP	2/22/2002	2	0	<6.53	<13.0		<0.0131	<0.0131	0.0196	0.0601	
UST 3-1	2/22/2002	7	>10,000	4,380	87.2		4.39	81.9	112	458	
UST 3-2	2/22/2002	7	>10,000	144	<13.4		<0.135	2.75	1.11	19.2	
UST 3-3	2/22/2002	7	>10,000	14,200	300	_	21.5	311	716	1,620	
UST 3-4	2/22/2002	7	>10,000	8,900	38.9		29.4	169	544	959	
UST 3-5	2/22/2002	7	5,000	4,940	54.7		9.76	109	170	481	
UST 3-6	2/22/2002	7	>10,000	2,010	75.8		<1.57	45.6	62.9	296	
UST 3-FP	2/22/2002	2	90	<6.35	<12.5		<0.0127	<0.0127	0.0178	0.0662	
UST 4-1	2/22/2002	7	>10,000	<6400	11,100		20.5	92.2	319	626	
UST 4-2	2/22/2002	7	>10,000	1,670	63.5		1.49	31.4	46.8	173	
UST 4-3	2/22/2002	7	200	7.86	<14.4	i	0.441	0.0597	0.767	0.514	
UST 4-4	2/22/2002	7	0	<6.23	<12.4		<0.0125	<0.0125	<0.0125	<0.0125	
UST 4-5	2/22/2002	7	0	<6.90	17		<0.0138	<0.0138	<0.0138	<0.0138	
UST 4-6	2/22/2002	7	0	<6.86	<13.6	<u>-</u>	<0.0137	<0.0137	<0.0137	<0.0137	
UST 4-FP	2/22/2002	2	o	<5.93	27.4		<0.0119	<0.0119	<0.0119	<0.0119	
UST 5-1	2/22/2002	7	300	<7.06	<14.0		<0.0141	<0.0141	<0.0141	<0.0141	
UST 5-2	2/22/2002	7	70	<6.93	<13.8		<0.0139	<0.0139	<0.0139	<0.0139	
UST 5-3	2/22/2002	7	80	<6.98	<14.0		<0.0140	<0.0140	<0.0140	<0.0140	
UST 5-4	2/22/2002	7	100	<7.81	<15.6		<0.0156	<0.0156	<0.0156	<0.0156	
UST 5-FP	2/22/2002	2	0	<6.58	<13.1		<0.0132	<0.0132	<0.0132	<0.0132	
Pump Islan	ds										
Pl - 1	2/22/2002	2	30	<6.69	<13.3		<0.0134	<0.0134	<0.0134	<0.0134	
PI - 2	2/22/2002	2	40	<6.39	<12.8		<0.0128	<0.0128	0.0217	<0.0128	
PI - 2	2/22/2002	2	50	<6.57	<13.0		<0.0131	<0.0131	<0.0131	<0.0131	
Stock Pile											
SP-1	2/22/2002	Comp.	NA .	<5.47	24.8		<0.0109	<0.0109	<0.0109	<0.0109	
		Soil	Stockpile Volume	and Source	e (cubic ya	ds)		Disposal L	ocation		
	5 (Gas/diesel	UST field grave	l and soil				Disposal P	ending		
	5 (cubic yard:	s	TOTAL							
Soil-Ground	water MSCC			10	10	250	0.0056	0.24	7	5	
Residential			•	NA	NA	250	22	1,560	782	32,000	
		SCC	1	NA.	NA	NA	200	40,000	20,440	200,000	
Industrial/Commercial MSCC					l					,	

Results shown in bold exceed soil-groundwater MSCC mg/kg=Milligrams/kilogram

Only detected compounds are shown in table

BGL = Below ground level

-- = Not analyzed

FP≃ Fill Pîpe

ND = Not detected

NE = Not established

N/A = Not Applicable

Appendix A Notification of Intent to Close

UST-3 Notice of Intent: UST Pern	nanent Closure or Chang	ge-in-Service
FOR TANKS IN The second section to		STATE USE ONLY:
The DWM Regional Office in the area the facility is	located. SEE MAP ON THE BACK OF	I.D. Number:
NC THIS FORM FOR REGIONAL OFFICE ADDRESS	E3.	Date Received:
INSTRU	CTIONS	
Complete and return at least five (5) working days prior to closure or change-in supervision for closure or change-in service site assessment activities and significant services.	service if a Professional Engineer (P.E) or a L ns and seals all closure reports. Otherwise,	Icensed Geologist (L.G.) provides thirty (30) days notice is required.
I. OWNERSHIP OF TANKS	II. LOCAT	1
Owner Name MASCL L. CHILTUN ESTATE Corporation, Individual, Public Agency, or Other Entity	Facility Name MARIA L. C.H.I. Or Company	TIDN ESTATE
Street Address 5005 SUMMIT AUE	Facility I.D. # (If known)	0 0000000000000000000000000000000000000
City GELDONSBURD County GULT FORD	Street Address or State Road 500	
State NC Zip Code 27405	City (212-1533) County (40)	
Telephone Number: (770) 428 - 423(Telephone Number: (770) 475 Area Code	8-4236
Name TOM U-NWW Job Title LECT	PERSONNEL THE NO. (33)	767-7522
IV. TANK REMOVAL, CLOSURE	IN PLACE, CHANGE-IN SER	VICE
1 Contact local Fire Marshal 5. Provide a sketch to	cating piping, tanks and under the	supervision of a P.E. or L.G.,
2 Plan the entire closure event.	ons, with all CK reports be	sure site assessment aring signature and seal of
8 Submit a closure re	port in the format of the P.E. or	r L.G. it a release has not
4. If removing tanks of closing in place, an arms following the	e site investigation. or seal of	the supervision, signature, a P.E. or L.G. is not re-
ratar to the API Publication 2015	tank(s) has occurred, quired.	
and 1804 Removal and Disposal of the site assessment Used Underground Petroleum Storage closure must be containts.	portion of the tank 8. Keep clos	ure records for 3 years.
V. WORK TO BE	PERFORMED BY	
Contractor Name PDTOMONT PNOUSTRDAL	SINEVIZIES DNC.	
Address 41211-13 DWDTANA AVE Stat	nc	Zip Code
Contact Person TOIDO SCOTT Tel.	No. (336) 767-752	2
Primary Consultant 1-P.M - SOUTH LAST Tel.	NO. (704) 541-834	<u> </u>
VI. TANK(S) SCHEDULED FOR CL	OSURE OR CHANGE-IN-SE	RVICE
Tank ID# Tank Capacity Last Contents	Proposeu /	Activity Change-in-service
	Removal Abandonment in Place	New Contents Stored
TI FT. 1500 UNKNOWN		,
12 17, 1000 UNKNOWN		
TI 131, 1000 UNKNOWN		
131, 550 UNIXWWN	_ O 18	
	<u> </u>	
I understand the Lorentz Delicing to Delicing the Deck of this lorentz before signing. Print name and gricul title	e resulting from the improper disposes	, in y 0010.
Signature Date/Signe	hours	y your DWM Regional Office 48 s before this date if scheduled val date changes.
UST-3 rev-10/95 Q White Copy-Regional Office	Yellow Copy/Central Office	Pink Copy-Owner
UST-3 rev-10/20 White Copy-Regional Office		

GUILFORD COUNTY DEPARTMENT OF EMERGENCY SERVICES FIRE SERVICE DIVISION 1002 MEADOWOOD STREET Greensboro, N. C. 27409

TO:	Chief Fire Inspector
Application	is hereby made by the undersigned for a permit to
	Remove Underground Tank(s)
<u> </u>	Abandon Underground Tank(s) in or on the premises known as:

(Business Name and Address)

1.	Tank	Contr	actor :_	PIEDMON	[INDUSTRI	al SFR	VES on	
Cont	racto	r's Ad	dress:	4211-B	DODANA	AUE	WINSTON-SALEW	1 nc
Numb	er, S	ize an	d Produc	t of Tank(s) BIMMEN	DANK	WINSTON-SALEW 27105 SIZB, (ACTUAL OWN) (SIZES L	THNK
1-	1,500	7	-1,000	e 14550	PRODUCT	UNKU	OWN (SIZES L	>n/Knowly

- 2. Permit shall be obtained for removal or abandonment of underground tanks in place prior to beginning work.
- 3. Removal and abandonment of underground tanks in place shall comply with all applicable codes and regulation including the fire code, N.F.P.A. 327, and A.P.I. Publication 1604.
- 4. Notify Fire Service Division at (336) 373-7565 and Toxic Hazards Division, at 373-3771, minimum one working day prior to removal or abandonment in place.
- 5. For tank removal or abandonment in place all liquids shall be removed from the tank(s) and properly disposed of in accordance with applicable laws.
- 6. Prior to removal or abandonment in place tanks shall be purged or rendered inert. Purging or inerting shall be conducted in accordance with applicable standards and regulations. For purging the vapors shall not exceed 20% of the lower flammable limits. For inerting the oxygen content shall be below 8%. Tank contractors shall have the proper operating meters, combustible gas indicator and/or oxygen meter at each job site.

PAGE 2

7. Tanks which have been removed from the ground shall be properly removed from the premises to a proper facility. Tanks shall be labeled with legible letters at least two (2) inches high, similar to the following:

TANK HAS CONTAINED LEADED GASOLINE

NOT VAPOR FREE

NOT SUITABLE FOR STORAGE OF FOOD OR LIQUID
INTENDED FOR HUMAN OR ANIMAL CONSUMPTION
DATE OF REMOVAL: MONTH/DAY/YEAR
PERMIT #

- 8. Tanks to be transported in accordance with all applicable local, state and federal regulations. Tank openings to be plugged or capped with one plug having a 1/8" inch vent hole to prevent the tank from being subjected to excessive differential pressure. Tanks to be secured on a truck or trailer for transportation to the storage or disposal site with the 1/8" inch vent hole located at the uppermost point on the tank.
- 9. Tank contractor shall complete and submit Guilford County Health Department form upon completion of removal or abandonment of tanks. Information submitted to be accurate and detailed. Health and Fire Copy mailed to Guilford County Emergency Services.

I understand and consent to the above stipulated conditions upon which this permit is granted. Failure to obtain permit and comply with regulation may render you liable to the penalties provided by law.

Applicant 3/10/10/10/10/10/10/10/10/10/10/10/10/10/		Fire Inspec	tor	P
Phone: (336) 767 - 7522	Permit #:			
Day (33L) 541-1141	Granted: _		Denied	
Night				

PAGE 3

ADDITIONS:

- Result of soil sample shall be sent to this office. ı.
- Please call this office the day before you plan to remove 2. the tank.

Appendix B Site Investigation Report for Permanent Closure

Site Investigation Report for Permanent Closure or Change-in Service of UST

		THIS FORM Regi	OR REGIONAL OF	FICE ADDRESS	ES. Return	the ye	ellow copy	to the Cer		STATE USE ONLY: 1.D. Number:
	NC	Office in Raleigi CLOSED."	h so that the status	of the lank may	be changed	ito P	ERMANE	NTLY		Date Received:
		I. Ownership	of Tanks				II.	Locati	on of T	anks
Ow Cot	ner Name poration, Indiv	Mebel L. Ch vidual, Public Agency, or	ilton Est	ates	Facility No Or Compa		Form	er E	xxon	
Stre	eet Address	5005 Sumn	+ Ave		Facility I.£). # (if	known) _	Not A	luaiable	
City	Green	sbaro	County Gui	1 ford	Street Add	dress_	5009	Sum	m . + A	lve
Stat	enc		Zip Code 27	405	City Gr	cen	Sboro	County (Guilfor	d Zip Code 2 7405
Tele	phone Numbe	er: (770) <u>42</u> § Area Code	4-4236		Telephone	: Numi	per: (ファ Area	0) <u>4</u> Code	28-	4236
			11	I. Contact	Person	inel				
Nam	ne_Jer	ry Prosse	r Job Ti	He Licen	sed be	0/09	ist To	el. No	704-5	741-8345
		PIS				_				
Prima	ary Consultani	ERM NC	Addres	s 7300 Ca	rmal Es	PŁ	Soile Te	I. No 7	04-5	41-8345
Lab _	Tes+ A	merica	Addres	\$ 2960 Fos	ter Crei	g h fe	200 n Te	I. No 6	15-7	26 -0177
	IV.	UST Informatio	n	V. Ex	cavatio	n C	onditio	no		I. Additional
Tank. No.	Size In Gallons	Tank Dimensions	Last Contents	Water in Excavation	Pn	oduct	Soil Cont			nation Required
1	1,100	4 x /2	Unknows	N/A	No Yes	No	Yes		(owner's co	e side of pink copy opy) for additional
2	560	3 x 8	unknown	NA		X	X			required by NC DWM in report and sketch.
3	560	3 x &	Uhlenoun	NIA		X	X			release from the tank(s) ed, the site assessment
4 560 3×8 Unknown N/					X		X	1	ortion of th	ne tank closure must be under the supervision of a
5	160	3 x 8	unknown	NA		X	X	[[P.E. or L.G.	, with all closure site t reports bearing the
		· · · · · · · · · · · · · · · · · · ·								nd seal of the P.E. or L.G.
		VII.	Check List (Check the	Activit	ies	Comp	leted)		
PERM	MANENT C	LOSURE			ABANDO	NME	NT IN F	PLACE		
		or Abandoning-in-	place)		K Filitankı 4. Plugaro				ik opening.	
	ntact local fire ify DWM Regi	marsnat. onal Office before aban	donment.		Discorine				t line.	l
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Ø Exc	avate down to		łnk,		Core	F	از	00		ļ
	an and inspect nove drop tube	t tank. e, fill pipe, gauge pipe, t	lanor recovery tank					· · · · · · · · · · · · · · · · · · ·		
con	nections, subn	nersible pumps and all	other tank fixtures.	17	IEMOVAL					
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& Cut	one or more la	arge hotes in the tanks.	Jera,				in approv	ed manne	r, Final tar	nk destination:
•	kfill the area. • Tank(s) Perr	manently closed: 2:	22-02							
		n-Service: 2 -		-4-	····					
cedilu i	inder negaliy	of law that I have perso	nally evarnined and	Lam familiar wit	h tha iafarm	orion	ar da saista al		l all alta ala	

based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete.

Print name and offici	at little of owner or owner's authorized representative	Signature /	Date Signed 3/18/02
UST-2 rev. 10/99	White Copy-Regional Office	Yellow Copy-Central Office	Pink Copy-Owner

Appendix C Certification of Closure/In-Place Abandoment For USTs

SALEM ENVIRONMENTAL

CERTIFICATION OF CLOSURE/IN-PLACE ABANDONMENT FOR UNDERGROUND STORAGE TANKS

DATE: February 25th, 2002

<u>LOCATION</u>: Country Consignment (Estate of Mabel Chilton), 5009 Summit Ave., Greensboro, Guilford Co., NC 27405

<u>USTs CLOSED</u>: 4-550 gallon & 1-1,100 gallon

On the above date, underground storage tanks (USTs) were abandoned in-place at the above site by inert, solidifying nitrogen-resin foam fill manufactured by Tailored Chemical Products, Inc., of Hickory, North Carolina. Salem Environmental is an approved installer of the Tailored Foam system, having over twelve years experience on over a thousand sites; Salem also retains full pollution and general liability coverage. All personnel are medically monitored and OSHA Section 1910 trained. MSDS sheets and other relevant product data is on file at our office and available upon request.

The closure process removes all residues to <1" by vacuum truck or submersible pump when such remain; these are disposed at a permitted facility. Liquid foam is pumped into the UST until the vessel is full. It cures into an inert solid within 24-48 hours. Fill and vent lines are removed or sheared to below ground level, and both openings are grouted with concrete mix. Our process is in accordance with all applicable provisions of 40 CFR 280, Subpart G, and adheres to FHA protocol and guidelines.

The UST owner and/or the general contractor initiated this process and accept our work without recourse. Neither party requested an environmental assessment before closure.

Sincerely yours,

Harvey C. Danner, Jr.

President

5009_summit_GSO_piedind.doc

Appendix D Soil, Water, Sludge Disposal Manifests



P.O. Box 16590 • GREENSBORO, NC 27416-0590 • (336) 273-2718

MATERIAL MANIFEST

MANIFEST#		F.S.E. JOB	#	. 5 1 1					
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Appendix E Soil Laboratory Analytical Data Sheets Phone: 615-726-0177 Fax: 615-725-3404 Nashville Division 2960 Foster Creighton Nashville, TN 37204 Test/America

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is this work being conducted for regulatory purposes? To assist us in using the proper analytical methods, Compliance Monitoring

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Test/Incries 2960 Foster Creighton

Phone: 615-726-0177 Fax: 615-726-3404

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To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes? 16682-56682

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273181 Phone: 615-726-0177 Fax: 615-726-3404 TOSTAINETTO 2960 Foster Creighton

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48292

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Quote #:

Sampler Signature:

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3/ 2/02

ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project 48292 99 GNC. The Laboratory Project number is 273181. An executed copy of the chain of custody and the sample receipt form are also included as an addendum to this report.

		Page 1
Sample Identification	Lab Number	Collection Date
UST 1-1	02-A28755	2/21/02
UST 1-2	02-A28756	2/21/02
UST 1-3	02-A28757	2/21/02
UST 1-4	02-A28758	2/21/02
UST 1-5	02-A28759	2/21/02
UST 1-6	02-A28760	2/21/02
UST 1-FP	02-A28761	2/22/02
UST 2-1	02-A28762	2/22/02
UST 2-2	02-A28763	2/22/02
UST 2-3	02-A28764	2/22/02
UST 2-4	02-A28765	2/22/02
UST 2-5	02-A28766	2/22/02
UST 2-6	02-A28767	2/22/02
UST 2-FP	02-A28768	2/22/02
UST 3-1	02-A28769	2/22/02
UST 3-2	02-A28770	2/22/02
UST 3-3	02-A28771	2/22/02
UST 3-4	02-A28772	2/22/02
UST 3-5	02-A28773	2/22/02
UST 3-6	02-A28774	2/22/02
UST 3-FP	02-A28775	2/22/02
UST 4-1	02-A28776	2/22/02
UST 4-2	02-A28777	2/22/02
UST 4-3	02-A28778	2/22/02
UST 4-4	02-A28779	2/22/02
UST 4-5	02-A28780	2/22/02
UST 4-6	02-A28781	2/22/02
UST 4-FP	02-A28782	2/22/02
UST 5-1	02-A28783	2/22/02

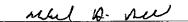


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Sample Identification	Lab Number	Collection Date
w		
	<u>-</u>	**
UST 5-2	02-A28784	2/22/02
UST 5-3	02-A28785	2/22/02
UST 5-4	02-A28786	2/22/02
UST 5-FP	02-A28787	2/22/02
SP-1	02-A28788	2/22/02
PI-1	02-A28789	2/22/02
PI-2	02-A28790	2/22/02
PI-3	02-A28791	2/22/02

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By:



Report Date: 3/ 2/02

Paul E. Lane, Jr., Lab Director Michael H. Dunn, M.S., Technical Director Johnny A. Mitchell, Dir. Technical Serv. Eric S. Smith, Assistant Technical Director Jennifer P. Flynn, Technical Services Gail A. Lage, Technical Serv. Glenn L. Norton, Technical Serv. Kelly S. Comstock, Technical Serv. Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 387



ANALYTICAL REPORT

ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28755 Sample ID: UST 1-1 Sample Type: Soil

Site ID:

Date Collected: 2/21/02 Time Collected: 14:30 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAME	TERS*								
% Dry Weight	79.9	%		1	2/28/02	18:30	J.Tyree	CLP	4389
ORGANIC PARAMETERS*									
Benzene	ND	mg/kg	0.0125	1	3/ 1/02	12:28	D. Otero	8021B	5157
Ethylbenzene	ND	mg/kg	0.0125	1	3/ 1/02	12:28	D. Otero	8021B	5157
foluene	ND	mg/kg	0.0125	1	3/ 1/02	12:28	D. Otero	8021B	5157
Mylenes, total	ND	mg/kg	0.0125	1	3/ 1/02	12:28	D. Otero	8021B	5157
TPH (Gasoline Range)	ND	mg/kg	6.26	1	3/ 1/02	12:28	D. Otero	8015B	5157
TPH (Diesel Range)	ND	mg/kg	12.5	1	2/28/02	17:20	K.Phelps	8015B	7774

Sample Extraction	Data			
Parameter	Wt/Vol Extracted Extract Vol	Date Time	Analyst Method	
EPH/DRO	25.1 gm 1.0 ml	2/27/02	D. Harris 3550	
Surrogate		% Recovery	Target Range	
UST surr-Triflu	orotoluene	80.	65 135.	

Sample report continued . . .



ANALYTICAL REPORT

Laboratory Number: 02-A28755 Sample ID: UST 1-1 Project: 48292

Page 2

Surrogate	% Recovery	Target Range
EPH surr-o-Terphenyl	86.	50 1 50.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.

End of Sample Report.



ANALYTICAL REPORT

ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28756 Sample ID: UST 1-2 Sample Type: Soil

Site ID:

Date Collected: 2/21/02 Time Collected: 15:15 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
		·							
GENERAL CHEMISTRY PARAM	METERS								
6 Dry Weight	72.8	%		1	2/28/02	18:30	J.Tyree	CLP	4389
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	0.0137	1	3/ 1/02	13:03	D. Otero	8021B	5157
Ethylbenzene	ND	mg/kg	0.0137	1	3/ 1/02	13:03	D. Otero	8021B	5157
Coluene	ND	mg/kg	0.0137	1	3/ 1/02	13:03	D. Otero	8021B	5157
Kylenes, total	ND	mg/kg	0.0137	1	3/ 1/02	13:03	D. Otero	8021B	5157
TPH (Gasoline Range)	ND	mg/kg	6.87	1	3/ 1/02	13:03	D. Otero	8015B	5157
TPH (Diesel Range)	ND	mg/kg	13.5	1	2/28/02	17:31	K.Phelps	8015B	7774

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method	
EPH/DRO	25.5 gr	n 1.0 ml	2/27/02		D. Harris	3550	
Surrogate	Surrogate		% Recovery		Target Range		

UST surr-Trifluorotoluene

65. - 135.

Sample report continued . . .

80.



Laboratory Number: 02-A28756 Sample ID: UST 1-2

Project: 48292

Page 2

Surrogate Target Range % Recovery EPH surr-o-Terphenyl 74. 50. - 150.

LABORATORY COMMENTS:

 $\ensuremath{\text{ND}}$ - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28757 Sample ID: UST 1-3 Sample Type: Soil

Site ID:

Date Collected: 2/21/02 Time Collected: 15:00 Date Received: 2/23/02 Time Received: 9:00

Page: 1

65. - 135.

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
*GENERAL CHEMISTRY PARAM	APTODC ±								
6 Dry Weight	77.5	%		1	2/28/02	18:30	J.Tyree	CLP	4389
ORGANIC PARAMETERS									
Benzene	5.81	mg/kg	1.29	100	3/ 1/02	22:29	S. Davis	8021B	9699
Ithylbenzene	57.7	mg/kg	1.29	100	3/ 1/02	22:29	S. Davis	8021B	9699
'oluene	77.9	mg/kg	1.29	100	3/ 1/02	22:29	S. Davis	8021B	9699
ylenes, total	240.	mg/kg	1.29	100	3/ 1/02	22:29	S. Davis	8021B	9699
TPH (Gasoline Range)	2950	mg/kg	645.	100	3/ 1/02	22:29	S. Davis	8015B	9699
CPH (Diesel Range)	341.	mg/kg	127.	10	2/28/02	23:10	K.Phelps	8015B	7774

	WILL AOT	_	_			14 13 3
Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
EPH/DRO	25.4 g	m 1.0 ml	2/27/02		D. Harris	3550
Surrogate			% Rec	covery	Target	Range

Sample report continued . . .

UST surr-Trifluorotoluene

103.



Laboratory Number: 02-A28757 Sample ID: UST 1-3 Project: 48292 Page 2

LABORATORY COMMENTS:

ND = Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.

TRPH d surrogate was diluted out due to sample matrix.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28758 Sample ID: UST 1-4 Sample Type: Soil

Site ID:

Date Collected: 2/21/02 Time Collected: 15:20 Date Received: 2/23/02 Time Received: 9:00

Page: 1

65. - 135.

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMET	ERS							Z.	
% Dry Weight	71.2	%		1	2/28/02	18:30	J.Tyree	CLP	4389
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	0.0140	1	2/28/02	18:08	S. Davis	8021B	5159
Ethylbenzene	ND	mg/kg	0.0140	1	2/28/02	18:08	S. Davis	8021B	5159
Toluene	ND	mg/kg	0.0140	1	2/28/02	18:08	S. Davis	8021B	5159
Xylenes, total	ND	mg/kg	0.0140	1	2/28/02	18:08	S. Davis	8021B	5159
IPH (Gasoline Range)	ND	mg/kg	7.02	1	2/28/02	18:08	S. Davis	8015B	5159
TPH (Diesel Range)	ND	mg/kg	13.9	1	2/28/02	18:05	K.Phelps	8015B	7774

Sample Extraction Data

	Wt/Vol					
Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
EPH/DRO	25.3 g	m 1.0 ml	2/27/02		D. Harris	3550
Surrogate			% Rec	overy	Target	Range

Sample report continued . . .

UST surr-Trifluorotoluene

87.



Laboratory Number: 02-A28758 Sample ID: UST 1-4

Project: 48292

Page 2

Surrogate	% Recovery	Target Range		
EPH surr-o-Terphenyl	77.	50 150.		

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28759 Sample ID: UST 1-5 Sample Type: Soil

Site ID:

Date Collected: 2/21/02 Time Collected: 15:30 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
	Nesur:								
GENERAL CHEMISTRY PARAMET	TERS								
% Dry Weight	75.1	%		1	2/28/02	18:30	J.Tyree	CLP	4389
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	0.0133	1	2/28/02	18:43	S. Davis	8021B	5159
Ethylbenzene	ND	mg/kg	0.0133	1	2/28/02	18:43	S. Davis	8021B	5159
l'oluene	ND	mg/kg	0.0133	1	2/28/02	18:43	S. Davis	8021B	5159
Xylenes, total	ND	mg/kg	0.0133	1	2/28/02	18:43	S. Davis	8021B	5159
TPH (Gasoline Range)	ND	mg/kg	6.66	1	2/28/02	18:43	S. Davis	8015B	5159
TPH (Diesel Range)	ND	mg/kg	13.2	ì	2/28/02	18:16	K.Phelps	8015B	7774

Sample Extraction Data

Surrogate			% Rec	overy	Target	Range
EPH/DRO	25.2 g	m 1.0 ml	2/27/02		D. Harris	3550
Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
	Wt/Vol					

UST surr-Trifluorotoluene

87.

65. - 135.



Laboratory Number: 02-A28759 Sample ID: UST 1-5

Project: 48292

Page 2

Surrogate % Recovery Target Range -----_____ 79. 50. - 150. EPH surr-o-Terphenyl

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220

CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT

Lab Number: 02-A28760 Sample ID: UST 1-6 Sample Type: Soil

Site ID:

Date Collected: 2/21/02 Time Collected: 15:40 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMET	TERS								
% Dry Weight	85.3	%		1	2/28/02	18:30	J.Tyree	CLP	4389
ORGANIC PARAMETERS									
Benzene	ŇĎ	mg/kg	1.17	100	3/ 1/02	11:19	S. Davis	8021B	5159
Ethylbenzene	17.6	mg/kg	1.17	100	3/ 1/02	11:19	S. Davis	8021B	5159
Toluene	2.58	mg/kg	1.17	100	3/ 1/02	11:19	S. Davis	8021B	5159
Xylenes, total	141.	mg/kg	1.17	100	3/ 1/02	11:19	S. Davis	8021B	5159
TPH (Gasoline Range)	1830	mg/kg	586.	100	3/ 1/02	11:19	S. Davis	8015B	5159
TPH (Diesel Range)	1120	mg/kg	234.	20	3/ 1/02	10:49	K.Phelps	8015B	7774

Sample Extraction Data

	Wt/Vol					
Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
						
EPH/DRO	25.0 g	m 1.0 ml	2/27/02		D. Harris	3550
Surrogate			% Rec	covery	Target	Range
~~ 						
UST surr-Triflu	orotoluene		Ģ	90.	65.	135.



Laboratory Number: 02-A28760 Sample ID: UST 1-6 Project: 48292

Page 2

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.

TRPH d surrogate was diluted out due to sample matrix.



ERM - SOUTHEAST, INC. 6207

JERRY PROSSER

7300 CARMEL EXEC. PARK, STE220

CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28761 Sample ID: UST 1-FP Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 10:15 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAM	ETERS								
% Dry Weight	77.8	%		1	2/28/02	18:30	J.Tyree	CLP	4389
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	0.0129	1	2/28/02	19:53	S. Davis	8021B	5159
Ethylbenzene	ND	mg/kg 🦠	0.0129	1	2/28/02	19:53	S. Davis	8021B	5159
Toluene	ND	mg/kg	0.0129	1	2/28/02	19:53	S. Davis	8021B	5159
Kylenes, total	0.0308	mg/kg	0.0129	1	2/28/02	19:53	S. Davis	8021B	5159
TPH (Gasoline Range)	ND	mg/kg	6.43	1	2/28/02	19:53	S. Davis	8015B	5159
TPH (Diesel Range)	ND	mg/kg	12.8	1	3/ 1/02	19:44	D.Haywood	8015B	9138

Sample Extraction Data

	Wt/Vol					
Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
EPH/DRO	25.2 g	m 1.0 ml	3/ 1/02		D. Harris	3550
Surrogate			% Rec	overv	Target	Range

UST surr-Trifluorotoluene

87.

65. - 135.



Laboratory Number: 02-A28761 Sample ID: UST 1-FP

Project: 48292

Page 2

Surrogate	% Recovery	Target Range
EPH surr-o-Terphenyl	85.	50 150.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

 $\slash\hspace{-0.6em}\#$ - Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER

7300 CARMEL EXEC. PARK, STE220

CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT

Lab Number: 02-A28762 Sample ID: UST 2-1 Sample Type: Soil Site ID:

Date Collected: 2/22/02 Time Collected: 11:45 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
·									
GENERAL CHEMISTRY PARAMET	ERS								
% Dry Weight	74.1	%		1	2/28/02	18:30	J.Tyree	CLP	4389
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	1.35	100	3/ 1/02	11:58	S. Davis	8021B	5159
Ethylbenzene	30.6	mg/kg	1.35	100	3/ 1/02	11:58	S. Davis	8021B	5159
Toluene	17.9	mg/kg	1.35	100	3/ 1/02	11:58	S. Davis	8021B	5159
Xylenes, total	161.	mg/kg	1.35	100	3/ 1/02	11:58	S. Davis	8021B	5159
TPH (Gasoline Range)	1750	mg/kg	675.	100	3/ 1/02	11:58	S. Davis	8015B	5159
TPH (Diesel Range)	287,	mg/kg	135.	10	3/ 1/02	11:11	K.Phelps	8015B	7774

Sample Extraction Data

Surrogate			% Rec	overy	Target	Range
EPH/DRO	24.9 g	m 1.0 ml	2/27/02	·· ···	D. Harris	3550
Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
	Wt/Vol					

UST surr-Trifluorotoluene

Sample report continued . . .

65. - 135.

93.



Laboratory Number: 02-A28762 Sample ID: UST 2-1 Project: 48292 Page 2

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.

TRPH d surrogate was diluted out due to sample matrix.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT

Lab Number: 02-A28763 Sample ID: UST 2-2 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 11:30 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMET	TERS*								
% Dry Weight	74.1	%		1	2/28/02	18:30	J.Tyree	CLP	4389
ORGANIC PARAMETERS									
Benzene	0.0148	mg/kg	0.0135	1	2/28/02	21:02	S. Davis	8021B	5159
Sthylbenzene	0.0297	mg/kg	0.0135	1	2/28/02	21:02	S. Davis	8021B	5159
Coluene	0.0445	mg/kg	0.0135	1	2/28/02	21:02	S. Davis	8021B	5159
(ylenes, total	0.174	mg/kg	0.0135	1	2/28/02	21:02	S. Davis	8021B	5159
TPH (Gasoline Range)	МÐ	mg/kg	6.75	1	2/28/02	21:02	S. Davis	8015B	5159
PH (Diesel Range)	ND	mg/kg	13.3	1	2/28/02	19:01	K.Phelps	8015B	7774

Sample Extraction Data

Surrogate			% Rec	overy	Target	Range
EPH/DRO	25.3 g	m 1.0 ml	2/27/02		D. Harris	3550
Parameter		Extract Vol	Date	Time	Analyst	Method
	Wt/Vol					

UST surr-Trifluorotoluene

87. 65. - 135.



Laboratory Number: 02-A28763 Sample ID: UST 2-2 Project: 48292

Page 2

Surrogate	% Recovery	Target Range

EPH surr-o-Terphenvl	86.	50 150.

LABORATORY COMMENTS:

 $\ensuremath{\mathsf{ND}}$ — Not detected at the report limit.

 $\slash\hspace{-0.4em}\#$ — Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER

7300 CARMEL EXEC. PARK, STE220

CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28764 Sample ID: UST 2-3

Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 11:21 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAM	ETERS								
% Dry Weight	79.2	%		1	2/28/02	18:30	J.Tyree	CLP	4389
ORGANIC PARAMETERS									
Benzene	NĎ	mg/kg	0.0126	1	2/28/02	21:37	S. Davis	8021B	5159
Ithylbenzene	ND	mg/kg	0.0126	1	2/28/02	21:37	S. Davis	8021B	5159
oluene	0.0126	mg/kg	0.0126	1	2/28/02	21:37	S. Davis	8021B	5159
Yylenes, total	ND	mg/kg	0.0126	1	2/28/02	21:37	S. Davis	8021B	5159
TPH (Gasoline Range)	ND	mg/kg	6.31	1	2/28/02	21:37	S. Davis	8015B	5159
TPH (Diesel Range)	ND	mg/kg	12.4	1	2/28/02	19:13	K.Phelps	8015B	7774

Sample Extraction Data

Surrogate			% Rec	overy	Target	Range
EPH/DRO	25.4 g	m 1.0 ml	2/27/02		D. Harris	3550
Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
	Wt/Vol					

UST surr-Trifluorotoluene

87.

65. - 135.



Laboratory Number: 02-A28764 Sample ID: UST 2-3

Project: 48292

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Surrogate % Recovery Target Range -----------89. 50. - 150. EPH surr-o-Terphenyl

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28765 Sample ID: UST 2-4 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 11:05 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMET	ΓÉŔS								
% Dry Weight	69.3	%		1	2/28/02	18:30	J.Tyree	CLP	4389
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	0.0144	1	2/28/02	22:13	S. Davis	8021B	5159
Ethylbenzene	1.34	mg/kg	0.0144	1	2/28/02	22:13	S. Davis	8021B	5159
Toluene	0.501	mg/kg	0.0144	1	2/28/02	22:13	S. Davis	8021B	5159
Xylenes, total	6.31	mg/kg	0.144	10	3/ 1/02	12:33	S. Davis	8021B	9835
TPH (Gasoline Range)	92.9	mg/kg	7.22	1	2/28/02	22:13	S. Davis	8015B	5159
TPH (Diesel Range)	33.6	mg/kg	14.4	l	3/ 2/02	9:55	D.Haywood	8015B	9746

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Me thod
EPH/DRO	25.1 g	m I.O ml	2/28/02		D.Yeager	3550
Surrogate			% Rec	overy	Targe	t Range
UST surr-Triflu	orotoluene		8	37.	65	135.



Laboratory Number: 02-A28765 Sample ID: UST 2-4 Project: 48292 Page 2

Surrogate	% Recovery	Target Range
EPH surr-o-Terphenyl	91.	50 150.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

 $\slash\hspace{-0.4em}\#$ - Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28766 Sample ID: UST 2-5 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 10:55 Date Received: 2/23/02 Time Received: 9:00

Page: 1

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Analyte	Result	Units	Report Limít	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAM	ETERS								
% Dry Weight	70.7	%		1	2/28/02	18:30	J.Tyree	CLP	4389
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	1.41	100	3/ 1/02	13:09	S. Davis	8021B	5159
Ethylbenzene	59.0	mg/kg	1.41	100	3/ 1/02	13:09	S. Davis	8021B	5159
Coluene	47.0	mg/kg	1.41	100	3/ 1/02	13:09	S. Davis	8021B	5159
Mylenes, total	236.	mg/kg	14.1	1000	3/ 1/02	20:29	S. Davis	8021B	9835
TPH (Gasoline Range)	3270	mg/kg	707.	100	3/ 1/02	13:09	S. Davis	8015B	5159
TPH (Diesel Range)	32.4	mg/kg	14,1	1	3/ 1/02	20:50	D.Haywood	8015B	9746

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
EPH/DRO	25.1 გ	m 1.0 ml	2/28/02		D.Yeager	3550
Surrogate			% Rec	overy	Targe	t Range

90.

. Sample report continued . . .

UST surr-Trifluorotoluene



Laboratory Number: 02-A28766 Sample ID: UST 2-5

Project: 48292

Page 2

Surrogate	% Recovery	Target Range		
EPH surr-o-Terphenyl	92.	50 150.		

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER

7300 CARMEL EXEC. PARK, STE220

CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT

Lab Number: 02-A28767 Sample ID: UST 2-6 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 11:35 Date Received: 2/23/02 Time Received: 9:00

Page: 1

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Analyte	Result	Units	Report Limít	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
*									
GENERAL CHEMISTRY PARAM	ETERS								
% Dry Weight	78.2	%		1	2/28/02	18:30	J.Tyree	CLP	4389
ORGANIC PARAMETERS									
Benzene	4.73	mg/kg	1.28	100	3/ 1/02	13:45	S. Davis	8021B	5159
Ethylbenzene	60.2	mg/kg	1.28	100	3/ 1/02	13:45	S. Davis	8021B	5159
Toluene	58.4	mg/kg	1.28	100	3/ 1/02	13:45	S. Davis	8021B	5159
Xylenes, total	199.	mg/kg	12.8	1000	3/ 1/02	21:04	S. Davis	8021B	9835
TPH (Gasoline Range)	3940	mg/kg	639.	100	3/ 1/02	13:45	S. Davis	8015B	5159
TPH (Diesel Range)	86.1	mg/kg	12.7	1	3/ 1/02	21:02	D.Haywood	8015B	9746

Sample Extraction Data

	Wt/Vol			
Parameter	Extracted Extract	Vol Date Time	Analyst Method	
				-
EPH/DRO	25.2 gm 1.0 m	1 2/28/02	D.Yeager 3550	
Surrogate		% Recovery	Target Range	

90.

Sample report continued . . .

UST surr-Trifluorotoluene



Laboratory Number: 02-A28767 Sample ID: UST 2-6

Project: 48292

Page 2

% Recovery Target Range Surrogate -----98. 50. - 150. EPH surr-o-Terphenyl

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220

CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28768 Sample ID: UST 2-FP Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 10:20 Date Received: 2/23/02 Time Received: 9:00

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Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAME	FERS								
% Dry Weight	76.6	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	0.0131	1	3/ 1/02	1:11	S. Davis	8021B	5159
Ethylbenzene	ND	mg/kg	0.0131	1	3/ 1/02	1:11	S. Davís	8021B	5159
Toluene	0.0196	mg/kg	0.0131	1	3/ 1/02	1:11	S. Davis	8021B	5159
Xylenes, total	0.0601	mg/kg	0.0131	1	3/ 1/02	1:11	S. Davis	8021B	5159
TPH (Gasoline Range)	ND	mg/kg	6.53	1	3/ 1/02	1:11	S. Davis	8015B	5159
TPH (Diesel Range)	ND	mg/kg	13.0	1	3/ 1/02	21:24	D.Haywood	8015B	9746

Sample Extraction Data

Surrogate			% Rec	overy	Target	Range
EPH/DRO	25.1 gr	m 1.0 ml	2/28/02		D.Yeager	3550
Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method

Sample report continued . . .

UST surr-Trifluorotoluene

90.



Laboratory Number: 02-A28768 Sample ID: UST 2-FP

Project: 48292

Page 2

Surrogate	% Recovery	Target Range
EPH surr-o-Terphenyl	97.	50 150.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

 $\slash\hspace{-0.4em}\#$ - Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER

7300 CARMEL EXEC. PARK, STE220

CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28769 Sample ID: UST 3-1

Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 9:50 Date Received: 2/23/02 Time Received: 9:00

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65. - 135.

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMET	ERS								
% Dry Weight	72.9	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS									
Benzene	4.39	mg/kg	1.37	100	3/ 1/02	14:19	S. Davis	8021B	5159
Ethylbenzene	81.9	mg/kg	1.37	100	3/ 1/02	14:19	S. Davís	8021B	5159
Toluene	112.	mg/kg	1.37	100	3/ 1/02	14:19	S. Davis	8021B	5159
Xylenes, total	458.	mg/kg	13.7	1000	3/ 1/02	21:44	S. Davis	8021B	9835
TPH (Gasoline Range)	4380	mg/kg	686.	100	3/ 1/02	14:19	S. Davis	8015B	5159
TPH (Diesel Range)	87.2	mg/kg	13.7	1	3/ 1/02	21:34	D. Haywood	8015B	9746

Sample Extraction Data

Surrogate			% Rec	overy	Target	Range
EPH/DRO	25.1 gm	1.0 ml	2/28/02		D.Yeager	3550
Parameter	Extracted Ex	tract Vol	Date	Time	Analyst	Method
	Wt/Vol					

Sample report continued . . .

UST surr-Trifluorotoluene

90.



Laboratory Number: 02-A28769 Sample ID: UST 3-1 Project: 48292

Page 2

Surrogate % Recovery Target Range

EPH surr-o-Terphenyl

112.

50. - 150.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28770 Sample ID: UST 3-2 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 9:55 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAM	IETERS								
% Dry Weight	74.1	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	0.135	10	3/ 1/02	14:54	S. Davis	8021B	5159
Ethylbenzene	2.75	mg/kg	0.135	10	3/ 1/02	14:54	S. Davis	8021B	5159
Toluene	1.11	mg/kg	0.135	10	3/ 1/02	14:54	S. Davis	8021B	5159
Kylenes, total	19.2	mg/kg	0.135	10	3/ 1/02	14:54	S. Davis	8021B	5159
TPH (Gasoline Range)	144.	mg/kg	67.5	10	3/ 1/02	14:54	S. Davis	8015B	5159
TPH (Diesel Range)	ND	mg/kg	13.4	1	3/ 1/02	21:46	D.Haywood	8015B	9746

Sample Extraction Data

	Wt/Vol				
Parameter	Extracted Extr	act Vol Date	Time	Analyst	Method
~ 					
EPH/DRO	25.1 gm 1	.0 ml 2/28/02	2	D.Yeager	3550
Surrogate		% Re	ecovery	Target	Range
UST surr-Trifluo	orotoluene		90.	65.	- 135.



Laboratory Number: 02-A28770 Sample ID: UST 3-2 Project: 48292 Page 2

Surrogate	% Recovery	Target Range

EPH surr-o-Terphenyl	82	50 150.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

 $\slash\hspace{-0.6em}\#$ - Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28771 Sample ID: UST 3-3 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 10:10 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAME	TERS								
% Dry Weight	79.1	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS									
Benzene	21.5	mg/kg	12.6	1000	3/ 1/02	15:29	S. Davis	8021B	5159
Ethylbenzene	311.	mg/kg	12.6	1000	3/ 1/02	15:29	S. Davis	8021B	5159
Toluene	716.	mg/kg	12.6	1000	3/ 1/02	15:29	S. Davis	8021B	5159
Kylenes, total	1620	mg/kg	12.6	1000	3/ 1/02	15:29	S. Davis	8021B	5159
TPH (Gasoline Range)	14200	mg/kg	6320	1000	3/ 1/02	15:29	S. Davis	8015B	5159
TPH (Diesel Range)	300.	mg/kg	126.	10	3/ 1/02	21:57	D. Haywood	8015B	9746

Sample Extraction Data

Surrogate			% Rec	overy	Target	Range
EPH/DRO	25.0 g	m 1.0 ml	2/28/02		D.Yeager	3550
rarame cer		EXCIDENT VOI				
Parameter	Wirected	Extract Vol	Date	Time	Analyst	Method

UST surr-Trifluorotoluene

97.

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Laboratory Number: 02-A28771 Sample ID: UST 3-3 Project: 48292 Page 2

LABORATORY COMMENTS:

 \mbox{ND} - \mbox{Not} detected at the report limit.

 $\slash\hspace{-0.4em}\#$ — Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.

trph-d surrgate was diluted out due to sample matrix.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28772 Sample ID: UST 3-4 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 10:15 Date Received: 2/23/02 Time Received: 9:00

Page: 1

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Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMET	ERS								
% Dry Weight	71.5	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS									
Benzene	29.4	mg/kg	14.0	1000	3/ 1/02	22:19	S. Davis	8021B	5159
Ethylbenzene	169.	mg/kg	14.0	1000	3/ 1/02	22:19	S. Davis	8021B	5159
Toluene	544.	mg/kg	14.0	1000	3/ 1/02	22:19	S. Davis	8021B	5159
(ylenes, total	959.	mg/kg	14.0	1000	3/ 1/02	22:19	S. Davis	8021B	5159
TPH (Gasoline Range)	8900	mg/kg	6990	1000	3/ 1/02	22:19	S. Davis	8015B	5159
TPH (Diesel Range)	38.9	mg/kg	13.8	1	3/ 1/02	22:07	D.Haywood	8015B	9746

Sample Extraction Data

	Wt/Vol		
Parameter	Extracted Extract Vol	Date Time	Analyst Method
EPH/DRO	25.3 gm 1.0 ml	2/28/02	D.Yeager 3550
			·
Surrogate		% Recovery	Target Range

Sample report continued . . .

UST surr-Trifluorotoluene

90.



Laboratory Number: 02-A28772 Sample ID: UST 3-4

Project: 48292

Page 2

Surrogate	% Recovery	Target Range		
EPH surr-o-Terphenyl	93.	50 150.		

LABORATORY COMMENTS:

ND - Not detected at the report limit.

 $\# \ \text{--}\ \textsc{Recovery}$ outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28773 Sample ID: UST 3-5 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 10:25 Date Received: 2/23/02 Time Received: 9:00

Page: 1

65. - 135.

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAME"	rers								
% Dry Weight	71.7	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS*									
Benzene	9.76	mg/kg	1.39	100	3/ 1/02	17:54	S. Davis	8021B	5159
thylbenzene	109.	mg/kg	1.39	100	3/ 1/02	17:54	S. Davis	8021B	5159
oluene	170.	mg/kg	13.9	1000	3/ 1/02	22:55	S. Davis	8021B	9835
ylenes, total	481.	mg/kg	13.9	1000	3/ 1/02	22:55	S. Davis	8021B	9835
PH (Gasoline Range)	4940	mg/kg	697.	100	3/ 1/02	17:54	S. Davis	8015B	5159
PH (Diesel Range)	54.7	mg/kg	13.9	1	3/ 1/02	22:19	D.Haywood	8015B	9746

Sample Extraction Data

Surrogate			% Rec	covery	Targe	t Range
EPH/DRO	25.0 g	m 1.0 ml	2/28/02		D.Yeager	3550
Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method

Sample report continued . . .

UST surr-Trifluorotoluene

90.



Laboratory Number: 02-A28773 Sample ID: UST 3-5 Project: 48292

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Surrogate	% Recovery	Target Range
EPH surr-o-Terphenyl	105.	50 150 <i>.</i>

LABORATORY COMMENTS:

 $\ensuremath{\mathsf{ND}}$ - $\ensuremath{\mathsf{Not}}$ detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28774 Sample ID: UST 3-6 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 9:40
Date Received: 2/23/02
Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMET	TERS								
% Dry Weight	63.6	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS*									
Benzene	ND	mg/kg	1.57	100	3/ 1/02	18:28	S. Davis	8021B	5159
Sthylbenzene	45.6	mg/kg	1.57	100	3/ 1/02	18:28	S. Davis	8021B	5 159
Coluene	62.9	mg/kg	1.57	100	3/ 1/02	18:28	S. Davis	8021B	5159
Kylenes, total	296.	mg/kg	15.7	1000	3/ 1/02	23:30	S. Davis	8021B	9835
TPH (Gasoline Range)	2010	mg/kg	786.	100	3/ 1/02	18:28	S. Davis	8015B	5159
TPH (Diesel Range)	75.8	mg/kg	15.7	1	3/ 1/02	22:29	D.Haywood	8015B	9746

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
EPH/DRO	25.1 g	m 1.0 ml	2/28/02		D.Yeager	3550
Surrogate			% Rec	overy	Target	Range
UST surr-Trifluo	orotoluene		ģ	0.	65.	- 135.

Sample report continued . . .



Laboratory Number: 02-A28774 Sample ID: UST 3-6

Project: 48292

Page 2

Target Range Surrogate % Recovery 102. 50. - 150. EPH surr-o-Terphenyl

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28775 Sample ID: UST 3-FP Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 10:45 Date Received: 2/23/02 Time Received: 9:00

Page: 1

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Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAM	ETERS								
% Dry Weight	78.8	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	0.0127	1	3/ 1/02	6:27	S. Davis	8021B	5159
Ethylbenzene	ND	mg/kg	0.0127	1	3/ 1/02	6:27	S. Davis	8021B	5159
Toluene	0.0178	mg/kg	0.0127	1	3/ 1/02	6:27	S. Davis	8021B	5159
Xylenes, total	0.0622	mg/kg	0.0127	1	3/ 1/02	6:27	S. Davis	8021B	5159
TPH (Gasoline Range)	ЙЙ	mg/kg	6.35	l	3/ 1/02	6:27	S. Davis	8015B	5159
TPH (Diesel Range)	ND	mg/kg	12.5	1	3/ 2/02	10:06	D. Haywood	8015B	9746

Sample Extraction Data

Surrogate			% Rec	overy	Target	Range
EPH/DRO	25.3 g	m 1.0 ml	2/28/02		D.Yeager	3550
Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method

Sample report continued . . .

UST surr-Trifluorotoluene



Laboratory Number: 02-A28775 Sample ID: UST 3-FP Project: 48292

Page 2

Surrogate	% Recovery	Target Range
RPH surr_o_Ternhenyl	96	50 - 150

LABORATORY COMMENTS:

 \mbox{ND} = \mbox{Not} detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28776 Sample ID: UST 4-1 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 12:45 Date Received: 2/23/02 Time Received: 9:00

Page: 1

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Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAM	ETERS*								
& Dry Weight	78.1	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS*									
Benzene	20.5	mg/kg	12.8	1000	3/ 1/02	19:07	S. Davis	8021B	5159
Ethylbenzene	92.2	mg/kg	12.8	1000	3/ 1/02	19:07	S. Davis	8021B	5159
Toluene	319.	mg/kg	12.8	1000	3/ 1/02	19:07	S. Davis	8021B	5159
Yylenes, total	626.	mg/kg	12.8	1000	3/ 1/02	19:07	S. Davis	8021B	5159
PH (Gasoline Range)	ND	mg/kg	6400	1000	3/ 1/02	19:07	S. Davis	8015B	5159
TPH (Diesel Range)	11100	mg/kg	640.	50	3/ 2/02	12:41	D.Haywood	8015B	9746

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
EPH/DRO	25.0 g	m 1.0 ml	2/28/02		D.Yeager	3550
Surrogate			% Rec	overy	Target	Range

Sample report continued . . .

UST surr-Trifluorotoluene



Laboratory Number: 02-A28776 Sample ID: UST 4-1 Project: 48292 Page 2

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.

TRPH-D SURROGATE WAS DILUTED OUT DUE TO SAMPLE MATRIX.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28777 Sample ID: UST 4-2 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 12:55 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Ánalyst	Method	Batch
GENERAL CHEMISTRY PARAM	ETERS								
% Dry Weight	80.8	%		l	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS									
Benzene	1.49	mg/kg	1.24	100	3/ 1/02	19:43	S. Davis	8021B	5159
Sthylbenzene	31.4	mg/kg	1.24	100	3/ 1/02	19:43	S. Davis	8021B	5159
Coluene	46.8	mg/kg	1.24	100	3/ 1/02	19:43	S. Davis	8021B	5159
Mylenes, total	173.	mg/kg	1.24	100	3/ 1/02	19:43	S. Davis	8021B	5159
TPH (Gasoline Range)	1670	mg/kg	619.	100	3/ 1/02	19:43	S. Davis	8015B	5159
PH (Diesel Range)	63.5	mg/kg	12.4	1	3/ 1/02	23:03	D.Haywood	8015B	9746

Sample Extraction Data

Parameter	Wt/Vol Extracted F	Extract Vol	Date	Time	Analyst	Method
EPH/DRO	25.0 gm	1.0 ml	2/28/02		D.Yeager	3550
Surrogate			% Rec	-	Target	9

UST surr-Trifluorotoluene

93.

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Sample report continued . . .



Laboratory Number: 02-A28777

Sample ID: UST 4-2 Project: 48292 Page 2

Surrogate	% Recovery	Target Range			
EPH surr-o-Terphenyl	105.	50 150.			

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28778 Sample ID: UST 4-3 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 13:00 Date Received: 2/23/02 Time Received: 9:00

Page: 1

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Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch	
GENERAL CHEMISTRY PARAM	ETERS									
% Dry Weight	68.7	%		1	2/28/02	16:14	D.Yeager	CLP	4391	
ORGANIC PARAMETERS*										
Benzene	0.441	mg/kg	0.0146	1	3/ 1/02	20:59	S. Davis	8021B	5160	
Ithylbenzene	0.0597	mg/kg	0.0146	1	3/ 1/02	20:59	S. Davis	8021B	5160	
oluene	0.767	mg/kg	0.0146	l	3/ 1/02	20:59	S. Davis	8021B	5160	
ylenes, total	0.514	mg/kg	0.0146	l	3/ 1/02	20:59	S. Davis	8021B	5160	
PH (Gasoline Range)	7.86	mg/kg	7.28	1	3/ 1/02	20:59	S. Davis	8015B	5160	
TPH (Diesel Range)	ND	mg/kg	14.4	1	3/ 1/02	23:26	D.Haywood	8015B	9746	

Sample Extraction Data

Wt/Vol

Parameter	Extracted Extract	Vol Date Time	Analyst	Method
EPH/DRO	25.2 gm 1.0 m	1 2/28/02	D.Yeager	3550
Surrogate		% Recovery	Target	Range

Sample report continued . . .

UST surr-Trifluorotoluene



Laboratory Number: 02-A28778 Sample ID: UST 4-3 Project: 48292

Page 2

Surrogate	% Recovery	Target Range
EPH surr-o-Terphenyl	93.	50 150.

LABORATORY COMMENTS:

 $\ensuremath{\mathsf{ND}}$ — Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28779 Sample ID: UST 4-4 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 13:10 Date Received: 2/23/02 Time Received: 9:00

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Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAM	ETERS								
Dry Weight	80.3	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	0.0125	1	3/ 1/02	21:30	S. Davis	8021B	5160
Ethylbenzene	ND	mg/kg	0.0125	1	3/ 1/02	21:30	S. Davis	8021B	5160
Toluene	NĎ	mg/kg	0.0125	1	3/ 1/02	21:30	S. Davis	8021B	5160
Kylenes, total	ND	mg/kg	0.0125	1	3/ 1/02	21:30	S. Davis	8021B	5160
TPH (Gasoline Range)	ND	mg/kg	6.23	1	3/ 1/02	21:30	S. Davis	8015B	5160
TPH (Diesel Range)	ND	mg/kg	12.4	1	3/ 1/02	23:37	D.Haywood	8015B	9746
mple Extraction Data	<u> </u>								
Wt/Vol									

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
EPH/DRO	25.1 g	m 1.0 ml	2/28/02		D.Yeager	3550
Surrogate			% Rec	covery	Targe	t Range

Sample report continued . . .

UST surr-Trifluorotoluene



Laboratory Number: 02-A28779 Sample ID: UST 4-4 Project: 48292 Page 2

Surrogate	% Recovery	Target Range
EPH surr-o-Terphenyl	91.	50 150.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207

JERRY PROSSER

7300 CARMEL EXEC. PARK, STE220

CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28780 Sample ID: UST 4-5 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 13:20
Date Received: 2/23/02
Time Received: 9:00

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Analyte	Řesult	Units	Report Limit	Dil Factor	An a lysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAM	IETERS*								
% Dry Weight	72.5	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS*									
Benzene	ND	mg/kg	0.0138	1	3/ 1/02	22:02	S. Davis	8021B	5160
Ethylbenzene	ND	mg/kg	0.0138	1	3/ 1/02	22:02	S. Davis	8021B	5160
Toluene	ND	mg/kg	0.0138	1	3/ 1/02	22:02	S. Davis	8021B	5160
Kylenes, total	ND	mg/kg	0.0138	1	3/ 1/02	22:02	S. Davis	8021B	5160
TPH (Gasoline Range)	ND	mg/kg	6.90	1	3/ 1/02	22:02	S. Davis	8015B	5160
TPH (Diesel Range)	17.0	mg/kg	13.6	1	3/ 1/02	23:48	D.Haywood	8015B	9746
ple Extraction Data									

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
EPH/DRO	25.4 g	m 1.0 ml	2/28/02	·	D.Yeager	3550
Surrogate			% Rec	overy	Target	r Range
UST surr-Triflu	orotoluene		1	.13.	65.	135.

Sample report continued . . .



Laboratory Number: 02-A28780 Sample ID: UST 4-5 Project: 48292 Page 2

Surrogate	% Recovery	Target Range		
EPH surr-o-Terphenyl	84.	50 150.		

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28781 Sample ID: UST 4-6 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 13:30 Date Received: 2/23/02 Time Received: 9:00

Page: 1

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Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAM	ETERS*								
% Dry Weight	72.9	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS*									
Benzene	ND	mg/kg	0.0137	1	3/ 1/02	22:33	S. Davis	8021B	5160
lthylbenzene	ND	mg/kg	0.0137	1	3/ 1/02	22:33	S. Davis	8021B	5160
oluene	ND	mg/kg	0.0137	1	3/ 1/02	22:33	S. Davis	8021B	5160
Ylenes, total	ND	mg/kg	0.0137	1	3/ 1/02	22:33	S. Davis	8021B	5160
TH (Gasoline Range)	ND	mg/kg	6.86	1	3/ 1/02	22:33	S. Davis	8015B	5160
TPH (Diesel Range)	ND	mg/kg	13.6	1	3/ 1/02	23:59	D.Haywood	8015B	9746
									
nple Extraction Data									

Sa

Surrogate			% Rec	overy	Target	Range
EPH/DRO	25.2 g	m 1.0 ml	2/28/02		D.Yeager	3550
				-		
Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method

Sample report continued . . .

UST surr-Trifluorotoluene



Laboratory Number: 02-A28781 Sample ID: UST 4-6

Project: 48292

Page 2

% Recovery Target Range Surrogate ----------50. - 150. 84. EPH surr-o-Terphenyl

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220

CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT

Lab Number: 02-A28782 Sample ID: UST 4-FP Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 10:50 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAM	ETERS								
% Dry Weight	84.3	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS									
Benzene ·	ND	mg/kg	0.0119	1	3/ 1/02	23:04	S. Davis	8021B	5160
Ethylbenzene	ND	mg/kg	0.0119	1	3/ 1/02	23:04	S. Davis	8021B	5160
Toluene	ND	mg/kg	0.0119	1	3/ 1/02	23:04	S. Davis	8021B	5160
Yylenes, total	ND	mg/kg	0.0119	1	3/ 1/02	23:04	S. Davis	8021B	5160
TPH (Gasoline Range)	ND	mg/kg	5.93	1	3/ 1/02	23:04	S. Davis	8015B	5160
TPH (Diesel Range)	27.4	mg/kg	11.9	1	3/ 2/02	10:27	D.Haywood	8015B	9746

Sample Extraction	Data				
Parameter	Wt/Vol Extracted Extract Vol	Date Time	Analyst	Method	
EPH/DRO	25.0 gm 1.0 ml	2/28/02	D.Yeager	3550	
Surrogate		% Recovery	Target	Range	
UST surr-Triflu	orotoluene	113.	65.	- 135.	

Sample report continued . . .



Laboratory Number: 02-A28782 Sample ID: UST 4-FP

Project: 48292 Page 2

Surrogate	% Recovery	Target Range
EPH surr-o-Terphenyl	89.	50 150.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

 $\ensuremath{\#}$ - Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28783 Sample ID: UST 5-1 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 12:30 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
***									:
GENERAL CHEMISTRY PARAM	ETERS								
% Dry Weight	70.8	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS									
Benzene ·	ND	mg/kg	0.0141	1	3/ 1/02	23:36	S. Davis	8021B	5160
Ethylbenzene	ND	mg/kg	0.0141	İ	3/ 1/02	23:36	S. Davis	8021B	5160
Toluene	ND	mg/kg	0.0141	1	3/ 1/02	23:36	S. Davis	8021B	5160
Xylenes, total	ND	mg/kg	0.0141	1	3/ 1/02	23:36	S. Davis	8021B	5160
TPH (Gasoline Range)	ND	mg/kg	7.06	1	3/ 1/02	23:36	S. Davis	8015B	5160
TPH (Diesel Range)	ND	mg/kg	14.0	1	3/ 2/02	0:21	D.Haywood	8015B	9746

Sample Extraction Data

Wt/Vol

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
EPH/DRO	25.2 g	m 1.0 ml	2/28/02		D.Yeager	3550
Surrogate			% Rec	overy	Target	Range

UST surr-Trifluorotoluene

117.

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Sample report continued . . .



Laboratory Number: 02-A28783 Sample ID: UST 5-1 Project: 48292

Page 2

Surrogate	% Recovery	Target Range
	2-2	
EPH surr-o-Terphenvl	81.	50, - 150.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28784 Sample ID: UST 5-2 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 9:10 Date Received: 2/23/02 Time Received: 9:00

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Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAM	ÆTERS*								
& Dry Weight	72.2	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS*									
Benzene	ИD	mg/kg	0.0139	1	3/ 2/02	0:07	S. Davis	8021B	5160
Ethylbenzene	ND	mg/kg	0.0139	1	3/ 2/02	0:07	S. Davis	8021B	5160
oluene	ND	mg/kg	0.0139	1	3/ 2/02	0:07	S. Davis	8021B	5160
Yylenes, total	ND	mg/kg	0.0139	1	3/ 2/02	0:07	S. Davis	8021B	5160
PH (Gasoline Range)	ND	mg/kg	6.93	1	3/ 2/02	0:07	S. Davis	8015B	5160
PH (Diesel Range)	ND	mg/kg	13.8	1	3/ 2/02	0:32	D.Haywood	8015B	9746

Sample Extraction Data

	Wt/Vol		
Parameter	Extracted Extract Vol	Date Time	Analyst Method
EPH/DRO	25.1 gm 1.0 ml	2/28/02	D.Yeager 3550
Surrogate		% Recovery	Target Range

Sample report continued . . .

UST surr-Trifluorotoluene



Laboratory Number: 02-A28784 Sample ID: UST 5-2 Project: 48292

Page 2

Surrogate	% Recovery	Target Range
EPH surr-o-Terphenvl	81.	50 150.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207
JERRY PROSSER

7300 CARMEL EXEC. PARK, STE220

CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28785 Sample ID: UST 5-3 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 9:20 Date Received: 2/23/02 Time Received: 9:00

Page: 1

65. - 135.

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMET	TERS								
% Dry Weight	71.6	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	0.0140	1	3/ 2/02	0:39	S. Davis	80213	5160
Ethylbenzene	ND	mg/kg	0.0140	1	3/ 2/02	0:39	S. Davis	8021B	5160
Toluene	ND	mg/kg	0.0140	1	3/ 2/02	0:39	S. Davis	8021B	5160
Xylenes, total	ИD	mg/kg	0.0140	1	3/ 2/02	0:39	S. Davis	8021B	5160
TPH (Gasoline Range)	ND	mg/kg	6.98	1	3/ 2/02	0:39	S. Davis	8015B	5160
TPH (Diesel Range)	ND	mg/kg	14.0	1	3/ 2/02	11:26	D.Haywood	8015B	9748

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
EPH/DRO	25.0 g	m 1.0 ml	2/28/02		D.Yeager	3550
Surrogate			% Rec	overy	Target	Range

Sample report continued . . .

UST surr-Trifluorotoluene



Laboratory Number: 02-A28785 Sample ID: UST 5-3 Project: 48292 Page 2

Surrogate	% Recovery	Target Range
EPH surr-o-Terphenyl	70.	50 150.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28786 Sample ID: UST 5-4 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 9:30 Date Received: 2/23/02 Time Received: 9:00

Page: 1

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Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAM	ETERS								
% Dry Weight	64.0	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS									
Benzene -	ND	mg/kg	0.0156	l	3/ 2/02	2:13	S. Davis	8021B	5160
Ethylbenzene	ND	mg/kg	0.0156	l	3/ 2/02	2:13	S. Davis	8021B	5160
C oluene	ND	mg/kg	0.0156	1	3/ 2/02	2:13	S. Davis	8021B	5160
Kylenes, total	ND	mg/kg	0.0156	1	3/ 2/02	2:13	S. Davis	8021B	5160
TPH (Gasoline Range)	ND	mg/kg	7.81	1	3/ 2/02	2:13	S. Davis	8015B	5160
TPH (Diesel Range)	ND	mg/kg	15.6	1	3/ 2/02	11:45	D.Haywood	8015B	9748

Sample Extraction Data

Parameter	Wt/Vol Extracted E	Extract Vol	Date	Time	Analyst	Method	
EPH/DRO	25.0 gm	1.0 ml	2/28/02		D.Yeager	3550	
Surrogate			% Re c	overy	Target	Range	

Sample report continued . . .

UST surr-Trifluorotoluene



Laboratory Number: 02-A28786 Sample ID: UST 5-4 Project: 48292 Page 2

Surrogate	% Recovery	Target Range
EPH surr-o-Terphenyl	68.	50 150.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28787 Sample ID: UST 5-FP Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 10:40 Date Received: 2/23/02 Time Received: 9:00

Page: 1

			Report	Dil	Analysis	Analysis			
Analyte	Result	Units	Limit	Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAM	(FTFDC+								
Dry Weight	76.0	%		1	2/28/02	16:14	D.Yeager	CLP	4391
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	0.0132	1	3/ 2/02	2:44	S. Davis	8021B	5160
Ethylbenzene	ND	mg/kg	0.0132	1	3/ 2/02	2:44	S. Davis	8021B	5160
l'oluene	ND	mg/kg	0.0132	1	3/ 2/02	2:44	S. Davis	8021B	5160
Kylenes, total	ND	mg/kg	0.0132	1	3/ 2/02	2:44	S. Davis	8021B	5160
TPH (Gasoline Range)	ND	mg/kg	6.58	I	3/ 2/02	2:44	S. Davis	8015B	5160
TPH (Diesel Range)	ND	mg/kg	13.1	1	3/ 2/02	12:05	D. Haywood	8015B	9748

							.
Sample Extraction	Data						
	Wt/Vol						
Parameter	Extracted E	xtract Vol	Date	Time	Analyst	Method	
EPH/DRO	25.1 gm	1.0 ml	2/28/02		D.Yeager	3550	
Surrogate			% Rec	overy	Target	Range	
UST surr-Trifluo	orotoluene		1	13.	65	- 135.	

Sample report continued . . .



Laboratory Number: 02-A28787 Sample ID: UST 5-FP Project: 48292 Page 2

Surrogate	% Recovery	Target Range
DDH over a Manual	59°.	50 150.
EPH surr-o-Terphenyl	29.	50 150.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220

CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28788

Sample ID: SP-1 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 11:50 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
				• • • • • • •					
GENERAL CHEMISTRY PARAMET	TERS								
% Dry Weight	91.4	%		1	2/28/02	16:09	D.Yeager	CLP	4393
ORGANIC PARAMETERS									
Benzene -	ND	mg/kg	0.0109	1	3/ 2/02	3:16	S. Davis	8021B	5160
Ethylbenzene	ND	mg/kg	0.0109	1	3/ 2/02	3:16	S. Davis	8021B	5160
Coluene	ND	mg/kg	0.0109	1	3/ 2/02	3:16	S. Davis	8021B	5160
Mylenes, total	ND	mg/kg	0.0109	1	3/ 2/02	3:16	S. Davis	8021B	5160
PH (Gasoline Range)	ND	mg/kg	5.47	1	3/ 2/02	3:16	S. Davis	8015B	5160
PH (Diesel Range)	24.8	mg/kg	10.9	1	3/ 2/02	12:24	D.Haywood	8015B	9748

Sample Extraction Data

Parameter	Wt/Vol Extracted Extract Vol	Date Time	Analyst	Method
EPH/DRO	25.1 gm 1.0 ml	2/28/02	D.Yeager	3550
Surrogate		% Recovery	Target	Range

UST surr-Trifluorotoluene

113.

65. - 135.

Sample report continued . . .



Laboratory Number: 02-A28788 Sample ID: SP-1 Project: 48292 Page 2

Surrogate	% Recovery	Target Range
	00	50 150
EPH surr-o-Terphenyl	80.	50 150.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT Lab Number: 02-A28789

Sample ID: PI-1 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 11:10 Date Received: 2/23/02 Time Received: 9:00

Page: 1

65. - 135.

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMET	ERS								
% Dry Weight	74.7	%		1	2/28/02	16:09	D.Yeager	CLP	4393
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	0.0134	1	3/ 2/02	3:47	S. Davis	8021B	5160
Ethylbenzene	ND	mg/kg	0.0134	1	3/ 2/02	3:47	S. Davis	8021B	5160
Coluene	ND	mg/kg	0.0134	1	3/ 2/02	3:47	S. Davis	8021B	5160
Kylenes, total	ND	mg/kg	0.0134	1	3/ 2/02	3:47	S. Davis	8021B	5160
TPH (Gasoline Range)	ND	mg/kg	6.69	1	3/ 2/02	3:47	S. Davis	8015B	5160
TPH (Diesel Range)	ND	mg/kg	13.3	1	3/ 2/02	13:43	D.Haywood	8015B	9748

Sample Extraction Data

Surrogate			% Rec	covery	Targe	t Range
EPH/DRO	25.1 g	m 1.0 ml	2/28/02		D.Yeager	3550
Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method

Sample report continued . . .

UST surr-Trifluorotoluene



Laboratory Number: 02-A28789 Sample ID: PI-1 Project: 48292 Page 2

Surrogate	% Recovery	Target Range
EPH surr-o-Terphenyl	102.	50, - 150.

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207 JERRY PROSSER 7300 CARMEL EXEC. PARK, STE220 CHARLOTTE, NC 28226

Project: 48292 Project Name: 99 GNC Sampler: RHETT BAGGETT

Lab Number: 02-A28790 Sample ID: PI-2

Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 11:15 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte 	Result	Units				Analysis			
			Limit	Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAM	ËTERS								
% Dry Weight	78.2	%		1	2/28/02	16:09	D.Yeager	CLP	4393
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	0.0128	1	3/ 2/02	4:18	S. Davis	8021B	5160
Sthylbenzene	ND	mg/kg	0.0128	1	3/ 2/02	4:18	S. Davis	8021B	5160
Coluene	0.0217	mg/kg	0.0128	1	3/ 2/02	4:18	S. Davis	8021B	5160
Kylenes, total	ND	mg/kg	0.0128	1	3/ 2/02	4:18	S. Davis	8021B	5160
TPH (Gasoline Range)	ND	mg/kg	6.39	1	3/ 2/02	4:18	S. Davis	8015B	5160
TPH (Diesel Range)	ND	mg/kg	12.8	1	3/ 2/02	6:05	D.Haywood	8015B	9748

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
EPH/DRO	25.0 gm	1.0 ml	2/28/02		D.Yeager	3550
Surrogate			% Rec	overy	Target	Rånge

Sample report continued . . .

UST surr-Trifluorotoluene

120.

65. - 135.



Laboratory Number: 02-A28790 Sample ID: PI-2 Project: 48292 Page 2

Surrogate	% Recovery	Target Range
EPH surr-o-Terphenyl	88.	50 1 5 0.

LABORATORY COMMENTS:

ND = Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



ERM - SOUTHEAST, INC. 6207

JERRY PROSSER

7300 CARMEL EXEC. PARK, STE220

CHARLOTTE, NC 28226

Project: 48292

Project Name: 99 GNC

Sampler: RHETT BAGGETT

Lab Number: 02-A28791

Sample ID: PI-3 Sample Type: Soil

Site ID:

Date Collected: 2/22/02 Time Collected: 11:25 Date Received: 2/23/02 Time Received: 9:00

Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAM	ETERS								
% Dry Weight	76.1	%		1	2/28/02	16:09	D.Yeager	CLP	4393
ORGANIC PARAMETERS									
Benzene	ND	mg/kg	0.0131	1	3/ 2/02	4:50	S. Davis	8021B	5160
Ethylbenzene	ND	mg/kg	0.0131	1	3/ 2/02	4:50	S. Davis	8021B	5160
Toluene	ND	mg/kg	0.0131	1	3/ 2/02	4:50	S. Davis	8021B	5160
Kylenes, total	ND	mg/kg	0.0131	1	3/ 2/02	4:50	S. Davis	8021B	5160
TPH (Gasoline Range)	ND	mg/kg	6.57	1	3/ 2/02	4:50	S. Davis	8015B	5160
TPH (Diesel Range)	ND	mg/kg	13.0	1	3/ 2/02	6:25	D.Havwood	8015B	9748

Sample Extraction Data

Parameter	Wt/Vol Extracted Extract Vol	Date Time	Analyst Metho	od
EPH/DRO	25.2 gm 1.0 ml	2/28/02	D.Yeager 3550	
Surrogate		% Recovery	Target Range	

UST surr-Trifluorotoluene

117.

65. - 135.

Sample report continued . . .



Laboratory Number: 02-A28791 Sample ID: PI-3 Project: 48292

Page 2

Surrogate	% Recovery	Target Range	
EPH surr-o-Terphenyl	88.	50 150.	

LABORATORY COMMENTS:

ND - Not detected at the report limit.

- Recovery outside Laboratory historical or method prescribed limits.

All reported results for metals or Organic analyses have been corrected for dry weight.



PROJECT QUALITY CONTROL DATA Project Number: 48292 Page: 1

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
UST PARAMETERS					
UST surr-Trifluorotoluene	83.	% Recovery	5157	2/28/02	16:14
UST surr-Trifluorotoluene	87.	% Recovery	5159	2/28/02	17:29
UST surr-Trifluorotoluene	113.	% Recovery	5160	3/ 1/02	20:27
UST surr-Trifluorotoluene	87.	% Recovery	9835	3/ 1/02	16:44
UST surr-Trifluorotoluene	103.	% Recovery	9699	3/ 2/02	0:00

End of Report for Project 273181

VOLATILES (BC'd WKNUT HEADSPACE?

PROPER CONTAINERS USed?

PROPER PRESERVATIVES indicated?

Received WITHIN HOLDING TIMES?

CUSTODY SEALS INTACT?

HINGINING ON WET ICE? Tump A.

Samples INTACT upon antival?

Service Analytical & Environmental Solutions

449 Springbrook Road Charlotte, NC 28217 P.O. Box 240543 Charlotte, NC 28224-0543 Phone: 704/529-6364 Fax: 704/525-0409

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NTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Tefor-Uned Cap VOA = Volatile Organics Analysis (Zero Head Space)

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NC SC OTHER

DRINKING WATER:

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Samples INTACT upon antival? Received DN WET ICE? Temp ONTACT PROPER PRESERVATIVES indicated? Received WITHIN HOLDING TIMES? CUSTODY SEALS INTACT? VOLATILES rect WIOUT HEADSPACE? PROPER CONTAINERS used?		ー タ	EST.	77		7	1
	Samples INTACT upon arrival?	Ancalved ON WET ICE? Temp ON	PROPER PRESERVATIVES indicated?	Received WITHIN HOLDING TIMES?	CUSTODY SEALS INTAGT?	VOLATILES rec'd WIOUT HEADSPACE?	PROPER CONTAINERS Worth

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REPORT TO: NAME LE LINEA.	Address	BILL TO: Name LE KARA	Address	Requested Jul Date Ja-
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(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

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

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TABLE 1

SOIL LABORATORY ANALYTICAL RESULTS NCDOT PARCEL 948 - MABEL L. CHILTON PROPERTY GUILFORD COUNTY, NORTH CAROLINA NCDOT PROJECT 8.1690303

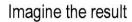
(TIP: R-2616 AA)

	UNITS	-	Petroleum Hydro	carbons
Analysis		GRO	DRO	Oil and Grease
STANDARDS				
Reportable Quantity	mg/kg	10	10	2.50
TPH Action Level	mg/kg	10	40	250
Soil-To-Groundwater	mg/kg	NE	NE	NE
Remediation Goal	mg/kg	NE	NE	NE
CT 1	ANAL	YTICAL RESUL	TS	-i
GP-1-4	mg/kg	<1.0	<10	320
GP-1-16	mg/kg	<1.0	<10	260
GP-1-31	mg/kg	14	<10	320
GP-2-4	mg/kg	<1.0	<10	380
GP-2-14	mg/kg	<1.0	<10	450
GP-3-4	mg/kg	90	120	
GP-3-28	mg/kg	210	<10	280
GP-4-30	mg/kg	420	<10	210
GP-5-8	mg/kg	61	<10	330
GP-5-16	mg/kg	6000	64	450
GP-5-29	mg/kg	2500		520
GP-6-4	mg/kg	<1.0	35	360
GP-6-20	mg/kg		<10	320
GP-6-39	mg/kg	4.4	<10	220
GP-7-20		1200	<10	260
GP-8-2	mg∕kg	20000	220	330
GP-8-31.5	mg/kg	<1.0	<10	170
GP-9-4	mg/kg	42	34	330
GP-9-28	mg/kg	<1.0	<10	260
GP-10-8	mg/kg	2500	81	280
	mg/kg	17	27	410
GP-10-18	mg/kg	22	350	1300
GP-10-32	mg/kg	230	15	350
JP-11-28	mg/kg	780	<10	440
GP-12-8	mg/kg	<1.0	<10	120
3P-12-14	mg/kg	1.2	<10	730
SP-12-23.5	mg/kg	2.5	<10	
3P-13-20	mg/kg	7.2	<10	130

- 1. Soil samples were collected by Probe Technology of Concord, NC under the supervision of URS on 2-9-01 and submitted by URS under chainof-custody protocols to Prism Laboratories, Inc. of Charlotte, NC for analyses.
- 2. Results for selected analytes are shown; see Appendix 3 for a full listing of results.
- 3. "<" denotes a non-detection (the detection limit follows).
- 4. "()" denotes an aqueous concentration.
- 5. STANDARDS are taken from guidance provided by the North Carolina Department of Environment and Natural Resources (NCDENR), including the Oct. 4, 1999 Division of Water Quality, Groundwater Section memorandum to environmental service companies, consultants and other interested parties entitled: Revised Policy for Soil Analytical Methods; the Jan. 2, 1998 Guidelines for the Investigation and Remediation of Soil and Groundwater, Volume II; and the NCDENR Division of Waste Management, Superfund Section, Inactive Hazardous Sites Branch Aug.
- 6. "NE" Not established



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G-DRIVE LOCA	ATION: pig/Em/	ma/NC/99GNC/ Kepo	nte/2013	STRATA UPLOAD	DATE:	
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ExxonMobil Environmental Services Company

Monitoring Well Abandonment Report - 2013

Former ExxonMobil Facility #99GNC 5009 Summit Avenue Greensboro, Guilford County, North Carolina

Groundwater Incident #24265

November 2013

ARCADIS

Paul Goodell, C.E.S.

Staff Environmental Scientist

Jon Farley, P.E.

Certified Project Manager I

Curtis S. Bostian, P.E.

North Carolina P.E. No. 25659

Senior Engineer

Monitoring Well Abandonment Report - 2013

Former ExxonMobil Facility #99GNC

Prepared for:

ExxonMobil Environmental Services Company Ms. Jewel Cox – Project Manager 1016 W. Poplar Avenue Suite 106 #232 Collierville, Tennessee 38017

Prepared by:

ARCADIS G&M of North Carolina, Inc. 801 Corporate Center Drive Suite 300 Raleigh, North Carolina 27607 Tel 919.854.1282 Fax 919.854.5448 www.arcadis-us.com

Environmental

Our Ref.:

B0085851.0047

Date:

November 1, 2013

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ARCADIS

MONITORING WELL ABANDONMENT REPORT - 2013

Former ExxonMobil Facility #99GNC 5009 Summit Avenue Greensboro, Guilford County, North Carolina Latitude 35° 41' 43.82"N Longitude 80° 52' 33.41"W (Reference **Figure 1**)

Groundwater Incident #:

Risk Classification:

Reason for Risk Classification:

Land Use Category:

Source of Release:

Date of Release Discovery:

Estimated Quantity of Release:

Cause of Release:

Responsible Party:

responsible rarty.

Property Owner:

24265

High

26 potable wells within 1,500 feet

of the site

Residential

Former gasoline UST system

February 2002

Unknown

UST Leak

ExxonMobil Corporation

Environmental Service Company

Attn: Ms. Jewel Cox 1016 W. Poplar Avenue

Suite 106 #232

Collierville, TN 38017

901.850.9009

Attn: Heather Fulghum

NCDOT

PO Box #14996

Greensboro, NC 27415

770.428.4236

, a Professional Engineer for ARCADIS G&M of North

Carolina, Inc., do certify that the information contained in this report is correct and accurate to the best of my knowledge. ARCADIS G&M of North Carolina, Inc. is licensed to practice geology and engineering in North Carolina. The certification numbers of the company are C-155 (geology) and C-1869 (engineering).

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Monitoring Well
Abandonment Report
- 2013

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1. Introduction

On October 22 – 23, 2013, on behalf of ExxonMobil Environmental Services Company (EMES), ARCADIS G&M of North Carolina (ARCADIS) subcontracted Parratt-Wolff Inc. (PW) to properly abandon the potable well located at 2710 Pindals Road and all groundwater monitoring wells associated with groundwater incident #24265 and former ExxonMobil facility #99GNC (the site), located at 5009 Summit Avenue, Greensboro, Guilford County, North Carolina. A site location map is included as **Figure 1**. The monitoring wells were abandoned as per email correspondence with the North Carolina Department of Environment and Natural Resources (NCDENR) in advance of the redevelopment of the property for use in the proposed Greensboro Loop (NCDOT Project #U-2525C). A copy of the email correspondence is provided in **Appendix A**.

2. Potable & Monitoring Well Abandonment

Eleven (11) groundwater monitoring/soil vapor extraction (SVE) wells (MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7/SVE-2, MW-8/SVE-1, MW-9/SVE-3, MW-10, and MW-11), three (3) air sparge wells (AS-1, AS-2, and AS-3), and one potable well (2710 Pindals Road) were properly abandoned by PW, a North Carolina licensed well driller (Cert. #3544), on October 22 - 23, 2013. The groundwater monitoring/SVE wells and air sparge wells were housed in 8-inch diameter round manholes and the SVE wells were housed in 2 foot by 2 foot square vaults. The potable well at 2710 Pindals Road was housed within a 12-inch diameter above-ground circular concrete well vault. Abandonment of the monitoring/SVE wells, air sparge wells, and potable well was performed in accordance with 15A NCAC 2C Well Construction Standards as follows:

- ARCADIS personnel gauged each monitoring/SVE, air sparge, and potable well
 prior to abandonment. Depth to water was measured from the top of casing of
 each monitoring/SVE, air sparge, and potable well using an electronic oil/water
 interface probe accurate to 0.01 foot. Current and historical groundwater elevations
 are summarized in Table 1.
- Monitoring/SVE, air sparge, and potable wells were abandoned in-place via tremiegrout methods. The monitoring/SVE, air sparge, and potable wells were filled from the bottom up with a cement grout mixture consisting of Portland cement and powdered bentonite.
- Following tremie-grouting of the monitoring/SVE, air sparge, and potable wells, the manhole and vault voids were returned to grade using a concrete cap to ground

Monitoring Well Abandonment Report - 2013

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surface. Due to high vehicle and pedestrian traffic at the site, monitoring/SVE, air sparge, and potable well vault manhole lids were abandoned in place and secured by the concrete cap. Before, during, and after photographs of monitoring well abandonment are included in **Appendix B** as an example of the monitoring well abandonment activities.

The locations of the former monitoring/SVE and air sparge wells are illustrated in **Figure 2**. The location of the former potable well (2710 Pindals Road) and the route of the Greensboro Loop (NCDOT Project #U-2525C) are presented in **Figure 3**. The Well Abandonment Records are included in **Appendix C**.

As per the email correspondence with the NCDENR, ARCADIS respectfully recommends the completion of a Notice of Residual Petroleum (NORP) for the subject incident number. The proposed NORP will be completed and filed with the Guilford County Register of Deeds. Upon completion of the NORP requirements, ARCADIS will respectfully request No Further Action (NFA) status be granted for the subject incident number.



Tables

Table 1: Groundwater Gauging Data Revision Date: <u>11/4/2013</u>

Well ID	Gauging Date	Top of Casing Elevation	Well Casing	Screened Interval	Depth to Water	Depth to Product	Product Thickness	Groundwater Elevation	Measured Depth to	Well Diameter
		(ft)	(ft btoc)	(ft btoc)	(ft btoc)	(ft btoc)	(ft)	(ft)	Bottom (ft)	(inches)
	06/27/02				32.07	70.46	2.53	67.93	40.00	2"
	07/29/02				32.37	72.01	4.38	67.63	40.00	2"
	08/27/02				37.40	67.10	4.50	62.60	40.00	2"
	09/09/02				37.36	67.15	4.51	62.64	40.00	2" 2"
1 1	10/02/02				35.30 35.03	66.30	1.60	64.70	40.00	2"
1 }	11/18/02 12/17/02				30.81	68.85 69.55	3.88 0.36	64.97 69.19	40.00 40.00	2"
l 1	01/10/03				30.26	70.10	0.36	69.74	40.00	2"
l	02/24/03				29.10	71.20	0.30	70.90	40.00	2"
1 1	03/18/03				27.94	72.24	0.18	72.06	40.00	2"
l 1	04/11/03				26.63	73.55	0.18	73.37	40.00	2"
1 1	05/14/03				26.04	74.25	0.29	73.96	40.00	2"
1 1	06/05/03				25.52	74.71	0.23	74.48	40.00	2"
1 1	07/08/03				24.65			75.35	40.00	2"
1 [08/11/03				24.65			75.35	40.00	2"
l [09/03/03				24.60			75.40	40.00	2"
[09/15/03				24.50			75.50	40.00	2"
[03/09/04				24.70			75.30	40.00	2"
	01/03/06				30.00			70.00	40.00	2"
	12/26/07			25-40	Dry		-	Dry	27.85	2"
	03/31/08	400.00	0.05		33.07			66.93	39.82	2"
MW-1	08/14/08	100.00	0-25		31.50			68.50	40.00 40.20	2" 2"
	06/02/09				30.32 33.11	-		69.68 66.89	40.20	2"
l }	11/05/09 08/09/10				29.17			70.83	41.00	2"
l 1	11/04/10				32.32			67.68	40.00	2"
l	02/01/11				32.10			67.90	NM	2"
l	04/26/11				31.80			68.20	38.80	2"
l	10/25/11				32.19			67.81	40.10	2"
l 1	01/18/12				33.25			66.75	NM	2"
l t	02/10/12				31.04			68.96	40.10	2"
l i	03/20/12				30.86			69.14	40.10	2"
1 1	04/25/12				30.20	-		69.80	40.10	2"
1 1	05/23/12				28.00	-		72.00	40.10	2"
1 [06/26/12				28.10	-		71.90	40.10	2"
1 [07/25/12				29.13			70.87	40.10	2"
	08/29/12				32.00			68.00	40.10	2"
1 1	09/26/12					ing Well Inc	$\overline{}$	Disabled Vehic		ver Well
	10/25/12				29.24			70.76	40.10	2"
[11/08/12				29.97			70.03	40.10	2"
	11/14/12 12/05/12				33.90 33.95			66.10 66.05	40.10 40.10	2"
l 1	10/22/13				30.40			69.60	40.10	2"
[10/22/13			Monitorina \	30.40 69.60 40.00 2 Well Abandoned on October 22, 2013					
	12/26/07				Dry			Dry	31.80	
MW-1R	03/31/08		Unknown	Unknown	Dry			Dry	39.10	
	06/27/02				32.92	67.35	0.15	67.20	40.00	2"
	07/29/02				35.15	67.87	2.90	64.97	40.00	2"
	08/27/02				36.00	66.52	2.40	64.12	40.00	2"
	09/09/02				35.95	66.52	2.35	64.17	40.00	2"
	10/02/02				35.00	66.07	0.95	65.12	40.00	2"
	11/18/02	100.12	0-25	25-40	34.50	68.17	2.55	65.62	40.00	2"
	12/17/02				30.45			69.67	40.00	2"
	01/10/03				30.41			69.71	40.00	2"
[02/24/03				29.30			70.82	40.00	2"
	03/18/03			[28.40			71.72	40.00	2"
	01/01/00				27.11			73.01	40.00	2"

Table 1: Groundwater Gauging Data Revision Date: <u>11/4/2013</u>

Well ID	Gauging Date	Top of Casing Elevation (ft)	Well Casing (ft btoc)	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Depth to Product (ft btoc)	Product Thickness (ft)	Groundwater Elevation (ft)	Measured Depth to Bottom (ft)	Well Diameter (inches)
	05/14/03	(11)	November 1981		26.40			73.72	40.00	2"
	06/05/03				25.95		_	74.17	40.00	2"
	07/08/03				25.25		-	74.87	40.00	2"
	09/15/03				24.90			75.22	40.00	2"
	03/09/04				25.08			75.04	40.00	2"
	01/03/06				30.25			69.87	40.00	2"
	12/26/07				33.85			66.27	49.20	2"
	08/14/08				32.95			67.17	35.40	2"
	06/02/09				32.01			68.11	34.30	2"
	11/05/09				32.45			67.67	34.44	2"
	08/09/10				26.71			73.41	34.69	2"
	11/04/10				28.68		8	71.44	40.00	2"
	02/01/11				Dry				NM	2"
	04/26/11				32.20			67.92	34.40	2"
MW-2	10/25/11	100.12	0-25	25-40	31.95			68.17	34.17	2"
Continued	01/18/12				33.00			67.12	NM	2"
	02/10/12				31.84			68.28	34.20	2"
	03/20/12				31.51			68.61	34.30	2"
	04/25/12				29.65		1.55	70.47	34.30	2"
	05/23/12				27.40	-		72.72	34.30	2"
	06/26/12				30.50			69.62	34.30	2"
	07/25/12				31.18			68.94	34.30	2"
	08/29/12				31.90			68.22	34.30	2"
	09/26/12				31.96	-		68.16	34.30	2"
	10/25/12				31.00			69.12	34.30	2"
	11/08/12				30.17			69.95	34.30	2"
	11/14/12				33.68			66.44	34.30	2"
	12/05/12				32.80			67.32	34.30	2"
	10/22/13				30.76			69.36	34.50	2"
	Monitoring Well Abandoned on October 22, 2013									
	10/04/02				37.30	-		62.82	45.00	2"
	03/09/04				24.74			75.38	45.00	2"
	12/26/07	100.12 0-20	Î		35.91		-	64.21	44.25	2"
	03/31/08				33.51	-		66.61	44.02	2"
	08/14/08		0-20		33.56			66.56	44.18	2"
	06/02/09] [30.35			69.77	45.12	2"
	11/05/09				35.75			64.37	44.10	2"
MW-3	08/09/10			20-45	31.43			68.69	44.22	2"
WWW O	11/04/10				34.73			65.39	45.00	2"
	02/01/11			35.30			64.82	NM	2"	
	04/26/11				32.70			67.42	44.00	2"
	10/25/11						Not Locat		1100	2"
	03/20/12				32.89			67.23	44.00	2"
	11/08/12				34.25			65.87	44.10	2"
	10/22/13				31.93			68.19	44.00	2"
				Monitoring \						
	06/27/02				31.35			67.26	42.00	2"
	03/09/04				22.55			76.06	42.00	2"
					30.25			68.36	34.80	2"
	12/26/07		8		33.02			65.59	40.52	2"
	03/31/08			3						011
	03/31/08 08/14/08				30.44	1	-	68.17	41.00	2"
MW-4	03/31/08 08/14/08 06/02/09	98 61	0-27	27-45	30.44 27.86			70.75	40.21	2"
MW-4	03/31/08 08/14/08 06/02/09 11/05/09	98.61	0-27	27-45	30.44 27.86 32.17			70.75 66.44	40.21 39.75	2" 2"
MW-4	03/31/08 08/14/08 06/02/09 11/05/09 08/09/10	98.61	0-27	27-45	30.44 27.86 32.17 28.38			70.75 66.44 70.23	40.21 39.75 40.15	2" 2" 2"
MW-4	03/31/08 08/14/08 06/02/09 11/05/09 08/09/10 11/04/10	98.61	0-27	27-45	30.44 27.86 32.17 28.38 30.80			70.75 66.44 70.23 67.81	40.21 39.75 40.15 40.00	2" 2" 2" 2"
MW-4	03/31/08 08/14/08 06/02/09 11/05/09 08/09/10 11/04/10 02/01/11	98.61	0-27	27-45	30.44 27.86 32.17 28.38 30.80 30.00			70.75 66.44 70.23 67.81 68.61	40.21 39.75 40.15 40.00 NM	2" 2" 2" 2" 2"
MW-4	03/31/08 08/14/08 06/02/09 11/05/09 08/09/10 11/04/10	98.61	0-27	27-45	30.44 27.86 32.17 28.38 30.80			70.75 66.44 70.23 67.81	40.21 39.75 40.15 40.00	2" 2" 2" 2"

Table 1: Groundwater Gauging Data Revision Date: <u>11/4/2013</u>

Well ID	Gauging Date	Top of Casing Elevation (ft)	Well Casing (ft btoc)	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Depth to Product (ft btoc)	Product Thickness (ft)	Groundwater Elevation (ft)	Measured Depth to Bottom (ft)	Well Diameter (inches)		
	03/20/12				29.78			68.83	40.00	2"		
MW-4	11/08/12	98.61	0-27	27-45	32.18			66.43	40.00	2"		
Continued	10/22/13			<u> </u>	29.47			69.14	40.10	2"		
				Monitoring \		oned on Oc	tober 22, 20					
	06/27/02	9/04 6/07 1/08			27.35	-		66.97	40.00	2"		
	03/09/04				19.85			74.47	40.00	2"		
	12/26/07							NL NL				
	03/31/08 08/14/08				26.94			67.38	39.70	2"		
	06/02/09				20.94			NL	39.70			
	11/05/09				22.23			72.09	39.75	2"		
200000000000000000000000000000000000000	08/09/10	94.32	0-20	20-40	24.82			69.50	39.73	2"		
MW-5	11/04/10	002	0.20		26.77			67.55	40.00	2"		
	02/01/11				27.10			67.22	NM	2"		
	04/26/11				24.70	-		69.62	39.70	2"		
	10/25/11				28.62			65.70	39.75	2"		
	03/20/12				24.90	-	-	69.42	39.65	2"		
	11/08/12				26.25	-		68.07	39.65	2"		
	10/22/13				27.75			66.57	40.00	2"		
	Monitoring Well Abandoned on October 22, 2013											
	10/04/02			20-45	35.80			65.30	45.00	2"		
	03/09/04				26.00			75.10	45.00	2"		
	12/26/07				34.56			66.54	44.70	2"		
	03/31/08				33.28			67.82	44.46	2"		
	08/14/08	101.10			32.61			68.49	44.38	2" 2"		
	06/02/09 11/05/09				30.58 34.11			70.52 66.99	44.65 44.78	2"		
	08/09/10		0-20		30.43			70.67	44.78	2"		
MW-6	11/04/10		0-20		33.12			67.98	45.00	2"		
	02/01/11				34.00			67.10	NM	2"		
	04/26/11				32.30			68.80	44.60	2"		
	10/25/11				35.49			65.61	44.60	2"		
	03/20/12				32.20			68.90	44.60	2"		
	11/08/12				33.46	1	-	67.64	44.60	2"		
	10/22/13				31.62	-		69.48	44.60	2"		
			,	Monitoring \	Well Abandoned on October 22, 2013							
	03/09/04				24.81			75.31	38.00	4"		
	12/26/07				32.41			67.71	36.33	4"		
	03/31/08							NL				
	08/14/08				30.75			69.37	31.42	4"		
	06/04/09				24.64			75.48	38.60	4"		
	11/05/09				32.17			67.95 Dry	33.60	4" 4"		
MW-7/SVE-2	08/09/10 11/04/10	100.12	0-8	8-33	Dry 26.25			73.87	26.31 38.20	4"		
1V1VV-113VE-2	02/01/11				22.90			77.22	36.20 NM	4"		
	04/26/11				30.70			69.42	33.50	4"		
	10/25/11		1		21.90			78.22	37.20	4"		
	03/20/12				27.95			72.17	37.10	4"		
	11/08/12				26.22			73.90	37.10	4"		
	10/22/13				29.08			71.04	37.20	4"		
		Ì	Monitoring /	Soil Vapor	Extraction \	Well Aband	oned on Oc	tober 22, 2013				
				·								

Table 1: Groundwater Gauging Data Revision Date: <u>11/4/2013</u>

Well ID	Gauging Date	Top of Casing Elevation (ft)	Well Casing (ft btoc)	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Depth to Product (ft btoc)	Product Thickness (ft)	Groundwater Elevation (ft)	Measured Depth to Bottom (ft)	Well Diameter (inches)
	03/09/04				24.15			75.40	33.00	4"
	01/03/06				29.00			70.55	33.00	4"
	12/26/07				33.78			65.77	49.00	4"
	08/14/08				Dry			Dry	26.70	4"
	06/04/09				D			Not Access	20.00	4"
	11/05/09 08/09/10				Dry Dry			Dry Dry	28.90 28.33	4"
	11/04/10				24.22			75.33	32.15	4"
	02/11/11				19.05			80.50	NM	4"
	04/26/11				30.50			69.05	31.70	4"
	10/25/11				Dry			Dry	31.30	4"
	01/18/12				Dry			Dry	31.15	4"
MW-8/SVE-1	02/10/12	99.55	0-8	8-33	30.92			68.63	31.60	4"
WWW-0/GVL-1	03/20/12				29.05			70.50	31.40	4"
	04/25/12				24.68			74.87	31.40	4" 4"
	05/23/12				24.72 23.86			74.83 75.69	31.40 31.40	4"
	06/26/12 07/25/12				29.38			70.17	31.40	4"
	08/29/12				30.00			69.55	31.40	4"
	09/26/12				30.01			69.54	31.40	4"
	10/25/12				30.02			69.53	31.40	4"
	11/08/12				21.48			78.07	31.40	4"
	11/14/12				30.01			69.54	31.40	4"
	12/05/12				29.42			70.13	31.40	4"
	10/22/13		<u> </u>		29.08			70.47	31.50	4"
	20/00/01		Monitoring /	Soil Vapor		Well Aband	7	tober 22, 2013		411
	03/09/04 01/03/06				24.85 29.85			75.25 70.25	39.00 39.00	4" 4"
	03/31/08				32.77			67.33	36.70	4"
	08/14/08				30.98			69.12	36.32	4"
	06/04/09				29.99			70.11	36.80	4"
	11/05/09				32.48	_		67.62	36.00	4"
	08/09/10	100.10	0-9	9-39	28.78			71.32	35.65	4"
MW-9/SVE-3	11/04/10	100.10	0-9	9-39	26.80	-		73.30	37.15	4"
	02/01/11				22.75			77.35	NM	4"
	04/26/11				30.70			69.40	33.90	4"
	10/25/11				Dry 30.94			Dry 69.16	35.40 34.90	4" 4"
	03/20/12 11/08/12				27.81			72.29	34.90	4"
	10/22/13				30.05		_	70.05	36.40	4"
	10/22/10		Monitoring /	Soil Vapor		Well Aband	oned on Oc	tober 22, 2013		
	03/31/08				28.37	-		68.18	34.60	4"
	08/14/08				28.53			68.02	34.79	2"
	06/02/09				25.48			71.07	34.77	2"
	11/05/09				29.52			67.03	34.80	2"
	08/09/10				25.75			70.80	35.82	2"
1 MAY 40	11/04/10	96.55	Unknown	Unknown	28.82		-	67.73	34.70	2"
MW-10	02/11/11 04/26/11				29.00 26.90			67.55 69.65	NM 34.60	2"
	10/25/11				30.85			65.70	34.70	2"
	03/20/12				27.48			69.07	34.70	2"
	11/08/12				28.35			68.20	34.70	2"
					28.73			67.82	34.90	2"
	10/22/13			1	20.73		tober 22, 20		01.00	

Table 1: Groundwater Gauging Data

Revision Date: 11/4/2013

Incident Number: 24265

Well ID	Gauging Date	Top of Casing Elevation (ft)	Well Casing (ft btoc)	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Depth to Product (ft btoc)	Product Thickness (ft)	Groundwater Elevation (ft)	Measured Depth to Bottom (ft)	Well Diameter (inches)		
	11/05/09	NA	i i		30,13			NA	37.20	2"		
	08/09/10	NA			26.37			NA	37.00	2"		
	11/04/10	NA	i		29.36			NA	37.00	2"		
	02/01/11	NA	i		29.90			NA	NM	2"		
	04/26/11	NA	Unknown	Unknown	27.50			NA	36.50	2"		
MW-11	10/25/11	NA	i		31.49			NA	36.65	2"		
	03/20/12	NA	1		27.88			NA	36.60	2"		
	11/08/12	NA			29.03			NA	36.60	2"		
	10/22/13 NA	1		29.76			NA	36.65	2"			
	Monitoring Well Abandoned on October 22, 2013											
	06/27/02	100.11		55-70	54.95			45.16	70.00	2"		
V / = 4	03/09/04				24.66		1	75.45	70.00	2"		
VE-1	12/26/07				34.45			65.66	69.20	2"		
	VE-1 Converted to AS-1 in 2007											
	12/26/07				32.41	-		67.71	36.33	2"		
40.4	03/31/08	100.12	0-55	55-70	Dry			Dry	26.75	2"		
AS-1	10/22/13			1	30.70			69.42	49.00	2"		
	Air Sparge Well Abandoned on October 22, 2013											
40.0	10/22/13	NA	Unknown	Unknown	31.49			NA	70.00	2"		
AS-2		9934 993		Air Sparge \	Well Aband	oned on O	ctober 22, 2	013				
AS-3	10/22/13	NA	Unknown	Unknown				NA	49.40	2"		
A3-3				Air Sparge \	Well Aband	oned on O	ctober 22, 2	013				
2710 Pindals	10/22/13	NA	NA	NA	28.00			NA	67.00	6"		
Road			F	otable Wel	l Abandone	d on Octob	er 22 - 23, 2	2013				

Notes:

ft = feet

btoc = below top of well casing
-- = not detected or not applicable

NM = not measured

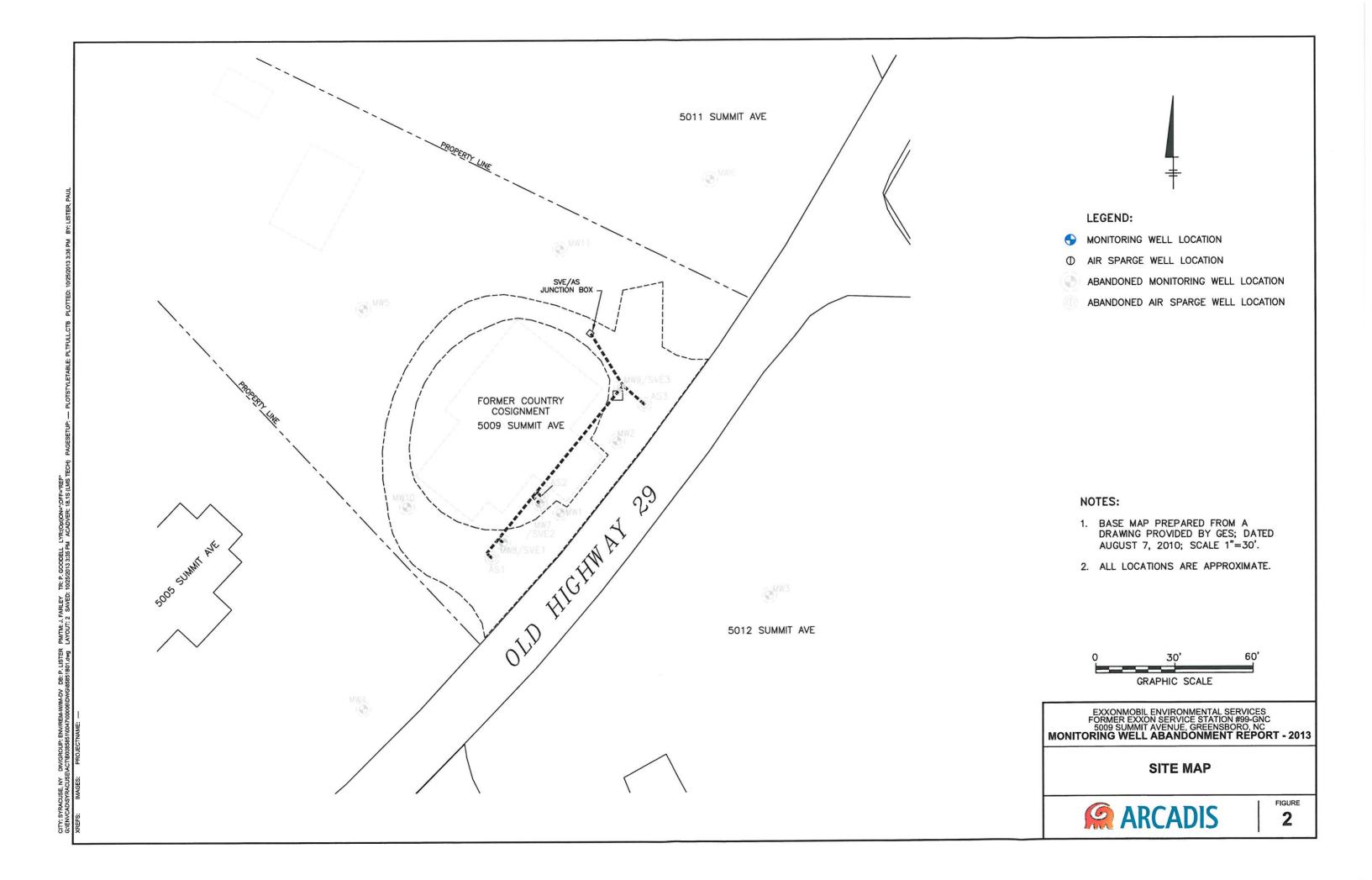
NL= not located

NG= not gauged

NA = not available



Figures



UNDEVELOPED LAND Â UNDEVELOPED LAND UNDEVELOPED LAND CANDLENUT RD SUMMIT VACANT LOT SITE AVENUE UNDEVELOPED LAND VACANT LAND VACANT LAND 5005 SUMMIT AVENUE PINDALS RD VACANT LOT ABANDONED A RESIDENTIAL VACANT LOT 300 METERS (984, 240 FT.)

LEGEND

A

WATER SUPPLY WELL

PROPERTIES IN BLUE HAVE BEEN PURCHASED BY THE NCDOT FOR USE IN THE PROPOSED GREENSBORO LOOP (NCDOT PROJECT #U-2525C)

PROPOSED PATH OF THE HIGHWAY

ABANDONED WATER SUPPLY WELL

NOTES:

- BASE MAP PREPARED FROM A DRAWING PROVIDED BY GES; DATED AUGUST 7, 2010; SCALE 1"=30'.
- 2. ALL LOCATIONS ARE APPROXIMATE.
- 3. SW-4 WAS THE POTABLE WELL THAT SERVICED 2710 PINDALS ROAD. THIS WELL WAS ABANDONED ON 10/22-10/23/2013.



EXXONMOBIL ENVIRONMENTAL SERVICES FORMER EXXON SERVICE STATION #99-GNC 5009 SUMMIT AVENUE, GREENSBORO, NC MONITORING WELL ABANDONMENT REPORT - 2013

POTABLE WELL LOCATION MAP



FIGURE 3

CITY: SYRACUSE, NY DIV/GROUP: ENV/REM-W/IM-D G:/ENVCAD\SYRACUSE\ACT\B0085851\0047\00006\DM

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Appendix A

Email Correspondence with the NCENR – May – June 2013

From: Gene Mao <GMAO@co.guilford.nc.us>
Sent: Wednesday, June 12, 2013 2:17 PM

To: Farley, Jon

Subject: RE: Incident #24265 - Former ExxonMobil Facility #99GNC - Potable Well Sampling

I think after the closing the well can be abandoned. Then you can move forward for site closure under the risk-based rules.

Thank.

From: Farley, Jon [mailto:Jon.Farley@arcadis-us.com]

Sent: Wednesday, June 12, 2013 2:08 PM

To: Gene Mao

Subject: RE: Incident #24265 - Former ExxonMobil Facility #99GNC - Potable Well Sampling

Thank you Mr. Mao.

Please keep us posted. It is our understanding that the home will only be occupied for another 4 to 8 weeks and then the NCDOT will assume ownership as part of the Greensboro Loop Project.

From: Gene Mao [mailto:GMAO@co.quilford.nc.us]

Sent: Wednesday, June 12, 2013 2:05 PM

To: Farley, Jon

Subject: RE: Incident #24265 - Former ExxonMobil Facility #99GNC - Potable Well Sampling

I have submitted the results and request to the State and hopefully hear from them soon.

Thanks.

From: Farley, Jon [mailto:Jon.Farley@arcadis-us.com]

Sent: Wednesday, June 12, 2013 1:31 PM

To: Gene Mao

Cc: Cox, Jewel G; Mattingly, Michael; Goodell, Paul

Subject: RE: Incident #24265 - Former ExxonMobil Facility #99GNC - Potable Well Sampling

Hello Mr. Mao,

I just wanted to follow up with you and confirm that it is acceptable to proceed with our plan to provide bottled water to Ms. Morris' residence. Delivery is scheduled for this afternoon (06/12/13).

Thank you,

Jon

From: Farley, Jon

Sent: Tuesday, June 11, 2013 4:50 PM

To: 'Gene Mao'

Cc: 'Cox, Jewel G'; Mattingly, Michael (Michael.Mattingly@arcadis-us.com); Goodell, Paul (Paul.Goodell@arcadis-us.com)

Subject: RE: Incident #24265 - Former ExxonMobil Facility #99GNC - Potable Well Sampling

Hello Mr. Mao,

We were able to visit the property at 2710 Pindals Road in Greensboro, NC and also meet with the current property owner (Ms. Janet King Morris) yesterday (06/10/13) evening. We provided Ms. Morris with the potable well sampling results from the two (2) potable water samples that were collected previously (05/14/13 and 05/30/13 – laboratory analytical results attached) from the spigot on the side of the home. We were also able to collect two additional potable water samples from the home (bathroom faucet and kitchen faucet) to confirm COC concentrations from the previous two sampling events.

Ms. Morris also confirmed that she has signed an agreement with the NCDOT and expects to vacate the property within the next 4 to 8 weeks. Ms. Morris' home phone number is 336-291-6911.

At this point we plan to move forward with providing Ms. Morris with bottled water for drinking. The bottled water delivery service to the residence will begin tomorrow (06/12/13).

Once we receive the laboratory analytical results from the additional confirmation potable well samples collected yesterday (06/10/13) we will pass those along to all parties.

If you have any questions please let me know.

Thank you, Jon

From: Gene Mao [mailto:GMAO@co.guilford.nc.us]

Sent: Monday, June 10, 2013 2:15 PM

To: Farley, Jon

Subject: RE: Incident #24265 - Former ExxonMobil Facility #99GNC - Potable Well Sampling

Jon Farley,

I concur with your plan.

Thanks.

Gene Mao

From: Farley, Jon [mailto:Jon.Farley@arcadis-us.com]

Sent: Monday, June 10, 2013 11:58 AM

To: Gene Mao

Cc: Cox, Jewel G; Mattingly, Michael; Goodell, Paul

Subject: RE: Incident #24265 - Former ExxonMobil Facility #99GNC - Potable Well Sampling

Hello Mr. Mao,

I wanted to follow up with you regarding incident #24265, former ExxonMobil facility #99GNC located at 5009 Summit Avenue in Greensboro, NC, and the recent potable well sampling events at the property located at 2710 Pindals Road (SW-4 on the attached figure).

A second potable well sample was collected from the potable well (same location as the first sample was collected – spigot on side of home) located at 2710 Pindals Road (SW4) on May 30, 2013 to confirm concentrations of 1,2-Dichloroethane (see email chain below). Laboratory analytical results (attached) indicated 1,2-Dichloroethane was

detected in the second sample collected at a concentration of 1.17 micrograms per Liter (ug/L) exceeding the North Carolina Groundwater Quality 2L Standard of 0.40 ug/L for 1,2-Dichloroethane.

However, since collecting the potable well samples we learned that the North Carolina Department of Transportation (NCDOT) has come to an agreement to purchase the property located at 2710 Pindals Road from the property owner (Ms. Janet King Morris) as part of the planned Greensboro, NC Loop Road Project. The property will be closed on within the next three (3) weeks (please see attached email from Ms. Heather Fulghum with the NCDOT). As a result, the property will be vacant and the well will no longer be in use. The property will also eventually become part of the planned road project (please see attached site map showing location of potable well at 2710 Pindals Road and the planned Greensboro, NC Loop Road Project construction).

At this time it is unknown if Ms. Morris is still residing at the property or if she has vacated (telephone number we have is no longer in service). We are planning to send someone to the property to inform Ms. Morris of the sampling results and confirm if the property is vacant and the well is still in use. If the well is still in use we would also like to collect multiple potable water samples from inside the property to confirm if concentrations of 1,2-Dichloroethane are from the potable well or from an alternate source within the structure.

Please let me know if our plan of action is acceptable and how we should proceed. Also, please let me know if you have any questions.

Thank you, Jon

From: Goodell, Paul

Sent: Friday, May 24, 2013 10:35 AM

To: Gene Mao **Cc:** Farley, Jon

Subject: RE: Incident #24265

Thank you Mr. Mao. We are utilizing TestAmerica for both sets of samples.

From: Gene Mao [mailto:GMAO@co.quilford.nc.us]

Sent: Friday, May 24, 2013 10:21 AM

To: Goodell, Paul

Subject: RE: Incident #24265

Mr. Goodell,

Thanks for the update. Resampling the well will be OK. Do you use the same lab or other lab?

Gene

From: Goodell, Paul [mailto:Paul.Goodell@arcadis-us.com]

Sent: Friday, May 24, 2013 10:08 AM

To: Gene Mao **Cc:** Farley, Jon

Subject: RE: Incident #24265

Good morning Mr. Mao,

This email is in regards to incident #24265, Former ExxonMobil Facility #99GNC, which is located at 5009 Summit Avenue in Greensboro, NC. ARCADIS completed a round of potable well sampling at the four properties surrounding the site that we discussed last week. One property, 2710 Pindals Road (SW-4 on the attached figure), contained a detection for 1,2-dichloroethane at 1.32 ug/L which exceeds the 2L standard of 0.40 ug/L. No other dissolved-phase chemicals of concern (COCs) were detected above the minimum laboratory detection limits for this monitoring well. Additionally, none of the other potable wells sampled contained detections of dissolved-phase COCS.

The detection of 1,2-dicholorethane at 2710 Pindals Road is likely an anomaly compared with the non-detections for all other COCs at this location and the other sampled wells. I would like to propose to resample 2710 Pindals Road, only, early next week to confirm the detection.

Thank you

Paul

Paul Goodell, CES | Staff Environmental Scientist | paul.goodell@arcadis-us.com ARCADIS U.S., Inc. |801 Corporate Center Drive, Suite 300 | Raleigh, NC, 27607 T. 919-415-2299 | M. 919-741-0870 | F. 919.854.5448 www.arcadis-us.com ARCADIS, Imagine the result

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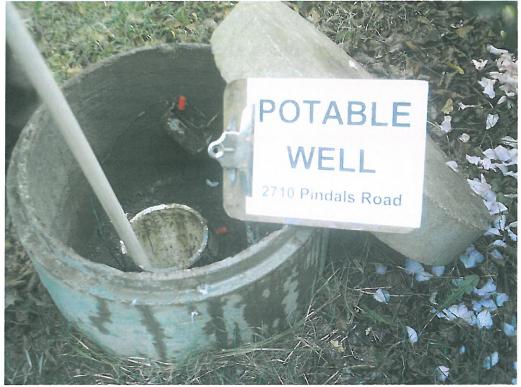
Appendix **B**

Well Abandonment Photographs

Revision Date: November 2013



Photograph 1: Potable well at 2710 Pindals Road prior to abandonment



Photograph 2: Potable well at 2710 Pindals Road during abandonment

Revision Date: November 2013 Incident: #2426



Photograph 3: Potable well at 2710 Pindals Road after abandonment



Photograph 4: Typical monitoring well prior to abandonment



Photograph 5: Typical monitoring well during abandonment



Photograph 6: Typical monitoring well during abandonment



Photograph 7: Typical remediation system well prior to abandonment



Photograph 8: Typical remediation system well during abandonment

Appendix B – Monitoring Well Abandonment Photographs

Revision Date: November 2013



Photograph 9: Typical remediation system well after abandonment

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Appendix C

Well Abandonment Records

WELL ABANDONMI This form can be used for single or multip	ENT RECORD le wells	For Internal Use ONLY:					
1. Well Contractor Information:		WELL ABANDONMENT DETAILS					
Joshua Ellingworth							
Well Contractor Name (or well owner personally	y abandoning well on his/her property)	7a. Number of wells being abandoned: For multiple injection or non-water					
3544	 Consists of charge of the property of the consists of the consist of the consists	construction/ohandorment, you can submit one					
NC Well Contractor Certification Number		7b. Approximate volume of water rema	ining in well(s):(gal.)				
Parratt-Wolff, Inc.		FOR WATER SUPPLY WELLS ONL	Υ:				
Company Name		7c. Type of disinfectant used:					
2. Well Construction Permit #:	(a)	075.500					
List all applicable well permits (i.c. County, State	e, Variance, Injection, etc.) if known	7d. Amount of disinfectant used:					
3. Well use (check well use):			413				
Water Supply Well:		7e. Sealing materials used (check all tha ☐ Neat Cement Grout	n apply): ☐ Bentonite Chips or Pellets				
□Agricultural	□Municipal/Public	☐ Sand Cement Grout	☐ Dry Clay				
Geothermal (Heating/Cooling Supply)	□Residential Water Supply (single)	☐ Concrete Grout	☐ Drill Cuttings				
□Industrial/Commercial	□Residential Water Supply (shared)	☑ Specialty Grout	☐ Gravel				
□Irrigation		☐ Bentonite Slurry	☐ Other (explain under 7g)				
Non-Water Supply Well: ☑Monitoring	□Recovery	D Bentonite Sturry	Other (explain under 7g)				
Injection Well:	Likecovery	7f. For each material selected above, pro	ovide amount of materials used:				
□Aquifer Recharge	Groundwater Remediation	4 bags					
☐Aquifer Storage and Recovery	□Salinity Barrier						
□Aquifer Test	□Stormwater Drainage						
□Experimental Technology	□Subsidence Control	5. Position being and the ch					
Geothermal (Closed Loop)	□Tracer	7g. Provide a brief description of the ab					
Geothermal (Heating/Cooling Return)	□Other (explain under 7g)	Tremie grouted casing in p	Diace				
4. Date well(s) abandoned:	<u> </u>						
5a. Well location:							
Exxon Mobil							
Facility/Owner Name	Facility ID# (if applicable)	8. Certification:	/ /				
5009 Summit Ave, Greens	boro, NC 27405	1	10/29/13				
Physical Address, City, and Zip		Signature of Certified Well Contractor or Well C	Owner Datc				
Guilford	i i	Projection this form I hamalus consider the	of the walls) was sugar about and				
County	Parcel Identification No. (PIN)	By signing this form, I hereby certify the accordance with 15A NCAC 02C .0100 or	· 2C .0200 Well Construction Standards				
5b. Latitude and longitude in degrees/mi	nutes/seconds or decimal degrees:	and that a copy of this record has been pro	ovided to the well owner.				
(if well field, one lat/long is sufficient)	and sold a decimal degrees.	9. Site diagram or additional well details	s:				
36.145909 _N 79.	743349 _w	You may use the back of this page to pro abandonment details. You may also attach					
CONSTRUCTION DETAILS OF WELL		SUBMITTAL INSTRUCTIONS					
Attach well construction record(s) if available. wells ONLY with the same construction/abandom		10a. For All Wells: Submit this form	within 30 days of completion of well				
6a. Well ID#: MW-1	_	abandonment to the following:					
40.0		Division of Water Resources, 1617 Mail Service Center,					
6b. Total well depth: 40.0	_(ft.)	101 En Lindon Weller In addition to	anding the form to the address in 10c				
6c. Borehole diameter: 2.0	_(in.)	10b. For Injection Wells: In addition to above, also submit one copy of this form abandonment to the following:					
6d. Water level below ground surface:	(ft.)	Division of Water Resources, Under 1636 Mail Service Center,					
6e. Outer casing length (if known):	(ft.)	10c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well abandonment to the county health department of the county					
6f. Inner casing/tubing length (if known):	(ft.)	where abandoned.					
6g. Screen length (if known):	(ft.)						

WELL ABANDONMENT RECORD This form can be used for single or multiple wells		For Internal Use ONLY:	
1. Well Contractor Information:		WELL ABANDONMENT DETAILS	
Joshua Ellingworth			
Well Contactor Name (or well owner personally abandoning well on his/her property)		For multiple injection or non-water	supply wells ONLY with the same
3544	, according to the control property,	construction/abandonment, you can submit one	form.
NC Well Contractor Certification Number		7b. Approximate volume of water rema	aining in well(s):(gal.)
Parratt-Wolff, Inc.		FOR WATER SUPPLY WELLS ONL	.Y:
Company Name		To The of disinference and	
electrice • electr • professor topics		7c. Type of disinfectant used:	
2. Well Construction Permit #:	e, Variance, Injection, etc.) if known	7d. Amount of disinfectant used:	
3. Well use (check well use):		7d. Amount of disinfectant used.	
Water Supply Well:		7e. Sealing materials used (check all the	at apply):
□Agricultural	□Municipal/Public	☐ Neat Cement Grout	☐ Bentonite Chips or Pellets
☐Geothermal (Heating/Cooling Supply)	□Residential Water Supply (single)	☐ Sand Cement Grout	☐ Dry Clay
□lndustrial/Commercial	□Residential Water Supply (shared)	☐ Concrete Grout	☐ Drill Cuttings
□lrrigation		☑ Specialty Grout	☐ Gravel
Non-Water Supply Well:		☐ Bentonite Slurry	☐ Other (explain under 7g)
☑Monitoring	□Recovery	7f. For each material selected above, pr	avide amount of materials used.
Injection Well:	Complete Description	3-1/2 bags	ovide amount of materials used.
□ Aquifer Recharge	□Groundwater Remediation	3-1/2 bags	
□Aquifer Storage and Recovery	☐Salinity Barrier ☐Stormwater Drainage		
□Aquifer Test □Experimental Technology	□Subsidence Control		
Geothermal (Closed Loop)	□Tracer	7g. Provide a brief description of the ab	
Geothermal (Heating/Cooling Return)	□Other (explain under 7g)	Tremie grouted casing in p	Diace
4. Date well(s) abandoned: 10/22/13 5a. Well location:		-	
Exxon Mobil			
Facility/Owner Name	Facility ID# (if applicable)	8. Certification:	
5009 Summit Ave, Greens	boro, NC 27405	The same of the sa	19/28/13
Physical Address, City, and Zip		Signature of Certified Well Contractor or Well C	Owner Date
Guilford		By signing this form, I hereby certify the	
County	Parcel Identification No. (PIN)	accordance with 15A NCAC 02C .0100 or and that a copy of this record has been pro	
5b. Latitude and longitude in degrees/min	nutes/seconds or decimal degrees:		
(if well field, one lat/long is sufficient)	742206	 Site diagram or additional well details: You may use the back of this page to provide additional well site details or well 	
36.145961 _N 79.	743286w	abandonment details. You may also attach	
CONSTRUCTION DETAILS OF WELL Attach well construction record(s) if available.	For multiple injection or non-water supply	SUBMITTAL INSTRUCTIONS	
wells ONLY with the same construction/abandons 6a. Well ID#: MW-2	nent, you can submit one form.	10a. <u>For All Wells</u> : Submit this form within 30 days of completion of well abandonment to the following:	
	-		Information Processing Unit,
6b. Total well depth: 34.5	_(ft.)	1617 Mail Service Center,	
6c. Borehole diameter: 2.0 (in.)		10b. For Injection Wells: In addition to sending the form to the address in 10a above, also submit one copy of this form within 30 days of completion of well abandonment to the following:	
6d. Water level below ground surface:	(ft.)	Division of Water Resources, Under 1636 Mail Service Center,	rground Injection Control Program, Raleigh, NC 27699-1636
6e. Outer casing length (if known):	(ft.)	10c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well abandonment to the county health department of the county	
6f. Inner casing/tubing length (if known):	(ft.)	where abandoned.	
6g. Screen length (if known):	(ft.)		

WELL ABANDONMENT RECORD This form can be used for single or multiple wells		For Internal Use ONLY:	
1. Well Contractor Information:		WELL ABANDONMENT DETAILS	
Joshua Ellingworth			
Well Contractor Name (or well owner personally abandoning well on his her property)		7a. Number of wells being abandoned: For multiple injection or non-water	supply wells ONLY with the same
3544	,,	construction abandonment, you can submit one	form.
NC Well Contractor Certification Number		7b. Approximate volume of water rema	ining in well(s):(gal,)
Parratt-Wolff, Inc.		FOR WATER SUPPLY WELLS ONL	Y:
Company Name		7c. Type of disinfectant used:	
2. Well Construction Permit #:		, a 20p2 of assessment	
List all applicable well permits (i.e. County, State	e, Variance, Injection, etc.) if known	7d. Amount of disinfectant used:	
3. Well use (check well use):			
Water Supply Well:		7e. Sealing materials used (check all tha ☐ Neat Cement Grout	t apply): □ Bentonite Chips or Pellets
□ Agricultural	□Municipal/Public	☐ Sand Cement Grout	☐ Dry Clay
Geothermal (Heating/Cooling Supply)	□Residential Water Supply (single)	□ Concrete Grout	☐ Drill Cuttings
□Industrial/Commercial	□Residential Water Supply (shared)	☑ Specialty Grout	☐ Gravel
□Irrigation Non-Water Supply Well:		☐ Bentonite Slurry	☐ Other (explain under 7g)
☑Monitoring	□Recovery		
Injection Well:		7f. For each material selected above, pre	ovide amount of materials used:
□Aquifer Recharge	☐Groundwater Remediation	4-1/2 bags	
☐ Aquifer Storage and Recovery	□Salinity Barrier		
□Aquifer Test	☐Stormwater Drainage		
□Experimental Technology	□Subsidence Control	7g. Provide a brief description of the ab	andonment procedure:
□Geothermal (Closed Loop)	□Tracer	Tremie grouted casing in place	
☐Geothermal (Heating/Cooling Return)	□Other (explain under 7g)		
4. Date well(s) abandoned: 10/22/13 5a. Well location:	<u> </u>		
Exxon Mobil			
Facility/Owner Name	Facility ID# (if applicable)	8. Certification:	/ /
5012 Summit Ave, Greenst	boro, NC 27405		w zels
Physical Address, City, and Zip		Signature of Certified Well Contractor or Well O	hwner Date
Guilford	/	By signing this form, I hereby certify that	at the well(s) was (were) abandoned in
County	Parcel Identification No. (PIN)	accordance with 15A NCAC 02C .0100 or	2C .0200 Well Construction Standards
5b. Latitude and longitude in degrees/min	nutes/seconds or decimal degrees:	and that a copy of this record has been pro	vided to the well owner.
(if well field, one lat/long is sufficient)			
36.145664 _N 79.7	36 145664 79 742874		
CONSTRUCTION DETAILS OF WELL(S) BEING ABANDONED		 Site diagram or additional well details You may use the back of this page to pro abandonment details. You may also attach 	vide additional well site details or well
CONSTRUCTION DETAILS OF WELL Attach well construction record(s) if available.	(S) BEING ABANDONED	You may use the back of this page to pro	vide additional well site details or well
Attach well construction record(s) if available. wells ONLY with the same construction/abandonn	(S) BEING ABANDONED For multiple injection or non-water supply	You may use the back of this page to pro abandonment details. You may also attach SUBMITTAL INSTRUCTIONS 10a. For All Wells: Submit this form	vide additional well site details or well additional pages if necessary.
Attach well construction record(s) if available.	(S) BEING ABANDONED For multiple injection or non-water supply	You may use the back of this page to pro abandonment details. You may also attach SUBMITTAL INSTRUCTIONS	vide additional well site details or well additional pages if necessary.
Attach well construction record(s) if available. wells ONLY with the same construction/abandonn 6a. Well ID#: MW-3	(S) BEING ABANDONED For multiple injection or non-water supply ment, you can submit one form.	You may use the back of this page to pro abandonment details. You may also attach SUBMITTAL INSTRUCTIONS 10a. For All Wells: Submit this form	vide additional well site details or well additional pages if necessary. within 30 days of completion of well Information Processing Unit,
Attach well construction record(s) if available. wells ONLY with the same construction/abandonn 6a. Well ID#:	(S) BEING ABANDONED For multiple injection or non-water supply	You may use the back of this page to pro abandonment details. You may also attach SUBMITTAL INSTRUCTIONS 10a. For All Wells: Submit this form abandonment to the following: Division of Water Resources, 1617 Mail Service Center, 10b. For Injection Wells: In addition to	vide additional well site details or well additional pages if necessary. within 30 days of completion of well Information Processing Unit, Raleigh, NC 27699-1617 sending the form to the address in 10a
Attach well construction record(s) if available. wells ONLY with the same construction/abandonn 6a. Well ID#: MW-3 6b. Total well depth: 44.0	(S) BEING ABANDONED For multiple injection or non-water supply ment, you can submit one form.	You may use the back of this page to pro abandonment details. You may also attach SUBMITTAL INSTRUCTIONS 10a. For All Wells: Submit this form abandonment to the following: Division of Water Resources, 1617 Mail Service Center,	vide additional well site details or well additional pages if necessary. within 30 days of completion of well Information Processing Unit, Raleigh, NC 27699-1617 sending the form to the address in 10a
Attach well construction record(s) if available. wells ONLY with the same construction/abandonn 6a. Well ID#: MW-3 6b. Total well depth: 44.0	(S) BEING ABANDONED For multiple injection or non-water supply ment, you can submit one form. (ft.) (in.)	You may use the back of this page to pro abandonment details. You may also attach SUBMITTAL INSTRUCTIONS 10a. For All Wells: Submit this form abandonment to the following: Division of Water Resources, 1617 Mail Service Center, 10b. For Injection Wells: In addition to above, also submit one copy of this form	vide additional well site details or well additional pages if necessary. within 30 days of completion of well Information Processing Unit, Raleigh, NC 27699-1617 sending the form to the address in 10a within 30 days of completion of well ground Injection Control Program,
Attach well construction record(s) if available, wells ONLY with the same construction/abandonn 6a. Well ID#: MW-3 6b. Total well depth: 44.0 6c. Borehole diameter: 2.0	(S) BEING ABANDONED For multiple injection or non-water supply ment, you can submit one form. (ft.) (ft.)	You may use the back of this page to pro abandonment details. You may also attach SUBMITTAL INSTRUCTIONS 10a. For All Wells: Submit this form abandonment to the following: Division of Water Resources, 1617 Mail Service Center, 10b. For Injection Wells: In addition to above, also submit one copy of this form abandonment to the following: Division of Water Resources, Under 1636 Mail Service Center, 110c. For Water Supply & Injection We the address(es) above, also submit one	vide additional well site details or well additional pages if necessary. within 30 days of completion of well Information Processing Unit, Raleigh, NC 27699-1617 sending the form to the address in 10a within 30 days of completion of well ground Injection Control Program, Raleigh, NC 27699-1636 lls: In addition to sending the form to copy of this form within 30 days of
Attach well construction record(s) if available. wells ONLY with the same construction/abandonn 6a. Well ID#: MW-3 6b. Total well depth: 44.0 6c. Borehole diameter: 2.0 6d. Water level below ground surface:	(S) BEING ABANDONED For multiple injection or non-water supply ment, you can submit one form. (ft.) (in.) (ft.)	You may use the back of this page to pro abandonment details. You may also attach SUBMITTAL INSTRUCTIONS 10a. For All Wells: Submit this form abandonment to the following: Division of Water Resources, 1617 Mail Service Center, 10b. For Injection Wells: In addition to above, also submit one copy of this form abandonment to the following: Division of Water Resources, Under 1636 Mail Service Center, 110c. For Water Supply & Injection Wells.	vide additional well site details or well additional pages if necessary. within 30 days of completion of well Information Processing Unit, Raleigh, NC 27699-1617 sending the form to the address in 10a within 30 days of completion of well ground Injection Control Program, Raleigh, NC 27699-1636 lls: In addition to sending the form to copy of this form within 30 days of

WELL ABANDONMENT RECORD This form can be used for single or multiple wells		For Internal Use ONLY:	
1. Well Contractor Information:		WELL ABANDONMENT DETAILS	
Joshua Ellingworth			
Well Contractor Name (or well owner personally abandoning well on his/her property)		7a. Number of wells being abandoned: For multiple injection or non-water	supply wells ONLY with the some
3544		construction/abandonment, you can submit one	form.
NC Well Contractor Certification Number		7b. Approximate volume of water rema	ining in well(s):(gal.)
Parratt-Wolff, Inc.		FOR WATER SUPPLY WELLS ONL	Y:
Company Name		7c. Type of disinfectant used:	
2. Well Construction Permit #:		. 1	
List all applicable well permits (i.e. County, State	e, Variance, Injection, etc.) if known	7d. Amount of disinfectant used:	
3. Well use (check well use):	V - 0	7. Seeling motorials used (about all the	t annly):
Water Supply Well:	C) (7e. Sealing materials used (check all tha	☐ Bentonite Chips or Pellets
□Agricultural	□Municipal/Public	☐ Sand Cement Grout	☐ Dry Clay
Geothermal (Heating/Cooling Supply)	□Residential Water Supply (single)	□ Concrete Grout	□ Drill Cuttings
□Industrial/Commercial	□Residential Water Supply (shared)	☑ Specialty Grout	□ Gravel
□Irrigation Non-Water Supply Well:	*	☐ Bentonite Slurry	☐ Other (explain under 7g)
☑ Monitoring	□Recovery		
Injection Well:		7f. For each material selected above, pro	ovide amount of materials used:
□Aquifer Recharge	☐Groundwater Remediation	4 bags	
☐Aquifer Storage and Recovery	□Salinity Barrier		
□ Aquifer Test	□Stormwater Drainage		
□Experimental Technology	□Subsidence Control	7g. Provide a brief description of the ab-	andonment procedure:
□Geothermal (Closed Loop)	□Tracer	Tremie grouted casing in place	
☐Geothermal (Heating/Cooling Return)	□Other (explain under 7g)		
4. Date well(s) abandoned: 10/22/13 5a. Well location:	<u> </u>		
Exxon Mobil			
Facility/Owner Name	Facility ID# (if applicable)	8. Certification	, ,
5005 Summit Ave, Greensl	boro, NC 27405	1	<u>व्यक्ति।</u>
Physical Address, City, and Zip		Signature of Certified Well Contractor or Well C	Owner Date
Guilford		By signing this form, I hereby certify that	at the well(s) was (were) abandoned in
County	Parcel Identification No. (PIN)	accordance with 15A NCAC 02C .0100 or 2C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.	
5b. Latitude and longitude in degrees/min	nutes/seconds or decimal degrees:	ana that a copy of this record has been pro	videa to the well owner.
(if well field, one lat/long is sufficient)		9. Site diagram or additional well details: You may use the back of this page to provide additional well site details or well abandonment details. You may also attach additional pages if necessary.	
36.145503 _N 79.	743652 w		
CONSTRUCTION DETAILS OF WELL Attach well construction record(s) if available.	L(S) BEING ABANDONED For multiple injection or non-water supply	SUBMITTAL INSTRUCTIONS	
wells ONLY with the same construction/abandons		10a. For All Wells: Submit this form	within 30 days of completion of well
6a. Well ID#: MW-4	-	abandonment to the following: Division of Water Resources,	Information Processing Unit
6b. Total well depth: 40.1	(ft.)	1617 Mail Service Center,	
ou. Total well deptil.	_(,,,)	10b. For Injection Wells: In addition to	sending the form to the address in 10a
6c. Borehole diameter: 2.0	_(in.)	above, also submit one copy of this form abandonment to the following:	within 30 days of completion of well
6d. Water level below ground surface:	(ft.)	Division of Water Resources, Under 1636 Mail Service Center,	
6e. Outer casing length (if known):	(ft.)	10c. For Water Supply & Injection We the address(es) above, also submit one	
6f. Inner casing/tubing length (if known):	(ft.)	completion of well abandonment to the c where abandoned.	
or muce casing/tubing length (it known):	(16)		
6g. Screen length (if known):	(ft.)		

WELL ABANDONM This form can be used for single or multip		For Internal Use ONLY:	
1. Well Contractor Information:		WELL ABANDONMENT DETAILS	
Joshua Ellingworth		7a. Number of wells being abandoned	
Well Contractor Name (or well owner personally abandoning well on his/ner property) 3544		For multiple injection or non-water construction/abandonment, you can submit on	supply wells ONLY with the same of form.
NC Well Contractor Certification Number		7b. Approximate volume of water rem	aining in well(s):(gal.)
Parratt-Wolff, Inc.		FOR WATER SUPPLY WELLS ON	LY:
Company Name		7c. Type of disinfectant used:	
2. Well Construction Permit #:	te, Variance, Injection, etc.) if known	7d. Amount of disinfectant used:	
3. Well use (check well use):			
Water Supply Well:		7e. Sealing materials used (check all th	
□Agricultural	□Municipal/Public	□ Neat Cement Grout	☐ Bentonite Chips or Pellets
□Geothermal (Heating/Cooling Supply)	☐Residential Water Supply (single)	☐ Sand Cement Grout	□ Dry Clay
□Industrial/Commercial	☐Residential Water Supply (shared)	□ Concrete Grout	☐ Drill Cuttings
□Irrigation	SAP LINE CONTRACTOR OF THE CON	☑ Specialty Grout	□ Gravel
Non-Water Supply Well:		☐ Bentonite Slurry	☐ Other (explain under 7g)
☑Monitoring Injection Well:	□Recovery	7f. For each material selected above, p	rovide amount of materials used:
□Aquifer Recharge	☐Groundwater Remediation	4 bags	
□Aquifer Storage and Recovery	□Salinity Barrier		
□Aquifer Test	□Stormwater Drainage		
□Experimental Technology	□Subsidence Control	7g. Provide a brief description of the a	handonment procedures
□Geothermal (Closed Loop)	□Tracer		
☐Geothermal (Heating/Cooling Return)	□Other (explain under 7g)	Tremie grouted casing in	place
5a. Well location: Exxon Mobil Facility/Owner Name	Facility ID# (if applicable)	8. Certification	
5009 Summit Ave, Greens	boro, NC 27405	1/20	10/29/13
Physical Address, City, and Zip Guilford	· · · · · · · · · · · · · · · · · · ·	Signature of Certified Well Contractor or Well	
County	Parcel Identification No. (PIN)		nat the well(s) was (were) abandoned in or 2C .0200 Well Construction Standards
		and that a copy of this record has been pr	rovided to the well owner.
 Latitude and longitude in degrees/mi (if well field, one lat/long is sufficient) 	nutes/seconds or decimal degrees:	9. Site diagram or additional well detai	ls:
	743593 _w	You may use the back of this page to prabandonment details. You may also attack	ovide additional well site details or well
CONSTRUCTION DETAILS OF WELL Attach well construction record(s) if available.		SUBMITTAL INSTRUCTIONS	
wells ONLY with the same construction/abandon 6a. Well ID#: MW-5		10a. <u>For All Wells</u> : Submit this form within 30 days of completion of well abandonment to the following:	
6b. Total well depth: 40.0		Division of Water Resources 1617 Mail Service Center	s, Information Processing Unit, , Raleigh, NC 27699-1617
66. Total well depth:(it.) 6c. Borehole diameter: 2.0(in.)		10b. <u>For Injection Wells</u> : In addition to sending the form to the address in 10a above, also submit one copy of this form within 30 days of completion of well abandonment to the following:	
6d. Water level below ground surface:	(ft.)	Division of Water Resources, Unde 1636 Mail Service Center	erground Injection Control Program, , Raleigh, NC 27699-1636
ie. Outer casing length (if known):	(ft.)	10c. For Water Supply & Injection W the address(es) above, also submit one completion of well abandonment to the	copy of this form within 30 days of
if. lnner casing/tubing length (if known):	(ft.)	where abandoned.	y

WELL ABANDONME This form can be used for single or multip		For Internal Use ONLY:	
1. Well Contractor Information:		WELL ABANDONMENT DETAILS	
Joshua Ellingworth			
		7a. Number of wells being abandoned For multiple injection or non-water	supply wells ONLY with the same
Well Contractor Name (or well owner personally abandoning well on his/her property) 3544		construction/abandonment, you can submit on	e form.
NC Well Contractor Certification Number		7b. Approximate volume of water rem	aining in well(s):(gal.)
		FOR WATER SUPPLY WELLS ON	LY:
Parratt-Wolff, Inc.			e e e e e e e e e e e e e e e e e e e
Company Name		7c. Type of disinfectant used:	
2. Well Construction Permit #:	e, Variance, Injection, etc.) if known	7d. Amount of disinfectant used:	
3. Well use (check well use):			- N
Water Supply Well:		7e. Sealing materials used (check all th	
□Agricultural	□Municipal/Public	□ Neat Cement Grout	 □ Bentonite Chips or Pellets □ Dry Clay
☐Geothermal (Heating/Cooling Supply)	□Residential Water Supply (single)	☐ Sand Cement Grout ☐ Concrete Grout	☐ Drill Cuttings
□Industrial/Commercial	□Residential Water Supply (shared)	☐ Specialty Grout	☐ Gravel
□Irrigation Non-Water Supply Well:		☐ Bentonite Slurry	☐ Other (explain under 7g)
Monitoring	□Recovery	Control and Associated Associated Associated Association (Associated Associated Associat	
Injection Well:		7f. For each material selected above, p	rovide amount of materials used:
□Aquifer Recharge	☐Groundwater Remediation	4-1/2 bags	
☐ Aquifer Storage and Recovery	□Salinity Barrier		
□ Aquifer Test	☐Stormwater Drainage		
□Experimental Technology	□Subsidence Control	7g. Provide a brief description of the a	bandonment procedure:
☐Geothermal (Closed Loop)	□Tracer	Tremie grouted casing in	place
Geothermal (Heating/Cooling Return)	□Other (explain under 7g)		
4. Date well(s) abandoned: 10/22/13 5a. Well location: Exxon Mobil	3		
Facility/Owner Name	Facility ID# (if applicable)	8. Certification	/ /
5009 Summit Ave, Greens			2/70 liz
Physical Address, City, and Zip	boio, NO 27400	Signature of Certified Well Contractor or Well	Owner Date
Guilford		9	
County	Parcel Identification No. (PIN)	By signing this form, I hereby certify to accordance with 15A NCAC 02C .0100 and that a copy of this record has been p	hat the well(s) was (were) abandoned in or 2C .0200 Well Construction Standards rovided to the well owner.
5b. Latitude and longitude in degrees/mi	nutes/seconds or decimal degrees:		
(if well field, one lat/long is sufficient) 36.146365 79.	742781 _w	 Site diagram or additional well detay You may use the back of this page to pabandonment details. You may also attact 	rovide additional well site details or well
			, , , , , , , , , , , , , , , , , , , ,
CONSTRUCTION DETAILS OF WELL Attach well construction record(s) if available. wells ONLY with the same construction/abandom	For multiple injection or non-water supply	SUBMITTAL INSTRUCTIONS 10a. For All Wells: Submit this form within 30 days of completion of well	
6a. Well ID#: MW-6	_	abandonment to the following:	
6b. Total well depth: 44.6	_(ft.)	Division of Water Resources, Information Processing Unit, 1617 Mail Service Center, Raleigh, NC 27699-1617	
6c. Borehole diameter: 2.0	_(in.)	10b. <u>For Injection Wells</u> : In addition above, also submit one copy of this for abandonment to the following:	to sending the form to the address in 10a m within 30 days of completion of well
6d. Water level below ground surface:	(ft.)		erground Injection Control Program, , Raleigh, NC 27699-1636
бе. Outer casing length (if known):	(ft.)	10c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well abandonment to the county health department of the county	
6f. Inner casing/tubing length (if known):	(ft.)	where abandoned.	

WELL ABANDONMENT RECORD This form can be used for single or multiple wells		For Internal Use ONLY:	
Straightformore 1 Swittenbuckstotic (± 60° − 264° − 554° challadoris (±C) − 50°)		WELL ABANDONMENT DETAILS	
1. Well Contractor Information:		WELL ABANDONMENT DETAILS	
Joshua Ellingworth Well Contractor Name (or well owner personally abandoning well on his/her property)		7a. Number of wells being abandoned: _ For multiple injection or non-water.	supply wells ONLY with the same
	abandoning well on his/her property)	construction/abandonment, you can submit one f	form.
3544		7b. Approximate volume of water remai	ning in well(s):(gal.)
NC Well Contractor Certification Number			
Parratt-Wolff, Inc.	a	FOR WATER SUPPLY WELLS ONLY	
Company Name		7c. Type of disinfectant used:	
2. Well Construction Permit #:			
List all applicable well permits (i.e. County, State	e, Variance, Injection, etc.) if known	7d. Amount of disinfectant used:	
3. Well use (check well use):		7e. Sealing materials used (check all that	annivi:
Water Supply Well:	DMynicinal/Byblic	□ Neat Cement Grout	☐ Bentonite Chips or Pellets
☐ Agricultural ☐ Geothermal (Heating/Cooling Supply)	☐Municipal/Public ☐Residential Water Supply (single)	□ Sand Cement Grout	□ Dry Clay
☐ Industrial/Commercial	☐Residential Water Supply (shared)	□ Concrete Grout	□ Drill Cuttings
□ Irrigation	Exestdential water Supply (shared)	☑ Specialty Grout	□ Gravel
Non-Water Supply Well:		☐ Bentonite Slurry	☐ Other (explain under 7g)
☑Monitoring	□Recovery		
Injection Well:		7f. For each material selected above, pro	vide amount of materials used:
□Aquifer Recharge	☐Groundwater Remediation	3-1/2 bags	
☐ Aquifer Storage and Recovery	□Salinity Barrier		
□Aquifer Test	☐Stormwater Drainage		
□Experimental Technology	☐Subsidence Control	7g. Provide a brief description of the aba	indonment procedure:
☐Geothermal (Closed Loop)	□Tracer	Tremie grouted casing in place	
☐Geothermal (Heating/Cooling Return)	□Other (explain under 7g)		
4. Date well(s) abandoned: 10/22/13 5a. Well location: Exxon Mobil			
	T W T ((C V 1) 1)	8. Certification:	
Facility/Owner Name	Facility ID# (if applicable)	3	2/-/
5009 Summit Ave, Greenst	ooro, NC 27405	16	10/28/13
Physical Address, City, and Zip		Signature of Certified Well Contractor or Well Or	wner Date
Guilford		By signing this form, I hereby certify that	
County	Parcel Identification No. (PIN)	accordance with 15A NCAC 02C .0100 or and that a copy of this record has been prov	
5b. Latitude and longitude in degrees/min	nutes/seconds or decimal degrees:		
(if well field, one lat/long is sufficient)	7.40004	 Site diagram or additional well details: You may use the back of this page to prove 	
36.145921 _N 79.7	743361w	abandonment details. You may also attach	
CONSTRUCTION DETAILS OF WELL Attach well construction record(s) if available.	For multiple injection or non-water supply	SUBMITTAL INSTRUCTIONS	
wells ONLY with the same construction/abandonn	nent, you can submit one form.	10a. For All Wells: Submit this form v	within 30 days of completion of well
6a. Well ID#: MVV-7	_	abandonment to the following:	
27.2	_(ft.)	Division of Water Resources, Information Processing Unit, 1617 Mail Service Center, Raleigh, NC 27699-1617	
		10b. For Injection Wells: In addition to above, also submit one copy of this form	
6c. Borehole diameter: 4.0	_(in.)	abandonment to the following:	William 30 days of completion of won
6d. Water level below ground surface:	(ft.)	Division of Water Resources, Underg 1636 Mail Service Center, F	
6e. Outer casing length (if known):	(ft.)	10c. For Water Supply & Injection Well the address(es) above, also submit one completion of well abandonment to the co	opy of this form within 30 days of
6f. Inner casing/tubing length (if known):	(ft.)	where abandoned.	,
6g. Screen length (if known):	(ft.)		

WELL ABANDONME This form can be used for single or multip		For Internal Use ONLY:	
1. Well Contractor Information:		WELL ABANDONMENT DETAILS	J
Joshua Ellingworth		7- Number of wells being abandaned:	
Well Centractor Name (or well owner personally abandoning well on his her property)		7a. Number of wells being abandoned: _ For multiple injection or non-water .	
3544		construction abandonment, you can submit one fo	
NC Well Contractor Certification Number		7b. Approximate volume of water remain	ning in well(s):(gal.)
Parratt-Wolff, Inc.		FOR WATER SUPPLY WELLS ONLY	/ :
Company Name		7c. Type of disinfectant used:	
		7c. Type of disinfectant used.	
2. Well Construction Permit #:	te, Variance, Injection, etc.) if known	7d. Amount of disinfectant used:	
3. Well use (check well use):		74.71110411 07.41111	
Water Supply Well:		7e. Sealing materials used (check all that	apply):
□ Agricultural	□Municipal/Public	☐ Neat Cement Grout	☐ Bentonite Chips or Pellets
□Geothermal (Heating/Cooling Supply)	□Residential Water Supply (single)	☐ Sand Cement Grout	□ Dry Clay
□Industrial/Commercial	□Residential Water Supply (shared)	□ Concrete Grout	□ Drill Cuttings
□lrrigation		☑ Specialty Grout	☐ Gravel
Non-Water Supply Well:		☐ Bentonite Slurry	☐ Other (explain under 7g)
☑ Monitoring	□Recovery	7f. For each material selected above, pro	vide amount of materials used:
Injection Well: □Aquifer Recharge	☐Groundwater Remediation	3 bags	
☐ Aquifer Storage and Recovery	☐Salinity Barrier	- Dags	
☐Aquifer Storage and Recovery	□Stormwater Drainage		
□Experimental Technology	□Subsidence Control	7g. Provide a brief description of the aba	- January manaduras
Geothermal (Closed Loop)	□Tracer		
Geothermal (Heating/Cooling Return)	□Other (explain under 7g)	Tremie grouted casing in p	lace
4. Date well(s) abandoned: 10/22/13 5a. Well location:	<u> </u>	· · · · · · · · · · · · · · · · · · ·	
Exxon Mobil			
Facility/Owner Name	Facility ID# (if applicable)	8. Certification:	1 1
5009 Summit Ave, Greensl	boro, NC 27405	Za	10/29/13
Physical Address, City, and Zip		Signature of Certified Well Contractor or Well On	wner Date
Guilford	,	By signing this form, I hereby certify that	the well(s) was (were) abandoned in
County	Parcel Identification No. (PIN)	accordance with 15A NCAC 02C .0100 or	2C .0200 Well Construction Standards
5b. Latitude and longitude in degrees/min	nutes/seconds or desimal degrees	and that a copy of this record has been prov	vided to the well owner.
(if well field, one lat/long is sufficient)	nutes/seconds of decimal degrees:	9. Site diagram or additional well details:	
36.145835 _N 79.7	743472 w	You may use the back of this page to provabandonment details. You may also attach	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	abandonment details. Tou may also acaen	additional pages it necessary.
CONSTRUCTION DETAILS OF WELL Attach well construction record(s) if available. wells ONLY with the same construction/abandons.	For multiple injection or non-water supply	SUBMITTAL INSTRUCTIONS 10a. For All Wells: Submit this form within 30 days of completion of well	
6a. Well ID#: MW-8	_	abandonment to the following:	Information Processing Unit
6b. Total well depth: 31.5	_(ft.)	Division of Water Resources, I 1617 Mail Service Center, I	Raleigh, NC 27699-1617
6c. Borehole diameter: 4.0	_(in.)	10b. For Injection Wells: In addition to above, also submit one copy of this form abandonment to the following:	
6d. Water level below ground surface:	(ft.)	Division of Water Resources, Underg 1636 Mail Service Center, F	
6e. Outer casing length (if known):	(ft.)	10c. For Water Supply & Injection Well the address(es) above, also submit one completion of well abandonment to the completion of the comple	copy of this form within 30 days of
6f. Inner casing/tubing length (if known):	(ft.)	where abandoned.	
6g. Screen length (if known):	(ft.)		

WELL ABANDONMENT RECORD This form can be used for single or multiple wells		For Internal Use ONLY:	
1. Well Contractor Information:		WELL ABANDONMENT DETAILS	
Joshua Ellingworth			
Well Contractor Name (or well owner personally abandoning well on his/her property)		7a. Number of wells being abandoned: _ For multiple injection or non-water	supply wells ONLY with the same
3544	,	construction/abandonment, you can submit one f	form.
NC Well Contractor Certification Number		7b. Approximate volume of water remai	ning in well(s):(gal.
Parratt-Wolff, Inc.		FOR WATER SUPPLY WELLS ONLY	γ:
Company Name		7c. Type of disinfectant used:	
2. Well Construction Permit #:			
List all applicable well permits (i.e. County, State	tc, Variance, Injection, etc.) if known	7d. Amount of disinfectant used:	
3. Well use (check well use):		7e. Sealing materials used (check all that	t anniv):
Water Supply Well: □Agricultural	□Municipal/Public	□ Neat Cement Grout	☐ Bentonite Chips or Pellets
Geothermal (Heating/Cooling Supply)	☐Residential Water Supply (single)	☐ Sand Cement Grout	☐ Dry Clay
□Industrial/Commercial	□Residential Water Supply (shared)	☐ Concrete Grout	☐ Drill Cuttings
□ Irrigation	Circulation water bupping (shared)	☑ Specialty Grout	□ Gravel
Non-Water Supply Well:		☐ Bentonite Slurry	☐ Other (explain under 7g)
☑Monitoring	□Recovery		
Injection Well:		7f. For each material selected above, pro	vide amount of materials used:
□ Aquifer Recharge	☐Groundwater Remediation	3-1/2 bags	
☐Aquifer Storage and Recovery	□Salinity Barrier		
□Aquifer Test	□Stormwater Drainage		
□Experimental Technology	□Subsidence Control	7g. Provide a brief description of the aba	ndonment procedure:
□Geothermal (Closed Loop)	□Tracer	Tremie grouted casing in p	lace
Geothermal (Heating/Cooling Return)	□Other (explain under 7g)		
5a. Well location: Exxon Mobil		9 Coutte-skin	
Facility/Owner Name	Facility ID# (if applicable)	8. Certification:	/ /
5009 Summit Ave, Greens	boro, NC 27405	Ha	10/29/13
Physical Address, City, and Zip		Signature of Certified Well Contractor or Well Or	wner Date
Guilford		By signing this form, I hereby certify that	
County	Parcel Identification No. (PIN)	accordance with 15A NCAC 02C .0100 or and that a copy of this record has been prov	
5b. Latitude and longitude in degrees/min (if well field, one lat/long is sufficient)	outes/seconds or decimal degrees:	9. Site diagram or additional well details:	:
이 구성하는 경기는 이 가게 되었다면 보고 있는 것이 되었다면 하면 보고 있는 것이 되었다면 보고 있는 것이 되었다면 보고 있다면 743248 _w	You may use the back of this page to prov	ride additional well site details or well	
	W	abandonment details. You may also attach	additional pages if necessary.
CONSTRUCTION DETAILS OF WELL Attach well construction record(s) if available, wells ONLY with the same construction/abandonn	For multiple injection or non-water supply	SUBMITTAL INSTRUCTIONS 10a. For All Wells: Submit this form within 30 days of completion of well	
6a. Well ID#: MW-9	-	abandonment to the following:	
6b. Total well depth: 36.4	_(ft.)	Division of Water Resources, Information Processing Unit, 1617 Mail Service Center, Raleigh, NC 27699-1617	
6c. Borehole diameter: 4.0 (in.)		10b. <u>For Injection Wells</u> : In addition to a above, also submit one copy of this form abandonment to the following:	
6d. Water level below ground surface:	(ft.)	Division of Water Resources, Underg 1636 Mail Service Center, R	
6e. Outer casing length (if known):	(ft.)	10c. For Water Supply & Injection Wells: In addition to sending the form to the address(es) above, also submit one copy of this form within 30 days of completion of well abandonment to the county health department of the county	
6f. lnner casing/tubing length (if known):	(ft.)	where abandoned.	
6g. Screen length (if known):	(ft.)		

WELL ABANDONMI This form can be used for single or multip		For Internal Use ONLY:	
1. Well Contractor Information:		WELL ABANDONMENT DETAILS	
Joshua Ellingworth		7a. Number of wells being abandoned:	
Well Contractor Name (or well owner personally abandoning well on his/her property) 3544		For multiple injection or non-water construction/abandonment, you can submit on	supply wells ONLY with the same
NC Well Contractor Certification Number		7b. Approximate volume of water rema	aining in well(s):(gal.)
Parratt-Wolff, Inc.		FOR WATER SUPPLY WELLS ONL	Y:
Company Name		7c. Type of disinfectant used:	
2. Well Construction Permit #:	te, Variance, Injection, etc.) if known	7d. Amount of disinfectant used:	
3. Well use (check well use):			
Water Supply Well:		7e. Sealing materials used (check all tha	
□Agricultural	□Municipal/Public	☐ Neat Cement Grout	☐ Bentonite Chips or Pellets
☐Geothermal (Heating/Cooling Supply)	□Residential Water Supply (single)	☐ Sand Cement Grout	☐ Dry Clay
□Industrial/Commercial	□Residential Water Supply (shared)	☐ Concrete Grout	☐ Drill Cuttings
□Irrigation		☑ Specialty Grout	☐ Gravel
Non-Water Supply Well:		☐ Bentonite Slurry	☐ Other (explain under 7g)
Monitoring	□Recovery	7f. For each material selected above, pr	ovide amount of materials used.
Injection Well:	DC		ovide amount of materials diet.
□Aquifer Recharge	□Groundwater Remediation	3-1/2 bags	
□Aquifer Storage and Recovery	□Salinity Barrier		
□Aquifer Test	□Stormwater Drainage		
□Experimental Technology	☐Subsidence Control	7g. Provide a brief description of the ab	
☐Geothermal (Closed Loop) ☐Geothermal (Heating/Cooling Return)	☐Tracer ☐Other (explain under 7g)	Tremie grouted casing in p	olace
		_	
4. Date well(s) abandoned: 10/22/13	<u> </u>		
5a. Well location: Exxon Mobil			
	E W. TRUCK P 111	8. Certification;	
Facility/Owner Name	Facility ID# (if applicable)	2 2	/-/-
5009 Summit Ave, Greensl	boro, NC 27405	2/2	0/19/13
Physical Address, City, and Zip Guilford		Signature of Certified Well Contractor or Well C	
County	Parcel Identification No. (PIN)	By signing this form, I hereby certify the accordance with 15A NCAC 02C .0100 or and that a copy of this record has been pro	2C .0200 Well Construction Standards
5b. Latitude and longitude in degrees/min (if well field, one lat/long is sufficient)	autes/seconds or decimal degrees:	9. Site diagram or additional well details	
36.145870 _N 79.7	743589	You may use the back of this page to pro	vide additional well site details or well
N	W	abandonment details. You may also attach	additional pages if necessary.
CONSTRUCTION DETAILS OF WELL		SUBMITTAL INSTRUCTIONS	
Attach well construction record(s) if available. wells ONLY with the same construction/abandonn			
6a. Well ID#: MW-10	-	10a. For All Wells: Submit this form abandonment to the following:	within 30 days of completion of well
Sb. Total well depth: 34.9	_(ft.)	Division of Water Resources, 1617 Mail Service Center,	
oc. Borehole diameter: 2.0	_(in.)	10b. For Injection Wells: In addition to above, also submit one copy of this form abandonment to the following:	
id. Water level below ground surface:	(ft.)	Division of Water Resources, Under 1636 Mail Service Center,	
e. Outer casing length (if known):	(ft.)	10c. For Water Supply & Injection We the address(es) above, also submit one completion of well abandonment to the completion of well abandonment to the completion.	copy of this form within 30 days of
f, lnner casing/tubing length (if known);	(ft.)	where abandoned.	

This form can be used for single or multiple wells		For Internal Use ONLY:	
1. Well Contractor Information:		WELL ABANDONMENT DETAILS	
Joshua Ellingworth			
Well Contractor Name (or well owner personally	abandoning well on his her property)	7a. Number of wells being abandoned: For multiple injection or non-water	supply wells ONLY with the same
3544	acandoning wen on maner property)	construction/abandonment, you can submit one	form.
NC Well Contractor Certification Number		7b. Approximate volume of water rema	ining in well(s):(gal.)
Parratt-Wolff, Inc.		FOR WATER SUPPLY WELLS ONL	Y:
Company Name			
		7c. Type of disinfectant used:	
2. Well Construction Permit #:	e, Variance, Injection, etc.) if known	7d. Amount of disinfectant used:	
3. Well use (check well use):			W. D. D. D.
Water Supply Well:		7e. Sealing materials used (check all tha	
□Agricultural	□Municipal/Public	□ Neat Cement Grout	☐ Bentonite Chips or Pellets
Geothermal (Heating/Cooling Supply)	□Residential Water Supply (single)	☐ Sand Cement Grout	☐ Dry Clay
□Industrial/Commercial	□Residential Water Supply (shared)	☐ Concrete Grout	☐ Drill Cuttings
□Irrigation Non-Water Supply Well:		☑ Specialty Grout ☐ Bentonite Slurry	☐ Gravel
Monitoring wen:	□Recovery	Li Bentonite Sturry	☐ Other (explain under 7g)
Injection Well:	DRECOVERY	7f. For each material selected above, pro	ovide amount of materials used:
□Aquifer Recharge	☐Groundwater Remediation	3-1/2 bags	
□Aquifer Storage and Recovery	□Salinity Barrier		
□Aquifer Test	□Stormwater Drainage		
□Experimental Technology	□Subsidence Control	7g. Provide a brief description of the ab:	andonment procedure
□Geothermal (Closed Loop)	□Tracer	Tremie grouted casing in p	
□Geothermal (Heating/Cooling Return)	□Other (explain under 7g)	Treffile grouted casing in p	
5a. Well location: Exxon Mobil		9 Contifications (2)	
Facility/Owner Name	Facility ID# (if applicable)	8. Certification:	
5009 Summit Ave, Greenst	ooro, NC 27405	The	129/13
Physical Address, City, and Zip		Signature of Certified Well Contractor or Well O	wner Date
Guilford	n	By signing this form, I hereby certify that	at the well(s) was (were) abandoned in
County	Parcel Identification No. (PIN)	accordance with 15A NCAC 02C .0100 or 2C .0200 Well Construction Standards and that a copy of this record has been provided to the well owner.	
 Latitude and longitude in degrees/min (if well field, one lat/long is sufficient) 	iutes/seconds or decimal degrees:	9. Site diagram or additional well details	:
	743330 w	You may use the back of this page to pro abandonment details. You may also attach	vide additional well site details or well
CONSTRUCTION DETAILS OF WELL Attach well construction record(s) if available.		SUBMITTAL INSTRUCTIONS	•
wells ONLY with the some construction/abandonn 6a. Well ID#: MW-11		10a. For All Wells: Submit this form abandonment to the following:	within 30 days of completion of well
ba. Well ID#:	-	m	T. 6
6b. Total well depth: 36.65	_(ft.)	Division of Water Resources, 1617 Mail Service Center, 1	
Sc. Borehole diameter: 2.0	(in.)	10b. For Injection Wells: In addition to above, also submit one copy of this form abandonment to the following:	
id. Water level below ground surface:	(ft.)	Division of Water Resources, Under 1636 Mail Service Center, l	
e. Outer casing length (if known):	(ft.)	10c. For Water Supply & Injection Wel the address(es) above, also submit one of completion of well abandonment to the co	copy of this form within 30 days of
f. Inner casing/tubing length (if known):(ft.)		where abandoned.	· · · · · · · · · · · · · · · · · · ·

WELL ABANDONMI This form can be used for single or multip		For Internal Use ONLY:	
1. Well Contractor Information:		WELL ABANDONMENT DETAILS	
Joshua Ellingworth			
Well Contractor Name (or well owner personally abandoning well on his/her property)		7a. Number of wells being abandoned: _ For multiple injection or non-water	supply wells ONLY with the sam
3544	,,	construction/obandonment, you can submit one J	form.
NC Well Contractor Certification Number		7b. Approximate volume of water remain	ining in well(s):(gal.
Parratt-Wolff, Inc.		FOR WATER SUPPLY WELLS ONLY	Y:
Company Name		7c. Type of disinfectant used:	
2. Well Construction Permit #: List all applicable well permits (i.e. County, State	te, Variance, Injection, etc.) if known	7d. Amount of disinfectant used:	
3. Well use (check well use):		L	
Water Supply Well:		7e. Sealing materials used (check all that	
□Agricultural	□Municipal/Public	☐ Neat Cement Grout ☐ Sand Cement Grout	☐ Bentonite Chips or Pellets
☐Geothermal (Heating/Cooling Supply)	□Residential Water Supply (single)	☐ Concrete Grout	 □ Dry Clay □ Drill Cuttings
□Industrial/Commercial	□Residential Water Supply (shared)	LI SA INCO CONTROLLA NEW YORK AND AND AND AND AND AND AND AND AND AND	☐ Gravel
Olrigation		☑ Specialty Grout	
Non-Water Supply Well:	□Recovery	☐ Bentonite Slurry	☐ Other (explain under 7g)
Injection Well:	Likeovay	7f. For each material selected above, pro	ovide amount of materials used:
☐Aquifer Recharge	☐Groundwater Remediation	5 bags	
□Aquifer Storage and Recovery	□Salinity Barrier		
□Aquifer Test	□Stormwater Drainage		
□Experimental Technology	□Subsidence Control	7g. Provide a brief description of the aba	andonment procedure:
□Geothermal (Closed Loop)	□Tracer	Air sparge well	indument procedure.
☐Geothermal (Heating/Cooling Return)	☑Other (explain under 7g)	Tremie grouted casing in p	
4. Date well(s) abandoned: 10/22/13 5a. Well location:	3		
Exxon Mobil			
Facility/Owner Name	Facility ID# (if applicable)	8. Certification:	,
5009 Summit Ave, Greens		The state of the s	12/29/13
Physical Address, City, and Zip Guilford	6	Senature of Certified Well Contractor or Well Or By signing this form, I hereby certify that	
County	Parcel Identification No. (PIN)	accordance with 15A NCAC 02C .0100 or and that a copy of this record has been pro-	2C .0200 Well Construction Standards
5b. Latitude and longitude in degrees/mi	nutes/seconds or decimal degrees:	6	
(if well field, one lat/long is sufficient)	7.40.500	 Site diagram or additional well details: You may use the back of this page to provide additional well site details or well 	
36.145824 _N 79.	743532 _w	abandonment details. You may also attach	
CONSTRUCTION DETAILS OF WELL Attach well construction record(s) if available.	For multiple injection or non-water supply	SUBMITTAL INSTRUCTIONS	
wells ONLY with the same construction/abandom 6a. Well ID#: AS-1	ment, you can suomit one Jorm.	10a. For All Wells: Submit this form vabandonment to the following:	within 30 days of completion of well
	_	Division of Water Resources, 1617 Mail Service Center, I	
6b. Total well depth: 49.0	_(ft.)	10b. For Injection Wells: In addition to	20 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2
6c. Borehole diameter: 2.0	_(in.)	above, also submit one copy of this form abandonment to the following:	
6d. Water level below ground surface:	(ft.)	Division of Water Resources, Under 1636 Mail Service Center, I	
6e. Outer casing length (if known):	(ft.)	10c. For Water Supply & Injection Wel the address(es) above, also submit one completion of well abandonment to the co	copy of this form within 30 days of
6f. Inner casing/tubing length (if known):	(ft.)	where abandoned.	
6g. Screen length (if known):	(ft.)		

WELL ABANDONMENT RECORD This form can be used for single or multiple wells		For Internal Use ONLY:	
1. Well Contractor Information:		WELL ABANDONMENT DETAILS	
Joshua Ellingworth			
Well Contractor Name (or well owner personally abandoning well on his/her property)		7a. Number of wells being abandoned	supply wells ONLY with the some
3544	y availabiling well on misrael projectivy	construction alrandonment, you can submit or	ne form.
NC Well Contractor Certification Number		7b. Approximate volume of water ren	naining in well(s):(gal.)
Parratt-Wolff, Inc.		FOR WATER SUPPLY WELLS ON	LY:
Company Name			
		7c. Type of disinfectant used:	
2. Well Construction Permit #:	te, Variance, Injection, etc.) if known	7d. Amount of disinfectant used:	
3. Well use (check well use):		7d. Amount of disinfectant used.	
Water Supply Well:		7 7e. Sealing materials used (check all the	hat apply):
□Agricultural	□Municipal/Public	☐ Neat Cement Grout	☐ Bentonite Chips or Pellets
Geothermal (Heating/Cooling Supply)	☐Residential Water Supply (single)	☐ Sand Cement Grout	☐ Dry Clay
□Industrial/Commercial	□Residential Water Supply (shared)	☐ Concrete Grout	☐ Drill Cuttings
□Irrigation	Section to as the section	☑ Specialty Grout	☐ Gravel
Non-Water Supply Well:		☐ Bentonite Slurry	☐ Other (explain under 7g)
☐Monitoring Injection Well:	□Recovery	7f. For each material selected above, p	provide amount of materials used:
□ Aquifer Recharge	☐Groundwater Remediation	7 bags	
□Aquifer Storage and Recovery	□Salinity Barrier	7 Dage	
□Aquifer Test	□Stormwater Drainage		
□Experimental Technology	□Subsidence Control	7g. Provide a brief description of the a	bandanment procedure
□Geothermal (Closed Loop)	□Tracer	TOTAL SECTION OF THE PROPERTY	bandonment procedure.
□Geothermal (Heating/Cooling Return)	☑Other (explain under 7g)	Air sparge well Tremie grouted casing in	
4. Date well(s) abandoned: 10/22/13 5a. Well location:			
Exxon Mobil	4	8. Certification:	
Facility/Owner Name	Facility ID# (if applicable)	o. ceruncadon	//
5009 Summit Ave, Greenst	boro, NC 2/405	1/6-	10/29/13
Physical Address, City, and Zip		Signature of Certified Well Contractor or Well	Owner Date
Guilford			hat the well(s) was (were) abandoned in
County	Parcel Identification No. (PIN)	and that a copy of this record has been p	or 2C .0200 Well Construction Standards rovided to the well owner.
5b. Latitude and longitude in degrees/min (if well field, one lat/long is sufficient)	outes/seconds or decimal degrees:	9. Site diagram or additional well detail	ile.
	743422 _w		rovide additional well site details or well
N 10.1	W	abandonment details. You may also attac	ch additional pages if necessary.
CONSTRUCTION DETAILS OF WELL Attach well construction record(s) if available. wells ONLY with the same construction/abandonn	For multiple injection or non-water supply	SUBMITTAL INSTRUCTIONS 10a. For All Wells: Submit this form within 30 days of completion of well	
6a. Well ID#: AS-2	-	abandonment to the following:	n within 30 days of completion of well
6b. Total well depth: 70.0	_(ft.)		s, Information Processing Unit, , Raleigh, NC 27699-1617
			to sending the form to the address in 10a
6c. Borehole diameter: 2.0	_(in.)	above, also submit one copy of this for abandonment to the following:	m within 30 days of completion of well
6d. Water level below ground surface:	(ft.)		erground Injection Control Program, , Raleigh, NC 27699-1636
6e. Outer casing length (if known):	(ft.)	10c. For Water Supply & Injection W the address(es) above, also submit one completion of well abandonnent to the	copy of this form within 30 days of
6f. Inner casing/tubing length (if known):	(ft.)	where abandoned.	county hearth department of the county
6g. Screen length (if known):	(ft.)		

WELL ABANDONMI This form can be used for single or multip		For Internal Use ONLY:		
1. Well Contractor Information:		WELL ABANDONMENT DETAILS		
Joshua Ellingworth				
Well Contractor Name (or well owner personal)	y abandoning well on his/her property)	7a. Number of wells being abandoned: For multiple injection or non-water	supply wells ONLY with the same	
3544		construction/abandonment, you can submit one		
NC Well Contractor Certification Number		7b. Approximate volume of water rema	ining in well(s):(gal.)	
Parratt-Wolff, Inc.		FOR WATER SUPPLY WELLS ONL	Y:	
Company Name		7c. Type of disinfectant used:		
2. Well Construction Permit #:	te, Variance, Injection, etc.) if known	7d. Amount of disinfectant used:		
3. Well use (check well use):		7d. Amount of dismrectant used.		
Water Supply Well:		7c. Sealing materials used (check all tha	000 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	
□Agricultural	□Municipal/Public	□ Neat Cement Grout	☐ Bentonite Chips or Pellets	
Geothermal (Heating/Cooling Supply)	□Residential Water Supply (single)	☐ Sand Cement Grout	☐ Dry Clay	
□Industrial/Commercial	☐Residential Water Supply (shared)	Concrete Grout	□ Drill Cuttings	
□Irrigation Non-Water Supply Well:		☑ Specialty Grout ☐ Bentonite Slurry	☐ Gravel ☐ Other (explain under 7g)	
□Monitoring	□Recovery	L Bentonite Stury	Li Other (explain under 7g)	
Injection Well:		7f. For each material selected above, pro	vide amount of materials used:	
□Aquifer Recharge	☐Groundwater Remediation	5 bags		
☐ Aquifer Storage and Recovery	☐Salinity Barrier			
□Aquifer Test	☐Stormwater Drainage			
□Experimental Technology	☐Subsidence Control	7g. Provide a brief description of the aba	andonment procedure:	
□Geothermal (Closed Loop)	□Tracer	Air sparge well	•	
☐Geothermal (Heating/Cooling Return)	☑Other (explain under 7g)	Tremie grouted casing in p	Inna	
5a, Well location: Exxon Mobil				
Facility/Owner Name	Facility ID# (if applicable)	8. Certification:		
5009 Summit Ave, Greens	boro, NC 27405		10/20/13	
Physical Address, City, and Zip Guilford		Signature of Certified Well Contractor or Well O		
County	Parcel Identification No. (PIN)	By signing this form, I hereby certify that accordance with 15A NCAC 02C .0100 or		
5b. Latitude and longitude in degrees/mi	nutes/seconds or decimal degrees:	and that a copy of this record has been pro-	vided to the well owner.	
(if well field, one lat/long is sufficient)		9. Site diagram or additional well details		
36.146008 _N 79.7	743263 w	You may use the back of this page to provabandonment details. You may also attach		
CONSTRUCTION DETAILS OF WELL Attach well construction record(s) if available.	For multiple injection or non-water supply	SUBMITTAL INSTRUCTIONS		
wells ONLY with the same construction/abandonn 6a. Well ID#: AS-3	nent, you can submit one form.	10a. For All Wells: Submit this form vabandonment to the following:	within 30 days of completion of well	
10.1	-	Division of Water Resources, 1 1617 Mail Service Center, I		
b. Total well depth:	_(ft.)			
c. Borehole diameter: 2.0	_(in.)	10b. <u>For Injection Wells</u> : In addition to above, also submit one copy of this form abandonment to the following:		
d. Water level below ground surface:	(ft.)	Division of Water Resources, Underg 1636 Mail Service Center, F		
e. Outer casing length (if known):	(ft.)	10c. For Water Supply & Injection Well the address(es) above, also submit one completion of well abandonment to the co	opy of this form within 30 days of	
f. lnner casing/tubing length (if known):	(ft.)	where abandoned.	,	
g, Screen length (if known):	(ft.)			

WELL ABANDONME This form can be used for single or multip		For Internal Use ONLY:	
1. Well Contractor Information:		WELL ABANDONMENT DETAILS	
Joshua Ellingworth		7a. Number of wells being abandoned	ŀ
Well Contractor Name (or well owner personally	y abandoning well on his/her property)	For multiple injection or non-water	supply wells ONLY with the sam
3544		construction/abandonment, you can submit or	ne form.
NC Well Contractor Certification Number		7b. Approximate volume of water ren	naining in well(s):(ga).
Parratt-Wolff, Inc.		FOR WATER SUPPLY WELLS ON	ILY:
Company Name		7c. Type of disinfectant used: Chlo	orine tablets
2. Well Construction Permit #:		, a type of distinctions about	
List all applicable well permits (i.e. County, State	e, Variance, Injection, etc.) if known	7d, Amount of disinfectant used:	
3. Well use (check well use):			
Water Supply Well:		7e. Sealing materials used (check all the	hat apply):
□Agricultural	□Municipal/Public	☐ Neat Cement Grout	☐ Bentonite Chips or Pellets
☐Geothermal (Heating/Cooling Supply)	□Residential Water Supply (single)	☐ Sand Cement Grout	□ Dry Clay
☑Industrial/Commercial	□Residential Water Supply (shared)	☐ Concrete Grout	☐ Drill Cuttings
□Irrigation		☑ Specialty Grout	☐ Gravel
Non-Water Supply Well:		☐ Bentonite Slurry	☐ Other (explain under 7g)
Monitoring	□Recovery	7f. For each material selected above, p	provide amount of materials used:
Injection Well:	□Groundwater Remediation	6-1/2 bags	or or the amount of majorizing about
☐ Aquifer Storage and Recovery	□Salinity Barrier	0-1/2 bags	
□Aquifer Test	□Stormwater Drainage		
□Experimental Technology	☐Subsidence Control		
□Geothermal (Closed Loop)	□Tracer	7g. Provide a brief description of the a	
Geothermal (Heating/Cooling Return)	□Other (explain under 7g)	Tremie grouted casing in	place
5a. Well location: EXXON Mobil Facility/Owner Name	Facility ID# (if applicable)	8. Certification:	
2710 Pindals Road, Greens		9	10/19/11
Physical Address, City, and Zip		Signature of Certified Well Contractor or Well	Owner Date
Guilford		2	
County	Parcel Identification No. (PIN)		hat the well(s) was (were) abandoned in or 2C .0200 Well Construction Standards rovided to the well owner.
5b. Latitude and longitude in degrees/min (if well field, one lat/long is sufficient)	nutes/seconds or decimal degrees:	9. Site diagram or additional well deta	2
4구시 : [- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	741523 w		rovide additional well site details or well
N 10.1	W	abandonment details. You may also attac	ch additional pages if necessary.
CONSTRUCTION DETAILS OF WELL Attach well construction record(s) if available. wells ONLY with the same construction/abandonn	For multiple injection or non-water supply	SUBMITTAL INSTRUCTIONS	
6a. Well ID#:	eni, you can suomii one jorni.	10a, For All Wells: Submit this form abandonment to the following:	n within 30 days of completion of well
67.0	(ft.)		s, Information Processing Unit, c, Raleigh, NC 27699-1617
1.0	(in.)		to sending the form to the address in 10a m within 30 days of completion of well
6d. Water level below ground surface:	(ft.)		erground Injection Control Program, , Raleigh, NC 27699-1636
6e. Outer casing length (if known): 48.0	(ft.)	10c. For Water Supply & Injection We the address(es) above, also submit one completion of well abandonment to the	copy of this form within 30 days of
6f. Inner casing/tubing length (if known):	(ft.)	where abandoned.	

REPORT

PRELIMINARY SITE ASSESSMENT MABEL L. CHILTON PROPERTY GUILFORD COUNTY, NORTH CAROLINA

STATE PROJECT: 6.498003T (TIP: U-2525B)

Prepared for
North Carolina Department of Transportation
Century Center
1020 Birch Ridge Drive
P.O. Box 25201
Raleigh, NC 27611-5201
Tel. (919) 250-4088

April 6, 2001

URS

URS Corporation – Maryland 3109 Poplarwood Court, Suite 301 Raleigh, North Carolina 27604-1043 Job D6-00055146.04-00001

Tel. (919) 850-9511 Fax. (919) 790-0217

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SECTIONONE Introduction

1.1 PROJECT INTRODUCTION AND ORGANIZATION

This report documents a Preliminary Site Assessment (PSA) for the NCDOT Parcel 948 performed by URS Corporation – Maryland (URS) on behalf of the North Carolina Department of Transportation (NCDOT). The subject site of this PSA report is 5009 Summit Avenue, the west side of SR 2525 Guilford County, North Carolina. The NCDOT Parcel is currently the property of Mabel L. Chilton (see Figure 1). The PSA was performed in general accordance with: NCDOT's January 25, 2001 Request for Technical and Cost Proposal for Preliminary Site Assessment, Parcel 948 – Mabel L. Chilton Property (Former L.R. Chilton Grocery); and URS's February 2, 2001 Technical and Cost Proposal for Preliminary Site Assessment, Greensboro Eastern Loop, from US 70 Relocation to US 29 North of Greensboro; Parcel 948 – Mabel L. Chilton Property (Former L.R. Chilton Grocery) (the Proposal). URS received a letter dated February 5, 2001 from NCDOT providing Notice To Proceed and establishing a due date no later than April 5, 2001 for the final PSA report.

The project included determination of UST content constituents, soil sampling using a Geoprobe rig, groundwater sampling for suspected contamination, and laboratory analyses of selected soil samples. The five UST's were located by the NCDOT. Soil borings were conducted on February 8th and 9th, 2001 under the supervision of URS personnel by URS's subcontractor, Probe Technology, Inc. of Concord, North Carolina. Analysis of soil samples were performed by Prism Laboratories, Inc. (Prism) of Charlotte, North Carolina under direct contract with NCDOT. URS's project manager, Lee Rhea, communicated any unforeseen conditions and project milestones to NCDOT via telephone and email during execution of the work scope.

1.2 PROJECT BACKGROUND

The location of the property is shown in Figure 1. The structure located on the subject property on the west side of State Route 2525, with the address 5009 Summit Avenue, is an abandoned gas station and grocery store. The business opened in the 1930's and the gas station operated until the early 1960's. There are five suspected UST's at the site, none of which are registered with the North Carolina Department of Environment and Natural Resources (NCDENR) Division of Water Quality (DWQ). The structure seems to be in good condition, but according to the property owner has not been used in 15 years. Based on discussions with a neighbor, it was discovered that there is a water well on the property located north of the building, although URS was unable to locate it. The pump island is approximately 24 feet, or 7.32 meters (m), from the centerline of SR 2525.

The property is 0.15 miles (241 m) north of the Greensboro City Limits. There are several neighborhoods surrounding the property. Most of the surrounding houses use drinking water wells and are not supplied by city water, according to the neighbors. The area directly west of the property is a wooded area with no houses. The lot across to the east, across Summit Avenue, is also a wooded lot. There is a Texaco Gas Station 0.3 miles (483 m) north of the property on Summit Avenue



2.1 TANK SAMPLING

NCDOT performed a Ground Penetrating Radar (GPR) survey to determine the approximate sizes of the five suspected UST's. Based on the GPR survey results, tanks #4 and #5 each have an approximate diameter of three feet and Tanks #2 and #3 each have an approximate diameter of four feet. The size of Tank #1 could not be determined.

URS made an attempt to collect samples from each of the UST's. However, URS located only three vents, and only those for Tanks #2 and #3 were reasonably accessible (see Figure 3). These tanks were sampled using disposable bailers. It was discovered that Tank #3 was completely empty, and Tank #2 contained approximately two inches of water with a trace of product.

2.2 SOIL SAMPLING RATIONALE AND PROCEDURES

URS conducted environmental screening sampling in targeted areas within the property to identify whether the subsurface had been impacted by potential contaminants. Initial sampling locations were selected based on existing information provided by the NCDOT and the locations of the UST's. Additional borings were conducted to delineate the extent of impact where evidence of significant petroleum impacts was encountered.

Soil samples were collected and logged continuously at each boring. Soil sample aliquots were divided into approximately 2-foot (0.610 m) increments for field screening with a photoionization detection (PID) and flame ionization detection (FID) instrument. However, due to difficulties with the FID as described below, it was not used for screening all borings. Groundwater was encountered in two of the borings, but the subsurface material was too impermeable to collect a representative groundwater sample. Completed borings were backfilled with bentonite pellets.

The soil field-screening instrument selected for this project was a Foxboro TVA with both flame-ionization detection (FID) and photo-ionization detection (PID) capabilities. However, the FID portion of the unit malfunctioned, and was completely unusable for three out of the fourteen borings completed. Therefore, borings GP-7, GP-13, and GP-14 were screened using only the PID.

Samples were collected for laboratory analysis in borings where headspace field screening analysis indicated possible impact. If impact was indicated at more than one depth, vertical delineation samples were collected from the zone with the highest headspace detection, the lowest headspace detection, and in most cases from the bottom of the boring. Each sample was analyzed for TPH Diesel Range Organics (DRO) (EPA Method 8015 mod./3550), TPH Gasoline Range Organics (GRO) (EPA Method 8015 mod./5030), and oil and grease (EPA Method 9071).



2.2.1 Quality Control/Quality Assurance Procedures

2.2.1.1 Sample Documentation and Labeling

The purpose of sample management is to create a "cradle to grave", legally defensible, traceable and documented chain-of-custody (COC) for samples from the time of collection in the field through shipment, receipt by the laboratory, and final receipt of analytical data by URS. A copy of the COC forms for samples submitted for off-site commercial laboratory analyses has been maintained by the laboratory as part of the data package, and by URS in the project files.

In the field, data was collected on standard boring logs as well as in a logbook maintained by the URS field representative. All pertinent field data collection activities and observations were recorded on either of these two media. In addition, field sketches have been made in the field logbooks when appropriate, with reference points tied to existing structures in the area (i.e. buildings). The field logbook and supporting boring log forms are identified by a projectspecific number, client, and location, and are stored in the field project files when not in use.

2.2.1.2 Sample Identification and Labeling

Each sample collected was assigned a unique sample identification number and placed in the appropriate sample container. The sample numbering system provides a tracking number to allow retrieval and cross-referencing of sample information. Each sample container had a preprinted sample label affixed to the outside with the site name, type of sample the sample identification number, and chemical preservatives added, if any. All documentation was completed in waterproof ink.

2.2.1.3 Sample Containers

URS collected samples for off-site commercial laboratory analyses in containers appropriate for the matrix being sampled and the parameters being analyzed. URS acquired commercially cleaned (to Unites States Environmental Protection Agency standards) sample containers from the analytical laboratory.

2.2.1.4 Sample Preservation and Holding Times

Sample preservation efforts commenced at the time of sample collection and continued until analyses were performed. Samples collected for laboratory analyses were stored on ice in insulated coolers immediately following collection. Where appropriate, sample preservatives were included in sample containers supplied by the laboratory.

2.2.1.5 Chain of Custody Protocol

URS has established a program of sample COC that was followed during sample handling activities in both field and laboratory operations. The primary purpose of COC procedures is to document the possession of the samples from collection through shipping, storage, analysis, data reporting, and disposal. The Project Manager or his/her designee has been responsible for monitoring compliance with COC procedures.



SECTIONTWO

Methods of Investigation

During field sampling activities, traceability of the sample was maintained from the time the samples were collected until laboratory data were issued. Initial information concerning collection of the samples was recorded in the field logbook. Information on the custody, transfer, handling, and shipping of all samples was recorded on a COC form.

The sampler was responsible for filling out the COC form initiated by the laboratory. The field team members were responsible for the care and custody of the samples collected until the samples were received at the laboratory. When transferring custody of the samples, the individual who relinquished custody of the samples had verified sample numbers and condition and would document the sample acquisition and transfer by signing, with date and time, the COC. Each cooler was hand delivered to the laboratory accompanied by a COC form.

2.2.2 Management of Investigation Derived Waste

Minimal investigative waste is generated when the Geoprobe direct push methodology is used. Soil from the Geoprobe borings that was not used as sample material was spread on the ground surface after field screening results in accordance with the Proposal. No containerized waste was generated during this investigation.



3.1 REGIONAL CONDITIONS

According to the United States Department of Agriculture Soil Conservation Service's December 1977 Soil Survey of Guilford County, North Carolina, overburden soils in the Site vicinity are classified as within the Enon-Mecklenburg (EoB2) and Cecil-Madison (CeB2) associations. Both of these soil associations are described as gently sloping and sloping, welldrained surficial soils with a loamy or clayey subsoil.

The Enon soils have a three inch thick surface layer of dark grayish brown fine sandy loam. The subsurface soil is about five inches thick and consists of yellowish brown fine sandy loam. The underlying subsoil is 25 inches thick, with the upper part consisting of a light olive brown sandy clay loam, and the lower part a yellowish brown clay. The underlying material, to a depth of 75 inches, is mottled brownish yellow, black, and dark greenish gray loam. Enon soils are described as being well drained.

The Mecklenburg soils are described as having a surface layer three inches thick that is a dark, grayish brown fine sandy loam. The subsoil is 31 inches thick and is composed of an upper mottled yellowish red and red clay and a lower yellowish red clay loam. The underlying material, to a depth of 70 inches, is mottled red and brownish yellow silty clay loam. Mecklenburg soils are also well drained.

The Cecil soils have a six inch thick brown sandy loam surface layer. The subsoil is 46 inches thick, with the upper part consisting of a yellowish red sandy clay loam, the middle part a red clay, and the lower part a mottled red clay loam. The underlying material to a depth of 85 inches is mottled red and yellow loam. Cecil soils are well drained.

The Madison soils are composed of a surface layer that is reddish brown sandy loam about five inches thick. The subsoil is 29 inches thick, with the upper part consisting of red clay and the lower part of mottled red clay loam. The underlying material, to a depth of 80 inches, is mottled reddish yellow sandy clay loam in the upper part and mottled reddish yellow sandy loam in the lower part. Madison soils are also well drained.

According to the North Carolina Geological Survey's 1985 Geologic Map of North Carolina, the site region is located within the Carolina Slate Belt. Bedrock in this region consists predominantly of well foliated, megacrystic, metamorphosed granite rock that locally contains horneblende (late Proterozoic to late Cambrian).

3.2 SITE CONDITIONS

Boring logs for the PSA Geoprobe explorations are provided in Appendix B. Borings GP-1 through GP-14 were performed at the NCDOT Parcel 948, 5009 Summit Avenue. Geoprobe borings were conducted at locations surrounding the UST's and at or near the property boundaries. The number of sampling locations was based on NCDOT's request to screen this area and does not necessarily reflect NCDEHR guidelines for UST investigations. Figure 3 shows the boring locations at this property. Boring depths ranged from 16 to 39 feet (4.88 to



SECTIONTHREE

Geological/Hydrogeological Conditions

11.9 m). Groundwater was detected in GP-1 and GP-3 at approximately 31.5 feet (9.61 m), but URS determined there was not enough water present to collect a groundwater sample.

The primary soil in the area was a clayey silt to silt with clayey saprolite. Resistance increased with depth in the saprolite, reaching effective refusal at depths from 23.5 to 39 feet (7.17 to 11.9 m) below the ground surface.

Geoprobe borings were first conducted south of the pump island, in the area of Tanks #2, #4, and #5. Initially, six borings designated GP-6 through GP-11 were selected to delineate the impacted area. Native soil (saprolite) was encountered in each boring. There was little resistance in the first 4-foot increment of GP-6, where an apparent void was encountered. The Geoprobe then encountered increasing resistance with depth and finally encountered refusal at 39 feet (11.9 m) below the ground surface (BGS). Borings GP-7 through GP-11 all hit refusal between 29.5 to 35 feet (9.00 to 10.68 m) BGS. Elevated headspace readings occurred during the field screening and strong petroleum odors were noted for each boring. Three soil samples were collected from GP-6, one from GP-7, two from GP-8, two from GP-9, three from GP-10, and one from GP-11.

GP-12 was placed approximately 30 feet (9.15 m) south of GP-10. Based on field screening results, the soil at this location also appeared to be impacted. Three soil samples were collected from GP-12. GP-14 was placed approximately 10 feet (3.05 m) west and 8 feet (2.44 m) south of the porch attached to the south end of the structure. GP-14 was advanced to 28 feet (8.54 m) BGS, but no samples were taken because no odors or elevated headspace results were detected.

Five borings were placed around Tanks #1 and #3. No obvious location for a former excavation was evident. In this area, groundwater was detected at GP-1 and GP-3 at approximately 31.5 feet (9.61 m) BGS. The Geoprobe encountered refusal at 31.5 feet (9.61 m) BGS at GP-4 and at 29 feet (8.85 m) BGS at GP-5, with no indications of the groundwater table. GP-1 was placed approximately 2 feet (0.610 m) north of Tank #1 and 6.25 feet (1.91 m) east of the building. GP-3 was located north of Tank #3 and east of Tank #1. GP-4 was placed approximately 8 feet (2.44 m) east of the former pump island. GP-5 was located adjacent to the former pump island. Petroleum odors were noted and elevated headspace reading occurred in all four boring locations. Two samples were collected from GP-1, two from GP-3, one from GP-4, and three from GP-5. GP-2 was placed approximately 2 feet (0.610 m) east of the building, south of Tank #1. GP-2 was advanced to 16 feet (4.88 m) BGS and no odors or signs of impacted soil were detected; therefore the boring was stopped. Upon further screening, the PID/FID detected elevated headspace readings, and two samples were taken from GP-2.

GP-13 was placed 36 feet (11.0 m) north of the former pump island, near the north edge of the property boundary. GP-13 was advanced to 30 feet (9.15 m) BGS into the saprolite. Because GP-13 yielded significantly lower field screening results in comparison to other borings, only one sample was collected.



All samples collected from the facility were sent to the contract laboratory and the analytical results are documented in Table 1 of this report. The complete laboratory report is included in Appendix C.

Fourteen borings were completed and 27 samples were collected at the Mabel L. Chilton Property. Out of the 27 samples collected, 23 exceeded the NCDENR Groundwater Section "Action Level" or TPH clean-up standard¹. Borings GP-5, GP-7 and GP-9 were among the highest reported results from the soil samples, indicating they were nearest to the source area. At the northern portion of the property, GP-13 did detect minor amounts of TPH, but not above the reportable quantity. This appears to be the extent of the impacted soil on the north side of the property. GP-12 had two sample depths, at 8 and 23.5 feet (2.44 and 7.16 m), that reported below the reportable quantities for TPH, and a third from a depth of 14 feet (4.27 m) reported above the Action Level for Oil and Grease. This indicates the impacted soil is nearing the edge of extent. See Figure 3 for the suspected dimensions of the plume.

4.1 CALCULATION OF IMPACTED SOIL

Borings GP-12, GP-13, and GP-14 were placed at the south, north, and southwest edges of the property boundary. GP-12, at the south edge, and GP-13, at the north edge, were both slightly impacted. This is most likely an indication of the north and south horizontal extent of impact. GP-14, at the southwest corner, does not appear to have any impact from the contaminated source area. No borings were placed inside the footprint of the structure or in the empty wooded lot across Summit Avenue, therefore the east and west horizontal delineation has not been determined. Based upon the available field screening and laboratory analysis, however, URS estimates there are approximately 3,212 tons of impacted beneath the Mabel L. Chilton Property (see Appendix D). Actual tonnage may vary due to uncertainty of the extent of impact to soil beneath the structure and Summit Avenue.

4.2 WELL SURVEY

Due to the likelihood of soil contamination on-site, URS conducted a well survey within a 1,500foot (457 m) radius of the site (see Figure 4). The Mabel L. Chilton Property is approximately 0.15 mile (241 m) north the Greensboro City Limit. The property is bordered by wooded areas to the west, northwest and southwest. The property is mainly surrounded by residential neighborhoods. There are rows of houses north and south of the property. Across Summit Avenue to the northeast, Pindals Road has about a dozen houses on the south side of the dead end street and is wooded on the north side of the street. From discussions with the neighbors, most of the surrounding houses have drinking water wells. It was not determined if the neighborhoods south of the Greensboro City Limit are connected to city water or have drinking water wells. There is a Texaco Gas Station near the intersection of Hicone Road and Summit Avenue and a BBO Restaurant on the corner of Pineneedle Drive and Summit Avenue.

¹ NCDENR Division of Water Quality, Groundwater Section. October 4, 1999 Memorandum to Environmental Service Companies, Consultants, and other interested parties, entitled: Revised Policy for Soil Analytical Methods.



SECTIONFIVE

Conclusions and Recommendations

PSA field observations and laboratory analytical results of soil samples indicate significant petroleum hydrocarbon contamination exists in on-site soils. Based on the available data for soils and the inferred groundwater flow direction in the area, it is possible that petroleum hydrocarbon contamination could exist in groundwater, and could have migrated south and east of the property.

Petroleum hydrocarbons in the soil have apparently migrated down to the water table and have likely contaminated groundwater. URS estimates the volume of impacted soils on-site to be approximately 3,212 tons (Appendix D). This estimation does not include any possible off-site contamination.



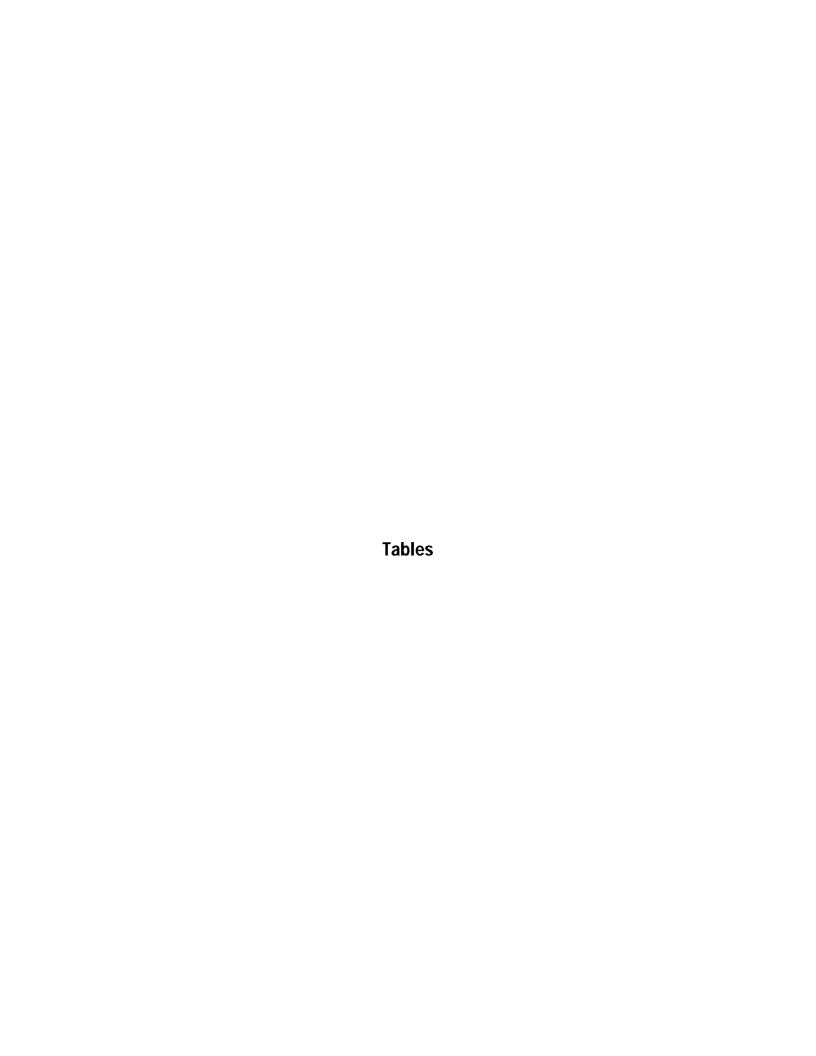


TABLE 1

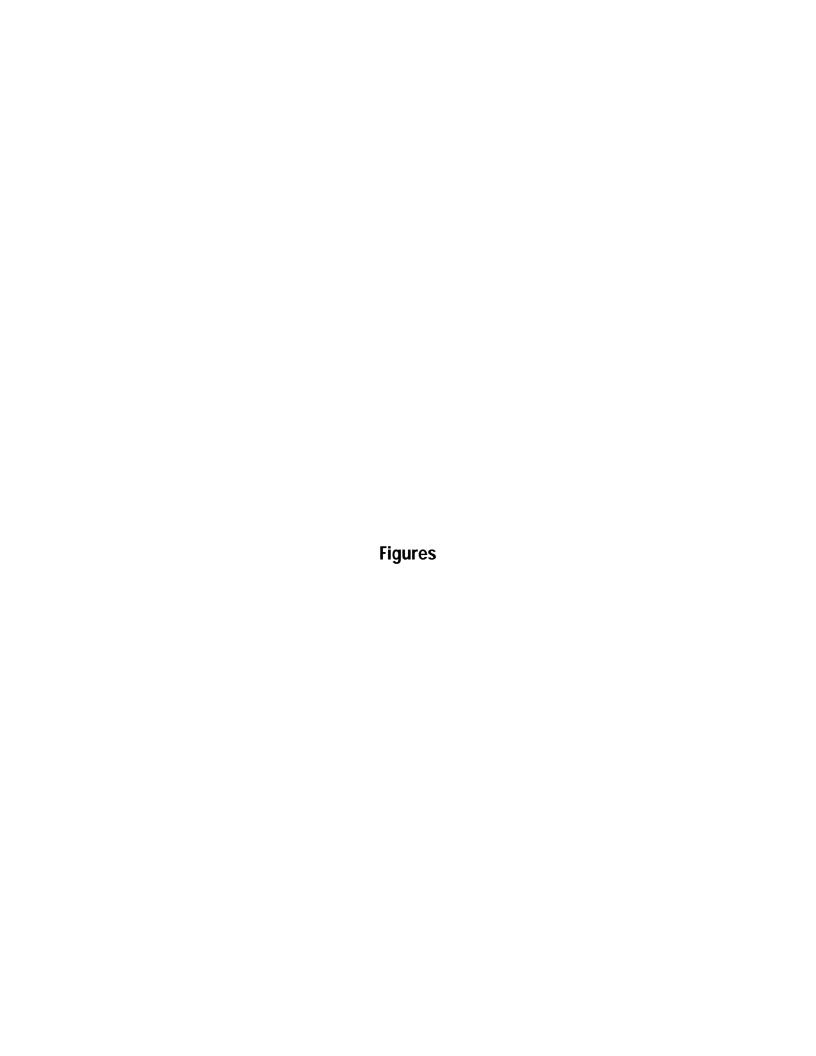
SOIL LABORATORY ANALYTICAL RESULTS NCDOT PARCEL 948 - MABEL L. CHILTON PROPERTY GUILFORD COUNTY, NORTH CAROLINA NCDOT PROJECT 8.1690303

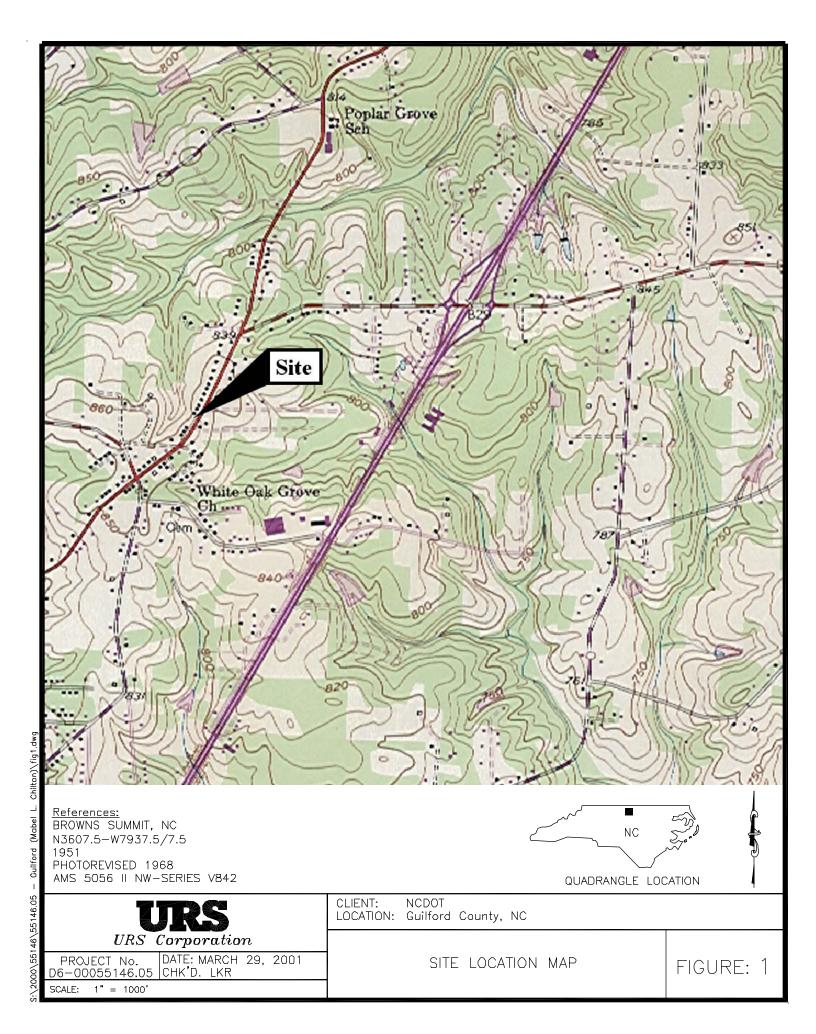
(TIP: R-2616 AA)

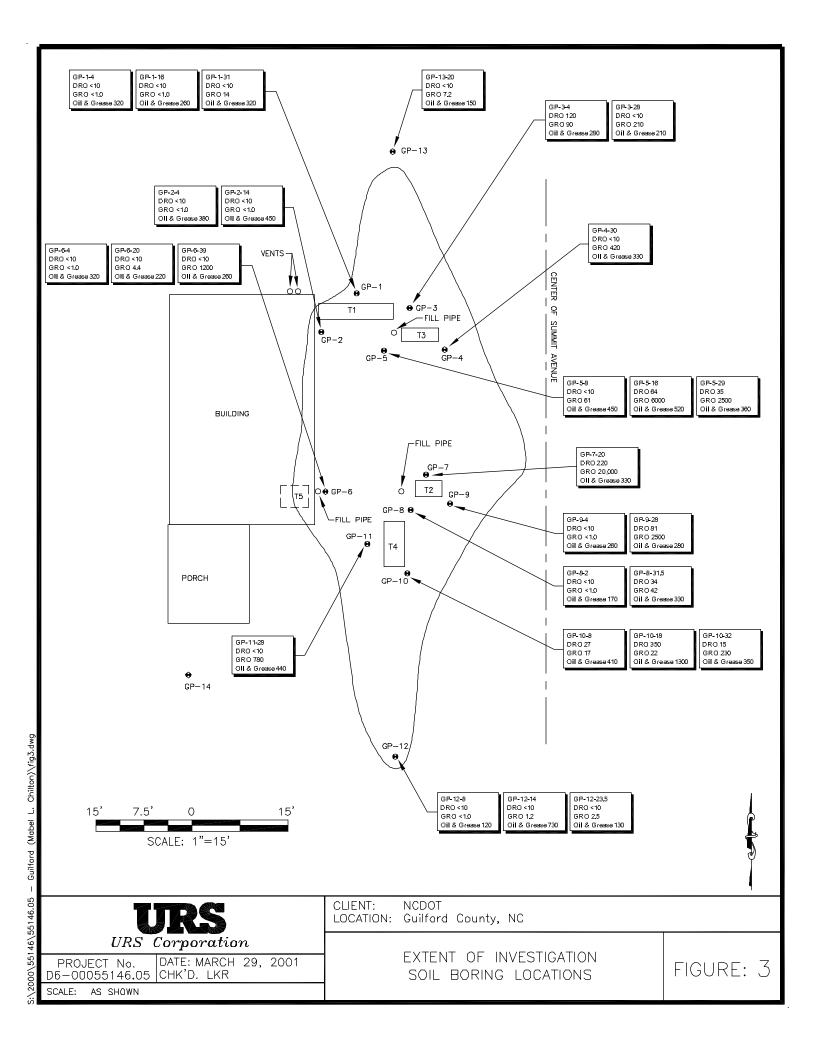
	UNITS	Petroleum Hydrocarbons			
Analysis		GRO	DRO	Oil and Grease	
STANDARDS	•	1		'	
Reportable Quantity	mg/kg	10	10	250	
TPH Action Level	mg/kg	10	40	250	
Soil-To-Groundwater	mg/kg	NE	NE	NE	
Remediation Goal	mg/kg	NE	NE	NE	
	ANALY	TICAL RESULTS	S		
GP-1-4	mg/kg	<1.0	<10	320	
GP-1-16	mg/kg	<1.0	<10	260	
GP-1-31	mg/kg	14	<10	320	
GP-2-4	mg/kg	<1.0	<10	380	
GP-2-14	mg/kg	<1.0	<10	450	
GP-3-4	mg/kg	90	120	280	
GP-3-28	mg/kg	210	<10	210	
GP-4-30	mg/kg	420	<10	330	
GP-5-8	mg/kg	61	<10	450	
GP-5-16	mg/kg	6000	64	520	
GP-5-29	mg/kg	2500	35	360	
GP-6-4	mg/kg	<1.0	<10	320	
GP-6-20	mg/kg	4.4	<10	220	
GP-6-39	mg/kg	1200	<10	260	
GP-7-20	mg/kg	20000	220	330	
GP-8-2	mg/kg	<1.0	<10	170	
GP-8-31.5	mg/kg	42	34	330	
GP-9-4	mg/kg	<1.0	<10	260	
GP-9-28	mg/kg	2500	81	280	
GP-10-8			27	410	
GP-10-18	mg/kg	22	350	1300	
GP-10-32	mg/kg	230	15	350	
GP-11-28	mg/kg	780	<10 440		
GP-12-8	mg/kg	<1.0	<10	120	
GP-12-14	mg/kg	1.2	<10	730	
GP-12-23.5	mg/kg	2.5	<10	130	
GP-13-20	mg/kg	7.2	<10	150	

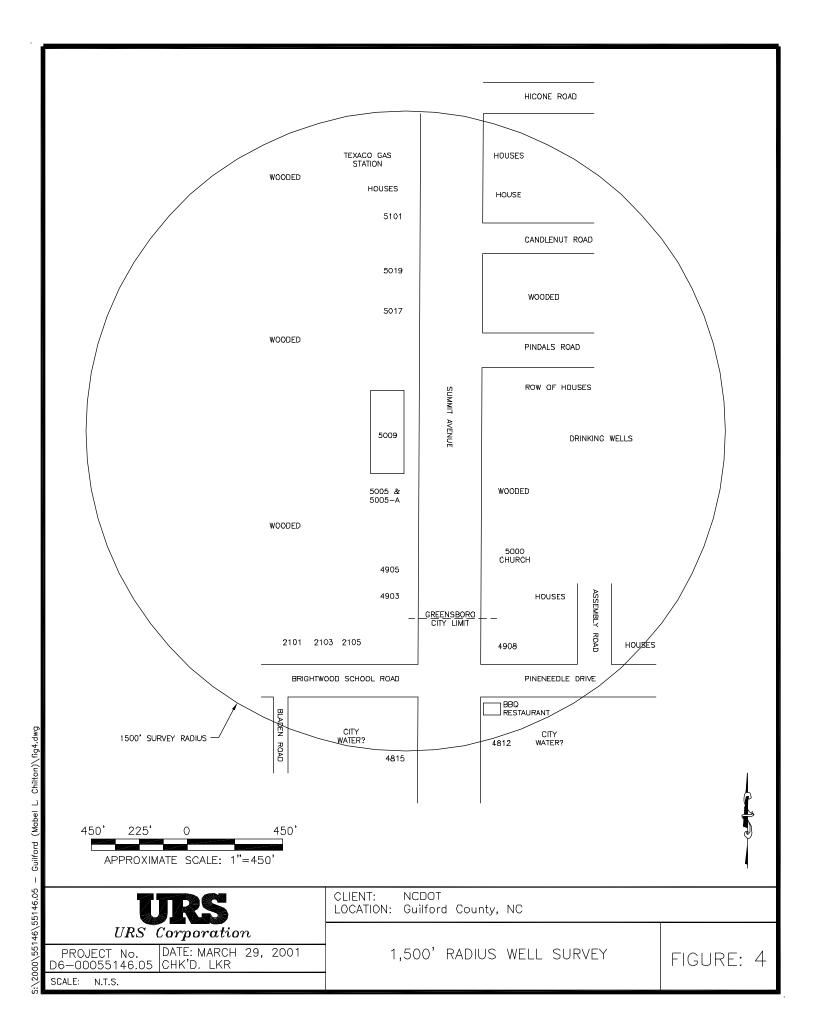
NOTES:

- 1. Soil samples were collected by Probe Technology of Concord, NC under the supervision of URS on 2-9-01 and submitted by URS under chain-of-custody protocols to Prism Laboratories, Inc. of Charlotte, NC for analyses.
- 2. Results for selected analytes are shown; see Appendix B for a full listing of results.
- 3. "<" denotes a non-detection (the detection limit follows).
- 4. "()" denotes an aqueous concentration.
- 5. STANDARDS are taken from guidance provided by the North Carolina Department of Environment and Natural Resources (NCDENR), including the Oct. 4, 1999 Division of Water Quality, Groundwater Section memorandum to environmental service companies, consultants and other interested parties entitled: Revised Policy for Soil Analytical Methods the Jan. 2, 1998 Guidelines for the Investigation and Remediation of Soil and Groundwater, Volume II; and the NCDENR Division of Waste Management, Superfund Section, Inactive Hazardous Sites Branch Aug. 1998 Guidelines for Assessment and Cleanup
- 6. "NE" Not established









Appendix A
Photo Documentation

Appendix B Boring Logs

Locations	Distance
GP-1	2 ft north of T1, 6.25 ft east of building
GP-2	2 ft south of T1, 1.5 ft east of building
GP-3	3 ft north of T3, 14.5 ft east of building
GP-4	2 ft south of T3, 19.5 ft east of building
GP-5	5 ft south of T1, 12 ft east of building
GP-6	2 ft east of T5 fillport
GP-7	2 ft north of T2, 18 ft east of building
GP-8	3.5 ft south of T2, 16.5 ft east of building
GP-9	2 ft east-southeast of T2, 22 ft east of building
GP-10	17 ft south of pump island, 2 ft southeast of T4
GP-11	11.5 ft south of pump island, 10.5 ft east of building
GP-12	30 ft south of T4
GP-13	36 ft north of pump island
GP-14	From porch on southend of building, 8 ft south, 10 ft w

APPENDIX C BORING LOCATION DATA GUILFORD COUNTY, NORTH CAROLINA NCDOT PROJECT

(TIP: U-2525B)

DEPTH	PEN.	REC.	DESCRIPTION	PID	FID	Sample ID
		REC.	DESCRIPTION	Max	Max	Sample 1D
BORING GP-1						
0 to 1	3.8	2.8	6" of gravel and topsoil.			
1 to 2						
2 to 3			Dry, red clayey SILT, with some saprolite.			
3 to 4				76	440	GP-1-4
4 to 5	3.8	3.6	Same			
5 to 6				47	135	
6 to 7						
7 to 8				61	228	No Odor
8 to 9	3.8	3.1	Same	100	600	
9 to 10				120	680	
10 to 11				00	400	N. O.I
11 to 12	2.0	2.6		80	400	No Odor
12 to 13	3.8	3.6	Same	122	760	
13 to 14 14 to 15			Clintale and interest CH T middle and lite	133	760	Trace Odors
14 to 15 15 to 16			Slightly moist, red clayey SILT, with saprolite.	68	82	GP-1-16
15 to 16 16 to 17	3.8	3.6	Same	08	02	GP-1-10
17 to 18	3.0	3.0	Same	90	400	
18 to 19			Same	70	400	
19 to 20			Banic	160	720	Odor
20 to 21	3.8	3.2	Dry, tan and white saprolite.	100	720	Odor
21 to 22	3.0	3.2	bij, an and winte supronee.	123	724	
22 to 23			Same	120	,	
23 to 24				98	530	Odor
24 to 25	3.8	3.3	Dry, tan, brown and white saprolite.			
25 to 26			1	95	280	
26 to 27			Same, becoming slightly moist.			
27 to 28				108	622	Odor
28 to 29	3.3	3.3				
29 to 30			Same	120	740	Odor
30 to 31						
31 to 32			Groundwater @ 31.5' End of Boring	350	2400	Odor

NOTES:

- 1. Geoprobe explorations were completed on 2/9/01 by Mike Tynan (Probe Technology, Inc. of Concord, NC) using a Geoprobe rig under the supervision of Corlista Urtz (URS). Sampling was performed using an acetate-lined four-foot long steel sampler.
- 2. Field Photo Ionization Detector (PID) and Flame Ionization Detector (FID) screening was performed using a Foxboro Total Vapor Analyzer (TVA).
- 3. All penetration, recovery, and depth measurements are expressed in units of feet; PID and FID measurements are expressed as parts per million relative to isobutylene and methane standards.
- 4. Groundwater was encountered at 31.5'. Boring backfilled with granular bentonite.
- 5. ND indicates No Detection.

(TIP: U-2525B)

DEPTH	PEN.	REC.	DESCRIPTION	PID Max	FID Max	Sample ID			
BORING GP-2									
0 to 1	3.8	1.0	6" gravel and topsoil						
1 to 2									
2 to 3			Slightly moist, red clayey SILT.			No Odor			
3 to 4						GP-2-4			
4 to 5	3.8	3.8	Slightly moist, red clayey SILT, with saprolite.						
5 to 6				200	>900				
6 to 7									
7 to 8				24	35	No Odor			
8 to 9	3.8	3.2	Same						
9 to 10				20	22				
10 to 11									
11 to 12				20	101	No Odor			
12 to 13	3.8	3.8	Same						
13 to 14				53	210	GP-2-14			
14 to 15									
15 to 16			End of Boring	69	283	No Odor			

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- 2. Field Photo Ionization Detector (PID) and Flame Ionization Detector (FID) screening was performed using a Foxboro Total Vapor Analyzer (TVA).
- 3. All penetration, recovery, and depth measurements are expressed in units of feet; PID and FID measurements are expressed as parts per million relative to isobutylene and methane standards.
- 4. No groundwater was encountered. Boring backfilled with granular bentonite.
- 5. ND indicates No Detection.

(TIP: U-2525B)

DEPTH	PEN.	REC.	DESCRIPTION	PID Max	FID Max	Sample ID
BORING GP-	3					
0 to 1	3.8	3.2	6" gravel and topsoil			
1 to 2			Dry, red clayey SILT, with saprolite.			
2 to 3						Trace Odors
3 to 4				32	8	GP-3-4
4 to 5	3.8	3.5	Same			
5 to 6				52	203	
6 to 7						
7 to 8			Dry, tan and white clayeye SILT, with saprolite.	145	1200	Odors
8 to 9	3.8	3.8	Same			
9 to 10				175	806	
10 to 11						
11 to 12				180	844	Odors
12 to 13	3.8	3.8	Same			
13 to 14				125	632	
14 to 15				110	450	0.1
15 to 16	2.0	2.7		110	450	Odors
16 to 17 17 to 18	3.8	3.7	Same	100	266	
17 to 18 18 to 19				102	366	
19 to 20				32	135	Odors
20 to 21	3.8	3.5	Same	32	133	Odors
21 to 22	3.0	3.3	Banic	72	133	
22 to 23				, -	155	
23 to 24				58	112	Odors
24 to 25	3.8	3.5	Same			
25 to 26				42	98	
26 to 27						Odors
27 to 28				49	105	GP-3-28
28 to 29	3.3	3.3	Same			
29 to 30						
30 to 31			Slightly moist, white saprolite.	54	110	Odors
31 to 32			Groundwater @ 31.5' End of Boring			

- 1. Geoprobe explorations were completed on 2/9/01 by Mike Tynan (Probe Technology, Inc. of Concord, NC) using a Geoprobe rig under the supervision of Corlista Urtz (URS). Sampling was performed using an acetate-lined four-foot long steel sampler.
- 2. Field Photo Ionization Detector (PID) and Flame Ionization Detector (FID) screening was performed using a Foxboro Total Vapor Analyzer (TVA).
- 3. All penetration, recovery, and depth measurements are expressed in units of feet; PID and FID measurements are expressed as parts per million relative to isobutylene and methane standards.
- 4. Groundwater was encountered at 31.5'. Boring backfilled with granular bentonite.
- 5. ND indicates No Detection.

(TIP: U-2525B)

DEPTH	PEN.	REC.	DESCRIPTION	PID Max	FID Max	Sample ID
BORING GP-	4				•	
0 to 1	3.8	3.8	6" gravel and topsoil			
1 to 2			Dry, red-tan clayey SILT.	40	210	
2 to 3						
3 to 4			Dry, red-brown, clayey SILT, with saprolite.	9	8	No Odor
4 to 5	3.8	3.8				
5 to 6			Dry, light red and white, clayey SILT, with saprolite.	17	28	
6 to 7				4.40		
7 to 8	2.0	2.0	Dry, tan, some sand, clayey SILT, with saprolite.	140	550	Trace Odors
8 to 9 9 to 10	3.8	3.8	Same	30	55	
10 to 11				30	33	
10 to 11 11 to 12			Dry, red, tan and white, clayey SILT, with saprolite.	40	95	Odors
12 to 13	3.8	3.8	bry, red, tall and write, etayey StE1, with suprofile.	70	73	Odors
13 to 14	3.0	3.0	Dry, dark red, clayey SILT, saprolite.	110	400	
14 to 15						
15 to 16			Same	55	140	Odors
16 to 17	3.8	3.8				
17 to 18			Same	110	120	
18 to 19						
19 to 20			Dry, dark red, some black soil, clayey SILT, with saprolite.	80	360	Trace Odors
20 to 21	3.8	3.5				
21 to 22			Same	120	1400	
22 to 23			CIT Let the Letter The CITY TO	200	1.400	T. 01
23 to 24 24 to 25	3.8	3.7	Slightly moist, red clayey SILT.	200	1400	Trace Odors
24 to 25 25 to 26	3.8	3.7	Slightly moist, brown, some black soil, clayey SILT.	300	1400	
26 to 27			isinging moist, brown, some black son, clayey sill i.	300	1400	
20 to 27 27 to 28			Same	400	1400	Trace Odors
28 to 29	3.3	3.3	- Saute	100	1100	11400 04015
29 to 30				440	1400	GP-4-30
30 to 31			Same	180	1400	Trace Odors
31 to 32			Refusal @ 31.5'			

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- 2. Field Photo Ionization Detector (PID) and Flame Ionization Detector (FID) screening was performed using a Foxboro Total Vapor Analyzer (TVA).
- 3. All penetration, recovery, and depth measurements are expressed in units of feet; PID and FID measurements are expressed as parts per million relative to isobutylene and methane standards.
- 4. No groundwater was encountered. Boring backfilled with granular bentonite.
- 5. ND indicates No Detection.

(TIP: U-2525B)

DEPTH	PEN.	REC.	DESCRIPTION	PID	FID	Sample ID
		REC.	DESCRIPTION	Max	Max	Sample 1D
BORING GP-					1	ı
0 to 1	3.8	3.3	1' topsoil and gravel			
1 to 2			Dry, red clay, some SILT.	200	1400	
2 to 3						
3 to 4			Dry, red clay, some SILT, saprolite.	20	40	Trace Odors
4 to 5	3.8	3.8	Same			
5 to 6				80	330	
6 to 7						Odors
7 to 8			Red clay, and white-purple saprolite.	10	9	GP-5-8
8 to 9	3.8	3.8	D 11 077 77 11		4.400	
9 to 10			Dry, red clayey SILT, saprolite.	220	1400	
10 to 11			D 11 GW W 15	110	1.400	0.1
11 to 12	2.0	2.0	Dry, red clayey SILT, some sand, saprolite.	110	1400	Odors
12 to 13	3.8	3.8	D (11') 1 CHT 1')	150	240	
13 to 14			Dry, tan and white, clayey SILT, saprolite.	150	240	0.1
14 to 15 15 to 16				450	1.400	Odors
	2.0	3.8		450	1400	GP-5-16
16 to 17 17 to 18	3.8	3.8	Come with some number coloning	40	110	
17 to 18 18 to 19			Same, with some purple coloring.	40	110	
19 to 20			Dry, tan and white, clayey SILT, saprolite.	100	450	Odors
20 to 21	3.8	3.8	Dry, tan and winte, clayey Ster, saptonic.	100	450	Ouois
21 to 22	3.0	5.0		140	580	
22 to 23				140	500	
23 to 24				200	1400	Odors
24 to 25	3.8	3.7	Same		1.00	
25 to 26				240	1400	
26 to 27						
27 to 28				240	1400	Odors
28 to 29	1.5	1.5		180	1400	GP-5-29
29 to 30			Refusal @ 29'			

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- 3. All penetration, recovery, and depth measurements are expressed in units of feet; PID and FID measurements are expressed as parts per million relative to isobutylene and methane standards.
- 4. No groundwater was encountered. Boring backfilled with granular bentonite.
- 5. ND indicates No Detection.

(TIP: U-2525B)

DEPTH	PEN.	REC.	DESCRIPTION	PID	FID	Sample ID
BORING GP-	6			Max	Max	
0 to 1	3.8	1.3	6" of asphalt and gravel			
1 to 2			8-m-1-m-1-m-1-m-1-m-1-m-1-m-1-m-1-m-1-m-			
2 to 3			~2' voidspace			No Odors
3 to 4			Moist, red-brown, clayey SILT.	90	100	GP-6-4
4 to 5	3.8	2.8				
5 to 6			Slightly moist, red clay, saprolite.	1600	2100	
6 to 7						
7 to 8			Slightly moist, red clayey SILT, with saprolite.	50	420	Odors
8 to 9	3.8	3.8				
9 to 10			Dry, red clayey SILT.	8000	936	
10 to 11						
11 to 12			Dry, red clayey SILT, with saprolite.	5000	820	Trace Odors
12 to 13	3.8	3.8				
13 to 14			Same	40	320	
14 to 15						
15 to 16				105	890	Odors
16 to 17	3.8	3.8				
17 to 18			Dry, red and white, some clayey SILT, mostly saprolite.	75	550	
18 to 19				25	60	Odors
19 to 20 20 to 21	3.8	3.8	Dry, brown clayey SILT.	25	60	GP-6-20
20 to 21 21 to 22	3.8	3.8		73	380	
21 to 22 22 to 23				/3	360	
22 to 23 23 to 24			Same, lighter in color.	50	380	Odors
23 to 24 24 to 25	3.8	3.8	Same, fighter in color.	30	360	Odors
24 to 25 25 to 26	3.6	3.0	Dry, tan and white, some clayey SILT, mostly saprolite.	385	5000	
26 to 27			bry, tall and write, some clayey Silli, mostly saprone.	363	3000	Petroleum and
27 to 28				580	450	sulfur odors
28 to 29	3.8	3.8		200		Sulful Susis
29 to 30			Dry, white saprolite	250	500	
30 to 31			1			
31 to 32				150	930	Odors
32 to 33	3.8	3.6	Same			
33 to 34				950	3600	
34 to 35						
35 to 36			Dry, tan and white saprolite.	36	240	Odors
36 to 37	3.0	3.0				
37 to 38						Odors
38 to 39			Dry, brown and white saprolite.	111	286	GP-6-39
39 to 40			Refusal @ 39'			

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- 3. All penetration, recovery, and depth measurements are expressed in units of feet; PID and FID measurements are expressed as parts per million relative to isobutylene and methane standards.
- 4. No groundwater was encountered. Boring backfilled with granular bentonite.
- 5. ND indicates No Detection.

(TIP: U-2525B)

DEPTH	PEN.	REC.	DESCRIPTION	PID Max	FID Max	Sample ID
BORING GP-	7			•		
0 to 1	3.8	3.8	6" asphalt and gravel			
1 to 2			Dry, red clayey SILT, with saprolite.	140	460	
2 to 3						
3 to 4				110	350	Odors
4 to 5	3.8	3.8	Same			
5 to 6				500		
6 to 7						
7 to 8	2.0	2.0	0	505		Odors
8 to 9 9 to 10	3.8	3.8	Same	520		
10 to 11				320		
10 to 11 11 to 12			Dry, tan and white, clayey SILT, with saprolite.	530		Odors
12 to 13	3.8	3.8	bry, tan and white, crayey Sill 1, with suprofite.	330		Odors
13 to 14	3.0	3.0	Same	675		
14 to 15				0,0		
15 to 16			Dry, red and white, clayey SILT, saprolite.	665		Odors
16 to 17	3.8	3.8				
17 to 18				540		
18 to 19						Odors
19 to 20			Slightly moist, red-brown, clayey SILT.	710		GP-7-20
20 to 21	3.8	3.6				
21 to 22			Dry, brown, clayey SILT, saprolite.	520		
22 to 23						
23 to 24	2.0	2.2		460		Odors
24 to 25	3.8	3.3	Same	510		
25 to 26 26 to 27				510		
26 to 27 27 to 28			Dry, tan and white, clayey SILT, with saprolite.	330		Odors
28 to 29	3.8	3.8	ינקן, tan and write, clayey SiL1, with sapionic.	330		Odols
29 to 30	3.0	3.0	Dry, dark brown, clayey SILT.	350		
30 to 31			Dij, dan oto nii, dayoy bibi.	330		
31 to 32			Dry, tan and white, clayey SILT, with saprolite.	245		Odors

Refusal @ 32'

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- 3. All penetration, recovery, and depth measurements are expressed in units of feet; PID and FID measurements are expressed as parts per million relative to isobutylene and methane standards.
- 4. No groundwater was encountered. Boring backfilled with granular bentonite.
- 5. ND indicates No Detection.

(TIP: U-2525B)

DEPTH	PEN.	REC.	DESCRIPTION	PID Max	FID Max	Sample ID
BORING GP	-8			•	•	
0 to 1	3.8	3.8	6" topsoil			
1 to 2			Dry, red clayey SILT.	90	430	GP-8-2
2 to 3						
3 to 4			Dry, red clayey SILT, with saprolite.	69	199	No Odor
4 to 5	3.8	3.8				
5 to 6			Same	230	1400	
6 to 7						
7 to 8		•	Dry, white and tan, clayey SILT, with saprolite.	245	1400	Trace Odors
8 to 9	3.8	3.8		420	1.400	
9 to 10			Same	420	1400	
10 to 11 11 to 12			S	111	500	04
11 to 12 12 to 13	3.8	3.8	Same	111	586	Odors
12 to 13 13 to 14	3.8	3.8	Dry, red clayey SILT.	210	1400	
13 to 14 14 to 15			Dry, led clayey SiL1.	210	1400	
15 to 16				260	1400	Odors
16 to 17	3.8	3.8	Same	200	1400	Odors
17 to 18	3.0	3.0	Suine			
18 to 19						
19 to 20				200	1400	Odors
20 to 21	3.8	3.8	Same			
21 to 22				265	1400	
22 to 23						
23 to 24			Dry, white and tan, clayey SILT, with saprolite.	400	1400	Odors
24 to 25	3.8	3.8	Same			
25 to 26						
26 to 27						
27 to 28				186	740	Odors
28 to 29	3.3	3.3	Same			
29 to 30						Odors
30 to 31			Dry, white saprolite.	340	1400	GP-8-31.5
31 to 32			Refusal @ 31.5			

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- 4. No groundwater was encountered. Boring backfilled with granular bentonite.
- 5. ND indicates No Detection.

(TIP: U-2525B)

DEPTH	PEN.	REC.	DESCRIPTION	PID Max	FID Max	Sample ID
BORING GP-					-	
0 to 1	3.8	3.2	6" gravel			
1 to 2			Dry, red and white, clayey SILT, with saprolite.			
2 to 3						No Odors
3 to 4				66	70	GP-9-4
4 to 5	3.8	3.7	Same			
5 to 6				72	625	
6 to 7						
7 to 8			Dry, tan and white, clayey SILT, saprolite.	80	810	Odors
8 to 9	3.8	3.8	Same	105	1210	
9 to 10				135	1210	
10 to 11				410	1.400	0.1
11 to 12 12 to 13	3.8	3.5	Same	410	1400	Odors
12 to 13 13 to 14	3.8	3.3	Same	565	1400	
13 to 14 14 to 15				303	1400	
15 to 16			Dry, tan and white, clayey SILT, saprolite.	550	1400	Odors
16 to 17	3.8	3.7	Same	330	1400	Odors
17 to 18	3.0	3.7	Suine	700	1400	
18 to 19				, 00	1.00	
19 to 20				650	1400	Odors
20 to 21	3.8	3.8	Same			
21 to 22				625	1400	
22 to 23						
23 to 24				470	1400	Odors
24 to 25	3.8	3.8	Same			
25 to 26				390	1020	
26 to 27						Odors
27 to 28				210	920	GP-9-28
28 to 29	3.8	3.8	Same			
29 to 30			Slightly moist, brown saprolite.	125	810	
30 to 31						
31 to 32				80	410	
32 to 33	3.0	3.0	Same			
33 to 34						
34 to 35			Refusal @ 35'	60	120	Odors

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- 3. All penetration, recovery, and depth measurements are expressed in units of feet; PID and FID measurements are expressed as parts per million relative to isobutylene and methane standards.
- 4. No groundwater was encountered. Boring backfilled with granular bentonite.
- 5. ND indicates No Detection.

(TIP: U-2525B)

DEPTH	PEN.	REC.	DESCRIPTION	PID Max	FID Max	Sample ID
BORING GP-					-	
0 to 1	3.8	2.9	1' asphalt and gravel			
1 to 2			Slightly moist, brown, clayey SILT, some sand.	72	352	
2 to 3						
3 to 4				26	78	No Odors
4 to 5	3.8	3.8				
5 to 6			Slightly moist, red, clayey SILT, with saprolite.	51	274	0.1
6 to 7				25	00	Odors
7 to 8 8 to 9	3.8	3.8	Same	25	80	GP-10-8
9 to 10	3.6	3.0	Dry, red and brown, some purple, clayey SILT, with saprolite.	44	351	
10 to 11			bry, red and brown, some purple, etayey StD1, with suprome.	""	331	
11 to 12				90	270	Odors
12 to 13	3.8	3.8				
13 to 14			Dry, tan and white saprolite.	141	388	
14 to 15						
15 to 16				175	600	Odors
16 to 17	3.8	3.8				
17 to 18			Dry, white saprolite.	220	1400	GP-10-18
18 to 19			D		410	0.1
19 to 20 20 to 21	3.8	3.8	Dry, tan and white saprolite. Same	60	410	Odors
20 to 21 21 to 22	3.6	3.0	Same	72	550	
21 to 22 22 to 23				12	330	
23 to 24				100	410	Odors
24 to 25	3.8	3.8	Same	100	110	3 4 5 1 5
25 to 26				68	310	
26 to 27						
27 to 28				60	210	Odors
28 to 29	3.8	3.2	Same			
29 to 30				150	1400	Heavy Odors
30 to 31				4.50		in bedrock.
31 to 32			Dry, white saprolite.	160	800	GP-10-32

Refusal @ 35'

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- 3. All penetration, recovery, and depth measurements are expressed in units of feet; PID and FID measurements are expressed as parts per million relative to isobutylene and methane standards.
- 4. No groundwater was encountered. Boring backfilled with granular bentonite.
- 5. ND indicates No Detection.

(TIP: U-2525B)

DEPTH	PEN.	REC.	DESCRIPTION	PID	FID	Sample ID
		REC.	DESCRIPTION	Max	Max	Sample 1D
BORING GP						
0 to 1	3.8		6" asphalt and gravel			
1 to 2			Dry, red clayey SILT.	12	28	
2 to 3						
3 to 4				480	220	No Odors
4 to 5	3.8	3.8				
5 to 6			Slightly moist, red clayey SILT, with saprolite.	252	550	
6 to 7						
7 to 8				18	90	No Odors
8 to 9	3.8	3.6	Same			
9 to 10				2800	256	
10 to 11				1.7	25	T. 0.1
11 to 12	2.0	2.0		17	35	Trace Odors
12 to 13	3.8	3.8	Same	1000	6000	
13 to 14 14 to 15				1800	6000	
14 to 15 15 to 16			Dry, tan SILT, with saprolite.	22	68	Odors
15 to 10 16 to 17	3.8	3.8	Dry, tall StE1, with sapronte.	22	00	Odors
17 to 18	3.6	3.0	Slightly moist, red clayey SILT, with saprolite.	1200	380	
18 to 19			Slightly moist, led etayey Sie 1, with sapionic.	1200	300	
19 to 20			Dry, brown and white, clayey SILT, with saprolite.	43	160	Odors
20 to 21	3.8	3.4	Same	15	100	3 2315
21 to 22				140	710	
22 to 23						
23 to 24				80	165	Odors
24 to 25	3.8	3.4	Same			
25 to 26				1200	7500	
26 to 27						
27 to 28				5800	4022	Odors
28 to 29	1.5	1.5	Dry, white saprolite.			
29 to 30			Refusal @ 29.5	5800	3600	GP-11-29.5

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- 4. No groundwater was encountered. Boring backfilled with granular bentonite.
- 5. ND indicates No Detection.

(TIP: U-2525B)

DEPTH	PEN.	REC.	DESCRIPTION	PID Max	FID Max	Sample ID
BORING GP-	12			172421	172422	
0 to 1	3.8	3.8	6" topsoil and gravel			
1 to 2			Dry, red and brown clay.	4	1	
2 to 3						
3 to 4			Dry, tan and white, clayey SILT, with saprolite.	4	1	No Odors
4 to 5	3.8	3.8	Same			
5 to 6				4	3	
6 to 7						
7 to 8				3	1	GP-12-8
8 to 9	3.8	3.8	D. I. GW.T.	10	20	
9 to 10			Dry, brown, clayey SILT.	12	29	
10 to 11 11 to 12				60	300	No Odors
11 to 12 12 to 13	3.8	3.8	Same	60	300	No Odors
12 to 13 13 to 14	3.6	3.6	Same	55	140	GP-12-14
14 to 15				33	140	G1 12 14
15 to 16				50	290	Trace Odors
16 to 17	3.8	3.5				
17 to 18			Dry, tan and white, clayey SILT, with saprolite.	30	85	
18 to 19						
19 to 20				110	320	Trace Odors
20 to 21	3.3	3.3	Same			
21 to 22				220	680	
22 to 23			Saprolite.			
23 to 24			Refusal @ 23.5'	500	1400	GP-12-23.5

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- 5. ND indicates No Detection.

(TIP: U-2525B)

DEPTH	PEN.	REC.	DESCRIPTION	PID	FID	Sample ID
		REC.	DESCRIPTION	Max	Max	Sample 1D
BORING GP-						
0 to 1	3.8		6" topsoil and sand			
1 to 2			Dry, red and brown, clayey SILT, with saprolite.	19		
2 to 3						
3 to 4		•		17		No Odor
4 to 5	3.8	3.8	D of the state of	1.7		
5 to 6			Dry, tan and white, clayey SILT, with saprolite.	15		
6 to 7			D b CH T	12		N- O-1
7 to 8 8 to 9	3.8	3.7	Dry, brown clayey SILT, with saprolite. Same	13		No Odor
9 to 10	3.0	3.7	Same	12		
10 to 11				12		
10 to 11 11 to 12				18		No Odor
12 to 13	3.8	3.5		10		No Odol
13 to 14	3.0	3.3	Dry, red, clayey SILT, with saprolite.	13		
14 to 15			bij, ied, eldjej bizi, wili suprome.			
15 to 16				14		No Odor
16 to 17	3.8	3.3	Same			
17 to 18				62		
18 to 19						
19 to 20				100		GP-13-20
20 to 21	3.8	3.8				
21 to 22			Dry, tan, clayey SILT, with saprolite.	47		
22 to 23						
23 to 24				38		No Odor
24 to 25	3.8	3.4	Same			
25 to 26				63		
26 to 27						
27 to 28			Dry, white saprolite.	72		No Odor
28 to 29	2.0	2.0				
29 to 30			Refusal @ 30'	16		

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- 2. Field Photo Ionization Detector (PID) and Flame Ionization Detector (FID) screening was performed using a Foxboro Total Vapor Analyzer (TVA).
- 3. All penetration, recovery, and depth measurements are expressed in units of feet; PID and FID measurements are expressed as parts per million relative to isobutylene and methane standards.
- 4. No groundwater was encountered. Boring backfilled with granular bentonite.
- 5. ND indicates No Detection.

(TIP: U-2525B)

DEPTH	PEN.	DEC	DESCRIPTION	PID	FID	Sample ID
		REC.	DESCRIPTION	Max	Max	Sample 1D
BORING GP						
0 to 1	3.8		6" topsoil			No Odor
1 to 2			Dry, red and brown, clayey SILT.	2		No Samples
2 to 3						
3 to 4				2		
4 to 5	3.8	3.8	Same			
5 to 6				1		
6 to 7						
7 to 8			Dry, red and brown, clayey SILT, with saprolite.	3		No Odor
8 to 9	3.8	3.7	Same			
9 to 10				2		
10 to 11						
11 to 12				2		No Odor
12 to 13	3.8	3.8	Same			
13 to 14				2		
14 to 15						
15 to 16				2		No Odor
16 to 17	3.8	3.8	Same			
17 to 18				3		
18 to 19						
19 to 20			Dry, brown, clayey SILT, with saprolite.	2		No Odor
20 to 21	3.8	3.8	Same			
21 to 22				3		
22 to 23						
23 to 24				3		No Odor
24 to 25	3.8	3.8	Same			
25 to 26				3		
26 to 27						
27 to 28			End of Boring 28'	2		No Odor

- 1. Geoprobe explorations were completed on 2/9/01 by Mike Tynan (Probe Technology, Inc. of Concord, NC) using a Geoprobe rig under the supervision of Corlista Urtz (URS). Sampling was performed using an acetate-lined four-foot long steel sampler.
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Appendix C
Laboratory Results

Appendix D
Calculations of Impacted Soil

Mabel L. Chilton Property

Soil Volume Calculation:

Using planimeter on concentration contour, see Figure 3:

1,835.2 sq. ft

Assuming an average soil column to be removed of 31.5 feet:

1,835.2 Sq. feet x 31.5 feet = 57,809 cu. feet

Assuming a conversion of 1.5 tons per in place cubic yard

57,809 cu. feet x 1 cu. yard/ 27 cu. feet x 1.5 tons per cu. yard = 3,212 tons.

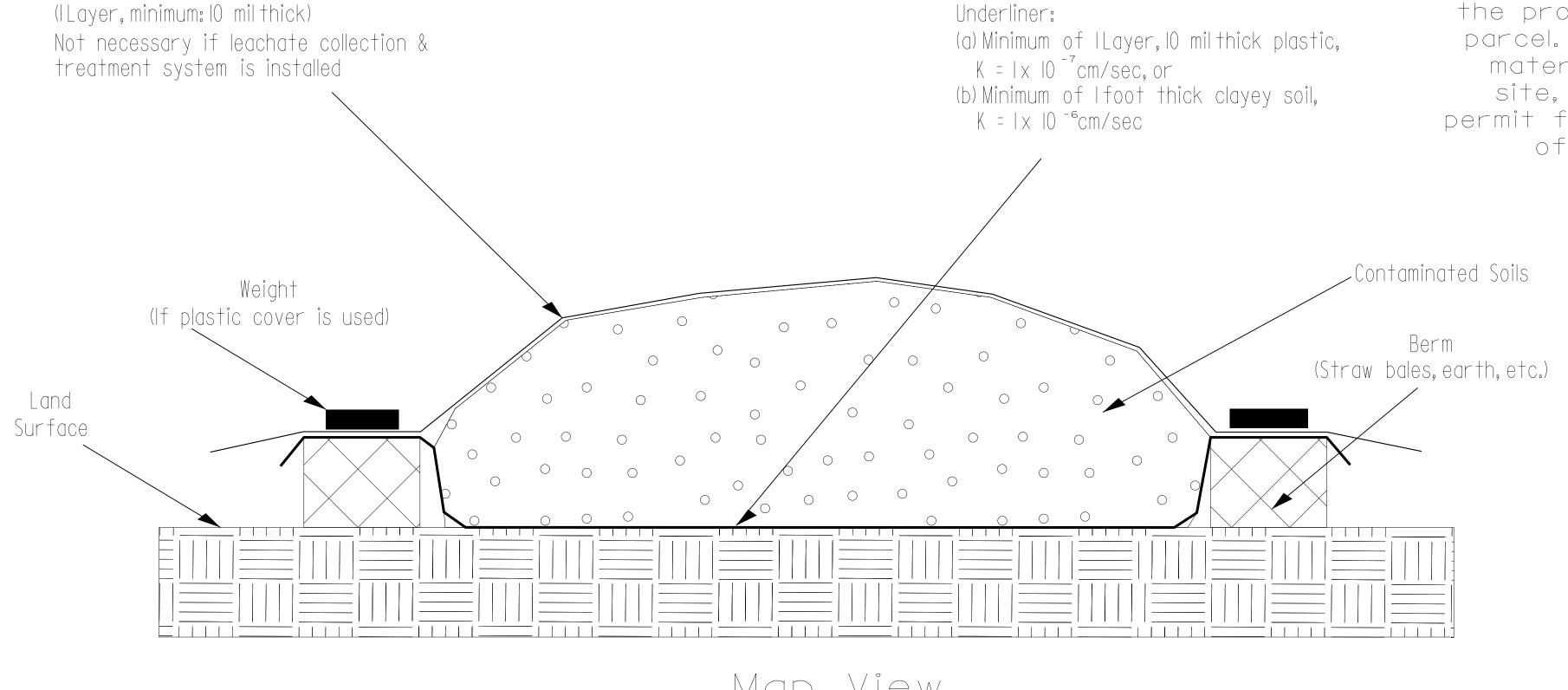
Calculated soil impact within the Mabel L. Chilton Property is 3,212 tons.

PROJECT REFI	EREN	CE NO.	SHEET
U-2525	C		2H-1
GEOENVIRONMENTAL ENGINEER		ENGIN	EER
SEAL 31499 SEAL 31499 OF ESS /ON AFTER OF ESS /ON AFTER SEAL 31499 OF ESS /ON AFTER SEAL 31499 A / 6 / 20 C96492AF5E824DF SIGNATURE DAI SIGNATURE DAI OF ESS /ON AFTER SIGNATURE DAI OF ESS /ON		SIGNATURE	DATE

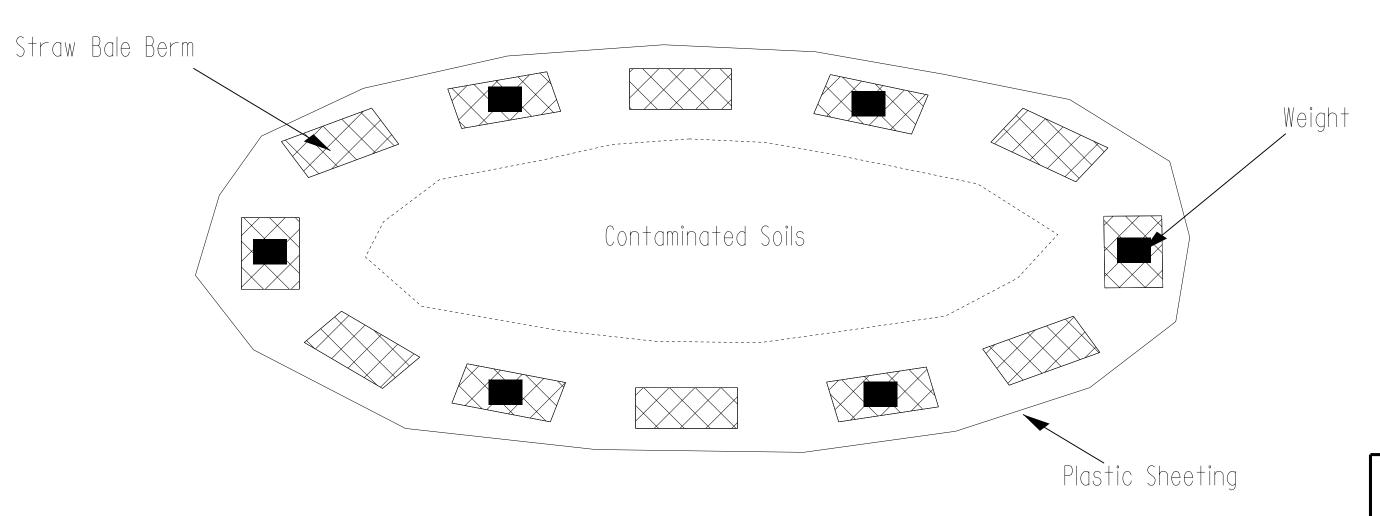
Detailfor Temporary Containment of Contaminated Soil

Cross-Section View

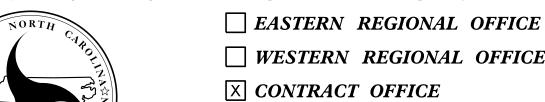
 $\mathbb{N} \cup \mathbb{T} \sqsubseteq \mathbb{I}$ The Contractor shall stockpile all contaminated soilexcavated from a property in a location within the property boundaries of the source parcel. If the volume of contaminated material exceeds available space on site, the Contractor shall obtain a permit from the NCDENR UST Section for off-site temporary storage.



Map View



GEOTECHNICAL ENGINEERING UNIT



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION **RALEIGH**

STOCKPILE CONTAINMENT DETAIL

REVISIONS									
BY	DATE	NO.	BY	DATE					
		3							
		4							

PREPARED BY: REVIEWED BY:

Top Plastic Cover Sheeting