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PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

CERTIFIED MAIL
91-7108-2133-3935-6637-7345

MR EDDIE JOHNSON
RT 2 US HWY 601 NORTH
PAGELAND SC 29728

NOV 0 6 2008

Re: Notice of Alleged Violation
Eddie's Pit Stop, Rt. 2, US Hwy 601 North, Pageland, SC
UST Permit # 18871; CA # 20135
Release #1 Reported August 29, 2002
Chesterfield County

Dear Mr. Johnson:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control directed you to complete a Tier I Assessment in September 2003, with the report due January 2004. To date the required report has not been received. In accordance with Section 280.65 of the South Carolina Underground Storage Tank Regulations, the assessment must be conducted as chemicals of concern are above the risk-based-screening levels.

Implementation of this scope of work should proceed upon receipt of this correspondence. **Please submit the report within 30 days from the date of this letter. Should you not submit the report on or before December 1, 2008, this office will be forced to initiate enforcement action.**

On all correspondence regarding this site, please reference UST Permit #18871. If you have any questions concerning this correspondence, please call Minda Johnson, project manager, at (803) 896-6395.

Sincerely,

Minda Johnson

Minda Johnson, Hydrogeologist
Assessment Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

cc: Technical File

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MR PETER REINHART
SC DEPARTMENT OF TRANSPORTATION
PO BOX 191
COLUMBIA SC 29202-0191

DEC 09 2008

Re: Tier I Directive
Eddies' Pit Stop-SCDOT, Rt. 2, US Hwy 601 North, Pageland, SC
UST Permit # 18871; CA # 20135; MWA#UMW-17651
Release reported August 29, 2002
Initial Groundwater Assessment Report received August 1, 2003
Chesterfield County

Dear Mr. Rhinehart:

This directive, previously sent to Eddie Johnson on August 7, 2007, is being re-issued. Please find attached a copy of the previously approved cost agreement and monitoring well approval.

The Underground Storage Tank (UST) Program has reviewed the referenced report submitted by ARM Environmental Services, Inc. The report indicates that concentrations of chemicals of concern (CoCs) are above risk-based screening levels (RBSLs). Therefore, implementation of the scope of work as outlined in the Tier I Assessment document will be necessary to characterize any possible risk to human health or to sensitive environmental receptors. The Tier I Assessment document may be obtained from our website at: http://www.scdhec.gov/EQC/admin/html/eqforms.html#UST.

Our records indicate that Owner/Operator Information form has not been filed for the facility. The enclosed form should be completed and returned to the Program to my attention within fifteen days of the date of this letter. A list of SCDHEC Certified-Contractors is enclosed for your convenience.

According to Program records, the release at the facility was reported to SCDHEC on August 29, 2002. In accordance with Section 44-2-40(D) of the SUPERB Act, SCDOT is responsible for the first $25,000 of site rehabilitation costs. To insure that expenditures made toward rehabilitation apply to the $25,000 deductible, the Program has pre-approved costs for implementing the Tier I and assigned Cost Agreement (CA) # 20135 for tracking. By law, the SUPERB Account cannot compensate any costs that are not pre-approved.

The Program has pre-approved a total of $10,880.00 for implementation of the Tier I Assessment. The total includes costs for completion of up to 75 feet of permanent monitoring well footage. Additional monitoring well footage can be billed at the SUPERB allowable rate of $38 per foot provided that the cost is pre-approved by the Program. **Please note that sampling for EDB and lead are now required as part of all initial assessment activities as directed in the revised SUPERB Account Allowable Costs document issued on October 10, 2003.** The additional sampling costs are reflected in the revised Tier I Assessment rate. Also, if any drinking water wells are located within 500 feet of the UST area, a water sample shall be obtained from the well(s) and analyzed for the appropriate parameters. Upon receipt of a report of findings, and a completed Tier I invoice with all necessary supporting documentation, up to $11,230.00 will be applied towards the $25,000 deductible. The report and invoice should be submitted to the Program within 90 days of

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the date of this correspondence. Please be certain that Tier I Assessment Report is submitted in the format that correspondence to the SCDHEC Tier I Guidance document.

Please note that in accordance with R.61-92, Subpart H, Section 280.114, you are required to notify the Program by certified mail within ten (10) days of commencing a voluntary or involuntary proceeding in bankruptcy. State law also requires that an owner/operator or guarantor that files for bankruptcy protection must immediately submit appropriate forms documenting that entity's ability to demonstrate financial responsibility.

Implementation of the Tier I Assessment may proceed immediately upon receipt of this correspondence. Approval to install three permanent monitoring wells is enclosed. Please note that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. Also note that only EPA Method 8260B will be accepted for analysis of volatile organic hydrocarbons. Any site rehabilitation activity associated with the UST release must be performed by a SCDHEC-certified site rehabilitation contractor as required by R.61-98.

The Department grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If the COC concentrations based on laboratory analysis are below Risk Based Screening Levels (RBSLs), please contact the project manager for approval to dispose of soil and/or groundwater on site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

On all correspondence concerning this site, please reference UST Permit # 18871. If there are any questions concerning this project, please contact me at (803) 896-6395. I can also be reached by email at johnsoms@dhec.sc.gov or by fax at (803) 896-6245.

Sincerely,

Minda Johnson

Minda Johnson, Hydrogeologist
Assessment Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

enc: Approved cost agreement
Monitoring well approval
Owner/Operator Information Sheet

cc: Technical file (w/MWA)

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PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

Monitoring Well Approval

Approval is hereby granted to: **SCDOT**
(On behalf of): **Eddie Johnson**
Facility: **Eddie's Pit Stop**
Rt. 2, US Hwy 601 N., Pageland, SC
UST Permit Number: **18871**
County: **Chesterfield**

This approval is for the installation of three shallow permanent groundwater monitoring wells. The monitoring wells are to be installed in the approved locations. Monitoring wells are to be installed following the South Carolina Well Standards, R.61-71, and the applicable guidance documents. Please provide notification to the Project Manager a minimum of forty-eight hours prior to well installation.

Please note that R.61-71 requires the following:

1. All wells shall be drilled, constructed, and abandoned by a South Carolina certified well driller per R.61-71.D.1.
2. All monitoring wells shall be labeled as required by R.61-71.H.2.c.
3. A Water Well Record Form or other form provided or approved by the Department shall be completed and submitted to the Department within 30 days after well completion or abandonment unless another schedule has been approved by the Department. The form should contain the "as-built" construction details and all other information required by R.61-71.H.1.f
4. All analytical data and water levels obtained from each monitoring well shall be submitted to the Department within 30 days of receipt of laboratory results unless another schedule has been approved by the Department as required by R.61-71.H.1.d.
5. If any of the information provided to the Department changes, notification to Minda Johnson (tel: (803) 896-6395 or e-mail: johnsoms@scdhec.sc.gov) shall be provided a minimum of twenty-four (24) hours prior to well construction as required by R.61-71.H.1.a.
6. All temporary monitoring wells shall be abandoned within 5 days of borehole completion using appropriate methods as required by R.61-71.H.4.c. All other wells shall be properly developed per R.61-71.H.2.d.
7. Departmental approval is required prior to abandonment of all monitoring wells as required by R.61-71.H.1.a.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and R.61-71 of the South Carolina Well Standards and Regulations, dated April 26, 2002. A copy of this approval should be on the site during well installation.

Date of Issuance: September 16, 2003

Approval #: UMW-17651

Minda Johnson, Hydrogeologist
Assessment Section
Division of Assessment and Corrective Action
Bureau of Land and Waste Management

Munda

UNDERGROUND STORAGE TANK (UST) OWNER/OPERATOR LEAD INFORMATION SHEET

1. CONTRACTOR OF CHOICE

As the UST Owner/Operator of the UST Permit #18871 I would like to use the contractor or person(s)* listed below and request that they represent me for:

☐ IGWA
☒ All future assessment scopes. **

Name of Contractor/Person(s) TERRACON Mike Hudgins
Address 521 Clemson Road
Columbia, S.C 29229
Telephone Number 803 - 741-9000

Note: After September 20, 1997, rehabilitation activities must be performed by a SC Certified Site Rehabilitation Contractor.

*indicate if the person listed is your own employee

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UNDERGROUND STORAGE TANK PROGRAM

** if you would like the contractor to perform all future assessment activities at this and/or other UST sites that have confirmed releases, please provide a list of all sites on your letterhead and provide the information requested in items 2 and 3 below with this contact letter.

2. FINANCIAL OR FAMILIAL RELATIONSHIP

Does a financial or familial relationship, as defined below, exist between you and the contractor/person that you listed above? ____ Yes ✓ No (please initial)

Financial Relationship: A connection or association through a material interest of sources of income which exceed five percent of annual gross income from a business entity.

Familial Relationship: A connection or association by family or relatives, in which a family member or relative has a material interest. Family or relatives include: father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, grandchild, great grandchild, step grandparent, step great grandparent, step grandchild, step great grandchild, or fiancée.

3. PAYMENT

The first $25,000.00 in eligible site rehabilitation costs will be applied against the applicable SUPERB deductible, upon submittal of the canceled check (front and back) or a notarized statement from the contractor verifying payment.

For eligible costs exceeding the $25,000.00 deductible, you can pay the contractor and, upon the submittal of the canceled check (front and back) or a notarized statement from the contractor verifying payment, be compensated from the SUPERB Account, or have payment issued directly from the SUPERB Account to the contractor. (check one)

____ For eligible costs exceeding the deductible, I request that payment be made to me after I have paid the contractor.

✓ For eligible costs exceeding the deductible, I request that payment be made directly to the contractor.

(Note: all costs must receive prior financial approval from the Department regardless of payment option.)

Underground Storage Tank Owner/Operator Signature Peter J. Rubin

Date 2/10/09

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FAX

For: Minda Johnson

Fax number: 896-6245

From: PETER REINHART

Fax number:

Date: 2.10.09

Regarding: UST Permit #1887

Number of pages: 2

Comments:

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UNDERGROUND STORAGE
TANK PROGRAM

LETTER OF TRANSMITTAL

Terracon

521 Clemson Rd.
Columbia, SC 29229
803-741-9000 / 803-741-9900 fax

TO Ms. Minda Johnson
SCDOT
P.O. Box 191.
Columbia, SC 29201

DATE 9/3/09	JOB NO. 73098106
RE: Eddie's Pit Stop, Pageland SC	
UST Permit # 18871	

WE ARE SENDING YOU **X** Attached ☐ Under separate cover via _____ the following items:

COPIES	DATE	NO.	DESCRIPTION
1	9/2/09		Tier I Report (CD)
1	9/2/09		Tier I Invoice

THESE ARE TRANSMITTED as checked below:

☐ For approval
☐ For your use
☐ As requested
☐ For review and comment
☐ FOR BIDS DUE _____ 20___

☐ Approved as submitted
☐ Approved as noted
☐ Returned for corrections

☐ Resubmit ___ copies for approval
☐ Submit ___ copies for distribution
☐ Return ___ corrected prints

REMARKS:

Please find enclosed the Tier Assessment report submitted to SCDHEC, and the associated invoice.

COPY TO: _____

SIGNED: **Mike Hudgins**

If enclosures are not as noted, kindly notify us at once.

UST Docket 5T

TIER I ASSESSMENT REPORT
EDDIE'S PIT STOP
Rt. 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA

UST Permit # 18871

Prepared for:

South Carolina Department of Transportation
PO Box 191
Columbia, South Carolina 29202

Prepared by:

Terracon Consultants, Inc.
521 Clemson Road
Columbia, South Carolina 29229

Terracon Project No. 73098106

September 1, 2009

September 1, 2009

Terracon

Consulting Engineers & Scientists

Terracon Consultants, Inc.
521 Clemson Road
Columbia, SC 29229
Phone (803) 741-9000
Fax (803) 741-9900
www.terracon.com

Ms. Minda Johnson
Underground Storage Tank Program
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1708

Re: **Tier 1 Assessment Report**
Eddie's Pit Stop
Rt. 2, US Hwy 601
Pageland, South Carolina
UST Permit # 18871; CA # 20135; MWA #UMW-17651
Terracon Project No. 73098106

Dear Ms. Johnson:

On behalf of the South Carolina Department of Transportation, (SCDOT), **Terracon Consultants, Inc.** (Terracon), is pleased to submit the Tier 1 Assessment Report for the Eddie's Pit Stop facility in Pageland, Chesterfield County, South Carolina. If you have any questions regarding the contents of this report, or if there is a need for further information, please contact us.

Respectfully submitted,

Terracon Consultants, Inc.

Norman E. Partin, Jr., CHMM
Project Manager II

P. Michael Hudgins, P.G.
Senior Hydrogeologist
SC Registration No. 1137

Enclosures

CC: Mr. Peter Reinhart / SCDOT

TIER I ASSESSMENT REPORT OF FINDINGS

I INTRODUCTION

A. Owner/Operator Information

Owner Name:	South Carolina Department of Transportation
Address:	PO Box 191, Columbia, SC, 29202-0191
Telephone Number:	(803) 737-1110

B. Contractor Information

Name:	Terracon Consultants, Inc.
SCDHEC Certification #:	246
Address:	521 Clemson Road, Columbia, SC 29229
Telephone Number:	(803) 741-9000

C. Facility Information

Facility Name:	Eddie's Pit Stop
Address:	Rt. 2, US Hwy 601, Pageland, South Carolina
UST Permit No.:	18871

The site has been defined as the area of the former USTs within the SCDOT right-of-way. The right-of-way and US Highway 601 were expanded in 2001 as part of road improvements in Chesterfield County. Property access to the reminder of the Eddie's Pit Stop property was not granted during this assessment.

Description of Adjacent Land Use (Commercial, residential, rural, etc.)

The site is bound to the east by US Highway 601 and the Carolina Country Convenience Store (UST 02261); to the south by agricultural land; to the west by the remainder of the former Eddie's Pit Stop property; and to the north by residential land. A portion of the Chesterfield County tax map is included in Appendix G with a table of property owners. A topographic map showing the site location is presented as Figure 1. A surrounding land use map is included as Figure 2.

Predicted Future Land Use (site and adjacent area):

Based on current land use at the site and of the surrounding areas, the site and adjacent properties will likely continue to be used for commercial and residential purposes. .

D. Facility History

Date Release # 1 Reported to SCDHEC:	August 29, 2002
Estimated Quantity of Product Released:	Unknown
Cause of Release:	Unknown
SCRBCA Class Code:	CLASS2BB
Cleanup Complete Date:	NA

UST #	Product	Capacity (gallons)	Currently in use (Yes or No)	If not in use, Date Removed	Method of Abandonment
1	Gasoline	750	No	8/19/2002	Removed from Ground
2	Gasoline	2,000	No	8/19/2002	Removed from Ground

II. SITE CHARACTERISTICS

A. Site Geography

Topography of the site and surrounding area (slope, vegetation, bodies of water, major land features, etc.).

According to the Pageland, South Carolina 7.5-minute topographic quadrangle, the Eddie's Pit Stop site and surrounding area slopes gently to the southwest. The closest surface water body is a pond and a tributary to Hills Creek is located approximately 900 feet south of the UST system. In the close vicinity of the site, land cover is predominantly agricultural and rural residential.

Mean Elevation of Site: Approximately 553 feet mean sea level (msl)

B. Exposure Analysis

Potential receptors and preferential pathways within a 1000-foot radius of the site.

Two water supply wells were observed within 1,000 feet of the site, one on the Eddie's site and the other on the north adjacent property. The on-site water supply well was sampled. The second well on the north adjacent residential property was inaccessible and therefore not sampled.

C. Utilities Survey

Utilities on site, and adjacent to the site within a 250-foot radius, that could serve as exposure points or as preferential pathways.

Utility	On-site or Distance/Direction from site	Depth to Utility
Water	A private water supply well is located on the Eddie's site approximately 110 feet northwest of the former UST basin.	Unknown
Sewer	Storm water sewer inlet and line runs along the southwest side of Hwy 601 adjacent to wells MW-1 and MW-4 (and former UST basin).	3 feet

D. Site Geology

Brief description of the regional geology and hydrogeology:

The site is located within the Carolina Slate Belt terrain of the Lower Piedmont physiographic province. The Carolina Slate Belt province consists of weathered low grade metamorphic rocks.

Ground water within the shallow sediments of the Lower Piedmont provinces typically occurs under water table (unconfined) and semi-confined conditions. Ground water flow directions are a subtle reflection of the local topography. Local recharge of the shallow aquifer occurs by the direct infiltration by precipitation. The ground water discharges into streams and rivers.

Brief description of the site-specific geology and stratigraphy:

Soils encountered in undisturbed portions of the site consist of unconsolidated, hard clays and silts, typically colored brown, yellow, and/or orange. The geologist logs describing the soils encountered are included in Appendix A.

Ground water at this site occurs within the shallow aquifer under unconfined conditions at depths ranging from approximately 17-20 feet below ground surface across the study area. Figure 5 indicates the ground water flows to the west-southwest across the site. The depth-to-water measurement from the initial groundwater assessment well (IGWA) MW-1 indicated water at 19.3 feet below ground surface. Saturated soils outside of the UST basin were first encountered at approximately 41 feet depth in boring MW-2. However, water levels rose to approximately 17.5 feet.

E. Soil Boring Data

Drilling Date: May 7 and 8, 2009

Justification for the location of the soil borings:

SB-1 Adjacent to the former dispenser island
SB-2 Adjacent to the former UST Basin

The locations of the soil borings are shown on Figure 3.

Standard Operating Procedure for Field Screening:

Soil samples were placed in sealed plastic bags to allow potential organic vapors to accumulate within the headspace of the bags. A Foxboro Century 128 Flame Ionization Detector (FID) organic vapor analyzer (OVA) was used to measure VOC vapors in the headspace of the bag by inserting the OVA probe through the seal of the bag to obtain the readings. The organic vapor concentrations were recorded directly from the FID OVA meter to a field log and are included on the geologist logs in Appendix A.

Soil analytical data and appropriate RBSL's for Clay-rich Soil (ug/Kg)

CoC	RBSL (<10 ft)	SB-1 (6-8 ft)	SB-2/ MW-4 (8-10 ft)	MW-2 (25 ft)	MW-3 (0-5 ft)
Benzene	*3*	1.63J	<0.106	<0.096	<0.101
Toluene	*627*	<0.146	<0.154	<0.14	<0.147
Ethylbenzene	*1,551*	9.18	<0.159	2.12J	<0.152
Xylenes	*13,010*	6.45J	<0.53	15.3	<0.505
MTBE	*NE*	<0.122	<0.129	<0.116	<0.123
Naphthalene 8260	*47*	5.94	<0.637	12.6	<0.608
Naphthalene 8270	*47*	<101	<98.8	<95.1	<100
Benzo(a)-anthracene	*66*	<5.95	<5.48	<5.62	<5.92
Benzo(b)-flouranthene	*66*	<27.3	<26.8	<25.8	<27.1
Benzo(k)-flouranthene	*66*	<74.7	<73.4	<70.6	<74.4
Chrysene	*66*	<10.3	<10.1	<9.73	<10.2
Dibenz(a,h)-anthracene	*66*	<22.8	<22.4	<21.5	<22.7
Fluoranthene	*NE*	<6.97	<6.85	<6.59	7.52J
Phenanthrene	*NE*	<9.49	<9.32	<8.97	<9.45
Pyrene	*NE*	<11.6	<11.4	<11.0	16.1J
TPH - DRO	*NE*	18,000	NA	NA	NA
TOC (mg/kg)	*NE*	NA	NA	NA	935

Notes: COC = Contaminant of Concern
N/A = Not Analyzed
< 0.003 = concentration is lower than the laboratory method detection limit
RBSL = Risk-Based Screening level established in South *Carolina Risk-Based Corrective Action for Petroleum Releases* manual
NE = not established
TPH - DRO = Total Petroleum Hydrocarbons – Diesel Range Organics (EPA 8015/3550)
TOC = Total Organic Carbon (SW-846 9060M)

Horizontal and vertical extent of COC in the soil:

Contaminants of Concern (COCs) were not detected above regulated levels in the samples collected. Although none of the typical COCs were detected in the soil sample from boring SB-1, the TPH-DRO concentration was 18,000 ug/kg. OVA concentrations in excess of 100 parts per million (ppm) in soil boring SB-1 were recorded.

The soil contamination observed in the borings appears to be sourced from the fill material in the former UST basin. The estimated extent of hydrocarbon impact to soil is indicated on the Soil COC Map (Figure 4).

F. Chemicals of Concern - Ground Water

Well installation information

MW #	Installation Date	Development Date	Sampling Date
MW-2	5/08/09	5/08/09	5/11/09
MW-3	5/08/09	5/08/09	5/11/09
MW-4	5/07/09	5/08/09	5/11/09

Summary of monitoring well and ground-water data

MW #	TOC Elevation (ft)	Screened Interval (ft)	Depth to Water (ft)	Water Table Elevation (ft)
MW-1	298.85	47	19.35	279.50
MW-2	298.98	28-43	17.25	281.73
MW-3	298.36	30-45	19.20	279.16
MW-4	299.29	34-49	20.16	279.13

Dissolved oxygen (mg/L)

Monitoring Well #	MW-1	MW-2	MW-3	MW-4
Dissolved Oxygen	3.17	6.65	4.11	6.58

Ground water analytical data

CoC	RBSL	MW-1	MW-2	MW-3	MW-4	PW-1
Free Product Thickness, ft.	--	None	None	None	None	None
Benzene, ug/L	*5*	**3250**	**2290**	**290**	**75.8**	<0.075
Toluene, ug/L	*1,000*	265	73.6	63.5	<0.082	<0.082
Ethylbenzene, ug/L	*700*	**1580**	699	154	14	<0.052
Xylenes, ug/L	*10,000*	5160	2140	217	200	<0.334
MTBE, ug/L	*40*	<3.89	<1.94	<0.194	1.16	<0.097
Naphthalene 8260, ug/L	*25*	**841**	**186**	**39.6**	16.7	4.11J
EDB, ug/L	*0.05*	**1.66**	**0.385**	<0.0035	0.042	NA
1,2-DCA	*0.05*	<2.56	**105**	**5.15J**	<0.064	NA
Acenaphthene, ug/L	*NE*	<0.147	<0.143	<0.143	<0.144	NA
Acenaphthylene, ug/L	*NE*	<0.132	<0.128	<0.128	<0.129	NA
Anthracene, ug/L	*NE*	<0.142	<0.138	<0.138	<0.139	NA
Benzo(a)anthracene, ug/L	*10*	<0.366	<0.354	<0.354	<0.358	NA
Benzo(a)pyrene, ug/L	*NE*	<0.373	<0.362	<0.362	<0.366	NA
Benzo(b)flouranthene, ug/L	*10*	<0.227	<0.220	<0.220	<0.222	NA
Benzo(g,h,i)perylene, ug/L	*NE*	<0.169	<0.164	<0.164	<0.166	NA
Benzo(k)flouranthene, ug/L	*10*	<0.132	<0.128	<0.128	<0.129	NA
Chrysene, ug/L	*10*	<0.434	<0.421	<0.421	<0.425	NA
Dibenz(a,h)anthracene, ug/L	*10*	<0.132	<0.128	<0.128	<0.129	NA
Fluoranthene, ug/L	*NE*	<0.132	<0.128	<0.128	<0.129	NA
Fluorene, ug/L	*NE*	1.18J	<0.128	<0.128	<0.129	NA
Indeno(1,2,3-c,d)pyrene, ug/L	*NE*	<0.132	<0.128	<0.128	<0.129	NA
Phenanthrene, ug/L	*NE*	0.807J	0.128	<0.128	<0.129	NA
Pyrene, ug/L	*NE*	0.481J	<0.182	<0.182	<0.184	NA
Methane, ug/L	*NE*	23.7	2.67J	20.1	2.33J	NA
Ferrous Iron, mg/L	*NE*	1.16	0.195	0.451	0.086	NA
Lead, mg/L	*0.015*	0.012B	0.0033B	**0.027**	0.014B	NA
Nitrate, mg/L	--	<0.001	0.058	0.021	0.008B	NA
Sulfate, mg/L	--	<0.41	2.1B	67.1	<0.41	NA

Notes: < 1.0 = concentration is lower than the laboratory method detection limit
NE = RBSL is not established in South *Carolina Risk-Based Corrective Action for Petroleum Releases* manual
Results reported in bold-face type indicate concentrations exceed the RBSL
J = Estimated value above the laboratory method detection limit and below the reporting limit.

Horizontal and vertical extent of COC in the ground water:

Ground water samples from monitoring wells MW-1, MW-2, MW-3, and MW-4 exceeded the RBSLs for benzene. The RBSL for ethylbenzene was exceeded in samples collected from MW-1. The naphthalene RBSL was exceeded in wells MW-1, MW-2, and MW-3. The

ethylene dibromide RBSL was exceeded in wells MW-1 and MW-2. Total lead exceeded the RBSL in the sample from MW-3. The ground water contamination appears to be sourced from the abandoned UST basin or dispenser island system. The estimated extent of hydrocarbon impact is unknown and extends beyond the monitoring well network in all directions. Additional assessment would be required to determine whether contamination has dispersed in the direction of ground water flow to the west. The estimated ground water flow direction is indicated on the Ground Water COC Map (Figure 5).

Natural attenuation indicator parameters (methane, nitrates, sulfates, and ferrous iron) were also analyzed as part of this assessment. In general, methane concentrations were greater and nutrient concentrations were below detection limits in the wells with RBSL exceedances. This data indicates that active natural attenuation or bioremediation of the contaminants is occurring at the site.

Naphthalene was detected at a concentration of 4.1 ug/L in the water supply well on the Eddie's site. The RBSL for naphthalene is 25 ug/L.

G. Aquifer Characteristics

Hydraulic Conductivity: MW-3; 0.225 ft./day
MW-4; 0.206 ft./day

Hydraulic Gradient: 0.05 (assumed)

Porosity: (assumed effective porosity) 0.30

Estimated Seepage Velocity: 13 ft/year

The slug test form and supporting data used to derive the aquifer characteristics and hydrologic parameters are included in Appendix D.

Grain Size Analysis:

Sample Depth:	49 feet
% Sand:	37
% Silt:	34
% Clay:	29
Description:	Sandy silt with clay

The grain-size distribution test report is included with the slug test data in Appendix D.

III. TIER I EVALUATION

A. Current Land Use - Potential receptors or human exposure pathways (e.g. basements, contaminated soils from UST closures, etc.) within a 1000-foot radius for current land use.

Media (for exposure)	Exposure Route	Pathway Selected for Evaluation? (Yes or No)	Exposure Point or Reason for Non-Selection	Data Requirements (IF pathway selected)
Air	Inhalation	Yes [No]	No exposure pathway due to asphalt barrier between source and atmosphere.	
	Explosion Hazard	Yes [No]		
Ground-Water	Ingestion	[Yes] No	Two water supply wells within 1,000 feet of site	Water Supply Well Samples
	Dermal Contact	[Yes] No		
	Inhalation	[Yes] No		
Surface Water	Ingestion	[Yes] No	Hills Creek is located within 1,000 feet of the former UST system	Surface water samples
	Dermal Contact	[Yes] No		
	Inhalation	[Yes] No		
Surficial Soil	Ingestion	Yes [No]	Site is paved. Surficial soils are not exposed.	
	Dermal Contact	Yes [No]		
	Inhalation	Yes [No]		
	Leaching to Ground-Water	Yes [No]		
Subsurface Soil	Ingestion	Yes [No]	Ingestion, dermal contact, and inhalation pathways are blocked by asphalt land cover.	
	Dermal Contact	Yes [No]		
	Inhalation	Yes [No]		
	Leaching to Ground-Water	[Yes] No	Infiltration via cracked asphalt and migration of surface water to the water table could cause leaching of COCs.	Ground water samples

B. <u>Future Land Use</u> - Potential receptors or human exposure pathways (e.g. basements, contaminated soils from UST closures, etc.) within a 1000-foot radius for projected future land use.

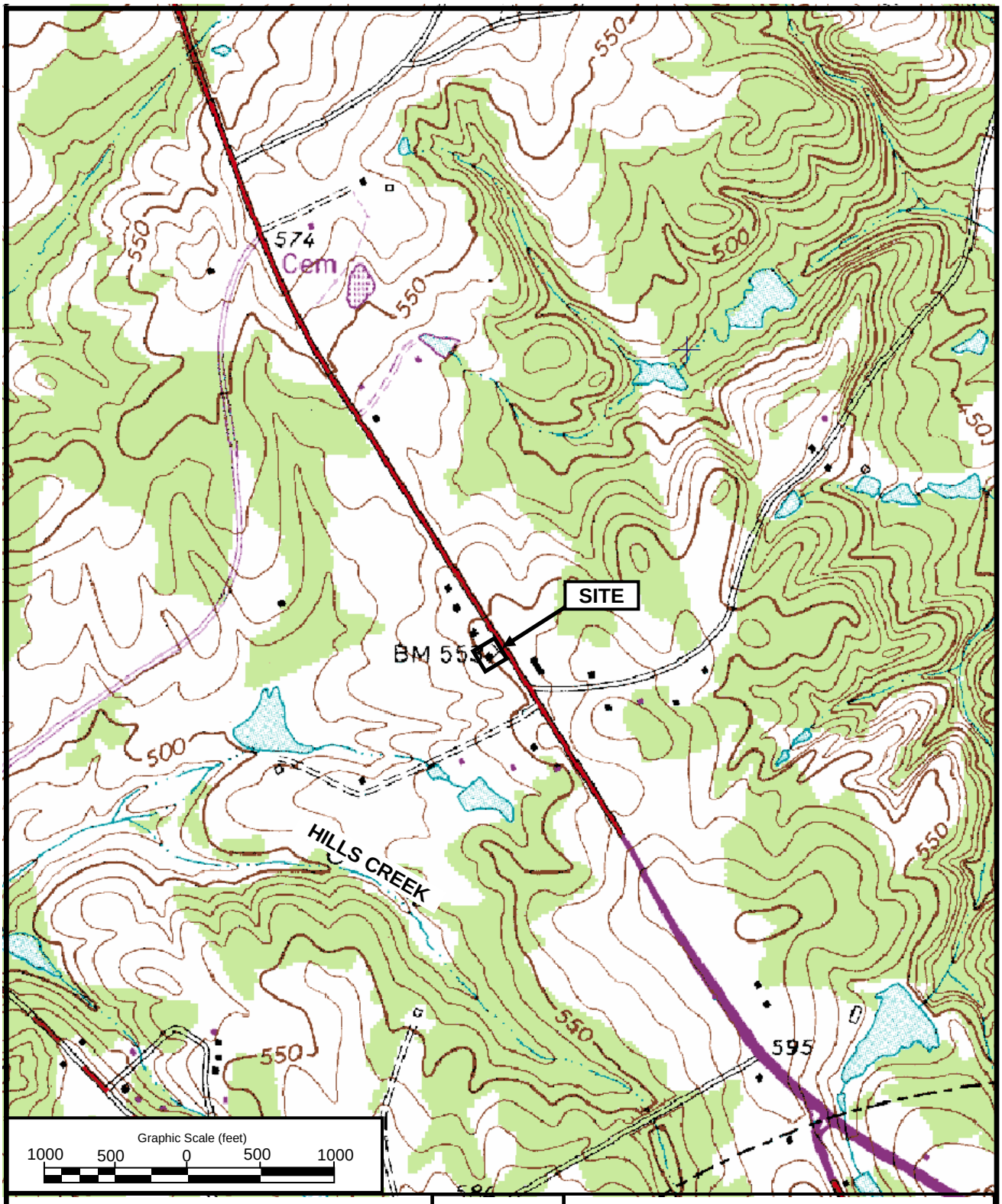
Media (for exposure)	Exposure Route	Pathway Selected for Evaluation? (Yes or No)	Exposure Point or Reason for Non-Selection	Data Requirements (IF pathway selected)
Air	Inhalation	Yes [No]	No exposure pathway due to asphalt barrier between source and atmosphere. No plans to remove current ground cover.	
	Explosion Hazard	Yes [No]		
Ground-Water	Ingestion	[Yes] No	Two Water Supply wells within 1,000 feet.	Ground water samples
	Dermal Contact	[Yes] No		
	Inhalation	[Yes] No		
Surface Water	Ingestion	[Yes] No	Crane Creek is located within 1,000 feet of the former UST system.	Surface water samples
	Dermal Contact	[Yes] No		
	Inhalation	[Yes] No		
Surficial Soil	Ingestion	Yes [No]	Site is paved. Surficial soils are not exposed. No current plans to remove current ground cover.	
	Dermal Contact	Yes [No]		
	Inhalation	Yes [No]		
	Leaching to Ground-Water	Yes [No]		
Subsurface Soil	Ingestion	Yes [No]	Ingestion, dermal contact, and inhalation pathways are blocked by asphalt land cover. No current plans to excavate to subsurface.	
	Dermal Contact	Yes [No]		
	Inhalation	Yes [No]		
	Leaching to Ground-Water	[Yes] No	Infiltration via cracked asphalt and migration of surface water to the water table could cause leaching of COCs.	Ground water samples

Recommendations for further action:

Inspection of the field and analytical data collected indicates soil and groundwater have been impacted above RBSLs, sourced from the underground storage tanks system. Free product was not detected in any of the soil borings or monitoring wells installed. RBSLs were exceeded in ground water samples; however, the contaminant plume does not appear to extend offsite. Contamination in the upgradient well, MW-2 indicates that there may be contribution from an upgradient source (Carolinas Country Convenience UST #02261). Based on this data, and the reported ground water flow direction, further plume delineation is recommended.

Two water supply wells, one on site, were identified as potential receptors. The on-site well was sampled and indicated a low concentration of naphthalene. The water supply well on the adjacent property was inaccessible at the time of this assessment but should be sampled in the future. Should additional sampling indicate decreasing or stable contaminant concentrations, this site should be considered for a “conditional no further action’ (CNFA) classification.

FIGURES



USGS TOPOGRAPHIC QUADRANGLE MAP
PAGELAND, SOUTH CAROLINA

DATE: 1993
SCALE: 1 INCH = 1000 FEET
PROJECT NO. 73098106

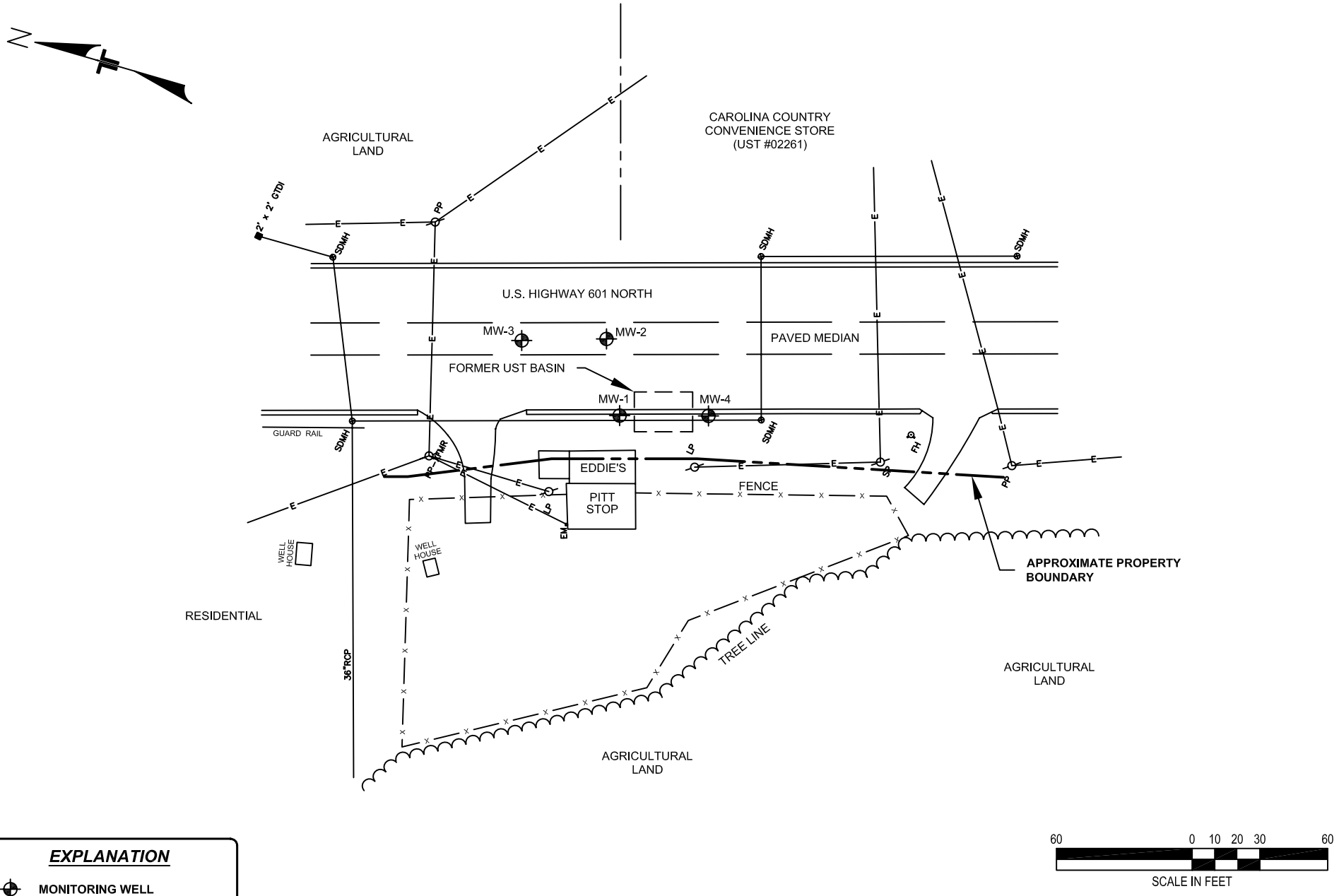
N

Terracon

SITE LOCATION MAP

EDDIE'S PITT STOP
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA

FIGURE 1: TOPOGRAPHIC MAP



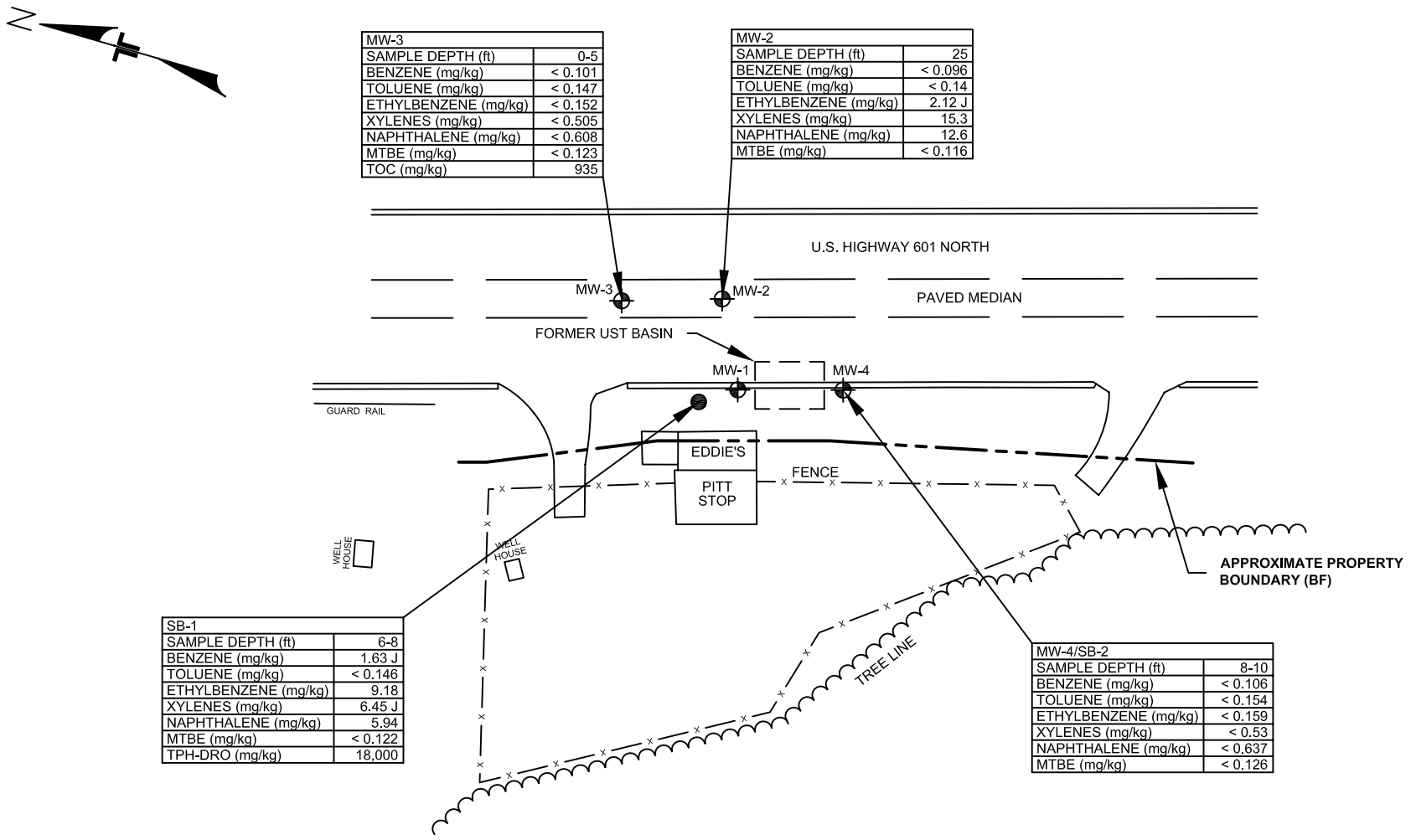
Project Mngr:	RWN
Drawn By:	PTK
Checked By:	RWN
Approved By:	PMH
Project No.	73098106
Scale:	AS SHOWN
File No.	73098106
Date:	AUGUST 2009

Terracon
Consulting Engineers and Scientists
521 CLEMSON ROAD COLUMBIA, SC 29229
PH. (803) 741-9000 FAX. (803) 741-9900

SITE MAP

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA
UST PERMIT # 18871

FIG. No. 2



EXPLANATION

MONITORING WELL

SOIL BORING

mg/kg **MILLIGRAMS PER KILOGRAM**

60 0 10 20 30 60

SCALE IN FEET

Project Mngr:	RWN
Drawn By:	PTK
Checked By:	RWN
Approved By:	PMH

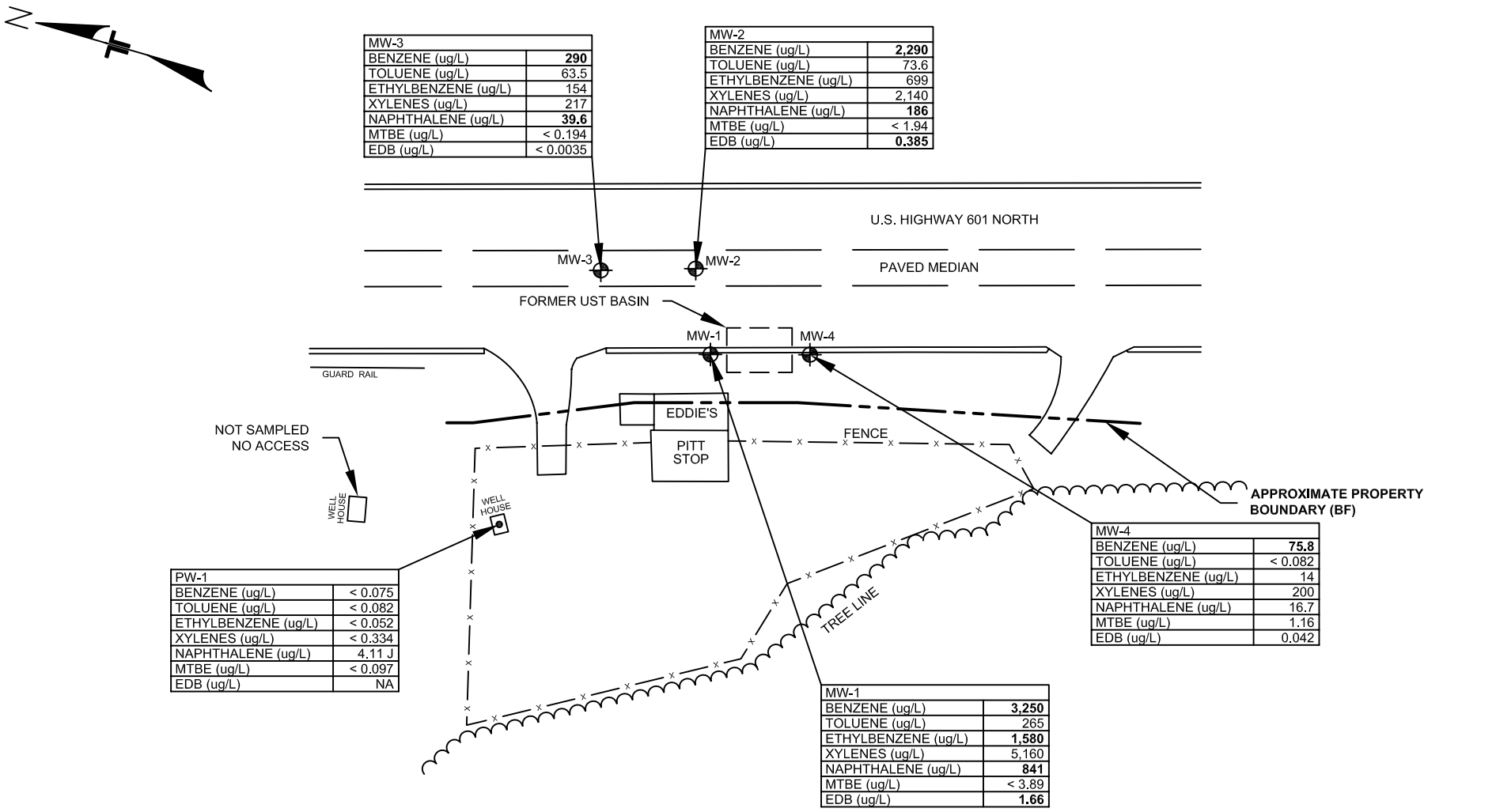
Project No.	73098106
Scale:	AS SHOWN
File No.	73098106
Date:	AUGUST 2009

Terracon
Consulting Engineers and Scientists
521 CLEMSON ROAD COLUMBIA, SC 29229
PH. (803) 741-9000 FAX. (803) 741-9900

SOIL COC CONCENTRATION MAP

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA
UST PERMIT # 18871

FIG. No. 3



Project Mngr:	RWN
Drawn By:	PTK
Checked By:	RWN
Approved By:	PMH

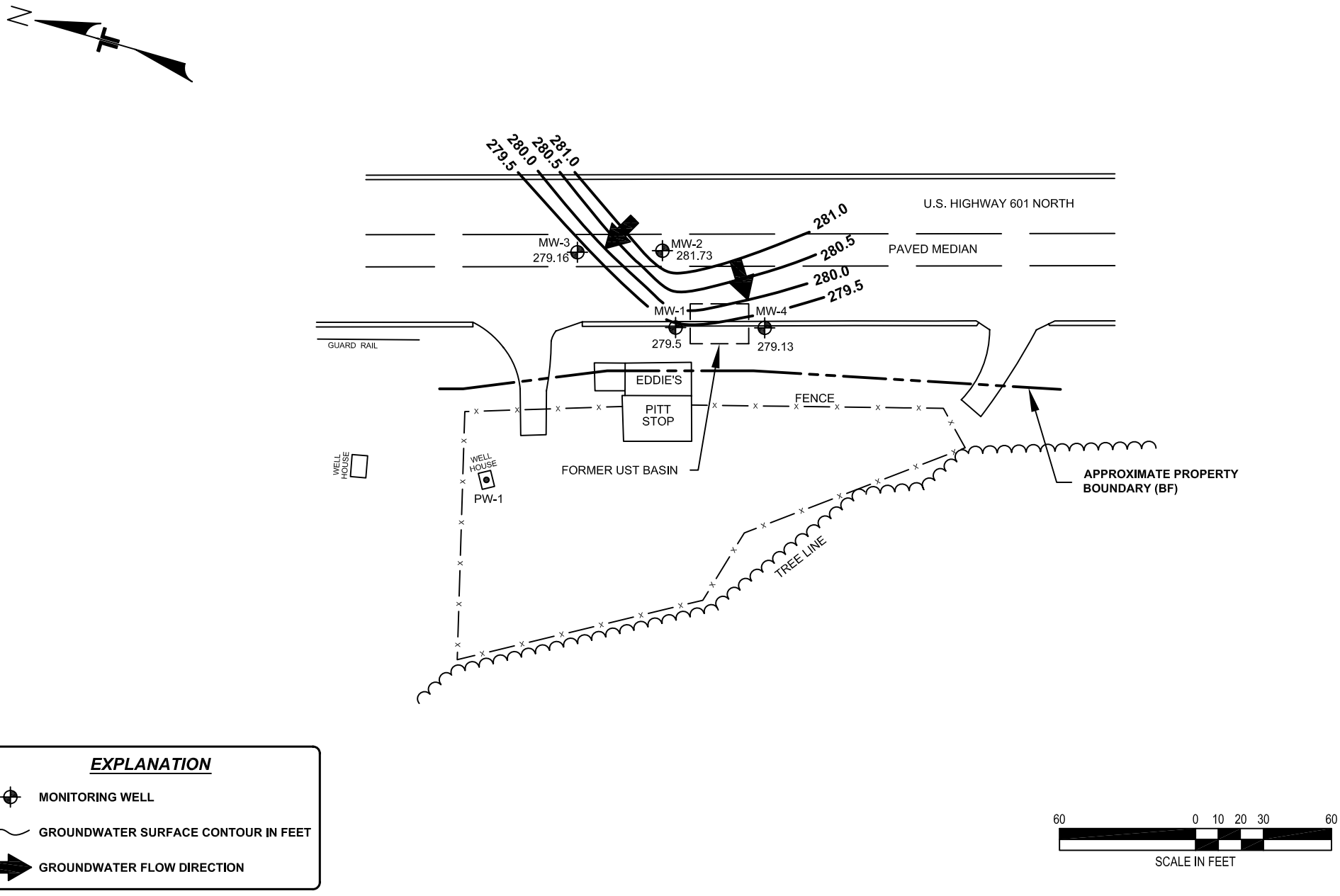
Project No.	73098106
Scale:	AS SHOWN
File No.	73098106
Date:	AUGUST 2009

Terracon
Consulting Engineers and Scientists
521 CLEMSON ROAD COLUMBIA, SC 29229
PH. (803) 741-9000 FAX. (803) 741-9900

GROUND WATER COC CONCENTRATION MAP

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA
UST PERMIT # 18871

FIG. No. 4



Project Mngr:	RWN
Drawn By:	PTK
Checked By:	RWN
Approved By:	PMH

Project No.	73098106
Scale:	AS SHOWN
File No.	73098106
Date:	AUGUST 2009

Terracon
Consulting Engineers and Scientists
521 CLEMSON ROAD COLUMBIA, SC 29229
PH. (803) 741-9000 FAX. (803) 741-9900

POTENTIOMETRIC SURFACE MAP

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA
UST PERMIT # 18871

FIG. No. 5

APPENDICES

A	Geologist Logs and Water Well Records
B	Ground Water Sampling Logs
C	Laboratory Data
D	Aquifer Calculations
E	Waste Disposal Manifests
F	Tax Map with Property Owners
G	Comprehensive Site Survey

APPENDIX A

Geologist Logs and Water Well Records

GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **SB-1**
Client:		***Well Construction Data***	
Date Started: 5/7/09	Date Completed: 5/7/09		
Logged By: W. Walker	Coordinates:		
Drilling Co.: Land Probe	Driller: Tom Coon		
Method: Split Spoon	Equipment: CME-750		
Boring Depth (ft.): 10.0	TOC Elevation:		
Boring Diameter (in): 2	GW Level:	Time/Date:	

Depth	Sample	Sample Number	Blows/ 6 inches	PID (ppm)	Lithology	Description	Depth
						TOPSOIL	
						GRANITE FILL ROCK	
2						**SAND**, brown, no petroleum odor.	2
	X	1		1.0			
4						Sandy **CLAY**, brown, moist, no petroleum odor.	4
	X	2		0.0			
6						Sandy **CLAY**, with coarse grained quartz, brown, moist, no petroleum odor.	6
	X	3		1.0			
	X	4		0.2			
8						**CLAY**, trace quartz grained, mottled (orange and red), moist, no petroleum odor.	8
	X	5		100			
10						**Boring Terminated at 10 ft.**	10

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 5/12/09

GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: MW-2
Client:			
Date Started: 5/8/09	Date Completed: 5/8/09		
Logged By: W. Walker	Coordinates:		
Drilling Co.: Land Probe	Driller: Tom Coon		
Method: Auger	Equipment: Mobile B-59		
Boring Depth (ft.): 44.0	TOC Elevation: 298.98		
Boring Diameter (in): 2.25	GW Level: 17.25	Time/Date: 5/11/2009	

Well Construction Data

Screen:	2" (0.010) Slotted PVC	From: 28	To: 43
Pack:	#2 Filter Sand	From: 26	To: 43
Seal:		From:	To:
Grout:	Portland Cement Type I	From: 0	To: 26
Inner Casing:	2" Threaded PVC Sch 40		
Outer Casing/Stick Up:			

Depth	Sample	Sample Number	Blows/ 6 inches	PID (ppm)	Description
0					**ASPHALT**
2					Clayey **SAND**, brown, medium grained, no petroleum odor.
4		1		1.0	
6					Clayey **SAND**, brown, moist, no petroleum odor.
8					**CLAY**, with medium quartz, brown.
10		2		0.4	**CLAY**, light orange, dry.
12					**CLAY**, yellow, dry.
14		3		0.2	Clayey **SILT**, yellow, dry, no petroleum odor.
16					
18					
20		4		1.4	**SILT**, yellow, dry, no petroleum odor.
22					
24		5		22.0	**SILT**, yellow, dry, strong petroleum odor.
26					**SILT**, yellow, no petroleum odor.
28					**SILT**, with large quartz, yellow, strong petroleum odor.
30		6		5.8	**SILT**, with mica and partially weathered rock, light yellow, dry, no petroleum odor.
32					
34		7		0.4	**SILT**, light yellow, hard, dry, no petroleum odor.
36					**SILT**, with partially weathered rock, light yellow, hard, dry, no petroleum odor.
38					
40		8		1.2	**SILT**, with coarse rock fragments, saturated.
42					
44					**Boring Terminated at 44 ft.**

Well Detail

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/17/09

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. Well Owner Information:
Name: SCDOT
(last) (first)
Address: Post Office Box 191
City: Columbia State: SC zip: 29202-0191
Phone: Work:
Home:

2. Location of Well: County: Chesterfield
Name: Eddie's Pitt Stop - SCDOT
Address: Rt. 2 US Hwy 601 N
City: Pageland zip:
Latitude: Longitude:

3. Public System Name: **Public System Number:**

4. Abandonment: (yes/ no) **No**
Grouted Depth: from to ft.

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum

5. Remarks: MW-2
26' to 23'
Bentonite Seal

6. Type:

Mud Rotary	Jetted	Bored
Dug	Air Rotary	Driven
Cable tool	Auger xxx	

7. Permit Number: UMW-17651

8. Use:

Residential	Public Supply	Process
Irrigation	Air Conditioning	Emergency
Test Well	Monitor Well xxx	Replacement

9. Well Depth (completed) 43.1 ft.
Date Started: 5/8/2009
Date Completed: 5/8/2009

10. Casing: Threaded | Welded
Diameter: 2"
Type: PVC
in. to ft. depth
in. to ft. depth
Height: Below
Surface: 6" ft. Weight: lb./ft.
Drive Shoe: No

11. Screen:
Type: PVC Diameter: 2"
Slot/Gauge: 0.01 Length: 15'
Set Between: 43.1 ft. and 28.1 ft.
ft. and ft.
Sieve Analysis: No

12. Static Water Level: ft. below land surface after 24 hours.

13. Pumping Level below land surface.
ft. after hrs Pumping GPM
Pumping Test: No
Yield: gpm

14. Water Quality:
Chemical Analysis: No Bacterial Analysis: No

15. Artificial Filter (filter pack) Yes
Installed from: 43.1 ft. to 26 ft.
Effective Size: #2 Uniformity Coefficient

16. Well Grouted? Yes

Neat Cement	Bentonite	Bentonite/Cement	other

Depth: from 23 ft. to surface ft.

17. Nearest Source of Possible Contamination: ft. direction
Type:
Well disinfected No Type: Amount:

18. Pump: Date installed: Not Installed
Mfr. Name: Model no.:
H.P.: Volts: Length of pipe: ft.
Capacity: gpm
TYPE:
Submersible Jet (shallow) Turbine
Jet (deep) Reciprocating Centrifugal

19. Well Driller Kevin Thomas Cert No. 1155
Address: 6004 Ponders Court Level A
Greenville SC 29615
Telephone: 864-527-9324 Fax: 864-288-4430

20. Water Well Driller's Certification: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Kevin Thomas

Date: 5/8/09

If D Level Driller, provide supervising driller's name.

GEOLOGIST LOG

Terracon

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-3**
Client:		***Well Construction Data***	
Date Started: 5/8/09	Date Completed: 5/8/09	Screen: 2" (0.010) Slotted PVC	From: 30 - To: 45
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 27 - To: 45
Drilling Co.: Land Probe	Driller: Tom Coon	Seal: Bentonite Pellets	From: 25 - To: 27
Method: Auger	Equipment: CME-750	Grout: Portland Cement Type I	From: 0 - To: 25
Boring Depth (ft.): 48.0	TOC Elevation: 298.36	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 4	GW Level: ▼ 19.20 Time/Date: 5/11/2009	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	PID (ppm)	Lithology	Description	Well Detail	Depth
0						**ASHALT**		0
2						**CLAY**, brown, moist, no petroleum odor.		2
4		1		12.0				4
6								6
8						**CLAY**, red, moist, no petroleum odor.		8
10		2		1.2		**SILT**, light brown, dry, no petroleum odor.		10
12								12
14		3		0.8				14
16								16
18							▼	18
20		4		0.6		Clayey **SILT**, light brown, damp, no petroleum odor.		20
22								22
24		5		1.2		Clayey **SILT**, light brown, dry, no petroleum odor.		24
26								26
28								28
30		6		0.8				30
32								32
34		7		0.8				34
36								36
38								38
40		8		3.0		Clayey **SILT**, light brown, dry, petroleum odor.		40
42								42
44		18		6.4				44
46								46
48						**Boring Terminated at 48 ft.**		48

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/17/09

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. Well Owner Information:
Name: SCDOT
(last) (first)
Address: Post Office Box 191
City: Columbia State: SC zip: 29202-0191
Phone: Work:
Home:

2. Location of Well: County: Chesterfield
Name: Eddie's Pitt Stop - SCDOT
Address: Rt. 2 US Hwy 601 N
City: Pageland zip:
Latitude: Longitude:

3. Public System Name: **Public System Number:**

4. Abandonment: (yes/ no) **No**
Grouted Depth: from to ft.

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum

5. Remarks: MW-3
27' to 24'
Bentonite Seal

6. Type:

Mud Rotary	Jetted	Bored
Dug	Air Rotary	Driven
Cable tool	Auger xxx	

7. Permit Number: UMW-17651

8. Use:

Residential	Public Supply	Process
Irrigation	Air Conditioning	Emergency
Test Well	Monitor Well xxx	Replacement

9. Well Depth (completed)
45.3 ft.
Date Started: 5/8/2009
Date Completed: 5/8/2009

10. Casing: Threaded / Welded
Diameter: 2"
Type: PVC
in. to ft. depth
in. to ft. depth
Height: Below
Surface: 6" ft. Weight: lb./ft.
Drive Shoe: No

11. Screen:
Type: PVC Diameter: 2"
Slot/Gauge: 0.01 Length: 15'
Set Between: 45.3 ft. and 30.3 ft.
ft. and ft.
Sieve Analysis: No

12. Static Water Level: ft. below land surface after 24 hours.

13. Pumping Level below land surface.
ft. after hrs Pumping GPM
Pumping Test: No
Yield: gpm

14. Water Quality:
Chemical Analysis: No Bacterial Analysis: No

15. Artificial Filter (filter pack) Yes
Installed from: 45.3 ft. to 27 ft.
Effective Size: #2 Uniformity Coefficient

16. Well Grouted? Yes

Neat Cement	Bentonite	Bentonite/Cement	other

Depth: from 24 ft. to surface ft.

17. Nearest Source of Possible Contamination: ft. direction
Type:
Well disinfected No Type: Amount:

18. Pump: Date installed: Not Installed
Mfr. Name: Model no.:
H.P.: Volts: Length of pipe: ft.
Capacity: gpm
TYPE:
Submersible Jet (shallow) Turbine
Jet (deep) Reciprocating Centrifugal

19. Well Driller Kevin Thomas **Cert No. 1155**
Address: 6004 Ponders Court **Level A**
Greenville SC 29615
Telephone: 864-527-9324 Fax: 864-288-4430

20. Water Well Driller's Certification: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Kevin Thomas

Date: 5/8/09

If D Level Driller, provide supervising driller's name.

GEOLOGIST LOG

Terracon

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-4/SB-2**
Client:		***Well Construction Data***	
Date Started: 5/7/09	Date Completed: 5/8/09	Screen: 2" (0.010) Slotted PVC	From: 34 - To: 49
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 31 - To: 49
Drilling Co.: Land Probe	Driller: Tom Coon	Seal: Bentonite Pellets	From: 29 - To: 31
Method: Auger	Equipment: CME-750	Grout: Portland Cement Type I	From: 0 - To: 29
Boring Depth (ft.): 49.0	TOC Elevation: 299.29	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 4	GW Level: ▼ 20.16 Time/Date: 5/11/2009	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	PID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		0
2		1		0.0		Silty **SAND**, red, dry, no petroleum odor.		2
						SAND, orange, fine grained, dry, no petroleum odor.		
4		2		0.0		Sandy **CLAY**, trace coarse grained quartz, moist, no petroleum odor.		4
6		3		0.4		**CLAY**, trace coarse grained quartz, light brown, moist, no petroleum odor.		6
8		4		0.0		Silty **CLAY**, mottled (red, orange, and yellow), damp, no petroleum odor.		8
10		5		0.4		**SILT**, trace quartz, white and orange.		10
12								12
14		6		2.5		**CLAY**, trace medium sized quartz, orange, moist.		14
16								16
18								18
20		7		12.0		**CLAY**, trace medium sized quartz, orange, damp, petroleum odor.	▼	20
22								22
24		8		22.0		Clayey **SILT**, trace grains, damp, no petroleum odor.		24
26								26
28						Clayey **SILT**, with partially weathered rock, damp, no petroleum odor.		28
30		9		35.0		**SILT**, with partially weathered rock, trace grains, light yellow.		30
32								32
34		10		9.8		**SILT**, light yellow, dry, no petroleum odor.		34
36								36
38						**SILT**, brown, damp, no petroleum odor.		38
40		11		7.8				40
42								42
44		12		10.0				44
46								46
48								48
						Boring Terminated at 49 ft.		

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/17/09

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. Well Owner Information:
Name: SCDOT
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Address: Post Office Box 191
City: Columbia State: SC zip: 29202-0191
Phone: Work:
Home:

2. Location of Well: County: Chesterfield
Name: Eddie's Pitt Stop - SCDOT
Address: Rt. 2 US Hwy 601 N
City: Pageland zip:
Latitude: Longitude:

3. Public System Name: **Public System Number:**

4. Abandonment: (yes/ no) **No**
Grouted Depth: from to ft.

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum

5. Remarks: MW-4
31' to 28'
Bentonite Seal

6. Type:

Mud Rotary	Jetted	Bored
Dug	Air Rotary	Driven
Cable tool	Auger xxx	

7. Permit Number: UMW-17651

8. Use:

Residential	Public Supply	Process
Irrigation	Air Conditioning	Emergency
Test Well	Monitor Well xxx	Replacement

9. Well Depth (completed) 48.7 ft.
Date Started: 5/7/2009
Date Completed: 5/8/2009

10. Casing: Threaded | Welded
Diameter: 2"
Type: PVC
in. to ft. depth
in. to ft. depth
Height: Below
Surface: 6" ft. Weight: lb./ft.
Drive Shoe:

11. Screen:
Type: PVC Diameter: 2"
Slot/Gauge: 0.01 Length: 15'
Set Between: 48.7 ft. and 33.7 ft.
ft. and ft.
Sieve Analysis: No

12. Static Water Level: ft. below land surface after 24 hours.

13. Pumping Level below land surface.
ft. after hrs Pumping GPM
Pumping Test: No
Yield: gpm

14. Water Quality:
Chemical Analysis: No Bacterial Analysis: No

15. Artificial Filter (filter pack) **Yes**
Installed from: 48.7 ft. to 31 ft.
Effective Size: #2 Uniformity Coefficient

16. Well Grouted? **Yes**

Neat Cement	Bentonite	Bentonite/Cement	other

Depth: from 28 ft. to surface ft.

17. Nearest Source of Possible Contamination: ft. direction
Type:
Well disinfected No Type: Amount:

18. Pump: Date installed: Not Installed
Mfr. Name: Model no.:
H.P.: Volts: Length of pipe: ft.
Capacity: gpm
TYPE:
Submersible Jet (shallow) Turbine
Jet (deep) Reciprocating Centrifugal

19. Well Driller Kevin Thomas **Cert No. 1155**
Address: 6004 Ponders Court **Level A**
Greenville SC 29615
Telephone: 864-527-9324 Fax: 864-288-4430

20. Water Well Driller's Certification: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Kevin Thomas

Date: 5/7/09

If D Level Driller, provide supervising driller's name.

APPENDIX B

Ground Water Sampling Logs

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-741-9000

Well ID:	MW-1
Date:	5/11/2009
Site Name:	**Eddie's**
Project No.:	7309-8106
Field Personnel:	W.Walker
Weather Conditions:	rainy
Air Temperature:	65 F
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1640

Total Well Depth:	47.0	ft. BTOC
Depth to water:	19.35	ft. BTOC
Length of Water Column (LWC):	27.65	ft.
Casing Diameter:	2.0	in.
1 Casing Volume = LWC x 0.17 =	4.7	gal.
3 Casing Volumes:	14.1	gal.

Remarks: ____

Field Analyses

Volume Purged (gal.)	4.7	9	14.1				
Time							
pH	5.91	5.82	5.94				
Specific Conductivity (umhos/cm)	84.5	89.5	88.1				
Water Temperature ©	16.5	16.8	16.2				
Turbidity	low	Mod	—				
Dissolved Oxygen (mg/L)			3.17				

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-
741-9000

Well ID:	MW-2
Date:	5/11/2009
Site Name:	**Eddie's**
Project No.:	7309-8106
Field Personnel:	W.Walker
Weather Conditions:	rainy
Air Temperature:	65 F
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1520

Total Well Depth:	43.0	ft. BTOC
Depth to water:	17.25	ft. BTOC
Length of Water Column (LWC):	25.75	ft.
Casing Diameter:	2.0	in.
1 Casing Volume = LWC x 0.17 =	4.3	gal.
3 Casing Volumes:	13.13	gal.

Remarks: _____

Field Analyses

Volume Purged (gal.)	4.3	8.6	13.13				
Time							
pH	7.28	6.61	6.50				
Specific Conductivity (umhos/cm)	104.5	95.6	107.6				
Water Temperature ©	17.4	16.2	17.0				
Turbidity	High	—	—				
Dissolved Oxygen (mg/L)			6.65				

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-
741-9000

Page ____ of ____

Well ID:	MW-3	Total Well Depth:	45.5 ft. BTOC
Date:	5/11/2009	Depth to water:	19.20 ft. BTOC
Site Name:	**Eddie's**	Length of Water Column (LWC):	26.3 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	4.4 gal.
Weather Conditions:	rainy	3 Casing Volumes:	13.41 gal.
Air Temperature:	65 F	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1450		

Field Analyses

Volume Purged (gal.)	4.4	8.8	13.41				
Time							
pH	8.46	8.02	7.41				
Specific Conductivity (umhos/cm)	406.2	424.4	210.3				
Water Temperature ©	17.7	16.6	16.7				
Turbidity	Mod	—	—				
Dissolved Oxygen (mg/L)			4.11				

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-741-9000

Well ID:	MW-4
Date:	5/11/2009
Site Name:	**Eddie's**
Project No.:	7309-8106
Field Personnel:	W.Walker
Weather Conditions:	rainy
Air Temperature:	65 F
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1610

Total Well Depth:	49.0	ft. BTOC
Depth to water:	20.16	ft. BTOC
Length of Water Column (LWC):	28.84	ft.
Casing Diameter:	2.0	in.
1 Casing Volume = LWC x 0.17 =	4.9	gal.
3 Casing Volumes:	14.7	gal.

Remarks: ____

Field Analyses

Volume Purged (gal.)	4.9	9	14.7				
Time							
pH	7.10	6.21	6.02				
Specific Conductivity (umhos/cm)	61.7	58.1	59.1				
Water Temperature ©	16.8	17.0	17.3				
Turbidity	Nal	—	—				
Dissolved Oxygen (mg/L)			6.58				

APPENDIX C

Laboratory Data

ACCESS
ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT
Terracon
521 Clemson Rd
Columbia, SC 29205

ATTENTION
Mike Hudgins

PROJECT ID
Eddies

LABORATORY REPORT NUMBER
209051243

DATE
05/22/2009

Primary Data Review By

Curtis Ekker
Fri May 22 14:47:59 2009

Curtis Ekker
Data Validation Manager, GCAL

Secondary Data Review By

Ashley B. Amick
Project Manager, Access Analytical, Inc.
aamick@accessanalyticalinc.com

PLEASE NOTE:

- **Unless otherwise noted, all analysis on this report performed at Gulf Coast Analytical Labs (GCAL), 7979 GSRI Rd. Baton Rouge, LA 70820.**

- **GCAL is SCDHEC certified laboratory # 73006, NCDENR certified lab # 618, GA certified lab # LA-01955, NELAP certified laboratory # 01955**

- Local support services for this project are provided by Access Analytical, Inc.. Access Analytical is a representative of GCAL serving clients in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll free at 888.315.4243.

NELAP CERTIFICATE NUMBER 01955

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 05/22/2009

GCAL Report 209051243

Deliver To	Terracon 521 Clemson Rd Columbia, SC 29205 803-741-9000
Attn	Mike Hudgins

Project Eddies

CASE NARRATIVE

Client: Terracon **Report:** 209051243

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

METALS

In the SW-846 6010B analysis, a chemical or physical interference necessitated a dilution for sample 20905124301 (SB-1 8-10). This is reflected in the elevated reporting limits.

CONVENTIONALS

Andrew Lopez performed the analysis of TOC in solids.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates an estimated value
U	Indicates the compound was analyzed for but not detected
B	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
B	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with ISO Guide 25 and NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Curtis Ekker
Fri May 22 14:48:22 2009

Robyn Migues
Technical Director
GCAL REPORT 209051243

THIS REPORT CONTAINS _____ PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124301	SB-1 8-10	Solid	05/07/2009 18:00	05/12/2009 09:50
20905124302	SB-2/MW-4 8-10	Solid	05/07/2009 18:10	05/12/2009 09:50
20905124303	MW-2 25	Solid	05/06/2009 14:20	05/12/2009 09:50
20905124304	MW-3/BG 0-5	Solid	05/06/2009 15:05	05/12/2009 09:50
20905124305	MW-3/BG 0-5	Solid	05/06/2009 15:30	05/12/2009 09:50
20905124306	SB-1	Solid	05/06/2009 18:50	05/12/2009 09:50

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124301	**SB-1 8-10**	Solid	05/07/2009 18:00	05/12/2009 09:50

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	1.63J	3.64	0.100	ug/Kg
100-41-4	Ethylbenzene	9.18	3.64	0.150	ug/Kg
1330-20-7	Xylene (total)	6.45J	7.28	0.499	ug/Kg
91-20-3	Naphthalene	5.94	3.64	0.600	ug/Kg

SW-846 6010B

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	4.84	1.46	0.17	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124302	**SB-2/MW-4 8-10**	Solid	05/07/2009 18:10	05/12/2009 09:50

SW-846 6010B

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.31B	0.72	0.085	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124303	**MW-2 25**	Solid	05/06/2009 14:20	05/12/2009 09:50

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
100-41-4	Ethylbenzene	2.12J	3.49	0.144	ug/Kg
1330-20-7	Xylene (total)	15.3	6.98	0.479	ug/Kg
91-20-3	Naphthalene	12.6	3.49	0.576	ug/Kg

SW-846 6010B

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	3.90	0.69	0.082	mg/kg

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124304	**MW-3/BG 0-5**	Solid	05/06/2009 15:05	05/12/2009 09:50

SW-846 8270C

CAS#	Parameter	Result	RDL	MDL	Units
206-44-0	Fluoranthene	7.52J	400	6.94	ug/Kg
129-00-0	Pyrene	16.1J	400	11.6	ug/Kg

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124304	**MW-3/BG 0-5**	Solid	05/06/2009 15:05	05/12/2009 09:50

SW-846 6010B

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	**Lead**	**7.14**	**0.72**	**0.085**	**mg/kg**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124305	**MW-3/BG 0-5**	Solid	05/06/2009 15:30	05/12/2009 09:50

SW-846 9060 TOC

CAS#	Parameter	Result	RDL	MDL	Units
C-012	**Total Organic Carbon**	**935**	**200**	**146**	**mg/kg**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124306	**SB-1**	Solid	05/06/2009 18:50	05/12/2009 09:50

SW-846 8015B

CAS#	Parameter	Result	RDL	MDL	Units
GCSV-00-4	**Diesel Range Organics**	**18000**	**4910**	**1310**	**ug/Kg**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124301	**SB-1 8-10**	Solid	05/07/2009 18:00	05/12/2009 09:50

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/13/2009 10:59	WAS	411534

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	**Benzene**	**1.63J**	**3.64**	**0.100**	**ug/Kg**
108-88-3	Toluene	0.146U	3.64	0.146	ug/Kg
100-41-4	**Ethylbenzene**	**9.18**	**3.64**	**0.150**	**ug/Kg**
1330-20-7	**Xylene (total)**	**6.45J**	**7.28**	**0.499**	**ug/Kg**
91-20-3	**Naphthalene**	**5.94**	**3.64**	**0.600**	**ug/Kg**
1634-04-4	tert-Butyl methyl ether (MTBE)	0.122U	3.64	0.122	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	29.9	26.9	ug/Kg	90	62 - 127
1868-53-7	Dibromofluoromethane	29.9	27.1	ug/Kg	91	65 - 130
2037-26-5	Toluene d8	29.9	25.7	ug/Kg	86	71 - 132
17060-07-0	1,2-Dichloroethane-d4	29.9	34.2	ug/Kg	114	62 - 125

SW-846 8270C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/15/2009 11:00	411681	3550B	1	05/18/2009 10:28	RLY	411827

CAS#	Parameter	Result	RDL	MDL	Units
83-32-9	Acenaphthene	12.7U	402	12.7	ug/Kg
208-96-8	Acenaphthylene	11.8U	402	11.8	ug/Kg
120-12-7	Anthracene	5.16U	402	5.16	ug/Kg
56-55-3	Benzo(a)anthracene	5.95U	402	5.95	ug/Kg
50-32-8	Benzo(a)pyrene	28.6U	402	28.6	ug/Kg
205-99-2	Benzo(b)fluoranthene	27.3U	402	27.3	ug/Kg
191-24-2	Benzo(g,h,i)perylene	35.9U	402	35.9	ug/Kg
207-08-9	Benzo(k)fluoranthene	74.7U	402	74.7	ug/Kg
218-01-9	Chrysene	10.3U	402	10.3	ug/Kg
53-70-3	Dibenz(a,h)anthracene	22.8U	402	22.8	ug/Kg
206-44-0	Fluoranthene	6.97U	402	6.97	ug/Kg
86-73-7	Fluorene	10.8U	402	10.8	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	61.5U	402	61.5	ug/Kg
91-20-3	Naphthalene	101U	402	101	ug/Kg
85-01-8	Phenanthrene	9.49U	402	9.49	ug/Kg
129-00-0	Pyrene	11.6U	402	11.6	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	1670	1200	ug/Kg	72	46 - 123
321-60-8	2-Fluorobiphenyl	1670	1180	ug/Kg	71	47 - 127
1718-51-0	Terphenyl-d14	1670	1470	ug/Kg	88	38 - 167
4165-62-2	Phenol-d5	3330	2680	ug/Kg	80	43 - 123
367-12-4	2-Fluorophenol	3330	2490	ug/Kg	75	51 - 119
118-79-6	2,4,6-Tribromophenol	3330	2810	ug/Kg	84	44 - 121

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124301	**SB-1 8-10**	Solid	05/07/2009 18:00	05/12/2009 09:50

SW-846 6010B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/13/2009 10:15	411517	SW-846 3050B	2	05/21/2009 12:44	CNB	411999

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	**Lead**	**4.84**	**1.46**	**0.17**	**mg/kg**

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124302	**SB-2/MW-4 8-10**	Solid	05/07/2009 18:10	05/12/2009 09:50

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/13/2009 09:51	WAS	411534

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	0.106U	3.86	0.106	ug/Kg
108-88-3	Toluene	0.154U	3.86	0.154	ug/Kg
100-41-4	Ethylbenzene	0.159U	3.86	0.159	ug/Kg
1330-20-7	Xylene (total)	0.530U	7.72	0.530	ug/Kg
91-20-3	Naphthalene	0.637U	3.86	0.637	ug/Kg
1634-04-4	tert-Butyl methyl ether (MTBE)	0.129U	3.86	0.129	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	32.1	33	ug/Kg	103	62 - 127
1868-53-7	Dibromofluoromethane	32.1	33.2	ug/Kg	103	65 - 130
2037-26-5	Toluene d8	32.1	30.7	ug/Kg	96	71 - 132
17060-07-0	1,2-Dichloroethane-d4	32.1	36.7	ug/Kg	114	62 - 125

SW-846 8270C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/15/2009 11:00	411681	3550B	1	05/18/2009 10:43	RLY	411827

CAS#	Parameter	Result	RDL	MDL	Units
83-32-9	Acenaphthene	12.4U	394	12.4	ug/Kg
208-96-8	Acenaphthylene	11.6U	394	11.6	ug/Kg
120-12-7	Anthracene	5.07U	394	5.07	ug/Kg
56-55-3	Benzo(a)anthracene	5.84U	394	5.84	ug/Kg
50-32-8	Benzo(a)pyrene	28.1U	394	28.1	ug/Kg
205-99-2	Benzo(b)fluoranthene	26.8U	394	26.8	ug/Kg
191-24-2	Benzo(g,h,i)perylene	35.3U	394	35.3	ug/Kg
207-08-9	Benzo(k)fluoranthene	73.4U	394	73.4	ug/Kg
218-01-9	Chrysene	10.1U	394	10.1	ug/Kg
53-70-3	Dibenz(a,h)anthracene	22.4U	394	22.4	ug/Kg
206-44-0	Fluoranthene	6.85U	394	6.85	ug/Kg
86-73-7	Fluorene	10.6U	394	10.6	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	60.4U	394	60.4	ug/Kg
91-20-3	Naphthalene	98.8U	394	98.8	ug/Kg
85-01-8	Phenanthrene	9.32U	394	9.32	ug/Kg
129-00-0	Pyrene	11.4U	394	11.4	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	1660	1250	ug/Kg	76	46 - 123
321-60-8	2-Fluorobiphenyl	1660	1180	ug/Kg	71	47 - 127
1718-51-0	Terphenyl-d14	1660	1510	ug/Kg	91	38 - 167

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124302	**SB-2/MW-4 8-10**	Solid	05/07/2009 18:10	05/12/2009 09:50

SW-846 6010B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/13/2009 10:15	411517	SW-846 3050B	1	05/21/2009 13:02	CNB	411999

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	**Lead**	**0.31B**	**0.72**	**0.085**	**mg/kg**

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124303	**MW-2 25**	Solid	05/06/2009 14:20	05/12/2009 09:50

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/13/2009 10:14	WAS	411534

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	0.096U	3.49	0.096	ug/Kg
108-88-3	Toluene	0.140U	3.49	0.140	ug/Kg
100-41-4	**Ethylbenzene**	**2.12J**	**3.49**	**0.144**	**ug/Kg**
1330-20-7	**Xylene (total)**	**15.3**	**6.98**	**0.479**	**ug/Kg**
91-20-3	**Naphthalene**	**12.6**	**3.49**	**0.576**	**ug/Kg**
1634-04-4	tert-Butyl methyl ether (MTBE)	0.116U	3.49	0.116	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	30.2	28.3	ug/Kg	94	62 - 127
1868-53-7	Dibromofluoromethane	30.2	28.1	ug/Kg	93	65 - 130
2037-26-5	Toluene d8	30.2	24.6	ug/Kg	81	71 - 132
17060-07-0	1,2-Dichloroethane-d4	30.2	36.6	ug/Kg	121	62 - 125

SW-846 8270C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/15/2009 11:00	411681	3550B	1	05/18/2009 10:59	RLY	411827

CAS#	Parameter	Result	RDL	MDL	Units
83-32-9	Acenaphthene	12.0U	379	12.0	ug/Kg
208-96-8	Acenaphthylene	11.1U	379	11.1	ug/Kg
120-12-7	Anthracene	4.88U	379	4.88	ug/Kg
56-55-3	Benzo(a)anthracene	5.62U	379	5.62	ug/Kg
50-32-8	Benzo(a)pyrene	27.0U	379	27.0	ug/Kg
205-99-2	Benzo(b)fluoranthene	25.8U	379	25.8	ug/Kg
191-24-2	Benzo(g,h,i)perylene	33.9U	379	33.9	ug/Kg
207-08-9	Benzo(k)fluoranthene	70.6U	379	70.6	ug/Kg
218-01-9	Chrysene	9.73U	379	9.73	ug/Kg
53-70-3	Dibenz(a,h)anthracene	21.5U	379	21.5	ug/Kg
206-44-0	Fluoranthene	6.59U	379	6.59	ug/Kg
86-73-7	Fluorene	10.2U	379	10.2	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	58.1U	379	58.1	ug/Kg
91-20-3	Naphthalene	95.1U	379	95.1	ug/Kg
85-01-8	Phenanthrene	8.97U	379	8.97	ug/Kg
129-00-0	Pyrene	11.0U	379	11.0	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	1660	1230	ug/Kg	74	46 - 123
321-60-8	2-Fluorobiphenyl	1660	1230	ug/Kg	74	47 - 127
1718-51-0	Terphenyl-d14	1660	1570	ug/Kg	95	38 - 167

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124303	**MW-2 25**	Solid	05/06/2009 14:20	05/12/2009 09:50

SW-846 6010B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/13/2009 10:15	411517	SW-846 3050B	1	05/21/2009 14:21	CNB	411999

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	**Lead**	**3.90**	**0.69**	**0.082**	**mg/kg**

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124304	**MW-3/BG 0-5**	Solid	05/06/2009 15:05	05/12/2009 09:50

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/13/2009 10:37	WAS	411534

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	0.101U	3.68	0.101	ug/Kg
108-88-3	Toluene	0.147U	3.68	0.147	ug/Kg
100-41-4	Ethylbenzene	0.152U	3.68	0.152	ug/Kg
1330-20-7	Xylene (total)	0.505U	7.37	0.505	ug/Kg
91-20-3	Naphthalene	0.608U	3.68	0.608	ug/Kg
1634-04-4	tert-Butyl methyl ether (MTBE)	0.123U	3.68	0.123	ug/Kg

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	30.4	30.9	ug/Kg	102	62 - 127
1868-53-7	Dibromofluoromethane	30.4	31.7	ug/Kg	104	65 - 130
2037-26-5	Toluene d8	30.4	30.4	ug/Kg	100	71 - 132
17060-07-0	1,2-Dichloroethane-d4	30.4	32.4	ug/Kg	107	62 - 125

SW-846 8270C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/15/2009 11:00	411681	3550B	1	05/18/2009 11:14	RLY	411827

CAS#	Parameter	Result	RDL	MDL	Units
83-32-9	Acenaphthene	12.6U	400	12.6	ug/Kg
208-96-8	Acenaphthylene	11.7U	400	11.7	ug/Kg
120-12-7	Anthracene	5.14U	400	5.14	ug/Kg
56-55-3	Benzo(a)anthracene	5.92U	400	5.92	ug/Kg
50-32-8	Benzo(a)pyrene	28.5U	400	28.5	ug/Kg
205-99-2	Benzo(b)fluoranthene	27.1U	400	27.1	ug/Kg
191-24-2	Benzo(g,h,i)perylene	35.7U	400	35.7	ug/Kg
207-08-9	Benzo(k)fluoranthene	74.4U	400	74.4	ug/Kg
218-01-9	Chrysene	10.2U	400	10.2	ug/Kg
53-70-3	Dibenz(a,h)anthracene	22.7U	400	22.7	ug/Kg
206-44-0	**Fluoranthene**	**7.52J**	**400**	**6.94**	**ug/Kg**
86-73-7	Fluorene	10.7U	400	10.7	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	61.2U	400	61.2	ug/Kg
91-20-3	Naphthalene	100U	400	100	ug/Kg
85-01-8	Phenanthrene	9.45U	400	9.45	ug/Kg
129-00-0	**Pyrene**	**16.1J**	**400**	**11.6**	**ug/Kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	1670	1270	ug/Kg	76	46 - 123
321-60-8	2-Fluorobiphenyl	1670	1310	ug/Kg	79	47 - 127
1718-51-0	Terphenyl-d14	1670	1520	ug/Kg	91	38 - 167

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124304	**MW-3/BG 0-5**	Solid	05/06/2009 15:05	05/12/2009 09:50

SW-846 6010B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/13/2009 10:15	411517	SW-846 3050B	1	05/21/2009 14:27	CNB	411999

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	**Lead**	**7.14**	**0.72**	**0.085**	**mg/kg**

RESULTS REPORTED ON A DRY WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124305	**MW-3/BG 0-5**	Solid	05/06/2009 15:30	05/12/2009 09:50

SW-846 9060 TOC

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2009 09:01	AEL	412013

CAS#	Parameter	Result	RDL	MDL	Units
C-012	**Total Organic Carbon**	**935**	**200**	**146**	**mg/kg**

RESULTS REPORTED ON A WET WEIGHT BASIS

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905124306	**SB-1**	Solid	05/06/2009 18:50	05/12/2009 09:50

SW-846 8015B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/14/2009 16:00	411596	3550B	1	05/15/2009 10:41	SMH	411826

CAS#	Parameter	Result	RDL	MDL	Units
GCSV-00-4	**Diesel Range Organics**	**18000**	**4910**	**1310**	**ug/Kg**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
84-15-1	o-Terphenyl	1660	1170	ug/Kg	71	27 - 129

RESULTS REPORTED ON A DRY WEIGHT BASIS

GC/MS Volatiles Quality Control Summary

Analytical Batch 411534	**Client ID**	MB411534	LCS411534	LCSD411534	
Prep Batch N/A	**GCAL ID**	723839	723840	723841	
	Sample Type	Method Blank	LCS	LCSD	
	Analytical Date	05/13/2009 09:24	05/13/2009 08:16	05/13/2009 08:39	
	Matrix	Solid	Solid	Solid	

SW-846 8260B		**Units**	ug/Kg	**Spike Added**	**Result**	**Result**	**% R**	**Control Limits**	**RPDs**	**% R**	**Result**	**% R**	**RPD**	**RPD Limit**
107-06-2	1,2-Dichloroethane		0.131U	0.131	50.0	54.9	110	73 - 128			56.3	113	3	30
100-41-4	Ethylbenzene		0.206U	0.206	50.0	57.1	114	80 - 123			56.7	113	0.7	30
1634-04-4	tert-Butyl methyl ether (MTBE)		0.167U	0.167	50.0	54.6	109	69 - 131			59.2	118	8	30
1330-20-7	Xylene (total)		0.686U	0.686	150	175	117	80 - 120			170	113	3	30
91-20-3	Naphthalene		0.825U	0.825	50.0	52.6	105	58 - 137			56.2	112	7	30
71-43-2	Benzene		0.137U	0.137	50.0	54.5	109	78 - 120			55.0	110	0.9	21
108-88-3	Toluene		0.200U	0.200	50.0	54.7	109	78 - 122			55.5	111	1	21
Surrogate														
460-00-4	4-Bromofluorobenzene		44.2	88	50	52.9	106	62 - 127			51	102		
1868-53-7	Dibromofluoromethane		45.9	92	50	52.7	105	65 - 130			51	102		
2037-26-5	Toluene d8		44.6	89	50	50.1	100	71 - 132			50	100		
17060-07-0	1,2-Dichloroethane-d4		45.7	91	50	52.1	104	62 - 125			54.6	109		

Analytical Batch 411534	**Client ID**	SS-2 RS	SS-2 RS (MS)	SS-2 RS (MSD)	
Prep Batch N/A	**GCAL ID**	20905120201	20905120202	20905120203	
	Sample Type	SAMPLE	MS	MSD	
	Analytical Date	05/13/2009 13:29	05/13/2009 14:12	05/13/2009 14:34	
	Matrix	Solid	Solid	Solid	

SW-846 8260B		**Units**	ug/Kg	**Spike Added**	**Result**	**Result**	**% R**	**Control Limits**	**RPDs**	**% R**	**Result**	**% R**	**RPD**	**RPD Limit**
71-43-2	Benzene		0.00	0.118	43.0	44.2	103	78 - 120			48.6	103	9	21
Surrogate														
460-00-4	4-Bromofluorobenzene				43	41.4	96	62 - 127			47.4	100		
1868-53-7	Dibromofluoromethane				43	39.7	92	65 - 130			48	102		
2037-26-5	Toluene d8				43	36	84	71 - 132			43.5	92		
17060-07-0	1,2-Dichloroethane-d4				43	44.2	103	62 - 125			52.3	111		

GC/MS Semi-Volatiles Quality Control Summary

| | | |

GC/MS Semi-Volatiles Quality Control Summary

Analytical Batch	411827	**Client ID**	HA-1	724442MS	724442MSD
Prep Batch	411681	**GCAL ID**	20905142501	724637	724638
Prep Method	3550B	**Sample Type**	SAMPLE	MS	MSD
		Prep Date	05/15/2009 11:00	05/15/2009 11:00	05/15/2009 11:00
		Analytical Date	05/18/2009 15:17	05/18/2009 15:32	05/18/2009 15:47
		Matrix	Solid	Solid	Solid

SW-846 8270C		**Units**	ug/Kg	**Spike Added**	**Result**	**Result % R**	**Control Limits**	**Result**	**RPD % R**	**RPD**	**RPD Limit**
106-46-7	1,4-Dichlorobenzene	0.00	10.1	3330	2360	71	42 - 120	2240	67	5	40
621-64-7	n-Nitrosodi-n-propylamine	0.00	13.4	3330	2780	83	46 - 120	2750	83	1	40
120-82-1	1,2,4-Trichlorobenzene	0.00	15.4	3330	2520	76	46 - 120	2330	70	8	40
83-32-9	Acenaphthene	0.00	10.4	3330	2660	80	50 - 120	2540	76	5	40
121-14-2	2,4-Dinitrotoluene	0.00	36.7	3330	2680	80	45 - 120	2800	84	4	40
129-00-0	Pyrene	0.00	9.57	3330	2830	85	38 - 136	2750	83	3	40
Surrogate											
4165-60-0	Nitrobenzene-d5			1670	1370	82	46 - 123	1280	77		
321-60-8	2-Fluorobiphenyl			1670	1310	79	47 - 127	1220	73		
1718-51-0	Terphenyl-d14			1670	1430	86	38 - 167	1420	85		
4165-62-2	Phenol-d5			3330	2660	80	43 - 123	2640	79		
367-12-4	2-Fluorophenol			3330	2580	77	51 - 119	2540	76		
118-79-6	2,4,6-Tribromophenol			3330	2530	76	44 - 121	2800	84		

General Chromatography Quality Control Summary

Analytical Batch	411744	**Client ID**	MB411596	LCS411596	LCSD411596
Prep Batch	411596	**GCAL ID**	724219	724220	724221
Prep Method	3550B	**Sample Type**	Method Blank	LCS	LCSD
		Prep Date	05/14/2009 16:00	05/14/2009 16:00	05/14/2009 16:00
		Analytical Date	05/15/2009 08:43	05/15/2009 09:00	05/15/2009 09:17
		Matrix	Solid	Solid	Solid

SW-846 8015B		**Units**	ug/Kg	**Spike Added**	**Result**	**Result**	**% R**	**Control Limits**	**Result**	**% R**	**RPD**	**RPD Limit**
GCSV-00-4	Diesel Range Organics	1070U	1070	33300	25400	76	50 - 124	RDL % R	24700	74	3	40
Surrogate												
84-15-1	o-Terphenyl	1350	81	1670	1330	80	27 - 129		1300	78		

Analytical Batch	411826	**Client ID**	SS-2 RS	SS-2 RS (MS)	SS-2 RS (MSD)
Prep Batch	411596	**GCAL ID**	20905120201	20905120202	20905120203
Prep Method	3550B	**Sample Type**	SAMPLE	MS	MSD
		Prep Date	05/14/2009 16:00	05/14/2009 16:00	05/14/2009 16:00
		Analytical Date	05/15/2009 11:38	05/15/2009 12:29	05/15/2009 12:46
		Matrix	Solid	Solid	Solid

SW-846 8015B		**Units**	ug/Kg	**Spike Added**	**Result**	**Result**	**% R**	**Control Limits**	**Result**	**% R**	**RPD**	**RPD Limit**
GCSV-00-4	Diesel Range Organics	138000	5310	33200	176000	114	50 - 124	RDL % R	176000	116	0	40
Surrogate												
84-15-1	o-Terphenyl			1660	1160	70	27 - 129		1220	73		

Inorganics Quality Control Summary

Analytical Batch	411999	**Client ID**	MB411517			LCS411517		
Prep Batch	411517	**GCAL ID**	723801			723802		
Prep Method	SW-846 3050B	**Sample Type**	Method Blank			LCS		
		Prep Date	05/13/2009 10:15			05/13/2009 10:15		
		Analytical Date	05/21/2009 11:13			05/21/2009 11:19		
		Matrix	Solid			Solid		
SW-846 6010B		**Units**	mg/kg	**Spike Added**	**Result**	**% R**	**Control Limits % R**	
7439-92-1	Lead		0.071U	20.0	20.7	104	80 - 120	

Analytical Batch	411999	**Client ID**	GFP-130509-EK-TS-1		724081MS			724081MSD			
Prep Batch	411517	**GCAL ID**	20905135101		724094			724095			
Prep Method	SW-846 3050B	**Sample Type**	SAMPLE		MS			MSD			
		Prep Date	05/13/2009 15:15		05/13/2009 15:15			05/13/2009 15:15			
		Analytical Date	05/21/2009 11:26		05/21/2009 11:32			05/21/2009 11:38			
		Matrix	Solid		Solid			Solid			
SW-846 6010B		**Units**	mg/kg	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
7439-92-1	Lead		3.94	20.0	24.5	103	75 - 125	24.0	100	2	20

General Chemistry Quality Control Summary

Analytical Batch 412013	**Client ID**	MB412013			LCS412013		
Prep Batch N/A	**GCAL ID**	726147			726148		
	Sample Type	Method Blank			LCS		
	Analytical Date	05/20/2009 08:32			05/20/2009 08:53		
	Matrix	Solid			Solid		
SW-846 9060 TOC	**Units**	mg/kg	**Spike**		**Result**		**Control**
	Result	**RDL**	**Added**			**% R**	**Limits % R**
C-012 Total Organic Carbon	146U	146	10000		10100	101	69 - 128

Analytical Batch 412013	**Client ID**	TW-1	724958DUP			
Prep Batch N/A	**GCAL ID**	20905154801	726149			
	Sample Type	SAMPLE	DUP			
	Analytical Date	05/20/2009 11:48	05/20/2009 12:02			
	Matrix	Solid	Solid			
SW-846 9060 TOC	**Units**	mg/kg	**Result**		**RPD**	
	Result	**RDL**		**RPD**	**Limit**	
C-012 Total Organic Carbon	0.000	146	0.000	0	25	

ACCESS / 45651 / 209051243 / 5-19-09

Access Analytical - Chain of Custody Record

LAB USE ONLY

Project Work Order # 7309-8106 | PO # | Access Quote # | Laboratory ID: 45651

Company Name: Terracon

Report To: Mike Hudgins

Address: 521 Clemson Rd

City: Columbia State: SC Zip: 29229

Phone: 803-741-9000 Fax:

Email:

Project Name: Eddies

Sampled By: William Walker

Sample Location/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	# of cont.	BTEX, MTBE	PAH	Lead	TOC	TPH - DRO
SB-1 "8-10'"	5/7/09	1800		S	5	3	1	1		
SB-2/MW-4 "8-10'"	5/7/09	1810								
MW-2 "25'"	5/6/09	1420								
MW-3/BG "0-5'"	5/8/09	1505								
MW-3/BG "0-5'"	5/8/09	1530			1				1	
SB-1	5/7/09	1850			1					1

Preservative: (*see codes below)

↓ REQUESTED LAB ANALYSIS: ↓

ACCESS ANALYTICAL, INC.

7478 Carlisle Street
Irmo, SC 29063

Phone: (803) 781-4243
Fax: 781-4303
Toll Free (888) 315-4243
www.axs-inc.com

*Preservative Codes (place corresponding # in block above analysis field): 0=None, 1=HCL, 2=HNO_3, 3=H_2SO_4, 4=NaOH, 5=$Na_2S_2O_3$, 6=$NaHSO_4$, Other=Specify

*Matrix Codes (place corresponding code in sample matrix column): GW=ground water, WW=waste water, DW=drinking water, S=soil, SL=sludge, A=air, IW=industrial waste, WO=waste oil, OT=other (Specify in comments section)

NOTES / COMMENTS (if sample is a composite please use space below to note start/finish times & dates)

-1
-2
-3
-4
-5
-6

Turnaround Time:

✓ Standard
__ RUSH*
*Date Required:_____
(For rush work, results emailed/faxed by end of business day on date required)

LAB USE ONLY

Samples Recd. on Ice?
✓ Yes
__ No
Receipt Temp 3.9°

Project Location:
✓ SC
__ NC
__ Other_____(specify)

Relinquished By:	Date:	Time:	Received By:
William Walker	5/11/09	15:30	M. Robertson
M. Robertson	5/11/09	1700	FEDEX
FEDEX	5/12/09	0950	A Marston

See Reverse for Terms and Conditions

Original Copy - Returned w/Report
Yellow Copy - Access File Copy
Pink Copy - Client Copy

ACCESS
ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT
Terracon
521 Clemson Rd
Columbia, SC 29205

ATTENTION
Mike Hudgins

PROJECT ID
Eddies

LABORATORY REPORT NUMBER
209051338

DATE
05/27/2009

Primary Data Review By

Curtis Ekker
Data Validation Manager, GCAL

Secondary Data Review By

Ashley B. Amick
Project Manager, Access Analytical, Inc.
aamick@accessanalyticalinc.com

PLEASE NOTE:

- **Unless otherwise noted, all analysis on this report performed at Gulf Coast Analytical Labs (GCAL), 7979 GSRI Rd. Baton Rouge, LA 70820.**

- **GCAL is SCDHEC certified laboratory # 73006, NCDENR certified lab # 618, GA certified lab # LA-01955, NELAP certified laboratory # 01955**

- Local support services for this project are provided by Access Analytical, Inc.. Access Analytical is a representative of GCAL serving clients in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll free at 888.315.4243.

NELAP CERTIFICATE NUMBER 01955

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 05/27/2009

GCAL Report 209051338

Deliver To	Terracon 521 Clemson Rd Columbia, SC 29205 803-741-9000
Attn	Mike Hudgins

Project Eddies

CASE NARRATIVE

Client: Terracon **Report:** 209051338

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

VOLATILES MASS SPECTROMETRY

In the SW-846 8260B analysis, samples 20905133801 (MW-1), 20905133802 (MW-2) and 20905133803 (MW-3) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument.

In the SW-846 8260B analysis for analytical batch 411938, the MS/MSD exhibited recovery failures.

In the SW-846 8260B analysis for analytical batch 411679, the LCS/LCSD exhibited marginal sporadic recovery failures for the extended list of spike compounds.

SEMI-VOLATILES MASS SPECTROMETRY

In the SW-846 8270C analysis, sample 20905133801 (MW-1) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument.

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the SW-846 8011 analysis, sample 20905133801 (MW-1) had to be diluted to bracket target compounds within the calibration range of the instrument. This is reflected in elevated reporting limits.

CONVENTIONALS

Samples were analyzed for Ferrous Iron by SM 3500 Fe D. This method is defined as a field parameter and was analyzed on the day of receipt.

In the EPA 375.4 analysis, sample 20905133803 (MW-3) had to be diluted in order to bracket the concentration within the calibration range of the instrument.

MISCELLANEOUS

The results for Naphthalene vary between methods SW-846 8260B and SW-846 8270C methods. This could be due to the different aliquots used for each procedure.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates an estimated value
U	Indicates the compound was analyzed for but not detected
B	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
B	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with ISO Guide 25 and NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Robyn Migues
Technical Director
GCAL REPORT 209051338

THIS REPORT CONTAINS _____ PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133801	MW-1	Water	05/11/2009 16:40	05/13/2009 09:55
20905133802	MW-2	Water	05/11/2009 15:20	05/13/2009 09:55
20905133803	MW-3	Water	05/11/2009 14:50	05/13/2009 09:55
20905133804	MW-4	Water	05/11/2009 16:10	05/13/2009 09:55
20905133805	PW-1	Water	05/11/2009 14:00	05/13/2009 09:55

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133801	**MW-1**	Water	05/11/2009 16:40	05/13/2009 09:55

SW-846 8011

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	1.66	0.050	0.018	ug/L

SM 3500 Fe D Ferrous Iron

CAS#	Parameter	Result	RDL	MDL	Units
WET-045	Ferrous Iron	1.16	0.050	0.005	mg/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	3250	40.0	2.99	ug/L
100-41-4	Ethylbenzene	1580	40.0	2.09	ug/L
91-20-3	Naphthalene	841	200	4.04	ug/L
108-88-3	Toluene	265	40.0	3.28	ug/L
1330-20-7	Xylene (total)	5160	120	13.4	ug/L

RSK 175

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	Methane	23.7	5.00	0.116	ug/L

SW-846 8270C

CAS#	Parameter	Result	RDL	MDL	Units
86-73-7	Fluorene	1.18J	10.5	0.132	ug/L
85-01-8	Phenanthrene	0.807J	10.5	0.132	ug/L
129-00-0	Pyrene	0.481J	10.5	0.187	ug/L

SW-846 8270C

CAS#	Parameter	Result	RDL	MDL	Units
91-20-3	Naphthalene	727	42.1	0.968	ug/L

SW-846 6010B

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.012B	0.015	0.0027	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133802	**MW-2**	Water	05/11/2009 15:20	05/13/2009 09:55

SW-846 6010B

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0033B	0.015	0.0027	mg/L

EPA 353.2 N+N

CAS#	Parameter	Result	RDL	MDL	Units
C-005	Nitrate/Nitrite	0.058	0.010	0.001	mg/L

SW-846 8011

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.385	0.010	0.00350	ug/L

RSK 175

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	Methane	2.67J	5.00	0.116	ug/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	2290	20.0	1.49	ug/L
108-88-3	Toluene	73.6	20.0	1.64	ug/L
100-41-4	Ethylbenzene	699	20.0	1.04	ug/L
1330-20-7	Xylene (total)	2140	60.0	6.68	ug/L
91-20-3	Naphthalene	186	100	2.02	ug/L
107-06-2	1,2-Dichloroethane	105	100	1.28	ug/L

EPA 375.4 Sulfate

CAS#	Parameter	Result	RDL	MDL	Units
14808-79-8	Sulfate	2.1B	5.0	0.41	mg/L

SM 3500 Fe D Ferrous Iron

CAS#	Parameter	Result	RDL	MDL	Units
WET-045	Ferrous Iron	0.195	0.050	0.005	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133803	**MW-3**	Water	05/11/2009 14:50	05/13/2009 09:55

EPA 375.4 Sulfate

CAS#	Parameter	Result	RDL	MDL	Units
14808-79-8	Sulfate	67.1	10.0	0.83	mg/L

RSK 175

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	Methane	20.1	5.00	0.116	ug/L

SW-846 6010B

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.027	0.015	0.0027	mg/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	290	2.00	0.149	ug/L
108-88-3	Toluene	63.5	2.00	0.164	ug/L
100-41-4	Ethylbenzene	154	2.00	0.104	ug/L
1330-20-7	Xylene (total)	217	6.00	0.668	ug/L
91-20-3	Naphthalene	39.6	10.0	0.202	ug/L
107-06-2	1,2-Dichloroethane	5.15J	10.0	0.128	ug/L

EPA 353.2 N+N

CAS#	Parameter	Result	RDL	MDL	Units
C-005	Nitrate/Nitrite	0.021	0.010	0.001	mg/L

SM 3500 Fe D Ferrous Iron

CAS#	Parameter	Result	RDL	MDL	Units
WET-045	Ferrous Iron	0.451	0.050	0.005	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133804	**MW-4**	Water	05/11/2009 16:10	05/13/2009 09:55

SM 3500 Fe D Ferrous Iron

CAS#	Parameter	Result	RDL	MDL	Units
WET-045	Ferrous Iron	0.086	0.050	0.005	mg/L

SW-846 8011

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.042	0.010	0.00350	ug/L

SW-846 6010B

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.014B	0.015	0.0027	mg/L

EPA 353.2 N+N

CAS#	Parameter	Result	RDL	MDL	Units
C-005	Nitrate/Nitrite	0.008B	0.010	0.001	mg/L

RSK 175

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	Methane	2.33J	5.00	0.116	ug/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	75.8	1.00	0.075	ug/L
100-41-4	Ethylbenzene	17.0	1.00	0.052	ug/L
1330-20-7	Xylene (total)	200	3.00	0.334	ug/L
91-20-3	Naphthalene	16.7	5.00	0.101	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	1.16	1.00	0.097	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133805	**PW-1**	Water	05/11/2009 14:00	05/13/2009 09:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
91-20-3	**Naphthalene**	**4.11J**	**5.00**	**0.101**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133801	**MW-1**	Water	05/11/2009 16:40	05/13/2009 09:55

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			40	05/19/2009 14:50	AGC	411938

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	2.56U	200	2.56	ug/L
71-43-2	**Benzene**	**3250**	**40.0**	**2.99**	**ug/L**
100-41-4	**Ethylbenzene**	**1580**	**40.0**	**2.09**	**ug/L**
91-20-3	**Naphthalene**	**841**	**200**	**4.04**	**ug/L**
108-88-3	**Toluene**	**265**	**40.0**	**3.28**	**ug/L**
1330-20-7	**Xylene (total)**	**5160**	**120**	**13.4**	**ug/L**
1634-04-4	tert-Butyl methyl ether (MTBE)	3.89U	40.0	3.89	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2000	2120	ug/L	106	78 - 130
1868-53-7	Dibromofluoromethane	2000	1830	ug/L	92	77 - 127
2037-26-5	Toluene d8	2000	2050	ug/L	103	76 - 134
17060-07-0	1,2-Dichloroethane-d4	2000	1930	ug/L	97	71 - 127

SW-846 8270C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/14/2009 07:00	411573	3510C	1	05/15/2009 16:19	KCB	411718

CAS#	Parameter	Result	RDL	MDL	Units
83-32-9	Acenaphthene	0.147U	10.5	0.147	ug/L
208-96-8	Acenaphthylene	0.132U	10.5	0.132	ug/L
120-12-7	Anthracene	0.142U	10.5	0.142	ug/L
56-55-3	Benzo(a)anthracene	0.366U	10.5	0.366	ug/L
50-32-8	Benzo(a)pyrene	0.373U	10.5	0.373	ug/L
205-99-2	Benzo(b)fluoranthene	0.227U	10.5	0.227	ug/L
191-24-2	Benzo(g,h,i)perylene	0.169U	10.5	0.169	ug/L
207-08-9	Benzo(k)fluoranthene	0.132U	10.5	0.132	ug/L
218-01-9	Chrysene	0.434U	10.5	0.434	ug/L
53-70-3	Dibenz(a,h)anthracene	0.132U	10.5	0.132	ug/L
206-44-0	Fluoranthene	0.132U	10.5	0.132	ug/L
86-73-7	**Fluorene**	**1.18J**	**10.5**	**0.132**	**ug/L**
193-39-5	Indeno(1,2,3-cd)pyrene	0.132U	10.5	0.132	ug/L
85-01-8	**Phenanthrene**	**0.807J**	**10.5**	**0.132**	**ug/L**
129-00-0	**Pyrene**	**0.481J**	**10.5**	**0.187**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	52.6	40.1	ug/L	76	52 - 120
321-60-8	2-Fluorobiphenyl	52.6	27.2	ug/L	52	16 - 128
1718-51-0	Terphenyl-d14	52.6	43.6	ug/L	83	43 - 138

SW-846 8270C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/14/2009 07:00	411573	3510C	4	05/20/2009 13:49	KCB	412036

CAS#	Parameter	Result	RDL	MDL	Units
91-20-3	**Naphthalene**	**727**	**42.1**	**0.968**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133801	**MW-1**	Water	05/11/2009 16:40	05/13/2009 09:55

SW-846 8270C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/14/2009 07:00	411573	3510C	4	05/20/2009 13:49	KCB	412036

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	52.6	43.2	ug/L	82	52 - 120
321-60-8	2-Fluorobiphenyl	52.6	30	ug/L	57	16 - 128
1718-51-0	Terphenyl-d14	52.6	40.9	ug/L	78	43 - 138

RSK 175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2009 14:26	JAR	411945

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	**Methane**	**23.7**	**5.00**	**0.116**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	27.8	ug/L	69	40 - 143

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/14/2009 16:00	411677	SW-846 8011	5	05/19/2009 12:14	TLS	411975

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	**1,2-Dibromoethane**	**1.66**	**0.050**	**0.018**	**ug/L**

SW-846 6010B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/13/2009 12:45	411557	SW-846 3010A	1	05/21/2009 23:23	CNB	412201

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	**Lead**	**0.012B**	**0.015**	**0.0027**	**mg/L**

EPA 353.2 N+N

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/18/2009 11:34	AEL	411843

CAS#	Parameter	Result	RDL	MDL	Units
C-005	Nitrate/Nitrite	0.001U	0.010	0.001	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133801	**MW-1**	Water	05/11/2009 16:40	05/13/2009 09:55

SM 3500 Fe D Ferrous Iron

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/13/2009 12:25	JEM	411566

CAS#	Parameter	Result	RDL	MDL	Units
WET-045	**Ferrous Iron**	**1.16**	**0.050**	**0.005**	**mg/L**

EPA 375.4 Sulfate

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/18/2009 09:14	JEM	411829

CAS#	Parameter	Result	RDL	MDL	Units
14808-79-8	Sulfate	0.41U	5.0	0.41	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133802	**MW-2**	Water	05/11/2009 15:20	05/13/2009 09:55

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			20	05/15/2009 02:39	JCK	411679

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	**Benzene**	**2290**	**20.0**	**1.49**	**ug/L**
108-88-3	**Toluene**	**73.6**	**20.0**	**1.64**	**ug/L**
100-41-4	**Ethylbenzene**	**699**	**20.0**	**1.04**	**ug/L**
1330-20-7	**Xylene (total)**	**2140**	**60.0**	**6.68**	**ug/L**
91-20-3	**Naphthalene**	**186**	**100**	**2.02**	**ug/L**
1634-04-4	tert-Butyl methyl ether (MTBE)	1.94U	20.0	1.94	ug/L
107-06-2	**1,2-Dichloroethane**	**105**	**100**	**1.28**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	1000	1020	ug/L	102	78 - 130
1868-53-7	Dibromofluoromethane	1000	913	ug/L	91	77 - 127
2037-26-5	Toluene d8	1000	1020	ug/L	102	76 - 134
17060-07-0	1,2-Dichloroethane-d4	1000	891	ug/L	89	71 - 127

SW-846 8270C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/14/2009 07:00	411573	3510C	1	05/15/2009 16:36	KCB	411718

CAS#	Parameter	Result	RDL	MDL	Units
83-32-9	Acenaphthene	0.143U	10.2	0.143	ug/L
208-96-8	Acenaphthylene	0.128U	10.2	0.128	ug/L
120-12-7	Anthracene	0.138U	10.2	0.138	ug/L
56-55-3	Benzo(a)anthracene	0.354U	10.2	0.354	ug/L
50-32-8	Benzo(a)pyrene	0.362U	10.2	0.362	ug/L
205-99-2	Benzo(b)fluoranthene	0.220U	10.2	0.220	ug/L
191-24-2	Benzo(g,h,i)perylene	0.164U	10.2	0.164	ug/L
207-08-9	Benzo(k)fluoranthene	0.128U	10.2	0.128	ug/L
218-01-9	Chrysene	0.421U	10.2	0.421	ug/L
53-70-3	Dibenz(a,h)anthracene	0.128U	10.2	0.128	ug/L
206-44-0	Fluoranthene	0.128U	10.2	0.128	ug/L
86-73-7	Fluorene	0.128U	10.2	0.128	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.128U	10.2	0.128	ug/L
91-20-3	Naphthalene	0.235U	10.2	0.235	ug/L
85-01-8	Phenanthrene	0.128U	10.2	0.128	ug/L
129-00-0	Pyrene	0.182U	10.2	0.182	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	51	39.1	ug/L	77	52 - 120
321-60-8	2-Fluorobiphenyl	51	29.5	ug/L	58	16 - 128
1718-51-0	Terphenyl-d14	51	41.4	ug/L	81	43 - 138

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133802	**MW-2**	Water	05/11/2009 15:20	05/13/2009 09:55

RSK 175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2009 14:36	JAR	411945

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	**Methane**	**2.67J**	**5.00**	**0.116**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	36.7	ug/L	91	40 - 143

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/14/2009 16:00	411677	SW-846 8011	1	05/19/2009 01:01	TLS	411975

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	**1,2-Dibromoethane**	**0.385**	**0.010**	**0.00350**	**ug/L**

SW-846 6010B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/13/2009 12:45	411557	SW-846 3010A	1	05/21/2009 23:28	CNB	412201

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	**Lead**	**0.0033B**	**0.015**	**0.0027**	**mg/L**

EPA 353.2 N+N

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/18/2009 11:05	AEL	411843

CAS#	Parameter	Result	RDL	MDL	Units
C-005	**Nitrate/Nitrite**	**0.058**	**0.010**	**0.001**	**mg/L**

SM 3500 Fe D Ferrous Iron

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/13/2009 12:23	JEM	411566

CAS#	Parameter	Result	RDL	MDL	Units
WET-045	**Ferrous Iron**	**0.195**	**0.050**	**0.005**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133802	**MW-2**	Water	05/11/2009 15:20	05/13/2009 09:55

EPA 375.4 Sulfate

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/18/2009 09:15	JEM	411829

CAS#	Parameter	Result	RDL	MDL	Units
14808-79-8	**Sulfate**	**2.1B**	**5.0**	**0.41**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133803	**MW-3**	Water	05/11/2009 14:50	05/13/2009 09:55

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	05/15/2009 03:04	JCK	411679

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	**Benzene**	**290**	**2.00**	**0.149**	**ug/L**
108-88-3	**Toluene**	**63.5**	**2.00**	**0.164**	**ug/L**
100-41-4	**Ethylbenzene**	**154**	**2.00**	**0.104**	**ug/L**
1330-20-7	**Xylene (total)**	**217**	**6.00**	**0.668**	**ug/L**
91-20-3	**Naphthalene**	**39.6**	**10.0**	**0.202**	**ug/L**
1634-04-4	tert-Butyl methyl ether (MTBE)	0.194U	2.00	0.194	ug/L
107-06-2	**1,2-Dichloroethane**	**5.15J**	**10.0**	**0.128**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	94.2	ug/L	94	78 - 130
1868-53-7	Dibromofluoromethane	100	85.5	ug/L	86	77 - 127
2037-26-5	Toluene d8	100	93.2	ug/L	93	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	94.7	ug/L	95	71 - 127

SW-846 8270C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/14/2009 07:00	411573	3510C	1	05/15/2009 16:52	KCB	411718

CAS#	Parameter	Result	RDL	MDL	Units
83-32-9	Acenaphthene	0.143U	10.2	0.143	ug/L
208-96-8	Acenaphthylene	0.128U	10.2	0.128	ug/L
120-12-7	Anthracene	0.138U	10.2	0.138	ug/L
56-55-3	Benzo(a)anthracene	0.354U	10.2	0.354	ug/L
50-32-8	Benzo(a)pyrene	0.362U	10.2	0.362	ug/L
205-99-2	Benzo(b)fluoranthene	0.220U	10.2	0.220	ug/L
191-24-2	Benzo(g,h,i)perylene	0.164U	10.2	0.164	ug/L
207-08-9	Benzo(k)fluoranthene	0.128U	10.2	0.128	ug/L
218-01-9	Chrysene	0.421U	10.2	0.421	ug/L
53-70-3	Dibenz(a,h)anthracene	0.128U	10.2	0.128	ug/L
206-44-0	Fluoranthene	0.128U	10.2	0.128	ug/L
86-73-7	Fluorene	0.128U	10.2	0.128	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.128U	10.2	0.128	ug/L
91-20-3	Naphthalene	0.235U	10.2	0.235	ug/L
85-01-8	Phenanthrene	0.128U	10.2	0.128	ug/L
129-00-0	Pyrene	0.182U	10.2	0.182	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	51	35.2	ug/L	69	52 - 120
321-60-8	2-Fluorobiphenyl	51	28.8	ug/L	56	16 - 128
1718-51-0	Terphenyl-d14	51	39.2	ug/L	77	43 - 138

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133803	**MW-3**	Water	05/11/2009 14:50	05/13/2009 09:55

RSK 175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2009 14:44	JAR	411945

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	**Methane**	**20.1**	**5.00**	**0.116**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	39.5	ug/L	98	40 - 143

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/14/2009 16:00	411677	SW-846 8011	1	05/19/2009 01:22	TLS	411975

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.00350U	0.010	0.00350	ug/L

SW-846 6010B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/13/2009 12:45	411557	SW-846 3010A	1	05/21/2009 23:34	CNB	412201

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	**Lead**	**0.027**	**0.015**	**0.0027**	**mg/L**

EPA 353.2 N+N

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/18/2009 11:35	AEL	411843

CAS#	Parameter	Result	RDL	MDL	Units
C-005	**Nitrate/Nitrite**	**0.021**	**0.010**	**0.001**	**mg/L**

SM 3500 Fe D Ferrous Iron

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/13/2009 12:20	JEM	411566

CAS#	Parameter	Result	RDL	MDL	Units
WET-045	**Ferrous Iron**	**0.451**	**0.050**	**0.005**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133803	**MW-3**	Water	05/11/2009 14:50	05/13/2009 09:55

EPA 375.4 Sulfate

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	05/18/2009 09:18	JEM	411829

CAS#	Parameter	Result	RDL	MDL	Units
14808-79-8	**Sulfate**	**67.1**	**10.0**	**0.83**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133804	**MW-4**	Water	05/11/2009 16:10	05/13/2009 09:55

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/15/2009 03:27	JCK	411679

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	**Benzene**	**75.8**	**1.00**	**0.075**	**ug/L**
108-88-3	Toluene	0.082U	1.00	0.082	ug/L
100-41-4	**Ethylbenzene**	**17.0**	**1.00**	**0.052**	**ug/L**
1330-20-7	**Xylene (total)**	**200**	**3.00**	**0.334**	**ug/L**
91-20-3	**Naphthalene**	**16.7**	**5.00**	**0.101**	**ug/L**
1634-04-4	**tert-Butyl methyl ether (MTBE)**	**1.16**	**1.00**	**0.097**	**ug/L**
107-06-2	1,2-Dichloroethane	0.064U	5.00	0.064	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	49.9	ug/L	100	78 - 130
1868-53-7	Dibromofluoromethane	50	46.3	ug/L	93	77 - 127
2037-26-5	Toluene d8	50	50.7	ug/L	101	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	44.7	ug/L	89	71 - 127

SW-846 8270C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/14/2009 07:00	411573	3510C	1	05/15/2009 17:08	KCB	411718

CAS#	Parameter	Result	RDL	MDL	Units
83-32-9	Acenaphthene	0.144U	10.3	0.144	ug/L
208-96-8	Acenaphthylene	0.129U	10.3	0.129	ug/L
120-12-7	Anthracene	0.139U	10.3	0.139	ug/L
56-55-3	Benzo(a)anthracene	0.358U	10.3	0.358	ug/L
50-32-8	Benzo(a)pyrene	0.366U	10.3	0.366	ug/L
205-99-2	Benzo(b)fluoranthene	0.222U	10.3	0.222	ug/L
191-24-2	Benzo(g,h,i)perylene	0.166U	10.3	0.166	ug/L
207-08-9	Benzo(k)fluoranthene	0.129U	10.3	0.129	ug/L
218-01-9	Chrysene	0.425U	10.3	0.425	ug/L
53-70-3	Dibenz(a,h)anthracene	0.129U	10.3	0.129	ug/L
206-44-0	Fluoranthene	0.129U	10.3	0.129	ug/L
86-73-7	Fluorene	0.129U	10.3	0.129	ug/L
193-39-5	Indeno(1,2,3-cd)pyrene	0.129U	10.3	0.129	ug/L
91-20-3	Naphthalene	0.237U	10.3	0.237	ug/L
85-01-8	Phenanthrene	0.129U	10.3	0.129	ug/L
129-00-0	Pyrene	0.184U	10.3	0.184	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	51.5	35.8	ug/L	69	52 - 120
321-60-8	2-Fluorobiphenyl	51.5	31	ug/L	60	16 - 128
1718-51-0	Terphenyl-d14	51.5	38.5	ug/L	75	43 - 138

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133804	**MW-4**	Water	05/11/2009 16:10	05/13/2009 09:55

RSK 175

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/20/2009 15:00	JAR	411945

CAS#	Parameter	Result	RDL	MDL	Units
74-82-8	**Methane**	**2.33J**	**5.00**	**0.116**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
115-07-1	Propene	40.5	19	ug/L	47	40 - 143

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/14/2009 16:00	411677	SW-846 8011	1	05/19/2009 01:44	TLS	411975

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	**1,2-Dibromoethane**	**0.042**	**0.010**	**0.00350**	**ug/L**

SW-846 6010B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
05/13/2009 12:45	411557	SW-846 3010A	1	05/21/2009 23:40	CNB	412201

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	**Lead**	**0.014B**	**0.015**	**0.0027**	**mg/L**

EPA 353.2 N+N

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/18/2009 11:10	AEL	411843

CAS#	Parameter	Result	RDL	MDL	Units
C-005	**Nitrate/Nitrite**	**0.008B**	**0.010**	**0.001**	**mg/L**

SM 3500 Fe D Ferrous Iron

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/13/2009 12:25	JEM	411566

CAS#	Parameter	Result	RDL	MDL	Units
WET-045	**Ferrous Iron**	**0.086**	**0.050**	**0.005**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133804	**MW-4**	Water	05/11/2009 16:10	05/13/2009 09:55

EPA 375.4 Sulfate

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/18/2009 09:19	JEM	411829

CAS#	Parameter	Result	RDL	MDL	Units
14808-79-8	Sulfate	0.41U	5.0	0.41	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20905133805	**PW-1**	Water	05/11/2009 14:00	05/13/2009 09:55

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	05/15/2009 03:50	JCK	411679

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	0.075U	1.00	0.075	ug/L
108-88-3	Toluene	0.082U	1.00	0.082	ug/L
100-41-4	Ethylbenzene	0.052U	1.00	0.052	ug/L
1330-20-7	Xylene (total)	0.334U	3.00	0.334	ug/L
91-20-3	**Naphthalene**	**4.11J**	**5.00**	**0.101**	**ug/L**
1634-04-4	tert-Butyl methyl ether (MTBE)	0.097U	1.00	0.097	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	47.4	ug/L	95	77 - 127
2037-26-5	Toluene d8	50	49.8	ug/L	100	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	46.8	ug/L	94	71 - 127

GC/MS Volatiles Quality Control Summary

Analytical Batch 411679	**Client ID**	MB411679			LCS411679			LCSD411679			
Prep Batch N/A	**GCAL ID**	724628			724629			724630			
	Sample Type	Method Blank			LCS			LCSD			
	Analytical Date	05/14/2009 20:58			05/14/2009 19:26			05/14/2009 20:13			
	Matrix	Water			Water			Water			
SW-846 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
107-06-2	1,2-Dichloroethane	0.064U	0.064	50.0	36.3	73*	76 - 123	37.3	75*	3	30
100-41-4	Ethylbenzene	0.052U	0.052	50.0	53.3	107	74 - 126	53.6	107	0.6	30
1634-04-4	tert-Butyl methyl ether (MTBE)	0.097U	0.097	50.0	39.7	79	76 - 122	41.1	82	3	30
1330-20-7	Xylene (total)	0.334U	0.334	150	162	108	76 - 123	168	112	4	30
91-20-3	Naphthalene	0.101U	0.101	50.0	50.7	101	64 - 127	54.7	109	8	35
71-43-2	Benzene	0.075U	0.075	50.0	50.8	102	78 - 121	50.0	100	2	20
108-88-3	Toluene	0.082U	0.082	50.0	51.3	103	78 - 121	50.9	102	0.8	20
Surrogate											
460-00-4	4-Bromofluorobenzene	50.7	101	50	51.8	104	78 - 130	50.6	101		
1868-53-7	Dibromofluoromethane	45.9	92	50	45.1	90	77 - 127	44.8	90		
2037-26-5	Toluene d8	51.9	104	50	51.7	103	76 - 134	51.8	104		
17060-07-0	1,2-Dichloroethane-d4	42.7	85	50	42.2	84	71 - 127	43.7	87		

Analytical Batch 411938	**Client ID**	MB411938			LCS411938			LCSD411938			
Prep Batch N/A	**GCAL ID**	725814			725815			725816			
	Sample Type	Method Blank			LCS			LCSD			
	Analytical Date	05/19/2009 10:58			05/19/2009 09:22			05/19/2009 10:09			
	Matrix	Water			Water			Water			
SW-846 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
107-06-2	1,2-Dichloroethane	0.064U	0.064	50.0	48.7	97	76 - 123	44.4	89	9	30
100-41-4	Ethylbenzene	0.052U	0.052	50.0	56.5	113	74 - 126	52.7	105	7	30
1634-04-4	tert-Butyl methyl ether (MTBE)	0.097U	0.097	50.0	51.6	103	76 - 122	42.1	84	20	30
1330-20-7	Xylene (total)	0.334U	0.334	150	151	101	76 - 123	141	94	7	30
91-20-3	Naphthalene	0.101U	0.101	50.0	37.0	74	64 - 127	37.4	75	1	35
71-43-2	Benzene	0.075U	0.075	50.0	53.0	106	78 - 121	49.6	99	7	20
108-88-3	Toluene	0.082U	0.082	50.0	51.2	102	78 - 121	46.8	94	9	20
Surrogate											
460-00-4	4-Bromofluorobenzene	47.1	94	50	51.9	104	78 - 130	51.9	104		
1868-53-7	Dibromofluoromethane	48	96	50	48.7	97	77 - 127	48.3	97		
2037-26-5	Toluene d8	49.7	99	50	49.5	99	76 - 134	48.7	97		
17060-07-0	1,2-Dichloroethane-d4	49.3	99	50	47.1	94	71 - 127	47.8	96		

GC/MS Volatiles Quality Control Summary

Analytical Batch 411938	**Client ID**	VW-1	725207MS	725207MSD	
Prep Batch N/A	**GCAL ID**	20905160208	725990	725991	
	Sample Type	SAMPLE	MS	MSD	
	Analytical Date	05/19/2009 11:36	05/19/2009 12:26	05/19/2009 12:51	
	Matrix	Water	Water	Water	

SW-846 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
107-06-2	1,2-Dichloroethane	0.00	320	250000	232000	93	76 - 123	222000	89	4	30
100-41-4	Ethylbenzene	0.00	261	250000	270000	108	74 - 126	256000	102	5	30
1634-04-4	tert-Butyl methyl ether (MTBE)	273000	486	250000	491000	87	76 - 122	506000	93	3	30
1330-20-7	Xylene (total)	29800	1670	750000	722000	92	76 - 123	697000	89	4	30
91-20-3	Naphthalene	46400	505	250000	159000	**45***	64 - 127	212000	66	29	30
71-43-2	Benzene	18400	374	250000	268000	100	78 - 121	262000	97	2	30
108-88-3	Toluene	50400	410	250000	282000	93	78 - 121	276000	90	2	30
Surrogate											
460-00-4	4-Bromofluorobenzene			250000	261000	104	78 - 130	268000	107		
1868-53-7	Dibromofluoromethane			250000	252000	101	77 - 127	243000	97		
2037-26-5	Toluene d8			250000	241000	96	76 - 134	245000	98		
17060-07-0	1,2-Dichloroethane-d4			250000	249000	100	71 - 127	241000	96		

GC/MS Semi-Volatiles Quality Control Summary

Analytical Batch	411718	**Client ID**	MB411573			LCS411573			LCSD411573			
Prep Batch	411573	**GCAL ID**	724105			724106			724107			
Prep Method	3510C	**Sample Type**	Method Blank			LCS			LCSD			
		Prep Date	05/14/2009 07:00			05/14/2009 07:00			05/14/2009 07:00			
		Analytical Date	05/15/2009 11:20			05/15/2009 11:42			05/15/2009 11:58			
		Matrix	Water			Water			Water			
SW-846 8270C		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**		**RPD**	**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**		**Limit**
208-96-8	Acenaphthylene	0.125U	0.125								
120-12-7	Anthracene	0.135U	0.135								
56-55-3	Benzo(a)anthracene	0.347U	0.347								
205-99-2	Benzo(b)fluoranthene	0.216U	0.216								
207-08-9	Benzo(k)fluoranthene	0.125U	0.125								
191-24-2	Benzo(g,h,i)perylene	0.161U	0.161								
50-32-8	Benzo(a)pyrene	0.355U	0.355								
218-01-9	Chrysene	0.412U	0.412								
53-70-3	Dibenz(a,h)anthracene	0.125U	0.125								
206-44-0	Fluoranthene	0.125U	0.125								
86-73-7	Fluorene	0.125U	0.125								
193-39-5	Indeno(1,2,3-cd)pyrene	0.125U	0.125								
91-20-3	Naphthalene	0.230U	0.230								
85-01-8	Phenanthrene	0.125U	0.125								
83-32-9	Acenaphthene	0.140U	0.140	100	81.2	81	52 - 120	74.3	74	9	32
129-00-0	Pyrene	0.178U	0.178	100	82.6	83	54 - 120	80.9	81	2	30
Surrogate											
4165-60-0	Nitrobenzene-d5	36.3	73	50	39.9	80	52 - 120	36.3	73		
321-60-8	2-Fluorobiphenyl	35.2	70	50	36.4	73	16 - 128	35.4	71		
1718-51-0	Terphenyl-d14	38.8	78	50	43.8	88	43 - 138	40.1	80		

General Chromatography Quality Control Summary

Analytical Batch	411945	**Client ID**	MB411945			LCS411945				LCSD411945		
Prep Batch	N/A	**GCAL ID**	725844			725845				725846		
		Sample Type	Method Blank			LCS				LCSD		
		Analytical Date	05/20/2009 13:17			05/20/2009 14:03				05/20/2009 14:09		
		Matrix	Water			Water				Water		
RSK 175		**Units**	**Result**	ug/L **RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**		**Result**	**% R**	**RPD**	**RPD Limit**
74-82-8	Methane		0.116U	0.116	17.5	16.8	96	39 - 120		14.8	85	13	27
Surrogate													
115-07-1	Propene		34.9	86	40.5	27	67	40 - 143		23.9	59		

General Chromatography Quality Control Summary

Analytical Batch	411975	**Client ID**	MB411677	LCS411677	LCSD411677
Prep Batch	411677	**GCAL ID**	724622	724623	724624
Prep Method	SW-846 8011	**Sample Type**	Method Blank	LCS	LCSD
		Prep Date	05/14/2009 16:00	05/14/2009 16:00	05/14/2009 16:00
		Analytical Date	05/18/2009 19:19	05/19/2009 11:09	05/19/2009 11:31
		Matrix	Water	Water	Water

SW-846 8011		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
106-93-4	1,2-Dibromoethane	0.00350U	0.00350	1.07	0.739	69	62 - 140	0.974	87	27	40

Inorganics Quality Control Summary

Analytical Batch	412201	**Client ID**	MB411557		LCS411557
Prep Batch	411557	**GCAL ID**	723979		723980
Prep Method	SW-846 3010A	**Sample Type**	Method Blank		LCS
		Prep Date	05/13/2009 12:45		05/13/2009 12:45
		Analytical Date	05/21/2009 21:57		05/21/2009 22:04
		Matrix	Water		Water

SW-846 6010B		**Units** mg/L					
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**
7439-92-1	Lead	0.0027U	0.0027	0.50	0.50	101	80 - 120

General Chemistry Quality Control Summary

Analytical Batch 411843	**Client ID**	MB411843			LCS411843		
Prep Batch N/A	**GCAL ID**	725431			725432		
	Sample Type	Method Blank			LCS		
	Analytical Date	05/18/2009 10:54			05/18/2009 10:55		
	Matrix	Water			Water		
EPA 353.2 N+N		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
C-005 Nitrate/Nitrite		0.001U	0.001	0.500	0.511	102	90 - 110

Analytical Batch 411843	**Client ID**	CM02-200S			MATRIX SPIKEMS		
Prep Batch N/A	**GCAL ID**	20905136701			20905136703		
	Sample Type	SAMPLE			MS		
	Analytical Date	05/18/2009 11:14			05/18/2009 11:16		
	Matrix	Water			Water		
EPA 353.2 N+N		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
C-005 Nitrate/Nitrite		0.000	0.001	0.500	0.479	95.8	89.5 -110.4

Analytical Batch 411843	**Client ID**	U31EPHW (N+N)			723535MS		
Prep Batch N/A	**GCAL ID**	20905122101			725434		
	Sample Type	SAMPLE			MS		
	Analytical Date	05/18/2009 10:57			05/18/2009 11:00		
	Matrix	Water			Water		
EPA 353.2 N+N		**Units**	mg/L	**Spike**	**Result**		**Control**
		Result	**RDL**	**Added**		**% R**	**Limits % R**
C-005 Nitrate/Nitrite		14.9	0.100	50.0	65.4	101	89.5 -110.4

Analytical Batch 411843	**Client ID**	CM02-200S		MATRIX DUPLICATE		
Prep Batch N/A	**GCAL ID**	20905136701		20905136705		
	Sample Type	SAMPLE		DUP		
	Analytical Date	05/18/2009 11:14		05/18/2009 11:15		
	Matrix	Water		Water		
EPA 353.2 N+N		**Units**	mg/L	**Result**		**RPD**
		Result	**RDL**		**RPD**	**Limit**
C-005 Nitrate/Nitrite		0.000	0.001	0.000	0	25

General Chemistry Quality Control Summary

Analytical Batch 411843	**Client ID**	U31EPHW (N+N)		723535DUP		
Prep Batch N/A	**GCAL ID**	20905122101		725433		
	Sample Type	SAMPLE		DUP		
	Analytical Date	05/18/2009 10:57		05/18/2009 10:59		
	Matrix	Water		Water		
EPA 353.2 N+N		**Units**	mg/L	**Result**	**RPD**	**RPD Limit**
		Result	**RDL**			
C-005	Nitrate/Nitrite	14.9	0.100	15.6	4.6	25

General Chemistry Quality Control Summary

Analytical Batch	411566	Client ID	MB411566		LCS411566		
Prep Batch	N/A	GCAL ID	724049		724050		
		Sample Type	Method Blank		LCS		
		Analytical Date	05/13/2009 12:17		05/13/2009 12:17		
		Matrix	Water		Water		
SM 3500 Fe D Ferrous Iron		Units	mg/L	Spike	Result		Control
		Result	RDL	Added		% R	Limits % R
WET-045	Ferrous Iron	0.005U	0.005	1.00	1.10	110	80 - 120

Analytical Batch	411566	Client ID	MW-2		724027MS		
Prep Batch	N/A	GCAL ID	20905133802		724052		
		Sample Type	SAMPLE		MS		
		Analytical Date	05/13/2009 12:23		05/13/2009 12:23		
		Matrix	Water		Water		
SM 3500 Fe D Ferrous Iron		Units	mg/L	Spike	Result		Control
		Result	RDL	Added		% R	Limits % R
WET-045	Ferrous Iron	0.195	0.005	1.00	1.36	117	75 - 125

Analytical Batch	411566	Client ID	MW-3	724028DUP		
Prep Batch	N/A	GCAL ID	20905133803	724051		
		Sample Type	SAMPLE	DUP		
		Analytical Date	05/13/2009 12:20	05/13/2009 12:20		
		Matrix	Water	Water		
SM 3500 Fe D Ferrous Iron		Units	mg/L	Result		RPD
		Result	RDL		RPD	Limit
WET-045	Ferrous Iron	0.451	0.005	0.453	0.44	25

General Chemistry Quality Control Summary

Analytical Batch 411829	**Client ID**	MB411829			LCS411829		
Prep Batch N/A	**GCAL ID**	725400			725401		
	Sample Type	Method Blank			LCS		
	Analytical Date	05/18/2009 09:11			05/18/2009 09:12		
	Matrix	Water			Water		
EPA 375.4 Sulfate	**Units**	mg/L	**Spike**	**Result**		**Control**	
	Result	**RDL**	**Added**		**% R**	**Limits % R**	
14808-79-8 Sulfate	0.41U	0.41	20.0	20.3	102	80 - 120	

Analytical Batch 411829	**Client ID**	MW-1			724026MS		
Prep Batch N/A	**GCAL ID**	20905133801			725403		
	Sample Type	SAMPLE			MS		
	Analytical Date	05/18/2009 09:14			05/18/2009 09:15		
	Matrix	Water			Water		
EPA 375.4 Sulfate	**Units**	mg/L	**Spike**	**Result**		**Control**	
	Result	**RDL**	**Added**		**% R**	**Limits % R**	
14808-79-8 Sulfate	0.00	0.41	20.0	21.5	108	75 - 125	

Analytical Batch 411829	**Client ID**	MW-2			724027MS		
Prep Batch N/A	**GCAL ID**	20905133802			725404		
	Sample Type	SAMPLE			MS		
	Analytical Date	05/18/2009 09:15			05/18/2009 09:16		
	Matrix	Water			Water		
EPA 375.4 Sulfate	**Units**	mg/L	**Spike**	**Result**		**Control**	
	Result	**RDL**	**Added**		**% R**	**Limits % R**	
14808-79-8 Sulfate	2.1	0.41	20.0	25.7	118	75 - 125	

Analytical Batch 411829	**Client ID**	MW-1		724026DUP		
Prep Batch N/A	**GCAL ID**	20905133801		725402		
	Sample Type	SAMPLE		DUP		
	Analytical Date	05/18/2009 09:14		05/18/2009 09:14		
	Matrix	Water		Water		
EPA 375.4 Sulfate	**Units**	mg/L	**Result**		**RPD**	
	Result	**RDL**		**RPD**	**Limit**	
14808-79-8 Sulfate	0.00	0.41	0.00	0	25	

Access Analytical - Chain of Custody Record

Access/4565/20905136/5-209

LAB USE ONLY

Project Work Order # 7309-8706 | PO # | Access Quote # | LAB USE ONLY Laboratory ID: ACA

Company Name: Terracon

Report To: Mike Hudgins

Address: 521 Clemson Rd

City: Columbia State: SC Zip: 29229

Phone: 803-741-9000 Fax:

Email:

Project Name: Eddies

Sampled By: William Walker

Sample Location/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	# of cont.	Preservative: (*see codes below)	↓ REQUESTED LAB ANALYSIS: ↓ BTEX, MeOH, MTBE, 1,2-DCA	EDB	Ferrous Iron	Nitrate	Sulfate	Methane	PAH	Lead	BTEX, MeOH, MTBE	
MW-1	5/11/09	1640		GW	12		2	2	2	1	1	2	1	1		1
MW-2		1520														2
MW-3		1450														3
MW-4		1610														4
PW-1		1400			2										2	5

ACCESS ANALYTICAL, INC.

7478 Carlisle Street
Irmo, SC 29063

Phone: (803) 781-4243
Fax: 781-4303
Toll Free (888) 315-4243
www.axs-inc.com

*Preservative Codes (place corresponding # in block above analysis field): 0=None, 1=HCL, 2=HNO_3, 3=H_2SO_4, 4=NaOH, 5=$Na_2S_2O_3$, 6=$NaHSO_4$, Other=Specify

*Matrix Codes (place corresponding code in sample matrix column): GW=ground water, WW=waste water, DW=drinking water, S=soil, SL=sludge, A=air, IW=industrial waste, WO=waste oil, OT=other (Specify in comments section)

NOTES / COMMENTS
(if sample is a composite please use space below to note start/finish times & dates)

Turnaround Time:

✓ Standard
__ RUSH*
*Date Required:_____
(For rush work, results emailed/faxed by end of business day on date required)

LAB USE ONLY
Samples Recd. on Ice?
✓ Yes
__ No
Receipt Temp ____

Project Location:
✓ SC
__ NC
__ Other_____(specify)

Relinquished By:	Date:	Time:	Received By:
[signature]	5/4/09	15:30	M Robertson
M Robertson	5/12/09	1700	FEDEX
FEDEX	5-13-9	955	

See Reverse for Terms and Conditions

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Original Copy - Returned w/Report
Yellow Copy - Access File Copy
Pink Copy - Client Copy

Pg 1 of 1

APPENDIX D

Aquifer Calculations

Orig. Issur Ma

GRAIN SIZE DISTRIBUTION TEST DATA SHEET (ASTM D422)

Rev. Jan 2006

PROJECT	Eddies								
JOB NO.	73098106	DATE		6/10/2009	TESTED BY	RGS	REVIEWED BY	RWN	
BORING / PIT NO.	MW-4		DEPTH	49.0	SAMPLE TYPE		SS	SAMPLE NO.	0.001
LOCATION									
SOIL DESCRIPTION	Tan clayey SILT with sand								
LIQUID LIMIT	-	PLASTICITY INDEX		-	% Fines			SPECIFIC GRAVITY	-

SPLITTING AIR DRIED MATERIAL ON # 4 SIEVE

AIR DRIED WEIGHT OF TOTAL SAMPLE	0	GRAMS
AIR DRIED WEIGHT RETAINED ON # 4 SIEVE	0	GRAMS
(WASHED)OVEN DRIED WT. RETAINED ON # 4	0	GRAMS
AIR DRIED WEIGHT PASSING ON # 4 SIEVE	0	GRAMS
EQUAVALENT OVEN DRIED WT. PASSING # 4	50.00	GRAMS

MOISTURE ON AIR DRIED MATERIAL PASSING # 4

PAN NO.		
AIR DRIED SOIL+ PAN (GRAMS)	0.00	GRAMS
OVEN DRIED SOIL+ PAN (GRAMS)	0.00	GRAMS
WT. OF PAN (GRAMS)	0.00	GRAMS
% MOISTURE	0.00	%

MATERIAL FOR SIEVE & HYDROMETER ANALYSIS

PAN NO 5012

AIR DRIED MATERIAL PASSING # 4	0	GRAMS
OVEN DRIED MATERIAL PASSING # 4	0	GRAMS
OVEN DRIED MAT. REPRESENTING THE WHOLE SAMLPLE	50.00	GRAMS

SIEVE ANALYSIS DATA

	SIEVE SIZE	WEIGHT RETAINED (GRAMS)	MATERIAL RETIANED %	PARTICAL DIAMETER (MM)	MATERIAL PASSING %
COARSER THAN # 4 SIEVE	3"	0.00	0.0	75.00	100.00
	2"	0.00	0.00	50.00	100.00
	1 1/2"	0.00	0.00	37.50	100.00
	1"	0.00	0.00	25.00	100.00
	3/4"	0.00	0.00	19.00	100.00
	3/8"	0.00	0.00	9.50	100.00
	# 4	2.52	5.04	4.75	94.96
FINER THAN # 4 SIEVE	#10	6.31	12.62	2.000	87.38
	#30	9.08	18.16	0.600	81.84
	#40	9.50	19.00	0.425	81.00
	#60	10.29	20.58	0.250	79.42
	# 100	14.92	29.84	0.150	70.16
	# 200	18.28	36.56	0.075	63.44
HYDROMETER DATA				0.030	57.82
				0.020	44.97
				0.012	41.76
				0.008	35.33
				0.006	32.12
				0.003	19.27
				0.001	12.85

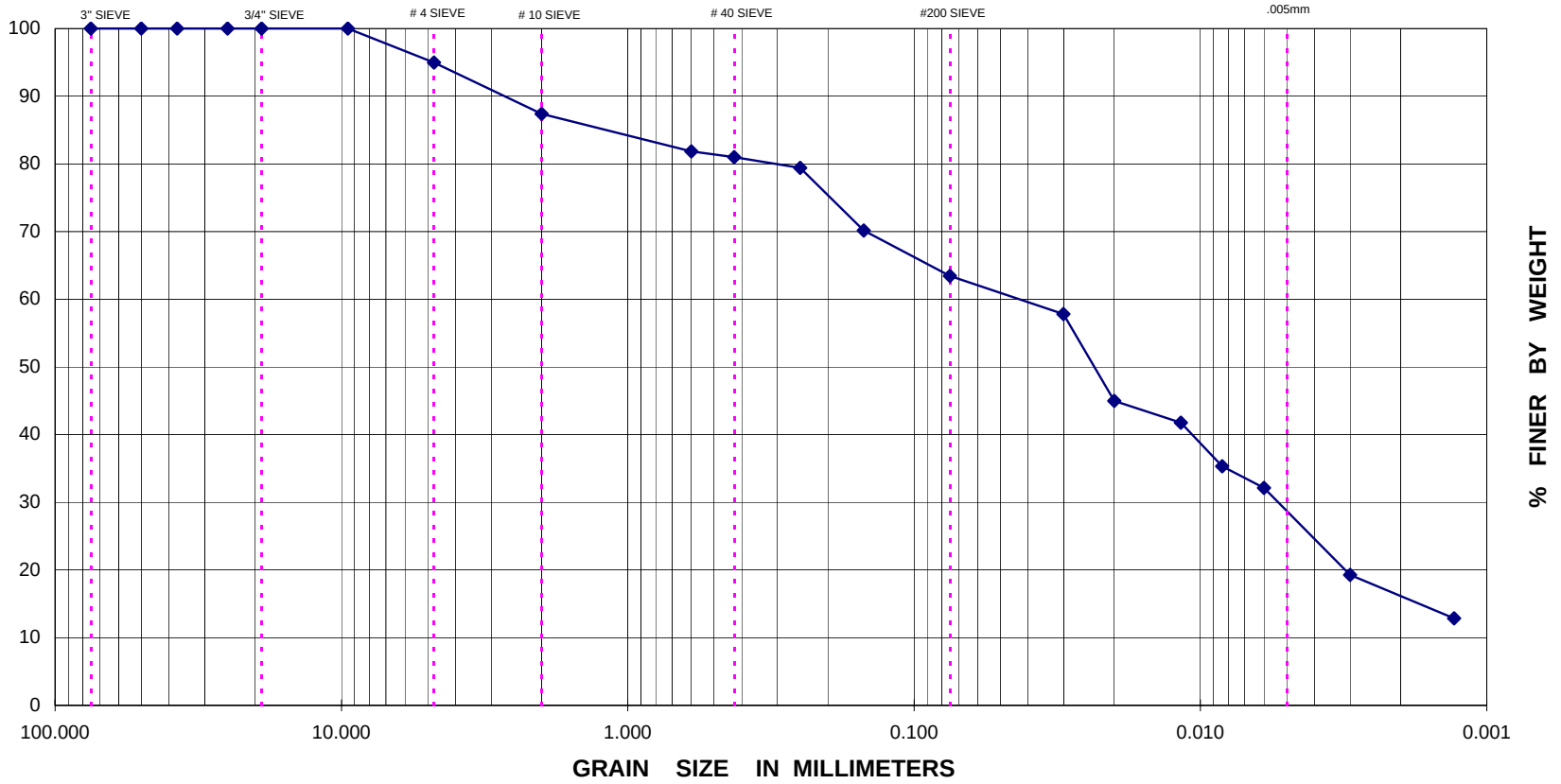
Date & Time	Zero CORR.	Temp °C	ELAPSED TIME (MINTUES)	READING (Uncorrted)

GRAIN SIZE DISTRIBUTION TEST REPORT

(ASTM D422)

JOB NAME :	Eddies						
JOB NO. :	73098106	**DATE:**	06/10/09	**TESTED BY :**	RGS	**REVIEWED BY :**	*RWN*
BORING / PIT NO. :	MW-4	**DEPTH, ft.:**	49.0	**SAMPLE NO. :**	*0.001*	**SAMPLE TYPE :**	*SS*
SAMPLE LOCATION:							
SOIL DESCRIPTION :	Tan clayey SILT with sand					**SP. GRAVITY, Gs :**	-
LIQUID LIMIT, %:		**PLASTICITY INDEX, %:**		**MOISTURE, %:**	-	**FINES, %:**	*63.4*
D10, MM:	-	**D30, MM:**	-	**D60, MM:**	-	**COEFF. OF CURVATURE, C_C:**	-
CLASSIFICATION		**UNIFIED:**	-	**AASHTO:**	-	**COEFF. OF UNIFORMITY, C_U:**	-

GRAVEL		SAND			FINES	
COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY



SUMMARY of SLUG TEST

SOUTH CAROLINA
Department of Health and Environmental Control (DHEC)

Site Data

SITE ID: # 18871 COUNTY Chesterfield

FACILITY NAME Eddies Pit Stop

Slug Data

See Appendix E Table _____ Figure _____ for a list of all data measurements.
(water level logs, etc) (complete as appropriate)
Water Level Recovery Data was measured by Manually with water level indicator
(Hermit Data Logger, Manually with Water Level Indicator, etc.) (list method).
Complete the following table for each well tested.
COMPLETE A SECOND SHEET IF MORE THAN FOUR WELLS ARE TESTED

Slug Test Conducted in well(s) number	MW-3	MW-4		
Initial Rise/Drawdown in well (feet)	2.07	2.54		
Radius of Well Casing (feet)	0.083	0.083		
Effective Radius of Well (feet)	0.667	0.667		
Static Saturated Aquifer Thickness (feet)	40	40		
Length of Well Screen (feet)	15	15		
Static Height of Water Column in Well (ft)	26.12	28.89		

Calculations

See Appendix D Table _____ Figure _____ for calculations. (complete as appropriate).
The method for aquifer calculations was Bouwer and Rice (i.e. Bouwer and Rice, etc.)
Calculated values by well were as follows:

Slug Test Conducted in Well(s) Number	MW-3	MW-4	
Hydraulic Conductivity (ft./day)	0.225	0.206	

The thickness of the aquifer used to calculate hydraulic conductivity was 40 feet.
The aquifer is _____ confined **X** semiconfined _____ Water Table (Check as appropriate)

The estimated seepage velocity is 13 feet per year based on:
a hydraulic conductivity of 0.215 ft./day , a hydraulic gradient of 0.05 , and
a porosity of 30 percent for clayey silt

SUMMARY of SLUG TEST

Slug Test Calculation

Monitoring Well	MW-3		
Project	Eddies Pit Stop		
Test Date	5/11/2009		
Casing Diameter	=	2.000	in
Borehole Diameter	=	6.000	in
r_c		0.0833	ft
r_c^2	=	0.0069	ft^2
r_w	=	0.2500	ft
r_w^2		0.0625	ft^2
L_e	=	15.00	ft
L_w	=	26.00	ft
L_e/r_w	=	60.00	
L_w/r_w	=	45.00	
H	=	30.60	ft
y_0	=	2.10	ft
y_t	=	1.40	ft
t	=	5.00	min
A	=	2.8	
B	=	0.5	
C	=	0.0	
n	=	0.25	
Depth to Water	=	20.4	ft
Depth to Impermeable	=	100.0	ft
Depth to Screen Bottom	=	48.1	ft

$$r_{eq} = ((1-n)r_c^2 + nr_w^2)^{1/2} = 0.1443 \text{ ft}$$

$$r_{eq}^2 = 0.020833333$$

$$\ln(R_e/R_w) = \left[\frac{1.1}{\text{Ln}(L_w/r_w)} + \frac{A + B\ln[(H - Lw)/ rw]}{L_e/r_w} \right]^{-1} = 2.7785$$

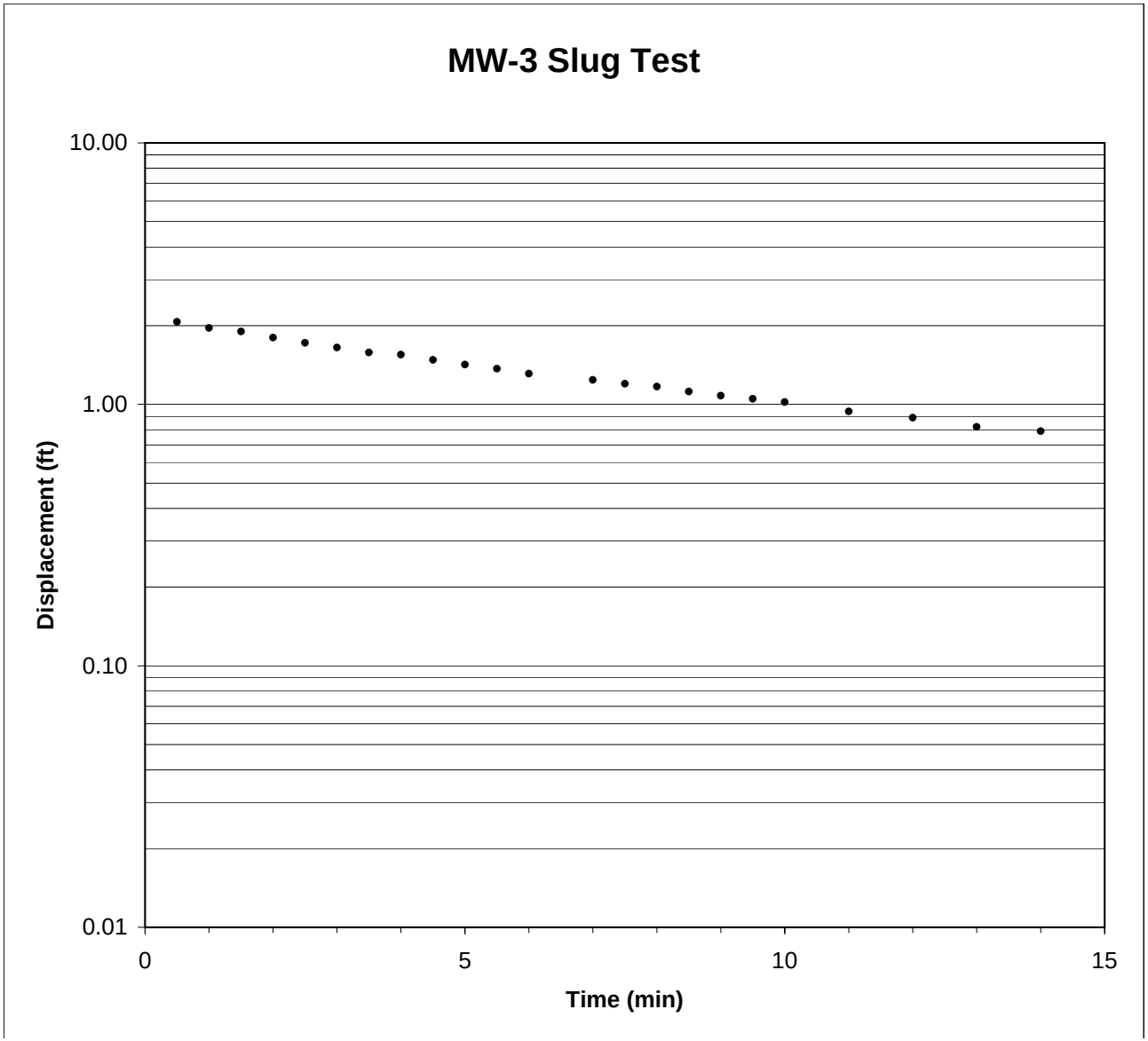
$$K \text{ (ft/min)} = \frac{r_{eq}^2 \ln(Re/Rw)}{2L_e} * \frac{1}{t} \ln\frac{y_0}{y_t} = 0.00015647$$

K (ft/day) =	**0.225**	**ft/day**
K (ft/sec) =	**0.000003**	**ft/sec**
K (cm/sec) =	**0.000079**	**cm/sec**

SLUG TEST DATA -- MW-3

Project Name:	Eddies Pit Stop
Project Number:	73098106
Date:	5/11/09
Well ID:	MW-3
Equipment/method:	Electric Water Level Indicator
Test Start Time:	17:05
Static Water Level:	19.38

Elapsed Time (min)	Depth to Water (ft)	Displace-ment (ft)	Elapsed Time (min)	Depth to Water (ft)	Displace-ment (ft)	Elapsed Time (min)	Depth to Water (ft)	Displace-ment (ft)
0.0	19.38	0.00	17.0	20.04	0.66			
0.5	21.45	2.07	18.0	20.00	0.62			
1.0	21.34	1.96	19.0	19.97	0.59			
1.5	21.28	1.90	20.0	19.93	0.55			
2.0	21.18	1.80	25.0	19.80	0.42			
2.5	21.10	1.72	55.0	19.48	0.10			
3.0	21.03	1.65	100.0	19.35	-0.03			
3.5	20.96	1.58						
4.0	20.93	1.55						
4.5	20.86	1.48						
5.0	20.80	1.42						
5.5	20.75	1.37						
6.0	20.69	1.31						
7.0	20.62	1.24						
7.5	20.58	1.20						
8.0	20.55	1.17						
8.5	20.50	1.12						
9.0	20.46	1.08						
9.5	20.43	1.05						
10.0	20.40	1.02						
11.0	20.32	0.94						
12.0	20.27	0.89						
13.0	20.20	0.82						
14.0	20.17	0.79						
15.0	20.13	0.75						
16.0	20.07	0.69						


MW-3 Slug Test
10.00
1.00
0.10
0.01
Displacement (ft)
0
5
10
15
Time (min)

SLUG TEST DATA -- MW-4

Project Name:	Eddies Pit Stop
Project Number:	73098106
Date:	5/11/09
Well ID:	MW-4
Equipment/method:	Electric Water Level Indicator
Test Start Time:	18:15
Static Water Level:	20.11

Elapsed Time (min)	Depth to Water (ft)	Displace-ment (ft)	Elapsed Time (min)	Depth to Water (ft)	Displace-ment (ft)	Elapsed Time (min)	Depth to Water (ft)	Displace-ment (ft)
0.0	20.11	0.00	17.0	20.60	0.49			
0.5	22.65	2.54	20.0	20.50	0.39			
1.0	22.38	2.27	25.0	20.40	0.29			
1.5	22.16	2.05	30.0	20.31	0.20			
2.0	21.99	1.88	45.0	20.20	0.09			
2.5	21.87	1.76	50.0	20.19	0.08			
3.0	21.70	1.59						
3.5	21.62	1.51						
4.0	21.52	1.41						
4.5	21.45	1.34						
5.0	21.35	1.24						
5.5	21.30	1.19						
6.0	21.26	1.15						
6.5	21.19	1.08						
7.0	21.13	1.02						
7.5	21.09	0.98						
8.0	21.05	0.94						
8.5	21.00	0.89						
9.0	20.96	0.85						
9.5	20.93	0.82						
10.0	20.90	0.79						
11.0	20.84	0.73						
12.0	20.80	0.69						
13.0	20.74	0.63						
15.0	20.66	0.55						
16.0	20.5	0.39						

Slug Test Calculation

Monitoring Well		MW-4	
Project		Eddies Pit Stop	
Test Date		5/11/2009	
Casing Diameter	=	2.000	in
Borehole Diameter	=	6.000	in
r_c		0.0833	ft
r_c^2	=	0.0069	ft^2
r_w	=	0.2500	ft
r_w^2		0.0625	ft^2
L_e	=	15.00	ft
L_w	=	28.00	ft
L_e/r_w	=	45.00	
L_w/r_w	=	45.00	
H	=	30.00	ft
y_0	=	2.10	ft
y_t	=	1.80	ft
t	=	2.00	min
A	=	2.8	
B	=	0.5	
C	=	0.0	
n	=	0.25	
Depth to Water	=	20.1	ft
Depth to Impermeable	=	50.0	ft
Depth to Screen Bottom	=	48.7	ft

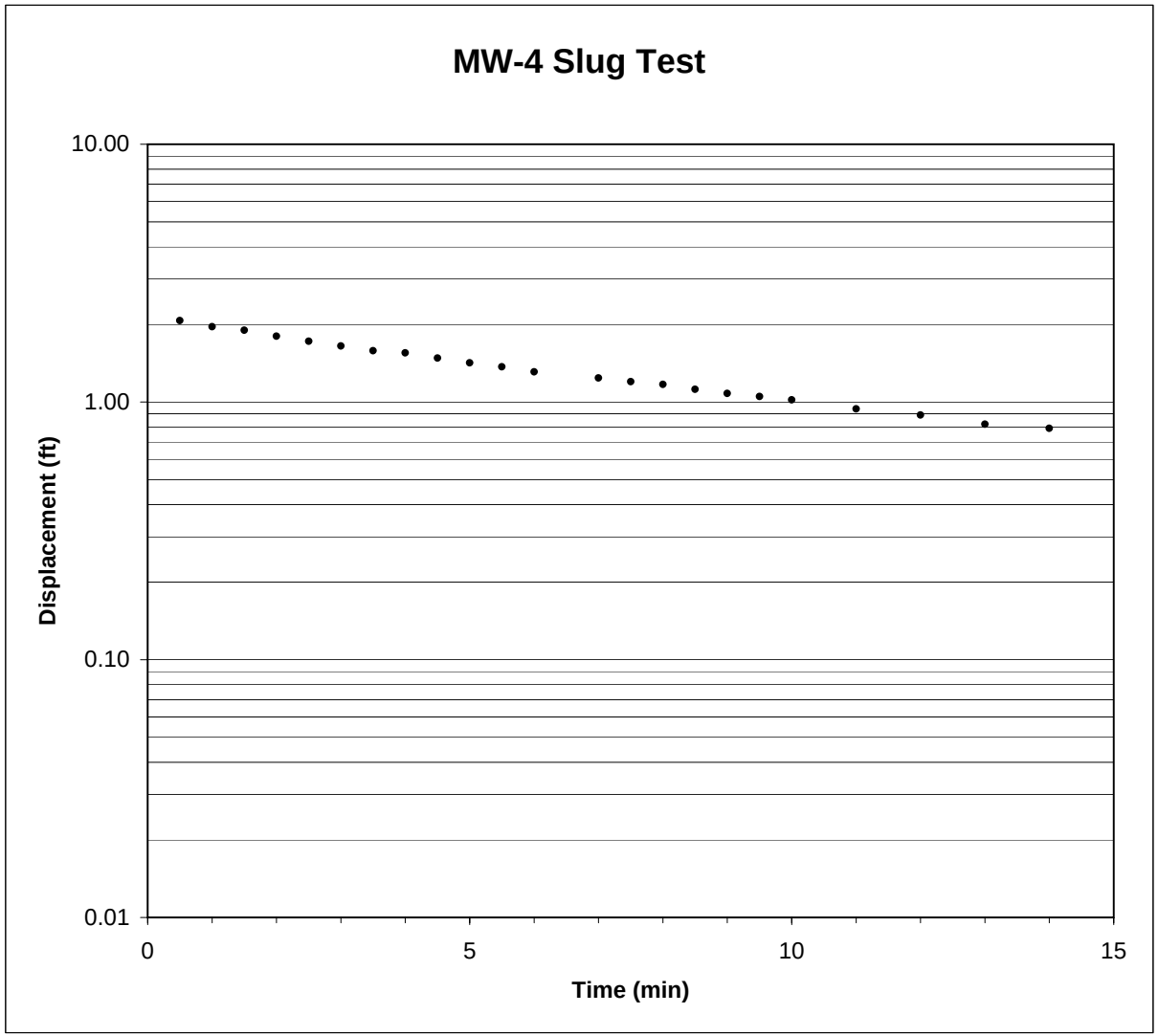
$r_{eq} = ((1-n)r_c^2 + nr_w^2)^{1/2}$ = 0.1443 ft

r_{eq}^2 = 0.020833333

$$\ln(R_e/R_w) = \left[\frac{1.1}{\mathrm{Ln}(L_w/r_w)} + \frac{A + B\ln[(H - Lw)/ rw]}{L_e/r_w} \right]^{-1} = 2.6717$$

$$K\ (\mathrm{ft/min}) = \frac{r_{eq}^2 \ln(Re/Rw)}{2L_e} * \frac{1}{t} \ln\frac{y_0}{y_t} = 0.00014300$$

K (ft/day) =	**0.206**	**ft/day**
K (ft/sec) =	**0.000002**	**ft/sec**
K (cm/sec) =	**0.000073**	**cm/sec**


MW-4 Slug Test
10.00
1.00
0.10
0.01
Displacement (ft)
0
5
10
15
Time (min)

APPENDIX E

Soil and Water Disposal Manifests

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone 803-926-0089	4. Waste Tracking Number 1 4 3 8 4

5. Generator's Name and Mailing Address: Eddies Pit- Stop - SCDOT
Rt. 2, US Hwy 601 North
Pageland, SC
Generator's Phone: 803- 741-9000

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Regulatory Solutions, Inc 803-926-0089 — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address: Regulatory Solutions, Inc.
40 Pascon Court
Gaston, SC, 29053-
Facility's Phone: 803-926-0089 — U.S. EPA ID Number

GENERATOR

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	NON-RCRA. NON-DOT REGULATED MATERIAL 10471 - 650	1 0	D M	5 5 0	g
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information

Terracon Consultants, Inc.

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Regan W. Norris — Signature — Month 06 Day 01 Year 09

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: FRED TOWNSEND — Signature — Month Day Year

Transporter 2 Printed/Typed Name — Signature: Fred Townsend — Month 6 Day 1 Year 09

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Ashley Johnson — Signature — Month 06 Day 1 Year 09

APPENDIX F

Tax Map With Property Owners

Project Mngr:	RWN
Drawn By:	PTK
Checked By:	RWN
Approved By:	PMH

Project No.	73098106
Scale:	NOT TO SCALE
File No.	73098106
Date:	AUGUST 2009

Terracon
Consulting Engineers and Scientists
521 CLEMSON ROAD COLUMBIA, SC 29229
PH. (803) 741-9000 FAX. (803) 741-9900

TAX MAP

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA
UST PERMIT # 18871

FIG. No.

Tax Map Information

SCDOT- Eddie's Pit Stop
Rt 2, U.S. HIGHWAY 601, Pageland, Chesterfield County
UST PERMIT NO. 18871

TAX MAP NO.	ADDRESS	PROPERTY OWNER	PROPERTY USE
30-04	Rt. 2, Hwy 601	Erich Simpson PO Box 1513 Lancaster, SC 29721	Subject Site
30-03	2003 Hwy 601 N Pageland, SC 29728	Cathy T. Casper 2003 Hwy 601 N Pageland, SC 29728	Real Property
30-02	2031 Hwy 601 N Pageland, SC 29728	Michael Wayne Shaw 2031 Hwy 601 N Pageland, SC 29728	Real Property
19-38	Hwy 601 N Pageland, SC 29728	Hundred Oaks Partners, LLc c/o James Belk 111 Virginia Street, Ste 401 Richmond, VA 32319	Real Property
30-05	Hwy 601 N Pageland, SC 29728	R. Elizabeth Wilson PO Box 1839 Lancaster, SC 29720	Real Property
30-06	1908 Hwy 601 N Pageland, SC 29728	E. Clyburn Wilson Wilson's Incorporated Box 1839 Lancaster SC 29720	Carolina Country Convenience Gas Station UST # 02261
30-08	Hwy 601 N Pageland, SC 29728	Philip R. Bundrick and Judy Kaye PO Box 58 Pageland, SC 29728	Real Property

APPENDIX G

Comprehensive Site Survey

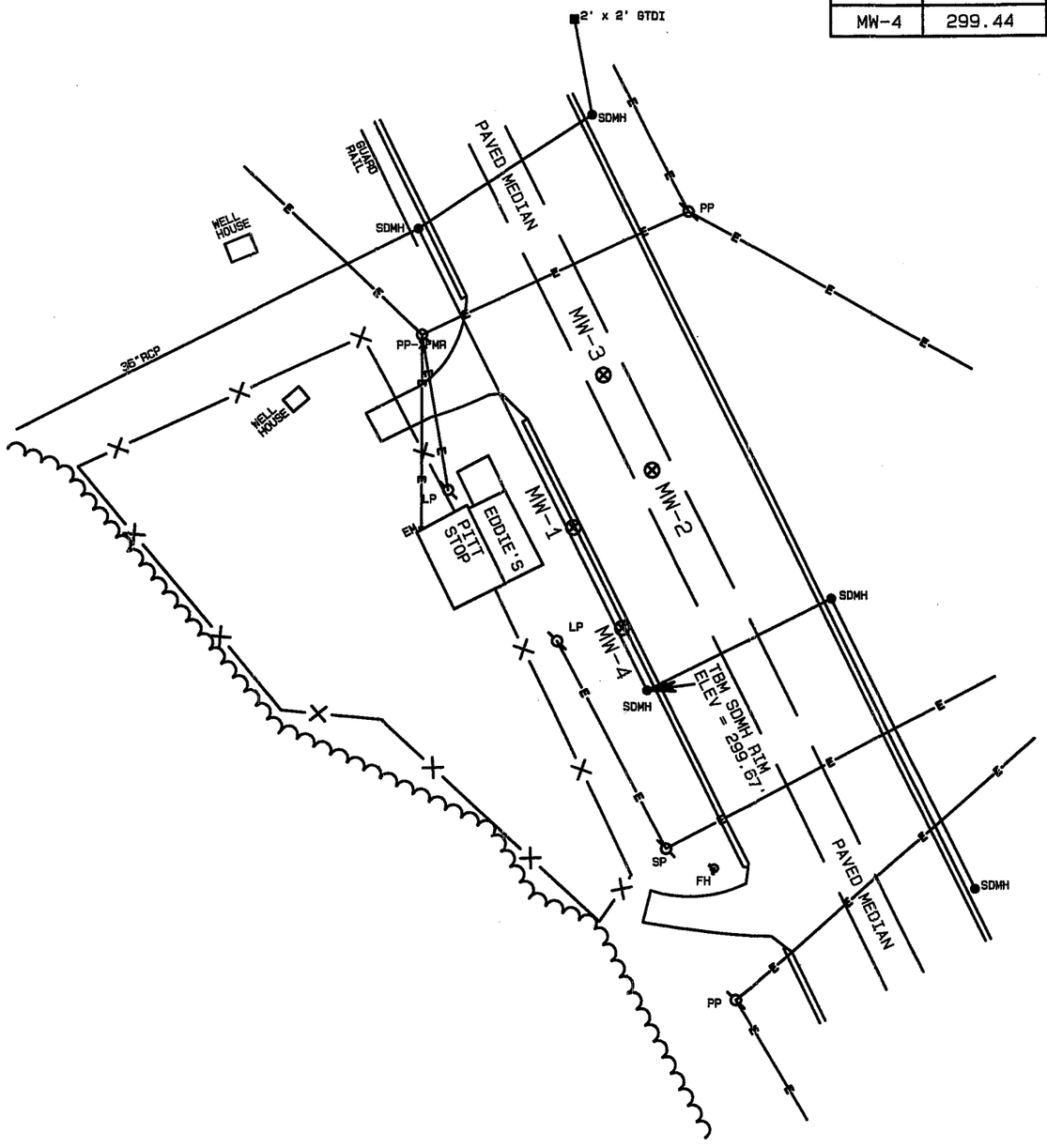
SOUTH CAROLINA
REGISTERED LAND SURVEYOR
No. 14811
JAY S. JOSHI

SOUTH CAROLINA
CONSTRUCTION SUPPORT SERVICES
No. C02425
CERTIFICATE OF AUTHORIZATION

MONITOR WELLS		
WELL	TOL ELEV.	TOC ELEV.
MW-1	299.10	298.85
MW-2	299.12	298.98
MW-3	298.84	298.36
MW-4	299.44	299.29

LEGEND AND ABBREVIATIONS:

- MW = MONITORING WELL
- TPED = TELEPHONE PEDESTAL
- SDMH = STORM DRAIN MAN HOLE
- SSMH = SANITARY SEWER MAN HOLE
- TMH = TELEPHONE MAN HOLE
- WM = WATER METER
- WV = WATER VALVE
- FH = FIRE HYDRANT
- FP = FLAG POLE
- PP = POWER POLE
- GM = GAS METER
- GV = GAS VALVE
- UST = UNDERGROUND STORAGE TANK
- USTF = UNDERGROUND STORAGE TANK FILL
- USTV = UNDERGROUND STORAGE TANK VENT
- CTCB = CONCRETE TOP CATCH BASIN
- SIGN = SIGN
- RCP = REINFORCED CONCRETE PIPE
- VAC/AIR = VACUUM AND AIR DISPENSER
- PHONE = PAY TELEPHONE
- FD = FUEL DISPENSER
- KTANK = KEROSENE TANK
- KDISP = KEROSENE DISPENSER
- E = OVERHEAD POWER LINE
- = WOODLINE



THIS PARCEL MAY BE SUBJECT TO EASEMENT AND/OR RIGHT-OF-WAYS NOT SHOWN. FINAL RESULTS, CONCLUSIVE OF TITLE SEARCH

GRAPHIC SCALE 1"=50'

0 50 100 150

NOTE:
NOT FOR THE PURPOSE OF RECORDATION AT COUNTY, COURTHOUSE OR THE CONVEYANCE OF PROPERTY.

NOTE:
I HEREBY CERTIFY THAT THE FIELD WORK, CALCULATIONS, AND DRAFTING WERE DONE UNDER MY DIRECT SUPERVISION.

COMPREHENSIVE SITE SKETCH OF

EDDIE'S PITT STOP

ROUTE 2 HIGHWAY 601 NORTH
PAGELAND, CHESTERFIELD COUNTY, SC
SCDHEC SITE ID #??????
PREPARED FOR

TERRACON

JAY S JOSHI PLS # 14811
8009 SUMTER HWY, SUITE 101, COLUMBIA, SC, 29209 803-776-9909

DATE: JUNE 23, 2009 JOB #061809W

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

SEP 04 2009

MR PETER REINHART
SC DEPARTMENT OF TRANSPORTATION
PO BOX 191
COLUMBIA SC 29202-0191

Re: Notice of Alleged Violation
Eddie's Pit Stop, Rt. 2, US Hwy 601 North, Pageland, SC
UST Permit # 18871
Release #1 Reported August 29, 2002
Chesterfield County

Dear Mr. Reinhart:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control directed you to complete a Tier I Assessment in December 2008, with the report due August 2009. To date the required report has not been received. In accordance with Section 280.65 of the South Carolina Underground Storage Tank Regulations, the assessment must be conducted as chemicals of concern are above the risk-based-screening levels.

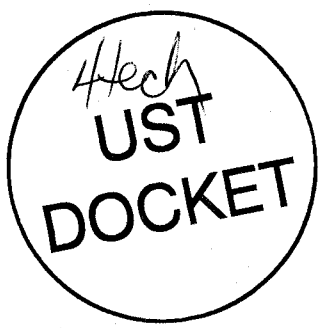
Implementation of this scope of work should proceed upon receipt of this correspondence. **Please submit the report within 30 days from the date of this letter. Should you not submit the report on or before October 10, 2009, this office will be forced to initiate enforcement action.**

On all correspondence regarding this site, please reference UST Permit #18871. If you have any questions concerning this correspondence, please call Minda Johnson, project manager, at (803) 896-6395.

Sincerely,

Minda Johnson, Hydrogeologist
Assessment Section
UST Management Division
Bureau of Land and Waste Management

cc: Technical File



UST
SEP 08 2009
PROGRAM

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street, Columbia, SC 29201

SUPERB Account Application

Pursuant to the State Underground Petroleum Environmental Response Bank (SUPERB) Act 44-2-130(E)(1): "An owner or operator of an underground storage tank or his agent seeking to qualify for compensation from the SUPERB Account for site rehabilitation shall submit a written application to the department."

Permit #: 18871 Facility Name: Eddie's Pit Stop

Facility Address: _____

Owner Name: SCDOT

Owner Address: P. O. Box 191

Owner Phone #: Columbia, SC 29202

For the following section, circle **YES** or **NO:**

YES or **NO** I request compensation from the SUPERB Account for the release discovered/reported on 8-29-02.

According to department records, you/your company had _____ as your financial responsibility mechanism at the time the release was reported. If this information is inaccurate, please correct it by checking the appropriate mechanism below:

☐ **Letter of Credit** ☐ **Insurance Policy** ☒ **Self-Insurance** ☐ **Surety Bond** ☐ **Guarantee**

INSURANCE STATEMENT

This site is potentially eligible to receive state monies to assist in site rehabilitation. Before eligibility for the SUPERB funds can be determined, written confirmation of the existence or non-existence of an environmental insurance policy for this site is required. Please circle **YES** or **NO** with regard to the following:

Is there now, or has there ever been an insurance policy or other financial mechanism that covers this UST release? **YES** or **NO**

My policy provider is _____

The policy number is _____

The policy deductible is _____ Policy limit: _____

If you have this type of insurance, please include a copy of the policy with this report.

UST
DOCKET
11th

Owner Signature: _____ Sworn before me this 3rd day

Date: 9/3/09 of September, 2009.

Michelle B Wagner
Notary Public (Signature)
for the State of South Carolina
(if other than South Carolina, affix seal)

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

OCT 13 2009

MR PETER REINHART
SC DEPARTMENT OF TRANSPORTATION
PO BOX 191
COLUMBIA SC 29202-0191

Re: Monitoring Well Installation Directive
Eddies' Pit Stop-SCDOT, Rt. 2, US Hwy 601 North, Pageland, SC
UST Permit # 18871; CA # 37147; MWA#UMW-23143
Release reported August 29, 2002
Tier I Assessment Report received September 4, 2009
Chesterfield County

Dear Mr. Reinhart:

The Underground Storage Tank (UST) Program has reviewed the referenced report submitted by Terracon. The report indicates that concentrations of chemicals of concern (CoCs) are above risk-based screening levels (RBSLs) and an upward hydraulic head has prevented accurate sampling of the top of the water table. The Department requests the installation of one shallow permanent monitoring well screened from fifteen to twenty-five (15 to 25) feet and one soil boring/temporary well to be installed upgradient of the source area to document the lithology to the top of bedrock and one groundwater sample to be collected from the boring at the top of bedrock. A site map with the proposed locations for the monitoring well and soil boring/temporary well is enclosed.

According to Program records, the release at the facility was reported to SCDHEC on August 29, 2002. In accordance with Section 44-2-40(D) of the SUPERB Act, SCDOT is responsible for the first $25,000 of site rehabilitation costs. To insure that expenditures made toward rehabilitation apply to the $25,000 deductible, the Program has pre-approved costs and assigned Cost Agreement (CA) # 37147 for tracking. By law, the SUPERB Account cannot compensate any costs that are not pre-approved.

The Program has pre-approved a total of $8425.48 for this scope of work. Additional soil boring footage can be billed at the SUPERB allowable rate provided that the cost is pre-approved by the Program. Upon receipt of a report of findings, and a completed invoice with all necessary supporting documentation, the approved costs will be applied towards the $25,000 deductible. The report and invoice should be submitted to the Program within 90 days of the date of this correspondence.

Please note that in accordance with R.61-92, Subpart H, Section 280.114, you are required to notify the Program by certified mail within ten (10) days of commencing a voluntary or involuntary proceeding in bankruptcy. State law also requires that an owner/operator or guarantor that files for bankruptcy protection must immediately submit appropriate forms documenting that entity's ability to demonstrate financial responsibility.

UST DOCKET

Implementation of this scope of work may proceed upon receipt of this correspondence. Approval to install one temporary well and one permanent monitoring well is enclosed. Please note that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. Also note that only EPA Method 8260B will be accepted for analysis of volatile organic hydrocarbons. Any site rehabilitation activity associated with the UST release must be performed by a SCDHEC-certified site rehabilitation contractor as required by R.61-98.

The Department grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If the COC concentrations based on laboratory analysis are below Risk Based Screening Levels (RBSLs), please contact the project manager for approval to dispose of soil and/or groundwater on site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

On all correspondence concerning this site, please reference UST Permit # 18871. If there are any questions concerning this project, please contact me at (803) 896-6395. I can also be reached by email at johnsoms@dhec.sc.gov or by fax at (803) 896-6245.

Sincerely,

Minda Johnson, Hydrogeologist
Assessment Section
UST Management Division
Bureau of Land and Waste Management

enc: Approved Cost Agreement
Monitoring Well Approval
Site Map

cc: Technical file (w/enc)

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

Monitoring Well Approval

Approval is hereby granted to: Terracon
On Behalf of: SCDOT
Facility: Eddie's Pit Stop
Rt. 2 Hwy 601 North
Pageland, SC
UST Permit Number: #18871
County: Chesterfield

This approval is for the installation of 1 temporary and 1 shallow permanent monitoring well. The monitoring wells are to be installed in the approved locations. Monitoring wells are to be installed following the South Carolina Well Standards, R.61-71, and the applicable guidance documents. **Minimum forty-eight hour notice prior to drilling activities must be provided to the project manager.**

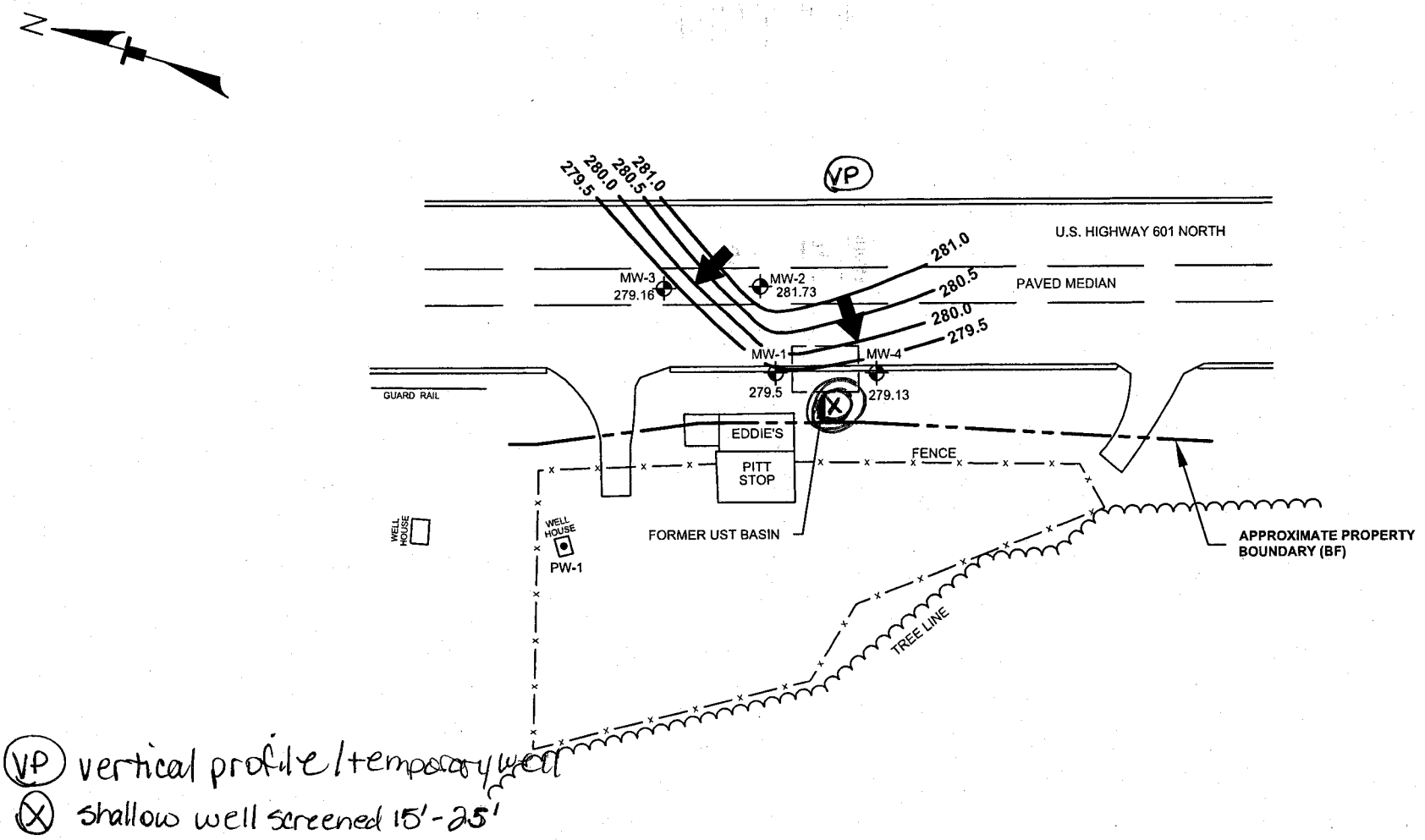
Please note that R.61-71 requires the following:

1. All wells shall be drilled, constructed, and abandoned by a South Carolina certified well driller per R.61-71.D.1.
2. All monitoring wells shall be labeled as required by R.61-71.H.2.c.
3. A Water Well Record Form or other form provided or approved by the Department shall be completed and submitted to the Department within 30 days after well completion or abandonment unless another schedule has been approved by the Department. The form should contain the "as-built" construction details and all other information required by R.61-71.H.1.f
4. All analytical data and water levels obtained from each monitoring well shall be submitted to the Department within 30 days of receipt of laboratory results unless another schedule has been approved by the Department as required by R.61-71.H.1.d.
5. If any of the information provided to the Department changes, notification to Minda Johnson (tel: (803) 896-6323 or e-mail: johnsoms@scdhec.sc.gov) shall be provided a minimum of twenty-four (24) hours prior to well construction as required by R.61-71.H.1.a.
6. All temporary monitoring wells shall be abandoned within 5 days of borehole completion using appropriate methods as required by R.61-71.H.4.c. All other wells shall be properly developed per R.61-71.H.2.d.
7. Departmental approval is required prior to abandonment of all monitoring wells as required by R.61-71.H.1.a.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and R.61-71 of the South Carolina Well Standards and Regulations, dated April 26, 2002. A copy of this approval should be on the site during well installation.

Date of Issuance: September 17, 2009 **Approval #: UMW-23143**

Minda Johnson, Hydrogeologist
Assessment Section,
UST Management Division
Bureau of Land and Waste Management



Project Mngr: RWN	Project No. 73098106	Terracon Consulting Engineers and Scientists	POTENTIOMETRIC SURFACE MAP
Drawn By: PTK	Scale: AS SHOWN	521 CLEMSON ROAD COLUMBIA, SC 29229	EDDIE'S PIT STOP - SCDOT ROUTE 2, US HIGHWAY 601 NORTH PAGELAND, SOUTH CAROLINA UST PERMIT # 18871
Checked By: RWN	File No. 73098106	PH. (803) 741-9000 FAX. (803) 741-9900	FIG. No. 5
Approved By: PMH	Date: AUGUST 2009		

Approved Cost Agreement 37147

Facility: 18871 EDDIES PIT STOP
JOHNSOMS
PO Number:

Task / Description	Categories	Item Description	Qty / Pct	Unit Price	Amount
04 MOB/DEMOB					
		A EQUIPMENT	1.0000	575.00	575.00
		B PERSONNEL	3.0000	290.00	870.00
09 WELL INSTALLATION					
		B WATER TABLE (DRILLED)	125.0000	38.00	4,750.00
10 SAMPLE COLLECTION					
		A GROUND WATER	2.0000	55.00	110.00
11 ANALYSES					
	GW GROUNDWATER	A BTEX+NAPTH+MTBE	2.0000	100.00	200.00
		BB 1,2-DCA	2.0000	10.75	21.50
		E LEAD	2.0000	20.00	40.00
		F EDB	2.0000	55.00	110.00
16 SUBSEQUENT SURVEY					
		SUBSEQUENT SURVEY	1.0000	260.00	260.00
17 DISPOSAL					
		A1 WASTEWATER - PURGING/SAMPLING	1.0000	90.00	90.00
		C SOIL (TREATMENT/DISPOSAL)	6.0000	50.00	300.00
19 RPT/PROJECT MNGT & COORDINATIO					
		PCT PERCENT	0.1500	7,326.50	1,098.98
			Total Amount		8,425.48

Monitoring Well Installation Report

Eddie's Pit Stop
Rt. 2, US Highway 601 North
Pageland, South Carolina
UST Permit # 18871

September 14, 2010
Terracon Project No. 73098106

Prepared for:
South Carolina Department of Transportation
PO Box 191
Columbia, South Carolina 29202

Prepared by:
Terracon Consultants, Inc.
Columbia, South Carolina

Offices Nationwide Established in 1965
Employee-Owned terracon.com
Terracon
Geotechnical Environmental Construction Materials Facilities

Terracon

September 14, 2010

Ms. Minda Johnson
Underground Storage Tank Program
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1708

Re: **Monitoring Well Installation Report**
Eddie's Pit Stop
Rt. 2, US Hwy 601 N, Pageland, South Carolina
UST Permit # 18871; CA # 37147
Terracon Project No. 73098106

Dear Ms. Johnson:

On behalf of the South Carolina Department of Transportation, (SCDOT), **Terracon Consultants, Inc.** (Terracon), is pleased to submit this Monitoring Well Installation Report for the Eddie's Pit Stop facility in Pageland, Chesterfield County, South Carolina. If you have any questions regarding the contents of this report, or if there is a need for further information, please contact us.

Respectfully submitted,

Terracon Consultants, Inc.
UST Contractor Certification No. 246

Regan Norris
Staff Scientist

P. Michael Hudgins, P.G.
Senior Hydrogeologist
SC Registration No. 1137

P. MICHAEL HUDGINS REGISTERED 1137 SOUTH CAROLINA PROFESSIONAL GEOLOGIST

Enclosures

CC: Mr. Peter Reinhart / SCDOT

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Eddie's Pit Stop
Rt. 2, US Hwy 601 N, Pageland, South Carolina
UST Permit # 18871; CA # 37147
Terracon Project No. 73098106

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1 Ground Water Elevation Data
1 Ground Water Analytical Data

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A Geologist Logs and Water Well Records
B Ground Water Sampling Logs
C Chemical Analytical Data
D Disposal Manifests

1.0 INTRODUCTION

Terracon Consultants, Inc. has completed a monitoring well installation at the former Eddie's Pit Stop located in Pageland, South Carolina. The purpose of the additional wells is to evaluate the current ground water quality conditions from a release of petroleum hydrocarbons previously reported at the site by the South Carolina Department of Transportation (SCDOT). The work was performed in accordance with the South Carolina Department of Health and Environmental Control (SCDHEC) Cost Agreement #37147 dated October 9, 2009 and the SCDHEC Tier II Assessment guidance document dated March 15, 2000. This report includes a description of the activities performed during this assessment, along with our current findings, conclusions and recommendations.

1.1. Facility Information

The former Eddie's Pit Stop site is located on U.S. Highway 601 N in Pageland, South Carolina. A site location (USGS Topographic) map showing a portion of the Pageland, South Carolina 7.5-minute topographic quadrangle is included as Figure 1. The site is defined as the area of the former USTs within the SCDOT right-of-way. Property access to the reminder of the Eddie's Pit Stop property was not granted during this assessment.

US Highway 601 and is associated right-of-way were expanded in 2001 as part of road improvements in Chesterfield County. The former Eddie's Pit Stop formerly operated one 750 gallon and one 2,000 gallon gasoline USTs and dispenser island, which were removed in 2002 as part of the highway expansion. A release was reported during closure of the UST basin located adjacent to the dispenser island containing the two USTs.

Based on the UST closure results, the SCDHEC issued a directive to the SCDOT to conduct an Initial Ground Water Assessment (IGWA), performed in May 2003.[1] Monitoring well MW-1 was installed as part of the IGWA which indicated Contaminants of Concern (COCs) in excess of Risk-Based Screening Levels (RBSLs) for benzene, toluene, ethylbenzene, xylenes (BTEX), naphthalene, ethylene dibromide (EDB) and lead. Based upon these results, the SCDHEC requested a Tier I Assessment be performed at this site.

Terracon performed a Tier I Assessment at the site in 2009, which included installation of four soil borings and three monitoring wells (MW-2, MW-3, and MW-4). Analyses of the groundwater samples indicated RBSLs were exceeded for one or more compounds in samples collected from all site monitoring wells. Additionally, a semi-confined water table was determined to exist at the site which prevented monitoring wells from bracketing the water table. Additional geologic and water level data was needed to determine the current water quality conditions and to evaluate the hydrogeology of the shallow aquifer.

---

[1] Initial Ground Water Assessment Report, Former Eddies Pit Stop: ARM Environmental Services, Inc., ARM Project #02-130,July 28, 2003

Two water supply wells, one on site, were identified as potential receptors. The on-site well was sampled as part of the Tier I and indicated a low concentration of naphthalene. The water supply well on the adjacent property was inaccessible at the time of the assessment.

The SCDHEC requested installation of two additional wells to evaluate the depth to bedrock and to evaluate the confining water table and water quality conditions. This well installation report includes a summary of the field methods utilized along with the results of ground water elevation measurements, field and laboratory ground water analytical results, and our conclusions and recommendations.

1.2. Monitoring Well Installation

One temporary monitoring well (TW-1) and one permanent well (MW-5) were drilled at the site on July 28, 2010 and August 6, 2010, respectively. TW-1 was drilled at a background location to bedrock, across Highway 601, east of the USTs. MW-5 was drilled on site closest to the USTs as the site conditions would allow (approximately 15 feet) owing to a drainage ditch and buried utilities (fiber optic) located in the area of the former USTs.

TW-1 was drilled using mud rotary methods and a 6-1/4 inch drill bit to a depth of 59 feet, where rock was encountered. Split-spoon soil samples were collected at 5-foot intervals, screened for organic vapors, and logged in the field. 10 feet of 2-inch PVC well screen, riser casing, and sand was set to the borehole depth and a ground water sample was collected from the temporary well. Upon sample collection, the screen and casing were abandoned in-place by pressure grouting with tremie pipe.

MW-5 was drilled using 2.5-inch inner diameter (ID) continuous-flight hollow stem augers (HSAs) to a depth of 25 feet. The monitoring well was constructed of 2-inch diameter schedule 40 PVC casing and 15 feet of 2-inch diameter PVC well screens with a manufactured slot size of 0.010-inch. An appropriately graded sand filter pack was placed within the annulus opposite the well screen to a height of approximately two feet above the top of the well screen. A bentonite pellet layer was placed above the sand filter pack in each well and hydrated. The remaining annulus of each well was grouted to land surface with cement grout. The well was completed below-grade within steel protective manhole covers, and a concrete pad was constructed around the well. The well construction details are included on Table 1. The Geologist Logs and Water Well Records (DHEC 1903 Form), as compiled by the certified driller, are included in Appendix A.

After installation, the wells were developed by surging and bailing until the wells were producing relatively clear water. Soil cuttings and development water generated during drilling was collected and disposed by Diversified Recycling, West Columbia, South Carolina. The disposal manifest is included in Appendix D.

A subsequent survey was conducted by Terracon personnel referenced to monitoring well MW-1. Top-of-casing elevations are included in Table 1.

1.3. Ground Water Sampling and Analyses

Water levels were recorded and ground water samples were collected from monitoring wells TW-1 and MW-5 on August 9, 2010. Water levels were measured using an electric water level indicator. The water level data was converted to elevations relative to the surveyed top of casing (TOC) elevations. A summary of the water level data is presented on Table 1.

TW-1 and MW-5 were purged with disposable polyethylene bailers dedicated to each well prior to sample collection. Specific conductance, pH, and temperature were recorded during well purging. The Ground Water Sampling Logs are included in Appendix B. Purge water was contained with the drilling fluid and soil cuttings and disposed by Diversified Recycling, West Columbia, South Carolina. The disposal manifests are included in Appendix D.

The samples were collected with dedicated bailers, poured into laboratory prepared containers, placed in a cooler refrigerated with ice, and delivered to Access Analytical, Inc. for analysis, accompanied with chain-of-custody documentation. The ground water samples were analyzed for the following:

Analysis	Method
Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) Methyl-tert-butyl-ether (MTBE) Naphthalene 1,2-dichloroethane (1,2-DCA) 8 Oxygenates	EPA Method 8260B
1,2-dibromoethane (EDB)	EPA Method 8011
Total lead	EPA Method 6010B

A summary of the ground water quality data from the monitoring wells is presented in Table 2 The laboratory analytical reports and chain-of-custody forms are included in Appendix.

2.0 TIER II ASSESSMENT RESULTS

2.1 Regional Hydrogeology

The site is located within the Carolina Slate Belt terrain of the Lower Piedmont physiographic province. The Carolina Slate Belt province consists of weathered low-grade metamorphic rocks. Ground water within the shallow sediments of the Lower Piedmont provinces typically occurs under water table (unconfined) and semi-confined conditions. Ground water flow

directions are a subtle reflection of the local topography. Local recharge of the shallow aquifer occurs by the direct infiltration by precipitation.

2.2 Site Hydrogeology

Based on the geologist logs of the soil borings and monitoring wells installed during this assessment, the site is underlain predominantly by tight silt and clay, and partially weathered rock (PWR) to the maximum study depth (59 feet). Based upon depth of refusal during drilling using a Mobile B-59 rig, bedrock is located approximately 59 feet below land surface at the site.

Ground water occurs within the shallow aquifer under semi-confined conditions. During installation of the monitoring wells, inspection of the split-spoon soil samples indicated that the borings were dry to boring depths. The wells were set and water was allowed to enter the borehole. TW-1 contained sufficient water after a period of a few hours, and MW-5 contained seven feet of water after a period of three days.

2.3 Ground Water Analytical Results

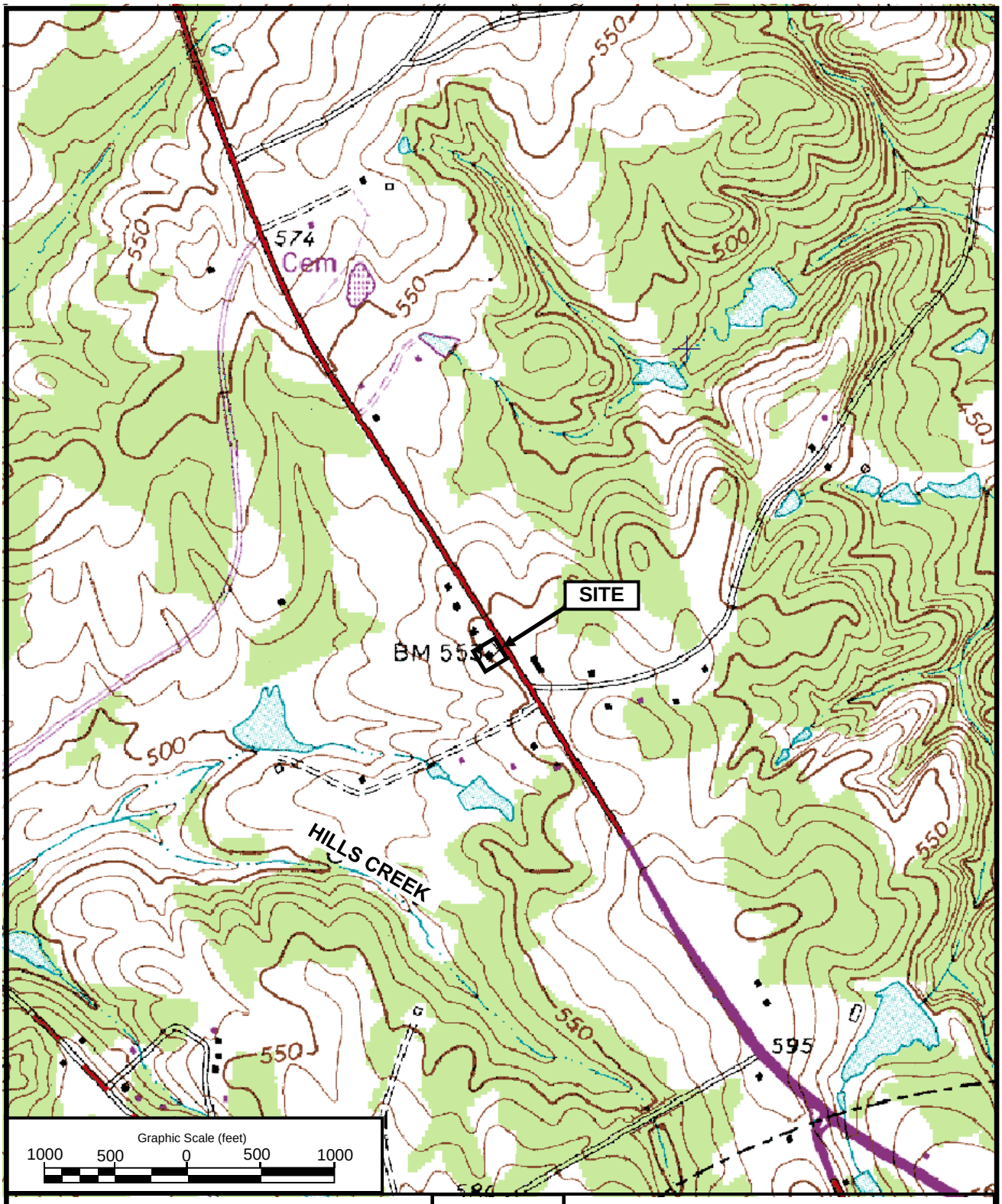
The results of the sample collected from TW-1 indicates an estimated value for ethylbenzene only. Benzene (166 ug/l) and naphthalene (307 ug/l) were detected at concentrations above RBSLs in MW-5. All other compounds were below RBSLs or laboratory detection limits. A site map showing the analytical data is included as Figure 2.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Inspection of the field and analytical data collected indicates soil and groundwater have been impacted above RBSLs, sourced from the underground storage tank system. Contamination in the upgradient well, MW-2 indicates that there may be contribution from an upgradient source (Carolinas Country Convenience UST #02261). Based on this data, and the reported ground water flow direction, further plume delineation is recommended.

Two water supply wells were identified as potential receptors. The well on the former Eddie's site (WS-1) was sampled as part of the Tier I Assessment in 2009 which indicated a low (estimated) concentration of naphthalene (4.11J). The water supply well on the adjacent property was inaccessible at the time of this assessment. Both supply wells should be sampled as part of all future assessments at this site.

FIGURES



USGS TOPOGRAPHIC QUADRANGLE MAP
PAGELAND, SOUTH CAROLINA

DATE: 1993
SCALE: 1 INCH = 1000 FEET
PROJECT NO. 73098106

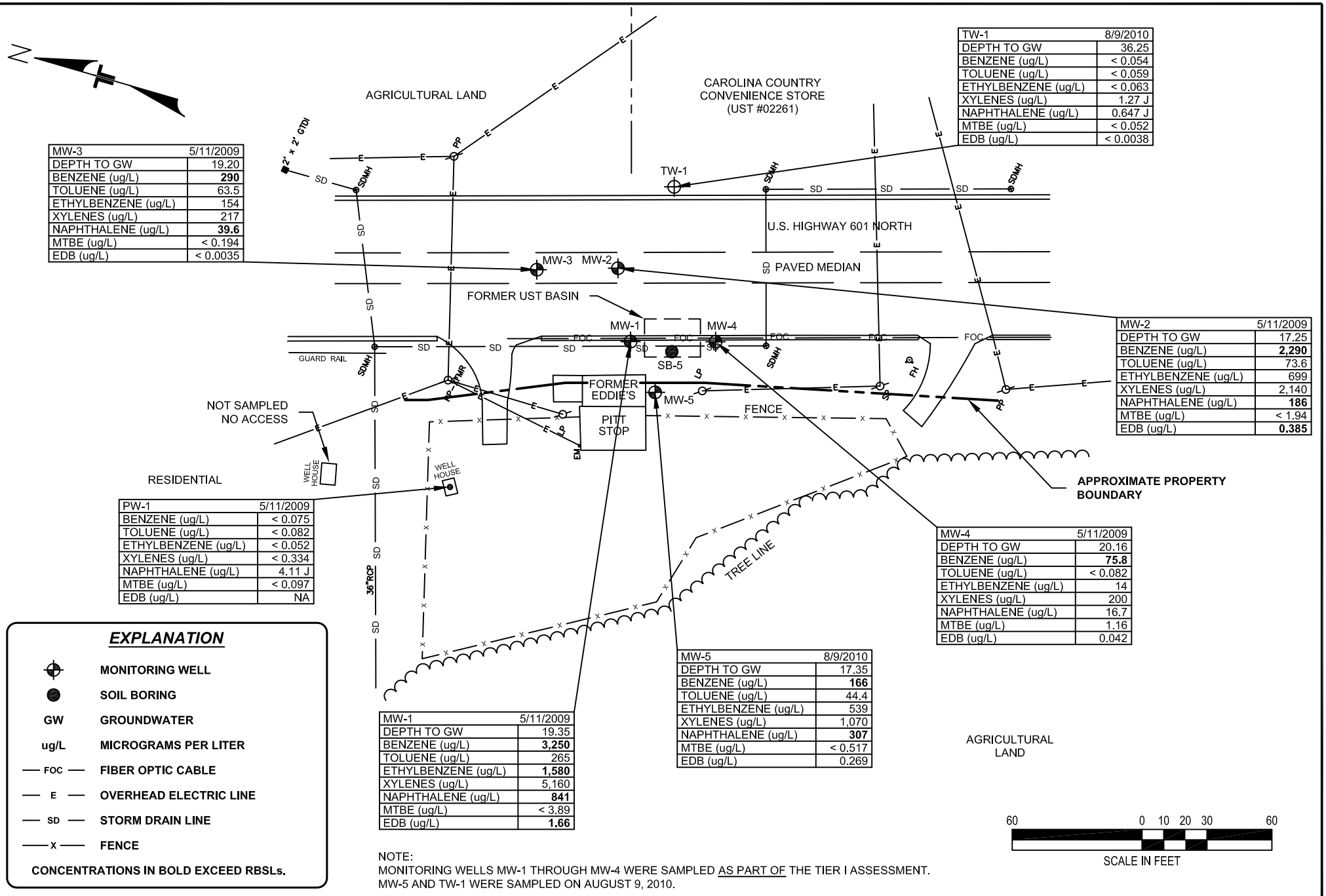
N

Terracon

SITE LOCATION MAP

EDDIE'S PITT STOP
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA

FIGURE 1: TOPOGRAPHIC MAP



MW-3	5/11/2009
DEPTH TO GW	19.20
BENZENE (ug/L)	**290**
TOLUENE (ug/L)	63.5
ETHYLBENZENE (ug/L)	154
XYLENES (ug/L)	217
NAPHTHALENE (ug/L)	**39.6**
MTBE (ug/L)	< 0.194
EDB (ug/L)	< 0.0035

TW-1	8/9/2010
DEPTH TO GW	36.25
BENZENE (ug/L)	< 0.054
TOLUENE (ug/L)	< 0.059
ETHYLBENZENE (ug/L)	< 0.063
XYLENES (ug/L)	1.27 J
NAPHTHALENE (ug/L)	0.647 J
MTBE (ug/L)	< 0.052
EDB (ug/L)	< 0.0038

MW-2	5/11/2009
DEPTH TO GW	17.25
BENZENE (ug/L)	**2,290**
TOLUENE (ug/L)	73.6
ETHYLBENZENE (ug/L)	699
XYLENES (ug/L)	2,140
NAPHTHALENE (ug/L)	**186**
MTBE (ug/L)	< 1.94
EDB (ug/L)	**0.385**

PW-1	5/11/2009
BENZENE (ug/L)	< 0.075
TOLUENE (ug/L)	< 0.082
ETHYLBENZENE (ug/L)	< 0.052
XYLENES (ug/L)	< 0.334
NAPHTHALENE (ug/L)	4.11 J
MTBE (ug/L)	< 0.097
EDB (ug/L)	NA

MW-4	5/11/2009
DEPTH TO GW	20.16
BENZENE (ug/L)	**75.8**
TOLUENE (ug/L)	< 0.082
ETHYLBENZENE (ug/L)	14
XYLENES (ug/L)	200
NAPHTHALENE (ug/L)	16.7
MTBE (ug/L)	1.16
EDB (ug/L)	0.042

MW-5	8/9/2010
DEPTH TO GW	17.35
BENZENE (ug/L)	**166**
TOLUENE (ug/L)	44.4
ETHYLBENZENE (ug/L)	539
XYLENES (ug/L)	1,070
NAPHTHALENE (ug/L)	**307**
MTBE (ug/L)	< 0.517
EDB (ug/L)	0.269

MW-1	5/11/2009
DEPTH TO GW	19.35
BENZENE (ug/L)	**3,250**
TOLUENE (ug/L)	265
ETHYLBENZENE (ug/L)	**1,580**
XYLENES (ug/L)	5,160
NAPHTHALENE (ug/L)	**841**
MTBE (ug/L)	< 3.89
EDB (ug/L)	**1.66**

EXPLANATION

- MONITORING WELL
- SOIL BORING
- GW — GROUNDWATER
- ug/L — MICROGRAMS PER LITER
- FOC — FIBER OPTIC CABLE
- E — OVERHEAD ELECTRIC LINE
- SD — STORM DRAIN LINE
- X — FENCE

CONCENTRATIONS IN BOLD EXCEED RBSLs.

NOTE:
MONITORING WELLS MW-1 THROUGH MW-4 WERE SAMPLED AS PART OF THE TIER I ASSESSMENT.
MW-5 AND TW-1 WERE SAMPLED ON AUGUST 9, 2010.

60 0 10 20 30 60
SCALE IN FEET

Project Mngr:	RWN
Drawn By:	PTK
Checked By:	RWN
Approved By:	PMH

Project No.	73098106
Scale:	AS SHOWN
File No.	73098106
Date:	AUGUST 2010

Terracon
Consulting Engineers and Scientists
521 CLEMSON ROAD COLUMBIA, SC 29229
PH. (803) 741-9000 FAX. (803) 741-9900

SITE MAP

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA
UST PERMIT # 18871

FIG. No. 2

TABLES

TABLE 1
GROUND WATER ELEVATION DATA
Petroleum Compounds

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	TOP OF CASING ELEVATION	DEPTH TO GROUND WATER	GROUND WATER ELEVATION
MW-1	5/20/03 5/11/09	**43**	**33- 43**	298.85	35.70 19.35	263.15 279.50
MW-2	5/11/09	43	28-43	298.98	17.25	281.73
MW-3	5/11/09	45	30-45	298.36	19.2	279.16
MW-4	5/11/09	49	34-49	299.29	20.16	279.13
MW-5	8/9/10	25	15 - 25	296.16	17.35	278.81
TW-1	8/9/10	59	49 - 59	NS	36.25	NS

Notes:
1) Top pf casing elevations surveyed by Terracon personnel
2) NS - Not Surveyed

TABLE 2
GROUND WATER ANALYTICAL DATA
Petroleum Compounds

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	BENZENE (ug/l)	TOLUENE (ug/l)	ETHYL-BENZENE (ug/l)	XYLENES (ug/l)	MTBE (ug/l)	NAPHTH-ALENE (ug/l)	EDB (ug/l)	Total Lead (ug/l)
MW-1	5/11/09	**3,250**	265	**1,580**	5,160	< 3.89	**841**	**1.66**	12 *B*
MW-2	5/11/09	**2,290**	73.6	699	2,140	< 1.94	**186**	**0.385**	3.3
MW-3	5/11/09	**290**	63.5	154	217	< 0.194	**39.6**	< 0.0035	**27**
MW-4	5/11/09	**75.8**	< 0.082	14	200	1.16	16.7	0.042	14 *B*
MW-5	8/9/10	**166**	44.4	539	1,070	< 0.517	**307**	0.269	3.4 *B*
TW-1	8/9/10	< 0.054	< 0.059	< 0.063	1.27 J	< 0.052	0.647 J	< 0.0038	< 1.5
RBSLs	--	*5*	*1,000*	*700*	*10,000*	*40*	*25*	*0.05*	*15*

Notes:

1) Results shown in boldface type indicate concentrations which exceed the RBSL for that compound
2) ug/l - micrograms per liter or parts per billion
3) RBSL- Risk-Based Screening Level as defined by the SCDHEC RBCA Document
4) *J* - indicates an estimated value
4) *B* - indicates the result is betweeen the Method Detection Limit and the Reporting Detection Limit

APPENDIX A

Geologist Logs and Water Well Records

GEOLOGIST LOG

Terracon

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **TW-1**
Client: SCDOT		***Well Construction Data***	
Date Started: 7/27/10	Date Completed: 7/28/10	Screen: 2" (0.010) Slotted PVC	From: 49 - To: 59
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 47 - To: 59
Drilling Co.: Land Probe	Driller: Marshall Burnett	Seal: Bentonite Pellets	From: 45 - To: 47
Method: Mud Rotary	Equipment: Mobile B-59	Grout: Portland Cement Type I	From: 0 - To: 45
Boring Depth (ft.): 59.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6.25	GW Level: ▼ 36.25 Time/Date: 8/9/2010	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		0
2						**SILT**, mottled (pink, gray, orange) with dark brown veins, hard, dry.		2
4								4
6		1	15 20	0.0				6
8								8
10		2	4 11 13	0.0		Clayey **SAND**, white with dark brown veins, medium grained, dry.		10
12								12
14								14
16		3	13 17 21	0.0		**CLAY**, orangish red, dry, with large black veins of quartz.		16
18								18
20		4	12 23 24	0.0				20
22								22
24								24
26		5	9 32 30	0.0		**CLAY**, trace dark brown quartz, orange, hard, dry.		26
28								28
30		6	30 35 50/6"	0.0		**SILT**, gray, hard.		30
32								32
34								34
36		7	25 32 35	0.0			▼	36
38								38
40		8	23 27 50/6"	0.0				40
42								42
44								44
46		9	31 50/6"	0.0		**SILT**, gray with dark brown veins, hard, laminated, dry.		46
48								48
50								50
52								52
54								54
56								56
58								58
						ROCK		
						Boring Terminated at 59 ft.		

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/26/10

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. Well Owner Information:
Name: SCDOT (last) (first)
Address: P.O. Box 191
City: Columbia State: SC zip: 29201
Phone: Work:
Home:

2. Location of Well: County: Chesterfield
Name: Eddies Pitt Stop
Address: Hwy 601
City: Pageland zip:
Latitude: Longitude:

3. Public System Name: **Public System Number:**

4. Abandonment: (yes/ no) YES
Grouted Depth: from to 0.0 ft. 59.0

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
See Logs		

5. Remarks:
SS every 5', hit rock at 59', ss on top of rock NR

6. Type:

Mud Rotary XXX	Jetted	Bored
Dug	Air Rotary	Driven
Cable tool	Auger	

7. Permit Number: 18871 / UMW-23143

8. Use:

Residential	Public Supply	Process
Irrigation	Air Conditioning	Emergency
Test Well	Monitor Well XXX	Replacement

9. Well Depth (completed)
59.0 ft.
Date Started: 7/27/2010
Date Completed: 7/28/2010

10. Casing: Threaded XXX Welded
Diameter: 2"
Type: PVC
0.0 in. to 59.0 ft. depth
in. to ft. depth
Height: Below
Surface: ft. Weight: lb./ft.
Drive Shoe: No

11. Screen:
Type: PVC Diameter: 2"
Slot/Gauge: 0.10 Length: 10.0 ft.
Set Between: 49.0 ft. and 59.0 ft.
ft. and ft.
Sieve Analysis: Y/N

12. Static Water Level: ft. below land surface after 24 hours.

13. Pumping Level below land surface.
ft. after hrs Pumping GPM
Pumping Test: No
Yield: gpm

14. Water Quality:
Chemical Analysis: No Bacterial Analysis: No

15. Artificial Filter (filter pack) Y/N YES
Installed from: 47.0 ft. to 59.0 ft.
Effective Size: Uniformity Coefficient

16. Well Grouted? YES

Neat Cement	Bentonite	Bentonite/Cement	other

Depth: from 0.0 ft. to 45.0 ft.

17. Nearest Source of Possible Contamination: ft. direction
Type:
Well disinfected No Type: Amount:

18. Pump: Date installed: N/A
Mfr. Name: Model no.:
H.P.: Volts: Length of pipe: ft.
Capacity: gpm
TYPE:
Submersible Jet (shallow) Turbine
Jet (deep) Reciprocating Centrifugal

19. Well Driller Marshall Burnett Cert No. 1671
Address: 6004 Ponders Court Level C
Greenville SC 29615
Telephone: 864-527-9324 Fax: 864-288-4430

20. Water Well Driller's Certification: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Marshall M Burnett

Date: 7/28/10

If D Level Driller, provide supervising driller's name.

GEOLOGIST LOG

Terracon

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-5**
Client: SCDOT		***Well Construction Data***	
Date Started: 8/6/10	Date Completed: 8/6/10	Screen: 2" (0.010) Slotted PVC	From: 15 - To: 25
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 13 - To: 25
Drilling Co.: VERCO	Driller: J. Chiorazzi	Seal: Bentonite Pellets	From: 11 - To: 13
Method: 2.25 HSA	Equipment: Geoprobe 6620 DT	Grout: Portland Cement Type I	From: 0 - To: 11
Boring Depth (ft.): 28.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6.25	GW Level: Dry / Time/Date: 8/6/2010	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		
2						Silty **CLAY**, orange.		2
4						Silty **CLAY**, light brown.		4
6						Clayey **SILT**, orange, petroleum odor.		6
8								8
10								10
12						Clayey **SILT**, orange.		12
14								14
16								16
18								18
20								20
22								22
24								24
26								26
28						**Boring Terminated at 28 ft.** GW LEVELS: 17.35 on8/9/2010		28

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/26/10

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:** Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Silt	25	25
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
Monitoring well - MW5

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 25 ft. Date Started: 8/6/10 Date Completed: 8/6/10

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 25 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☑
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: 0.010 Length: 10'
Set Between: 15 ft. and 25 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 18 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 13 ft. to 25 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 1 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not Installed ☑
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi **CERT. NO.:** 1790
Address: (Print) 171 Lott Ct, W.Columbia, 29169
Level: A ☐ B ☑ C ☐ D ☐ (circle one)
Telephone No.: 803-429-5001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ (Well Driller) Date: 8/19/10
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

APPENDIX B

Ground Water Sampling Logs

Terracon

Groundwater Sampling Log

Page ____ of ____

Well ID	MW-5
Date	8-9-10
Site Name.	Eddie's Pit Stop
Project No.:	73098106
Field Personnel	Regan W. Norris
Weather Conditions:	Sunny
Air Temperature	90
Well Evacuation Method	Bailer
Sample Collection Method.	Bailer
Sampled at (time):	1545

Total Well Depth.	25	ft BTOC
Depth to water	17.35	ft BTOC
Length of Water Column (LWC)	7.65	ft
Casing Diameter	2"	in
1 Casing Volume = LWC x .17 =	1.3	gal.
3 Casing Volumes.	3.9	gal.

Remarks:

Field Analyses

Volume Purged (gal.)	Initial						
Time							
pH	5.64	5.48	5.40	5.43			
Specific Conductivity (umhos/cm)	1418	87.4	62.5	60.8			
Water Temperature ©	27.0	24.3	22.6	21.5			
Turbidity	low	low	low	low			
Dissolved Oxygen (mg/L)	7.09	—					

Terracon

Groundwater Sampling Log

Page ____ of ____

Well ID	~~EW-1~~
Date:	8-9-10
Site Name:	Eddies Pit Stop
Project No	73098106
Field Personnel:	RWW
Weather Conditions	Sunny
Air Temperature	99
Well Evacuation Method.	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1630

Total Well Depth	59	ft. BTOC
Depth to water:	36.25	ft. BTOC
Length of Water Column (LWC):	22.75	ft
Casing Diameter:	2	in
1 Casing Volume = LWC x .17 =	3.86	gal
3 Casing Volumes:		gal.

Remarks: well dry @ 4.5 gallons allow for H2O Recovery and sample.

Field Analyses

Volume Purged (gal.)	Initial						
Time							
pH	6.37	6.23					
Specific Conductivity (umhos/cm)	67.2	94.3					
Water Temperature ©	26.1	28.1					
Turbidity	low	High					
Dissolved Oxygen (mg/L)	2.74	—					

APPENDIX C

Chemical Analytical Data

ACCESS
ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT
Terracon
521 Clemson Road
Columbia, SC 29229

ATTENTION
Regan Norris

PROJECT ID
Eddie's Pit Stop

LABORATORY REPORT NUMBER
210081113

DATE
08/17/2010

Primary Data Review By

Curtis Ekker
Data Validation Manager, GCAL

Secondary Data Review By

Ashley B. Amick
Project Manager, Access Analytical, Inc.
aamick@accessanalyticalinc.com

PLEASE NOTE:

- **Unless otherwise noted, all analysis on this report performed at Gulf Coast Analytical Labs (GCAL), 7979 GSRI Avenue, Baton Rouge, LA 70820.**

- **GCAL is SCDHEC certified laboratory # 73006, NCDENR certified lab # 618, GA certified lab # LA-01955, NELAP certified laboratory # 01955**

- Local support services for this project are provided by Access Analytical, Inc.. Access Analytical is a representative of GCAL serving clients in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll free at 888.315.4243.

NELAP CERTIFICATE NUMBER 01955

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

7979 GSRI Avenue

Baton Rouge, LA 70820

Report Date 08/17/2010

GCAL Report 210081113

Deliver To	Terracon 521 Clemson Road Columbia, SC 29229 803-741-9000
Attn	Regan Norris

Project Eddie's Pit Stop

CASE NARRATIVE

Client: Terracon **Report:** 210081113

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

VOLATILES MASS SPECTROMETRY

In the SW-846 8260B analysis, sample 21008111301 (MW-5) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates an estimated value
U	Indicates the compound was analyzed for but not detected
B	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
B	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

Robyn Migues
Technical Director
GCAL REPORT 210081113

THIS REPORT CONTAINS _____ PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21008111301	MW-5	Water	08/09/2010 15:45	08/11/2010 09:30
21008111302	TW-1	Water	08/09/2010 16:30	08/11/2010 09:30

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21008111301	**MW-5**	Water	08/09/2010 15:45	08/11/2010 09:30

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	166	10	0.542	ug/L
108-88-3	Toluene	44.4	10	0.590	ug/L
100-41-4	Ethylbenzene	539	10	0.627	ug/L
1330-20-7	Xylene (total)	1070	30	0.502	ug/L
91-20-3	Naphthalene	307	50	0.817	ug/L

SW-846 6010B

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0034B	0.015	0.0015	mg/L

SW-846 8011

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.269	0.010	0.00380	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21008111302	**TW-1**	Water	08/09/2010 16:30	08/11/2010 09:30

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
1330-20-7	Xylene (total)	1.27J	3	0.050	ug/L
91-20-3	Naphthalene	0.647J	5	0.082	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21008111301	**MW-5**	Water	08/09/2010 15:45	08/11/2010 09:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	08/12/2010 15:22	MSS	439630

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	**Benzene**	**166**	**10**	**0.542**	**ug/L**
108-88-3	**Toluene**	**44.4**	**10**	**0.590**	**ug/L**
100-41-4	**Ethylbenzene**	**539**	**10**	**0.627**	**ug/L**
1330-20-7	**Xylene (total)**	**1070**	**30**	**0.502**	**ug/L**
91-20-3	**Naphthalene**	**307**	**50**	**0.817**	**ug/L**
1634-04-4	tert-Butyl methyl ether (MTBE)	0.517U	10	0.517	ug/L
107-06-2	1,2-Dichloroethane	0.860U	10	0.860	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	496	ug/L	99	78 - 130
1868-53-7	Dibromofluoromethane	500	515	ug/L	103	77 - 127
2037-26-5	Toluene d8	500	481	ug/L	96	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	534	ug/L	107	71 - 127

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/12/2010 13:00	439608	SW-846 8011	1	08/16/2010 16:31	DLB	439908

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	**1,2-Dibromoethane**	**0.269**	**0.010**	**0.00380**	**ug/L**

SW-846 6010B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/11/2010 14:45	439525	SW-846 3010A	1	08/12/2010 20:28	CNB	439624

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	**Lead**	**0.0034B**	**0.015**	**0.0015**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21008111302	**TW-1**	Water	08/09/2010 16:30	08/11/2010 09:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/12/2010 15:46	MSS	439630

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	0.054U	1	0.054	ug/L
108-88-3	Toluene	0.059U	1	0.059	ug/L
100-41-4	Ethylbenzene	0.063U	1	0.063	ug/L
1330-20-7	**Xylene (total)**	**1.27J**	**3**	**0.050**	**ug/L**
91-20-3	**Naphthalene**	**0.647J**	**5**	**0.082**	**ug/L**
1634-04-4	tert-Butyl methyl ether (MTBE)	0.052U	1	0.052	ug/L
107-06-2	1,2-Dichloroethane	0.086U	1	0.086	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	50.7	ug/L	101	78 - 130
1868-53-7	Dibromofluoromethane	50	51.6	ug/L	103	77 - 127
2037-26-5	Toluene d8	50	49.7	ug/L	99	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	52.6	ug/L	105	71 - 127

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/12/2010 13:00	439608	SW-846 8011	1	08/16/2010 16:54	DLB	439908

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.00380U	0.010	0.00380	ug/L

SW-846 6010B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/11/2010 14:45	439525	SW-846 3010A	1	08/12/2010 20:34	CNB	439624

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0015U	0.015	0.0015	mg/L

GC/MS Volatiles Quality Control Summary

Analytical Batch	439630	**Client ID**	MB439630			LCS439630			LCSD439630		
Prep Batch	N/A	**GCAL ID**	867323			867324			867325		
		Sample Type	Method Blank			LCS			LCSD		
		Analytical Date	08/12/2010 11:29			08/12/2010 09:28			08/12/2010 10:19		
		Matrix	Water			Water			Water		
SW-846 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
107-06-2	1,2-Dichloroethane	0.086U	0.086	50.0	46.4	93	71 - 129	46.3	93	0.2	30
100-41-4	Ethylbenzene	0.063U	0.063	50.0	44.1	88	74 - 126	43.4	87	2	30
1634-04-4	tert-Butyl methyl ether (MTBE)	0.052U	0.052	50.0	42.2	84	71 - 125	42.1	84	0.2	30
1330-20-7	Xylene (total)	0.050U	0.050	150	135	90	74 - 127	133	89	1	30
91-20-3	Naphthalene	0.082U	0.082	50.0	43.0	86	57 - 138	42.4	85	1	35
71-43-2	Benzene	0.054U	0.054	50.0	43.9	88	70 - 129	43.7	87	0.5	20
108-88-3	Toluene	0.059U	0.059	50.0	42.0	84	72 - 120	41.3	83	2	20
Surrogate											
460-00-4	4-Bromofluorobenzene	48.1	96	50	50	100	78 - 130	49.9	100		
1868-53-7	Dibromofluoromethane	52.2	104	50	51.5	103	77 - 127	51.2	102		
2037-26-5	Toluene d8	49.1	98	50	47.6	95	76 - 134	46.8	94		
17060-07-0	1,2-Dichloroethane-d4	52.7	105	50	53.6	107	71 - 127	53.6	107		

General Chromatography Quality Control Summary

Analytical Batch	439908	**Client ID**	MB439608	LCS439608	LCSD439608
Prep Batch	439608	**GCAL ID**	867281	867282	867283
Prep Method	SW-846 8011	**Sample Type**	Method Blank	LCS	LCSD
		Prep Date	08/12/2010 13:00	08/12/2010 13:00	08/12/2010 13:00
		Analytical Date	08/16/2010 15:02	08/16/2010 15:24	08/16/2010 15:46
		Matrix	Water	Water	Water

SW-846 8011		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
106-93-4	1,2-Dibromoethane	0.00380U	0.00380	1.26	1.48	117	55 - 141	1.39	115	6	40

Inorganics Quality Control Summary

Analytical Batch	439624	**Client ID**	MB439525			LCS439525		
Prep Batch	439525	**GCAL ID**	866890			866891		
Prep Method	SW-846	**Sample Type**	Method Blank			LCS		
	3010A	**Prep Date**	08/11/2010 14:45			08/11/2010 14:45		
		Analytical Date	08/12/2010 18:21			08/12/2010 18:28		
		Matrix	Water			Water		
SW-846 6010B		**Units**	mg/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
7439-92-1	Lead	0.0015U	0.0015	0.50	0.50	100	80 - 120	

Analytical Batch	439624	**Client ID**	ACC5-PI-081010			866926MS			866926MSD			
Prep Batch	439525	**GCAL ID**	21008111701			866979			866980			
Prep Method	SW-846	**Sample Type**	SAMPLE			MS			MSD			
	3010A	**Prep Date**	08/11/2010 14:45			08/11/2010 14:45			08/11/2010 14:45			
		Analytical Date	08/12/2010 18:35			08/12/2010 18:41			08/12/2010 18:48			
		Matrix	Water			Water			Water			
SW-846 6010B		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**	
7439-92-1	Lead	0.0	0.0015	0.50	0.49	98	75 - 125	0.47	95	4	20	

Access/4523/210061113/8.18.10

Access Analytical - Chain of Custody Record

LAB USE ONLY

Project Work Order # 7309805

PO # _____ Access Quote # _____

LAB USE ONLY

Laboratory ID: GCAL

Company Name: Terracon Consultants

Report To: Roger W. Norris

Address: 521 Clemson Rd

City: Columbia State: SC Zip: 29229

Phone: 803-741-9000 Fax: 803-741-990C

Email: rwnorris@terracon.com

Project ID: Eddies Pit Stop

Sampled By: Roger W. Norris

Sample ID/Description	Date Collected	Time Collected	Type: (grab or composite)	Matrix (see codes)	Program Area (see codes)	TOTAL # of containers
MW-5	8/9/10	15:45	G	GW	CWA	5
TW-1	8/9/10	1630	G	GW	CWA	5

Preservative: (*see codes) 2 1 1

Container Type: (*see codes) P G G

REQUESTED LAB ANALYSIS

# of containers collected per analysis	Lead (Total)	BTEX, Naph., MTBE, 1,2 DCA	EDB
MW-5	1	2	2
TW-1	1	2	2

TOTAL # of containers	
MW-5	1
TW-1	2

ACCESS ANALYTICAL, INC.

7478 Carlisle Street
Irmo, SC 29063

Phone: (803) 781-4243
Fax: 781-4303

www.axs-inc.com

*Preservative Codes (place corresponding # in block above analysis field): 0 = None, 1 = HCL, 2 = HNO3, 3 = H2SO4, 4 = NaOH, 5 = Na2S2O3, 6 = Method 5035 set w/ NaHSO4 & CH3OH, 7 = NaOH/ZnOAC, 8 = H3PO4

*Matrix Codes (place corresponding code in matrix column): GW = ground water, WW = waste water, DW = drinking water, S = soil, SL = sludge, A = air, IW = industrial waste, WO = waste oil, OT = other (specify in comments section)

*Program Area Codes: CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking waters), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

NOTES / COMMENTS

(if sample is a composite please use space below to note start/finish times & dates)

Turnaround Time:

_✓_ Standard
___ RUSH*
*Date Required: _____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:

_✓_ SC
___ NC
___ Other
(specify) _____

Relinquished By:	Received By:	Date (mm-dd-yy)	Time (24HR)	Sample Temp. Upon Receipt (°C):	
[signature]	M. Robertson	8/10/10	1420	10.4 (°C)	___ (N/A)
M. Robertson	FedEx	8/10/10	1700	___ (°C)	___ (N/A)
[signature]	[signature]	8-11-10	930	9.1 (°C)	___ (N/A)
				___ (°C)	___ (N/A)

See Reverse for Terms and Conditions

Original Copy - Returned w/Report
Yellow Copy - Access File Copy
Pink Copy - Client Copy

APPENDIX D

Disposal Manifests

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
. . . . .	00113	7309 - 8106

GENERATOR

3. Generator's Name and Mailing Address D
SCDOT
PO Box 191 Columbia SC 29202

Eddies Pit Stop
Rt. 2 Hwy 601 N.
Padgetnd. SC
Ust # 18871

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
Diversified Recycling Inc	SCR000768948	877682
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
	. . . . .	

9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
Diversified Recycling 132 Grandview Zoreske West Columbia SC 29172	SCR000768127	803 493 5271

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON RCRA NON Regulated (Sol.d)	6.	DM	3750 ~~35~~ DM	P
b. Non RCRA Non (liquid)	1.	DM	11 gals	G
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
		.	.	.

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
James S Smith		.	.	.

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
		.	.	.

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
		.	.	.

GENERATOR'S COPY

Monitoring Well Installation Report

Eddie's Pit Stop
Rt. 2, US Highway 601 North
Pageland, South Carolina
UST Permit # 18871

September 14, 2010
Terracon Project No. 73098106

Prepared for:
South Carolina Department of Transportation
PO Box 191
Columbia, South Carolina 29202

Prepared by:
Terracon Consultants, Inc.
Columbia, South Carolina

Offices Nationwide Established in 1965
Employee-Owned terracon.com

Terracon

Geotechnical ■ Environmental ■ Construction Materials ■ Facilities

Terracon

September 14, 2010

Ms. Minda Johnson
Underground Storage Tank Program
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1708

Re: **Monitoring Well Installation Report**
Eddie's Pit Stop
Rt. 2, US Hwy 601 N, Pageland, South Carolina
UST Permit # 18871; CA # 37147
Terracon Project No. 73098106

Dear Ms. Johnson:

On behalf of the South Carolina Department of Transportation, (SCDOT), **Terracon Consultants, Inc.** (Terracon), is pleased to submit this Monitoring Well Installation Report for the Eddie's Pit Stop facility in Pageland, Chesterfield County, South Carolina. If you have any questions regarding the contents of this report, or if there is a need for further information, please contact us.

Respectfully submitted,

Terracon Consultants, Inc.
UST Contractor Certification No. 246

Regan Norris
Staff Scientist

P. Michael Hudgins, P.G.
Senior Hydrogeologist
SC Registration No. 1137

P. MICHAEL HUDGINS REGISTERED NO. 1137 SOUTH CAROLINA PROFESSIONAL GEOLOGIST

Enclosures

CC: Mr. Peter Reinhart / SCDOT

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Eddie's Pit Stop
Rt. 2, US Hwy 601 N, Pageland, South Carolina
UST Permit # 18871; CA # 37147
Terracon Project No. 73098106

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C Chemical Analytical Data
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1.0 INTRODUCTION

Terracon Consultants, Inc. has completed a monitoring well installation at the former Eddie's Pit Stop located in Pageland, South Carolina. The purpose of the additional wells is to evaluate the current ground water quality conditions from a release of petroleum hydrocarbons previously reported at the site by the South Carolina Department of Transportation (SCDOT). The work was performed in accordance with the South Carolina Department of Health and Environmental Control (SCDHEC) Cost Agreement #37147 dated October 9, 2009 and the SCDHEC Tier II Assessment guidance document dated March 15, 2000. This report includes a description of the activities performed during this assessment, along with our current findings, conclusions and recommendations.

1.1. Facility Information

The former Eddie's Pit Stop site is located on U.S. Highway 601 N in Pageland, South Carolina. A site location (USGS Topographic) map showing a portion of the Pageland, South Carolina 7.5-minute topographic quadrangle is included as Figure 1. The site is defined as the area of the former USTs within the SCDOT right-of-way. Property access to the reminder of the Eddie's Pit Stop property was not granted during this assessment.

US Highway 601 and is associated right-of-way were expanded in 2001 as part of road improvements in Chesterfield County. The former Eddie's Pit Stop formerly operated one 750 gallon and one 2,000 gallon gasoline USTs and dispenser island, which were removed in 2002 as part of the highway expansion. A release was reported during closure of the UST basin located adjacent to the dispenser island containing the two USTs.

Based on the UST closure results, the SCDHEC issued a directive to the SCDOT to conduct an Initial Ground Water Assessment (IGWA), performed in May 2003.[1] Monitoring well MW-1 was installed as part of the IGWA which indicated Contaminants of Concern (COCs) in excess of Risk-Based Screening Levels (RBSLs) for benzene, toluene, ethylbenzene, xylenes (BTEX), naphthalene, ethylene dibromide (EDB) and lead. Based upon these results, the SCDHEC requested a Tier I Assessment be performed at this site.

Terracon performed a Tier I Assessment at the site in 2009, which included installation of four soil borings and three monitoring wells (MW-2, MW-3, and MW-4). Analyses of the groundwater samples indicated RBSLs were exceeded for one or more compounds in samples collected from all site monitoring wells. Additionally, a semi-confined water table was determined to exist at the site which prevented monitoring wells from bracketing the water table. Additional geologic and water level data was needed to determine the current water quality conditions and to evaluate the hydrogeology of the shallow aquifer.

---

[1] Initial Ground Water Assessment Report, Former Eddies Pit Stop: ARM Environmental Services, Inc., ARM Project #02-130,July 28, 2003

Two water supply wells, one on site, were identified as potential receptors. The on-site well was sampled as part of the Tier I and indicated a low concentration of naphthalene. The water supply well on the adjacent property was inaccessible at the time of the assessment.

The SCDHEC requested installation of two additional wells to evaluate the depth to bedrock and to evaluate the confining water table and water quality conditions. This well installation report includes a summary of the field methods utilized along with the results of ground water elevation measurements, field and laboratory ground water analytical results, and our conclusions and recommendations.

1.2. Monitoring Well Installation

One temporary monitoring well (TW-1) and one permanent well (MW-5) were drilled at the site on July 28, 2010 and August 6, 2010, respectively. TW-1 was drilled at a background location to bedrock, across Highway 601, east of the USTs. MW-5 was drilled on site closest to the USTs as the site conditions would allow (approximately 15 feet) owing to a drainage ditch and buried utilities (fiber optic) located in the area of the former USTs.

TW-1 was drilled using mud rotary methods and a 6-1/4 inch drill bit to a depth of 59 feet, where rock was encountered. Split-spoon soil samples were collected at 5-foot intervals, screened for organic vapors, and logged in the field. 10 feet of 2-inch PVC well screen, riser casing, and sand was set to the borehole depth and a ground water sample was collected from the temporary well. Upon sample collection, the screen and casing were abandoned in-place by pressure grouting with tremie pipe.

MW-5 was drilled using 2.5-inch inner diameter (ID) continuous-flight hollow stem augers (HSAs) to a depth of 25 feet. The monitoring well was constructed of 2-inch diameter schedule 40 PVC casing and 15 feet of 2-inch diameter PVC well screens with a manufactured slot size of 0.010-inch. An appropriately graded sand filter pack was placed within the annulus opposite the well screen to a height of approximately two feet above the top of the well screen. A bentonite pellet layer was placed above the sand filter pack in each well and hydrated. The remaining annulus of each well was grouted to land surface with cement grout. The well was completed below-grade within steel protective manhole covers, and a concrete pad was constructed around the well. The well construction details are included on Table 1. The Geologist Logs and Water Well Records (DHEC 1903 Form), as compiled by the certified driller, are included in Appendix A.

After installation, the wells were developed by surging and bailing until the wells were producing relatively clear water. Soil cuttings and development water generated during drilling was collected and disposed by Diversified Recycling, West Columbia, South Carolina. The disposal manifest is included in Appendix D.

A subsequent survey was conducted by Terracon personnel referenced to monitoring well MW-1. Top-of-casing elevations are included in Table 1.

1.3. Ground Water Sampling and Analyses

Water levels were recorded and ground water samples were collected from monitoring wells TW-1 and MW-5 on August 9, 2010. Water levels were measured using an electric water level indicator. The water level data was converted to elevations relative to the surveyed top of casing (TOC) elevations. A summary of the water level data is presented on Table 1.

TW-1 and MW-5 were purged with disposable polyethylene bailers dedicated to each well prior to sample collection. Specific conductance, pH, and temperature were recorded during well purging. The Ground Water Sampling Logs are included in Appendix B. Purge water was contained with the drilling fluid and soil cuttings and disposed by Diversified Recycling, West Columbia, South Carolina. The disposal manifests are included in Appendix D.

The samples were collected with dedicated bailers, poured into laboratory prepared containers, placed in a cooler refrigerated with ice, and delivered to Access Analytical, Inc. for analysis, accompanied with chain-of-custody documentation. The ground water samples were analyzed for the following:

Analysis	Method
Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) Methyl-tert-butyl-ether (MTBE) Naphthalene 1,2-dichloroethane (1,2-DCA) 8 Oxygenates	EPA Method 8260B
1,2-dibromoethane (EDB)	EPA Method 8011
Total lead	EPA Method 6010B

A summary of the ground water quality data from the monitoring wells is presented in Table 2 The laboratory analytical reports and chain-of-custody forms are included in Appendix.

2.0 TIER II ASSESSMENT RESULTS

2.1 Regional Hydrogeology

The site is located within the Carolina Slate Belt terrain of the Lower Piedmont physiographic province. The Carolina Slate Belt province consists of weathered low-grade metamorphic rocks. Ground water within the shallow sediments of the Lower Piedmont provinces typically occurs under water table (unconfined) and semi-confined conditions. Ground water flow

directions are a subtle reflection of the local topography. Local recharge of the shallow aquifer occurs by the direct infiltration by precipitation.

2.2 Site Hydrogeology

Based on the geologist logs of the soil borings and monitoring wells installed during this assessment, the site is underlain predominantly by tight silt and clay, and partially weathered rock (PWR) to the maximum study depth (59 feet). Based upon depth of refusal during drilling using a Mobile B-59 rig, bedrock is located approximately 59 feet below land surface at the site.

Ground water occurs within the shallow aquifer under semi-confined conditions. During installation of the monitoring wells, inspection of the split-spoon soil samples indicated that the borings were dry to boring depths. The wells were set and water was allowed to enter the borehole. TW-1 contained sufficient water after a period of a few hours, and MW-5 contained seven feet of water after a period of three days.

2.3 Ground Water Analytical Results

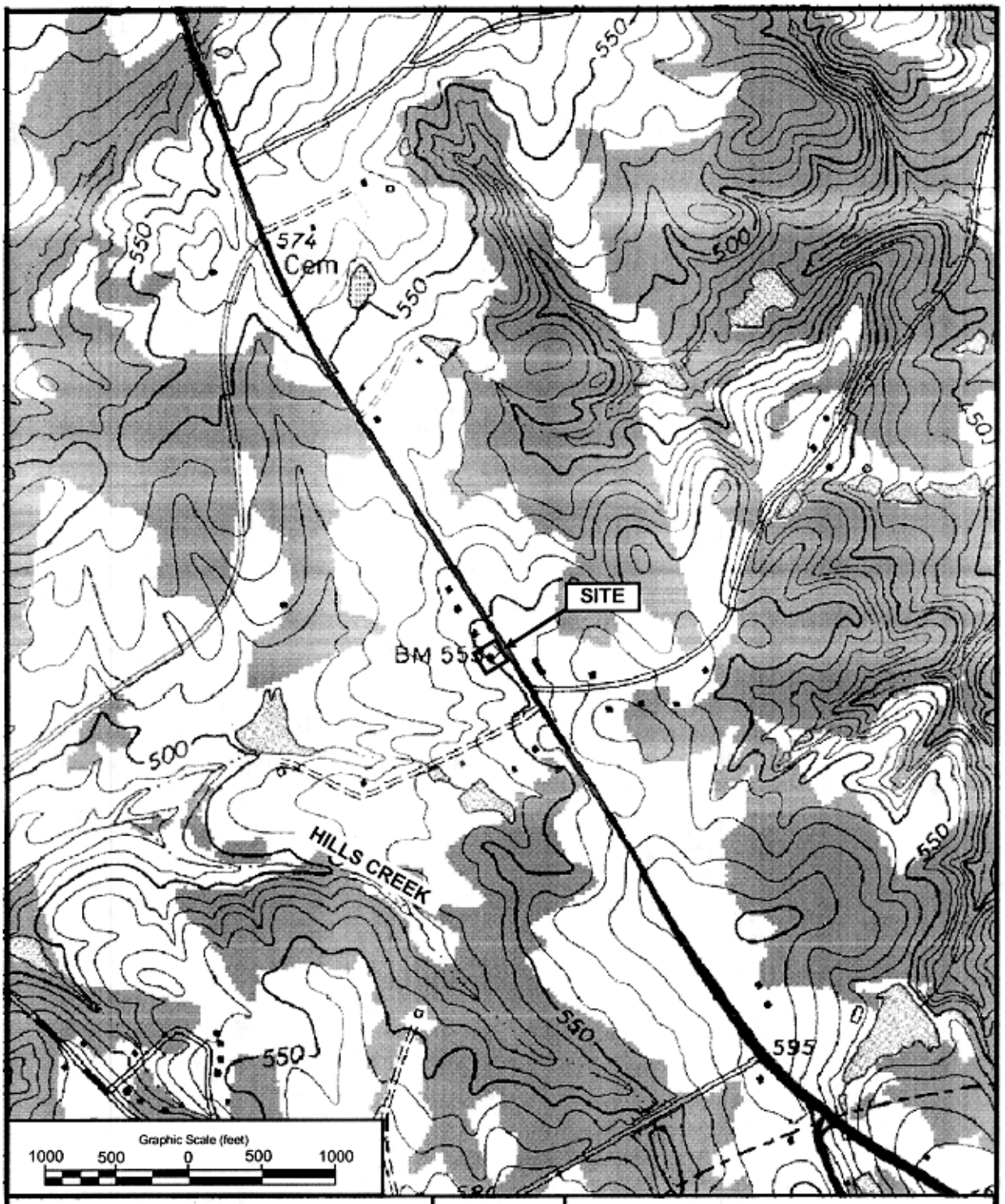
The results of the sample collected from TW-1 indicates an estimated value for ethylbenzene only. Benzene (166 ug/l) and naphthalene (307 ug/l) were detected at concentrations above RBSLs in MW-5. All other compounds were below RBSLs or laboratory detection limits. A site map showing the analytical data is included as Figure 2.

3.0 CONCLUSIONS AND RECOMMENDATIONS

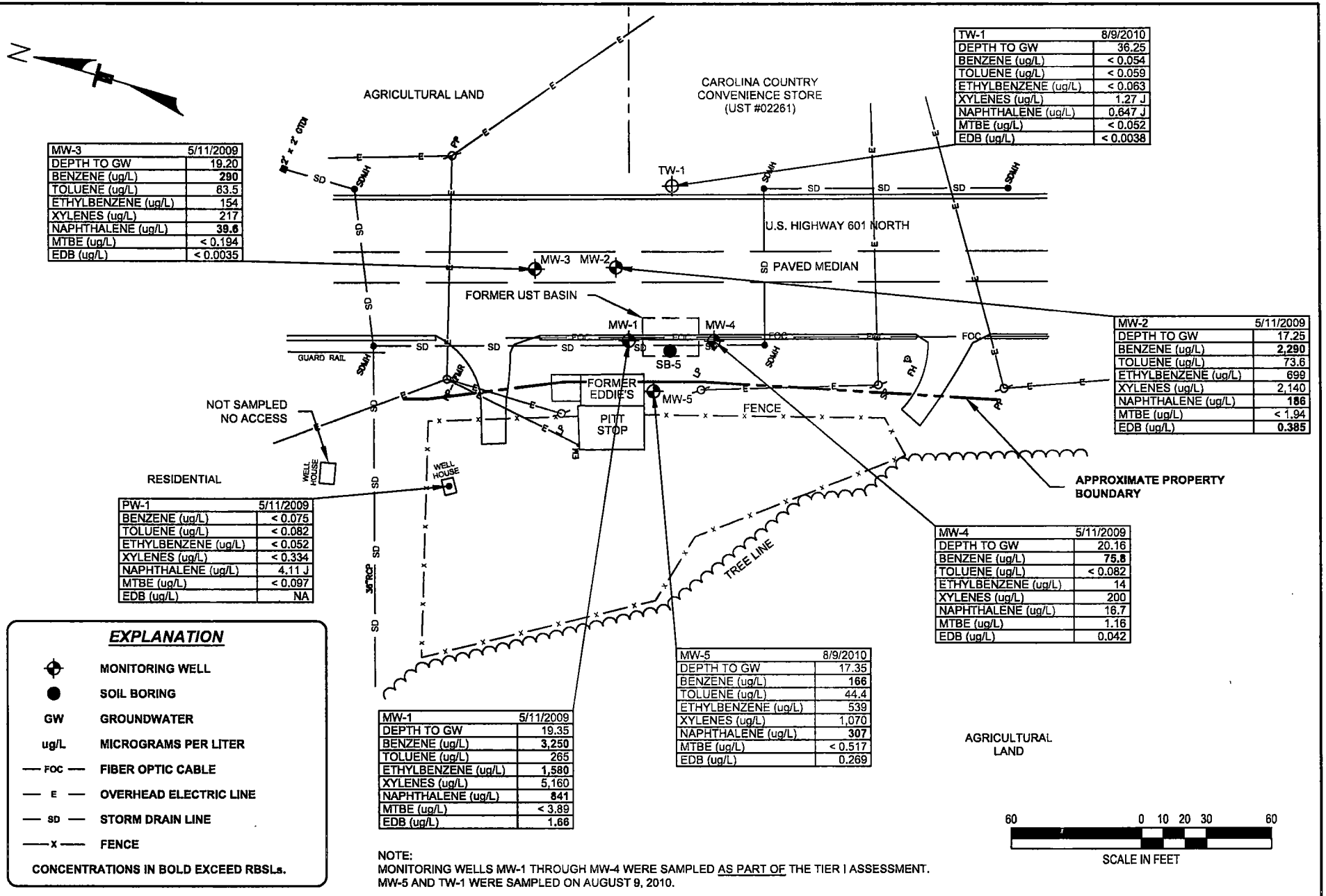
Inspection of the field and analytical data collected indicates soil and groundwater have been impacted above RBSLs, sourced from the underground storage tank system. Contamination in the upgradient well, MW-2 indicates that there may be contribution from an upgradient source (Carolinas Country Convenience UST #02261). Based on this data, and the reported ground water flow direction, further plume delineation is recommended.

Two water supply wells were identified as potential receptors. The well on the former Eddie's site (WS-1) was sampled as part of the Tier I Assessment in 2009 which indicated a low (estimated) concentration of naphthalene (4.11J). The water supply well on the adjacent property was inaccessible at the time of this assessment. Both supply wells should be sampled as part of all future assessments at this site.

FIGURES



USGS TOPOGRAPHIC QUADRANGLE MAP PAGELAND, SOUTH CAROLINA			**SITE LOCATION MAP** EDDIE'S PITT STOP ROUTE 2, US HIGHWAY 601 NORTH PAGELAND, SOUTH CAROLINA
DATE: 1993 SCALE: 1 INCH = 1000 FEET	N	Terracon	**FIGURE 1: TOPOGRAPHIC MAP**
PROJECT NO. 73098106			



MW-3	5/11/2009
DEPTH TO GW	19.20
BENZENE (ug/L)	**290**
TOLUENE (ug/L)	83.5
ETHYLBENZENE (ug/L)	154
XYLENES (ug/L)	217
NAPHTHALENE (ug/L)	**39.6**
MTBE (ug/L)	< 0.194
EDB (ug/L)	< 0.0035

TW-1	8/9/2010
DEPTH TO GW	36.25
BENZENE (ug/L)	< 0.054
TOLUENE (ug/L)	< 0.059
ETHYLBENZENE (ug/L)	< 0.063
XYLENES (ug/L)	1.27 J
NAPHTHALENE (ug/L)	0.647 J
MTBE (ug/L)	< 0.052
EDB (ug/L)	< 0.0038

MW-2	5/11/2009
DEPTH TO GW	17.25
BENZENE (ug/L)	**2,290**
TOLUENE (ug/L)	73.6
ETHYLBENZENE (ug/L)	699
XYLENES (ug/L)	2,140
NAPHTHALENE (ug/L)	**186**
MTBE (ug/L)	< 1.94
EDB (ug/L)	**0.385**

PW-1	5/11/2009
BENZENE (ug/L)	< 0.075
TOLUENE (ug/L)	< 0.082
ETHYLBENZENE (ug/L)	< 0.052
XYLENES (ug/L)	< 0.334
NAPHTHALENE (ug/L)	4.11 J
MTBE (ug/L)	< 0.097
EDB (ug/L)	NA

MW-4	5/11/2009
DEPTH TO GW	20.16
BENZENE (ug/L)	**75.8**
TOLUENE (ug/L)	< 0.082
ETHYLBENZENE (ug/L)	14
XYLENES (ug/L)	200
NAPHTHALENE (ug/L)	16.7
MTBE (ug/L)	1.16
EDB (ug/L)	0.042

MW-5	8/9/2010
DEPTH TO GW	17.35
BENZENE (ug/L)	**166**
TOLUENE (ug/L)	44.4
ETHYLBENZENE (ug/L)	539
XYLENES (ug/L)	1,070
NAPHTHALENE (ug/L)	**307**
MTBE (ug/L)	< 0.517
EDB (ug/L)	0.269

MW-1	5/11/2009
DEPTH TO GW	19.35
BENZENE (ug/L)	**3,250**
TOLUENE (ug/L)	265
ETHYLBENZENE (ug/L)	**1,580**
XYLENES (ug/L)	5,160
NAPHTHALENE (ug/L)	**841**
MTBE (ug/L)	< 3.89
EDB (ug/L)	**1.66**

EXPLANATION

- MONITORING WELL
- SOIL BORING
- GW — GROUNDWATER
- ug/L — MICROGRAMS PER LITER
- FOC — FIBER OPTIC CABLE
- E — OVERHEAD ELECTRIC LINE
- SD — STORM DRAIN LINE
- x — FENCE

CONCENTRATIONS IN BOLD EXCEED RBSLs.

NOTE:
MONITORING WELLS MW-1 THROUGH MW-4 WERE SAMPLED AS PART OF THE TIER I ASSESSMENT.
MW-5 AND TW-1 WERE SAMPLED ON AUGUST 9, 2010.

Project Mngr:	RWN
Drawn By:	PTK
Checked By:	RWN
Approved By:	PMH
Project No.	73098106
Scale	AS SHOWN
File No.	73098106
Date:	AUGUST 2010

Terracon
Consulting Engineers and Scientists
521 CLEMSON ROAD COLUMBIA, SC 29229
PH. (803) 741-9000 FAX. (803) 741-9900

SITE MAP

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA
UST PERMIT # 18871

FIG. No. 2

TABLES

TABLE 1
GROUND WATER ELEVATION DATA
Petroleum Compounds

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	TOP OF CASING ELEVATION	DEPTH TO GROUND WATER	GROUND WATER ELEVATION
MW-1	5/20/03	**43**	**33- 43**	298.85	35.70	263.15
	5/11/09				19.35	279.50
MW-2	5/11/09	43	28-43	298.98	17.25	281.73
MW-3	5/11/09	45	30-45	298.36	19.2	279.16
MW-4	5/11/09	49	34-49	299.29	20.16	279.13
MW-5	8/9/10	25	15 - 25	296.16	17.35	278.81
TW-1	8/9/10	59	49 - 59	NS	36.25	NS

Notes:
1) Top pf casing elevations surveyed by Terracon personnel
2) NS - Not Surveyed

TABLE 2
GROUND WATER ANALYTICAL DATA
Petroleum Compounds

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	BENZENE (ug/l)	TOLUENE (ug/l)	ETHYL-BENZENE (ug/l)	XYLENES (ug/l)	MTBE (ug/l)	NAPHTH-ALENE (ug/l)	EDB (ug/l)	Total Lead (ug/l)
MW-1	5/11/09	**3,250**	265	**1,580**	5,160	< 3.89	**841**	**1.66**	12 *B*
MW-2	5/11/09	**2,290**	73.6	699	2,140	< 1.94	**186**	**0.385**	3.3
MW-3	5/11/09	**290**	63.5	154	217	< 0.194	**39.6**	< 0.0035	**27**
MW-4	5/11/09	**75.8**	< 0.082	14	200	1.16	16.7	0.042	14 *B*
MW-5	8/9/10	**166**	44.4	539	1,070	< 0.517	**307**	0.269	3.4 *B*
TW-1	8/9/10	< 0.054	< 0.059	< 0.063	1.27 J	< 0.052	0.647 J	< 0.0038	< 1.5
RBSLs	--	*5*	*1,000*	*700*	*10,000*	*40*	*25*	*0.05*	*15*

Notes:

1) Results shown in boldface type indicate concentrations which exceed the RBSL for that compound

2) ug/l - micrograms per liter or parts per billion

3) RBSL- Risk-Based Screening Level as defined by the SCDHEC RBCA Document

4) *J* - indicates an estimated value

4) *B* - indicates the result is betweeen the Method Detection Limit and the Reporting Detection Limit

APPENDIX A

Geologist Logs and Water Well Records

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: TW-1
Client: SCDOT		***Well Construction Data***	
Date Started: 7/27/10	Date Completed: 7/28/10	Screen: 2" (0.010) Slotted PVC	From: 49 - To: 59
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 47 - To: 59
Drilling Co.: Land Probe	Driller: Marshall Burnett	Seal: Bentonite Pellets	From: 45 - To: 47
Method: Mud Rotary	Equipment: Mobile B-59	Grout: Portland Cement Type I	From: 0 - To: 45
Boring Depth (ft.): 59.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6.25	GW Level: ▼ 36.25 Time/Date: 8/9/2010	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
2						**TOPSOIL**		
4						SILT, mottled (pink, gray, orange) with dark brown veins, hard, dry.		
6		1	7 15 25	0.0				
8								
10		2	4 14 13	0.0		Clayey SAND, white with dark brown veins, medium grained, dry.		
12								
14								
16		3	13 17 21	0.0		CLAY, orangish red, dry, with large black veins of quartz.		
18								
20		4	13 23 24	0.0				
22								
24								
26		5	9 32 38	0.0		CLAY, trace dark brown quartz, orange, hard, dry.		
28								
30		6	30 36 50/6"	0.0		SILT, gray, hard.		
32								
34								
36		7	35 42 38	0.0			▼	
38								
40		8	33 37 50/6"	0.0				
42								
44								
46		9	31 50/6"	0.0		SILT, gray with dark brown veins, hard, laminated, dry.		
48								
50								
52								
54								
56								
58						**ROCK**		
						Boring Terminated at 59 ft.		

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/26/10

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

D H E C

PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. Well Owner Information:
Name: SCDOT
(last) (first)
Address: P.O. Box 191
City: Columbia State: SC zip: 29201
Phone: Work:
Home:

2. Location of Well: County: Chesterfield
Name: Eddies Pitt Stop
Address: Hwy 601
City: Pageland zip:
Latitude: Longitude:

3. Public System Name: **Public System Number:**

4. Abandonment: (yes/ no) YES
Grouted Depth: from to 0.0 ft. 59.0

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
See Logs		

5. Remarks:
SS every 5', hit rock at 59', ss on top of rock NR

6. Type:

Mud Rotary XXX	Jetted	Bored
Dug	Air Rotary	Driven
Cable tool	Auger	

7. Permit Number: 18871 / UMW-23143

8. Use:

Residential	Public Supply	Process
Irrigation	Air Conditioning	Emergency
Test Well	Monitor Well XXX	Replacement

9. Well Depth (completed)
Date Started: 7/27/2010
59.0 ft. Date Completed: 7/28/2010

10. Casing: Threaded XXX Welded
Diameter: 2"
Type: PVC
0.0 in. to 59.0 ft. depth
in. to ft. depth
Height: Below
Surface: ft. Weight: lb./ft.
Drive Shoe: No

11. Screen:
Type: PVC Diameter: 2"
Slot/Gauge: 0.10 Length: 10.0 ft.
Set Between: 49.0 ft. and 59.0 ft.
ft. and ft.
Sieve Analysis: Y/N

12. Static Water Level: ft. below land surface after 24 hours.

13. Pumping Level below land surface.
ft. after hrs Pumping GPM
Pumping Test: No
Yield: gpm

14. Water Quality:
Chemical Analysis: No Bacterial Analysis: No

15. Artificial Filter (filter pack) Y/N YES
Installed from: 47.0 ft. to 59.0 ft.
Effective Size: Uniformity Coefficient

16. Well Grouted? YES

Neat Cement	Bentonite	Bentonite/Cement	other

Depth: from 0.0 ft. to 45.0 ft.

17. Nearest Source of Possible Contamination: ft. direction
Type:
Well disinfected No Type: Amount:

18. Pump: Date Installed: N/A
Mfr. Name: Model no.:
H.P.: Volts: Length of pipe: ft.
Capacity: gpm
TYPE:
Submersible Jet (shallow) Turbine
Jet (deep) Reciprocating Centrifugal

19. Well Driller Marshall Burnett Cert No. 1671
Address: 6004 Ponders Court Level C
Greenville SC 29615
Telephone: 864-527-9324 Fax: 864-288-4430

20. Water Well Driller's Certification: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Marshall M Burnett

Date: 7/28/10

If D Level Driller, provide supervising driller's name.

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: MW-5
Client: SCDOT		*Well Construction Data*	
Date Started: 8/6/10	Date Completed: 8/6/10	Screen: 2" (0.010) Slotted PVC	From: 15 - To: 25
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 13 - To: 25
Drilling Co.: VERCO	Driller: J. Chiorazzi	Seal: Bentonite Pellets	From: 11 - To: 13
Method: 2.25 HSA	Equipment: Geoprobe 6620 DT	Grout: Portland Cement Type I	From: 0 - To: 11
Boring Depth (ft.): 28.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6.25	GW Level: Dry / Time/Date: 8/6/2010	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						TOPSOIL		
2						Silty CLAY, orange.		2
4						Silty CLAY, light brown.		4
6						Clayey SILT, orange, petroleum odor.		6
8								8
10								10
12						Clayey SILT, orange.		12
14								14
16								16
18								18
20								20
22								22
24								24
26								26
28						**Boring Terminated at 28 ft.** GW LEVELS: 17.35 on8/9/2010		28

LOG OF BORING WELL 73098108.GPJ GAGE_GRP.GDT 8/26/10

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from ____ ft. to ____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Silt	25	25
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
Monitoring well - MW5

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 8/6/10
25 ft. Date Completed: 8/6/10

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 25 ft. depth
____ in. to ____ ft. depth
Height: Above ☐ Below ☑
Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: 0.010 Length: 10'
Set Between: 15 ft. and 25 ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 18 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 13 ft. to 25 ft.
Effective size #2 Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other ____
Depth: From 0 ft. to 1 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☑ No Type: ____ Amount: ____

18. PUMP: Date Installed: ____ Not Installed ☑
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chionzzi CERT. NO.: 1790
Address: (Print) Level: A ☐ B ☑ C ☐ D ☐ (circle one)
171 Lott Ct, W.Columbia, 29169
Telephone No.: 803-429-5001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: ____ (Well Driller) Date: 8/19/10
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

APPENDIX B

Ground Water Sampling Logs

Terracon

Groundwater Sampling Log

Page ____ of ____

Well ID:	MW-5
Date:	8-9-10
Site Name:	Eddie's Pit Stop
Project No.:	73098106
Field Personnel:	Regan W. Norris
Weather Conditions:	sunny
Air Temperature:	90
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1545

Total Well Depth:	25 ft. BTOC
Depth to water:	17.35 ft. BTOC
Length of Water Column (LWC):	7.65 ft.
Casing Diameter:	2" in.
1 Casing Volume = LWC x .17 =	1.3 gal.
3 Casing Volumes:	3.9 gal.
Remarks:	

Field Analyses

Volume Purged (gal.)	Initial						
Time							
pH	5.64	5.48	5.40	5.43			
Specific Conductivity (umhos/cm)	141.8	87.4	62.5	60.8			
Water Temperature ©	27.0	24.3	22.6	21.5			
Turbidity	low	low	low	low			
Dissolved Oxygen (mg/L)	7.09	—					

Terracon

Groundwater Sampling Log

Page ____ of ____

Well ID:	~~EW-1~~
Date:	8-9-10
Site Name:	Eddies Pit Stop
Project No.:	73098106
Field Personnel:	DWN
Weather Conditions:	Sunny
Air Temperature:	99
Well Evacuation Method:	Baller
Sample Collection Method:	Baller
Sampled at (time):	1630

Total Well Depth:	59 ft. BTOC
Depth to water:	36.25 ft. BTOC
Length of Water Column (LWC):	22.75 ft.
Casing Diameter:	2 in.
1 Casing Volume = LWC x .17 =	3.86 gal.
3 Casing Volumes:	gal.
Remarks:	well dry @ 4.5 gallons allow for H2O Recovery and sample.

Field Analyses

Volume Purged (gal.)	Initial						
Time							
pH	6.37	6.23					
Specific Conductivity (umhos/cm)	67.2	94.3					
Water Temperature ©	26.1	28.1					
Turbidity	low	High					
Dissolved Oxygen (mg/L)	2.74	—					

APPENDIX C

Chemical Analytical Data

ACCESS
ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT
Terracon
521 Clemson Road
Columbia, SC 29229

ATTENTION
Regan Norris

PROJECT ID
Eddie's Pit Stop

LABORATORY REPORT NUMBER
210081113

DATE
08/17/2010

Primary Data Review By

Curtis Ekker
Data Validation Manager, GCAL

Secondary Data Review By

Ashley B. Amick
Project Manager, Access Analytical, Inc.
aamick@accessanalyticalinc.com

PLEASE NOTE:

- **Unless otherwise noted, all analysis on this report performed at Gulf Coast Analytical Labs (GCAL), 7979 GSRI Avenue, Baton Rouge, LA 70820.**
- **GCAL is SCDHEC certified laboratory # 73006, NCDENR certified lab # 618, GA certified lab # LA-01955, NELAP certified laboratory # 01955**
- Local support services for this project are provided by Access Analytical, Inc.. Access Analytical is a representative of GCAL serving clients in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll free at 888.315.4243.

NELAP CERTIFICATE NUMBER 01955

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.
7979 GSRI Avenue
Baton Rouge, LA 70820

Report Date 08/17/2010

GCAL Report 210081113

Deliver To	Terracon 521 Clemson Road Columbia, SC 29229 803-741-9000
Attn	Regan Norris

Project Eddie's Pit Stop

CASE NARRATIVE

Client: Terracon **Report:** 210081113

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

VOLATILES MASS SPECTROMETRY

In the SW-846 8260B analysis, sample 21008111301 (MW-5) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates an estimated value
U	Indicates the compound was analyzed for but not detected
B	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
B	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

_____

Robyn Migues
Technical Director
GCAL REPORT 210081113

THIS REPORT CONTAINS _____ PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21008111301	MW-5	Water	08/09/2010 15:45	08/11/2010 09:30
21008111302	TW-1	Water	08/09/2010 16:30	08/11/2010 09:30

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21008111301	MW-5	Water	08/09/2010 15:45	08/11/2010 09:30

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	166	10	0.542	ug/L
108-88-3	Toluene	44.4	10	0.590	ug/L
100-41-4	Ethylbenzene	539	10	0.627	ug/L
1330-20-7	Xylene (total)	1070	30	0.502	ug/L
91-20-3	Naphthalene	307	50	0.817	ug/L

SW-846 6010B

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0034B	0.015	0.0015	mg/L

SW-846 8011

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.269	0.010	0.00380	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21008111302	TW-1	Water	08/09/2010 16:30	08/11/2010 09:30

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
1330-20-7	Xylene (total)	1.27J	3	0.050	ug/L
91-20-3	Naphthalene	0.647J	5	0.082	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21008111301	MW-5	Water	08/09/2010 15:45	08/11/2010 09:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	08/12/2010 15:22	MSS	439630

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	166	10	0.542	ug/L
108-88-3	Toluene	44.4	10	0.590	ug/L
100-41-4	Ethylbenzene	539	10	0.627	ug/L
1330-20-7	Xylene (total)	1070	30	0.502	ug/L
91-20-3	Naphthalene	307	50	0.817	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.517U	10	0.517	ug/L
107-06-2	1,2-Dichloroethane	0.860U	10	0.860	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	496	ug/L	99	78 - 130
1868-53-7	Dibromofluoromethane	500	515	ug/L	103	77 - 127
2037-26-5	Toluene d8	500	481	ug/L	96	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	534	ug/L	107	71 - 127

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/12/2010 13:00	439608	SW-846 8011	1	08/16/2010 16:31	DLB	439908

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.269	0.010	0.00380	ug/L

SW-846 6010B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/11/2010 14:45	439525	SW-846 3010A	1	08/12/2010 20:28	CNB	439624

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0034B	0.015	0.0015	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21008111302	TW-1	Water	08/09/2010 16:30	08/11/2010 09:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/12/2010 15:46	MSS	439630

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	0.054U	1	0.054	ug/L
108-88-3	Toluene	0.059U	1	0.059	ug/L
100-41-4	Ethylbenzene	0.063U	1	0.063	ug/L
1330-20-7	**Xylene (total)**	**1.27J**	**3**	**0.050**	**ug/L**
91-20-3	**Naphthalene**	**0.647J**	**5**	**0.082**	**ug/L**
1634-04-4	tert-Butyl methyl ether (MTBE)	0.052U	1	0.052	ug/L
107-06-2	1,2-Dichloroethane	0.086U	1	0.086	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	50.7	ug/L	101	78 - 130
1868-53-7	Dibromofluoromethane	50	51.6	ug/L	103	77 - 127
2037-26-5	Toluene d8	50	49.7	ug/L	99	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	52.6	ug/L	105	71 - 127

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/12/2010 13:00	439608	SW-846 8011	1	08/16/2010 16:54	DLB	439908

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.00380U	0.010	0.00380	ug/L

SW-846 6010B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/11/2010 14:45	439525	SW-846 3010A	1	08/12/2010 20:34	CNB	439624

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0015U	0.015	0.0015	mg/L

GC/MS Volatiles Quality Control Summary

Analytical Batch 439630	Client ID	MB439630			LCS439630			LCSD439630			
Prep Batch N/A	GCAL ID	867323			867324			867325			
	Sample Type	Method Blank			LCS			LCSD			
	Analytical Date	08/12/2010 11:29			08/12/2010 09:28			08/12/2010 10:19			
	Matrix	Water			Water			Water			
SW-846 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
107-06-2	1,2-Dichloroethane	0.086U	0.086	50.0	46.4	93	71 - 129	46.3	93	0.2	30
100-41-4	Ethylbenzene	0.063U	0.063	50.0	44.1	88	74 - 126	43.4	87	2	30
1634-04-4	tert-Butyl methyl ether (MTBE)	0.052U	0.052	50.0	42.2	84	71 - 125	42.1	84	0.2	30
1330-20-7	Xylene (total)	0.050U	0.050	150	135	90	74 - 127	133	89	1	30
91-20-3	Naphthalene	0.082U	0.082	50.0	43.0	86	57 - 138	42.4	85	1	35
71-43-2	Benzene	0.054U	0.054	50.0	43.9	88	70 - 129	43.7	87	0.5	20
108-88-3	Toluene	0.059U	0.059	50.0	42.0	84	72 - 120	41.3	83	2	20
Surrogate											
460-00-4	4-Bromofluorobenzene	48.1	96	50	50	100	78 - 130	49.9	100		
1868-53-7	Dibromofluoromethane	52.2	104	50	51.5	103	77 - 127	51.2	102		
2037-26-5	Toluene d8	49.1	98	50	47.6	95	76 - 134	46.8	94		
17060-07-0	1,2-Dichloroethane-d4	52.7	105	50	53.6	107	71 - 127	53.6	107		

General Chromatography Quality Control Summary

Analytical Batch 439908	**Client ID**	MB439608	LCS439608	LCSD439608
Prep Batch 439608	**GCAL ID**	867281	867282	867283
Prep Method SW-846 8011	**Sample Type**	Method Blank	LCS	LCSD
	Prep Date	08/12/2010 13:00	08/12/2010 13:00	08/12/2010 13:00
	Analytical Date	08/16/2010 15:02	08/16/2010 15:24	08/16/2010 15:46
	Matrix	Water	Water	Water

SW-846 8011		**Units**	ug/L								
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
106-93-4	1,2-Dibromoethane	0.00380U	0.00380	1.26	1.48	117	55 - 141	1.39	115	6	40

Inorganics Quality Control Summary

Analytical Batch	439624	Client ID	MB439525			LCS439525		
Prep Batch	439525	GCAL ID	866890			866891		
Prep Method	SW-846 3010A	Sample Type	Method Blank			LCS		
		Prep Date	08/11/2010 14:45			08/11/2010 14:45		
		Analytical Date	08/12/2010 18:21			08/12/2010 18:28		
		Matrix	Water			Water		
SW-846 6010B		Units / Result	mg/L / RDL	Spike Added	Result	% R	Control Limits % R	
7439-92-1	Lead	0.0015U	0.0015	0.50	0.50	100	80 - 120	

Analytical Batch	439624	Client ID	ACC5-PI-081010			866926MS			866926MSD			
Prep Batch	439525	GCAL ID	21008111701			866979			866980			
Prep Method	SW-846 3010A	Sample Type	SAMPLE			MS			MSD			
		Prep Date	08/11/2010 14:45			08/11/2010 14:45			08/11/2010 14:45			
		Analytical Date	08/12/2010 18:35			08/12/2010 18:41			08/12/2010 18:48			
		Matrix	Water			Water			Water			
SW-846 6010B		Units / Result	mg/L / RDL	Spike Added	Result	% R	Control Limits % R	Result	% R	RPD	RPD Limit	
7439-92-1	Lead	0.0	0.0015	0.50	0.49	98	75 - 125	0.47	95	4	20	

Access Analytical - Chain of Custody Record

Access/4523/210061113/8-4-10

LAB USE ONLY

Project Work Order # 7309806

PO # _____ Access Quote # _____

LAB USE ONLY

Laboratory ID: GCAL

Company Name: Terracon Consultants

Report To: Roger W. Norris

Address: 521 Clemson Rd

City: Columbia State: SC Zip: 29229

Phone: 803-741-9000 Fax: 803-741-9900

Email: rwnorris@terracon.com

Project ID: Eddie's Pit Stop

Sampled By: Roger W. Norris

ACCESS ANALYTICAL, INC.

7478 Carlisle Street
Irmo, SC 29063

Phone: (803) 781-4243
Fax: 781-4303

www.axs-inc.com

*Preservative Codes: (place corresponding # in block above analysis field): 0 = None 1 = HCL 2 = HNO3 3 = H2SO4 4 = NaOH 5 = Na2S2O3 6 = Method 5035 set w/ NaHSO4 & CH3OH 7 = NaOH/ZnOAC 8 = H2SO4

*Matrix Codes (place corresponding code in matrix column): GW = ground water, WW = waste water, DW = drinking water, S = soil, SL = sludge, A = air, IW = industrial waste, WO = waste oil, OT = other (specify in comments section)

*Program Area Codes: CWA = Clean Water Act (for wastewater); SDWA = Safe Drinking Water Act (for drinking water); SHW = Solid and Hazardous Wastes (for soils, ground water and waste samples)

*Container Type: G = Glass, P = Plastic

Sample ID/Description	Date Collected	Time Collected	Type (grab or composite)	Matrix (see codes)	Program Area (see codes)	Total # of containers	Preservative (see codes)	Container Type (see codes)	Lead (Total)	BTEX, Naph., MTBE, 1,2 DCA	EDB												NOTES / COMMENTS (if sample is a composite please use space below to note start/finish times & dates)
MW-5	8/9/10	15:45	G	GW	CWA	5	1	2	2	2												1	
TW-1	8/9/10	1630	G	GW	CWA	5	1	2	2	2												2	

Turnaround Time:

_✓_ Standard
___ RUSH*
*Date Required: _____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:
_✓_ SC
___ NC
___ Other
(specify) _____

Relinquished By:	Received By:	Date (mm/dd/yy)	Time (24 HR)	Sample Temp. Upon Receipt (°C)	
	M. Robertson	8/10/10	1420	10.4 (°C)	____(N/A)
M. Robertson	FedEx	8/10/10	1700	____(°C)	____(N/A)
Fedex	M	8-11-10	930	4.1 (°C)	____(N/A)
				____(°C)	____(N/A)

See Reverse for Terms and Conditions

Original Copy - Returned w/Report
Yellow Copy - Access File Copy
Pink Copy - Client Copy

APPENDIX D

Disposal Manifests

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. 00003 | 2. Page 1 of 7309-8106

3. Generator's Name and Mailing Address D
SCOOT
PO Box 191 Columbia SC 29202
4. Generator's Phone ( )

Eddies Pit Stop
Rt. 2 Hwy 601 N.
Padgetud, SC
45ft # 18871

5. Transporter 1 Company Name: Diversified Recycling Inc | 6. US EPA ID Number: SCR000.768.048 | A. Transporter's Phone: 877682

7. Transporter 2 Company Name | 8. US EPA ID Number | B. Transporter's Phone

9. Designated Facility Name and Site Address
Diversified Recycling
132 Gamecock Zoo Rd
West Columbia SC 29172
10. US EPA ID Number: SCR000768127
C. Facility's Phone: 803 493 5271

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON RCRA NON Regulated (Solid)	6.	DM	3750 35DW	P
b. Non RCRA Non (liquid)	1.	DM	11 gals	G
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name | Signature | Month | Day | Year

GENERATOR

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

TRANSPORTER

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

GENERATOR'S COPY

Monitoring Well Installation Report

Eddie's Pit Stop
Rt. 2, US Highway 601 North
Pageland, South Carolina
UST Permit # 18871

September 14, 2010
Terracon Project No. 73098106

Prepared for:
South Carolina Department of Transportation
PO Box 191
Columbia, South Carolina 29202

Prepared by:
Terracon Consultants, Inc.
Columbia, South Carolina

Offices Nationwide Established in 1965
Employee-Owned terracon.com

Terracon

Geotechnical ■ Environmental ■ Construction Materials ■ Facilities

Terracon

September 14, 2010

Ms. Minda Johnson
Underground Storage Tank Program
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1708

Re: **Monitoring Well Installation Report**
Eddie's Pit Stop
Rt. 2, US Hwy 601 N, Pageland, South Carolina
UST Permit # 18871; CA # 37147
Terracon Project No. 73098106

Dear Ms. Johnson:

On behalf of the South Carolina Department of Transportation, (SCDOT), **Terracon Consultants, Inc.** (Terracon), is pleased to submit this Monitoring Well Installation Report for the Eddie's Pit Stop facility in Pageland, Chesterfield County, South Carolina. If you have any questions regarding the contents of this report, or if there is a need for further information, please contact us.

Respectfully submitted,

Terracon Consultants, Inc.
UST Contractor Certification No. 246

Regan Norris
Staff Scientist

P. Michael Hudgins,
Senior Hydrogeologist
SC Registration No. 1137

P. MICHAEL HUDGINS REGISTERED NO 1137 SOUTH CAROLINA PROFESSIONAL GEOLOGIST

Enclosures

CC: Mr. Peter Reinhart / SCDOT

TABLE OF CONTENTS
Monitoring Well Installation Report
Eddie's Pit Stop
Rt. 2, US Hwy 601 N, Pageland, South Carolina
UST Permit # 18871; CA # 37147
Terracon Project No. 73098106

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1 Ground Water Elevation Data
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A Geologist Logs and Water Well Records
B Ground Water Sampling Logs
C Chemical Analytical Data
D Disposal Manifests

1.0 INTRODUCTION

Terracon Consultants, Inc. has completed a monitoring well installation at the former Eddie's Pit Stop located in Pageland, South Carolina. The purpose of the additional wells is to evaluate the current ground water quality conditions from a release of petroleum hydrocarbons previously reported at the site by the South Carolina Department of Transportation (SCDOT). The work was performed in accordance with the South Carolina Department of Health and Environmental Control (SCDHEC) Cost Agreement #37147 dated October 9, 2009 and the SCDHEC Tier II Assessment guidance document dated March 15, 2000. This report includes a description of the activities performed during this assessment, along with our current findings, conclusions and recommendations.

1.1. Facility Information

The former Eddie's Pit Stop site is located on U.S. Highway 601 N in Pageland, South Carolina. A site location (USGS Topographic) map showing a portion of the Pageland, South Carolina 7.5-minute topographic quadrangle is included as Figure 1. The site is defined as the area of the former USTs within the SCDOT right-of-way. Property access to the reminder of the Eddie's Pit Stop property was not granted during this assessment.

US Highway 601 and is associated right-of-way were expanded in 2001 as part of road improvements in Chesterfield County. The former Eddie's Pit Stop formerly operated one 750 gallon and one 2,000 gallon gasoline USTs and dispenser island, which were removed in 2002 as part of the highway expansion. A release was reported during closure of the UST basin located adjacent to the dispenser island containing the two USTs.

Based on the UST closure results, the SCDHEC issued a directive to the SCDOT to conduct an Initial Ground Water Assessment (IGWA), performed in May 2003.[1] Monitoring well MW-1 was installed as part of the IGWA which indicated Contaminants of Concern (COCs) in excess of Risk-Based Screening Levels (RBSLs) for benzene, toluene, ethylbenzene, xylenes (BTEX), naphthalene, ethylene dibromide (EDB) and lead. Based upon these results, the SCDHEC requested a Tier I Assessment be performed at this site.

Terracon performed a Tier I Assessment at the site in 2009, which included installation of four soil borings and three monitoring wells (MW-2, MW-3, and MW-4). Analyses of the groundwater samples indicated RBSLs were exceeded for one or more compounds in samples collected from all site monitoring wells. Additionally, a semi-confined water table was determined to exist at the site which prevented monitoring wells from bracketing the water table. Additional geologic and water level data was needed to determine the current water quality conditions and to evaluate the hydrogeology of the shallow aquifer.

---

[1] Initial Ground Water Assessment Report, Former Eddies Pit Stop: ARM Environmental Services, Inc., ARM Project #02-130,July 28, 2003

Two water supply wells, one on site, were identified as potential receptors. The on-site well was sampled as part of the Tier I and indicated a low concentration of naphthalene. The water supply well on the adjacent property was inaccessible at the time of the assessment.

The SCDHEC requested installation of two additional wells to evaluate the depth to bedrock and to evaluate the confining water table and water quality conditions. This well installation report includes a summary of the field methods utilized along with the results of ground water elevation measurements, field and laboratory ground water analytical results, and our conclusions and recommendations.

1.2. Monitoring Well Installation

One temporary monitoring well (TW-1) and one permanent well (MW-5) were drilled at the site on July 28, 2010 and August 6, 2010, respectively. TW-1 was drilled at a background location to bedrock, across Highway 601, east of the USTs. MW-5 was drilled on site closest to the USTs as the site conditions would allow (approximately 15 feet) owing to a drainage ditch and buried utilities (fiber optic) located in the area of the former USTs.

TW-1 was drilled using mud rotary methods and a 6-1/4 inch drill bit to a depth of 59 feet, where rock was encountered. Split-spoon soil samples were collected at 5-foot intervals, screened for organic vapors, and logged in the field. 10 feet of 2-inch PVC well screen, riser casing, and sand was set to the borehole depth and a ground water sample was collected from the temporary well. Upon sample collection, the screen and casing were abandoned in-place by pressure grouting with tremie pipe.

MW-5 was drilled using 2.5-inch inner diameter (ID) continuous-flight hollow stem augers (HSAs) to a depth of 25 feet. The monitoring well was constructed of 2-inch diameter schedule 40 PVC casing and 15 feet of 2-inch diameter PVC well screens with a manufactured slot size of 0.010-inch. An appropriately graded sand filter pack was placed within the annulus opposite the well screen to a height of approximately two feet above the top of the well screen. A bentonite pellet layer was placed above the sand filter pack in each well and hydrated. The remaining annulus of each well was grouted to land surface with cement grout. The well was completed below-grade within steel protective manhole covers, and a concrete pad was constructed around the well. The well construction details are included on Table 1. The Geologist Logs and Water Well Records (DHEC 1903 Form), as compiled by the certified driller, are included in Appendix A.

After installation, the wells were developed by surging and bailing until the wells were producing relatively clear water. Soil cuttings and development water generated during drilling was collected and disposed by Diversified Recycling, West Columbia, South Carolina. The disposal manifest is included in Appendix D.

A subsequent survey was conducted by Terracon personnel referenced to monitoring well MW-1. Top-of-casing elevations are included in Table 1.

1.3. Ground Water Sampling and Analyses

Water levels were recorded and ground water samples were collected from monitoring wells TW-1 and MW-5 on August 9, 2010. Water levels were measured using an electric water level indicator. The water level data was converted to elevations relative to the surveyed top of casing (TOC) elevations. A summary of the water level data is presented on Table 1.

TW-1 and MW-5 were purged with disposable polyethylene bailers dedicated to each well prior to sample collection. Specific conductance, pH, and temperature were recorded during well purging. The Ground Water Sampling Logs are included in Appendix B. Purge water was contained with the drilling fluid and soil cuttings and disposed by Diversified Recycling, West Columbia, South Carolina. The disposal manifests are included in Appendix D.

The samples were collected with dedicated bailers, poured into laboratory prepared containers, placed in a cooler refrigerated with ice, and delivered to Access Analytical, Inc. for analysis, accompanied with chain-of-custody documentation. The ground water samples were analyzed for the following:

Analysis	Method
Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) Methyl-tert-butyl-ether (MTBE) Naphthalene 1,2-dichloroethane (1,2-DCA) 8 Oxygenates	EPA Method 8260B
1,2-dibromoethane (EDB)	EPA Method 8011
Total lead	EPA Method 6010B

A summary of the ground water quality data from the monitoring wells is presented in Table 2 The laboratory analytical reports and chain-of-custody forms are included in Appendix.

2.0 TIER II ASSESSMENT RESULTS

2.1 Regional Hydrogeology

The site is located within the Carolina Slate Belt terrain of the Lower Piedmont physiographic province. The Carolina Slate Belt province consists of weathered low-grade metamorphic rocks. Ground water within the shallow sediments of the Lower Piedmont provinces typically occurs under water table (unconfined) and semi-confined conditions. Ground water flow

directions are a subtle reflection of the local topography. Local recharge of the shallow aquifer occurs by the direct infiltration by precipitation.

2.2 Site Hydrogeology

Based on the geologist logs of the soil borings and monitoring wells installed during this assessment, the site is underlain predominantly by tight silt and clay, and partially weathered rock (PWR) to the maximum study depth (59 feet). Based upon depth of refusal during drilling using a Mobile B-59 rig, bedrock is located approximately 59 feet below land surface at the site.

Ground water occurs within the shallow aquifer under semi-confined conditions. During installation of the monitoring wells, inspection of the split-spoon soil samples indicated that the borings were dry to boring depths. The wells were set and water was allowed to enter the borehole. TW-1 contained sufficient water after a period of a few hours, and MW-5 contained seven feet of water after a period of three days.

2.3 Ground Water Analytical Results

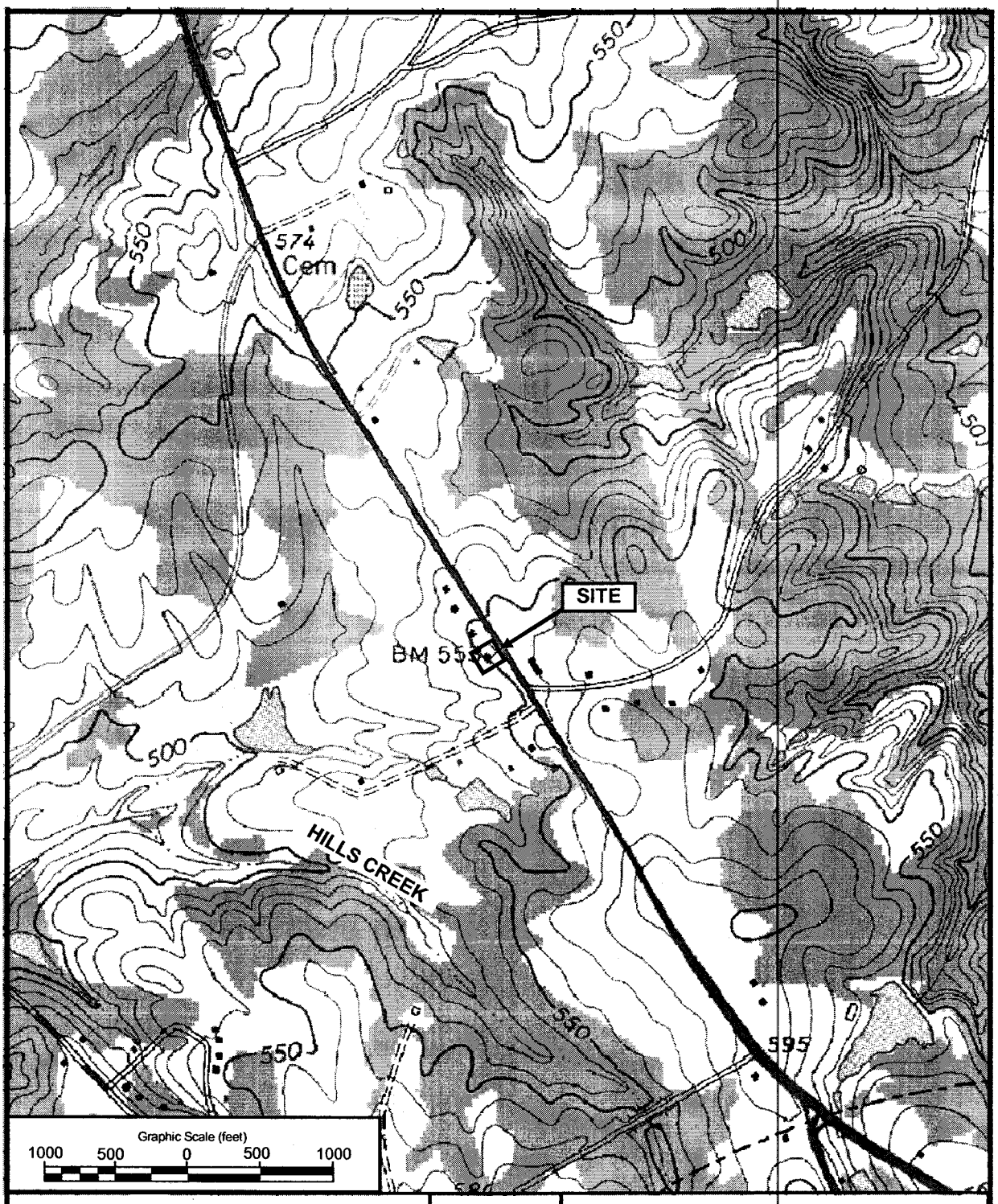
The results of the sample collected from TW-1 indicates an estimated value for ethylbenzene only. Benzene (166 ug/l) and naphthalene (307 ug/l) were detected at concentrations above RBSLs in MW-5. All other compounds were below RBSLs or laboratory detection limits. A site map showing the analytical data is included as Figure 2.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Inspection of the field and analytical data collected indicates soil and groundwater have been impacted above RBSLs, sourced from the underground storage tank system. Contamination in the upgradient well, MW-2 indicates that there may be contribution from an upgradient source (Carolinas Country Convenience UST #02261). Based on this data, and the reported ground water flow direction, further plume delineation is recommended.

Two water supply wells were identified as potential receptors. The well on the former Eddie's site (WS-1) was sampled as part of the Tier I Assessment in 2009 which indicated a low (estimated) concentration of naphthalene (4.11J). The water supply well on the adjacent property was inaccessible at the time of this assessment. Both supply wells should be sampled as part of all future assessments at this site.

FIGURES



USGS TOPOGRAPHIC QUADRANGLE MAP
PAGELAND, SOUTH CAROLINA

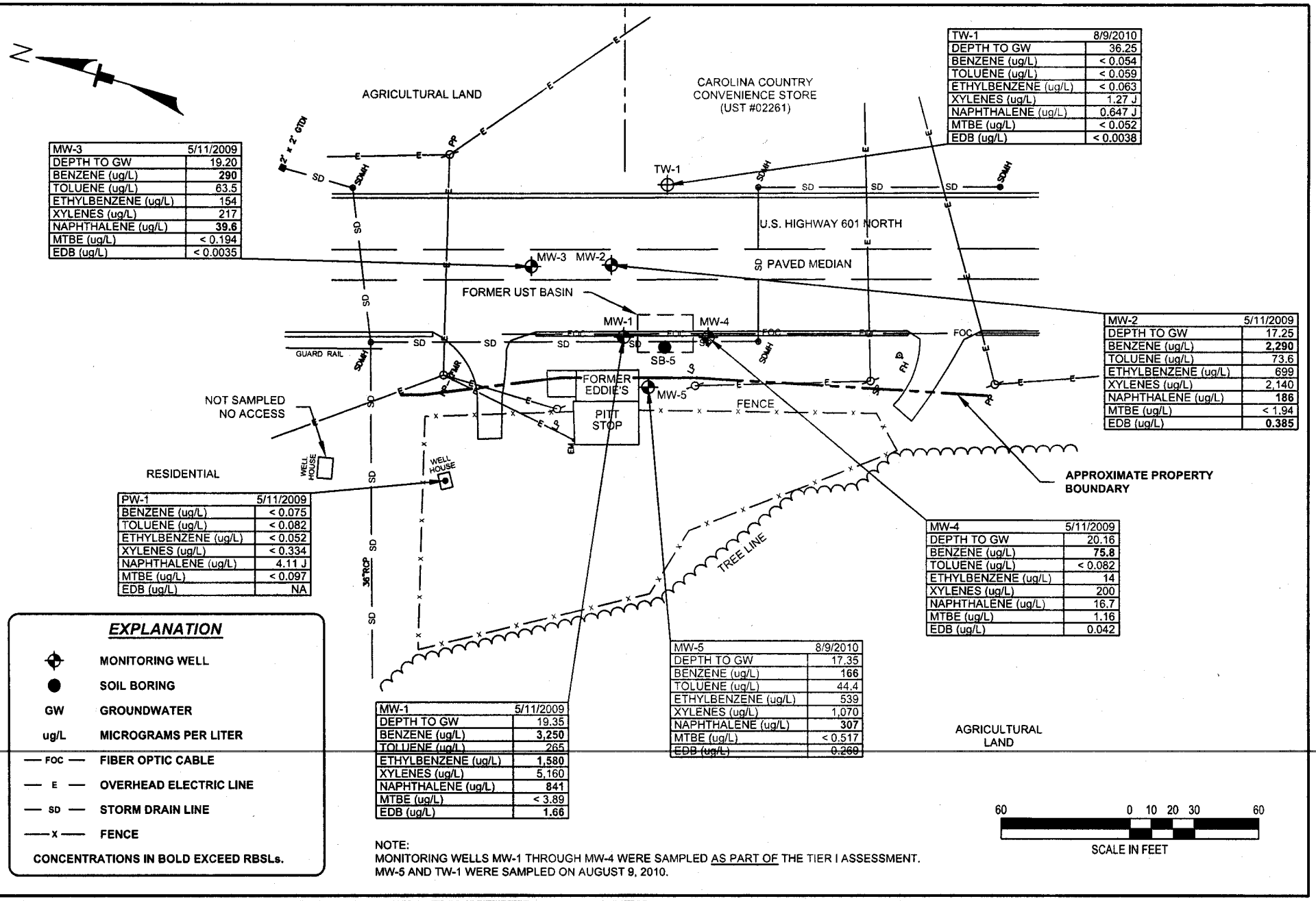
DATE: 1993
SCALE: 1 INCH = 1000 FEET
PROJECT NO. 73098106

N

Terracon

SITE LOCATION MAP
EDDIE'S PITT STOP
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA

FIGURE 1: TOPOGRAPHIC MAP



MW-3	5/11/2009
DEPTH TO GW	19.20
BENZENE (ug/L)	**290**
TOLUENE (ug/L)	63.5
ETHYLBENZENE (ug/L)	154
XYLENES (ug/L)	217
NAPHTHALENE (ug/L)	**39.6**
MTBE (ug/L)	< 0.194
EDB (ug/L)	< 0.0035

TW-1	8/9/2010
DEPTH TO GW	36.25
BENZENE (ug/L)	< 0.054
TOLUENE (ug/L)	< 0.059
ETHYLBENZENE (ug/L)	< 0.063
XYLENES (ug/L)	1.27 J
NAPHTHALENE (ug/L)	0.647 J
MTBE (ug/L)	< 0.052
EDB (ug/L)	< 0.0038

MW-2	5/11/2009
DEPTH TO GW	17.25
BENZENE (ug/L)	**2,290**
TOLUENE (ug/L)	73.6
ETHYLBENZENE (ug/L)	699
XYLENES (ug/L)	2,140
NAPHTHALENE (ug/L)	**186**
MTBE (ug/L)	< 1.94
EDB (ug/L)	**0.385**

PW-1	5/11/2009
BENZENE (ug/L)	< 0.075
TOLUENE (ug/L)	< 0.082
ETHYLBENZENE (ug/L)	< 0.052
XYLENES (ug/L)	< 0.334
NAPHTHALENE (ug/L)	4.11 J
MTBE (ug/L)	< 0.097
EDB (ug/L)	NA

MW-4	5/11/2009
DEPTH TO GW	20.16
BENZENE (ug/L)	**75.8**
TOLUENE (ug/L)	< 0.082
ETHYLBENZENE (ug/L)	14
XYLENES (ug/L)	200
NAPHTHALENE (ug/L)	16.7
MTBE (ug/L)	1.16
EDB (ug/L)	0.042

MW-5	8/9/2010
DEPTH TO GW	17.35
BENZENE (ug/L)	**166**
TOLUENE (ug/L)	44.4
ETHYLBENZENE (ug/L)	539
XYLENES (ug/L)	1,070
NAPHTHALENE (ug/L)	**307**
MTBE (ug/L)	< 0.517
EDB (ug/L)	0.269

MW-1	5/11/2009
DEPTH TO GW	19.35
BENZENE (ug/L)	**3,250**
TOLUENE (ug/L)	265
ETHYLBENZENE (ug/L)	**1,580**
XYLENES (ug/L)	5,160
NAPHTHALENE (ug/L)	**841**
MTBE (ug/L)	< 3.89
EDB (ug/L)	**1.66**

EXPLANATION

- MONITORING WELL
- SOIL BORING
- GW — GROUNDWATER
- ug/L — MICROGRAMS PER LITER
- FOC — FIBER OPTIC CABLE
- E — OVERHEAD ELECTRIC LINE
- SD — STORM DRAIN LINE
- X — FENCE

CONCENTRATIONS IN BOLD EXCEED RBSLs.

NOTE:
MONITORING WELLS MW-1 THROUGH MW-4 WERE SAMPLED AS PART OF THE TIER I ASSESSMENT.
MW-5 AND TW-1 WERE SAMPLED ON AUGUST 9, 2010.

60 0 10 20 30 60
SCALE IN FEET

Project Mngr:	RWN
Drawn By:	PTK
Checked By:	RWN
Approved By:	PMH

Project No.	73098106
Scale:	AS SHOWN
File No.	73098106
Date:	AUGUST 2010

Terracon
Consulting Engineers and Scientists
521 CLEMSON ROAD COLUMBIA, SC 29229
PH. (803) 741-9000 FAX. (803) 741-9900

SITE MAP

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA
UST PERMIT # 18871

FIG. No. 2

TABLES

TABLE 1
GROUND WATER ELEVATION DATA
Petroleum Compounds

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	TOP OF CASING ELEVATION	DEPTH TO GROUND WATER	GROUND WATER ELEVATION
MW-1	5/20/03 5/11/09	**43**	**33- 43**	298.85	35.70 19.35	263.15 279.50
MW-2	5/11/09	43	28-43	298.98	17.25	281.73
MW-3	5/11/09	45	30-45	298.36	19.2	279.16
MW-4	5/11/09	49	34-49	299.29	20.16	279.13
MW-5	8/9/10	25	15 - 25	296.16	17.35	278.81
TW-1	8/9/10	59	49 - 59	NS	36.25	NS

Notes:
1) Top pf casing elevations surveyed by Terracon personnel
2) NS - Not Surveyed

TABLE 2
GROUND WATER ANALYTICAL DATA
Petroleum Compounds

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	BENZENE (ug/l)	TOLUENE (ug/l)	ETHYL-BENZENE (ug/l)	XYLENES (ug/l)	MTBE (ug/l)	NAPHTH-ALENE (ug/l)	EDB (ug/l)	Total Lead (ug/l)
MW-1	5/11/09	**3,250**	265	**1,580**	5,160	< 3.89	**841**	**1.66**	12 *B*
MW-2	5/11/09	**2,290**	73.6	699	2,140	< 1.94	**186**	**0.385**	3.3
MW-3	5/11/09	**290**	63.5	154	217	< 0.194	**39.6**	< 0.0035	**27**
MW-4	5/11/09	**75.8**	< 0.082	14	200	1.16	16.7	0.042	14 *B*
MW-5	8/9/10	**166**	44.4	539	1,070	< 0.517	**307**	0.269	3.4 *B*
TW-1	8/9/10	< 0.054	< 0.059	< 0.063	1.27 J	< 0.052	0.647 J	< 0.0038	< 1.5
RBSLs	--	*5*	*1,000*	*700*	*10,000*	*40*	*25*	*0.05*	*15*

Notes:

1) Results shown in boldface type indicate concentrations which exceed the RBSL for that compound
2) ug/l - micrograms per liter or parts per billion
3) RBSL- Risk-Based Screening Level as defined by the SCDHEC RBCA Document
4) *J* - indicates an estimated value
4) *B* - indicates the result is betweeen the Method Detection Limit and the Reporting Detection Limit

APPENDIX A

Geologist Logs and Water Well Records

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **TW-1**
Client: SCDOT		***Well Construction Data***	
Date Started: 7/27/10	Date Completed: 7/28/10	Screen: 2" (0.010) Slotted PVC	From: 49 - To: 59
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 47 - To: 59
Drilling Co.: Land Probe	Driller: Marshall Burnett	Seal: Bentonite Pellets	From: 45 - To: 47
Method: Mud Rotary	Equipment: Mobile B-59	Grout: Portland Cement Type I	From: 0 - To: 45
Boring Depth (ft.): 59.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6.25	GW Level: ▼ 36.25 Time/Date: 8/9/2010	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		
2						**SILT**, mottled (pink, gray, orange) with dark brown veins, hard, dry.		
4								
6		1	7, 35, 28	0.0				
8								
10		2	4, 14, 13	0.0		Clayey **SAND**, white with dark brown veins, medium grained, dry.		
12								
14								
16		3	13, 37, 21	0.0		**CLAY**, orangish red, dry, with large black veins of quartz.		
18								
20		4	13, 33, 24	0.0				
22								
24								
26		5	9, 29, 30	0.0		**CLAY**, trace dark brown quartz, orange, hard, dry.		
28								
30		6	30, 50/6"	0.0		**SILT**, gray, hard.		
32								
34								
36		7	35, 37, 38	0.0			▼	
38								
40		8	33, 50/6"	0.0				
42								
44								
46		9	21, 50/6"	0.0		**SILT**, gray with dark brown veins, hard, laminated, dry.		
48								
50								
52								
54								
56								
58						**ROCK**		
						Boring Terminated at 59 ft.		

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/26/10

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. Well Owner Information:
Name: SCDOT (last) (first)
Address: P.O. Box 191
City: Columbia State: SC zip: 29201
Phone: Work:
Home:

2. Location of Well: County: Chesterfield
Name: Eddies Pitt Stop
Address: Hwy 601
City: Pageland zip:
Latitude: Longitude:

3. Public System Name: **Public System Number:**

4. Abandonment: (yes/ no) YES
Grouted Depth: from to 0.0 ft. 59.0

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum
See Logs		

5. Remarks:
SS every 5', hit rock at 59', ss on top of rock NR

6. Type:

Mud Rotary XXX	Jetted	Bored
Dug	Air Rotary	Driven
Cable tool	Auger	

7. Permit Number: 18871 / UMW-23143

8. Use:

Residential	Public Supply	Process
Irrigation	Air Conditioning	Emergency
Test Well	Monitor Well XXX	Replacement

9. Well Depth (completed) 59.0 ft.
Date Started: 7/27/2010
Date Completed: 7/28/2010

10. Casing: Threaded XXX Welded
Diameter: 2"
Type: PVC
0.0 in. to 59.0 ft. depth
in. to ft. depth
Height: Below Surface: ft. Weight: lb./ft.
Drive Shoe: No

11. Screen:
Type: PVC Diameter: 2"
Slot/Gauge: 0.10 Length: 10.0 ft.
Set Between: 49.0 ft. and 59.0 ft.
ft. and ft.
Sieve Analysis: Y/N

12. Static Water Level: ft. below land surface after 24 hours.

13. Pumping Level below land surface.
ft. after hrs Pumping GPM
Pumping Test: No
Yield: gpm

14. Water Quality:
Chemical Analysis: No Bacterial Analysis: No

15. Artificial Filter (filter pack) Y/N YES
Installed from: 47.0 ft. to 59.0 ft.
Effective Size: Uniformity Coefficient

16. Well Grouted? YES

Neat Cement	Bentonite	Bentonite/Cement	other

Depth: from 0.0 ft. to 45.0 ft.

17. Nearest Source of Possible Contamination: ft. direction
Type:
Well disinfected No Type: Amount:

18. Pump: Date installed: N/A
Mfr. Name: Model no.:
H.P.: Volts: Length of pipe: ft.
Capacity: gpm
TYPE:
Submersible Jet (shallow) Turbine
Jet (deep) Reciprocating Centrifugal

19. Well Driller Marshall Burnett Cert No. 1671
Address: 6004 Ponders Court Level C
Greenville SC 29615
Telephone: 864-527-9324 Fax: 864-288-4430

20. Water Well Driller's Certification: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Marshall Burnett
Date: 7/28/10

If D Level Driller, provide supervising driller's name.

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: MW-5
Client: SCDOT		***Well Construction Data***	
Date Started: 8/6/10	Date Completed: 8/6/10	Screen: 2" (0.010) Slotted PVC	From: 15 - To: 25
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 13 - To: 25
Drilling Co.: VERCO	Driller: J. Chiorazzi	Seal: Bentonite Pellets	From: 11 - To: 13
Method: 2.25 HSA	Equipment: Geoprobe 6620 DT	Grout: Portland Cement Type I	From: 0 - To: 11
Boring Depth (ft.): 28.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6.25	GW Level: Dry / Time/Date: 8/6/2010	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		
2						Silty **CLAY**, orange.		2
4						Silty **CLAY**, light brown.		4
6						Clayey **SILT**, orange, petroleum odor.		6
8								8
10								10
12						Clayey **SILT**, orange.		12
14								14
16								16
18								18
20								20
22								22
24								24
26								26
28						**Boring Terminated at 28 ft.** GW LEVELS: 17.35 on8/9/2010		28

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/26/10

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Silt	25	25
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: Monitoring well - MW5

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 25 ft. Date Started: 8/6/10 Date Completed: 8/6/10

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 25 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☑
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: 0.010 Length: 10'
Set Between: 15 ft. and 25 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 18 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 13 ft. to 25 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 1 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not Installed ☑
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi CERT. NO.: 1790
Address: (Print) 171 Lott Ct, W.Columbia, 29169
Level: A ☐ B ☑ C ☐ D ☐ (circle one)
Telephone No.: 803-429-3001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ (Well Driller) Date: 8/19/10
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

APPENDIX B

Ground Water Sampling Logs

Terracon

Groundwater Sampling Log

Page ____ of ____

Well ID:	MW-5
Date:	8-9-10
Site Name:	Eddie's Pit Stop
Project No.:	73098106
Field Personnel:	Regan W. Norris
Weather Conditions:	sunny
Air Temperature:	90
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1545

Total Well Depth:	25	ft. BTOC
Depth to water:	17.35	ft. BTOC
Length of Water Column (LWC):	7.65	ft.
Casing Diameter:	2"	in.
1 Casing Volume = LWC x .17 =	1.3	gal.
3 Casing Volumes:	3.9	gal.

Remarks: ____

Field Analyses

Volume Purged (gal.)	Initial						
Time							
pH	5.64	5.48	5.40	5.43			
Specific Conductivity (umhos/cm)	141.8	87.4	62.5	60.8			
Water Temperature ©	27.0	24.3	22.6	21.5			
Turbidity	low	low	low	low			
Dissolved Oxygen (mg/L)	7.09	—					

Terracon

Groundwater Sampling Log

Page ____ of ____

Well ID:	~~TW-1~~
Date:	8-9-10
Site Name:	Eddies Pit Stop
Project No.:	73098106
Field Personnel:	RWW
Weather Conditions:	Sunny
Air Temperature:	99
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1630

Total Well Depth:	59 ft. BTOC
Depth to water:	36.25 ft. BTOC
Length of Water Column (LWC):	22.75 ft.
Casing Diameter:	2 in.
1 Casing Volume = LWC x .17 =	3.86 gal.
3 Casing Volumes:	gal.
Remarks:	well dry @ 4.5 gallons allow for H2O Recovery and sample.

Field Analyses

Volume Purged (gal.)	Initial						
Time							
pH	6.37	6.23					
Specific Conductivity (umhos/cm)	67.2	94.3					
Water Temperature ©	26.1	29.1					
Turbidity	low	High					
Dissolved Oxygen (mg/L)	2.74	—					

APPENDIX C

Chemical Analytical Data

ACCESS
ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT
Terracon
521 Clemson Road
Columbia, SC 29229

ATTENTION
Regan Norris

PROJECT ID
Eddie's Pit Stop

LABORATORY REPORT NUMBER
210081113

DATE
08/17/2010

Primary Data Review By

Curtis Ekker
Data Validation Manager, GCAL

Secondary Data Review By

Ashley B. Amick
Project Manager, Access Analytical, Inc.
aamick@accessanalyticalinc.com

PLEASE NOTE:

- **Unless otherwise noted, all analysis on this report performed at Gulf Coast Analytical Labs (GCAL), 7979 GSRI Avenue, Baton Rouge, LA 70820.**

- **GCAL is SCDHEC certified laboratory # 73006, NCDENR certified lab # 618, GA certified lab # LA-01955, NELAP certified laboratory # 01955**

- Local support services for this project are provided by Access Analytical, Inc.. Access Analytical is a representative of GCAL serving clients in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll free at 888.315.4243.

NELAP CERTIFICATE NUMBER 01955

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.
7979 GSRI Avenue
Baton Rouge, LA 70820

Report Date 08/17/2010

GCAL Report 210081113

Deliver To	Terracon 521 Clemson Road Columbia, SC 29229 803-741-9000
Attn	Regan Norris

Project Eddie's Pit Stop

CASE NARRATIVE

Client: Terracon **Report:** 210081113

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

VOLATILES MASS SPECTROMETRY

In the SW-846 8260B analysis, sample 21008111301 (MW-5) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates an estimated value
U	Indicates the compound was analyzed for but not detected
B	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
B	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

Robyn Migues
Technical Director
GCAL REPORT 210081113

THIS REPORT CONTAINS _____ PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21008111301	MW-5	Water	08/09/2010 15:45	08/11/2010 09:30
21008111302	TW-1	Water	08/09/2010 16:30	08/11/2010 09:30

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21008111301	MW-5	Water	08/09/2010 15:45	08/11/2010 09:30

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	166	10	0.542	ug/L
108-88-3	Toluene	44.4	10	0.590	ug/L
100-41-4	Ethylbenzene	539	10	0.627	ug/L
1330-20-7	Xylene (total)	1070	30	0.502	ug/L
91-20-3	Naphthalene	307	50	0.817	ug/L

SW-846 6010B

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0034B	0.015	0.0015	mg/L

SW-846 8011

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.269	0.010	0.00380	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21008111302	TW-1	Water	08/09/2010 16:30	08/11/2010 09:30

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
1330-20-7	Xylene (total)	1.27J	3	0.050	ug/L
91-20-3	Naphthalene	0.647J	5	0.082	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21008111301	MW-5	Water	08/09/2010 15:45	08/11/2010 09:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	08/12/2010 15:22	MSS	439630

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	**Benzene**	**166**	**10**	**0.542**	**ug/L**
108-88-3	**Toluene**	**44.4**	**10**	**0.590**	**ug/L**
100-41-4	Ethylbenzene	539	10	0.627	ug/L
1330-20-7	**Xylene (total)**	**1070**	**30**	**0.502**	**ug/L**
91-20-3	**Naphthalene**	**307**	**50**	**0.817**	**ug/L**
1634-04-4	tert-Butyl methyl ether (MTBE)	0.517U	10	0.517	ug/L
107-06-2	1,2-Dichloroethane	0.860U	10	0.860	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	496	ug/L	99	78 - 130
1868-53-7	Dibromofluoromethane	500	515	ug/L	103	77 - 127
2037-26-5	Toluene d8	500	481	ug/L	96	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	534	ug/L	107	71 - 127

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/12/2010 13:00	439608	SW-846 8011	1	08/16/2010 16:31	DLB	439908

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.269	0.010	0.00380	ug/L

SW-846 6010B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/11/2010 14:45	439525	SW-846 3010A	1	08/12/2010 20:28	CNB	439624

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	**Lead**	**0.0034B**	**0.015**	**0.0015**	**mg/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21008111302	TW-1	Water	08/09/2010 16:30	08/11/2010 09:30

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	08/12/2010 15:46	MSS	439630

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	0.054U	1	0.054	ug/L
108-88-3	Toluene	0.059U	1	0.059	ug/L
100-41-4	Ethylbenzene	0.063U	1	0.063	ug/L
1330-20-7	**Xylene (total)**	**1.27J**	**3**	**0.050**	**ug/L**
91-20-3	**Naphthalene**	**0.647J**	**5**	**0.082**	**ug/L**
1634-04-4	tert-Butyl methyl ether (MTBE)	0.052U	1	0.052	ug/L
107-06-2	1,2-Dichloroethane	0.086U	1	0.086	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	50.7	ug/L	101	78 - 130
1868-53-7	Dibromofluoromethane	50	51.6	ug/L	103	77 - 127
2037-26-5	Toluene d8	50	49.7	ug/L	99	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	52.6	ug/L	105	71 - 127

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/12/2010 13:00	439608	SW-846 8011	1	08/16/2010 16:54	DLB	439908

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.00380U	0.010	0.00380	ug/L

SW-846 6010B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
08/11/2010 14:45	439525	SW-846 3010A	1	08/12/2010 20:34	CNB	439624

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0015U	0.015	0.0015	mg/L

GC/MS Volatiles Quality Control Summary

Analytical Batch 439630	Client ID	MB439630			LCS439630			LCSD439630			
Prep Batch N/A	GCAL ID	867323			867324			867325			
	Sample Type	Method Blank			LCS			LCSD			
	Analytical Date	08/12/2010 11:29			08/12/2010 09:28			08/12/2010 10:19			
	Matrix	Water			Water			Water			
SW-846 8260B		**Units**	ug/L	**Spike**	**Result**		**Control**	**Result**			**RPD**
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**
107-06-2	1,2-Dichloroethane	0.086U	0.086	50.0	46.4	93	71 - 129	46.3	93	0.2	30
100-41-4	Ethylbenzene	0.063U	0.063	50.0	44.1	88	74 - 126	43.4	87	2	30
1634-04-4	tert-Butyl methyl ether (MTBE)	0.052U	0.052	50.0	42.2	84	71 - 125	42.1	84	0.2	30
1330-20-7	Xylene (total)	0.050U	0.050	150	135	90	74 - 127	133	89	1	30
91-20-3	Naphthalene	0.082U	0.082	50.0	43.0	86	57 - 138	42.4	85	1	35
71-43-2	Benzene	0.054U	0.054	50.0	43.9	88	70 - 129	43.7	87	0.5	20
108-88-3	Toluene	0.059U	0.059	50.0	42.0	84	72 - 120	41.3	83	2	20
Surrogate											
460-00-4	4-Bromofluorobenzene	48.1	96	50	50	100	78 - 130	49.9	100		
1868-53-7	Dibromofluoromethane	52.2	104	50	51.5	103	77 - 127	51.2	102		
2037-26-5	Toluene d8	49.1	98	50	47.6	95	76 - 134	46.8	94		
17060-07-0	1,2-Dichloroethane-d4	52.7	105	50	53.6	107	71 - 127	53.6	107		

General Chromatography Quality Control Summary

Analytical Batch	439908	**Client ID**	MB439608			LCS439608			LCSD439608		
Prep Batch	439608	**GCAL ID**	867281			867282			867283		
Prep Method	SW-846 8011	**Sample Type**	Method Blank			LCS			LCSD		
		Prep Date	08/12/2010 13:00			08/12/2010 13:00			08/12/2010 13:00		
		Analytical Date	08/16/2010 15:02			08/16/2010 15:24			08/16/2010 15:46		
		Matrix	Water			Water			Water		

SW-846 8011		**Units**	ug/L							
		Result	**RDL**	**Spike Added**	**Result**	**% R**	**Control Limits % R**	**Result**	**% R**	**RPD**	**RPD Limit**
106-93-4	1,2-Dibromoethane	0.00380U	0.00380	1.26	1.48	117	55 - 141	1.39	115	6	40

Inorganics Quality Control Summary

Analytical Batch	439624	**Client ID**	MB439525			LCS439525		
Prep Batch	439525	**GCAL ID**	866890			866891		
Prep Method	SW-846 3010A	**Sample Type**	Method Blank			LCS		
		Prep Date	08/11/2010 14:45			08/11/2010 14:45		
		Analytical Date	08/12/2010 18:21			08/12/2010 18:28		
		Matrix	Water			Water		
SW-846 6010B		**Units**	mg/L	**Spike**	**Result**		**Control**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**	
7439-92-1	Lead	0.0015U	0.0015	0.50	0.50	100	80 - 120	

Analytical Batch	439624	**Client ID**	ACC5-PI-081010			866926MS			866926MSD			
Prep Batch	439525	**GCAL ID**	21008111701			866979			866980			
Prep Method	SW-846 3010A	**Sample Type**	SAMPLE			MS			MSD			
		Prep Date	08/11/2010 14:45			08/11/2010 14:45			08/11/2010 14:45			
		Analytical Date	08/12/2010 18:35			08/12/2010 18:41			08/12/2010 18:48			
		Matrix	Water			Water			Water			
SW-846 6010B		**Units**	mg/L	**Spike**	**Result**		**Control**	**Result**			**RPD**	
		Result	**RDL**	**Added**		**% R**	**Limits % R**		**% R**	**RPD**	**Limit**	
7439-92-1	Lead	0.0	0.0015	0.50	0.49	98	75 - 125	0.47	95	4	20	

Access Analytical - Chain of Custody Record

Access/4523/2100811113/8.11.10

LAB USE ONLY

Project Work Order #: 7309806

PO #: _____ Access Quote #: _____

LAB USE ONLY

Laboratory ID: CWL

Company Name: Terracon Consultants

Report To: Roger W. Norris

Address: 521 Clemson Rd

City: Columbia State: SC Zip: 29229

Phone: 803-741-9000 Fax: 803-741-9900

Email: rwnorris@terracon.com

Project ID: Eddie's Pit Stop

Sampled By: Roger W. Norris

Sample ID/Description	Date Collected	Time Collected	Type (G=grab, C=composite)	Matrix (see codes)	Program Area (see codes)	TOTAL # of containers
MW-5	8/9/10	15:45	G	GW	CWA	5
TW-1	8/9/10	1630	G	GW	CWA	5

Preservative (see codes): 2 | 1 | 1

Container Type: P | G | G

REQUESTED LAB ANALYSIS

Lead (Total)	BTEX, Naph., MTBE, 1,2 DCA	EDB									
1	2	2									1
1	2	2									2

ACCESS ANALYTICAL, INC.

7478 Carlisle Street
Irmo, SC 29063

Phone: (803) 781-4243
Fax: 781-4303

www.axs-inc.com

*Preservative Codes (place corresponding # in block above analysis field): 0 = None, 1 = HCL, 2 = HNO3, 3 = H2SO4, 4 = NaOH, 5 = Na2S2O3, 6 = Method 5035 sampler, NaHSO4, 7 = MeOH, ZnOAC, 8 = TEPO

*Matrix Codes (place corresponding code in matrix column): GW = ground water, WW = waste water, DW = drinking water, SL = soil, SG = sludge, A = air, IW = industrial waste, WO = waste oil, OT = other (specify in comments section)

*Program Area Codes: CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking waters), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

NOTES / COMMENTS

(if sample is a composite please use space below to note start/finish times & dates)

Turnaround Time:

- ✓ Standard
- ___ RUSH*

*Date Required: _____

(For rush work, results emailed/faxed by end of business day on date required)

Project Location:

- ✓ SC
- ___ NC
- ___ Other

(specify) _____

Relinquished By:	Received By:	Date (mm/dd/yy)	Time (24HR)	Sample Temp. Upon Receipt (°C)	
[signature]	M. Robertson	8/10/10	1420	1.4 (°C)	___ (N/A)
M. Robertson	FedEx	8/10/10	1700	___ (°C)	___ (N/A)
[signature]	[signature]	8-11-10	930	4.1 (°C)	___ (N/A)
				___ (°C)	___ (N/A)

See Reverse for Terms and Conditions

Original Copy - Returned w/Report
Yellow Copy - Access File Copy
Pink Copy - Client Copy

APPENDIX D

Disposal Manifests

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. 00013 | 2. Page 1 of 7309-8106

3. Generator's Name and Mailing Address D
SCOOT
PO Box 191 Columbia SC 29202
4. Generator's Phone ( )

Eddies Pit Stop
Rt. 2 Hwy 601 N.
Padgetland SC
45# 18871

5. Transporter 1 Company Name: Diversified Recycling Inc | 6. US EPA ID Number: SCR000.766.948 | A. Transporter's Phone: 807682

7. Transporter 2 Company Name | 8. US EPA ID Number | B. Transporter's Phone

9. Designated Facility Name and Site Address: Diversified Recycling
132 Granbys Zoreske
West Columbia SC 29172 | 10. US EPA ID Number: SCR000768127 | C. Facility's Phone: 803 493 5271

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON RCRA NON Regulated (Solid)	6.	DM	3750 ~~35~~ DM	P
b. Non RCRA Non (Liquid)	1.	PM	11 gals	G
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name | Signature | Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: James Smith | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

GENERATOR'S COPY

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MAR 10 2006

CERTIFIED MAIL 7001 2510 0008 4156 2327

MR EDDIE JOHNSON
RT 2 US HWY 601N
PAGELAND, SC 29728

Re: Eddie's Pit Stop, Rt.2, US Hwy 601 North
UST Permit #18871, Cost Agreement #20135
Release # 1 Reported August 29, 2002
Notice of Alleged Violation
Chesterfield County

Dear Mr. Johnson:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control directed you to complete a Tier I Assessment on September 19, 2003, with the assessment report due on January 17, 2004, enclosed. To date the required report has not been received. In accordance with Section 280.65 of the South Carolina Underground Storage Tank Regulations, the assessment must be conducted as chemicals of concern are above the risk-based-screening levels.

Implementation of this scope of work should proceed upon receipt of this correspondence. **Please submit the report within 30 days from the date of this letter. Should you not submit the report on or before April 14, 2006, this office will be forced to initiate enforcement action.**

On all correspondence regarding this site, please reference UST Permit #18871. If you have any questions concerning this correspondence, please call me at (803) 896-6395.

Sincerely,

Minda Johnson-Schmiedel

Minda Johnson-Schmiedel, Hydrogeologist
Assessment Section

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MAR 10 2006

MS CATHY CASPER
2003 HWY 601N
PAGELAND SC 29728

Re: Eddie's Pit Stop, Rt 2, US 601N, Pageland, SC
UST Permit #18871
Letter of Concern for adjacent property
Request received March 3, 2006

Dear Ms. Casper:

In response to your request for information about environmental conditions and liability associated with the referenced facility and adjacent property, the following is provided.

Our records indicate that two Underground Storage Tanks (USTs) were registered with the Department by Eddie Johnson. The registered USTs were removed in August 2002. An assessment report received in August 2003 documented a release of petroleum products in the vicinity of the UST. Our records indicate that Eddie Johnson complied with the regulatory requirements and removed the leak from the tanks. Additionally, they are currently pursuing the extent and severity of petroleum chemicals of concern under our direction. We have requested a Tier I Assessment Report will be submitted to the UST Program in April 2006.

This release of petroleum products from the USTs is qualified to receive funding under the conditions of the State Underground Petroleum Environmental Response Bank (SUPERB) Act after the $25,000 deductible is met. This means that reasonable costs up to $1,000,000 can be paid by the SUPERB account for site rehabilitation actions associated with this release. Should cleanup costs exceed $1,000,000, Eddie Johnson, under state and federal law, retains responsibility for any additional actions and associated costs.

Should the potential exist for petroleum chemicals of concern to migrate onto an adjacent property, Eddie Johnson and the Department may require access during reasonable hours to perform necessary rehabilitation activities. All rehabilitation activities associated with the petroleum impact are the responsibility of the Eddie Johnson. You should be aware that there are currently no laws or regulations that prohibit the use or development of adjacent properties and properties where a petroleum release has occurred.

If you have any questions, please do not hesitate to call me at (803) 896-6395.

Sincerely,

Minda Johnson Schmidt

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street, Columbia SC 29201
Phone (803) 898-4350 Fax (803) 898-4330

SEP 19 2003

MR EDDIE JOHNSON
RT 2 US HWY 601 N
PAGELAND SC 29728

Re: Eddie's Pit Stop, Rt. 2, US Hwy 601 North
UST Permit #18871; Cost Agreement #20135; MWA #UMW-17651
Release reported August 29, 2002
Initial Groundwater Assessment (IGWA) Report received August 1, 2003
Chesterfield County

Dear Mr. Johnson:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced IGWA report submitted by ARM Environmental Services, Inc. on your behalf. The report indicates that groundwater concentrations of benzene, toluene, ethylbenzene, naphthalene, EDB and lead are above risk-based screening levels (RBSLs). To determine what risk the release may pose to the environment and public health, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, implementation of the scope of work as outlined in the enclosed Tier I Assessment document is necessary. Since the above scope of work is detailed in the Tier I Assessment document, a separate plan is not required. **Please note that if the UST System was in operation prior to 1991, lead and EDB analyses is required. Also, all water wells within 250 feet of the former UST must be sampled. Please be advised that only EPA Method 8260B will be accepted for purgeable aromatics.**

According to our records, the release was reported to the SCDHEC on August 29, 2002. In accordance with Section 44-2-40(D) of the State Underground Petroleum Environmental Response Bank (SUPERB) Act, you are responsible for the first $25,000 for site rehabilitation. To insure that any expenditures you make apply to this $25,000 deductible, it is prudent for this agency to pre-approve such costs along with your technical plan of action. By law, the SUPERB account cannot compensate any costs that are not pre-approved. Eligible costs exceeding the $25,000 deductible can be compensated from the SUPERB Account. Cost Agreement #20135 has been established to track the allowable costs associated with this Tier I. Please include the cost agreement number when submitting your invoice.

To proceed with the qualification process for the State Underground Petroleum Environmental

includes costs for completion of up to 75 feet of permanent monitoring well footage. Upon receipt of the signed Tier I Invoice, Tier I Report, and a copy of your canceled check (front and back) or a notarized statement from the contractor verifying payment for this scope of work, up to **$10,880.00** may be applied toward your deductible.

Our records indicate that an Owner/Operator Information Sheet has not been filed for the release. **Please complete and return the enclosed Owner/Operator Information Sheet within 14 days from the date of this letter (note that all rehabilitation activities associated with a UST release must be performed by a SCDHEC certified site rehabilitation contractor as required by R.61-98).**

Please note that in accordance with R.61-92, Subpart H, Section 280.114, you are required to notify the Program by certified mail within ten (10) days of commencing a voluntary or involuntary proceeding in bankruptcy. State law also requires that an owner/operator or guarantor that files for bankruptcy protection must immediately submit appropriate forms documenting that entity's ability to demonstrate financial responsibility.

Implementation of the Tier I should proceed upon receipt of this correspondence. Approval to install three permanent monitoring wells is enclosed. **The report and invoice should be submitted within 90 days from the date of this letter**. The SCDHEC reserves the authority to only apply costs to your deductible for work properly performed and/or technically justified in accordance with established criteria. The Program grants pre-approval for the transportation of the investigative derived waste (virgin petroleum contaminated soil and groundwater) from the referenced site to a permitted treatment facility. All investigative derived waste must be properly stored in labeled containers or covered with plastic as appropriate. All contaminated investigated derived waste must be accepted by the approved treatment facility. There can be no spillage or leakage in transport. A copy of the disposal manifest and approval letter from the receiving facility must be included as an appendix to the final report. If the levels of petroleum contamination based on laboratory analysis are below treatment levels, please contact the project manager for approval to dispose of the investigative derived waste on site. The SUPERB Account will not compensate for transportation or treatment of clean soil and/or groundwater.

On all correspondence regarding this site and scope of work, please reference UST Permit #18871 and cost agreement #20135. If you have any questions concerning this correspondence, please contact me at (803) 896-6649 or 1-800-826-5435 (within South Carolina only).

Sincerely,

John D. Surber, Jr., Hydrogeologist
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

D H E C

PROMOTE PROTECT PROSPER

2600 Bull Street
Columbia, SC 29201-1708

Monitoring Well Installation Approval Form

Date of Issue: September 16, 2003 Approval No.: UMW-17651

Approval is hereby granted to: Mr. Eddie Johnson
UST Permit #: 18871: Eddie's Pit Stop, Rt 2 Hwy 601 N, Pageland SC
County: Chesterfield

This approval is for the construction of 3 permanent monitoring wells in accordance with the construction plans and technical specifications outlined in the Tier I Assessment Document. The wells are to be constructed within the surficial aquifer for the intended purpose of monitoring ground-water quality and/or water levels at the referenced facility. Approval is provided with the following conditions:

1. The latitude and longitude, surveyed elevations, boring and/or geologist logs and actual (as built) construction details for each well will be submitted with the technical report.
2. Each well will be labeled with an identification plate constructed of a durable material affixed to the casing or surface pad where it is readily visible. The plate will provide monitoring well I.D.#, date of construction, static water level, and driller name and state certification #.
3. Well construction and sampling derived waste including, but not necessarily limited to, drill cuttings, drilling fluids, development and purge water should be managed properly and in compliance with applicable requirements. If containerized, each vessel should be clearly labeled with regard to contents, source, and date of activity.
4. **A minimum of forty-eight (48) hours prior to initiation of drilling activities, please provide notice to John Surber at (803) 896-6649 or surberjd@dhec.sc.gov.**
5. Please provide ground-water quality analytical data (chemical analysis and/or water level(s)) and associated measurements (i.e., in-situ field measurements) to me with the technical report.
6. Monitoring wells and temporary monitoring wells will be installed by or under the direct supervision of a licensed well driller certified by the State of South Carolina.
7. Monitoring wells and temporary monitoring wells will be abandoned by or under the direct supervision of a licensed well driller certified by the State of South Carolina. Temporary monitoring wells shall not remain in place for longer than 30 days from the date of installation. Monitoring wells may be abandoned only upon concurrence by this Division.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and the Department of Health and Environmental Control Regulations R.61-71. Please remember to have a copy of this approval on the site during well installation.

Approved by:

John D. Surber, Jr., Hydrogeologist
Owner/Operator Assistance Section

Approved Cost Agreement [redacted]135

Facility: 18871 EDDIES PIT STOP
SURBERJD
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
20 TIER I						
		TIER I		1.0000	10,880.00	10,880.00
				Total Amount		10,880.00

EFIS

ARM ENVIRONMENTAL SERVICES, INC.

ASSESSMENT & REMEDIAL SERVICES DIVISION

RECEIVED
AUG 0 1 2003
UNDERGROUND STORAGE TANK PROGRAM

July 28, 2003

Mr. Travis Williams, Hydrogeologist
Underground Storage Tank Program
Assessment and Correction Action Division
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Re: Former Eddie's Pit Stop, Route 2, US Hwy 601 North
UST Permit #18871; CA # 17409
Chesterfield County, South Carolina
ARM Project #02-130

Dear Mr. Williams;

ARM has completed an Initial Ground Water Assessment (IGWA) at the referenced site in Pageland, South Carolina. The pertinent information regarding the assessment, including figures and appendices is presented in the enclosed report.

Sincerely,
ARM Environmental Services, Inc.

Michael L. Faris
Project Geologist

Andrew M. Wilson, P.G.
Principal Hydrogeologist

enclosure

INITIAL GROUND-WATER ASSESSMENT REPORT

Introduction

Facility Name: *Eddie's Pit Stop*

UST Permit Number: *18871*

UST Owner or Operator's Name: *SCDOT*

Address: *P.O. Box 191*
Columbia, SC 29202

Phone Number: *(803) 737-6692*

Property Owner's Name (if different than Owner):

Contractor: *ARM Environmental Services, Inc.* CERT.# *4*

Address: *Post Office Box 50285, Columbia, SC, 29250*

Phone Number: *(803) 783-3314*

Well Driller: *Richard Starnes, ARM Environmental* CERT. # *299*

Receptor and Site Data

Receptor Survey Questions	No	Yes*
Is there a drinking water supply well (public or private) or surface water supply intake within 1,000 feet of the UST?		✓
Are irrigation or other non-drinking water wells located within 1,000 feet of the UST?		✓
Are there other potential receptors (i.e., utilities, surface waters, wetlands) less than 500 feet from the UST?		✓

*Several underground utilities, including natural gas, sewer, and/or phone, storm drain, and water located with in 100 feet of UST system.

Former Eddie's Pit Stop
Initial Ground Water Assessment
July 28, 2003

Were there any water wells within 250 feet radius sampled? _____Yes ___X___ No

Is a public water supply line in the area? ___X___ Yes _____ No

Is the current use of the facility and surrounding properties commercial, residential agricultural or industrial?

Site: *commercial* Adjacent Properties: *commercial / residential*

Soil and Monitoring Well Data

Primary Soil Type: *Silty clay*

Well Installation Method and Date: *auger drill rig; 5/20/03*

Development Method: *Hand bailed and surged till relatively sediment free (at least five well volumes or until dry) with a disposable polyethylene hand bailer.*

Soil Sample obtained at *~35* feet below ground surface (bgs).

Soil Analytical Data (MW-1)*

Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene
BDL	*BDL*	***330***	***990***	***960***

Benzo(a)-anthracene	Benzo(b)-fluoranthene	Benzo(k)-fluoranthene	Chrysene	Dibenza(a, h)-anthracene
BDL	*BDL*	*BDL*	*BDL*	*BDL*

Total PAHs
390

*All results are expressed in ug/kg
**BDL - Below Detection Limit

Former Eddie's Pit Stop
Initial Ground Water Assessment
July 28, 2003

Ground Water Data

Depth to Ground Water: *35.70 feet bgs*

Well Purging/Sampling Method: *Evacuated five well volumes of ground water subsequent to development of well, then collected a ground water sample.*

Date Sampled: *5/20/03*

Free Product Thickness: *Not Applicable*

Equilibrated values:

Temperature: *19.5°C* pH: *5.84*

Dissolved Oxygen: *3.5 mg/L* Specific Conductance: *783 uohms/cm*

Ground Water Analytical Data (MW-1)*

Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene
3800	***1100***	***740***	***2600***	*BDL*	***380***

Benzo(a)-anthracene	Benzo(b)-fluoranthene	Benzo(k)-fluoranthene	Chrysene	Dibenza(a, h)-anthracene
BDL	*BDL*	*BDL*	*BDL*	*BDL*

EDB	Total PAHs	Lead
5.4	*360*	***19***

*All results are expressed in µg/L (parts per billion)
**BDL - Below Detection Limit

Appendices

Appendix A. Well Construction Log
Appendix B. Laboratory Data
Appendix C. Topographic Map with site location
Appendix D. Site Base Map
Appendix E. Disposal Manifest

Report Completed By: _____ CERT.# 4
Project Manager

Date: 7/28/03

APPENDIX A

GEOLOGICAL BORING LOG WITH
MONITORING WELL CONSTRUCTION SCHEMATIC

Project No: 02-130 **UST Permit #** 18871; CA # 17409

Project: Former Eddie's Pit Stop

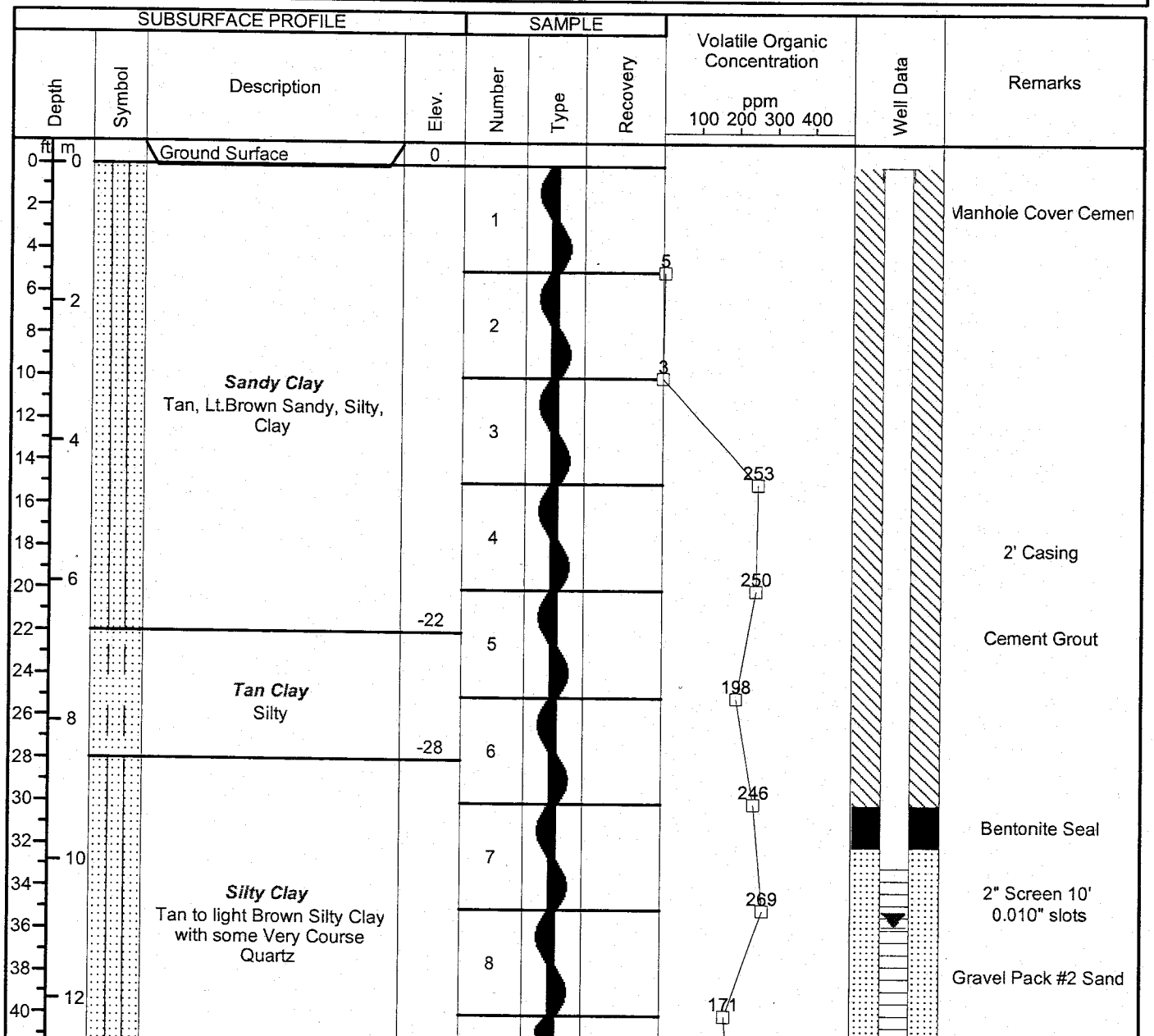
Client: SCDOT

Location: Chesterfield County, SC

Log of Borehole: MW-1

Driller: Richard Starne Cert. # 299

Inspector: Mike Faris



APPENDIX B

LABORATORY ANALYTICAL DATA

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

ARM Environmental Services, Inc.
1210 1st Street S. Ext.
Columbia, SC 29209
Attention: Michael Faris

Project Name: **Pageland DOT**

Project Number: **02-130**

Lot Number: **EE21028**

Date Completed: **06/04/2003**

Jennifer Orr Jones
Project Manager

SHEALY ENVIRONMENTAL SERVICES, INC.

SC DHEC No: 32010 NELAC No: E87653 NC DEHNR No: 329

Case Narrative
ARM Environmental Services, Inc.
Lot Number: EE21028

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative.

Sample receipt, sample analysis, and data review have been performed in accordance with Shealy's Quality Assurance Management Plan and Standard Operating Procedures. Any data qualifiers associated with sample analysis are footnoted on the analytical results page(s) or are discussed below.

TPH DRO

TPH hydrocarbon pattern for sample 001 is unknown.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Summary
ARM Environmental Services, Inc.
Lot Number: EE21028

Sample Number	Sample ID	Matrix	Date Sampled
001	MW-1	Solid	05/20/2003 1045
002	MW-1	Aqueous	05/20/2003 1200

(2 samples)

SHEALY ENVIRONMENTAL SERVICES, INC.

Executive Summary
ARM Environmental Services, Inc.
Lot Number: EE21028

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units
001	MW-1	Solid	TOC	Walkley-Black	210		mg/kg
001	MW-1	Solid	Ethylbenzene	8260B	330		ug/kg
001	MW-1	Solid	Naphthalene	8260B	960		ug/kg
001	MW-1	Solid	Xylenes (total)	8260B	990		ug/kg
001	MW-1	Solid	Naphthalene	8270C	390		ug/kg
001	MW-1	Solid	TPH-DRO	8015B	12000		ug/kg
002	MW-1	Aqueous	Alkalinity	310.1	77		mg/L
002	MW-1	Aqueous	Ferrous Iron	3500 Fe-D	0.32		mg/L
002	MW-1	Aqueous	Nitrate - N	353.2	0.023		mg/L
002	MW-1	Aqueous	Benzene	8260B	3800		ug/L
002	MW-1	Aqueous	Ethylbenzene	8260B	740		ug/L
002	MW-1	Aqueous	Naphthalene	8260B	380		ug/L
002	MW-1	Aqueous	Toluene	8260B	1100		ug/L
002	MW-1	Aqueous	Xylenes (total)	8260B	2600		ug/L
002	MW-1	Aqueous	Naphthalene	8270C	360		ug/L
002	MW-1	Aqueous	Methane	RSK - 175	33		ug/L
002	MW-1	Aqueous	1,2-Dibromoethane (EDB)	8011	5.4		ug/L
002	MW-1	Aqueous	Lead	6010B	0.019		mg/L

(18 detections)

Inorganic non-metals

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1045**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-001**
Matrix: **Solid**
% Solids: **83.8** **05/21/2003 1900**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	05/30/2003 0930	SRW		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TOC		Walkley-Black	210		240	mg/kg	1

Volatile Organic Compounds by GC/MS

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1045**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-001**
Matrix: **Solid**
% Solids: **83.8** **05/21/2003 1900**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	50	06/02/2003 1304	RED		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Benzene	71-43-2	8260B	ND		220	ug/kg	1
Ethylbenzene	**100-41-4**	**8260B**	**330**		**220**	**ug/kg**	**1**
Naphthalene	**91-20-3**	**8260B**	**960**		**220**	**ug/kg**	**1**
Toluene	108-88-3	8260B	ND		220	ug/kg	1
Xylenes (total)	**1330-20-7**	**8260B**	**990**		**220**	**ug/kg**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		64	53-142
Bromofluorobenzene		110	47-138
Toluene-d8		94	68-124

Semivolatile Organic Compounds by GC/MS

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1045**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-001**
Matrix: **Solid**
% Solids: **83.8** **05/21/2003 1900**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550B	8270C	1	05/30/2003 1648	LH	05/30/2003 0935	10800

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270C	ND		390	ug/kg	1
Acenaphthylene	208-96-8	8270C	ND		390	ug/kg	1
Anthracene	120-12-7	8270C	ND		390	ug/kg	1
Benzo(a)anthracene	56-55-3	8270C	ND		390	ug/kg	1
Benzo(a)pyrene	50-32-8	8270C	ND		390	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270C	ND		390	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270C	ND		390	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270C	ND		390	ug/kg	1
Chrysene	218-01-9	8270C	ND		390	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270C	ND		390	ug/kg	1
Fluoranthene	206-44-0	8270C	ND		390	ug/kg	1
Fluorene	86-73-7	8270C	ND		390	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270C	ND		390	ug/kg	1
Naphthalene	**91-20-3**	**8270C**	**390**		**390**	**ug/kg**	**1**
Phenanthrene	85-01-8	8270C	ND		390	ug/kg	1
Pyrene	129-00-0	8270C	ND		390	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		77	30-130
Nitrobenzene-d5		78	30-130
Terphenyl-d14		87	30-130

TPH - DRO

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1045**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-001**
Matrix: **Solid**
% Solids: **83.8** **05/21/2003 1900**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550B	8015B	1	05/29/2003 1901	MTR	05/28/2003 1030	10772

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		**8015B**	**12000**		**3900**	**ug/kg**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
o - Terphenyl		74	50-130

Inorganic non-metals

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1200**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Alkalinity) 310.1	1	05/25/2003 0509	LMC		
1		(Ferrous Iron) 3500 Fe-D	1	05/21/2003 1330	SRW		
1		(Nitrate - N) 353.2	1	05/21/2003 1804	LMC		
1		(pH) 9040B	1	05/22/2003 0748	LMC		
1		(Sulfate) 300.0	1	05/31/2003 1907	LMC		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Alkalinity		**310.1**	**77**		**10**	**mg/L**	**1**
Ferrous Iron		**3500 Fe-D**	**0.32**		**0.050**	**mg/L**	**1**
Nitrate - N		**353.2**	**0.023**		**0.020**	**mg/L**	**1**
pH		**9040B**	**5.84**	**@**		**su**	**1**
Sulfate		300.0	ND		1.0	mg/L	1

Volatile Organic Compounds by GC/MS

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1200**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	06/03/2003 1323	RED		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Benzene	**71-43-2**	**8260B**	**3800**		**250**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**740**		**250**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		250	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**380**		**250**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**1100**		**250**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**2600**		**250**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		89	70-130
Toluene-d8		96	70-130

Semivolatile Organic Compounds by GC/MS

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1200**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270C	1	05/29/2003 1142	LH	05/26/2003 1530	10750
2	3520C	8270C	2	05/29/2003 1425	LH	05/26/2003 1530	10750

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270C	ND		5.1	ug/L	1
Acenaphthylene	208-96-8	8270C	ND		5.1	ug/L	1
Anthracene	120-12-7	8270C	ND		5.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270C	ND		5.1	ug/L	1
Benzo(a)pyrene	50-32-8	8270C	ND		5.1	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270C	ND		5.1	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270C	ND		5.1	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270C	ND		5.1	ug/L	1
Chrysene	218-01-9	8270C	ND		5.1	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270C	ND		5.1	ug/L	1
Fluoranthene	206-44-0	8270C	ND		5.1	ug/L	1
Fluorene	86-73-7	8270C	ND		5.1	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270C	ND		5.1	ug/L	1
Naphthalene	**91-20-3**	**8270C**	**360**		**10**	**ug/L**	**2**
Phenanthrene	85-01-8	8270C	ND		5.1	ug/L	1
Pyrene	129-00-0	8270C	ND		5.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
2-Fluorobiphenyl		73	30-130		71	30-130
Nitrobenzene-d5		77	30-130		76	30-130
Terphenyl-d14		77	30-130		80	30-130

Dissolved Methane

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1200**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		RSK - 175	1	05/29/2003 0859	MTR		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Methane		**RSK - 175**	**33**		**26**	**ug/L**	**1**

EDB & DBCP by Microextraction

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1200**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		8011	10	06/03/2003 1258	MTR		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
1,2-Dibromoethane (EDB)	106-93-4	8011	5.4		0.20	ug/L	1

ICP-AES

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1200**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010B	1	05/27/2003 1631	MNM	05/22/2003 1328	10725

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Lead	7439-92-1	6010B	0.019		0.0030	mg/L	1

NTAL
NC.
CES DIVISION

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

ON COLUMBIA, SOUTH CAROLINA 29209 PHONE 803-783-3314 FAX 803-783-2587

nd - DOT

LABORATORY UTILIZED

Shealy

GRAB	LOCATION	NUMBER OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	BTEX + Naph. 8260B/5035	PAHs 8270C	TPH 3550	TOC	BTEX+Naph.+ MTBE 8260B	EDB 8011	PAHs 8270C	nitrates	sulfates	total lead	ferrous iron	methane	carbon dioxide
X		7	X		X	X	X	X									
X		15		X					X	X	X	X	X	X	X	X	X
											EE21628						

DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
5/21/03	1610		5/21/03	1610
DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
5/21/03	1630		5/21/03	1630

PROJECT MANAGER
Mike Faris

P.O. NUMBER

Sample Receipt Checklist

Client: ARM Cooler Rec'd by/date: LR 5/21/03 Lot #: EE21028

Means of receipt: ☒ SESI ☐ Client ☐ UPS ☐ FedEx ☐ DirectX ☐ Other

Cooler temperature upon receipt 3.8 °C
Method: ☐ Temperature Blank ☒ Against Bottles
Method of coolant: ☒ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☒	1. Is the shipper's packing slip attached to this form? (if applicable)
Yes ☒	No ☐	NA ☐	2. Was a chain of custody provided with the samples?
Yes ☒	No ☐	NA ☐	3. Were proper custody procedures followed?
Yes ☒	No ☐	NA ☐	4. Was the client name listed?
Yes ☒	No ☐	NA ☐	5. Were sample IDs listed?
Yes ☒	No ☐	NA ☐	6. Was collection date & time listed?
Yes ☒	No ☐	NA ☐	7. Were the tests to be performed listed on either the C of C or quote?
Yes ☒	No ☐	NA ☐	8. Did all samples arrive in the proper containers for each test?
Yes ☒	No ☐	NA ☐	9. Did all bottle labels agree with custody papers?
Yes ☒	No ☐	NA ☐	10. Did all containers arrive in good condition (unbroken)?
Yes ☒	No ☐	NA ☐	11. Was adequate sample volume available?
Yes ☒	No ☐	NA ☐	12. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☒	NA ☐	13. Were any samples containers missing?
Yes ☐	No ☒	NA ☐	14. Were there any excess samples not listed on C of C?
Yes ☐	No ☒	NA ☐	15. Were air bubbles >6 mm in any VOA vials (if applicable)?
Yes ☒	No ☐	NA ☐	16. Were all Metals; Oil & Grease; Nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☒	17. Were all Cyanide; Sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☒	18. Were all NH3; TKN; Cyanide; BNA; PEST; PCB; HERB; Toxicity samples free of residual chlorine? (< 0.1 mg/L)
Yes ☐	No ☐	NA ☒	19. For North Carolina samples, were collection temperatures documented on the chain of custody?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving.

Sample(s) _____ were received incorrectly preserved and were unable to be analyzed.

Sample(s) _____ were received with bubble >6 mm in diameter

Toxicity sample(s) _____ were received with TRC > 0.1 mg/L and were analyzed by method 330.5.

Corrective Action taken, if necessary:

ENTAL
NC.
ICES DIVISION

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

ON COLUMBIA, SOUTH CAROLINA 29209

PHONE 803-783-3314 FAX 803-783-2587

nd - DOT

LABORATORY UTILIZED

Shealy

GRAB	LOCATION	NUMBER OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	REQUESTED PARAMETERS: BTEX + Naph. 8260B/5035	PAHs 8270C	TPH 3550	TOC	BTEX+Naph.+ MTBE 8260B	EDB Poli	PAHs 8270C	nitrates	sulfates	total lead	ferrous iron	methane	carbon dioxide
X		7	X		X	X	X	X									
X		15		X					X	X	X	X	X	X	X	X	X

DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
5/21/03	1610		5/21/03	1610
DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME

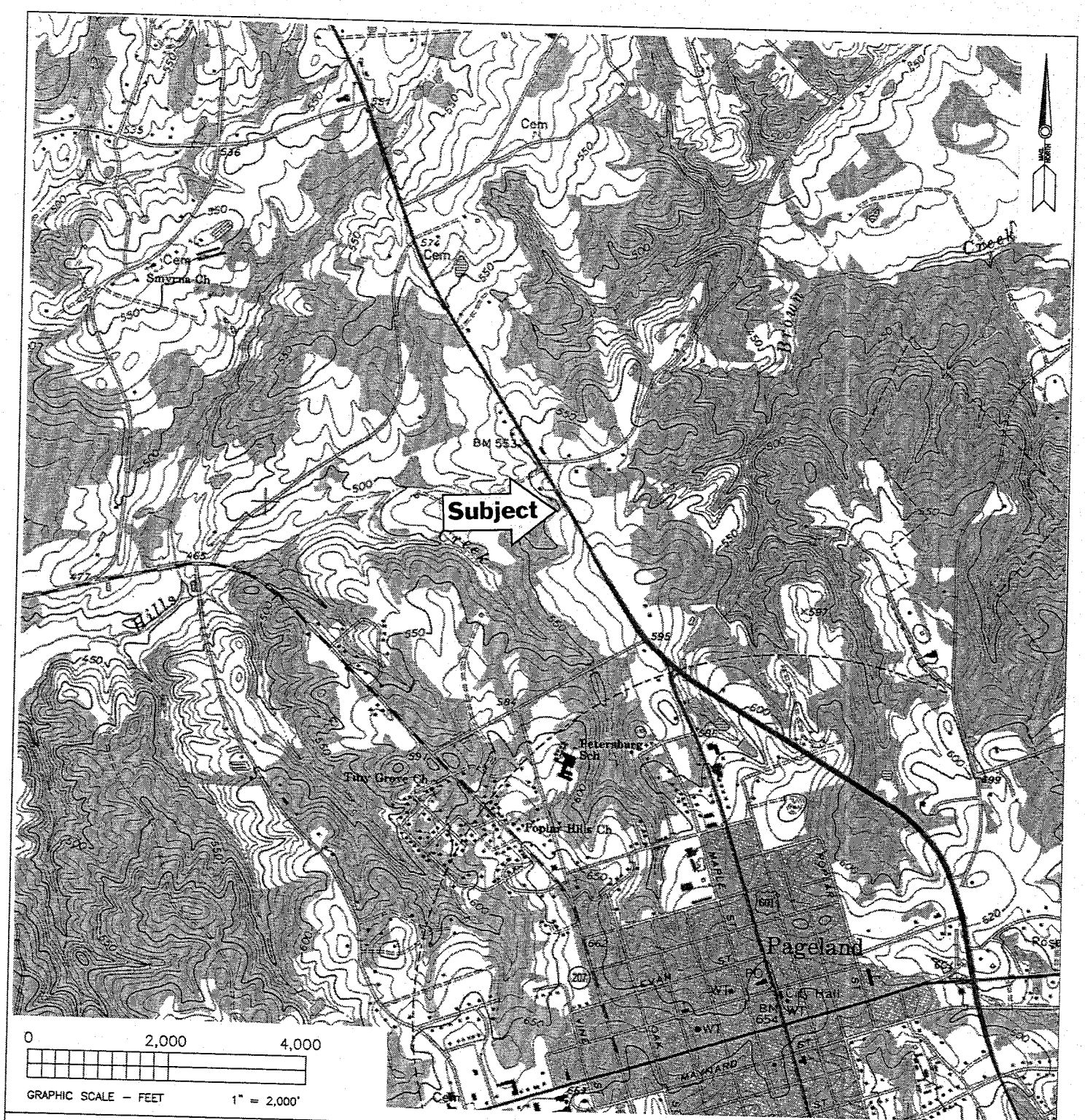
PROJECT MANAGER

Mike Faris

P.O. NUMBER

APPENDIX C

TOPOGRAPHIC MAP with SITE LOCATION

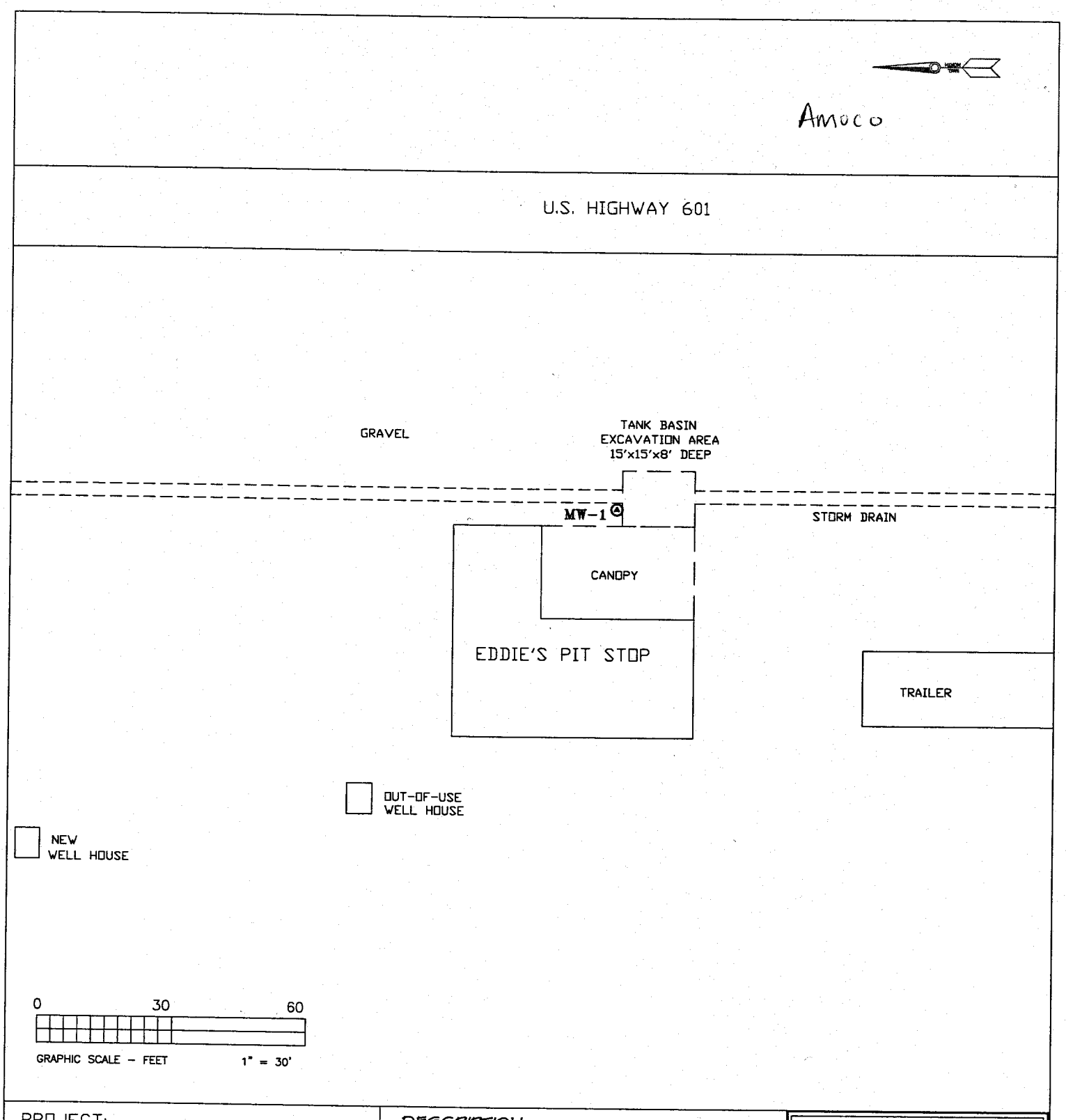


PROJECT:

DESCRIPTION

APPENDIX D

SITE BASE MAP


Amoco
U.S. HIGHWAY 601
GRAVEL
TANK BASIN
EXCAVATION AREA
15'x15'x8' DEEP
MW-1
STORM DRAIN
CANOPY
EDDIE'S PIT STOP
TRAILER
OUT-OF-USE
WELL HOUSE
NEW
WELL HOUSE
0
30
60
GRAPHIC SCALE - FEET
1" = 30'

APPENDIX E

DISPOSAL MANIFEST

Disposal has been initiated at this site. The Disposal Manifest for the 55 gallon drum of contaminated purge water generated during this assessment will be forwarded to the DHEC project manager as soon as ARM Environmental Services, Inc. receives the manifest from Crandall Corp., the certified disposal contractor.

Spencer Law Firm

301 West Main Street
Post Office Box 190
Chesterfield, SC 29709

William O. Spencer, Jr.
Kym Catoe Rollings

Telephone (843) 623-2144
Fax (843) 623-6928

RECEIVED
JAN 17 2003
UNDERGROUND STORAGE TANK PROGRAM

January 16, 2003

SC Dept. of Health and Environmental Control
Attn: Mr. Travis Williams
2600 Bull Street
Columbia, SC 29201-1708

Re: Eddie's Pit Stop, Rt. 2 US Hwy 160 N., Pageland, SC
UST Permit #18871; Cost Agreement #17409; MWA #UMW-16664
Release reported august 29, 2002
Assessment report received August 29, 2002
Chesterfield County

Dear Mr. Williams:

I am writing to you on behalf of Mr. Eddie Johnson who is in receipt of your letter dated November 5, 2002 in reference to the above. Your letter states that Mr. Johnson is responsible for the first $25,000.00 of site rehabilitation costs for the above referenced property.

The South Carolina Department of Transportation instituted an action to condemn Mr. Johnson's property and subsequently SCDOT removed the underground storage tanks from the said property without the consent of or any input from Mr. Johnson. It is Mr. Johnson's position that SCDOT is responsible for the $25,000.00 site rehabilitation costs. Litigation is presently pending in Chesterfield County addressing this matter. I have enclosed a copy of the pleadings for your file.

If you have any questions or would like to discuss this matter, please do not hesitate to call.

THE STATE OF SOUTH CAROLINA)
)
COUNTY OF CHESTERFIELD)

IN THE COURT OF COMMON PLEAS
FOURTH JUDICIAL CIRCUIT
CASE NUMBER: 01-CP-13-87
~~JUDGMENT ROLL NO.~~

South Carolina Department of Transportation,

Condemnor,

versus

Eddie M. Johnson,
Landowner,
and
First Citizens Bank and Trust Company of South Carolina,
Mortgagee,
Other Condemnee

NOTICE OF MOTION AND MOTION FOR RELIEF FROM ORDER OF DISMISSAL
~~JUDGMENT ROLL NO.~~

A True Copy, Attest
Joyce P. Sellers
CLERK OF COURT, C.P. & G.S.
CHESTERFIELD COUNTY, SC

FILED
CLERK OF COURT
2003 JAN 13 PM 12 54
BOOK PAGE

FEE PAID

TO: THE CONDEMNOR SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION AND ANDREW F. MCLEOD, ATTORNEY FOR THE CONDEMNOR, AND FIRST CITIZENS BANK AND TRUST COMPANY OF SOUTH CAROLINA, OTHER CONDEMNEE:

YOU WILL PLEASE TAKE NOTICE that the undersigned attorney for the Landowner will ten (10) days from the service of this Notice of Motion or as soon thereafter as counsel may be heard, move before a judge of the Court of Common Pleas of the Fourth Judicial Circuit at the Chesterfield County Courthouse, on Main Street, in Chesterfield, South Carolina, for an Order relieving the Landowner from the final order in the above captioned case pursuant to Rule 60(b) of the South Carolina Rules of Civil Procedure. The Landowner seeks relief from said order on the grounds of mistake,

60(b)(2)); and fraud, misrepresentation, or other misconduct of the Condemnor (Rule 60(b)(3), SCRCP). Landowner seeks relief from the Order of Dismissal and seeks to set aside the Release and have this case placed back on the active roster to be tried by a jury.

This motion will be based on the records, files and proceedings in the case and upon the following facts:

1. That on March 30, 2001, defendant filed a Condemnation Notice and Tender of Payment in this court against plaintiff and others, being Civil Action No. 2001-CP-13-87, by which suit defendant sought to condemn property owned by plaintiff for public purposes, more particularly for the construction of a section of U.S. Route 601 from S.C. Route 151 to 0.35 km northwesterly of N.C. state line.

2. That underground storage tanks were located on the condemned property, but said tanks had never been used by Landowner.

3. That during the pendency of this case, the Condemnor, without any input or involvement on behalf of Landowner, caused the said underground storage tanks to be removed at Condemnor's sole cost and expense. By letter dated July 24, 2002, SCDOT stated "The two thousand gallon tanks located in front of your business will have the contents removed on Monday, July 29, 2002 followed by the tank removal and soil remediation as necessary. This letter

reference.

4. That subsequent to the tank removal, in order to settle the controversy and end the litigation, a release was effected by and between the parties on August 26, 2002 and a Consent Order of Dismissal was subsequently filed with the Court. Copies of said release and order of dismissal are attached hereto as Exhibit "B" and "C" and made a part of this motion.

5. That at the time Landowner signed the Release, he believed that because Condemnor had already removed and taken the two underground storage tanks, that Condemnor would also bear the cost of any required clean-up, including soil remediation.

6. That Landowner, during the course of the operation of his business on the condemned property, would have never had the tanks removed and consequently would have never incurred costs associated with the clean-up after tank removal.

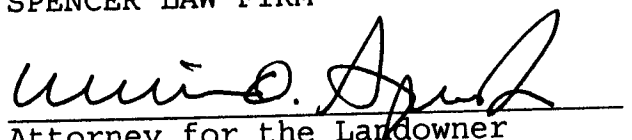
7. That subsequent to the execution of the Release and filing of the Consent Order of Dismissal, the Landowner received a letter from the South Carolina Department of Health and Environment Control(DHEC), dated November 5, 2002, stating that Landowner was responsible for the first $25,000.00 of site rehabilitation following the tank removal.

8. The Landowner subsequently contacted DHEC and requested that the clean-up bill be sent to Condemnor, as Condemnor had

9. The Landowner would not have settled the above case for the total sum of $40,000.00 had Landowner known at the time of settlement, that he would subsequently incur remediation costs in the amount of $25,000.00. The settlement was based upon mistake, inadvertence, surprise and excusable neglect and upon the fraud, misrepresentation and other misconduct of the Condemnor.
The Landowner had never used the tanks and would never have sought to remove the tanks. The Condemnor removed the tanks and Landowner was led to believe, by the actions of Condemnor, that Condemnor would incur all costs, including remediation, relating to the removal of the tanks.

10. That on December 26, 2002, Landowner received check number 124275431 made payable to Eddie M. Johnson and First Citizens Bank and Trust Co. of SC, MTGEE, in the amount of $40,000.00. Said check is herewith being returned to Condemnor's counsel.

SPENCER LAW FIRM



Attorney for the Landowner
P. O. Box 190 - 301 W. Main Street
Chesterfield, SC 29709
(843) 623-2144

January 3, 2003.

Tech F

D H E C

PROMOTE PROTECT PROSPER

2600 Bull Street
Columbia, SC 29201-1708

BUREAU OF LAND AND WASTE MANAGEMENT
UNDERGROUND STORAGE TANK PROGRAM

Phone (803) 896-6240 Fax (803) 896-6245

NOV 0 5 2002

MR EDDIE JOHNSON
RT 2 US HWY 160 N
PAGELAND SC 29728

Re: Eddie's Pit Stop, Rt. 2 US Hwy 160 N., Pageland, SC
UST Permit #18871; Cost Agreement #17409; MWA #UMW-16664
Release reported August 29, 2002
Assessment report received August 29, 2002
Chesterfield County

Dear Mr. Johnson:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced report and all information on-file for the referenced facility. The report indicates that chemicals of concern are present in the groundwater at concentrations that exceed risk-based screening levels. To determine what risk the chemicals may pose to the environment and public health, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, implementation of the scope of work as outlined in the Initial Groundwater Assessment (IGWA) document is necessary. The IGWA document may be obtained from our website at www.scdhec.net/eqc/admin/html/eqforms.html#ust.

Our records indicate that Insurance Statement and Owner/Operator Information forms have not been filed for the facility. **Please be aware that the release cannot be qualified for the State Underground Petroleum Environmental Response Bank (SUPERB) until a completed Insurance Statement form is on-file with the Program**. The enclosed forms should be completed and returned to the Program to my attention within fifteen days of the date of this letter.

According to Program records, the release at the facility was reported to SCDHEC on August 29, 2002, in accordance with Section 44-2-40(D) of the SUPERB Act, you are responsible for the first $25,000 of site rehabilitation costs. To insure that expenditures made toward rehabilitation apply to the $25,000 deductible, the Program has pre-approved costs for implementing the IGWA and assigned a cost

deductible **provided that the release is qualified for SUPERB**. The report and invoice should be submitted to the Program within 60 days of the date of this correspondence.

Please note that in accordance with R.61-92, Subpart H, Section 280.114, you are required to notify the Program by certified mail within ten (10) days of commencing a voluntary or involuntary proceeding in bankruptcy. State law also requires that an owner/operator or guarantor that files for bankruptcy protection must immediately submit appropriate forms documenting that entity's ability to demonstrate financial responsibility.

Implementation of the IGWA may proceed immediately upon receipt of this correspondence. Approval to install one permanent monitoring well is enclosed. Please note that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. Also note that only EPA Method 8260B will be accepted for analysis of volatile organic hydrocarbons. Any site rehabilitation activity associated with the UST release must be performed by an SCDHEC-certified site rehabilitation contractor as required by R.61-98. A list of certified contractors is enclosed for your convenience.

The Program grants pre-approval for transportation of virgin petroleum-contaminated soil and groundwater generated as a result of the IGWA from the referenced facility to a permitted treatment facility. The contaminated soil and/or groundwater must be accepted by the approved treatment facility. There can be no spillage or leakage during transport. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report of findings. If laboratory analyses show that the concentrations of chemicals of concern in the soil and/or groundwater are below risk-based screening levels, please contact me for approval to dispose of soil and/or groundwater on-site. The SUPERB Account will not compensate for transportation or treatment of clean soil and/or groundwater.

On all correspondence regarding this site, please reference UST Permit #18871. Should you have any questions regarding this correspondence, please feel free to contact me at (803) 896-6669.

Sincerely,

Travis Williams

Travis Williams, Hydrogeologist
Owner/Operator Assistance Section
Assessment and Corrective Action Division

enc: Approved Cost Agreement
Monitoring well approval
Insurance Statement form
Owner/Operator Lead Information form
Certified contractors list

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

Monitoring Well Installation Approval Form

Date of Issue: October 14, 2002

Approval No.: UMW-16664

Approval is hereby granted to: Mr. Eddie Johnson
UST Permit #: 18871
County: Chesterfield

This approval is for the construction of one permanent monitoring well in accordance with the construction plans and technical specifications outlined in the IGWA Document. The well is to be constructed within the surficial aquifer for the intended purpose of monitoring groundwater quality and/or water level(s) at the referenced facility. Approval is provided with the following conditions:

1. The latitude and longitude, surveyed elevations, boring and/or geologist logs and actual (as built) construction details for each well will be submitted with the technical report.

2. Each well will be labeled with an identification plate constructed of a durable material affixed to the casing or surface pad where it is readily visible. The plate will provide monitoring well I.D.#, date of construction, static water level, and driller name and state certification #.

3. Well construction and sampling derived waste including, but not necessarily limited to, drill cuttings, drilling fluids, development and purge water should be managed properly and in compliance with applicable requirements. If containerized, each vessel should be clearly labeled with regard to contents, source, and date of activity.

4. **A minimum of forty-eight (48) hours prior to initiation of drilling activities, please provide notice to Travis Williams at (803) 896-6669 or williat2@dhec.state.sc.us.**

5. Please provide ground-water quality analytical data (chemical analysis and/or water level(s)) and associated measurements (i.e., in-situ field measurements) to me with the technical report.

6. Monitoring wells and temporary monitoring wells will be installed by or under the direct supervision of a licensed well driller certified by the State of South Carolina.

7. Monitoring wells and temporary monitoring wells will be abandoned by or under the direct supervision of a licensed well driller certified by the State of South Carolina. Temporary monitoring wells shall not remain in place for longer than 30 days from the date of installation. Monitoring wells may be abandoned only upon concurrence by this Division.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and the Department of Health and Environmental Control Regulations R.61-71. Please remember to have a copy of this approval on the site during well installation.

Approved by: Travis Williams

Travis Williams, Hydrogeologist

Approved Cost Agreement 17409

Facility: 18871 EDDIES PIT STOP
WILLIATM
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
21 INITIAL GROUNDWATER ASSESSMENT						
		IGWA		1.0000	1,395.00	1,395.00
			Total Amount			1,395.00

Site ID# 18871 Facility Name Eddies Pit Stop

Triage Date 9-11-02 Triaged By Beverly McLeod

Triage (Indicate type of submittal)

CR ✓
AR ____
SC ____
RLS ___
TST ___
MWR __
T of O ___
Other ____

Date reported to UST Program: 8-29-02

Project Manager Assigned: Hightower

Report Ranking

A (Free Product, Sheen on GW) ___
B (GW contamination >MCL) ____
C (Soil contamination >RBSLs) ✓
D (Soil contamination <RBSLs) ____
E (No contamination documented) ___
F (Incomplete submittal) _____

Release Report Classification

Free Product (Forward to C Hightower) ___
TST Failure (tank/line/lld) ____
SIR (Fail/2 months Inconclusive) ____
Soil or GW Contamination ____

Tank System Status

System CIU or TOU (product in USTs) ____
System ABD or TOU (USTs closed/USTs are empty) ✓

Database Log-in/Change: Needs database change

Submittal (s) Logged-In By: Beverly McLeod

Database Changes Given To: Beverly McLeod

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

September 10, 2002

Eddie's Pit Stop
Eddie Johnson
Rt 2, UST Hwy 601N
Pageland SC 29728

Re: Underground Storage Tank Closure Report - Received 08/29/02

Dear Sir:

I spoke with you by phone on August 30, 2002 about the ownership of the underground tanks recently pulled from the ground at Eddie's Pit Stop. According to our conversation, you bought the property in 1976, but the tanks were out-of-service a long time before you took ownership. You stated that you would contact your attorney about sending copies of documents that relate to the Department of Transportation's acquisition of the portion of your property that housed the tanks. I have not heard from you or your attorney, nor have I received any paperwork that relates to tank ownership.

As you know, our review of the report is complete. The site is contaminated with petroleum, to the degree that further assessment is needed, and it is likely remediation will be necessary. At this point, it is crucial to determine who is the responsible party for the contamination. By September 24, 2002, please forward any documents that may clarify ownership of the tanks at the time of their removal from the ground. To discuss this matter, you may call me at (803) 896-6847, or within SC only, 800 826-5435.

Regards,

Connie Anderson

Connie Anderson, Manager

South Carolina Department of Health and Environmental Control (SCDHEC)

UNDERGROUND STORAGE TANK (UST) ASSESSMENT REPORT

Date Received
State Use Only

Submit Completed Form To:
UST Regulatory Section
SCDHEC
2600 Bull Street
Columbia, South Carolina 29201
Telephone (803) 898-4350

RECEIVED
AUG 29 2002
Underground Storage Tank Program

I. Ownership of UST(s)

Owner Name		
Unknown Owner/ USTS removed by the South Carolina Department of Transportation		
Mailing Address *PO Box 191*		
City Columbia	State South Carolina	Zip Code *29202*
Area Code *803*	Telephone Number *737-6692*	Contact Person *Mr. Mike Lockman*

II. Site Identification and Location

GWPD - I.D. # USTs Not Registered 18871			
Site Name Eddies Pit Stop			
Street Address Route 2, US Highway 601 North			
City *Pageland*	State *South Carolina*	County *Chesterfield*	Zip

III. Closure Information

A. Date Closure Started *July 29, 2002*	Date Closure Completed *August 19, 2002*	Number of UST's Closed *2*
Consultant *ARM Environmental Services, Inc.*	Contractor *G&K Tank Services*	

IV. Certification

V. UST Information

	TANK 1	TANK 2	TANK 3	TANK 4	TANK 5
A. Product	*Gasoline*	*Gasoline*			
B. Capacity	*2000 gal*	*750 gal.*			
C. Age	*Unknown*	*Unknown*			
D. Construction Material	*Steel*	*Steel*			
E. Month/Year of Last Use	*Unknown*	*Unknown*			
F. Depth To Base of Tank	*8 feet.*	*8 feet*			
G. Spill Prevention Equipment	*No*	*No*			
H. Overfill Prevention Equipment	*No*	*No*			
I. Method of Closure	*Removal*	*Removal*			
J. Visible Corrosion or Pitting	*Yes*	*Yes*			
K. Visible Holes	*Yes*	*No*			

(843) 672-7614
(843) 672-6872

2 P-74 tanks RFG
By SCDOT

Who is the RP.?

ON 9-3-02 I spoke to Eddie Johnson, who knew Nothing about the 25K deductible. He will talk to his attorney + send Paperwork about the dealings w/ SCDOT.

CJA

M. Method of disposal for any liquid petroleum, sludges, or wastewaters removed from the USTs.

Approximately 165 gallons of petroleum contaminated water was removed from the tanks. The contaminated water was transport to G&K Tank Services in Sumter, S.C. for disposal. Transportation manifest and certification of disposal are enclosed in attachment 4 of this report.

N. If any corrosion, pitting, or holes were observed, describe the extent and location for each UST.

Heavy corrosion/rust was evident on all three tanks.

VI. Piping Information

	TANK 1	TANK 2	TANK 3	TANK 4	TANK 5
A Construction Material *	*Steel*	*Steel*			
B. Distance from UST to Dispenser	*0*	*0*			
C. Number of Dispensers	*0*	*0*			
D Type of System (P/S)	*S*	*S*			
E. Was Piping Removed from Ground.	*Yes*	*Yes*			
F. Visible Corrosion or Pitting	*Yes*	*Yes*			
G Visible Holes	*No*	*No*			

VII. Brief Site Description and History

The subject site was reported to be a former service station. The underground tanks were discovered along the right-of-way of US Highway 601 North during grading and excavation work required to widen the highway. Currently, the site is operated as a restaurant named Eddie's Pit Stop. Eddie's Pit Stop consist of one small building with a gravel parking area. Mr. Eddie Johnson is the current property owner and reported that the tanks had been out of service since 1965. The property is served by municipal water and sewer service. Private water wells for irrigation or drinking water may be present within 1000 feet of the site. Soil samples were collected directly beneath the tanks after removal. Approximately 83 tons of petroleum contaminated soil was removed for disposal at G&K Tank Services in Sumter, S.C. The contaminated soil was removed to prevent adverse impact by petroleum hydrocarbons to the storm water drain system that was installed through the old tank basin. Disposal manifests are located in attachment 4 of this report.

VIII. Site Conditions

	YES	NO	UNK.
(A) Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitor wells?	X		
(B) Were any petroleum odors detected in the excavation, soil borings, trenches, or monitor wells?	X		
(C) Was ground water encountered in the UST excavation, soil borings, or trenches?		*X*	
(D) Did contaminated soils remain stockpiled on the site after closure?		*X*	
(E) Was a petroleum sheen or free product detected on any excavation or boring waters?		*X*	

IX. Sample Information

SAMPLE ID	SAMPLE LOCATION	MATRIX	DEPTH (FT BGS)	DATE	TIME	COLLECTED BY
TB-1	*Tank Basin*	*Soil*	*8 feet*	*7/29/02*	*1430*	*S. Havird*
TB-2	*Tank Basin*	*Soil*	*8 feet*	*7/29/02*	*1430*	*S. Havird*
TB-3	*Tank Basin*	*Soil*	*8 feet*	*7/29/02*	*1430*	*S. Havird*
SP-1	*Soil Stockpile*	*Soil*	*N/A*	*7/29/02*	*1430*	*S. Havird*

X. Sampling Methodology

ARM personnel collected soil samples from the underground storage tanks basin. Soil samples were collected by hand directly from soils excavated, by a backhoe or shovel, from the ends of the USTs basin during the removal of the tanks. For each soil sample, approximately three cubic centimeters (cc) of soil were placed in each of two pre-weighed 40 ml vials containing organic free water. Also, for each sample, three cc of soil were placed in a pre-weighed 40 ml vial, which was then field preserved with a laboratory measured amount of methanol as a preservative. In addition to the 40 ml vials, one four ounce unpreserved glass container was filled with soil and submitted to the laboratory. All sample containers were then packed in ice for transport to the laboratory.

The complete laboratory analytical results and chain of custody records are included in Attachment 3.

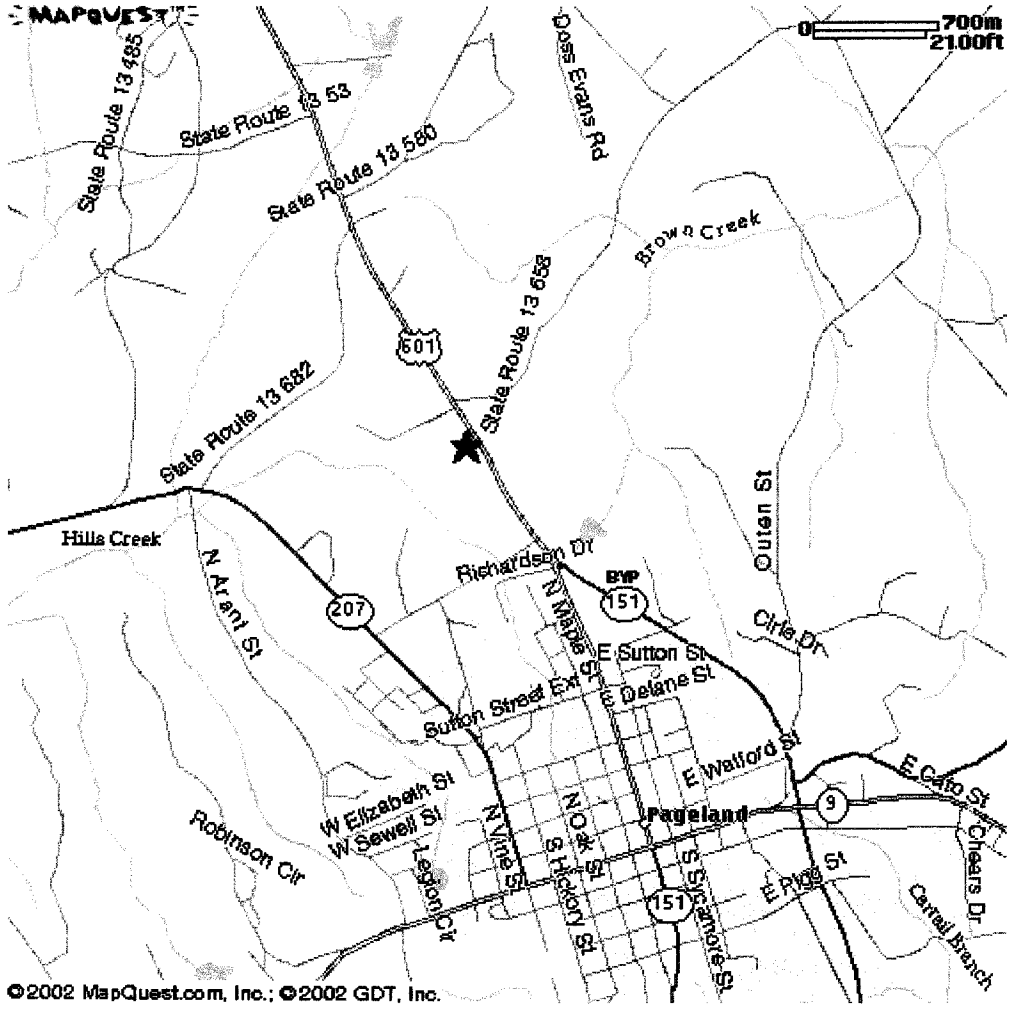
XI. Receptors

	YES	NO
(A) Are there any lakes, ponds, streams, or wetlands located within 1,000 feet of the UST system?		X
(B) Are there any public, private, or irrigation water supply wells within 1,000 feet of the UST piping system?	X*	
(C) Are there any subsurface structures located within 100 feet of the UST system?		X
(D) Are there any underground utilities located within 100 feet of the UST system that could potentially come in contact with the contamination?	X**	
(E) Has contaminated soil been identified at a depth of less than 3 feet below land surface in an area that is not capped by asphalt or concrete?	X	

* Private water supply and irrigation wells were report to be present within 1000 feet of the site.

* * Several underground utilities, including natural gas, sewer, and/or phone, storm drain, and water, are located within 100 feet of the UST system.

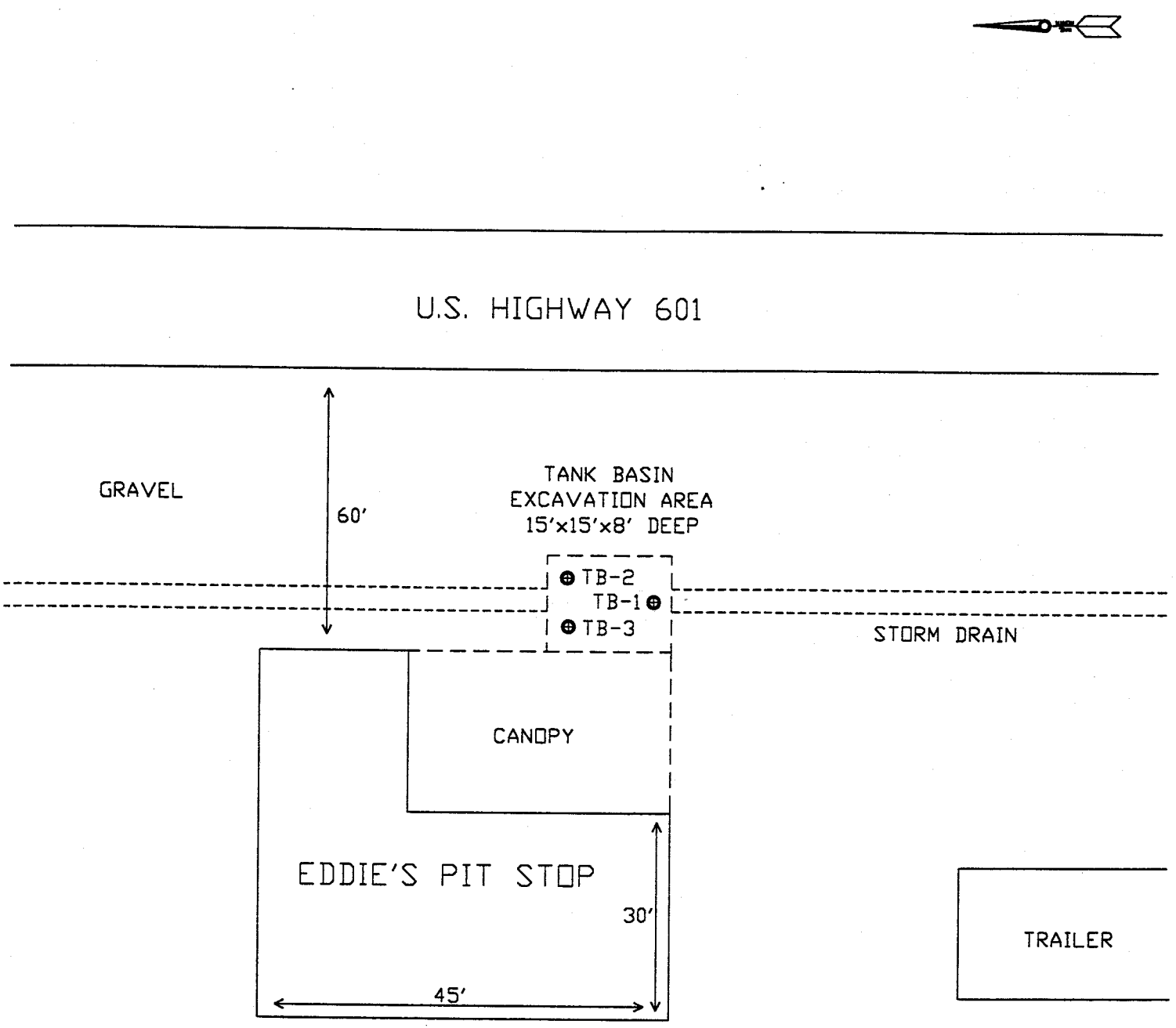
Attachment 1
Site Location Map



Project	**Figure 1**
TANK CLOSURE REPORT SCDOT 99-222 US Highway 601 Chesterfield County, South Carolina	Site Location Map
Scale	**Date**

Attachment 2

Site Plan with Sample Locations


U.S. HIGHWAY 601
GRAVEL
60'
TANK BASIN
EXCAVATION AREA
15'x15'x8' DEEP
TB-2
TB-1
TB-3
STORM DRAIN
CANOPY
EDDIE'S PIT STOP
30'
45'
TRAILER

Attachment 3

Laboratory Analytical Data

SHEALY ENVIRONMENTAL SERVICES, INC.
Scientists and Consultants

Report of Analysis

ARM Environmental Services, Inc.
1210 1st Street S. Ext.
Columbia, SC 29209
Attention : Sid Havird

Project Name : **SCDOT 99-222**

Lot Number : **DG31008**
Date Completed : **08/09/2002**

Jennifer Orr
Project Manager

Total number of pages in report : **6**

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

NC DEHNR No. 329

SC DHEC No. 32010

Client : **ARM Environmental Services, Inc.**
1210 1st Street S. Ext.
Columbia, SC 29209

Attention : **Sid Havird**
Project Name : **SCDOT 99-222**

Description : **TB-1**
Lot Number : DG31008-001

Date Sampled : 07/29/2002 1430
Matrix : Solid

Date Received : 07/31/2002

Parameter	Prep Method	Analytical Method	Result	Q	PQL	Units	Prep Date	Analysis Date	Analyst
Inorganic non-metals									
% Solids		160.3	**74.1**			%		07/31/2002 1331	MDC
Volatile Organic Compounds by GC/MS									
Benzene	5035	8260B	ND		310	ug/kg		08/06/2002 1833	RED
Ethylbenzene	5035	8260B	**7200**		310	ug/kg		08/06/2002 1833	RED
Naphthalene	5035	8260B	**10000**		310	ug/kg		08/06/2002 1833	RED
Toluene	5035	8260B	**820**		310	ug/kg		08/06/2002 1833	RED
Xylenes (total)	5035	8260B	**50000**		3100	ug/kg		08/08/2002 1926	RED
Surrogates									
1,2-Dichloroethane-d4	5035	8260B	94		53-142	%		08/06/2002 1833	RE
Bromofluorobenzene	5035	8260B	105		47-138	%		08/06/2002 1833	RE
Toluene-d8	5035	8260B	86		68-124	%		08/06/2002 1833	RE
Semivolatile Organic Compounds by GC/MS									
Acenaphthene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	L
Acenaphthylene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	L
Anthracene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	L
Benzo(a)anthracene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	L
Benzo(a)pyrene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	L
Benzo(b)fluoranthene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	L

Description	:	**TB-2**						Date Sampled	:	07/29/2002 1430
Lot Number	:	DG31008-002						Matrix	:	Solid
Client	:	**ARM Environmental Services, Inc.**								
Date Received	:	07/31/2002								

Parameter	Prep Method	Analytical Method	Result	Q	PQL	Units	Prep Date	Analysis Date	Analyst
Inorganic non-metals									
% Solids		160.3	**76.8**			%		07/31/2002 1331	MDC
Volatile Organic Compounds by GC/MS									
Benzene	5035	8260B	ND		340	ug/kg		08/06/2002 1857	RED
Ethylbenzene	5035	8260B	**6700**		340	ug/kg		08/06/2002 1857	RED
Naphthalene	5035	8260B	**7700**		340	ug/kg		08/06/2002 1857	RED
Toluene	5035	8260B	**3800**		340	ug/kg		08/06/2002 1857	RED
Xylenes (total)	5035	8260B	**85000**		3400	ug/kg		08/08/2002 1953	RED
Surrogates									
1,2-Dichloroethane-d4	5035	8260B	87		53-142	%		08/06/2002 1857	RED
Bromofluorobenzene	5035	8260B	106		47-138	%		08/06/2002 1857	RED
Toluene-d8	5035	8260B	83		68-124	%		08/06/2002 1857	RED
Semivolatile Organic Compounds by GC/MS									
Acenaphthene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Acenaphthylene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Anthracene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Benzo(a)anthracene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Benzo(a)pyrene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Benzo(b)fluoranthene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Benzo(g,h,i)perylene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Benzo(k)fluoranthene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Chrysene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Dibenzo(a,h)anthracene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Fluoranthene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Fluorene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Indeno(1,2,3-c,d)pyrene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Naphthalene	3550B	8270C	**7100**		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Phenanthrene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Pyrene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Surrogates									
2-Fluorobiphenyl	3550B	8270C	81		30-130	%	08/02/2002 1014	08/06/2002 1537	LH
Nitrobenzene-d5	3550B	8270C	85		30-130	%	08/02/2002 1014	08/06/2002 1537	LH

Description	:	**TB-3**	Date Sampled	:	07/29/2002 1430
Lot Number	:	DG31008-003	Matrix	:	Solid
Client	:	**ARM Environmental Services, Inc.**			
Date Received	:	07/31/2002			

Parameter	Prep Method	Analytical Method	Result	Q	PQL	Units	Prep Date	Analysis Date	Analyst
Inorganic non-metals									
% Solids		160.3	**61.9**			%		07/31/2002 1331	MDC
Volatile Organic Compounds by GC/MS									
Benzene	5035	8260B	ND		360	ug/kg		08/06/2002 1921	RED
Ethylbenzene	5035	8260B	**2200**		360	ug/kg		08/06/2002 1921	RED
Naphthalene	5035	8260B	**9400**		360	ug/kg		08/06/2002 1921	RED
Toluene	5035	8260B	ND		360	ug/kg		08/06/2002 1921	RED
Xylenes (total)	5035	8260B	**11000**		360	ug/kg		08/06/2002 1921	RED
Surrogates									
1,2-Dichloroethane-d4	5035	8260B	95		53-142	%		08/06/2002 1921	RED
Bromofluorobenzene	5035	8260B	120		47-138	%		08/06/2002 1921	RED
Toluene-d8	5035	8260B	89		68-124	%		08/06/2002 1921	RED
Semivolatile Organic Compounds by GC/MS									
Acenaphthene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Acenaphthylene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Anthracene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Benzo(a)anthracene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Benzo(a)pyrene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Benzo(b)fluoranthene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Benzo(g,h,i)perylene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Benzo(k)fluoranthene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Chrysene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Dibenzo(a,h)anthracene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Fluoranthene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Fluorene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Indeno(1,2,3-c,d)pyrene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Naphthalene	3550B	8270C	**1500**		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Phenanthrene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Pyrene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Surrogates									
2-Fluorobiphenyl	3550B	8270C	80		30-130	%	08/02/2002 1014	08/06/2002 1617	LH
Nitrobenzene-d5	3550B	8270C	83		30-130	%	08/02/2002 1014	08/06/2002 1617	LH

Description	:	**SP-1**						Date Sampled	:	07/29/2002 1430
Lot Number	:	DG31008-004						Matrix	:	Solid
Client	:	**ARM Environmental Services, Inc.**								
Date Received	:	07/31/2002								

Parameter	Prep Method	Analytical Method	Result	Q	PQL	Units	Prep Date	Analysis Date	Analyst
Inorganic non-metals									
% Solids		160.3	**71.5**			%		07/31/2002 1331	MDC
Volatile Organic Compounds by GC/MS									
Benzene	5035	8260B	ND		310	ug/kg		08/06/2002 1946	RED
Ethylbenzene	5035	8260B	**320**		310	ug/kg		08/06/2002 1946	RED
Naphthalene	5035	8260B	**1400**		310	ug/kg		08/06/2002 1946	RED
Toluene	5035	8260B	ND		310	ug/kg		08/06/2002 1946	RED
Xylenes (total)	5035	8260B	**2300**		310	ug/kg		08/06/2002 1946	RED
Surrogates									
1,2-Dichloroethane-d4	5035	8260B	88		53-142	%		08/06/2002 1946	RED
Bromofluorobenzene	5035	8260B	88		47-138	%		08/06/2002 1946	RED
Toluene-d8	5035	8260B	84		68-124	%		08/06/2002 1946	RED
TPH - DRO									
TPH-DRO	3550B	8015B	**39000**	@	4600	ug/kg	08/01/2002 1056	08/05/2002 2100	RZ
Surrogates									
o - Terphenyl	3550B	8015B	83		50-130	%	08/01/2002 1056	08/05/2002 2100	RZ
TPH - GRO									
TPH-GRO	5030B	8015B	**300000**		35000	ug/kg		08/08/2002 1639	DLB
Surrogates									
Trifluorotoluene	5030B	8015B	84		70-130	%		08/08/2002 1639	DLB

Sample Receipt Checklist

Client: ARM Cooler received by/date: [illegible] 7-31-02 Lot number: DG31008

Means of receipt: ☒ SESI ☐ Client ☐ UPS ☐ FedEx ☐ DirectX ☐ Other			
Cooler temperature upon receipt 5.4 °C Method: ☐ Temperature Blank ☒ Against Bottles Method of coolant: ☒ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
Yes ☐	No ☐	NA ☒	1. Is the shipper's packing slip attached to this form? (if applicable)
Yes ☒	No ☐	NA ☐	2. Was a chain of custody provided with the samples?
Yes ☒	No ☐	NA ☐	3. Were proper custody procedures followed?
Yes ☒	No ☐	NA ☐	4. Was the client name listed?
Yes ☒	No ☐	NA ☐	5. Were sample IDs listed?
Yes ☒	No ☐	NA ☐	6. Was collection date & time listed?
Yes ☒	No ☐	NA ☐	7. Were the tests to be performed listed on either the C of C or quote?
Yes ☒	No ☐	NA ☐	8. Did all samples arrive in the proper containers for each test?
Yes ☒	No ☐	NA ☐	9. Did all bottle labels agree with custody papers?
Yes ☒	No ☐	NA ☐	10. Did all containers arrive in good condition (unbroken)?
Yes ☒	No ☐	NA ☐	11. Was adequate sample volume available?
Yes ☐	No ☒	NA ☐	12. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☒	NA ☐	13. Were any samples containers missing?
Yes ☐	No ☒	NA ☐	14. Were there any excess samples not listed on C of C?
Yes ☐	No ☐	NA ☒	15. Were air bubbles >6 mm in any VOA vials (if applicable)?
Yes ☐	No ☐	NA ☒	16. Were all Metals; Oil & Grease; Nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☒	17. Were all Cyanide; Sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☒	18. Were all NH3; TKN; Cyanide; BNA; PEST; PCB; HERB; Toxicity samples free of residual chlorine? (< 0.1 mg/L)
Yes ☐	No ☐	NA ☒	19. For North Carolina samples, were collection temperatures documented on the chain of custody?
Sample Preservation (Must be completed for any sample(s) incorrectly preserved.)			
Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving.			
Sample(s) _____ were received incorrectly preserved and were unable to be analyzed.			
Sample(s) _____ were received with bubble >6 mm in diameter			
Toxicity sample(s) _____ were received with TRC > 0.1 mg/L and were analyzed by method 330.5.			

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

VISION

COLUMBIA, SOUTH CAROLINA 29209 PHONE 803-783-3314 FAX 803-783-2587

75-222 ATORY UTILIZED / hcaly LOCATION	NUMBER OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	BTEX, naphth	PAHs	TPH GRO	TPH DRO	REQUESTED PARAMETERS
Tank basin	5	X		X	X			DF3100R
Tank basin	5	X		X	X			
Tank basin	5	X		X	X			
Soil stockpile	5	X		X		X	X	

DATE	TIME	RECEIVED BY (~~SIGNATURE~~)	DATE	TIME
7/31/02 ~~7/30/02~~	0905		7/31	0905
DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
7/31/02	1000		7/31/02	1000

PROJECT MANAGER: Sid Havird

P.O. NUMBER:

d, S.C.

5740C

Attachment 4
Disposal Manifests

Aug 16 02 05:03p Glasscock 803-494-8598 P.9

Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tank # 1 @ 750 gallon
1 @ Size 2,000 gallon
SC File 13.629 purged underground storage t
Chesterfield, SC

This is to certify that the above tank has been disposed of by G&K Tank Service accordance with and exceeding EPA regulations on Petroleum Tank Disposal.

Certified by _____ Date 07/29/02

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
	GK4705	07/29/02

3. Generator's Name and Mailing Address: SC FILE #13,629 ED'S PIT STOP CHESTERFIELD, SC

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
G&K TANK SERVICES, INC.		800-800-6840

7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone

9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
G & K TANK SERVICES, INC 5070 BROAD STREET EXT SUMTER, SC 29151		803-494-4593

5.80

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINATED PRODUCT	3	DM	165	G/K
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
C RAY MILES ED KOLB
P.O. BOX 1477
LUGOFF, SC

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Frank Tidwell Jr.	Frank Tidwell	07	29	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR

TRANSPORT

Aug 16 02 05:03p Glasscock 803-494-8598 P.8

Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 165 gallons
SC File 13.629
Chesterfield, SC

Contaminant NonHazardous Petroleum
Contaminanted Product

This is to cerify the above ~~soil~~ product has been processed and disposed of by G &
Services, Inc., in accordance with and exceeding EPA regulations on pe
contaminated soils.

Certified by S. [illegible]

Date 07/29/02

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
	GK4705	07/29/02

3. Generator's Name and Mailing Address
SC FILE #13.629
CHESTERFIELD COUNTY
PAGELAND, SC

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
G&K TANK SERVICES, INC.		800-800-6840
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
G & K TANK SERVICES, INC 2070 BROAD STREET EXT SUMTER, SC 29151		803-494-4593

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINATED SOIL	1	DT	13.66 ~~22~~	TN ~~TON~~
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
C RAY MILES ED KOLB
P.O. BOX 1477
LUGOFF, SC

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Wastes.

Printed/Typed Name	Signature	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
DAN Felder	Dan Felder	8	7	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. GK4705

2. Page 1 of

07/29/02

3. Generator's Name and Mailing Address

SC FILE #13,629
CHESTERFIELD COUNTY
PAGELAND, SC

4. Generator's Phone ( )

5. Transporter 1 Company Name: G&K TANK SERVICES, INC.

6. US EPA ID Number

A. Transporter's Phone: 800-800-6840

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

G & K TANK SERVICES, INC
5070 BROAD STREET EXT
SUMTER, SC 29151

10. US EPA ID Number

C. Facility's Phone: 803-494-4593

	11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a.	NON HAZARDOUS PETROLEUM CONTAMINATED SOIL	1		20.75 TN	
b.					
c.					
d.					

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

C RAY MILES ED KOLB
P O BOX 1477
LUGOFF, SC

GENERATOR

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Terry Johnson

Signature

Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Terry Johnson

Signature: Terry Johnson

Month Day Year: 7 29 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
	GK4765	07/29/02

3. Generator's Name and Mailing Address

SC FILE #13,629
CHESTERFIELD COUNTY
PAGELAND, SC

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
G&K TANK SERVICES, INC.		800-800-6840
7. Transporter 2 Company Name	**8. US EPA ID Number**	**B. Transporter's Phone**

9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
G & K TANK SERVICES, INC 5020 BROAD STREET EXT SUMTER, SC 29151		803-494-4593

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINATED SOIL			20.01	TN
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

C RAY MILES ED KOLB
P O BOX 1477
LUGOFF, SC

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
James T Bolden	James T Bolden	07	29	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

GENERATOR

TRANSPORTER

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	
	GK4705		07/29/02

GENERATOR

3. Generator's Name and Mailing Address
SC FILE #13 629
CHESTERFIELD COUNTY
PAGELAND, SC

4. Generator's Phone ( )

5. Transporter 1 Company Name: G&K TANK SERVICES, INC.
6. US EPA ID Number:
A. Transporter's Phone: 800-800-6840

7. Transporter 2 Company Name:
8. US EPA ID Number:
B. Transporter's Phone:

9. Designated Facility Name and Site Address: G & K TANK SERVICES INC
5070 BROAD STREET EXT
SUMTER, SC 29151
10. US EPA ID Number:
C. Facility's Phone: 803-494-4593

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINATED SOIL			25T	TN
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
C RAY MILES ED KOLB
P.O. BOX 1477
LUGOFF, SC

Bill Robinson O. Ray Miles Cust

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
T Susan F. Davis	T Susan F. Davis	07	29	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
T Susan F. Davis	T Susan F. Davis	07	29	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 83.67 tons
SC File 13.629
Chesterfiled, SC

Contaminant NonHazardous Petroleum
Contaminanted Soil

o cerify the above soil has been processed and disposed of by G & K Tank
, Inc., in accordance with and exceeding EPA regulations on petroleum
nated soils.

by S. Sloat

Date 07/29/02

PROJECT TRANSFER CHECKLIST

Site Name/Full ID # Eddies PP Stop ID# 18871

Release # 1 For UST # 001-002 Release Report Date 8-29-02

Free Product Reported? Yes / (No) **Impacted Water Supply Well Reported?** Yes / (No)

Receptor(s) within 1000 feet of UST system? **(Well / Surface Water Body / Wetland / Other)**

Worst Case Analysis / Sample #	Soil (mg/kg) / #TB-2	Water (ug/l) / #_____
Benzene	<0.340	
Toluene	3.80	
Ethylbenzene	6.70	
Xylenes	85.00	
Naphthalene	7.70	
Benzo(a)anthracene	<0.430	
Benzo(b)flouranthene	<0.430	
Benzo(k)flouranthene	<0.430	
Chrysene	<0.430	
Dibenz(a,h)anthracene	<0.430	
MTBE (water only)		
Other _____		

REGULATORY INFORMATION

1. All USTs Registered? (Yes) / No / NA
2. Regulatory PM Hightocw
3. All Applicable Annual Fees Paid? Yes / No / NA Pre-74 ~~tanks~~
4. Financial responsibility Certification Received? Yes / No / NA Type _____
5. Site In Substantial Compliance? Yes / No / NA
6. Insurance Statement Received? Yes / No / NA Dated _____
7. UST Status (account for all USTs in database)

South Carolina
Department of Transportation

July 24, 2002

Mr. Eddie M. Johnson
Rural Route 2
Pageland, SC 29728

Subject: Widening of Highway 601

Dear Mr. Johnson

As you are aware Highway 601 that passes in front of your business is under construction to add additional lanes. The construction will affect you business in the following manner:

The two two thousand gallon tanks located in front of your business will have the contents removed on Monday, July 29, 2002 followed by the tank removal and soil remediation as necessary.

Immediately following the tank removal and remediation the pipe installation will begin along with the backfill efforts. The installation of the pipe and fill will leave a shoulder drop-off of approximately three feet with a 2:1 slope which equates to six horizontal feet. This in itself will prohibit customer parking in the existing area

Also, before the pipe is installed a portion of the existing canopy will be removed to allow for the pipe installation and fill effort.

If I can answer any question or provide additional information please call me at 623-6988.

Sincerely,

Mark C. Attaway

Mark C. Attaway

File #5673

State of South Carolina) In the Court of Common Pleas
)
County of Chesterfield) C/A No. 01-CP-13-87

Road/Route US Route **US ROUTE 601**
File **13.629**
Item **300315**
Project **BNH-PDCB(004)**
PIN **17179**

South Carolina Department of Transportation,

Condemnor,

vs.

Eddie M. Johnson,

Landowner(s).

and

First Citizens Bank and Trust Company of South Carolina, Mortgagee,

Other Condemnee(s)

RELEASE

WHEREAS, the South Carolina Department of Transportation (SCDOT), filed a Condemnation Notice on Eddie M. Johnson, Landowner and Carolina Bank and Trust, Mortgagee on March 30, 2001, to acquire certain property necessary for the construction of the above-referenced highway project; and

WHEREAS, the property being acquired is more specifically set forth in the Condemnation Notice and SCDOT plans for the above-referenced

just compensation for the property, including any and all damages and benefits to the remainder; and

WHEREAS, prior to the trial of this case, the parties agreed upon the sum of **FORTY THOUSAND AND NO/100 DOLLARS ($40,000.00)** as just compensation for the property, including any and all damage and benefits to the remainder, such sum to be paid by SCDOT to the Landowner and mortgagee for the acquisition of the property condemned by SCDOT; and

WHEREAS, the Condemnor and Landowner further agree that this case has been settled, and that this case should be ended and stricken from the calendar, and that the above-entitled action should be and is dismissed with prejudice;

KNOW ALL MEN BY THESE PRESENTS, that for and in consideration of the sum of **FORTY THOUSAND AND NO/100 DOLLARS ($40,000.00)** paid to the Landowner and Mortgagee by SCDOT, receipt of which is hereby acknowledged, the Landowner, by and through his representative below, for himself, his executors, administrators, beneficiaries and assigns and the Mortgagee hereby acknowledge the aforesaid sum as payment in full of just compensation as a result of the aforesaid condemnation and acquisition by SCDOT, and does hereby release, acquit and forever discharge the State of South Carolina, it agencies, departments, institution, boards and commissions, and officials, agents or employees thereof or successors thereto, and particularly SCDOT from any and all claims, demands, damages, actions, causes of action, and suits at law or in equity, of

IN WITNESS WHEREOF, we have hereunto set our hands and seals this 26th day of August, 2002.

IN THE PRESENCE OF:

Lou Ellen Rowell (Sign name)

LOU ELLEN ROWELL (Print name)

Sharon D Johnson (Sign name)

Sharon G Johnson (Print name)

Lou Ellen Rowell (Sign name)

LOU ELLEN ROWELL (Print name)

Sharon D Johnson (Sign name)

Sharon G Johnson (Print name)

Eddie M. Johnson
Eddie M. Johnson
Landowner

VP
First Citizens Bank & Trust
Mortgagee

#5673

State of South Carolina) In the Court of Common Pleas
)
County of Chesterfield) C/A No. 01-CP-13-87

Road/Route US Route **US ROUTE 601**
File **13.629**
Item **300315**
Project **BNH-PDCB(004)**
PIN **17179**

South Carolina Department of Transportation,

Condemnor,

vs.

Eddie M. Johnson,

Landowner(s).

and

First Citizens Bank and Trust Company of South Carolina, Mortgagee,

Other Condemnee(s)

FILED
CLERK OF COURT
2002 NOV 7 AM 10 53
CHESTERFIELD CO., S.C.
BOOK ____ PAGE ____

CONSENT ORDER OF DISMISSAL

This matter comes before the court upon the motion of the Condemnor, South Carolina Department of Transportation, and with the consent of both parties, pursuant to Rule 41(a)(2)of the South Carolina Rules of Civil Procedure, for an Order to end this case because the case has been settled pursuant to the Code of Laws of South Carolina, §28-2-40(1987).

WHEREAS the Condemnor and Landowner(s) have agreed that **FORTY THOUSAND AND 00/100 DOLLARS ($40,000.00)** is just compensation of the Landowner(s) for the Condemnor's acquisition of the above-referenced

THOUSAND TWO HUNDRED AND 00/100 DOLLARS ($16,200.00) plus any accrued interest, should be returned to the South Carolina Department of Transportation, and that the above-entitled action be and is dismissed with prejudice;

IT IS THEREFORE ORDERED that this case be ended and stricken, with prejudice, from the calendar; that the Clerk of Court return the monies on deposit with the Court to the South Carolina Department of Transportation, c/o Mr. Oscar Rucker, Director of Rights of Way, P.O. Box 191, Columbia, South Carolina 29202; that the Clerk of Court annotate a copy of the Condemnation Notice with the date and amount of settlement as **FORTY THOUSAND AND 00/100 Dollars ($40,000.00)** and file the annotated Condemnation Notice with the Register of Mesne Conveyance for Chesterfield County, duly indexed, as provided by law for the recording and indexing of deeds, showing the transfer to the property to the Condemnor, such filing being exempt from filing fees as provided under Code of Laws of South Carolina, §12-24-40 (Cum. Supp. 1997).

AND IT IS SO ORDERED:

The Honorable J. Michael Baxley
Circuit Court Judge
Fourth Judicial Circuit

In Chesterfield, South Carolina
August _____, 2002

WE CONSENT TO THE ABOVE ORDER:

Eddie M. Johnson
Landowner

First Citizens Bank & Trust

by Michael Casker VP
its:

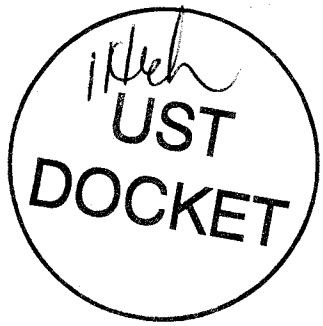
D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

SEP 29 2010



MR PETER REINHART
SC DEPARTMENT OF TRANSPORTATION
PO BOX 191 ROOM 324
COLUMBIA SC 29202-0191

Re: Tier II Plan Directive
Eddie's Pit Stop, Rt. 2, US Hwy 601 North, Pageland, SC
UST Permit # 18871
Release #1 Reported August 29, 2002
Monitoring Well Installation Report received September 16, 2010
Chesterfield County

Dear Mr. Reinhart:

The Underground Storage Tank (UST) Division of the South Carolina Department of Health and Environmental Control (SCDHEC) reviewed the referenced report. The report indicates presence of chemicals of concern in the soil and groundwater.

To determine what risk the referenced release may pose to the environment and public health, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, implementation of the scope of work as outlined in the Tier II Assessment Guidance Document is necessary. The Tier II Assessment Guidance Document and Tier II Assessment forms are available online at http://www.scdhec.gov/eqc/admin/html/..%5C..%5Cust%5Cpubs%5Ctier2.pdf and http://webserver03.dhec.sc.gov/iieforms/d3527.pdf respectively.

Please have your contractor complete and submit the Assessment Component Cost Agreement and Assessment Plan Forms within thirty days of the date of this letter. Every component may not be necessary to complete the above scope of work. The State Underground Petroleum Environmental Response Bank (SUPERB) Account allowable cost for each component is included on the Assessment Component Cost Agreement Form. Please note that approval from the Department must be issued before work begins.

On all correspondence regarding this site, please reference UST Permit #18871. If you have questions or need additional information feel free to call me at (803) 896-6395.

Sincerely,

Minda Johnson

Minda Johnson, Hydrogeologist
Assessment Section
Underground Storage Tank Division
Bureau of Land and Waste Management

cc: Terracon Consultants, Inc., 521 Clemson Road, Columbia, SC 29229
Technical File

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MAR 10 2006

CERTIFIED MAIL 7001 2510 0008 4156 2327

MR EDDIE JOHNSON
RT 2 US HWY 601N
PAGELAND, SC 29728

Re: Eddie's Pit Stop, Rt.2, US Hwy 601 North
UST Permit #18871, Cost Agreement #20135
Release # 1 Reported August 29, 2002
Notice of Alleged Violation
Chesterfield County

Dear Mr. Johnson:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control directed you to complete a Tier I Assessment on September 19, 2003, with the assessment report due on January 17, 2004, enclosed. To date the required report has not been received. In accordance with Section 280.65 of the South Carolina Underground Storage Tank Regulations, the assessment must be conducted as chemicals of concern are above the risk-based-screening levels.

Implementation of this scope of work should proceed upon receipt of this correspondence. **Please submit the report within 30 days from the date of this letter. Should you not submit the report on or before April 14, 2006, this office will be forced to initiate enforcement action.**

On all correspondence regarding this site, please reference UST Permit #18871. If you have any questions concerning this correspondence, please call me at (803) 896-6395.

Sincerely,

Minda Johnson-Schmiedel

Minda Johnson-Schmiedel, Hydrogeologist
Assessment Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

enc: Letter (Surber to Johnson) dated September 19, 2003.

cc: Technical File

SCANNED
Docket #10

D H E C
PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

MAR 10 2006

MS CATHY CASPER
2003 HWY 601N
PAGELAND SC 29728

Re: Eddie's Pit Stop, Rt 2, US 601N, Pageland, SC
UST Permit #18871
Letter of Concern for adjacent property
Request received March 3, 2006

Dear Ms. Casper:

In response to your request for information about environmental conditions and liability associated with the referenced facility and adjacent property, the following is provided.

Our records indicate that two Underground Storage Tanks (USTs) were registered with the Department by Eddie Johnson. The registered USTs were removed in August 2002. An assessment report received in August 2003 documented a release of petroleum products in the vicinity of the UST. Our records indicate that Eddie Johnson complied with the regulatory requirements and removed the leak from the tanks. Additionally, they are currently pursuing the extent and severity of petroleum chemicals of concern under our direction. We have requested a Tier I Assessment Report will be submitted to the UST Program in April 2006.

This release of petroleum products from the USTs is qualified to receive funding under the conditions of the State Underground Petroleum Environmental Response Bank (SUPERB) Act after the $25,000 deductible is met. This means that reasonable costs up to $1,000,000 can be paid by the SUPERB account for site rehabilitation actions associated with this release. Should cleanup costs exceed $1,000,000, Eddie Johnson, under state and federal law, retains responsibility for any additional actions and associated costs.

Should the potential exist for petroleum chemicals of concern to migrate onto an adjacent property, Eddie Johnson and the Department may require access during reasonable hours to perform necessary rehabilitation activities. All rehabilitation activities associated with the petroleum impact are the responsibility of the Eddie Johnson. You should be aware that there are currently no laws or regulations that prohibit the use or development of adjacent properties and properties where a petroleum release has occurred.

If you have any questions, please do not hesitate to call me at (803) 896-6395.

Sincerely,

Minda Johnson-Schmiedel

Minda Johnson-Schmiedel, Hydrogeologist
Assessment Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

cc: Mr. Eddie Johnson, Rt. 2, US 601N, Pageland, SC 29728
Technical File

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT
2600 Bull Street, Columbia SC 29201
Phone (803) 898-4350 Fax (803) 898-4330

SEP 19 2003

MR EDDIE JOHNSON
RT 2 US HWY 601 N
PAGELAND SC 29728

Re: Eddie's Pit Stop, Rt. 2, US Hwy 601 North
UST Permit #18871; Cost Agreement #20135; MWA #UMW-17651
Release reported August 29, 2002
Initial Groundwater Assessment (IGWA) Report received August 1, 2003
Chesterfield County

Dear Mr. Johnson:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced IGWA report submitted by ARM Environmental Services, Inc. on your behalf. The report indicates that groundwater concentrations of benzene, toluene, ethylbenzene, naphthalene, EDB and lead are above risk-based screening levels (RBSLs). To determine what risk the release may pose to the environment and public health, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, implementation of the scope of work as outlined in the enclosed Tier I Assessment document is necessary. Since the above scope of work is detailed in the Tier I Assessment document, a separate plan is not required. **Please note that if the UST System was in operation prior to 1991, lead and EDB analyses is required. Also, all water wells within 250 feet of the former UST must be sampled. Please be advised that only EPA Method 8260B will be accepted for purgeable aromatics.**

According to our records, the release was reported to the SCDHEC on August 29, 2002. In accordance with Section 44-2-40(D) of the State Underground Petroleum Environmental Response Bank (SUPERB) Act, you are responsible for the first $25,000 for site rehabilitation. To insure that any expenditures you make apply to this $25,000 deductible, it is prudent for this agency to pre-approve such costs along with your technical plan of action. By law, the SUPERB account cannot compensate any costs that are not pre-approved. Eligible costs exceeding the $25,000 deductible can be compensated from the SUPERB Account. Cost Agreement #20135 has been established to track the allowable costs associated with this Tier I. Please include the cost agreement number when submitting your invoice.

To proceed with the qualification process for the State Underground Petroleum Environmental Response Bank (SUPERB) Act, the following information is required:

! Written confirmation of the existence or nonexistence of an environmental insurance policy for this site. **This information must be signed by the responsible party and a notary public.** For your convenience, an insurance statement form has been enclosed. If an environmental insurance policy existed at the time of the release, a copy of the policy with all endorsements must be submitted with the insurance statement. **Please complete and return the enclosed insurance information form within 14 days from the date of this letter.**

Please note that the maximum approved amount for the Tier I Assessment is **$10,880.00**. The total

includes costs for completion of up to 75 feet of permanent monitoring well footage. Upon receipt of the signed Tier I Invoice, Tier I Report, and a copy of your canceled check (front and back) or a notarized statement from the contractor verifying payment for this scope of work, up to **$10,880.00** may be applied toward your deductible.

Our records indicate that an Owner/Operator Information Sheet has not been filed for the release. **Please complete and return the enclosed Owner/Operator Information Sheet within 14 days from the date of this letter (note that all rehabilitation activities associated with a UST release must be performed by a SCDHEC certified site rehabilitation contractor as required by R.61-98).**

Please note that in accordance with R.61-92, Subpart H, Section 280.114, you are required to notify the Program by certified mail within ten (10) days of commencing a voluntary or involuntary proceeding in bankruptcy. State law also requires that an owner/operator or guarantor that files for bankruptcy protection must immediately submit appropriate forms documenting that entity's ability to demonstrate financial responsibility.

Implementation of the Tier I should proceed upon receipt of this correspondence. Approval to install three permanent monitoring wells is enclosed. **The report and invoice should be submitted within 90 days from the date of this letter**. The SCDHEC reserves the authority to only apply costs to your deductible for work properly performed and/or technically justified in accordance with established criteria. The Program grants pre-approval for the transportation of the investigative derived waste (virgin petroleum contaminated soil and groundwater) from the referenced site to a permitted treatment facility. All investigative derived waste must be properly stored in labeled containers or covered with plastic as appropriate. All contaminated investigated derived waste must be accepted by the approved treatment facility. There can be no spillage or leakage in transport. A copy of the disposal manifest and approval letter from the receiving facility must be included as an appendix to the final report. If the levels of petroleum contamination based on laboratory analysis are below treatment levels, please contact the project manager for approval to dispose of the investigative derived waste on site. The SUPERB Account will not compensate for transportation or treatment of clean soil and/or groundwater.

On all correspondence regarding this site and scope of work, please reference UST Permit #18871 and cost agreement #20135. If you have any questions concerning this correspondence, please contact me at (803) 896-6649 or 1-800-826-5435 (within South Carolina only).

Sincerely,

John D. Surber, Jr., Hydrogeologist
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program

enc: Monitoring Well Approval
Information Sheet
Insurance Information

cc: Technical File (Copy of Monitoring Well Approval)
Financial File
Read File

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

Monitoring Well Installation Approval Form

Date of Issue: September 16, 2003 Approval No.: UMW-17651

Approval is hereby granted to: Mr. Eddie Johnson
UST Permit #: 18871: Eddie's Pit Stop, Rt 2 Hwy 601 N, Pageland SC
County: Chesterfield

This approval is for the construction of 3 permanent monitoring wells in accordance with the construction plans and technical specifications outlined in the Tier I Assessment Document. The wells are to be constructed within the surficial aquifer for the intended purpose of monitoring ground-water quality and/or water levels at the referenced facility. Approval is provided with the following conditions:

1. The latitude and longitude, surveyed elevations, boring and/or geologist logs and actual (as built) construction details for each well will be submitted with the technical report.
2. Each well will be labeled with an identification plate constructed of a durable material affixed to the casing or surface pad where it is readily visible. The plate will provide monitoring well I.D.#, date of construction, static water level, and driller name and state certification #.
3. Well construction and sampling derived waste including, but not necessarily limited to, drill cuttings, drilling fluids, development and purge water should be managed properly and in compliance with applicable requirements. If containerized, each vessel should be clearly labeled with regard to contents, source, and date of activity.
4. **A minimum of forty-eight (48) hours prior to initiation of drilling activities, please provide notice to John Surber at (803) 896-6649 or surberjd@dhec.sc.gov.**
5. Please provide ground-water quality analytical data (chemical analysis and/or water level(s)) and associated measurements (i.e., in-situ field measurements) to me with the technical report.
6. Monitoring wells and temporary monitoring wells will be installed by or under the direct supervision of a licensed well driller certified by the State of South Carolina.
7. Monitoring wells and temporary monitoring wells will be abandoned by or under the direct supervision of a licensed well driller certified by the State of South Carolina. Temporary monitoring wells shall not remain in place for longer than 30 days from the date of installation. Monitoring wells may be abandoned only upon concurrence by this Division.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and the Department of Health and Environmental Control Regulations R.61-71. Please remember to have a copy of this approval on the site during well installation.

Approved by:

John D. Surber, Jr., Hydrogeologist
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

cc: Pee Dee EQC District
Technical File

Approved Cost Agreement [redacted]135

Facility: 18871 EDDIES PIT STOP

SURBERJD

PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
20 TIER I						
		TIER I		1.0000	10,880.00	10,880.00

Total Amount **10,880.00**

EFIS

ARM ENVIRONMENTAL SERVICES, INC.

ASSESSMENT & REMEDIAL SERVICES DIVISION

RECEIVED
AUG 0 1 2003
UNDERGROUND STORAGE TANK PROGRAM

July 28, 2003

Mr. Travis Williams, Hydrogeologist
Underground Storage Tank Program
Assessment and Correction Action Division
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Re: Former Eddie's Pit Stop, Route 2, US Hwy 601 North
UST Permit #18871; CA # 17409
Chesterfield County, South Carolina
ARM Project #02-130

Dear Mr. Williams;

ARM has completed an Initial Ground Water Assessment (IGWA) at the referenced site in Pageland, South Carolina. The pertinent information regarding the assessment, including figures and appendices is presented in the enclosed report.

Sincerely,
ARM Environmental Services, Inc.

Michael L. Faris
Project Geologist

Andrew M. Wilson, P.G.
Principal Hydrogeologist

enclosure

cc: Mike Lockman; SCDOT

INITIAL GROUND-WATER ASSESSMENT REPORT

Introduction

Facility Name: *Eddie's Pit Stop*

UST Permit Number: *18871*

UST Owner or Operator's Name: *SCDOT*

Address: *P.O. Box 191*
Columbia, SC 29202

Phone Number: *(803) 737-6692*

Property Owner's Name (if different than Owner):

Contractor: *ARM Environmental Services, Inc.* CERT.# *4*

Address: *Post Office Box 50285, Columbia, SC, 29250*

Phone Number: *(803) 783-3314*

Well Driller: *Richard Starnes, ARM Environmental* CERT. # *299*

Receptor and Site Data

Receptor Survey Questions	No	Yes*
Is there a drinking water supply well (public or private) or surface water supply intake within 1,000 feet of the UST?		✓
Are irrigation or other non-drinking water wells located within 1,000 feet of the UST?		✓
Are there other potential receptors (i.e., utilities, surface waters, wetlands) less than 500 feet from the UST?		✓

*Several underground utilities, including natural gas, sewer, and/or phone, storm drain, and water located with in 100 feet of UST system.

A water-well was identified near the northwestern corner of the subject property. The well was not in service, but did not appear to be permanently abandoned. Additionally, a new private well house was located approximately 75 feet north/northwest of the former Eddie's Pit Stop well house. The status and use of that well was not clear at the time of this assessment. Underground utilities consisted of a natural gas line along the east side of Hwy 601 and a water line on the west side of Hwy 601.

Were there any water wells within 250 feet radius sampled? _____Yes ___X___ No

Is a public water supply line in the area? ___X___ Yes _____ No

Is the current use of the facility and surrounding properties commercial, residential agricultural or industrial?

Site: *commercial* Adjacent Properties: *commercial / residential*

Soil and Monitoring Well Data

Primary Soil Type: *Silty clay*

Well Installation Method and Date: *auger drill rig; 5/20/03*

Development Method: *Hand bailed and surged till relatively sediment free (at least five well volumes or until dry) with a disposable polyethylene hand bailer.*

Soil Sample obtained at *~35* feet below ground surface (bgs).

Soil Analytical Data (MW-1)*

Benzene	Toluene	Ethylbenzene	Xylenes	Naphthalene
BDL	*BDL*	***330***	***990***	***960***

Benzo(a)-anthracene	Benzo(b)-fluoranthene	Benzo(k)-fluoranthene	Chrysene	Dibenza(a, h)-anthracene
BDL	*BDL*	*BDL*	*BDL*	*BDL*

Total PAHs
390

*All results are expressed in ug/kg
**BDL - Below Detection Limit

Ground Water Data

Depth to Ground Water: *35.70 feet bgs*

Well Purging/Sampling Method: *Evacuated five well volumes of ground water subsequent to development of well, then collected a ground water sample.*

Date Sampled: *5/20/03*

Free Product Thickness: *Not Applicable*

Equilibrated values:

Temperature: *19.5°C* pH: *5.84*

Dissolved Oxygen: *3.5 mg/L* Specific Conductance: *783 uohms/cm*

Ground Water Analytical Data (MW-1)*

Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene
3800	***1100***	***740***	***2600***	*BDL*	***380***

Benzo(a)-anthracene	Benzo(b)-fluoranthene	Benzo(k)-fluoranthene	Chrysene	Dibenza(a, h)-anthracene
BDL	*BDL*	*BDL*	*BDL*	*BDL*

EDB	Total PAHs	Lead
5.4	*360*	***19***

*All results are expressed in µg/L (parts per billion)
**BDL - Below Detection Limit

Appendices

Appendix A. Well Construction Log
Appendix B. Laboratory Data
Appendix C. Topographic Map with site location
Appendix D. Site Base Map
Appendix E. Disposal Manifest

Report Completed By: _____ CERT.# 4
Project Manager

Date: 7/28/03

APPENDIX A

GEOLOGICAL BORING LOG WITH MONITORING WELL CONSTRUCTION SCHEMATIC

Project No: 02-130 **UST Permit #** 18871; CA # 17409

Log of Borehole: MW-1

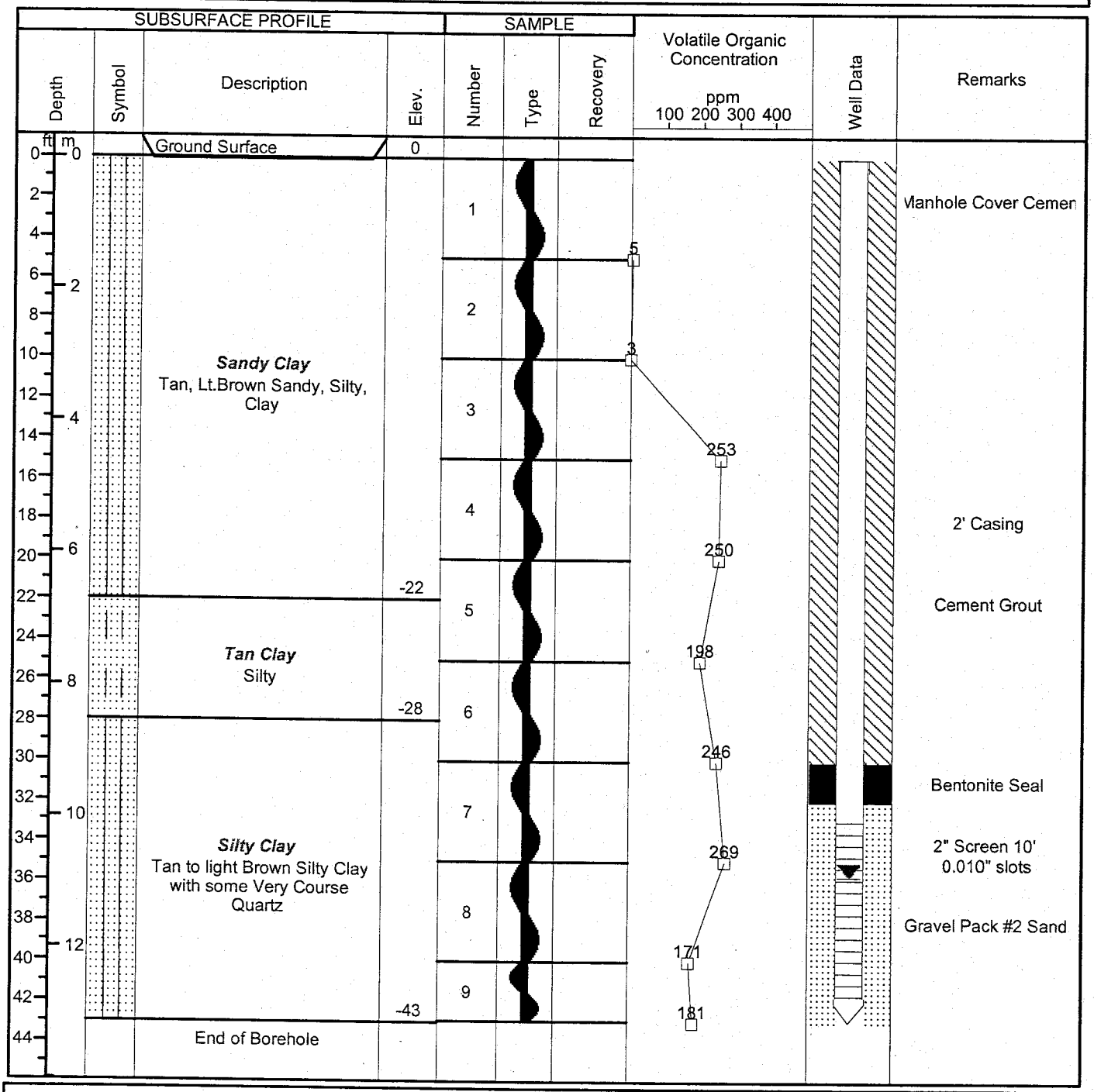
Project: Former Eddie's Pit Stop

Client: SCDOT

Location: Chesterfield County, SC

Driller: Richard Starne Cert. # 299

Inspector: Mike Faris



Drill Method: Auger Drill Rig

Drill Date: 05/20/03

Casing Diameter: 2"

Total Depth of Well: 43

ARM ENVIRONMENTAL SERVICES, INC.

Depth to Water: 35.70' bgs

Latitude: N34*47.512

Longitude: W80*24.150

APPENDIX B

LABORATORY ANALYTICAL DATA

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

ARM Environmental Services, Inc.
1210 1st Street S. Ext.
Columbia, SC 29209
Attention: Michael Faris

Project Name: **Pageland DOT**

Project Number: **02-130**

Lot Number: **EE21028**

Date Completed: **06/04/2003**

Jennifer Orr Jones
Project Manager

This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain of Custody Record and Sample Receipt Checklist.

Case Narrative
ARM Environmental Services, Inc.
Lot Number: EE21028

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative.

Sample receipt, sample analysis, and data review have been performed in accordance with Shealy's Quality Assurance Management Plan and Standard Operating Procedures. Any data qualifiers associated with sample analysis are footnoted on the analytical results page(s) or are discussed below.

TPH DRO

TPH hydrocarbon pattern for sample 001 is unknown.

SHEALY ENVIRONMENTAL SERVICES, INC.

Sample Summary
ARM Environmental Services, Inc.
Lot Number: EE21028

Sample Number	Sample ID	Matrix	Date Sampled
001	MW-1	Solid	05/20/2003 1045
002	MW-1	Aqueous	05/20/2003 1200

(2 samples)

Executive Summary
ARM Environmental Services, Inc.
Lot Number: EE21028

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units
001	MW-1	Solid	TOC	Walkley-Black	210		mg/kg
001	MW-1	Solid	Ethylbenzene	8260B	330		ug/kg
001	MW-1	Solid	Naphthalene	8260B	960		ug/kg
001	MW-1	Solid	Xylenes (total)	8260B	990		ug/kg
001	MW-1	Solid	Naphthalene	8270C	390		ug/kg
001	MW-1	Solid	TPH-DRO	8015B	12000		ug/kg
002	MW-1	Aqueous	Alkalinity	310.1	77		mg/L
002	MW-1	Aqueous	Ferrous Iron	3500 Fe-D	0.32		mg/L
002	MW-1	Aqueous	Nitrate - N	353.2	0.023		mg/L
002	MW-1	Aqueous	Benzene	8260B	3800		ug/L
002	MW-1	Aqueous	Ethylbenzene	8260B	740		ug/L
002	MW-1	Aqueous	Naphthalene	8260B	380		ug/L
002	MW-1	Aqueous	Toluene	8260B	1100		ug/L
002	MW-1	Aqueous	Xylenes (total)	8260B	2600		ug/L
002	MW-1	Aqueous	Naphthalene	8270C	360		ug/L
002	MW-1	Aqueous	Methane	RSK - 175	33		ug/L
002	MW-1	Aqueous	1,2-Dibromoethane (EDB)	8011	5.4		ug/L
002	MW-1	Aqueous	Lead	6010B	0.019		mg/L

(18 detections)

Inorganic non-metals

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1045**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-001**
Matrix: **Solid**
% Solids: **83.8** **05/21/2003 1900**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(TOC) Walkley-Black	1	05/30/2003 0930	SRW		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TOC		**Walkley-Black**	**210**		**240**	**mg/kg**	**1**

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result less than the PQL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1045**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-001**
Matrix: **Solid**
% Solids: **83.8** **05/21/2003 1900**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5035	8260B	50	06/02/2003 1304	RED		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Benzene	71-43-2	8260B	ND		220	ug/kg	1
Ethylbenzene	**100-41-4**	**8260B**	**330**		**220**	**ug/kg**	**1**
Naphthalene	**91-20-3**	**8260B**	**960**		**220**	**ug/kg**	**1**
Toluene	108-88-3	8260B	ND		220	ug/kg	1
Xylenes (total)	**1330-20-7**	**8260B**	**990**		**220**	**ug/kg**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		64	53-142
Bromofluorobenzene		110	47-138
Toluene-d8		94	68-124

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result less than the PQL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1045**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-001**
Matrix: **Solid**
% Solids: **83.8** **05/21/2003 1900**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550B	8270C	1	05/30/2003 1648	LH	05/30/2003 0935	10800

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270C	ND		390	ug/kg	1
Acenaphthylene	208-96-8	8270C	ND		390	ug/kg	1
Anthracene	120-12-7	8270C	ND		390	ug/kg	1
Benzo(a)anthracene	56-55-3	8270C	ND		390	ug/kg	1
Benzo(a)pyrene	50-32-8	8270C	ND		390	ug/kg	1
Benzo(b)fluoranthene	205-99-2	8270C	ND		390	ug/kg	1
Benzo(g,h,i)perylene	191-24-2	8270C	ND		390	ug/kg	1
Benzo(k)fluoranthene	207-08-9	8270C	ND		390	ug/kg	1
Chrysene	218-01-9	8270C	ND		390	ug/kg	1
Dibenzo(a,h)anthracene	53-70-3	8270C	ND		390	ug/kg	1
Fluoranthene	206-44-0	8270C	ND		390	ug/kg	1
Fluorene	86-73-7	8270C	ND		390	ug/kg	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270C	ND		390	ug/kg	1
Naphthalene	**91-20-3**	**8270C**	**390**		**390**	**ug/kg**	**1**
Phenanthrene	85-01-8	8270C	ND		390	ug/kg	1
Pyrene	129-00-0	8270C	ND		390	ug/kg	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
2-Fluorobiphenyl		77	30-130
Nitrobenzene-d5		78	30-130
Terphenyl-d14		87	30-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result less than the PQL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

TPH - DRO

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1045**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-001**
Matrix: **Solid**
% Solids: **83.8** **05/21/2003 1900**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3550B	8015B	1	05/29/2003 1901	MTR	05/28/2003 1030	10772

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
TPH-DRO		**8015B**	**12000**		**3900**	**ug/kg**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
o - Terphenyl		74	50-130

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result less than the PQL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Inorganic non-metals

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1200**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		(Alkalinity) 310.1	1	05/25/2003 0509	LMC		
1		(Ferrous Iron) 3500 Fe-D	1	05/21/2003 1330	SRW		
1		(Nitrate - N) 353.2	1	05/21/2003 1804	LMC		
1		(pH) 9040B	1	05/22/2003 0748	LMC		
1		(Sulfate) 300.0	1	05/31/2003 1907	LMC		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Alkalinity		**310.1**	**77**		**10**	**mg/L**	**1**
Ferrous Iron		**3500 Fe-D**	**0.32**		**0.050**	**mg/L**	**1**
Nitrate - N		**353.2**	**0.023**		**0.020**	**mg/L**	**1**
pH		**9040B**	**5.84**	**@**		**su**	**1**
Sulfate		300.0	ND		1.0	mg/L	1

Footnote(s): CO2 = 290 mg/l @ Analyzed outside the 24 hour holding time.

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result less than the PQL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Volatile Organic Compounds by GC/MS

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1200**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260B	50	06/03/2003 1323	RED		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Benzene	**71-43-2**	**8260B**	**3800**		**250**	**ug/L**	**1**
Ethylbenzene	**100-41-4**	**8260B**	**740**		**250**	**ug/L**	**1**
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260B	ND		250	ug/L	1
Naphthalene	**91-20-3**	**8260B**	**380**		**250**	**ug/L**	**1**
Toluene	**108-88-3**	**8260B**	**1100**		**250**	**ug/L**	**1**
Xylenes (total)	**1330-20-7**	**8260B**	**2600**		**250**	**ug/L**	**1**

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		95	70-130
Bromofluorobenzene		89	70-130
Toluene-d8		96	70-130

Footnote(s): CO_2 = 290 mg/l @ Analyzed outside the 24 hour holding time.

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result less than the PQL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Semivolatile Organic Compounds by GC/MS

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1200**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3520C	8270C	1	05/29/2003 1142	LH	05/26/2003 1530	10750
2	3520C	8270C	2	05/29/2003 1425	LH	05/26/2003 1530	10750

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Acenaphthene	83-32-9	8270C	ND		5.1	ug/L	1
Acenaphthylene	208-96-8	8270C	ND		5.1	ug/L	1
Anthracene	120-12-7	8270C	ND		5.1	ug/L	1
Benzo(a)anthracene	56-55-3	8270C	ND		5.1	ug/L	1
Benzo(a)pyrene	50-32-8	8270C	ND		5.1	ug/L	1
Benzo(b)fluoranthene	205-99-2	8270C	ND		5.1	ug/L	1
Benzo(g,h,i)perylene	191-24-2	8270C	ND		5.1	ug/L	1
Benzo(k)fluoranthene	207-08-9	8270C	ND		5.1	ug/L	1
Chrysene	218-01-9	8270C	ND		5.1	ug/L	1
Dibenzo(a,h)anthracene	53-70-3	8270C	ND		5.1	ug/L	1
Fluoranthene	206-44-0	8270C	ND		5.1	ug/L	1
Fluorene	86-73-7	8270C	ND		5.1	ug/L	1
Indeno(1,2,3-c,d)pyrene	193-39-5	8270C	ND		5.1	ug/L	1
Naphthalene	**91-20-3**	**8270C**	**360**		**10**	**ug/L**	**2**
Phenanthrene	85-01-8	8270C	ND		5.1	ug/L	1
Pyrene	129-00-0	8270C	ND		5.1	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits	Q	Run 2 % Recovery	Acceptance Limits
2-Fluorobiphenyl		73	30-130		71	30-130
Nitrobenzene-d5		77	30-130		76	30-130
Terphenyl-d14		77	30-130		80	30-130

Footnote(s): CO_2 = 290 mg/l @ Analyzed outside the 24 hour holding time.

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result less than the PQL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

Dissolved Methane

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1200**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		RSK - 175	1	05/29/2003 0859	MTR		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Methane		**RSK - 175**	**33**		**26**	**ug/L**	**1**

Footnote(s): CO_2 = 290 mg/l @ Analyzed outside the 24 hour holding time.

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result less than the PQL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

EDB & DBCP by Microextraction

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1200**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		8011	10	06/03/2003 1258	MTR		

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
1,2-Dibromoethane (EDB)	**106-93-4**	**8011**	**5.4**		**0.20**	**ug/L**	**1**

Footnote(s): CO2 = 290 mg/l @ Analyzed outside the 24 hour holding time.

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result less than the PQL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%

Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ICP-AES

Client: **ARM Environmental Services, Inc.**
Description: **MW-1**
Date Sampled: **05/20/2003 1200**
Date Received: **05/21/2003**

Laboratory ID: **EE21028-002**
Matrix: **Aqueous**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6010B	1	05/27/2003 1631	MNM	05/22/2003 1328	10725

Parameter	CAS Number	Analytical Method	Result	Q	PQL	Units	Run
Lead	**7439-92-1**	**6010B**	**0.019**		**0.0030**	**mg/L**	**1**

Footnote(s): CO_2 = 290 mg/l @ Analyzed outside the 24 hour holding time.

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result less than the PQL
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
Where applicable, all soil sample analysis are reported on a dry weight basis unless flagged with a "W"

ENVIRONMENTAL SERVICES, INC.
ASSESSMENT & REMEDIAL SERVICES DIVISION

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

1210 1st STREET SOUTH EXTENSION COLUMBIA, SOUTH CAROLINA 29209
PHONE 803-783-3314 FAX 803-783-2587

PROJECT #	PROJECT NAME
02-130	Pageland - DOT

SAMPLERS SIGNATURE: Michael for Kelly E. Shealey

LABORATORY UTILIZED

SAMPLE I.D.	DATE	TIME	COMP	GRAB	LOCATION	NUMBER OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	BTEX + Naph. 8260B/5035	PAHs 8270C	TPH 3550	TOC	BTEX+Naph.+MTBE 8260B	EDB 8011	PAHs 8270C	nitrates	sulfates	total lead	ferrous iron	methane	carbon dioxide
MW-1	5/20/03	1045		X		7	X		X	X	X	X									
MW-1	5/21/03	1200		X		15		X					X	X	X	X	X	X	X	X	X

REQUESTED PARAMETERS

EE21628

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
Michael Faris	5/21/03	1610	[signature]	5/21/03	1610
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
[signature]	5/21/03	1630	[signature]	5/21/03	1630

PROJECT MANAGER: Mike Faris

P.O. NUMBER:

REMARKS

38

Sample Receipt Checklist

Client: ARM Cooler Rec'd by/date: LR 5/21/03 Lot #: EE21028

Means of receipt: ☒ SESI ☐ Client ☐ UPS ☐ FedEx ☐ DirectX ☐ Other			
Cooler temperature upon receipt 3.8 °C Method: ☐ Temperature Blank ☒ Against Bottles Method of coolant: ☒ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None			
Yes ☐	No ☐	NA ☒	1. Is the shipper's packing slip attached to this form? (if applicable)
Yes ☒	No ☐	NA ☐	2. Was a chain of custody provided with the samples?
Yes ☒	No ☐	NA ☐	3. Were proper custody procedures followed?
Yes ☒	No ☐	NA ☐	4. Was the client name listed?
Yes ☒	No ☐	NA ☐	5. Were sample IDs listed?
Yes ☒	No ☐	NA ☐	6. Was collection date & time listed?
Yes ☒	No ☐	NA ☐	7. Were the tests to be performed listed on either the C of C or quote?
Yes ☒	No ☐	NA ☐	8. Did all samples arrive in the proper containers for each test?
Yes ☒	No ☐	NA ☐	9. Did all bottle labels agree with custody papers?
Yes ☒	No ☐	NA ☐	10. Did all containers arrive in good condition (unbroken)?
Yes ☒	No ☐	NA ☐	11. Was adequate sample volume available?
Yes ☒	No ☐	NA ☐	12. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☒	NA ☐	13. Were any samples containers missing?
Yes ☐	No ☒	NA ☐	14. Were there any excess samples not listed on C of C?
Yes ☐	No ☒	NA ☐	15. Were air bubbles >6 mm in any VOA vials (if applicable)?
Yes ☒	No ☐	NA ☐	16. Were all Metals; Oil & Grease; Nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☒	17. Were all Cyanide; Sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☒	18. Were all NH3; TKN; Cyanide; BNA; PEST; PCB; HERB; Toxicity samples free of residual chlorine? (< 0.1 mg/L)
Yes ☐	No ☐	NA ☒	19. For North Carolina samples, were collection temperatures documented on the chain of custody?
Sample Preservation (Must be completed for any sample(s) incorrectly preserved.)			
Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving.			
Sample(s) _____ were received incorrectly preserved and were unable to be analyzed.			
Sample(s) were received with bubble >6 mm in diameter			
Toxicity sample(s) _____ were received with TRC > 0.1 mg/L and were analyzed by method 330.5.			

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐
Did client respond: Yes ☐ No ☐
Date of response: _____
SESI employee: _____
Client instructions / Comments:

_____
_____
_____
_____
_____

ENVIRONMENTAL SERVICES, INC.
ASSESSMENT & REMEDIAL SERVICES DIVISION

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

1210 1st STREET SOUTH EXTENSION COLUMBIA, SOUTH CAROLINA 29209
PHONE 803-783-3314 FAX 803-783-2587

PROJECT #	PROJECT NAME
02-130	Pageland - DOT

SAMPLERS SIGNATURE: Michael for Billy S. Sheals
LABORATORY UTILIZED: Shealy

SAMPLE I.D.	DATE	TIME	COMP	GRAB	LOCATION	NUMBER OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	BTEX + Naph 8260B/5035	PAHs 8270C	TPH 3550	TOC	BTEX+Naph.+ MTBE 8260B	EDB 8011	PAHs 8270C	nitrates	sulfates	total lead	ferrous iron	methane	carbon dioxide
MW-1	5/20/03	1045		X		7	X		X	X	X	X									
MW-1	5/20/03	1200		X		15		X					X	X	X	X	X	X	X	X	X

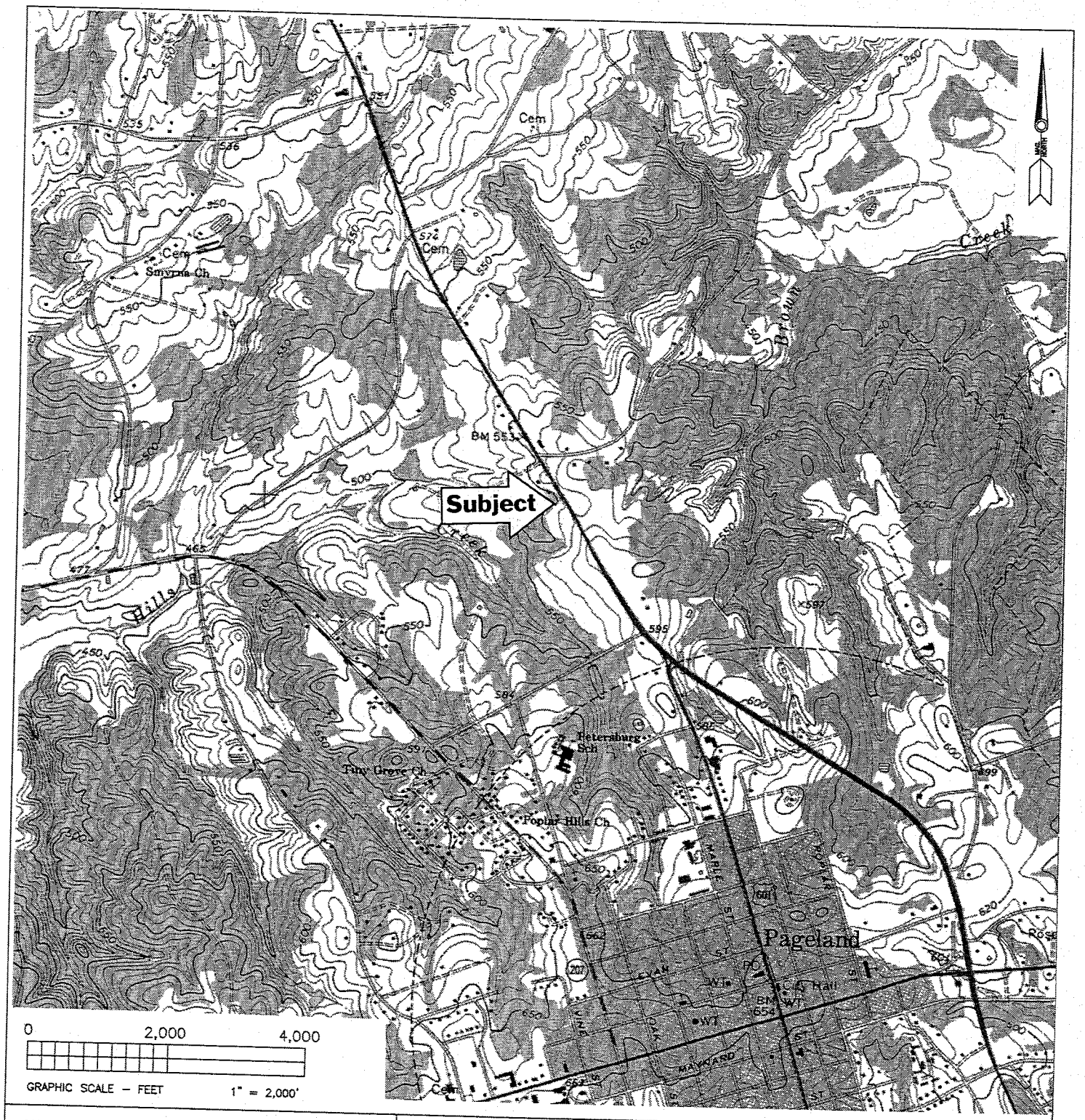
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
Michael Faris	5/21/03	1610	[signature]	5/21/03	1610
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME

REMARKS

PROJECT MANAGER: Mike Faris
P.O. NUMBER:

APPENDIX C

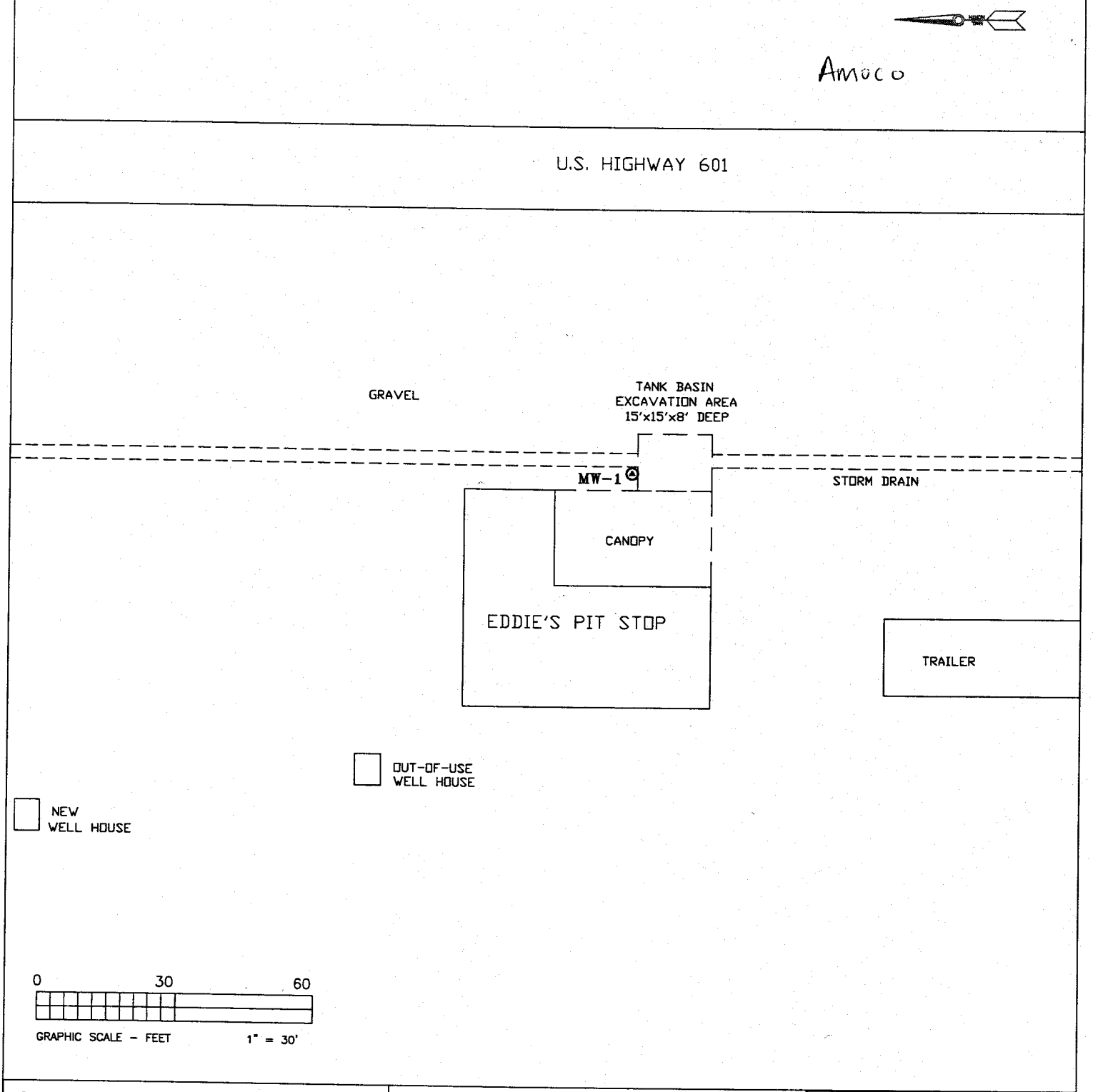
TOPOGRAPHIC MAP with SITE LOCATION



PROJECT: INITIAL GROUND WATER ASSESSMENT SC-DOT-02-130 US 601 NORTH UST PERMIT #18850; CA #17096 PAGELAND, SOUTH CAROLINA	DESCRIPTION: TOPOGRAPHIC MAP	FIGURE 1 DATE: JULY 2003
ARM ENVIRONMENTAL SERVICES, INC.	REFERENCE: U.S.G.S. TOPOGRAPHIC MAP (7.5 Minute Series) PAGELAND SOUTH CAROLINA QUADRANGLE	LEGEND:

APPENDIX D

SITE BASE MAP



PROJECT:

INITIAL GROUNDWATER ASSES.
SCDOT 02-130
UST PERMIT #18871; CA # 17409
CHESTERFIELD COUNTY, SC

DESCRIPTION:

SITE PLAN WITH
MONITORING WELL LOCATION

FIGURE 2

DATE:
JULY 2002

ARM ENVIRONMENTAL SERVICES, INC.

REFERENCE:

U.S.G.S. TOPOGRAPHIC MAP
(7.5 Minute Series)
PAGELAND
SOUTH CAROLINA QUADRANGLES

LEGEND:

MW = ⓐ = MONITORING WELL

APPENDIX E

DISPOSAL MANIFEST

Disposal has been initiated at this site. The Disposal Manifest for the 55 gallon drum of contaminated purge water generated during this assessment will be forwarded to the DHEC project manager as soon as ARM Environmental Services, Inc. receives the manifest from Crandall Corp., the certified disposal contractor.

Spencer Law Firm

301 West Main Street
Post Office Box 190
Chesterfield, SC 29709

William O. Spencer, Jr.
Kym Catoe Rollings

Telephone (843) 623-2144
Fax (843) 623-6928

RECEIVED

JAN 17 2003

UNDERGROUND STORAGE TANK PROGRAM

January 16, 2003

SC Dept. of Health and Environmental Control
Attn: Mr. Travis Williams
2600 Bull Street
Columbia, SC 29201-1708

Re: Eddie's Pit Stop, Rt. 2 US Hwy 160 N., Pageland, SC
UST Permit #18871; Cost Agreement #17409; MWA #UMW-16664
Release reported august 29, 2002
Assessment report received August 29, 2002
Chesterfield County

Dear Mr. Williams:

I am writing to you on behalf of Mr. Eddie Johnson who is in receipt of your letter dated November 5, 2002 in reference to the above. Your letter states that Mr. Johnson is responsible for the first $25,000.00 of site rehabilitation costs for the above referenced property.

The South Carolina Department of Transportation instituted an action to condemn Mr. Johnson's property and subsequently SCDOT removed the underground storage tanks from the said property without the consent of or any input from Mr. Johnson. It is Mr. Johnson's position that SCDOT is responsible for the $25,000.00 site rehabilitation costs. Litigation is presently pending in Chesterfield County addressing this matter. I have enclosed a copy of the pleadings for your file.

If you have any questions or would like to discuss this matter, please do not hesitate to call.

Very truly yours,

William O. Spencer

William O. Spencer, Jr.

\03-1\kcr\johnson.dhc

THE STATE OF SOUTH CAROLINA COUNTY OF CHESTERFIELD	)	IN THE COURT OF COMMON PLEAS FOURTH JUDICIAL CIRCUIT CASE NUMBER: 01-CP-13-87 ~~JUDGMENT ROLL NO.~~
South Carolina Department of Transportation, Condemnor, versus Eddie M. Johnson, Landowner, and First Citizens Bank and Trust Company of South Carolina, Mortgagee, Other Condemnee	)	NOTICE OF MOTION AND MOTION FOR RELIEF FROM ORDER OF DISMISSAL ~~JUDGMENT ROLL NO.~~

A True Copy, Attest
Joyce P. Sellers
CLERK OF COURT C.P. & G.S.
CHESTERFIELD COUNTY, SC

FILED
CLERK OF COURT
2003 JAN 28 PM 12:34
BOOK
PAGE

FEE PAID

TO: THE CONDEMNOR SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION AND ANDREW F. MCLEOD, ATTORNEY FOR THE CONDEMNOR, AND FIRST CITIZENS BANK AND TRUST COMPANY OF SOUTH CAROLINA, OTHER CONDEMNEE:

YOU WILL PLEASE TAKE NOTICE that the undersigned attorney for the Landowner will ten (10) days from the service of this Notice of Motion or as soon thereafter as counsel may be heard, move before a judge of the Court of Common Pleas of the Fourth Judicial Circuit at the Chesterfield County Courthouse, on Main Street, in Chesterfield, South Carolina, for an Order relieving the Landowner from the final order in the above captioned case pursuant to Rule 60(b) of the South Carolina Rules of Civil Procedure. The Landowner seeks relief from said order on the grounds of mistake, inadvertence, surprise and/or excusable neglect, (Rule 60(b)(1), SCRCP); newly discovered evidence which by due diligence could not have been discovered in time to move for a new trial, (Rule

Word #1

60(b)(2)); and fraud, misrepresentation, or other misconduct of the Condemnor (Rule 60(b)(3), SCRCP). Landowner seeks relief from the Order of Dismissal and seeks to set aside the Release and have this case placed back on the active roster to be tried by a jury.

This motion will be based on the records, files and proceedings in the case and upon the following facts:

1. That on March 30, 2001, defendant filed a Condemnation Notice and Tender of Payment in this court against plaintiff and others, being Civil Action No. 2001-CP-13-87, by which suit defendant sought to condemn property owned by plaintiff for public purposes, more particularly for the construction of a section of U.S. Route 601 from S.C. Route 151 to 0.35 km northwesterly of N.C. state line.

2. That underground storage tanks were located on the condemned property, but said tanks had never been used by Landowner.

3. That during the pendency of this case, the Condemnor, without any input or involvement on behalf of Landowner, caused the said underground storage tanks to be removed at Condemnor's sole cost and expense. By letter dated July 24, 2002, SCDOT stated "The two thousand gallon tanks located in front of your business will have the contents removed on Monday, July 29, 2002 followed by the tank removal and soil remediation as necessary. This letter indicated that Condemnor would bear all expenses associated with removal, including soil remediation. See July 24, 2002 letter attached hereto as Exhibit "A" and incorporated herein by

WOR #2

reference.

4. That subsequent to the tank removal, in order to settle the controversy and end the litigation, a release was effected by and between the parties on August 26, 2002 and a Consent Order of Dismissal was subsequently filed with the Court. Copies of said release and order of dismissal are attached hereto as Exhibit "B" and "C" and made a part of this motion.

5. That at the time Landowner signed the Release, he believed that because Condemnor had already removed and taken the two underground storage tanks, that Condemnor would also bear the cost of any required clean-up, including soil remediation.

6. That Landowner, during the course of the operation of his business on the condemned property, would have never had the tanks removed and consequently would have never incurred costs associated with the clean-up after tank removal.

7. That subsequent to the execution of the Release and filing of the Consent Order of Dismissal, the Landowner received a letter from the South Carolina Department of Health and Environment Control(DHEC), dated November 5, 2002, stating that Landowner was responsible for the first $25,000.00 of site rehabilitation following the tank removal.

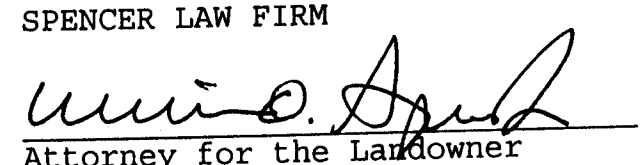
8. The Landowner subsequently contacted DHEC and requested that the clean-up bill be sent to Condemnor, as Condemnor had condemned the property and removed the tanks. The Landowner was informed at that time that Condemnor refused to pay the $25,000.00 SUPERB Fund deductible.

Wood #3

9. The Landowner would not have settled the above case for the total sum of $40,000.00 had Landowner known at the time of settlement, that he would subsequently incur remediation costs in the amount of $25,000.00. The settlement was based upon mistake, inadvertence, surprise and excusable neglect and upon the fraud, misrepresentation and other misconduct of the Condemnor. The Landowner had never used the tanks and would never have sought to remove the tanks. The Condemnor removed the tanks and Landowner was led to believe, by the actions of Condemnor, that Condemnor would incur all costs, including remediation, relating to the removal of the tanks.

10. That on December 26, 2002, Landowner received check number 124275431 made payable to Eddie M. Johnson and First Citizens Bank and Trust Co. of SC, MTGEE, in the amount of $40,000.00. Said check is herewith being returned to Condemnor's counsel.

SPENCER LAW FIRM



Attorney for the Landowner
P. O. Box 190 - 301 W. Main Street
Chesterfield, SC 29709
(843) 623-2144

January 3, 2003.

#4

kcr\03-01\johnson.mot

Tech F

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

BUREAU OF LAND AND WASTE MANAGEMENT
UNDERGROUND STORAGE TANK PROGRAM

Phone (803) 896-6240 Fax (803) 896-6245

NOV 0 5 2002

MR EDDIE JOHNSON
RT 2 US HWY 160 N
PAGELAND SC 29728

Re: Eddie's Pit Stop, Rt. 2 US Hwy 160 N., Pageland, SC
UST Permit #18871; Cost Agreement #17409; MWA #UMW-16664
Release reported August 29, 2002
Assessment report received August 29, 2002
Chesterfield County

Dear Mr. Johnson:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced report and all information on-file for the referenced facility. The report indicates that chemicals of concern are present in the groundwater at concentrations that exceed risk-based screening levels. To determine what risk the chemicals may pose to the environment and public health, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, implementation of the scope of work as outlined in the Initial Groundwater Assessment (IGWA) document is necessary. The IGWA document may be obtained from our website at www.scdhec.net/eqc/admin/html/eqforms.html#ust.

Our records indicate that Insurance Statement and Owner/Operator Information forms have not been filed for the facility. **Please be aware that the release cannot be qualified for the State Underground Petroleum Environmental Response Bank (SUPERB) until a completed Insurance Statement form is on-file with the Program.** The enclosed forms should be completed and returned to the Program to my attention within fifteen days of the date of this letter.

According to Program records, the release at the facility was reported to SCDHEC on August 29, 2002, in accordance with Section 44-2-40(D) of the SUPERB Act, you are responsible for the first $25,000 of site rehabilitation costs. To insure that expenditures made toward rehabilitation apply to the $25,000 deductible, the Program has pre-approved costs for implementing the IGWA and assigned a cost agreement number for tracking. By law, the SUPERB Account cannot compensate any costs that are not pre-approved.

The Program has pre-approved a total of $1,395.00 for implementation of the IGWA. The total includes costs for completion of up to 25 feet of permanent monitoring well footage. Additional monitoring well footage can be billed at the SUPERB allowable rate of $38 per foot provided that the cost is pre-approved by the Program. Upon receipt of a report of findings, and a completed IGWA invoice with all necessary supporting documentation, up to $1,395.00 will be applied towards the $25,000

deductible **provided that the release is qualified for SUPERB.** The report and invoice should be submitted to the Program within 60 days of the date of this correspondence.

Please note that in accordance with R.61-92, Subpart H, Section 280.114, you are required to notify the Program by certified mail within ten (10) days of commencing a voluntary or involuntary proceeding in bankruptcy. State law also requires that an owner/operator or guarantor that files for bankruptcy protection must immediately submit appropriate forms documenting that entity's ability to demonstrate financial responsibility.

Implementation of the IGWA may proceed immediately upon receipt of this correspondence. Approval to install one permanent monitoring well is enclosed. Please note that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. Also note that only EPA Method 8260B will be accepted for analysis of volatile organic hydrocarbons. Any site rehabilitation activity associated with the UST release must be performed by an SCDHEC-certified site rehabilitation contractor as required by R.61-98. A list of certified contractors is enclosed for your convenience.

The Program grants pre-approval for transportation of virgin petroleum-contaminated soil and groundwater generated as a result of the IGWA from the referenced facility to a permitted treatment facility. The contaminated soil and/or groundwater must be accepted by the approved treatment facility. There can be no spillage or leakage during transport. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report of findings. If laboratory analyses show that the concentrations of chemicals of concern in the soil and/or groundwater are below risk-based screening levels, please contact me for approval to dispose of soil and/or groundwater on-site. The SUPERB Account will not compensate for transportation or treatment of clean soil and/or groundwater.

On all correspondence regarding this site, please reference UST Permit #18871. Should you have any questions regarding this correspondence, please feel free to contact me at (803) 896-6669.

Sincerely,

Travis Williams

Travis Williams, Hydrogeologist
Owner/Operator Assistance Section
Assessment and Corrective Action Division

enc: Approved Cost Agreement
Monitoring well approval
Insurance Statement form
Owner/Operator Lead Information form
Certified contractors list

cc: Technical file

DHEC/UST/10-14-02/tmw/18871

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

Monitoring Well Installation Approval Form

Date of Issue: October 14, 2002 Approval No.: UMW-16664

Approval is hereby granted to: Mr. Eddie Johnson
UST Permit #: 18871
County: Chesterfield

This approval is for the construction of one permanent monitoring well in accordance with the construction plans and technical specifications outlined in the IGWA Document. The well is to be constructed within the surficial aquifer for the intended purpose of monitoring groundwater quality and/or water level(s) at the referenced facility. Approval is provided with the following conditions:

1. The latitude and longitude, surveyed elevations, boring and/or geologist logs and actual (as built) construction details for each well will be submitted with the technical report.

2. Each well will be labeled with an identification plate constructed of a durable material affixed to the casing or surface pad where it is readily visible. The plate will provide monitoring well I.D.#, date of construction, static water level, and driller name and state certification #.

3. Well construction and sampling derived waste including, but not necessarily limited to, drill cuttings, drilling fluids, development and purge water should be managed properly and in compliance with applicable requirements. If containerized, each vessel should be clearly labeled with regard to contents, source, and date of activity.

4. **A minimum of forty-eight (48) hours prior to initiation of drilling activities, please provide notice to Travis Williams at (803) 896-6669 or williat2@dhec.state.sc.us.**

5. Please provide ground-water quality analytical data (chemical analysis and/or water level(s)) and associated measurements (i.e., in-situ field measurements) to me with the technical report.

6. Monitoring wells and temporary monitoring wells will be installed by or under the direct supervision of a licensed well driller certified by the State of South Carolina.

7. Monitoring wells and temporary monitoring wells will be abandoned by or under the direct supervision of a licensed well driller certified by the State of South Carolina. Temporary monitoring wells shall not remain in place for longer than 30 days from the date of installation. Monitoring wells may be abandoned only upon concurrence by this Division.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and the Department of Health and Environmental Control Regulations R.61-71. Please remember to have a copy of this approval on the site during well installation.

Approved by: Travis Williams

Travis Williams, Hydrogeologist
Owner/Operator Assistance Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

cc: Pee Dee EQC District
Mr. Eddie Johnson
Technical File

SCDHEC/UST/10-14-02/tmw/18871

Approved Cost Agreement 17409

Facility: 18871 EDDIES PIT STOP
WILLIATM
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
21 INITIAL GROUNDWATER ASSESSMENT						
		IGWA		1.0000	1,395.00	1,395.00
			Total Amount			1,395.00

Site ID# 18871 Facility Name Eddies Pit Stop

Triage Date 9-11-02 Triaged By Beverly McLeod

Triage (Indicate type of submittal)

CR ✓
AR ___
SC ___
RLS ___
TST ___
MWR ___
T of O ___
Other ___

Date reported to UST Program: 8-29-02

Project Manager Assigned: Hightower

Report Ranking

A (Free Product, Sheen on GW) ___
B (GW contamination >MCL) ___
C (Soil contamination >RBSLs) ✓
D (Soil contamination <RBSLs) ___
E (No contamination documented) ___
F (Incomplete submittal) ___

Release Report Classification

Free Product (Forward to C Hightower) ___
TST Failure (tank/line/lld) ___
SIR (Fail/2 months Inconclusive) ___
Soil or GW Contamination ___

Tank System Status

System CIU or TOU (product in USTs) ___
System ABD or TOU (USTs closed/USTs are empty) ✓

Database Log-in/Change: Needs database change

Submittal (s) Logged-In By: Beverly McLeod

Database Changes Given To: Beverly McLeod

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

September 10, 2002

Eddie's Pit Stop
Eddie Johnson
Rt 2, UST Hwy 601N
Pageland SC 29728

Re: Underground Storage Tank Closure Report - Received 08/29/02

Dear Sir:

I spoke with you by phone on August 30, 2002 about the ownership of the underground tanks recently pulled from the ground at Eddie's Pit Stop. According to our conversation, you bought the property in 1976, but the tanks were out-of-service a long time before you took ownership. You stated that you would contact your attorney about sending copies of documents that relate to the Department of Transportation's acquisition of the portion of your property that housed the tanks. I have not heard from you or your attorney, nor have I received any paperwork that relates to tank ownership.

As you know, our review of the report is complete. The site is contaminated with petroleum, to the degree that further assessment is needed, and it is likely remediation will be necessary. At this point, it is crucial to determine who is the responsible party for the contamination. By September 24, 2002, please forward any documents that may clarify ownership of the tanks at the time of their removal from the ground. To discuss this matter, you may call me at (803) 896-6847, or within SC only, 800 826-5435.

Regards,

Connie Anderson

Connie Anderson, Manager
Regulatory Assistance Section
Regulatory Compliance Division
Underground Storage Tank Program
Bureau of Land and Waste Management

South Carolina Department of Health and Environmental Control (SCDHEC)

UNDERGROUND STORAGE TANK (UST) ASSESSMENT REPORT

Date Received
State Use Only

Submit Completed Form To:
UST Regulatory Section
SCDHEC
2600 Bull Street
Columbia, South Carolina 29201
Telephone (803) 898-4350

RECEIVED
AUG 29 2002
Underground Storage Tank Program

I. Ownership of UST(s)

Owner Name		
Unknown Owner/ USTS removed by the South Carolina Department of Transportation		
Mailing Address *PO Box 191*		
City Columbia	State South Carolina	Zip Code *29202*
Area Code *803*	Telephone Number *737-6692*	Contact Person *Mr. Mike Lockman*

II. Site Identification and Location

GWPD - I.D. # USTs Not Registered 18871			
Site Name Eddies Pit Stop			
Street Address Route 2, US Highway 601 North			
City *Pageland*	State *South Carolina*	County *Chesterfield*	Zip

III. Closure Information

A. Date Closure Started *July 29, 2002*	Date Closure Completed *August 19, 2002*	Number of UST's Closed *2*
Consultant *ARM Environmental Services, Inc.*	Contractor *G&K Tank Services*	

IV. Certification

I certify that I have personally examined and am familiar with the information submitted in this and all attached documents; and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Name G. Michael Lockman	
Signature G. Michael Lockman	Date 8/27/02

V. UST Information

	TANK 1	TANK 2	TANK 3	TANK 4	TANK 5
A. Product	*Gasoline*	*Gasoline*			
B. Capacity	*2000 gal*	*750 gal.*			
C. Age	*Unknown*	*Unknown*			
D. Construction Material	*Steel*	*Steel*			
E. Month/Year of Last Use	*Unknown*	*Unknown*			
F. Depth To Base of Tank	*8 feet.*	*8 feet*			
G. Spill Prevention Equipment	*No*	*No*			
H. Overfill Prevention Equipment	*No*	*No*			
I. Method of Closure	*Removal*	*Removal*			
J. Visible Corrosion or Pitting	*Yes*	*Yes*			
K. Visible Holes	*Yes*	*No*			

(843) 672-7614
(843) 672-6872

2 P-74 tanks RFG
By SCDOT

Who is the RP.?

ON 9-3-02 I spoke to Eddie Johnson, who knew Nothing about the 25K deductible. He will talk to his attorney + send Paperwork about the dealings w/ SCDOT.
CJA

L. Method of disposal for any USTs removed from the ground.

The USTs were removed and will be dismantled for scrap metal. Both tanks were transported to G&K Tank Services in Sumter, S.C. Disposal manifest are attached from G&K Tank Services that document disposal of the tanks.

M. Method of disposal for any liquid petroleum, sludges, or waste waters removed from the USTs.

Approximately 165 gallons of petroleum contaminated water was removed from the tanks. The contaminated water was transport to G&K Tank Services in Sumter, S.C. for disposal. Transportation manifest and certification of disposal are enclosed in attachment 4 of this report.

N. If any corrosion, pitting, or holes were observed, describe the extent and location for each UST.

Heavy corrosion/rust was evident on all three tanks.

VI. Piping Information

	TANK 1	TANK 2	TANK 3	TANK 4	TANK 5
A Construction Material *	*Steel*	*Steel*			
B. Distance from UST to Dispenser	*0*	*0*			
C. Number of Dispensers	*0*	*0*			
D Type of System (P/S)	*S*	*S*			
E. Was Piping Removed from Ground.	*Yes*	*Yes*			
F. Visible Corrosion or Pitting	*Yes*	*Yes*			
G Visible Holes	*No*	*No*			
H Age	*Unknown*	*Unknown*			

I. If any corrosion or pitting were observed, describe the location and extent for each hole.

Some light corrosion/rust was evident on the piping; however, no holes were evident.

VII. Brief Site Description and History

The subject site was reported to be a former service station. The underground tanks were discovered along the right-of-way of US Highway 601 North during grading and excavation work required to widen the highway. Currently, the site is operated as a restaurant named Eddie's Pit Stop. Eddie's Pit Stop consist of one small building with a gravel parking area. Mr. Eddie Johnson is the current property owner and reported that the tanks had been out of service since 1965. The property is served by municipal water and sewer service. Private water wells for irrigation or drinking water may be present within 1000 feet of the site. Soil samples were collected directly beneath the tanks after removal. Approximately 83 tons of petroleum contaminated soil was removed for disposal at G&K Tank Services in Sumter, S.C. The contaminated soil was removed to prevent adverse impact by petroleum hydrocarbons to the storm water drain system that was installed through the old tank basin. Disposal manifests are located in attachment 4 of this report.

VIII. Site Conditions

	YES	NO	UNK.
(A) Were any petroleum-stained or contaminated soils found in the UST excavation, soil borings, trenches, or monitor wells?	X		
(B) Were any petroleum odors detected in the excavation, soil borings, trenches, or monitor wells?	X		
(C) Was ground water encountered in the UST excavation, soil borings, or trenches?		*X*	
(D) Did contaminated soils remain stockpiled on the site after closure?		*X*	
(E) Was a petroleum sheen or free product detected on any excavation or boring waters?		*X*	

IX. Sample Information

SAMPLE ID	SAMPLE LOCATION	MATRIX	DEPTH (FT BGS)	DATE	TIME	COLLECTED BY
TB-1	*Tank Basin*	*Soil*	*8 feet*	*7/29/02*	*1430*	*S. Havird*
TB-2	*Tank Basin*	*Soil*	*8 feet*	*7/29/02*	*1430*	*S. Havird*
TB-3	*Tank Basin*	*Soil*	*8 feet*	*7/29/02*	*1430*	*S. Havird*
SP-1	*Soil Stockpile*	*Soil*	*N/A*	*7/29/02*	*1430*	*S. Havird*

X. Sampling Methodology

ARM personnel collected soil samples from the underground storage tanks basin. Soil samples were collected by hand directly from soils excavated, by a backhoe or shovel, from the ends of the USTs basin during the removal of the tanks. For each soil sample, approximately three cubic centimeters (cc) of soil were placed in each of two pre-weighed 40 ml vials containing organic free water. Also, for each sample, three cc of soil were placed in a pre-weighed 40 ml vial, which was then field preserved with a laboratory measured amount of methanol as a preservative. In addition to the 40 ml vials, one four ounce unpreserved glass container was filled with soil and submitted to the laboratory. All sample containers were then packed in ice for transport to the laboratory.

The complete laboratory analytical results and chain of custody records are included in Attachment 3.

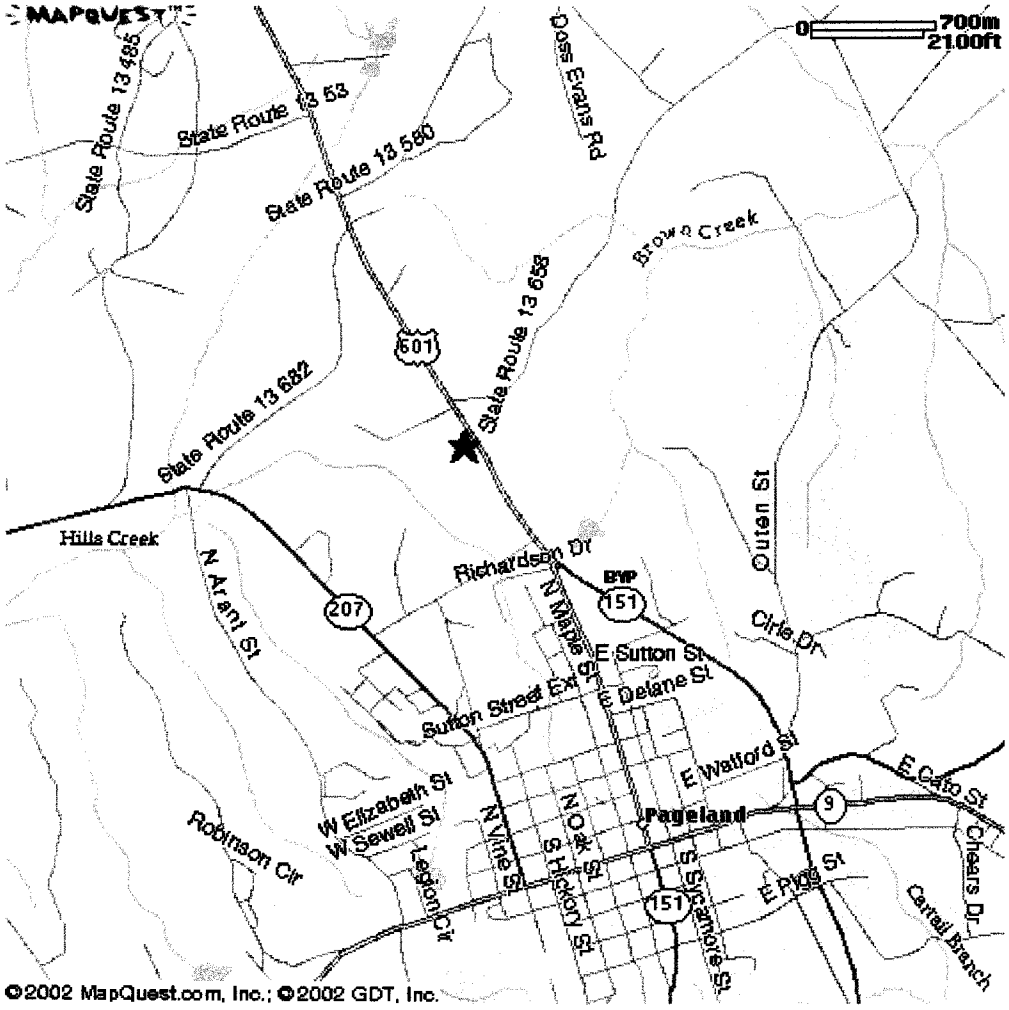
XI. Receptors

	YES	NO
(A) Are there any lakes, ponds, streams, or wetlands located within 1,000 feet of the UST system?		X
(B) Are there any public, private, or irrigation water supply wells within 1,000 feet of the UST piping system?	X*	
(C) Are there any subsurface structures located within 100 feet of the UST system?		X
(D) Are there any underground utilities located within 100 feet of the UST system that could potentially come in contact with the contamination?	X**	
(E) Has contaminated soil been identified at a depth of less than 3 feet below land surface in an area that is not capped by asphalt or concrete?	X	

* Private water supply and irrigation wells were report to be present within 1000 feet of the site.

* * Several underground utilities, including natural gas, sewer, and/or phone, storm drain, and water, are located within 100 feet of the UST system.

Attachment 1
Site Location Map

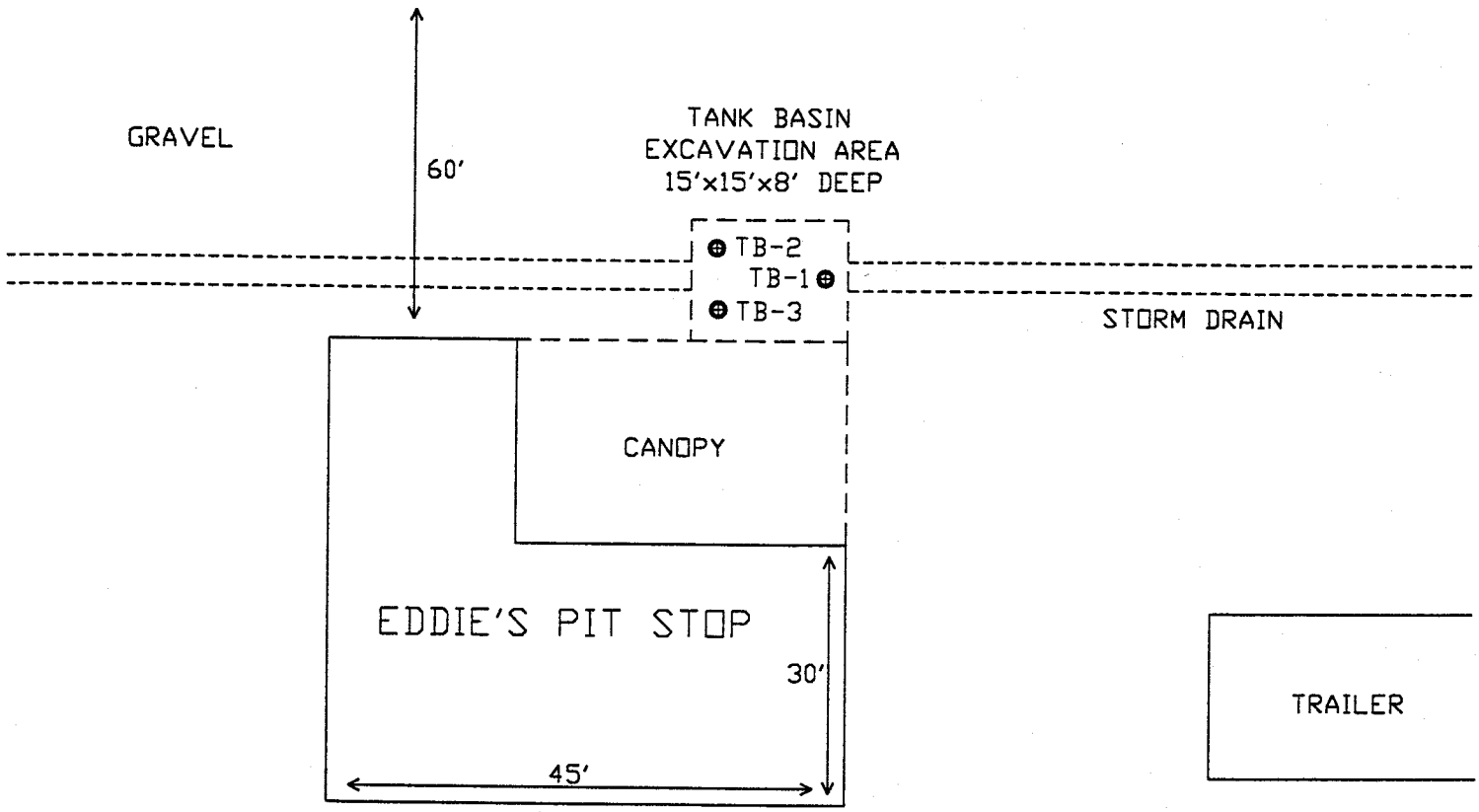


Project	**Figure 1**
TANK CLOSURE REPORT SCDOT 99-222 US Highway 601 Chesterfield County, South Carolina	Site Location Map

Scale	**Date**	
1 inch ≈ 2100 Ft	August 2002	ARM ENVIRONMENTAL SERVICES, INC.

Attachment 2

Site Plan with Sample Locations



PROJECT: SCDOT 99-222 U.S. HIGHWAY 601 CHESTERFIELD COUNTY, SC	DESCRIPTION: SITE MAP SHOWING SOIL SAMPLE LOCATIONS	*FIGURE 2* DATE: JULY 2002
ARM ENVIRONMENTAL SERVICES, INC.	LEGEND: ⊕ = SOIL SAMPLE	DRAWN BY: DN APPROVED BY: SH

Attachment 3

Laboratory Analytical Data

SHEALY ENVIRONMENTAL SERVICES, INC.
Scientists and Consultants

Report of Analysis

ARM Environmental Services, Inc.
1210 1st Street S. Ext.
Columbia, SC 29209
Attention : Sid Havird

Project Name : **SCDOT 99-222**

Lot Number : **DG31008**
Date Completed : **08/09/2002**

Jennifer Orr
Project Manager

Total number of pages in report : **6**

This report has been prepared and reviewed in accordance with Shealy's Quality Assurance Management Plan. Any data qualifiers associated with sample analysis are footnoted on the analytical results page(s). This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

The following non-paginated documents are considered part of this report: Chain Of Custody Record and Sample Receipt Checklist.

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

NC DEHNR No. 329

SC DHEC No. 32010

Client : **ARM Environmental Services, Inc.**
1210 1st Street S. Ext.
Columbia, SC 29209

Attention : **Sid Havird**
Project Name : **SCDOT 99-222**

Description : **TB-1**
Lot Number : DG31008-001

Date Sampled : 07/29/2002 1430
Matrix : Solid

Date Received : 07/31/2002

Parameter	Prep Method	Analytical Method	Result	Q	PQL	Units	Prep Date	Analysis Date	Analyst
Inorganic non-metals									
% Solids		160.3	**74.1**			%		07/31/2002 1331	MDC
Volatile Organic Compounds by GC/MS									
Benzene	5035	8260B	ND		310	ug/kg		08/06/2002 1833	RED
Ethylbenzene	5035	8260B	**7200**		310	ug/kg		08/06/2002 1833	RED
Naphthalene	5035	8260B	**10000**		310	ug/kg		08/06/2002 1833	RED
Toluene	5035	8260B	**820**		310	ug/kg		08/06/2002 1833	RED
Xylenes (total)	5035	8260B	**50000**		3100	ug/kg		08/08/2002 1926	RED
Surrogates									
1,2-Dichloroethane-d4	5035	8260B	94		53-142	%		08/06/2002 1833	RE
Bromofluorobenzene	5035	8260B	105		47-138	%		08/06/2002 1833	RE
Toluene-d8	5035	8260B	86		68-124	%		08/06/2002 1833	RE
Semivolatile Organic Compounds by GC/MS									
Acenaphthene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	L
Acenaphthylene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	L
Anthracene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	L
Benzo(a)anthracene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	L
Benzo(a)pyrene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	L
Benzo(b)fluoranthene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	L
Benzo(g,h,i)perylene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	L
Benzo(k)fluoranthene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	
Chrysene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	
Dibenzo(a,h)anthracene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	
Fluoranthene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	
Fluorene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	
Indeno(1,2,3-c,d)pyrene	3550B	8270C	ND		440	ug/kg	08/02/2002 1014	08/06/2002 1457	
Naphthalene	3550B	8270C	**1600**		440	ug/kg	08/02/2002 1014	08/06/2002 1457	

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result less than the PQL
E = Quantitation of compound exceeded the calibration range
Soils reported on a dry weight basis unless flagged with a "W"

Description	:	TB-2	Date Sampled	:	07/29/2002 1430
Lot Number	:	DG31008-002	Matrix	:	Solid
Client	:	ARM Environmental Services, Inc.			
Date Received	:	07/31/2002			

Parameter	Prep Method	Analytical Method	Result	Q	PQL	Units	Prep Date	Analysis Date	Analyst
Inorganic non-metals									
% Solids		160.3	**76.8**			%		07/31/2002 1331	MDC
Volatile Organic Compounds by GC/MS									
Benzene	5035	8260B	ND		340	ug/kg		08/06/2002 1857	RED
Ethylbenzene	5035	8260B	**6700**		340	ug/kg		08/06/2002 1857	RED
Naphthalene	5035	8260B	**7700**		340	ug/kg		08/06/2002 1857	RED
Toluene	5035	8260B	**3800**		340	ug/kg		08/06/2002 1857	RED
Xylenes (total)	5035	8260B	**85000**		3400	ug/kg		08/08/2002 1953	RED
Surrogates									
1,2-Dichloroethane-d4	5035	8260B	87		53-142	%		08/06/2002 1857	RED
Bromofluorobenzene	5035	8260B	106		47-138	%		08/06/2002 1857	RED
Toluene-d8	5035	8260B	83		68-124	%		08/06/2002 1857	RED
Semivolatile Organic Compounds by GC/MS									
Acenaphthene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Acenaphthylene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Anthracene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Benzo(a)anthracene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Benzo(a)pyrene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Benzo(b)fluoranthene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Benzo(g,h,i)perylene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Benzo(k)fluoranthene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Chrysene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Dibenzo(a,h)anthracene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Fluoranthene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Fluorene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Indeno(1,2,3-c,d)pyrene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Naphthalene	3550B	8270C	**7100**		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Phenanthrene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Pyrene	3550B	8270C	ND		430	ug/kg	08/02/2002 1014	08/06/2002 1537	LH
Surrogates									
2-Fluorobiphenyl	3550B	8270C	81		30-130	%	08/02/2002 1014	08/06/2002 1537	LH
Nitrobenzene-d5	3550B	8270C	85		30-130	%	08/02/2002 1014	08/06/2002 1537	LH
Terphenyl-d14	3550B	8270C	90		30-130	%	08/02/2002 1014	08/06/2002 1537	LH

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result less than the PQL
E = Quantitation of compound exceeded the calibration range
Soils reported on a dry weight basis unless flagged with a "W"

Description	:	**TB-3**	Date Sampled	:	07/29/2002 1430
Lot Number	:	DG31008-003	Matrix	:	Solid
Client	:	**ARM Environmental Services, Inc.**			
Date Received	:	07/31/2002			

Parameter	Prep Method	Analytical Method	Result	Q	PQL	Units	Prep Date	Analysis Date	Analyst
Inorganic non-metals									
% Solids		160.3	**61.9**			%		07/31/2002 1331	MDC
Volatile Organic Compounds by GC/MS									
Benzene	5035	8260B	ND		360	ug/kg		08/06/2002 1921	RED
Ethylbenzene	5035	8260B	**2200**		360	ug/kg		08/06/2002 1921	RED
Naphthalene	5035	8260B	**9400**		360	ug/kg		08/06/2002 1921	RED
Toluene	5035	8260B	ND		360	ug/kg		08/06/2002 1921	RED
Xylenes (total)	5035	8260B	**11000**		360	ug/kg		08/06/2002 1921	RED
Surrogates									
1,2-Dichloroethane-d4	5035	8260B	95		53-142	%		08/06/2002 1921	RED
Bromofluorobenzene	5035	8260B	120		47-138	%		08/06/2002 1921	RED
Toluene-d8	5035	8260B	89		68-124	%		08/06/2002 1921	RED
Semivolatile Organic Compounds by GC/MS									
Acenaphthene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Acenaphthylene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Anthracene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Benzo(a)anthracene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Benzo(a)pyrene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Benzo(b)fluoranthene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Benzo(g,h,i)perylene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Benzo(k)fluoranthene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Chrysene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Dibenzo(a,h)anthracene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Fluoranthene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Fluorene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Indeno(1,2,3-c,d)pyrene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Naphthalene	3550B	8270C	**1500**		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Phenanthrene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Pyrene	3550B	8270C	ND		530	ug/kg	08/02/2002 1014	08/06/2002 1617	LH
Surrogates									
2-Fluorobiphenyl	3550B	8270C	80		30-130	%	08/02/2002 1014	08/06/2002 1617	LH
Nitrobenzene-d5	3550B	8270C	83		30-130	%	08/02/2002 1014	08/06/2002 1617	LH
Terphenyl-d14	3550B	8270C	81		30-130	%	08/02/2002 1014	08/06/2002 1617	LH

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result less than the PQL
E = Quantitation of compound exceeded the calibration range
Soils reported on a dry weight basis unless flagged with a "W"

Description	: **SP-1**		Date Sampled	:	07/29/2002 1430
Lot Number	: DG31008-004		Matrix	:	Solid
Client	: **ARM Environmental Services, Inc.**				
Date Received	: 07/31/2002				

Parameter	Prep Method	Analytical Method	Result	Q	PQL	Units	Prep Date	Analysis Date	Analyst
Inorganic non-metals									
% Solids		160.3	**71.5**			%		07/31/2002 1331	MDC
Volatile Organic Compounds by GC/MS									
Benzene	5035	8260B	ND		310	ug/kg		08/06/2002 1946	RED
Ethylbenzene	5035	8260B	**320**		310	ug/kg		08/06/2002 1946	RED
Naphthalene	5035	8260B	**1400**		310	ug/kg		08/06/2002 1946	RED
Toluene	5035	8260B	ND		310	ug/kg		08/06/2002 1946	RED
Xylenes (total)	5035	8260B	**2300**		310	ug/kg		08/06/2002 1946	RED
Surrogates									
1,2-Dichloroethane-d4	5035	8260B	88		53-142	%		08/06/2002 1946	RED
Bromofluorobenzene	5035	8260B	88		47-138	%		08/06/2002 1946	RED
Toluene-d8	5035	8260B	84		68-124	%		08/06/2002 1946	RED
TPH - DRO									
TPH-DRO	3550B	8015B	**39000**	@	4600	ug/kg	08/01/2002 1056	08/05/2002 2100	RZ
Surrogates									
o - Terphenyl	3550B	8015B	83		50-130	%	08/01/2002 1056	08/05/2002 2100	RZ
TPH - GRO									
TPH-GRO	5030B	8015B	**300000**		35000	ug/kg		08/08/2002 1639	DLB
Surrogates									
Trifluorotoluene	5030B	8015B	84		70-130	%		08/08/2002 1639	DLB

Footnote(s) : @Hydrocarbon pattern is unknown.

PQL = Practical quantitation limit
ND = Not detected at or above the PQL
B = Detected in the method blank
J = Estimated result less than the PQL
E = Quantitation of compound exceeded the calibration range
Soils reported on a dry weight basis unless flagged with a "W"

Sample Receipt Checklist

Client: ARM Cooler received by/date: [illegible] 7-31-02 Lot number: DG31068

Means of receipt: ☒ SESI ☐ Client ☐ UPS ☐ FedEx ☐ DirectX ☐ Other

Cooler temperature upon receipt 5.4 °C
Method: ☐ Temperature Blank ☒ Against Bottles
Method of coolant: ☒ Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ None

Yes ☐	No ☐	NA ☒	1. Is the shipper's packing slip attached to this form? (if applicable)
Yes ☒	No ☐	NA ☐	2. Was a chain of custody provided with the samples?
Yes ☒	No ☐	NA ☐	3. Were proper custody procedures followed?
Yes ☒	No ☐	NA ☐	4. Was the client name listed?
Yes ☒	No ☐	NA ☐	5. Were sample IDs listed?
Yes ☒	No ☐	NA ☐	6. Was collection date & time listed?
Yes ☒	No ☐	NA ☐	7. Were the tests to be performed listed on either the C of C or quote?
Yes ☒	No ☐	NA ☐	8. Did all samples arrive in the proper containers for each test?
Yes ☒	No ☐	NA ☐	9. Did all bottle labels agree with custody papers?
Yes ☒	No ☐	NA ☐	10. Did all containers arrive in good condition (unbroken)?
Yes ☒	No ☐	NA ☐	11. Was adequate sample volume available?
Yes ☐	No ☒	NA ☐	12. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
Yes ☐	No ☒	NA ☐	13. Were any samples containers missing?
Yes ☐	No ☒	NA ☐	14. Were there any excess samples not listed on C of C?
Yes ☐	No ☐	NA ☒	15. Were air bubbles >6 mm in any VOA vials (if applicable)?
Yes ☐	No ☐	NA ☒	16. Were all Metals; Oil & Grease; Nutrient samples received at a pH of <2?
Yes ☐	No ☐	NA ☒	17. Were all Cyanide; Sulfide samples received at a pH >12?
Yes ☐	No ☐	NA ☒	18. Were all NH3; TKN; Cyanide; BNA; PEST; PCB; HERB; Toxicity samples free of residual chlorine? (< 0.1 mg/L)
Yes ☐	No ☐	NA ☒	19. For North Carolina samples, were collection temperatures documented on the chain of custody?

Sample Preservation (Must be completed for any sample(s) incorrectly preserved.)

Sample(s) _____ were received incorrectly preserved and were adjusted accordingly in sample receiving.

Sample(s) _____ were received incorrectly preserved and were unable to be analyzed.

Sample(s) _____ were received with bubble >6 mm in diameter

Toxicity sample(s) _____ were received with TRC > 0.1 mg/L and were analyzed by method 330.5.

Corrective Action taken, if necessary:

Was client notified: Yes ☐ No ☐
Did client respond: Yes ☐ No ☐
Date of response: _____
SESI employee: _____
Client instructions / Comments:

_____

_____

_____

_____

ENVIRONMENTAL SERVICES, INC.
ASSESSMENT & REMEDIAL SERVICES DIVISION

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

210 1st STREET SOUTH EXTENSION COLUMBIA, SOUTH CAROLINA 29209
PHONE 803-783-3314 FAX 803-783-2587

PROJECT #	PROJECT NAME
	SCDOT 99-222

SAMPLERS SIGNATURE	LABORATORY UTILIZED
Sid Havird	Shealy

SAMPLE I.D.	DATE	TIME	COMP	GRAB	LOCATION	NUMBER OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	REQUESTED PARAMETERS: BTEX, naphth	PAHs	TPH GRO	TPH DRO	
TB-1	7/29/02	2:30Pm		✓	TANK basin	5	X		X	X			DG-3100R
TB-2	7/29/02	2:30Pm		✓	TANK basin	5	X		X	X			
TB-3	7/29/02	2:30Pm		✓	TANK basin	5	X		X	X			
SP-1	7/29/02	2:30Pm		✓	Soil stockpile	5	X		X		X	X	

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
Sid Havird	7/31/02 7/30/02	0905		7/31	0905
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
	7/31/02	1000		7/31/02	1000

PROJECT MANAGER: Sid Havird
P.O. NUMBER:

REMARKS: 45601 - Pageland, S.C.

574C

Attachment 4
Disposal Manifests

Aug 16 02 05:03p Glasscock 803-494-8598 p.9

Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tank # 1 @ 750 gallon
1 @ 2,000 gallon
SC File 13.629
Chesterfield, SC

Size
purged underground storage tanks

This is to certify that the above tank has been disposed of by G&K Tank Services, Inc., in accordance with and exceeding EPA regulations on Petroleum Tank Disposal.

Certified by S. Gilley

Date 07/29/02

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. GK4705

2. Page 1 of 07/29/02

3. Generator's Name and Mailing Address
SC FILE #13,629
ED'S 5TI STOP
CHESTERFIELD, SC

4. Generator's Phone ( )

5. Transporter 1 Company Name
G&K TANK SERVICES, INC.

6. US EPA ID Number

A. Transporter's Phone 800-800-6840

7. Transporter 2 Company Name

8. US EPA ID Number

8. Transporter's Phone

9. Designated Facility Name and Site Address
G & K TANK SERVICES INC
5070 BROAD STREET EXT
SUMTER, SC 29151

5.80
7.30

10. US EPA ID Number

C. Facility's Phone
803-494-4593

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINATED PRODUCT	3	DM	165	GAL
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
C RAY NILES ED KOLB
P.O. BOX 1477
LUGOFF, SC

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name | Signature | Month | Day | Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: FRANK Tidwell Jr. | Signature: Frank Tidwell | Month 07 | Day 29 | Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: S. Collett | Signature: S. Collett | Month 07 | Day 29 | Year 02

GENERATOR

TRANSPORTER

FACILITY

TRANSPORTER #1

Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 165 gallons
SC File 13.629
Chesterfield, SC

Contaminant NonHazardous Petroleum
Contaminanted Product

This is to cerify the above ~~soil~~ product has been processed and disposed of by G & K Tank Services, Inc., in accordance with and exceeding EPA regulations on petroleum contaminated soils.

Certified by S. Collins

Date 07/29/02

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
	GK4705	07/29/02

GENERATOR

3. Generator's Name and Mailing Address
SC FILE #13.629
CHESTERFIELD COUNTY
PAGELAND, SC

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
G&K TANK SERVICES, INC.		800-800-6840
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
9. Designated Facility Name and Site Address	10. US EPA ID Number	C. Facility's Phone
G & K TANK SERVICES, INC 3070 BROAD STREET EXT SUMTER, SC 29151		803-494-4593

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINATED SOIL	1	DT	13.66 ~~22~~	TN ~~TON~~
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
C RAY MILES ED KOLB
P.O. BOX 1477
LUGOFF, SC

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
DAN FELDER	Dan Felder	8	2	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
John WATT		10	7	02

TRANSPORTER # 1

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. GK4705 | 2. Page 1 of | 07/29/02

3. Generator's Name and Mailing Address
SC FILE #13,629
CHESTERFIELD COUNTY
PAGELAND, SC

4. Generator's Phone ( )

5. Transporter 1 Company Name: G&K TANK SERVICES, INC. | 6. US EPA ID Number | A. Transporter's Phone: 800-800-6840

7. Transporter 2 Company Name | 8. US EPA ID Number | B. Transporter's Phone

9. Designated Facility Name and Site Address
G & K TANK SERVICES, INC
5070 BROAD STREET EXT
SUMTER, SC 29151

10. US EPA ID Number | C. Facility's Phone: 803-494-4593

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINATED SOIL	1	DF	20.75 TN	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
C RAY MILES ED KOLB
P O BOX 1477
LUGOFF, SC

GENERATOR

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Printed/Typed Name: Terry Johnson | Signature | Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Terry Johnson | Signature: Terry Johnson | Month 7 Day 29 Year 02

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: HAROLD DERENHARTY | Signature: Harold Derenharty | Month 7 Day 29 Year 2002

TRANSPORTER # 1

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
	GK4705	07/29/02

3. Generator's Name and Mailing Address
SC FILE #13,629
CHESTERFIELD COUNTY
PAGELAND, SC

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
G&K TANK SERVICES, INC.		800-800-6840
7. Transporter 2 Company Name	**8. US EPA ID Number**	**8. Transporter's Phone**
9. Designated Facility Name and Site Address	**10. US EPA ID Number**	**C. Facility's Phone**
G & K TANK SERVICES, INC 5070 BROAD STREET EXT SUMTER, SC 29151		803-494-4593

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINATED SOIL			20.01	TN
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
C RAY MILES ED KOLB
P O BOX 1477
LUGOFF, SC

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
James T Bolden	James T Bolden	7	29	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
HAROLD Beneahley	H. Dew	7	29	2002

GENERATOR

TRANSPORTER

FACILITY

TRANSPORTER #1

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of
	GK4705	07/29/02

GENERATOR

3. Generator's Name and Mailing Address: SC FILE #13 629 CHESTERFIELD COUNTY PAGELAND, SC

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone
G&K TANK SERVICES, INC.		800-800-6840
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
9. Designated Facility Name and Site Address: G & K TANK SERVICES, INC 5070 BROAD STREET EXT SUMTER, SC 29151	10. US EPA ID Number	C. Facility's Phone: 803-494-4593

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINATED SOIL			24.25 25T	TN
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information:
C. RAY MILES ED KOLB
P.O. BOX 1477
LUGOFF, SC

Bill Robinson O. Ray Miles Const

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Tyson F. Davis	Tyson F. Davis	07	29	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Tyson F. Davis	Tyson F. Davis	07	29	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Spencer Rowe	Spencer Rowe	7	29	02

TRANSPORTER #1

Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 83.67 tons
SC File 13.629
Chesterfiled, SC

Contaminant NonHazardous Petroleum Contaminanted Soil

This is to cerify the above soil has been processed and disposed of by G & K Tank Services, Inc., in accordance with and exceeding EPA regulations on petroleum contaminated soils.

Certified by T. Colley

Date 07/29/02

PROJECT TRANSFER CHECKLIST

Site Name/Full ID # Eddres Pit Shop ID# 18871

Release # 1 For UST # 001-002 Release Report Date 8-29-02

Free Product Reported? Yes / (No) **Impacted Water Supply Well Reported?** Yes / (No)

Receptor(s) within 1000 feet of UST system? **(Well / Surface Water Body / Wetland / Other)**

Worst Case Analysis / Sample #	Soil (mg/kg) / #TB-2	Water (ug/l) / #
Benzene	<0.340	
Toluene	3.80	
Ethylbenzene	6.70	
Xylenes	85.00	
Naphthalene	7.70	
Benzo(a)anthracene	<0.430	
Benzo(b)flouranthene	<0.430	
Benzo(k)flouranthene	<0.430	
Chrysene	<0.430	
Dibenz(a,h)anthracene	<0.430	
MTBE (water only)		
Other _____		

REGULATORY INFORMATION

1. All USTs Registered? (Yes) / No / NA
2. Regulatory PM Hightocw
3. All Applicable Annual Fees Paid? Yes / No / NA Pre-74 ~~tanks~~
4. Financial responsibility Certification Received? Yes / No / NA Type _____
5. Site In Substantial Compliance? Yes / No / NA
6. Insurance Statement Received? Yes / No / NA Dated _____
7. UST Status (account for all USTs in database)

✓ USTs Permanently Closed Date Closed 7-29-02

_____ USTs CIU & Passed TT Date Tested _____

_____ USTs TOU & Emptied Date Emptied _____

South Carolina
Department of Transportation

July 24, 2002

Mr. Eddie M. Johnson
Rural Route 2
Pageland, SC 29728

Subject: Widening of Highway 601

Dear Mr. Johnson

As you are aware Highway 601 that passes in front of your business is under construction to add additional lanes. The construction will affect you business in the following manner:

The two two thousand gallon tanks located in front of your business will have the contents removed on Monday, July 29, 2002 followed by the tank removal and soil remediation as necessary.

Immediately following the tank removal and remediation the pipe installation will begin along with the backfill efforts. The installation of the pipe and fill will leave a shoulder drop-off of approximately three feet with a 2:1 slope which equates to six horizontal feet. This in itself will prohibit customer parking in the existing area

Also, before the pipe is installed a portion of the existing canopy will be removed to allow for the pipe installation and fill effort.

If I can answer any question or provide additional information please call me at 623-6988.

Sincerely,

Mark C. Attaway

Mark C. Attaway
Resident Construction Engineer

cc: John McCarter

AN EQUAL OPPORTUNITY/

File #5673

State of South Carolina) In the Court of Common Pleas
)
County of Chesterfield) C/A No. 01-CP-13-87

Road/Route US Route **US ROUTE 601**
File **13.629**
Item **300315**
Project **BNH-PDCB(004)**
PIN **17179**

South Carolina Department of Transportation,

Condemnor,

vs.

Eddie M. Johnson,

Landowner(s).

and

First Citizens Bank and Trust Company of South Carolina, Mortgagee,

Other Condemnee(s)

RELEASE

WHEREAS, the South Carolina Department of Transportation (SCDOT), filed a Condemnation Notice on Eddie M. Johnson, Landowner and Carolina Bank and Trust, Mortgagee on March 30, 2001, to acquire certain property necessary for the construction of the above-referenced highway project; and

WHEREAS, the property being acquired is more specifically set forth in the Condemnation Notice and SCDOT plans for the above-referenced project, which Condemnation Notice and plans are incorporated herein by reference; and

WHEREAS, the Landowner initially rejected SCDOT's Tender of Payment of **SIXTEEN THOUSAND TWO HUNDRED AND 00/100 ($16,200.00)** as

Law Offices
Harris,McLeod & Ruffner
Post Office Drawer 1449
222 Market Street
Cheraw, South Carolina
(843) 537-5204

just compensation for the property, including any and all damages and benefits to the remainder; and

WHEREAS, prior to the trial of this case, the parties agreed upon the sum of **FORTY THOUSAND AND NO/100 DOLLARS ($40,000.00)** as just compensation for the property, including any and all damage and benefits to the remainder, such sum to be paid by SCDOT to the Landowner and mortgagee for the acquisition of the property condemned by SCDOT; and

WHEREAS, the Condemnor and Landowner further agree that this case has been settled, and that this case should be ended and stricken from the calendar, and that the above-entitled action should be and is dismissed with prejudice;

KNOW ALL MEN BY THESE PRESENTS, that for and in consideration of the sum of **FORTY THOUSAND AND NO/100 DOLLARS ($40,000.00)** paid to the Landowner and Mortgagee by SCDOT, receipt of which is hereby acknowledged, the Landowner, by and through his representative below, for himself, his executors, administrators, beneficiaries and assigns and the Mortgagee hereby acknowledge the aforesaid sum as payment in full of just compensation as a result of the aforesaid condemnation and acquisition by SCDOT, and does hereby release, acquit and forever discharge the State of South Carolina, it agencies, departments, institution, boards and commissions, and officials, agents or employees thereof or successors thereto, and particularly SCDOT from any and all claims, demands, damages, actions, causes of action, and suits at law or in equity, of whatsoever kind or nature, arisen, arising, or to arise from or because of any matter relating to the above-referenced project.

(signatures on the next page)

Law Offices

Harris,McLeod & Ruffner

Post Office Drawer 1449
222 Market Street
Cheraw, South Carolina
(843) 537-5204

IN WITNESS WHEREOF, we have hereunto set our hands and seals this 26th day of August, 2002.

IN THE PRESENCE OF:

Lou Ellen Rowell (Sign name)

LOU ELLEN ROWELL (Print name)

Sharon D Johnson (Sign name)

Sharon G Johnson (Print name)

Eddie M. Johnson
Eddie M. Johnson
Landowner

Lou Ellen Rowell (Sign name)

LOU ELLEN ROWELL (Print name)

Sharon D Johnson (Sign name)

Sharon G Johnson (Print name)

J. Mitchell Craig VP
First Citizens Bank & Trust
Mortgagee

Law Offices

Harris,McLeod & Ruffner

Post Office Drawer 1449
222 Market Street
Cheraw, South Carolina
(843) 537-5204

#5673

State of South Carolina	)	In the Court of Common Pleas
	)	
County of Chesterfield	)	C/A No. 01-CP-13-87

Road/Route US Route **US ROUTE 601**
File **13.629**
Item **300315**
Project **BNH-PDCB(004)**
PIN **17179**

South Carolina Department of Transportation,

Condemnor,

vs.

Eddie M. Johnson,

Landowner(s).

and

First Citizens Bank and Trust Company of South Carolina, Mortgagee,

Other Condemnee(s)

FILED
CLERK OF COURT
2002 NOV 7 AM 10 53
CHESTERFIELD S.C.
BOOK ____ PAGE ____

CONSENT ORDER OF DISMISSAL

This matter comes before the court upon the motion of the Condemnor, South Carolina Department of Transportation, and with the consent of both parties, pursuant to Rule 41(a)(2)of the South Carolina Rules of Civil Procedure, for an Order to end this case because the case has been settled pursuant to the Code of Laws of South Carolina, §28-2-40(1987).

WHEREAS the Condemnor and Landowner(s) have agreed that **FORTY THOUSAND AND 00/100 DOLLARS ($40,000.00)** is just compensation of the Landowner(s) for the Condemnor's acquisition of the above-referenced property; and

WHEREAS the Condemnor and Landowner have agreed that this case has been settled and therefore should be ended and stricken from the calendar, that the monies on deposit with the Clerk of Court, **SIXTEEN**

THOUSAND TWO HUNDRED AND 00/100 DOLLARS ($16,200.00) plus any accrued interest, should be returned to the South Carolina Department of Transportation, and that the above-entitled action be and is dismissed with prejudice;

IT IS THEREFORE ORDERED that this case be ended and stricken, with prejudice, from the calendar; that the Clerk of Court return the monies on deposit with the Court to the South Carolina Department of Transportation, c/o Mr. Oscar Rucker, Director of Rights of Way, P.O. Box 191, Columbia, South Carolina 29202; that the Clerk of Court annotate a copy of the Condemnation Notice with the date and amount of settlement as **FORTY THOUSAND AND 00/100 Dollars ($40,000.00)** and file the annotated Condemnation Notice with the Register of Mesne Conveyance for Chesterfield County, duly indexed, as provided by law for the recording and indexing of deeds, showing the transfer to the property to the Condemnor, such filing being exempt from filing fees as provided under Code of Laws of South Carolina, §12-24-40 (Cum. Supp. 1997).

AND IT IS SO ORDERED:

The Honorable J. Michael Baxley
Circuit Court Judge
Fourth Judicial Circuit

In Chesterfield, South Carolina
August _____, 2002

WE CONSENT TO THE ABOVE ORDER:

Andrew F. McLeod
Attorney for Condemnor SCDOT
Harris, McLeod & Ruffner
P.O. Drawer 1449
Cheraw, South Carolina 29512
(843) 537-5204

William O. Spencer, Jr.
Attorney for the Condemnee
Spencer Law Firm
Post Office Box 190
Chesterfield, S.C. 29550
(843)623-2144

Eddie M. Johnson
Landowner

First Citizens Bank & Trust

by Michael Casker VP
its:

Terracon

November 16, 2010

Ms. Minda Johnson
SCDHEC
Bureau of Land and Waste Management
UST Program
2600 Bull Street
Columbia, SC 29201

Re: Tier II Assessment Plan
Eddie's Pit Stop
Rt. 2, US Hwy 601 North, Pageland, SC
UST Permit # 18871

Dear Ms. Johnson:

On behalf of South Carolina Department of Transportation (SCDOT), **Terracon Consultants, Inc.**, is pleased to submit this Tier II assessment plan and associated cost agreement for additional assessment at the above referenced site. The scope of work was prepared to define the extent of the hydrocarbon plume in accordance with the South Carolina Department of Health and Environmental Control (SCDHEC) Tier II Assessment Guidance Document dated December 6, 2005. The costs were prepared as per the SUPERB account allowable costs dated January 10, 2006. All work will be performed in accordance with SCDHEC guidelines for Risk-Based Corrective Action.

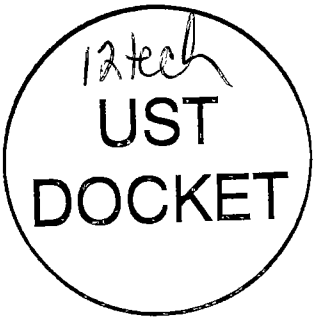
Please do not hesitate to contact me if you have any questions or comments.

Respectfully submitted,

Terracon Consultants, Inc.

P. Michael Hudgins, P.G.
Senior Hydrogeologist

PMH:pmh



Attachments
Tier II Assessment Plan
Assessment Component Cost Agreement
Site Map with Proposed Screening and Monitoring Well Locations

CC: Mr. Peter Reinhart / SCDOT

Terracon Consultants, Inc. 521 Clemson Road Columbia, South Carolina 29229
P [803] 741 9000 F [803] 741 9900 terracon.com

SCANNED

Tier II Assessment Plan

Underground Storage Tank Program

UST Permit # 18871 **County** Chesterfield **Facility Name** Eddie's Pit Stop

Facility Address Rt. 2, US Hwy 601 North, Padgeland, SC

Responsible Party SCDOT **Address** P.O. Box 191, Columbia, SC 29202-0191

No. USTs 2 **removed?** 2 removed **replaced?**

Current use of facility/property Vacant Building

Current property owner name SCDOT

Current property owner address P.O. Box 191, Columbia, SC 29202-0191

Field Screening Methodology

20 Groundwater Screening Borings will be installed to evaluate the side-gradient and downgradient extent of hydrocarbon impact to ground water as follows:

- 17 shallow depth borings will be advanced using Hollow Stem Auger equipment to a depth of 25 feet, approximately 8 feet into the shallow water table (425 ft).
- 2 deep boring will be advanced to identify water-bearing zones to 60 feet. (120 ft)

Ground water samples will be collected through the Geoprobe sampling equipment, placed into resealable plastic bags, and screened for organic vapors. If the OVA results indicate plume delineation, a groundwater sample will be submitted for laboratory analysis to ensure downgradient and vertical delineation prior to construction of permanent wells. Ground water screening samples will be submitted for laboratory BTEX, MTBE, and naphthalene analysis by Method 8260.

If the field or laboratory analytical results indicate the downgradient impact has not been defined, any temporary wells will be abandoned and additional temporary wells will be installed farther away from the source, sampled, and the results submitted to the SCDHEC project manager. All screening locations and results will be submitted to the SCDHEC for approval prior to installation of permanent wells.

Permanent Monitoring wells (estimate number and total completed depth)

# of shallow wells 8 **total depth** 200 (25 ft. ea.)

# of deep (Type III) wells 2 **total depth** 120 (60 ft. ea.)

Comments, if warranted

Eight shallow wells are proposed to be installed and will be determined based on the field and laboratory screening results.

Two deep wells are proposed to be paired with monitoring well MW-2 to a depth of 60 feet. The other deep monitoring well be installed down gradient of the old UST basin based upon screening results.

UST Permit # 18871 **Facility Name** Eddies Pit Stop

Analyses - List the analytical parameters (e.g., BTEX, MTBE) and estimated number.

Soil:

- 1 grain size analyses; collected from the lower portion of the shallow aquifer

Ground water:

- 19 samples for BTEX, MTBE, Naphthalene; collected from the 19 ground water screening points;
- 17 samples analyzed for BTEX, MTBE, Naphthalene; total lead; 1,2 DCA; EDB; and 8 oxygenates; from 5 existing wells,10 new wells, and 2 water supply wells. Nitrates; sulfate; ferrous iron; methane from the 10 new wells only.

Implementation Schedule
Start up date upon SCDHEC approval **Completion date** 60 days after SCDHEC approval
Report submittal date 90 days after SCDHEC approval

Site Maps

1. **Attach a copy of the relevant portion of the USGS topographic map showing the site location.**
2. **Prepare a site base map. The map must include the following:**

North Arrow	Legend with facility name and address, Site ID number, date and a bar scale
Location of property lines	Streets or highways (indicate names and numbers)
Location of buildings	Identification of located buildings
Paved areas on or adjacent to the site	Location of all present and former ASTs and USTs
Previous soil sampling locations	Underground and above ground utilities on or adjacent to the site
Previous monitoring well locations	Location of any other potential receptor

Aquifer Characterization (Check one and provide explanation for choice)
Pump Test _____ **Slug Tests** 1 (1 deep well)

Slug tests are necessary to estimate the hydraulic conductivity of the aquifer downgradient from the release.

Small Volume Disposal Type and Method

Soil: Impacted soil from the borings will be placed in 55-gallon drums, temporarily stored on site, and properly disposed by a licensed contractor.

Purge Water: Water and product from the monitoring wells will be placed in 55-gallon drums, temporarily stored on site and properly disposed by a licensed contractor.

Additional Comments:

ASSESSMENT COMPONENT COST AGREEMENT
SOUTH CAROLINA
Department of Health and Environmental Control
Underground Storage Tank Program
State Underground Petroleum Environmental Response Bank

Facility Eddie's Pit Stop

UST Permit # 18871 **CA#** _____

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1 Plan*				
A. Plan Preparation	1	x	$100.00	**$100.00**
B. Tax Maps		x	$50.00	**$0.00**
2. Receptor Survey*		x	$500.00	**$0.00**
3. Comprehensive Survey		x	$1,000.00	**$0.00**
4. Mob/Demob				
A. Equipment	2	x	$575.00	**$1,150.00**
B. Personnel	4	x	$290.00	**$1,160.00**
C. Adverse Terrain Vehicle		x	$550.00	**$0.00**
5. Soil Borings (hand augered)*		feet x	$14.00	**$0.00**
6. Soil Borings (drilled) & Field Screening	(includes collection and quantification)			
A. Standard	545	feet x	$17.00	**$9,265.00**
B. Alternative, on-site		feet x	$12.50	**$0.00**
C. Fractured Rock		feet x	$27.50	**$0.00**
7. Soil Leachability Model		x	$200.00	**$0.00**
8. Abandonment* (separate from #5 and #6)	545	feet x	$5.00	**$2,725.00**
9. Well Installation*	(includes drilling costs)			
A. Water Table (hand auger)		feet x	$20.00	**$0.00**
B. Water Table	200	feet x	$38.00	**$7,600.00**
C. Telescoping	120	feet x	$58.00	**$6,960.00**
D. Rock Drilling		feet x	$58.00	**$0.00**
E. 2" Rock Coring		feet x	$44.10	**$0.00**
F. 4" Rock Coring		feet x	$50.40	**$0.00**
G. Multi Sampling Ports/screen intervals		feet x	$47.20	**$0.00**
10. Sample collection				
A. Groundwater	10	samples x	$55.00	**$550.00**
B. Air Vapor		samples x	$90.00	**$0.00**
C. Water Supply		samples x	$25.00	**$0.00**
D. Groundwater No Purge	5	samples x	$35.00	**$175.00**
E. Gauge Well Only		samples x	$20.00	**$0.00**
F. Sample Below Product		samples x	$50.00	**$0.00**
G. Passive Diffusion Bag		samples x	$40.00	**$0.00**
11. Analyses-Groundwater	(See Analytical Methodology for site specific analyses)			
A. BTEX+Napth.+MTBE	36	samples x	$100.00	**$3,600.00**
B. BTEX+Napth.+MTBE **RUSH Analysis**		samples x	$120.00	**$0.00**
C. BTEX+Napth.+MTBE+Trimethylbenzene		samples x	$135.00	**$0.00**
D. PAH's		samples x	$120.00	**$0.00**
E. Lead	17	samples x	$20.00	**$340.00**
F. EDB	17	samples x	$55.00	**$935.00**
G. 8 RCRA Metals		samples x	$140.00	**$0.00**
H.TPH (9070)		samples x	$55.00	**$0.00**
J. BOD		samples x	$40.00	**$0.00**
K. Nitrate	10	samples x	$20.00	**$200.00**
L. Sulfate	10	samples x	$20.00	**$200.00**
M. Ferrous Iron	10	samples x	$20.00	**$200.00**
N. Methane	10	samples x	$110.00	**$1,100.00**
O. Organic Lead		samples x	$100.00	**$0.00**
P. 8 Oxygenates	17	samples x	$85.00	**$1,445.00**
AA. Filtered Lead		samples x	$46.00	**$0.00**
BB. 1,2, DCA	17	samples x	$10.75	**$182.75**
11 Analyses-Soil				
Q. BTEX + Napth.		samples x	$100.00	**$0.00**
R. PAH's		samples x	$120.00	**$0.00**
S. 8 RCRA Metals		samples x	$150.00	**$0.00**

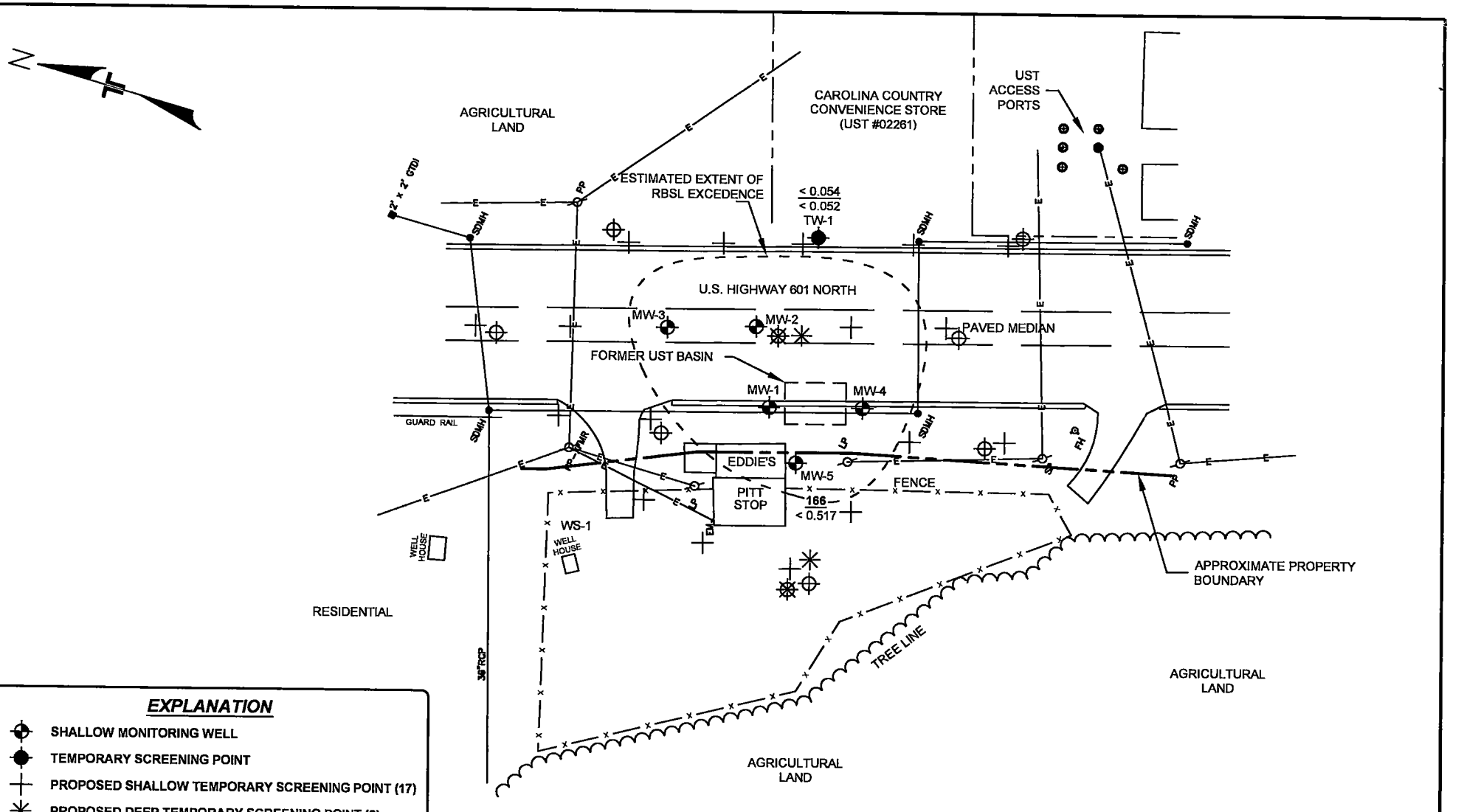
Facility Eddie's Pit Stop

UST Permit # 18871 **CA#**

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
T. TPH (9071)		samples x	$60.00	$0.00
U. TPH (3550)		samples x	$65.00	$0.00
V. TPH(5035)		samples x	$65.00	$0.00
W. Grain size / hydrometer	1	samples x	$75.00	$75.00
X. Total Organic Carbon		samples x	$35.00	$0.00
11. Analyses-Air				
Y. BTEX + Naphthalene		samples x	$100.00	$0.00
Z. Hydrocarbon Fuel Identification		samples x	$620.00	$0.00
12. Aquifer Characterization*				
A. Pumping Test		hours x	$120.00	$0.00
B. Slug test	1	tests x	$150.00	$150.00
C. Fractured Rock		tests x	$500.00	$0.00
13. Free Product Recovery Rate Test*		tests x	$120.00	$0.00
14. Fate & Transport Modeling				
A. Mathematical Model		models x	$300.00	$0.00
B. Computer Model		models x	$500.00	$0.00
15. Risk Evaluation				
A. Tier I		x	$301.00	$0.00
B. Tier II		x	$500.00	$0.00
16. Subsequent Survey*	1	x	$260.00	$260.00
17. Disposal				
A. Wastewater				
1. Purging/Sampling	10	drums x	$90.00	$900.00
2. Pumping test/AFVR		gallons x	$0.60	$0.00
B. Free Product		drums x	$110.00	$0.00
C. Soil (Treatment/Disposal)*	41	tons/drum	$50.00	$2,050.00
18. Miscellaneous Attach paid invoice receipts				
		x		$0.00
		x		$0.00
23. AFVR				
A. 8-Hour Event*		x	$3,000.00	$0.00
B. Additional Hour		x	$204.00	$0.00
C. Off-Gas Treatment		x	$35.00	$0.00
24. Granular Activated Carbon (GAC) filter System installation/service				
A. New GAC System Installation		x	$2,500.00	$0.00
B. Refurbished GAC System Installation		x	$850.00	$0.00
C. Filter Replacement/removal*		x	$450.00	$0.00
D. GAC System Removal, cleaning & refurbishment		x	$450.00	$0.00
E. GAC System housing		x	$450.00	$0.00
F. In-line particulate filter		x	$140.00	$0.00
G. Additional piping & fittings		x	$4.00	$0.00
25. Well Repair				
A. Additional Copies of Report		each x	$5.00	$0.00
B. Repair 2x2 monitoring well pad		each x	$100.00	$0.00
C. Repair 4x4 monitoring well pad		each x	$150.00	$0.00
D. Replace well vault		each x	$225.00	$0.00
E. Replace well cover and gasket		each x	$30.00	$0.00
F. Replace well cover bolts		each x	$10.00	$0.00
G. Replace locking well cap & lock		each x	$15.00	$0.00
19. Report/Project Management and Coordination			(SUBTOTAL)	
	15%	x	$41,322.75	$6,198.41
25. **Total**				$47,521.16

DHEC 3664 (12/20/05)

*** The appropriate Mobilization cost can be added to this cost**



EXPLANATION

- SHALLOW MONITORING WELL
- TEMPORARY SCREENING POINT
- PROPOSED SHALLOW TEMPORARY SCREENING POINT (17)
- PROPOSED DEEP TEMPORARY SCREENING POINT (2)
- PROPOSED SHALLOW MONITORING WELL (6)
- PROPOSED DEEP MONITORING WELL (2)
- 166 BENZENE CONCENTRATION IN µg/L
- < 0.517 MTBE CONCENTRATION IN µg/L
- µg/L TEMPORARY MONITORING WELL

CONCENTRATION IN BOLD EXCEED RBSLs.

60 0 10 20 30 60

SCALE IN FEET

Project Mngr:	RWN
Drawn By:	PTK
Checked By:	RWN
Approved By:	PMH
Project No	73098106
Scale	AS SHOWN
File No	73098106
Date	NOVEMBER 2010

Terracon
Consulting Engineers and Scientists
521 CLEMSON ROAD COLUMBIA, SC 29229
PH. (803) 741-9000 FAX (803) 741-9900

PROPOSED TIER II SCREENING LOCATIONS

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA
UST PERMIT # 18871

FIG. No. 2

Terracon

November 16, 2010

Ms. Minda Johnson
SCDHEC
Bureau of Land and Waste Management
UST Program
2600 Bull Street
Columbia, SC 29201

Re: Tier II Assessment Plan
Eddie's Pit Stop
Rt. 2, US Hwy 601 North, Pageland, SC
UST Permit # 18871

Dear Ms. Johnson:

On behalf of South Carolina Department of Transportation (SCDOT), **Terracon Consultants, Inc.**, is pleased to submit this Tier II assessment plan and associated cost agreement for additional assessment at the above referenced site. The scope of work was prepared to define the extent of the hydrocarbon plume in accordance with the South Carolina Department of Health and Environmental Control (SCDHEC) Tier II Assessment Guidance Document dated December 6, 2005. The costs were prepared as per the SUPERB account allowable costs dated January 10, 2006. All work will be performed in accordance with SCDHEC guidelines for Risk-Based Corrective Action.

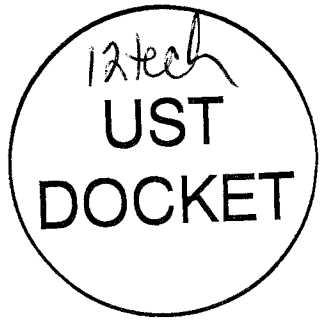
Please do not hesitate to contact me if you have any questions or comments.

Respectfully submitted,

Terracon Consultants, Inc.

P. Michael Hudgins, P.G.
Senior Hydrogeologist

PMH:pmh



Attachments
Tier II Assessment Plan
Assessment Component Cost Agreement
Site Map with Proposed Screening and Monitoring Well Locations

CC: Mr. Peter Reinhart / SCDOT

Tier II Assessment Plan
Underground Storage Tank Program

UST Permit # 18871 **County** Chesterfield **Facility Name** Eddie's Pit Stop
Facility Address Rt. 2, US Hwy 601 North, Padgeland, SC
Responsible Party SCDOT **Address** P.O. Box 191, Columbia, SC 29202-0191
No. USTs 2 **removed?** 2 removed **replaced?**
Current use of facility/property Vacant Building
Current property owner name SCDOT
Current property owner address P.O. Box 191, Columbia, SC 29202-0191

Field Screening Methodology

20 Groundwater Screening Borings will be installed to evaluate the side-gradient and downgradient extent of hydrocarbon impact to ground water as follows:

- 17 shallow depth borings will be advanced using Hollow Stem Auger equipment to a depth of 25 feet, approximately 8 feet into the shallow water table (425 ft).
- 2 deep boring will be advanced to identify water-bearing zones to 60 feet. (120 ft)

Ground water samples will be collected through the Geoprobe sampling equipment, placed into resealable plastic bags, and screened for organic vapors. If the OVA results indicate plume delineation, a groundwater sample will be submitted for laboratory analysis to ensure downgradient and vertical delineation prior to construction of permanent wells. Ground water screening samples will be submitted for laboratory BTEX, MTBE, and naphthalene analysis by Method 8260.

If the field or laboratory analytical results indicate the downgradient impact has not been defined, any temporary wells will be abandoned and additional temporary wells will be installed farther away from the source, sampled, and the results submitted to the SCDHEC project manager. All screening locations and results will be submitted to the SCDHEC for approval prior to installation of permanent wells.

Permanent Monitoring wells (estimate number and total completed depth)

# of shallow wells 8 → 9 **total depth** 200 → 225 (25 ft. ea.)

# of deep (Type III) wells 2 **total depth** 120 (60 ft. ea.)

Comments, if warranted

Eight shallow wells are proposed to be installed and will be determined based on the field and laboratory screening results.

Two deep wells are proposed to be paired with monitoring well MW-2 to a depth of 60 feet. The other deep monitoring well be installed down gradient of the old UST basin based upon screening results.

UST Permit # 18871 **Facility Name** Eddies Pit Stop

Analyses - List the analytical parameters (e.g., BTEX, MTBE) and estimated number.

Soil:

- 1 grain size analyses; collected from the lower portion of the shallow aquifer

Ground water:

- 19 samples for BTEX, MTBE, Naphthalene; collected from the 19 ground water screening points;
- 17 samples analyzed for BTEX, MTBE, Naphthalene; total lead; 1,2 DCA; EDB; and 8 oxygenates; from 5 existing wells,10 new wells, and 2 water supply wells. Nitrates; sulfate; ferrous iron; methane from the 10 new wells only.

Implementation Schedule
Start up date upon SCDHEC approval **Completion date** 60 days after SCDHEC approval
Report submittal date 90 days after SCDHEC approval

Site Maps

1. **Attach a copy of the relevant portion of the USGS topographic map showing the site location.**
2. **Prepare a site base map. The map must include the following:**

North Arrow	Legend with facility name and address, Site ID number, date and a bar scale
Location of property lines	Streets or highways (indicate names and numbers)
Location of buildings	Identification of located buildings
Paved areas on or adjacent to the site	Location of all present and former ASTs and USTs
Previous soil sampling locations	Underground and above ground utilities on or adjacent to the site
Previous monitoring well locations	Location of any other potential receptor

Aquifer Characterization (Check one and provide explanation for choice)
Pump Test _____ **Slug Tests** 1 (1 deep well)

Slug tests are necessary to estimate the hydraulic conductivity of the aquifer downgradient from the release.

Small Volume Disposal Type and Method

Soil: Impacted soil from the borings will be placed in 55-gallon drums, temporarily stored on site, and properly disposed by a licensed contractor.

Purge Water: Water and product from the monitoring wells will be placed in 55-gallon drums, temporarily stored on site and properly disposed by a licensed contractor.

Additional Comments:

ASSESSMENT COMPONENT COST AGREEMENT
SOUTH CAROLINA
Department of Health and Environmental Control
Underground Storage Tank Program
State Underground Petroleum Environmental Response Bank

Facility Eddie's Pit Stop

UST Permit # 18871 **CA#** _____

	ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Plan*				
	A. Plan Preparation	1	x	$100.00	**$100.00**
	B. Tax Maps		x	$50.00	**$0.00**
2.	Receptor Survey*		x	$500.00	**$0.00**
3.	Comprehensive Survey		x	$1,000.00	**$0.00**
4.	Mob/Demob				
	A. Equipment	2	x	$575.00	**$1,150.00**
	B. Personnel	4	x	$290.00	**$1,160.00**
	C. Adverse Terrain Vehicle		x	$550.00	**$0.00**
5.	Soil Borings (hand augered)*		feet x	$14.00	**$0.00**
6.	Soil Borings (drilled) & Field Screening	(includes collection and quantification)			
	A. Standard	545	feet x	$17.00	**$9,265.00**
	B. Alternative, on-site		feet x	$12.50	**$0.00**
	C. Fractured Rock		feet x	$27.50	**$0.00**
7.	Soil Leachability Model		x	$200.00	**$0.00**
8.	Abandonment* (separate from #5 and #6)	545	feet x	$5.00	**$2,725.00**
9.	Well Installation*	(includes drilling costs)			
	A. Water Table (hand auger)		feet x	$20.00	**$0.00**
	B. Water Table	200	feet x	$38.00	**$7,600.00**
	C. Telescoping	120	feet x	$58.00	**$6,960.00**
	D. Rock Drilling		feet x	$58.00	**$0.00**
	E. 2" Rock Coring		feet x	$44.10	**$0.00**
	F. 4" Rock Coring		feet x	$50.40	**$0.00**
	G. Multi Sampling Ports/screen intervals		feet x	$47.20	**$0.00**
10.	Sample collection				
	A. Groundwater	10	samples x	$55.00	**$550.00**
	B. Air Vapor		samples x	$90.00	**$0.00**
	C. Water Supply		samples x	$25.00	**$0.00**
	D. Groundwater No Purge	5	samples x	$35.00	**$175.00**
	E. Gauge Well Only		samples x	$20.00	**$0.00**
	F. Sample Below Product		samples x	$50.00	**$0.00**
	G. Passive Diffusion Bag		samples x	$40.00	**$0.00**
11.	Analyses-Groundwater	(See Analytical Methodology for site specific analyses)			
	A. BTEX+Napth.+MTBE	36	samples x	$100.00	**$3,600.00**
	B. BTEX+Napth.+MTBE **RUSH Analysis**		samples x	$120.00	**$0.00**
	C. BTEX+Napth.+MTBE+Trimethylbenzene		samples x	$135.00	**$0.00**
	D. PAH's		samples x	$120.00	**$0.00**
	E. Lead	17	samples x	$20.00	**$340.00**
	F. EDB	17	samples x	$55.00	**$935.00**
	G. 8 RCRA Metals		samples x	$140.00	**$0.00**
	H.TPH (9070)		samples x	$55.00	**$0.00**
	J. BOD		samples x	$40.00	**$0.00**
	K. Nitrate	10	samples x	$20.00	**$200.00**
	L. Sulfate	10	samples x	$20.00	**$200.00**
	M. Ferrous Iron	10	samples x	$20.00	**$200.00**
	N. Methane	10	samples x	$110.00	**$1,100.00**
	O. Organic Lead		samples x	$100.00	**$0.00**
	P. 8 Oxygenates	17	samples x	$85.00	**$1,445.00**
	AA. Filtered Lead		samples x	$46.00	**$0.00**
	BB. 1,2, DCA	17	samples x	$10.75	**$182.75**
11.	Analyses-Soil				
	Q. BTEX + Napth.		samples x	$100.00	**$0.00**
	R. PAH's		samples x	$120.00	**$0.00**
	S. 8 RCRA Metals		samples x	$150.00	**$0.00**

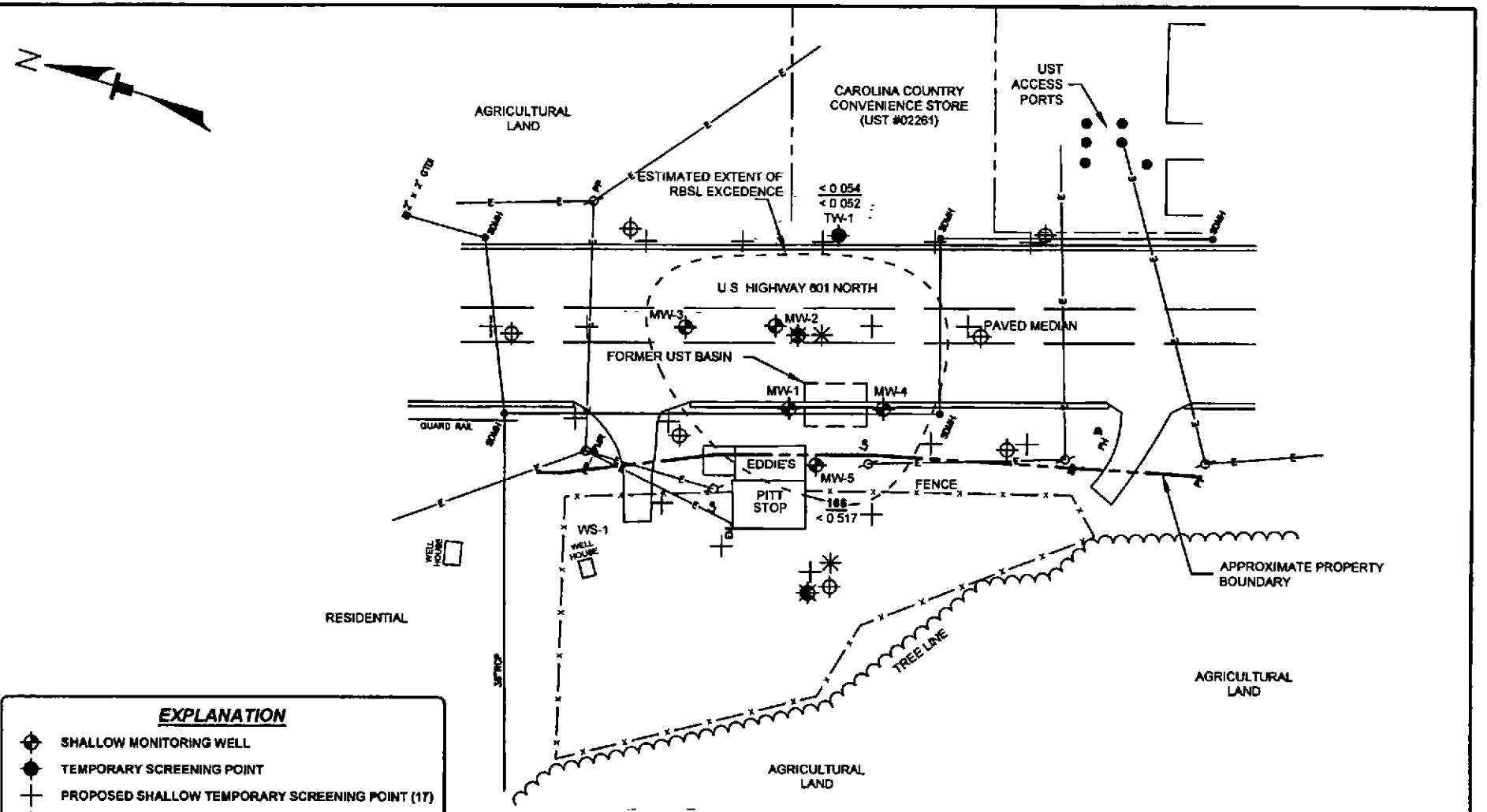
Facility Eddie's Pit Stop

UST Permit # 18871 **CA#**

	ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
	T. TPH (9071)		samples x	$60.00	**$0.00**
	U. TPH (3550)		samples x	$65.00	**$0.00**
	V. TPH(5035)		samples x	$65.00	**$0.00**
	W. Grain size / hydrometer	1	samples x	$75.00	**$75.00**
	X. Total Organic Carbon		samples x	$35.00	**$0.00**
11.	Analyses-Air				
	Y. BTEX + Naphthalene		samples x	$100.00	**$0.00**
	Z. Hydrocarbon Fuel Identification		samples x	$620.00	**$0.00**
12.	Aquifer Characterization*				
	A. Pumping Test		hours x	$120.00	**$0.00**
	B. Slug test	1	tests x	$150.00	**$150.00**
	C. Fractured Rock		tests x	$500.00	**$0.00**
13.	Free Product Recovery Rate Test*		tests x	$120.00	**$0.00**
14.	Fate & Transport Modeling				
	A. Mathematical Model		models x	$300.00	**$0.00**
	B. Computer Model		models x	$500.00	**$0.00**
15.	Risk Evaluation				
	A. Tier I		x	$301.00	**$0.00**
	B. Tier II		x	$500.00	**$0.00**
16.	Subsequent Survey*	1	x	$260.00	**$260.00**
17.	Disposal				
	A. Wastewater				
	1. Purging/Sampling	10	drums x	$90.00	**$900.00**
	2. Pumping test/AFVR		gallons x	$0.60	**$0.00**
	B. Free Product		drums x	$110.00	**$0.00**
	C. Soil (Treatment/Disposal)*	41	tons/drum	$50.00	**$2,050.00**
18.	Miscellaneous Attach paid invoice receipts				
			x		**$0.00**
			x		**$0.00**
23.	AFVR				
	A. 8-Hour Event*		x	$3,000.00	**$0.00**
	B. Additional Hour		x	$204.00	**$0.00**
	C. Off-Gas Treatment		x	$35.00	**$0.00**
24.	Granular Activated Carbon (GAC) filter System installation/service				
	A. New GAC System Installation		x	$2,500.00	**$0.00**
	B. Refurbished GAC System Installation		x	$850.00	**$0.00**
	C. Filter Replacement/removal*		x	$450.00	**$0.00**
	D. GAC System Removal, cleaning & refurbishment		x	$450.00	**$0.00**
	E. GAC System housing		x	$450.00	**$0.00**
	F. In-line particulate filter		x	$140.00	**$0.00**
	G. Additional piping & fittings		x	$4.00	**$0.00**
25.	Well Repair				
	A. Additional Copies of Report		each x	$5.00	**$0.00**
	B. Repair 2x2 monitoring well pad		each x	$100.00	**$0.00**
	C. Repair 4x4 monitoring well pad		each x	$150.00	**$0.00**
	D. Replace well vault		each x	$225.00	**$0.00**
	E. Replace well cover and gasket		each x	$30.00	**$0.00**
	F. Replace well cover bolts		each x	$10.00	**$0.00**
	G. Replace locking well cap & lock		each x	$15.00	**$0.00**
19.	Report/Project Management and Coordination			(SUBTOTAL)	
		15%	x	**$41,322.75**	**$6,198.41**
25.	**Total**				**$47,521.16**

DHEC 3664 (12/20/05)

*** The appropriate Mobilization cost can be added to this cost**



EXPLANATION

- SHALLOW MONITORING WELL
- TEMPORARY SCREENING POINT
- PROPOSED SHALLOW TEMPORARY SCREENING POINT (17)
- PROPOSED DEEP TEMPORARY SCREENING POINT (2)
- PROPOSED SHALLOW MONITORING WELL (8)
- PROPOSED DEEP MONITORING WELL (2)
- 166 BENZENE CONCENTRATION IN µg/L
- < 0.517 MTBE CONCENTRATION IN µg/L
- µg/L TEMPORARY MONITORING WELL

CONCENTRATION IN BOLD EXCEED RBSLs.

60 0 10 20 30 60
SCALE IN FEET

Project Mngr	RWN
Drawn By	PTK
Checked By	RWN
Approved By	PMH
Project No	73098106
Scale	AS SHOWN
File No	73098106
Date	NOVEMBER 2010

Terracon
Consulting Engineers and Scientists
521 CLEMSON ROAD COLUMBIA, SC 29229
PH (803) 741-8000 FAX (803) 741-8800

PROPOSED TIER II SCREENING LOCATIONS

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA
UST PERMIT # 18871

FIG. No. 2

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

APR 07 2011

MR PETER REINHART
SC DEPARTMENT OF TRANSPORTATION
PO BOX 191 ROOM 324
COLUMBIA SC 29202-0191

13tech UST DOCKET

Re: Tier II Assessment Report Directive
Eddie's Pit Stop, Rt. 2, US Hwy 601 North, Pageland, SC
UST Permit # 18871;CA# 41242; MWA#UMW-24144
Release #1 Reported August 29, 2002
Tier II Plan received November 18, 2010
Chesterfield County

Dear Mr. Reinhart:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced plan submitted your contractor. The assessment should be conducted in accordance with the Tier II Assessment guidance document and must be conducted in compliance with all applicable regulations. The Tier II assessment document and appendices may be obtained from our website at http://www.scdhec. gov/environment/lwm/ html/ ust_ guidance_ docs.htm.

Assessment activities at the site should begin immediately upon receipt of this letter. Cost agreement number 41242 has been approved for the amount shown on the enclosed cost agreement form for installation of up to seventeen temporary, eight shallow and two deep monitoring wells plus sampling the entire monitoring well network/the newly installed monitoring wells to define the horizontal and vertical extent of dissolved CoC. Please be aware that the February 1, 2006 State Underground Petroleum Environmental Response Bank (SUPERB) Allowable Costs sheet states that "If vertical and horizontal extent of chemicals of concern are not fully defined by this tier report, additional mobilizations may not be approved by the Department." Screening points that are converted to a permanent monitoring well will be reimbursed at the approved well installation rate. **Please contact the Department prior to well installation for concurrence regarding the final well locations. All shallow wells are to be installed with screen intervals that bracket the water table.** Shallow wells should have a 10-foot screen. **The SUPERB Account cannot reimburse costs for any shallow well with a screen that does not properly bracket the water table.**

A groundwater sample from any private wells within 1,000 feet of the facility should be collected and analyzed for BTEX, naphthalene, EDB, and MtBE. Groundwater samples from existing groundwater monitoring wells with screens that bracket the water table do not need to be purged before a sample is collected. Groundwater samples from all monitoring wells should be collected and analyzed for BTEX, naphthalene, MtBE, lead, 1,2-DCA, EDB, 8 oxygenates, all new monitoring wells/the entire monitoring well network. Analyses should be in accordance with *Analytical Methodology for Groundwater and Soil Assessment Guidelines* dated August 24, 2005. A copy of this publication is available on line at http://www.scdhec.gov/eqc5Canalmet.pdf.

The Assessment Report and invoice are due within 90 days from the date of this letter. The report (a signed .pdf copy on CD is preferred) submitted at the completion of these activities should include information outlined in the Tier II Guidance document to include the following:

- Geological cross sections that include the shallow and deep monitoring wells.
- Boring logs and well logs (DHEC form 1903) signed by a well driller licensed in the state of South Carolina for each new temporary or permanent monitoring well **in accordance with the South Carolina Well Standards, R.61-71**. 1903 forms are required for field screening borings (whether direct push or drilled) where a sample is extracted for analysis.
- A CoC map based on current groundwater laboratory analytical data. The groundwater data should be adjacent to the relevant monitoring well location.
- Groundwater elevations, depth to groundwater, measurable free product thickness (where applicable), total well depth and screened interval for all monitoring wells associated with the site, unless otherwise directed by the Division, shall be presented in tabular form. Historical groundwater laboratory analytical data and depth to groundwater , and product if applicable, for this and all previous monitoring events for all monitoring wells shall be presented in tabular format.
- A groundwater elevation contour map of the site based on current groundwater potentiometric data. A second contour map will be necessary if three or more deep wells are installed.
- Manifests for any contaminated soil and/or groundwater removed from the site for treatment and/or disposal.
- Signature and seal by a professional geologist or engineer registered in the State of South Carolina.
- According to R.61-98 Section IV.C.1 all plans, reports, invoices, and other documents relating to site rehabilitation activities which have been prepared or approved by a certified contractor shall be signed by the certified contractor and bear his certification number.

Please note the following changes to the submitted cost agreement:

- The method proposed for field screening groundwater samples is not approvable.
- "Field screening should not be advanced deeper than five feet below the water table as gauged in existing wells and shall delineate the horizontal extent" of CoCs at the water table, per the Tier II Assessment guidance document.
- One additional deep well plus groundwater sample collection and laboratory analyses has been included to define the vertical extent of the plume downgradient and to define the geology.
- One additional deep well plus groundwater sample collection and laboratory analyses has been included as a compliance point between the UST source and the water supply well identified as PW-1 in the Monitoring Well Installation Report dated September 16, 2010, to ensure the plume is not migrating to the well.

According to Division records, the release at the facility was reported to SCDHEC on August 29, 2002. In accordance with Section 44-2-40(D) of the SUPERB Act, SCDOT is responsible for the first $25,000 of site rehabilitation costs. Your contractor can submit an invoice for direct payment from SUPERB Account for preapproved costs that exceed the $25,000. An interim well drilling invoice may not be submitted for this scope of work as the deductible has not been met. By law, the SUPERB Account cannot compensate any costs that are not pre-approved. Please note that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. If the invoice is not submitted within 120 days from the date of this letter, monies allocated to

pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available. The UST Management Division, because of unnecessary dilution, cannot make decisions if the reporting limit of individual petroleum CoC exceeds Risk-Based Screening Levels (RBSLs). Note that the Division may deny payment for any non-detect analysis where the reporting limit exceeds the RBSL.

The UST Management Division encourages the use of 'J' values as necessary so the appropriate action can be determined for a release. Beginning in 2009, the UST Management Division will begin requiring that laboratories be certified through the SCDHEC Office of Environmental Laboratory Certification for the oxygenate compounds.

Please note that you and/or your contractor are responsible for obtaining all off-site access agreements and/or encroachment permits necessary for this scope of work.

The Department grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If the CoC concentrations based on laboratory analysis are below RBSLs, please contact the project manager for approval to dispose of soil and/or groundwater on site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

Please note that in accordance with R.61-92, Subpart H, Section 280.114, you are required to notify the UST Management Division by certified mail within ten (10) days of commencing a voluntary or involuntary proceeding in bankruptcy. State law also requires that an owner/operator or guarantor that files for bankruptcy protection must immediately submit appropriate forms documenting that entity's ability to demonstrate financial responsibility.

On all correspondence regarding this site, please reference UST Permit number 18871. Should you have any questions regarding this correspondence, please feel free to contact me at (803) 896-6395, fax me at (803) 896-6245, or e-mail me at hornosmj@dhec.sc.gov.

Sincerely,

Minda Hornosky, Hydrogeologist
Assessment Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc: Approved Cost Agreement (ACA)
Monitoring Well Approval (MWA)

cc: Terracon Consults, Inc., 521 Clemson Road, Columbia, SC 29229 (w/enc)
Technical file (w/enc)

D H E C

PROMOTE PROTECT PROSPER

C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

Monitoring Well Approval

Approval is hereby granted to:	Terracon
On Behalf of:	SCDOT
Facility:	Eddie's Pit Stop Rt. 2 Hwy 601 North Pageland, SC
UST Permit Number:	#18871
County:	Chesterfield

This approval is for the installation of 17 temporary, 9 shallow permanent, and 2 telescoping monitoring wells. The monitoring wells are to be installed in the approved locations. Monitoring wells are to be installed following the South Carolina Well Standards, R.61-71, and the applicable guidance documents. **Minimum forty-eight hour notice prior to drilling activities must be provided to the project manager.**

Please note that R.61-71 requires the following:

1. All wells shall be drilled, constructed, and abandoned by a South Carolina certified well driller per R.61-71.D.1.
2. All monitoring wells shall be labeled as required by R.61-71.H.2.c.
3. A Water Well Record Form or other form provided or approved by the Department shall be completed and submitted to the Department within 30 days after well completion or abandonment unless another schedule has been approved by the Department. The form should contain the "as-built" construction details and all other information required by R.61-71.H.1.f
4. All analytical data and water levels obtained from each monitoring well shall be submitted to the Department within 30 days of receipt of laboratory results unless another schedule has been approved by the Department as required by R.61-71.H.1.d.
5. If any of the information provided to the Department changes, notification to Minda Hornosky (tel: (803) 896-6395 or e-mail: hornosmj@scdhec.sc.gov) shall be provided a minimum of twenty-four (24) hours prior to well construction as required by R.61-71.H.1.a.
6. All temporary monitoring wells shall be abandoned within 5 days of borehole completion using appropriate methods as required by R.61-71.H.4.c. All other wells shall be properly developed per R.61-71.H.2.d.
7. Departmental approval is required prior to abandonment of all monitoring wells as required by R.61-71.H.1.a.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and R.61-71 of the South Carolina Well Standards and Regulations, dated April 26, 2002. A copy of this approval should be on the site during well installation.

Date of Issuance: March 8, 2011 **Approval #: UMW-24144**

Minda Hornosky, Hydrogeologist
Assessment Section,
UST Management Division
Bureau of Land and Waste Management

Approved Cost Agreement 41242

Facility: 18871 EDDIES PIT STOP
HORNOSMS
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
01 PLAN						
		A	PLAN PREPARATION	1.0000	100.00	100.00
04 MOB/DEMOB						
		A	EQUIPMENT	2.0000	575.00	1,150.00
		B	PERSONNEL	4.0000	290.00	1,160.00
06 SOIL BORINGS (DRILLED)						
		A	SOIL BORINGS & FLD SCREENING	545.0000	17.00	9,265.00
08 ABANDONMENT						
			ABANDONMENT	545.0000	5.00	2,725.00
09 WELL INSTALLATION						
		B	WATER TABLE (DRILLED)	225.0000	38.00	8,550.00
		C	TELESCOPING	120.0000	58.00	6,960.00
10 SAMPLE COLLECTION						
		A	GROUND WATER	11.0000	55.00	605.00
		D	GROUNDWATER NO-PURGE	5.0000	35.00	175.00
11 ANALYSES						
	GW GROUNDWATER	A	BTEX+NAPTH+MTBE	37.0000	100.00	3,700.00
		BB	1,2-DCA	18.0000	10.75	193.50
		E	LEAD	18.0000	20.00	360.00
		F	EDB	18.0000	55.00	990.00
		P	8 OXYGENATES	18.0000	85.00	1,530.00
	SOIL SOIL	W	GRAIN SIZE/HYDROMETER	1.0000	75.00	75.00
12 AQUIFER CHARACTERIZATION						
		B	SLUG TEST	1.0000	150.00	150.00
16 SUBSEQUENT SURVEY						
			SUBSEQUENT SURVEY	1.0000	260.00	260.00
17 DISPOSAL						
		A1	WASTEWATER - PURGING/SAMPLING	10.0000	90.00	900.00
		C	SOIL (TREATMENT/DISPOSAL)	41.0000	50.00	2,050.00
19 RPT/PROJECT MNGT & COORDINATIO						
		PCT	PERCENT	0.1500	40,898.50	6,134.78
				Total Amount		47,033.28

LETTER OF TRANSMITTAL

Terracon

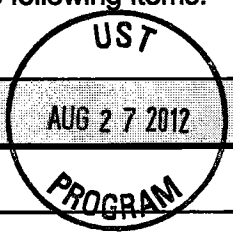
521 Clemson Rd.
Columbia, SC 29229
803-741-9000 / 803-741-9900 fax

TO Ms. Minda Hornosky

SCDHEC
Bureau of Land and Waste Management
UST Program
2600 Bull St.
Columbia, SC 29201

DATE 8/24/12	JOB NO. 73098106
RE: Eddie's Pit Stop, Pageland SC	
UST Permit # 18871; CA # 41242	

WE ARE SENDING YOU **X** Attached ☐ Under separate cover via _____ the following items:



COPIES	DATE	NO.	DESCRIPTION
1	8/24/12		TIER II Report (CD)
	8/24/12		SUPERB Assessment Component Invoice

THESE ARE TRANSMITTED as checked below:

☐ For approval
☐ For your use
☐ As requested
☐ For review and comment
☐ FOR BIDS DUE _____ 20___

☐ Approved as submitted
☐ Approved as noted
☐ Returned for corrections

☐ Resubmit ___ copies for approval
☐ Submit ___ copies for distribution
☐ Return ___ corrected prints

REMARKS:

Please find enclosed the Assessment report for the referenced site. Please call me if you have any questions.

Thank You, Mike H.

COPY TO: _____

SIGNED: **Mike Hudgins**

If enclosures are not as noted, kindly notify us at once.

TIER II ASSESSMENT REPORT

Eddies Pitt Stop
Route 2, US Highway 601 North
Pageland, South Carolina

UST PERMIT # 18871

August 24, 2012
Terracon Project No. 73098106

Prepared for:
South Carolina Department of Transportation
P.O. Box 191
Columbia, South Carolina 29202

Prepared by:
Terracon Consultants, Inc.
Columbia, South Carolina

Offices Nationwide Employee-Owned
Established in 1965 terracon.com
Terracon
Geotechnical Environmental Construction Materials Facilities

Terracon

August 24, 2012

Ms. Minda Hornosky
South Carolina Department of Health
and Environmental Control
Bureau of Land and Waste Management
UST Program
2600 Bull Street
Columbia, South Carolina 29201

Re: ***Tier II Assessment Report***
Eddies Pitt Stop
Route 2, US Highway 601 North, Pageland, South Carolina
UST Permit # 18871; C.A. 41242
Terracon Project No. 73098106

Dear Ms. Hornosky:

On behalf of the South Carolina Department of Transportation, **Terracon Consultants, Inc.** is pleased to submit this Tier II Assessment Report for the Eddies Pitt Stop in Pageland, South Carolina. This report summarizes the results of the assessment activities and our conclusions and recommendations.

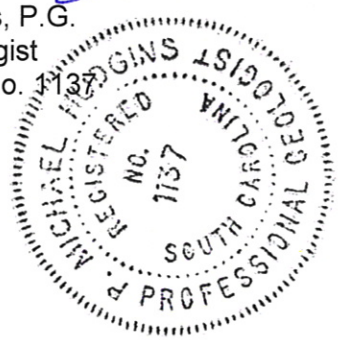
If you have any questions regarding the contents of this report, or if you need additional information, please contact us at (803) 741-9000.

Sincerely,

Terracon Consultants, Inc.
UST Contractor Certification No. 246

Regan Norris
Environmental Scientist

P. Michael Hudgins, P.G.
Senior Hydrogeologist
S.C. Registration No. 1137



Attachment

cc: Mark Hunter/SCDOT

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Eddies Pitt Stop
Route 2, US Highway 601 North
Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

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Route 2, US Highway 601 North
Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

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A Geologist Logs and Water Well Records
B Ground Water Sampling Logs
C Aquifer Tests and Grain Size Analyses
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F Comprehensive Survey

1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) has completed the Tier II Assessment at the Eddies Pitt Stop site located in Pageland, South Carolina. The purpose of this assessment was to define the extent of petroleum impact to ground water from a reported underground storage tank (UST) release at the site. The work was performed in accordance with the South Carolina Department of Health and Environmental Control (SCDHEC) Cost Agreement #41242 dated November 9, 2011, and the Risk Based Corrective Action (RBCA) guidance document prepared by SCDHEC. This report includes a description of the activities performed during this assessment, along with our current findings, conclusions and recommendations.

1.1 Site Description

The site is bound to the east by US Highway 601 and the Carolina Country Convenience Store (UST 02261); to the south by agricultural land; to the west by the remainder of the former Eddie's Pit Stop property; and to the north by residential land. A topographic map showing the site location is presented as Figure 1. A surrounding land use map is included as Figure 2.

The site is composed of a vacant gas station. The property is owned by Mr. Eric Simpson and is operated as the business office for No Limit Financial LLC. The fenced in area behind the existing gas station is currently being used to hold seized vehicles and other property obtained by the financial business.

Carolina Country Convenience Store (UST Permit # 02261) currently operates an UST system located approximately 150 feet east from the former Eddie's UST basin across Highway 601. According to the SCDHEC database, the site has a reported release dated September 30, 2008 and a confirmed clean up date of November 6, 2008.

A water well survey was conducted as part of this assessment. Two irrigation or water supply wells (PW-1 and PW-2) were observed within a ½ mile radius of the site. PW-1 is an unused well on the subject site. PW-2 is used as an irrigation supply well located offsite on the adjacent residential property (Casper residence). The site and surrounding area is serviced drinking water from a municipal water supply system.

1.2 Site History

The site has been defined as the area of the former USTs, which is now located within the SCDOT right-of-way of Highway 601. The right-of-way and US Highway 601 were expanded in 2001 as part of road improvements in Chesterfield County. Eddies Pitt Stop convenience

store/gas station previously operated one 750 gallon and one 2,000 gallon gasoline UST. These USTs were abandoned by removal in August 2002, and a release was reported with the UST closure in August 2002. A directive to conduct a Tier I Assessment was issued by the SCDHEC in 2009.

In 2009, a Tier I assessment was conducted at the site to include installation of two shallow borings and three shallow monitoring wells. A summary of the well construction and water level data is presented on Table 1. A site map with well locations and utilities is shown as Figure 3. The results of the previous assessments indicated:

- Ground water was encountered at depths generally ranging from 17 to 20 feet and is observed to flow radially toward the south at a calculated rate of 13 ft/yr;

- Ground water samples from monitoring wells MW-1, MW-2, MW-3, and MW-4 exceeded the Risk-Based Screening Levels RBSLs for benzene. The naphthalene RBSL was exceeded in wells MW-1, MW-2, and MW-3. The RBSL for ethylene Dibromide (EDB) was exceeded in wells MW-1 and MW-2. Total lead exceeded the RBSL in the sample from MW-3.

Based on the Tier I Assessment results, SCDHEC issued cost agreement # 41242 for a Tier II Assessment to further define the extent of the contaminant plume. The results of the well installation and sampling are presented below.

2.0 INVESTIGATIVE METHODS

2.1 Ground Water Screening

Ground water screening was performed as 23 temporary wells (TW-1 through TW-22) to evaluate the extent of petroleum in ground water and to identify the optimal locations for permanent monitoring wells. The field screening was conducted over a period of time between July 2011 and April 2012. Permanent monitoring wells were installed based on the screening results and as directed by the SCDHEC project manager. All boring and drilling for this project was performed by a South Carolina certified well driller. Upon completion of sampling, the temporary borings were abandoned according to state regulations or were converted to permanent monitoring wells. A site map showing all screening locations and analytical results is shown on Figure 4.

Ground water screening samples were collected utilizing dedicated plastic bailers, gloves and string. The samples were collected in provided, sealed containers, placed in an iced cooler, and delivered along with chain of custody documentation to Access Analytical Inc. Irmo, South Carolina. The samples were shipped to a state certified laboratory for analysis for analysis of

benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl-tert-butyl ether (MtBE, and naphthalene, as per Method 8260B.

In accordance with the SCDHEC Tier II directive dated April 7, 2011, no field screening wells were to be advanced greater than 5 feet into the water table. The water table was observed to fluctuate greater than 10 feet over the period of this assessment. No indication of water is evident until depths of forty-five feet are reached, and the water level subsequently rises in the well 6 to 10 feet. The site lithology is composed of compacted silt that does not allow water in infiltrate in a completed well for several days to a week. This silt also has the capability to swell during the drilling process, locking up the drilling tools on several occasions, which led to the loss of drill tooling the well and subsequent re-drilling of wells, significant down time, and several re-mobilizations to the site.

In accordance with SCDOT Encroachment Permit issued for the work, no open borings were allowed hole to be left in the highway, therefore, these screening wells were installed as permanent wells with steel manholes and well pads.

2.2 Screening and Well Installation

The monitoring wells were constructed of 2-inch diameter schedule 40 PVC casing and 10 to 15 feet of 2-inch diameter PVC well screens. The double cased, deep wells were installed with a 5 foot well screen. An appropriately graded sand filter pack was placed within the annulus opposite each well screen to a minimum height of approximately two feet above the top of the well screen. A minimum two-foot bentonite pellet layer was placed above the sand filter pack in each well and hydrated. The remaining annulus of each well was grouted to land surface with cement grout. The wells were completed below-grade within steel protective manhole covers and well tag permanently affixed to the well. A two-foot by two-foot concrete pad was constructed around each well. Well construction details are included on the Geologist Logs and Water Well Records (Appendix A) and on Table 1. A summary of the ground water screening data is included as Table 2.

After installation, the wells were developed by surging and pumping or bailing until the pH and specific conductivity of the water had stabilized and the wells were producing relatively clear water. Soil cuttings generated during drilling were collected in 55-gallon drums. Soil cuttings, drilling fluids, development water and purge water generated during well installation, development and sampling was combined with the soil cuttings and disposed by Palmetto Oil Recovery, Leesville, South Carolina, TK Tank Services, Sumter, South Carolina, and A&D Environmental, Lexington South Carolina. A waste disposal manifests for the investigative derived waste (IDW) is included in Appendix E.

The location of each well and vertical elevation of the top of each well casing (TOC) were surveyed by Terracon personnel in January 2012, referenced to the existing monitoring well

network. After the all wells were installed in April, a South Carolina registered surveyor surveyed all wells surveyed the well location and TOC elevations, referenced to the existing monitoring well network. The TOC elevations are provided on Table 1. A copy of the comprehensive survey is included as Appendix F.

Ground water screening and well installation occurred during several separate events from July 2011 and April 2012 based on the need to define the extent of impact due and the results of each sampling event. Further, three comprehensive sampling events were conducted during this assessment, referenced as Event #1 through #3. The following timeline describes the work completed during each of these events.

Date: July 7 - 13, 2012
Screening Points: TW-1, TW-2, TW-3
Monitoring Wells: no wells installed this event
Drill Equipment: Geoprobe® 6620DT

TW-1 and TW-2 were installed in the median of Highway 601 using Geoprobe® ground water sampling tools to a refusal depth of 30 ft. No water was encountered within the borings. The borings were converted to temporary wells by installing 1-inch PVC pipe and 10 feet of screen set at 29 ft. The wells were reported dry on the day of installation. After a period of 5 days (7/13/11), the wells contained approximately one foot of water and were sampled.

TW-3 was installed by the direct push method to a shallow refusal of 22 feet. No ground water was encountered. The direct push rods from TW-3 would not come out of the ground; therefore the well was then overdrilled with 2.25 hollow stem augers in order to retrieve the lost tooling and reach the desired total depth. The tooling was over drilled, retrieved, and the boring was extended to a total depth of 35 feet and 1-inch PVC temporary well was installed to 34 feet.

On July 13, 2011, Terracon re-visited the site and collected water samples from TW-1, TW-2, and TW-3. Results from the groundwater testing exhibited concentrations of benzene above the RBSLs with TW-1, TW-2, and TW-3, or naphthalene concentrations were above RBSLs. TW-1 through TW-3 were abandoned after the samples were collected.

Date: August 22 - 31, 2011
Screening Points: TW-5 through TW-10
Monitoring Wells: MW-6 through MW-10, MW-3D, MW-8D
Drill Equipment: CME 550 Auger drilling rig

Six screening points, five shallow wells and two (2) double cased, deeper wells were installed from August 22 - 31, 2011 to delineate the shallow and deep extent of impact to ground water.

TW-5 through TW-10 were installed to delineate the southern and western extent of impact on the site, downgradient from the former USTs. The temporary wells were installed to 28 feet, with 2" PVC pipe, and 10 feet of well screen, sand pack, and bentonite to allow water to enter the wells. The wells were sealed off at the surface to prevent surface water penetration.

TW-3, TW-4, TW-11, TW-12, and TW-13 were installed as shallow wells MW-10, MW-9, MW-6, MW-7 and MW-8, respectively. These wells were located as sidegradient and background shallow wells, installed to total depths of 34 or 35 feet. Due to the hard silt and swelling nature of the site lithology, it was necessary to drill these borings initially with 2-1/4 inch pilot hole to depth, then reamed out with 3-¼ in. augers, and drilled again with 4-¼ in augers to set the well inside the auger annulus (triple-drill the borings). Based on these drilling conditions, rock drilling was approved for installation of these wells by the SCDHEC project manager. All shallow wells were dry upon completion except MW-6, which had approximately five feet of water.

MW-3D and MW-8D were installed as double cased, deeper wells to define the vertical extent of impact at these locations. The outer casing of MW-3D and MW-8D were installed to 40 feet, and the inner 2-inch PVC casing and screen were set to 60 feet, with 5 feet of screen. All wells were built in accordance with SCDHEC well standards, and completed with a 2x2 concrete pad well tag and locking cap, encased in an 8-inch diameter steel man hole cover.

While drilling MW-8D, Terracon inadvertently drilled through an unmarked municipal water line running parallel to Highway 601. The water line was subsequently repaired by the city. A significant amount of water was introduced into the shallow aquifer for the duration of the repairs and may have affected the ground water elevations recorded during the following weeks.

Terracon returned to the site September 8, 2011 to find a small amount of water in wells MW-10 TW-8, MW-7, and MW-6. These wells were then sampled as test wells and submitted for analysis. None of the samples collected exhibited concentrations above the RBSL (Table 2). All other temporary wells were still dry.

Date: January 3 - 4, 2012
Screening Points: TW-3 through TW-13
Monitoring Wells: MW-11 through MW-14
Drill Equipment: CME 550 Auger drilling rig

The first week of January 2012, Terracon gauged the temporary wells installed in August. Wells TW-3/MW-10, TW-4/MW-9, TW-7, TW-8, TW-9, TW-11, TW-12, and TW-13 contained only 0.5 to less than 2 feet of water. Due to the observed seasonal variability in water level elevations observed across the site, temporary wells TW-5, TW-7, TW-8, and TW-10 were over drilled to a depth of 35 feet and were completed as monitoring wells MW-11, MW-12, MW13, and MW-14, respectively, with 15' of screen. TW-6 and TW-9 were abandoned in accordance to state regulations.

A comprehensive ground water sampling event #1 was conducted across the site. The results indicated petroleum concentrations significantly above RBLSs in wells MW-8, MW-10, and MW-12, indicating the ground water plume was not defined downgradient from the USTs.

Date: March 26 – April 4 , 2012
Screening Points: TW-14 through TW-23
Drill Equipment: Geoprobe® 6620DT

Ten field screening points and five shallow and five deep monitoring well pairings were added to the scope of work based on the January sampling data.

On March 26, 2012, ten temporary wells (TW-14 through TW-23) were installed offsite in a plowed field define the horizontal extent of impact to the south and south west of the subject site. A 6620DT Geoprobe® was needed due to adverse terrain of the field. One-inch temporary wells were installed to depths ranging from 25 to 34 feet to place 10 feet of PVC well screen and casing to surface, and were sampled as screening points on April 4, 2012. Upon sample collection, the wells were removed and abandoned with tremie pipe, from the bottom up, with neat cement (grout). The screening results indicated no concentrations of BTEX, MtBE, or naphthalene were detected in any of the samples collected.

Date: March 26 – April 3, 2012
Monitoring Wells: MW-15 through MW-19, MW-15D through MW-19D, TW-24
Drill Equipment: Gus-Pech Air Rotary

Monitoring wells MW-15 through MW-19 and MW-15D through MW-19D were installed to further delineate the extent of impact. Monitoring wells MW-15D, MW-16D were located in a direct line between the former UST area and water supply wells PW-1 and PW-2, respectively, as directed by the SCDHEC project manager. Monitoring wells MW-19D and MW-18D were installed as sidegradient wells, and MW-17D was located as a background well.

An exploratory stratigraphic boring TW-24 was drilled downgradient from the former USTs, outside of the area of estimated area of impact and near water supply well PW-1. The samples logged confirmed previous lithologic descriptions as silt to 28 feet, a 12 foot layer of clay to 40 feet, underlain by sandy silt and partially weathered rock. No bedrock was encountered to the total depth of to 98 feet.

A comprehensive ground water sampling event (Event #2) was conducted across the site on April 5, 2012. The results indicated petroleum concentrations outside of the source area were significantly above RBSLs in wells MW-8, MW-10, and MW-12, indicating the ground water plume was not defined downgradient from the USTs. Specifically, the concentrations in background well MW-10 increased, suggesting a potential release from the offsite UST system (Carolina Convenience Store # 02261).

Date: July 9 -11, 2012
Monitoring Wells: MW-20 through MW-22, MW-20D through MW-22D
Drill Equipment: Sonic Rig

Monitoring wells MW-20 through MW-22 and MW-20D through MW-22D were installed to further delineate the background ground water conditions and to evaluate the potential contribution from the upgradient UST system. The monitoring wells were installed as shallow and deep well pairs at the edge of the UST pit and northwest and southwest of the USTs. Due to the tight formation and drilling conditions encountered previously, these wells were installed with a TSi 150T Sonic Drill Rig which allowed for faster installation. Continuous cores were collected for lithologic description during drilling, described on the Geologist logs in Appendix A. Approximately 22 drums of drilling fluid was generated by this drilling method.

2.3 Ground Water Sampling

In August 2009, Monitoring wells MW-5 and TW-1 were sampled to evaluate the existing ground water conditions. Three comprehensive ground water sampling events were conducted as part of this assessment as Events #1, #2, and #3, referenced above. Sampling event #1 was conducted on January 5-6, 2012, and Event #2 was conducted on April 5, 2012, referenced above. For Event #1, all wells were purged prior to sample collection since it had been over one year since the previous sampling event (2009). For Events #2 and #3, only the new wells, deep wells, and water supply well PW-1 were purged prior to sampling. No-purge (grab) samples were collected from the remaining wells. A total of 43 wells were purged and 35 no-purge samples were collected during these three events.

Event #3 was conducted on July 17-20, 2012. Water levels for all monitoring wells were measured using an electric water level indicator and converted to elevations relative to TOC elevations. A summary of the water level data is presented on Table 3.

All purge water generated during well sampling was collected in 55-gallon drums and disposed by a licensed disposal contractor. The disposal manifests are included in Appendix E.

Ground water samples were collected using disposable polyethylene bailers dedicated to each well. Dissolved oxygen, specific conductance, pH, and temperature measurements were measured using calibrated field meters and recorded on Ground Water Sampling Logs, included in Appendix B. Samples were placed in an iced cooler and delivered along with chain of custody documentation to Access Analytical, Inc. in Irmo, South Carolina for analysis of the following parameters:

Analysis	Method
Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) Methyl-tert-butyl-ether (MTBE) Naphthalene 1,2-dichloroethane (1,2-DCA) 8 Oxygenates	SW-846 8260B
1,2-dibromoethane (EDB)	SW-846 8011
Total Lead	SW-846 6010B

Ground water analytical results are included in Table 4 (Petroleum Compounds) and Table 5 (Petroleum-Related Compounds). A copy of the analytical report is included in Appendix D.

2.4 Water Supply Well Sampling

As part of comprehensive sampling Event #1 on January 5, 2012, the residential supply well PW-1 was sampled using a polyethylene bailer and PW-2 was sampled through the existing, operational irrigation well pump. Low concentrations of benzene and 1,2 DCA were detected in WS-2 and WS-1, respectively. The SCDHEC was notified of these results on January 13, 2012.

On January 27th, 2012, Terracon returned to the site in order to confirm the results of the January 5 sampling as directed by the SCDHEC project manager. The property owners of PW-2 (Casper) developed some concerns with their municipal drinking water associated with the municipal supply line repair in August 2011. The Caspers requested that both their private well and their municipal water be sampled and analyzed for petroleum compounds. Terracon sampled the municipal water from the Casper residence spigot and the irrigation well (PW-2) from the well house spigot after allowing the water to run for approximately 10 minutes. Terracon also sampled the on-site well (PW-1) using a stainless steel pump and dedicated nylon tubing. PW-1 was tagged at a total depth of 122'. Terracon placed a pump five feet from the bottom of the well, and allowing the water to run for approximately 30 minutes prior to sample collection

Supply wells PW-1 and PW-2 were sampled for Events #2 (April) and #3 (July) in the same manner as for the January sampling event.

2.5 Soil Grain Size Analyses

Three soil samples were collected from across the site and submitted for analysis of soil grain size distribution. Samples from the bottom of MW-12 (35'), MW-18D (57'), and TW-24 (28') were submitted for analysis in order to determine the grain size within these intervals. The results of the sieve analyses for these soil samples are included in Appendix C.

2.6 Hydraulic Conductivity Testing

A borehole permeability test (slug test) was performed in shallow well MW-12 and deep well MW-18D. The test was performed by removing a 1.5-inch diameter by five foot PVC bailer from the well and recording the response as the water level returned to equilibrium. The Bouwer and Rice method was used to interpret the field data and assess the hydraulic conductivity of the aquifer. A summary of slug test data, results, and the calculated semi-log graphs of draw down versus time are included in Appendix C.

3.0 ASSESSMENT RESULTS

3.1 Site Geology

The site is located within the Carolina Slate Belt terrain of the Lower Piedmont physiographic province. The Carolina Slate Belt province consists of weathered low grade metamorphic rocks consisting of mixed gneiss; intermediate and felsic volcanic rocks; tuffaceous epiclastic rocks; and mafic and felsic volcanic rocks.

Two geologic cross-sections (A-A' and B-B') were constructed using data obtained from the monitoring wells. The cross-section locations are indicated on Figure 5. Cross-sections A-A' (Figure 6) and B-B' (Figure 7) illustrate the shallow stratigraphy of the sediments beneath the site. Surficial soils at the site included sands, silty/clayey sands, sandy silt, and saprolite. A thick sequence of low permeability clayey and silty sand was encountered beneath the site to depths ranging from approximately 15 to 30 feet across the site. Below this unit, partially weathered rock as hard clayey silt (saprolite) was encountered at depths ranging from 60 to 65 feet across the site, were air rotary was required for drilling, to the investigated depth of 98 feet.

A soil sample was collected from the saturated portions of the screened intervals of monitoring wells listed below and submitted for grain-size analysis and hydrometer testing. The grain-size analysis results are included with the hydraulic conductivity data in Appendix C. A summary of the grain-size data is presented below:

Well Number	**TW-24**	**MW-12**	**MW-18D**
Depth (ft)	26-28	33-35	56-57
Sand (%)	33.6	29.7	14.5
Silt (%)	45.5	33.1	40.9
Clay (%)	20.3	37.1	44.6
Description	Sandy Silt	Silty Clay, w/sand	Silty Clay

3.2 Site Hydrogeology

Ground water occurs within the shallow aquifer under unconfined conditions. The depth to ground water in the study area ranged from approximately 21 to 36 feet during this assessment. A potentiometric surface map of the upper and lower portions of the shallow aquifer, based on water level measurements obtained from site monitoring wells, are included as Figures 8 and 9, respectively.

Water levels on-site were recorded to be approximately five feet lower that the previously recorded elevations in April 2012. Inspection of Figures 8 and 9 and interpretation of the hydrogeology at the site indicate the shallow and intermediate ground water flow is generally to the southwest, similar to the ground water conditions documented for previous assessments.

Water elevation differences were recorded in three of the four shallow/deep monitoring well pairs at the northeast portion of the site (across Highway 601) ranged from 6.1 to 9.8 feet lower in the deeper wells. Elevation differences recorded in well pairs downgradient from the USTs were significantly less, ranging from 0.15 to 0.28 feet. These elevation differences suggest a low permeability unit is present between the upper and lower portions of the shallow aquifer, and a downward component of flow exists across this unit. Thus, ground water and the contaminants carried by ground water have the capacity to flow from the upper unit to the lower unit at this site.

The rate of horizontal ground water flow at the site is controlled by the horizontal hydraulic conductivity (K), effective porosity (ne), and the horizontal hydraulic gradient (dh/dl). The linear ground water seepage velocity (vs) can be calculated by substituting these values into the modified Darcy equation:

$$\mathbf{Vs = (K/n_e)\ (dh/dl)}$$

The effective porosity (ne) of sediments in the upper portion of the shallow aquifer at the site is estimated to be approximately 0.30. The hydraulic gradient was calculated to be 0.05 and the hydraulic conductivity calculated from the slug test performed at well MW-12 was 0.53 ft./day. Using these values, the estimated linear seepage velocity in the lower portion of the shallow aquifer was calculated to be approximately 3.2 feet per year.

The hydraulic gradient of the upper portion of the shallow aquifer was calculated to be 0.006. The hydraulic conductivity calculated from the slug test performed at well MW-5 was 0.32 ft./day. Using these values, the estimated linear seepage velocity in the lower portion of the shallow aquifer was calculated to be approximately 2.3 feet per year.

3.3 Ground Water Analytical Results

The results from the July 2012 sampling event indicated petroleum concentrations outside of the UST (source) area were significantly above RBSLs in wells MW-8, MW-10, and MW-12. Specifically, the concentrations in background well MW-10 increased, suggesting a potential release from the offsite UST system (Carolina Convenience store # 02261).

1,2 DCA was detected in ground water in eight wells at a concentrations above RBSLs ranging from 7.2 ug/l to 436 ug/l. EDB was detected above the RBSL in four wells at concentrations ranging from 0.1 to 3.75 ug/l. Petroleum oxygenates t-butanol (TBA), and tert-amyl alcohol (TAA) were the only oxygenates present in ground water above Action Levels (Als) established by the SCDHEC.

Concentrations detected in temporary wells installed offsite and downgradient of the source area were below detection limits, indicating the ground water plume is defined downgradient from the USTs. All other petroleum hydrocarbon compounds were below RBSLs. A benzene/naphthalene concentration map of the upper portion of the shallow aquifer is included as Figure 10.

The extent of impact in the lower portion of the shallow aquifer has been relatively defined. Benzene and/or naphthalene was detected at concentrations above RBSLs in deep wells MW-3D, MW-15D and MW-16D, located north and northeast of the former USTs. No concentrations were detected in the samples collected from the water supply wells PW-1 and PW-2, located downgradient from these wells, defining the downgradient, deep extent of impact. No compounds were detected in deep wells MW-18D and MW-19D. A benzene/naphthalene concentration map of the lower portion of the shallow aquifer is included as Figure 11.

3.4 Water Supply Well Analytical Results

The results indicated water supply well PW-2 detected low concentrations (4.64 ug/l) of benzene. The SCDHEC was notified of these results on January 13, 2012. Terracon returned to the site to resample these wells on January 27. The results indicated similar results with benzene concentration of 1.23 ug/l in PW-2. For the sampling events conducted in April and July, no compounds were detected above reporting limits for any compound except 1,2 DCA (1.22 ug/l) detected in the sample collected from PW-1 in July. No compounds were detected above RBSLs in any of the samples collected from these wells.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based upon the results of our site assessment activities, the ground water beneath the site and adjacent properties have been impacted by dissolved-phase hydrocarbons at concentrations above allowable levels.

The horizontal extent of the contaminants in the upper portion of the shallow aquifer downgradient from the former UST system has been defined by the monitoring well network. Petroleum hydrocarbon compounds were detected above Risk Based Screening Levels (RBSLs) for benzene, MtBE,1,2-DCA, and naphthalene in ground water samples collected from shallow wells located at the source area, northeast (MW-8) and southwest (MW-12) of the USTs. Further, the concentrations in four background wells exceeded RBSLs, suggesting a potential release from the offsite UST system (Carolina Convenience store, UST Permit #02261).

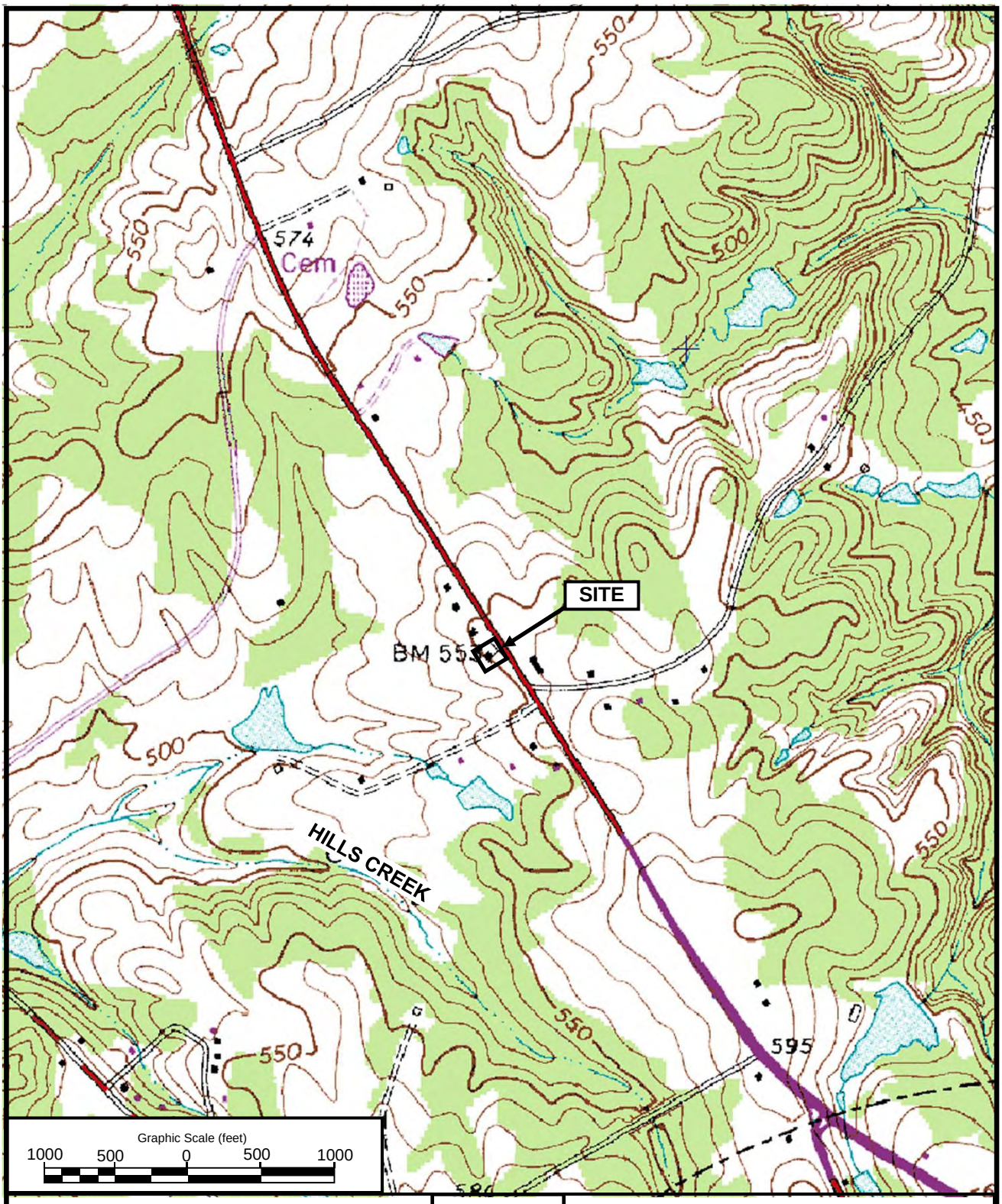
The extent of impact in the lower portion of the shallow aquifer has been defined. Benzene and/or naphthalene were detected at concentrations above RBSLs in deep wells MW-3D, MW-15D and MW-16D, located north and northeast of the former USTs. Contaminants have the potential to migrate faster through the fractures or other potential preferential pathways of the weathered rock material.

Benzene was detected in two samples collected form an unused water supply well (PW-1) at concentrations above the laboratory reporting limits. These detections may represent the leading edge of the dissolved plume extending toward this well in the deep portion of the shallow aquifer. Periodic monitoring and sampling of these supply wells is recommended.

Terracon also recommends Aggressive Fluid Vapor Recovery (AFVR) at this site. AFVR may reduce the high dissolved concentrations observed in monitoring wells MW-1, MW-2 and MW-12, to limit further contaminant migration from the source area. Once the high dissolved concentrations have been reduced, intrinsic corrective action may be an effective remedial method at this site. Terracon also recommends initiation of quarterly ground water sampling events to assess the potential for intrinsic biodegradation of petroleum compounds at the site.

FIGURES

Figure 1 - Site Location Map
Figure 2 - Surrounding Land Use Map
Figure 3 - Site Map with Utilities
Figure 4 - Site Map with Ground Water Screening Results
Figure 5 - Site Map w/ Cross Section Transects
Figure 6 - Geologic Cross Section A – A'
Figure 7 - Geologic Cross Section B –B'
Figure 8 - Potentiometric Surface Map of the Upper Portion of the Shallow Aquifer
Figure 9 - Potentiometric Surface Map of the Lower Portion of the Shallow Aquifer
Figure 10 - Benzene / Naphthalene Concentration Map of the Upper Portion of the Shallow Aquifer
Figure 11 - Benzene / Naphthalene Concentration Map of the Lower Portion of the Shallow Aquifer



USGS TOPOGRAPHIC QUADRANGLE MAP
PAGELAND, SOUTH CAROLINA

DATE: 1993
SCALE: 1 INCH = 1000 FEET

PROJECT NO. 73098106

N

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SITE LOCATION MAP
EDDIE'S PITT STOP
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA

FIGURE 1: TOPOGRAPHIC MAP

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Drawn By:	PTK
Checked By:	RWN
Approved By:	PMH

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Date:	AUGUST 2012

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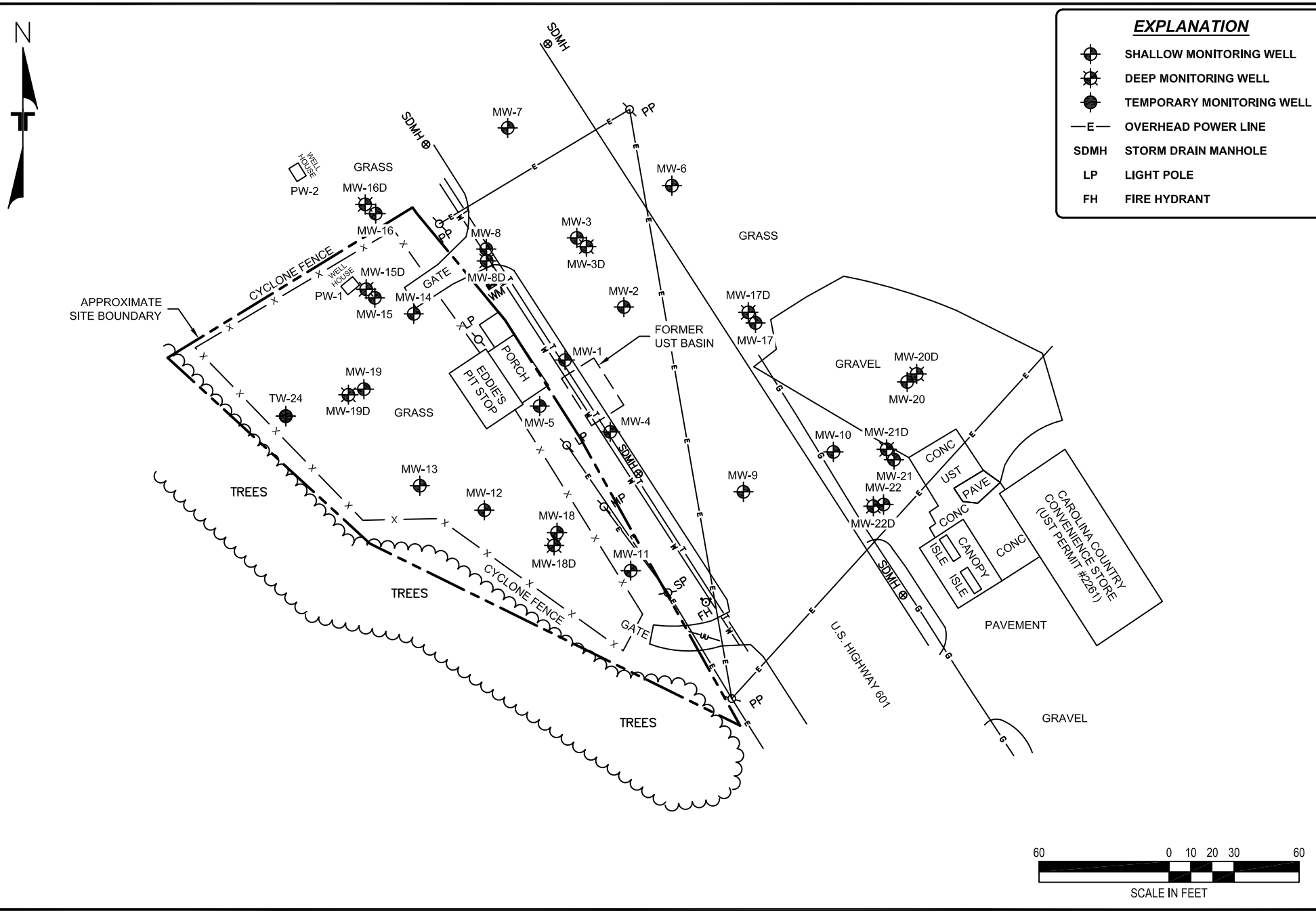
Consulting Engineers and Scientists
521 CLEMSON ROAD COLUMBIA, SC 29229
PH. (803) 741-9000 FAX. (803) 741-9900

SURROUNDING LAND USE MAP

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA
UST PERMIT #18871

Fig No. 2



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Checked By:	RWN
Approved By:	PMH

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SITE MAP WITH UTILITIES

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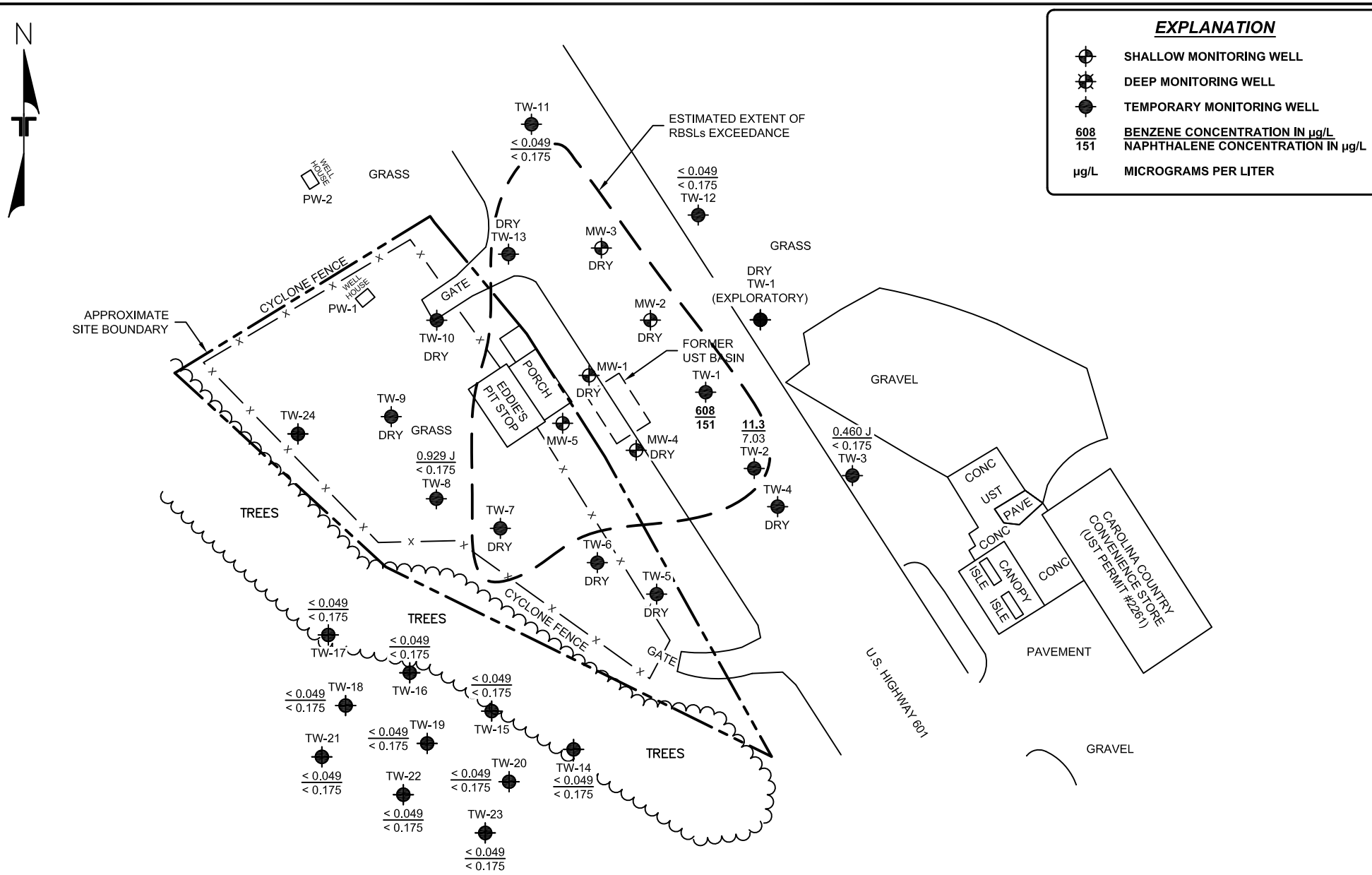
Fig No. 3



NOTE:
GROUNDWATER SCREENING SAMPLES WERE COLLECTED ON JULY 13, 2011 FOR TEMPORARY WELLS TW-1 AND TW-2; ON SEPTEMBER 8, 2011 FOR TEMPORARY WELLS TW-3, TW-7, TW-8, TW-12, AND TW-13; AND ON APRIL 5, 2012 FOR TEMPORARY WELLS TW-14 THROUGH TW-23.

Project Mngr:	RWN
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SITE MAP WITH GROUNDWATER SCREENING RESULTS

EDDIE'S PIT STOP - SCDOT
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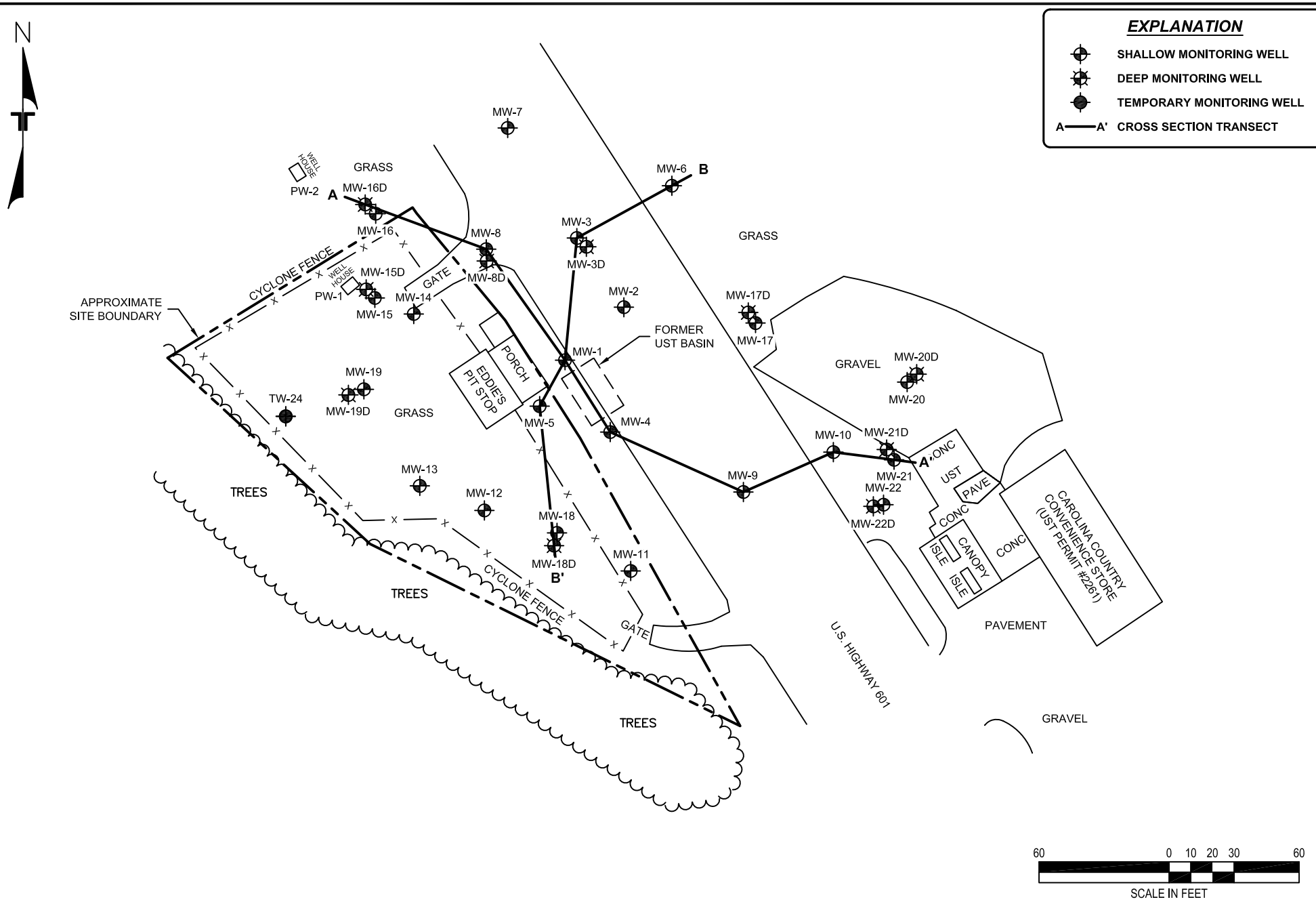
Fig No. 4



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SITE MAP WITH CROSS SECTION TRANSECTS

EDDIE'S PIT STOP - SCDOT
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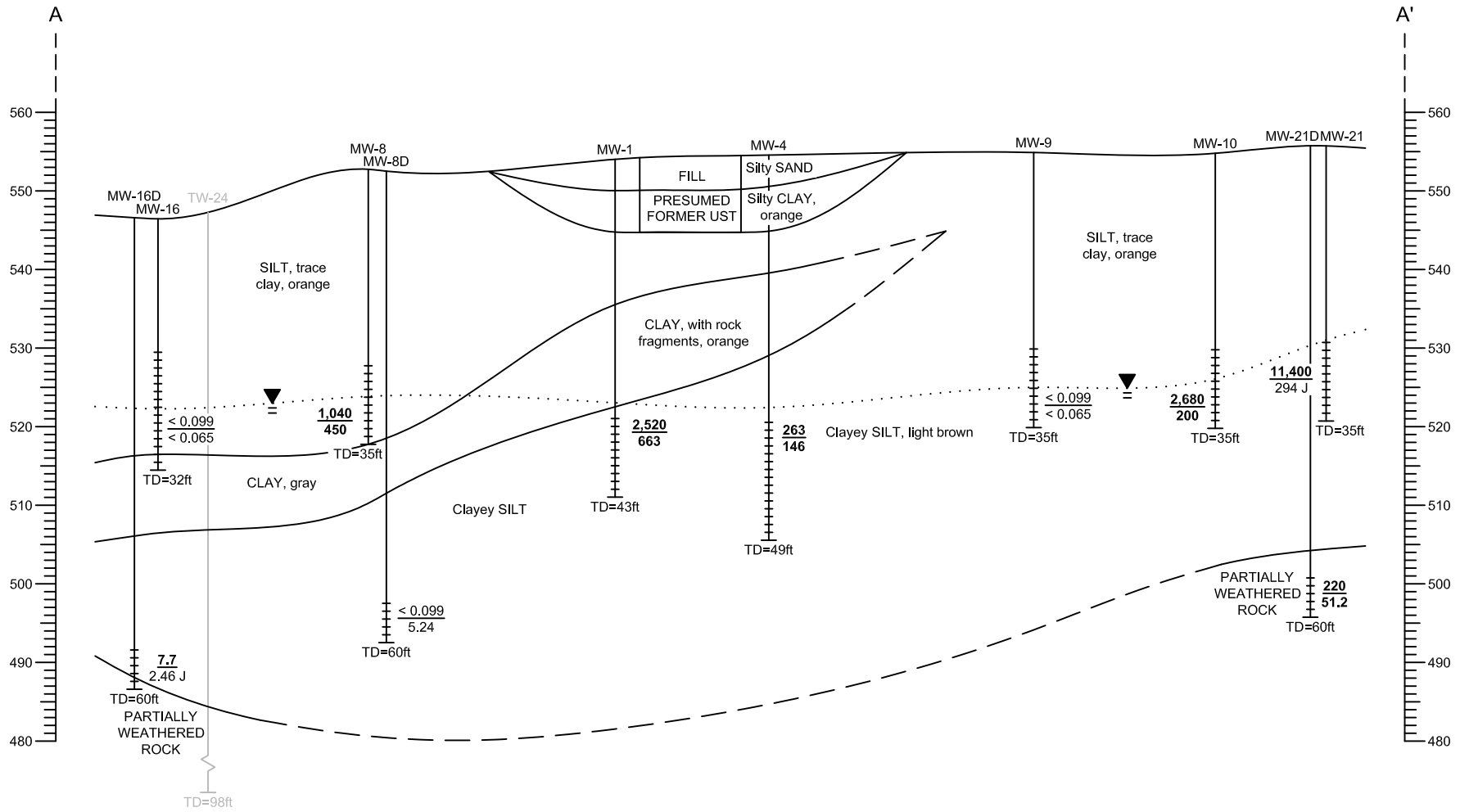
Fig No. 5



EXPLANATION

MW-1 (MONITORING WELL)

WATER LEVEL

SCREEN INTERVAL

TD = TOTAL DEPTH (in feet)

2,680 / 200 BENZENE CONCENTRATION / NAPHTHALENE CONCENTRATION

RBSLs RISK-BASED SCREENING LEVELS

CONCENTRATIONS IN BOLD EXCEED RBSLs

NOTE: GROUND WATER SAMPLES COLLECTED ON JULY 17-20, 2012.

40 0 10 20 40

HORIZONTAL SCALE IN FEET

20 0 5 10 20

VERTICAL SCALE IN FEET

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GEOLOGIC CROSS SECTION A-A'

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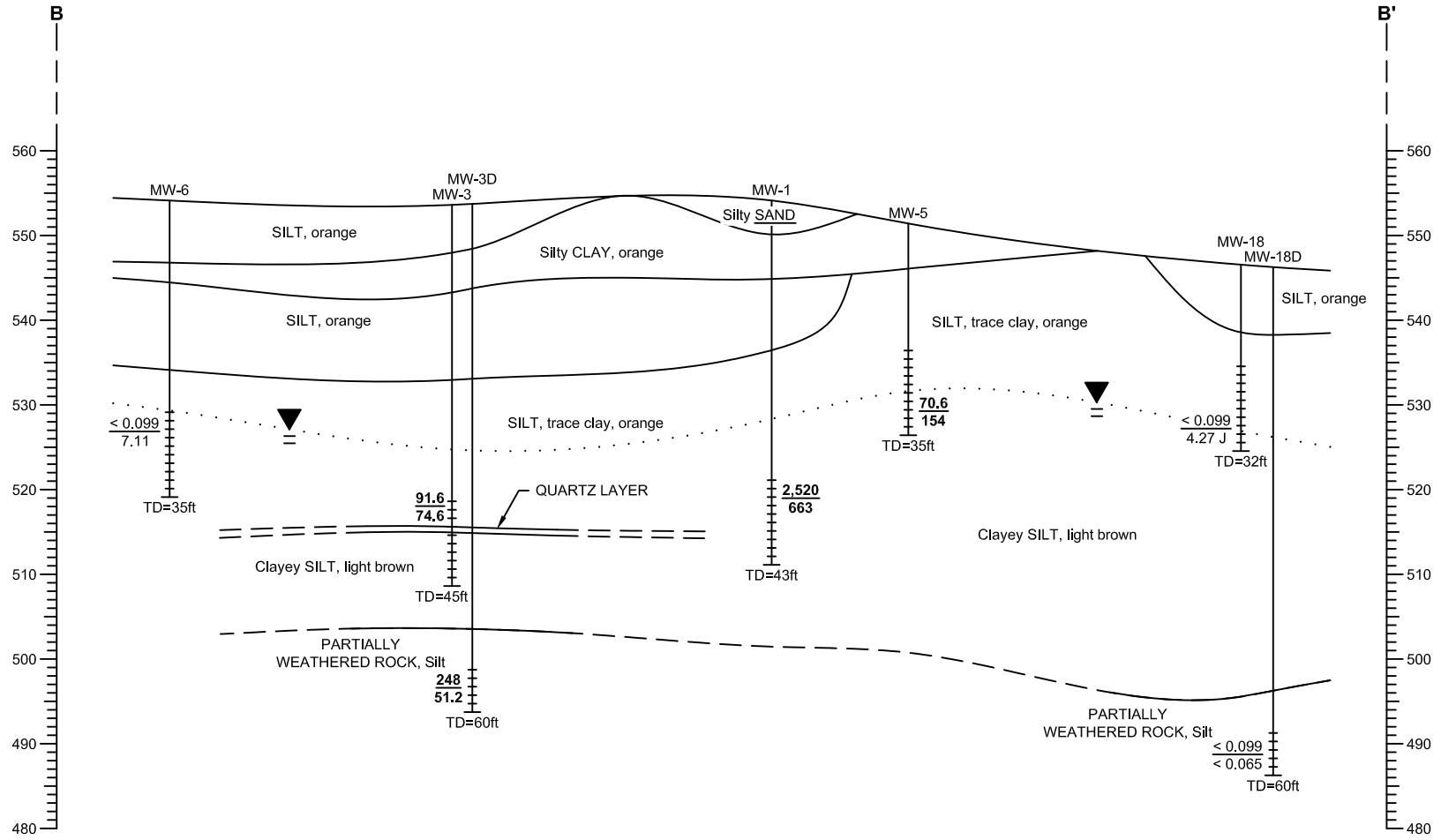
Fig No. 6



EXPLANATION

MW-1
(MONITORING WELL)

WATER LEVEL

SCREEN INTERVAL

TD = TOTAL DEPTH (in feet)

2,740 BENZENE CONCENTRATION
1,122 NAPHTHALENE CONCENTRATION

RBSLs RISK-BASED SCREENING LEVELS

CONCENTRATIONS IN BOLD EXCEED RBSLs

NOTE: GROUND WATER SAMPLES COLLECTED ON JULY 17-20, 2012.

30 0 10 20 30
HORIZONTAL SCALE IN FEET

20 0 5 10 20
VERTICAL SCALE IN FEET

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GEOLOGIC CROSS SECTION B-B'

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
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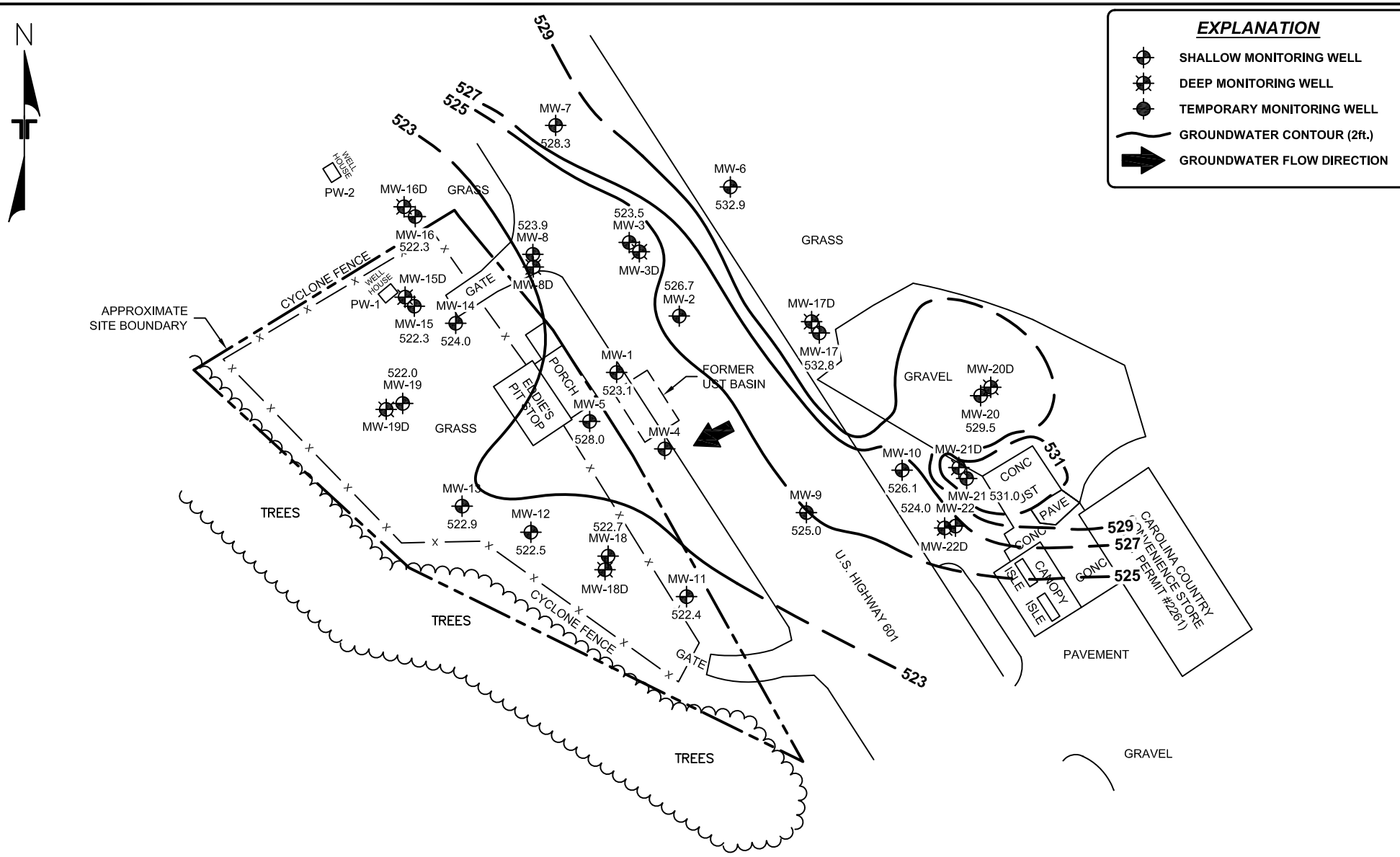
Fig No.
7



NOTE:
1) GROUNDWATER ELEVATIONS WERE RECORDED ON JULY 18, 2012.
2) MONITORING WELLS MW-1, MW-14, AND MW-22 WERE SCREENED WITHIN THE LOWER PORTION OF THE SHALLOW AQUIFER. THEREFORE THE GROUNDWATER ELEVATIONS WERE NOT USED DURING CONTOURING.
3) GROUNDWATER ELEVATIONS AT MONITORING WELLS MW-15 AND MW-16 APPEAR ANOMALOUS AND WERE NOT USED IN CONTOURING.

60 0 10 20 30 60
SCALE IN FEET

Project Mngr:	RWN
Drawn By:	PTK
Checked By:	RWN
Approved By:	PMH

Project No.	73098106
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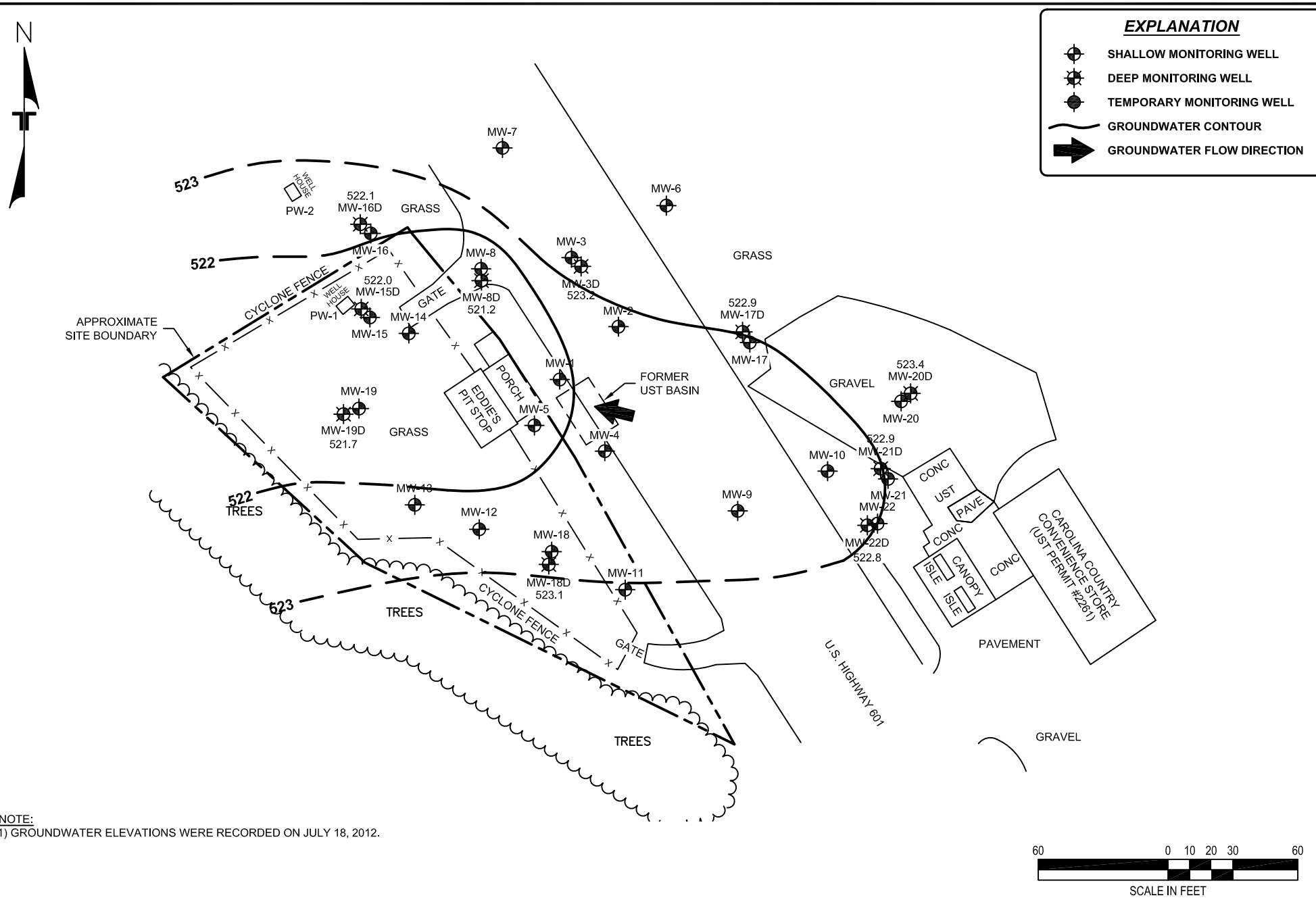
POTENTIOMETRIC SURFACE MAP OF THE UPPER PORTION OF THE SHALLOW AQUIFER

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA
UST PERMIT #18871

Fig No. 8



NOTE:
1) GROUNDWATER ELEVATIONS WERE RECORDED ON JULY 18, 2012.

Project Mngr:	RWN
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Approved By:	PMH
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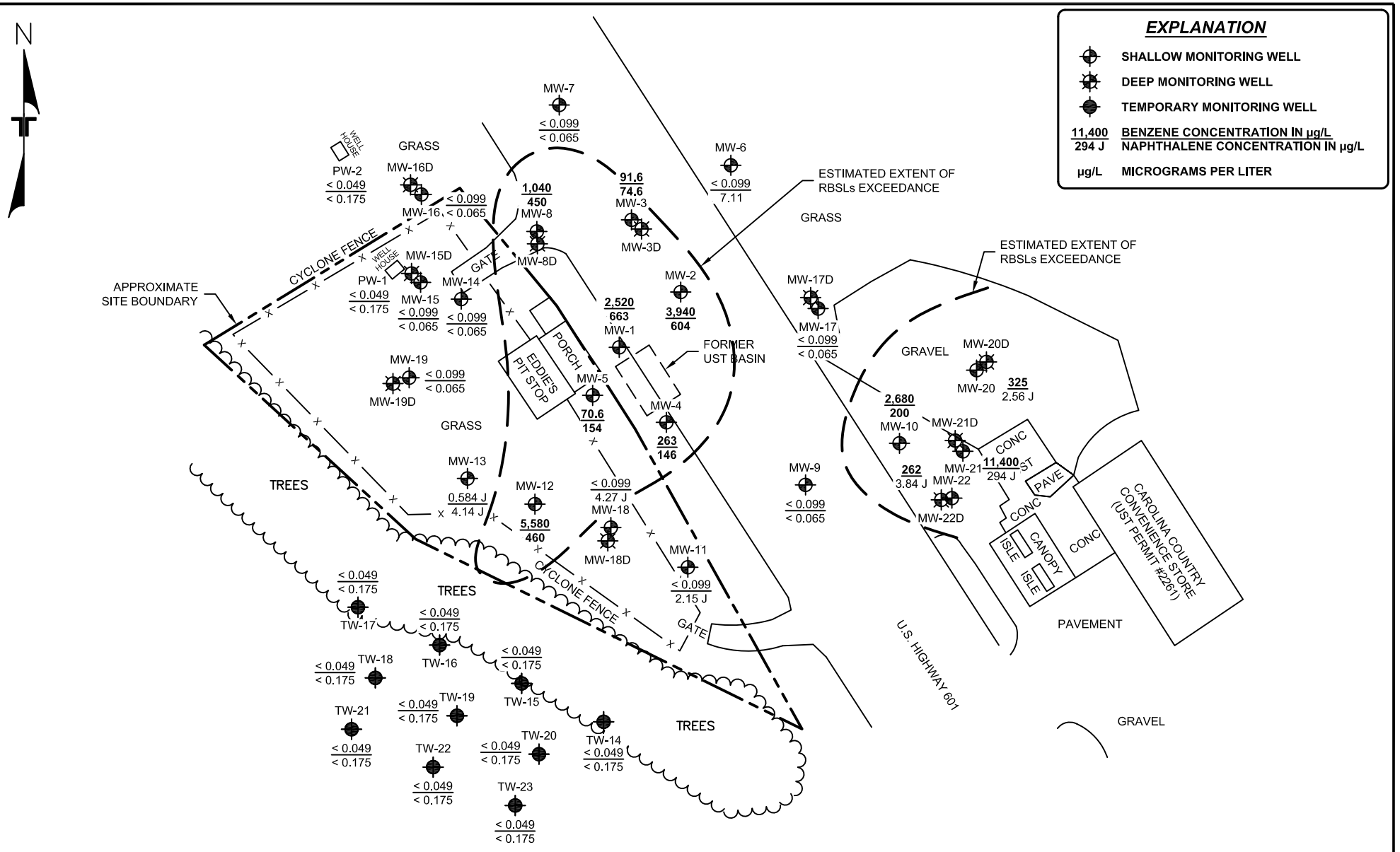
POTENTIOMETRIC SURFACE MAP OF THE LOWER PORTION OF THE SHALLOW AQUIFER

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA
UST PERMIT #18871

Fig No. 9



NOTE: GROUNDWATER SAMPLES WERE COLLECTED ON JULY 17-20, 2012.

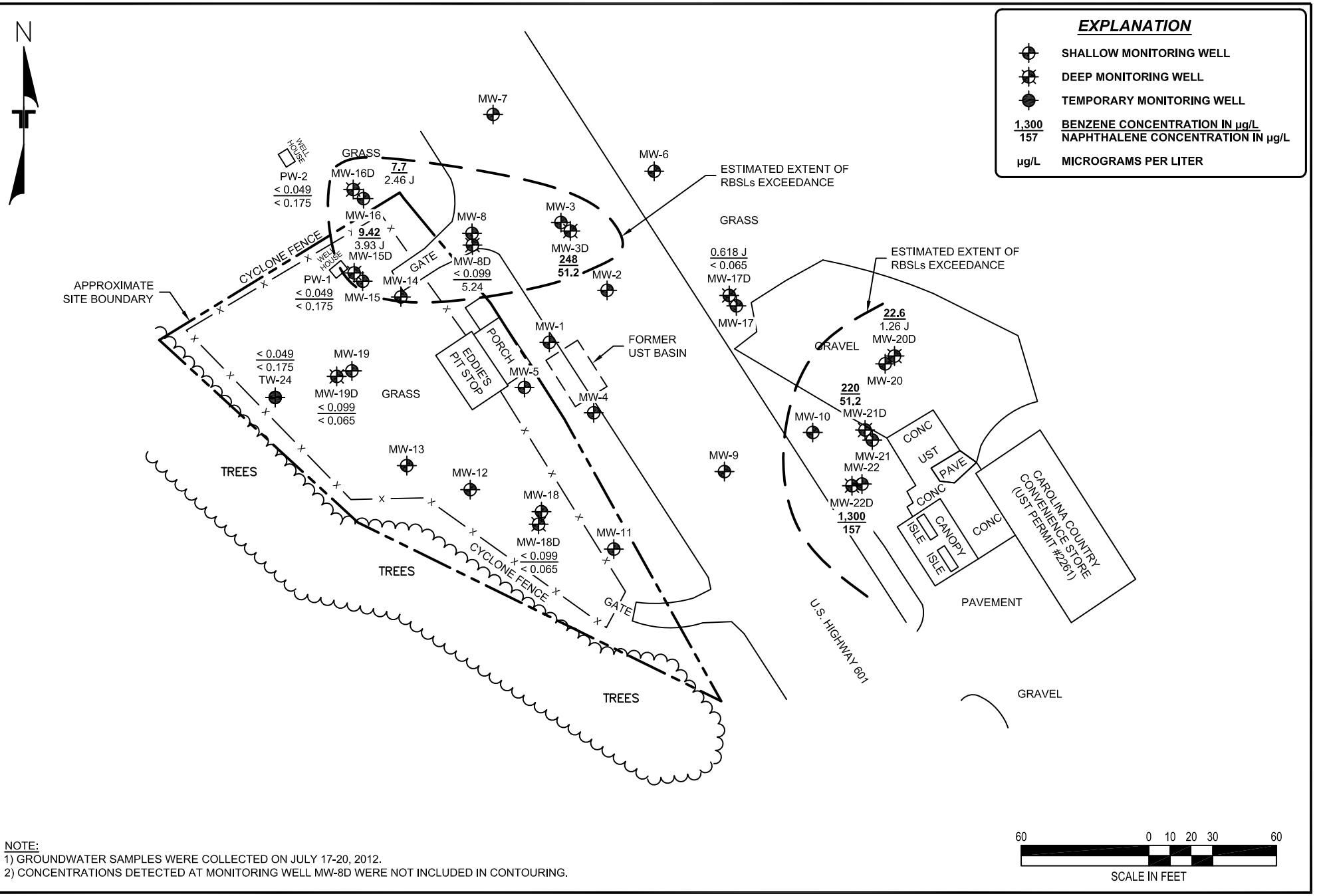
Project Mngr:	RWN
Drawn By:	PTK
Checked By:	RWN
Approved By:	PMH
Project No.	73098106
Scale:	AS SHOWN
File No.	73098106
Date:	AUGUST 2012

Terracon
Consulting Engineers and Scientists
521 CLEMSON ROAD COLUMBIA, SC 29229
PH. (803) 741-9000 FAX. (803) 741-9900

BENZENE / NAPHTHALENE CONCENTRATION MAP OF THE UPPER PORTION OF THE SHALLOW AQUIFER

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA
UST PERMIT #18871

Fig No. 10



NOTE:
1) GROUNDWATER SAMPLES WERE COLLECTED ON JULY 17-20, 2012.
2) CONCENTRATIONS DETECTED AT MONITORING WELL MW-8D WERE NOT INCLUDED IN CONTOURING.

Project Mngr:	RWN
Drawn By:	PTK
Checked By:	RWN
Approved By:	PMH
Project No.	73098106
Scale:	AS SHOWN
File No.	73098106
Date:	AUGUST 2012

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Consulting Engineers and Scientists
521 CLEMSON ROAD COLUMBIA, SC 29229
PH. (803) 741-9000 FAX. (803) 741-9900

BENZENE / NAPHTHALENE CONCENTRATION MAP OF THE LOWER PORTION OF THE SHALLOW AQUIFER

EDDIE'S PIT STOP - SCDOT
ROUTE 2, US HIGHWAY 601 NORTH
PAGELAND, SOUTH CAROLINA
UST PERMIT #18871

Fig No. 11

TABLES

Table 1 - Ground Water Screening Elevation Data
Table 2 - Ground Water Screening Analytical Data
Table 3 - Ground Water Monitoring Well Elevation Data
Table 4 - Ground Water Monitoring Well Analytical Data
Table 5 - Ground Water Analytical Data – Petroleum Related Compounds

TABLE 1
GROUND WATER SCREENING ELEVATION DATA

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	DEPTH TO GROUND WATER	Comments
TW-1	7/7/11 7/13/11	29	19-29	Dry 28.9	Abandoned after sample collection and based on analytical results (> RBSLs)
TW-2	7/7/11 7/13/11	29	19-29	Dry 28.7	
TW-3	8/27/11	28	18 - 28	Dry	Geoprobe point to 28 ft. and abandoned (dry) 1-inch well installed to 35 ft and abandoned Re-drilled and completed as 2-in. background well MW-10
	9/8/11 1/3/12	35	25-35	34.4 34.65	
TW-4	8/26/11 8/30/11 9/8/11 1/3/12	35*	24-34	Dry Dry 33.93 33.61	Over-drilled and completed as a background well MW-9
TW-5	8/22/11 8/30/11 9/8/11 1/3/12	28	18-28	Dry Dry Dry Dry	Over-drilled and completed as a sidegradient well MW-11
TW-6	8/22/11 8/30/11 9/8/11 1/3/12	28	18-28	Dry Dry Dry Dry	Abandoned in accordance with state well regulations
TW-7	8/23/11 8/30/11 9/8/11 1/3/12	28	18-28	Dry Dry Dry 26.38	Over-drilled and completed as a downgradient well MW-12
TW-8	8/23/11 8/30/11 9/8/11 1/3/12	28	18-28	Dry 27.3 26.84 26.3	Over-drilled and completed as a downgradient well MW-13
TW-9	8/23/11 8/30/11 9/8/11 1/3/12	28	18-28	Dry Dry Dry 27	Abandoned in accordance with state regulations

TABLE 1
GROUND WATER SCREENING ELEVATION DATA

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	DEPTH TO GROUND WATER	Comments
TW-10	8/23/11 8/30/11 9/8/11 1/3/12	28	18-28	Dry Dry Dry Dry	Over-drilled and completed as a side-gradient well MW-14
TW-11	8/25/11 8/30/11 9/8/11 1/3/12	35*	24-34	Dry Dry 33.4 30.55	Completed as side-gradient well MW-7
TW-12	8/23/11 8/30/11 9/8/11 1/3/12	35*	25-35	Dry 30.3 28.45 24.03	Completed as side-gradient well MW-6
TW-13	8/29/11 9/8/11 1/3/12	35*	25-35	Dry Dry 32.3	Completed as side-gradient well MW-8
TW-14	4/5/12	34	24-34	20.76	1-inch PVC wells installed within plowed field and abandoned after sample collection
TW-15	4/5/12	29	19-29	19.54	
TW-16	4/5/12	29	19-29	16.4	
TW-17	4/5/12	26	16-26	15.29	
TW-18	4/5/12	29	19-29	11.47	
TW-19	4/5/12	28	18-28	14.45	
TW-20	4/5/12	29	19-29	18.62	
TW-21	4/5/12	25	15-25	9.32	
TW-22	4/5/12	25	15-25	12.7	
TW-23	4/5/12	25	15-25	14.84	
TW-24	4/5/12	98	na	nm	Exploratory Boring

Notes:

Screening	666
Abandon	554

* - Screening completed as monitoring wells and are not included in screening footage totals
nm=not measured

TABLE 2
GROUND WATER SCREENING ANALYTICAL DATA
Petroleum Compounds

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	BENZENE (ug/l)	TOLUENE (ug/l)	ETHYL-BENZENE (ug/l)	XYLENES (ug/l)	MTBE (ug/l)	NAPHTH-ALENE (ug/l)
RBSLs	--	*5*	*1,000*	*700*	*10,000*	*40*	*25*
TW-1	7/13/11	**608**	123	245	1,160	< 0.420	**151**
TW-2	7/13/11	**11.3**	< 0.078	< 0.180	6.94	1.03	7.03
TW-3	7/13/11	**2,440**	877	460	2,640	**285**	**442**
	9/8/11	0.460 J	< 0.078	< 0.180	< 0.123	8.92	< 0.175
TW-11	9/8/11	< 0.049	< 0.078	< 0.180	< 0.123	3.04	< 0.175
TW-8	9/8/11	0.929 J	< 0.078	0.747 J	13.8	< 0.084	< 0.175
TW-12	9/8/11	< 0.049	< 0.078	< 0.180	< 0.123	< 0.084	< 0.175
TW-14	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175
TW-15	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175
TW-16	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175
TW-17	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175
TW-18	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175
TW-19	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175
TW-20	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175
TW-21	4/5/12	< 0.049	< 0.075	< 0.18	< 0.176	< 0.084	< 0.175
TW-22	4/5/12	< 0.049	< 0.075	< 0.18	< 0.176	< 0.084	< 0.175
TW-23	4/5/12	< 0.049	< 0.075	< 0.18	< 0.176	< 0.084	< 0.175

Notes:

1) Results shown in boldface type indicate concentrations which exceed the RBSL for that compound
2) ug/l - micrograms per liter or parts per billion
3) RBSL- Risk-Based Screening Level as defined by the SCDHEC RBCA Document
4) *J* - indicates an estimated value
5) *B* - indicates the result is between the Method Detection Limit and the Reporting Detection Limit
6) *NA* - Not Analyzed

TABLE 3
GROUND WATER MONITORING WELL ELEVATION DATA

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	TOP OF CASING ELEVATION	DEPTH TO GROUND WATER	GROUND WATER ELEVATION
MW-1	5/20/03	43	33- 43	298.85	35.70	263.15
	5/11/09				19.35	279.50
	9/8/11				36.7	262.15
	1/6/12				34.63	264.22
	3/27/12				26.21	272.64
	4/4/12			554.13	25.8	528.33
	7/18/12				31.0	523.13
MW-2	5/11/09	43	28-43	298.98	17.25	281.73
	7/7/11				25.85	273.13
	8/22/11				31.82	267.16
	9/8/11				33.1	265.88
	1/6/12				31.91	267.07
	3/27/12				23.25	275.73
	4/4/12			554.18	23.65	530.53
	7/18/12				27.52	526.66
MW-3	5/11/09	45	30-45	298.36	19.2	279.16
	9/8/11				36.28	262.08
	1/6/12				35.45	262.91
	3/27/12				31.74	266.62
	4/4/12			553.62	28.89	524.73
	7/18/12				30.1	523.52
MW-3D	9/8/11	60	55-60	298.51	25.19*	273.32
	1/5/12				35.12	263.39
	3/27/12				28.9	269.61
	4/4/12			553.74	29.48	524.26
	7/18/12				30.5	523.24

TABLE 3
GROUND WATER MONITORING WELL ELEVATION DATA

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	TOP OF CASING ELEVATION	DEPTH TO GROUND WATER	GROUND WATER ELEVATION
MW-4	5/11/09	49	34-49	299.29	20.16	279.13
	9/8/11				37.2	262.09
	1/6/12				35.79	263.50
	3/27/12				27.85	271.44
	4/4/12			554.56	27.9	526.66
	7/18/12				32.13	522.43
MW-5	8/9/10	25	15 - 25	296.16	17.35	278.81
	7/7/11				23.1	273.06
	8/22/11				24.92	271.24
	9/8/11				24.91	271.25
	1/6/12				24.36	271.80
	3/27/12				20.22	275.94
	4/4/12			551.42	19.79	531.63
	7/18/12				23.46	527.96
MW-6	8/23/11	35	25-35	298.58	Dry	Dry
	8/30/11				30.3	268.28
	9/8/11				28.45	270.13
	1/6/12				24.43	274.15
	3/27/12				19.21	279.37
	4/4/12			553.79	18.05	535.74
	7/18/12				20.9	532.89
MW-7	8/25/11	35	24-34	298.18	Dry	Dry
	8/30/11				Dry	Dry
	9/8/11				33.4	264.78
	1/6/12				32.39	265.79
	3/27/12				29.95	268.23
	4/4/12			553.42	28.02	525.40
	7/18/12				25.16	528.26

TABLE 3
GROUND WATER MONITORING WELL ELEVATION DATA

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	TOP OF CASING ELEVATION	DEPTH TO GROUND WATER	GROUND WATER ELEVATION
MW-8	8/29/11	35	25-35	297.5	Dry	Dry
	9/8/11				Dry	Dry
	1/6/12				32.85	264.65
	3/27/12				27.32	270.18
	4/4/12			552.76	27.05	525.71
	7/18/12				28.91	523.85
MW-8D	9/8/11	60	55-60	297.35	25.35*	272.00
	1/5/12				34.24	263.11
	3/27/12				26.12	271.23
	4/4/12			552.53	26.07	526.46
	7/18/12				31.3	521.23
MW-9	8/26/11	35	24-34	299.74	Dry	Dry
	8/30/11				Dry	Dry
	9/8/11				33.93	265.81
	1/6/12				33.6	266.14
	3/27/12				30.65	269.09
	4/4/12			554.89	29.12	525.77
	7/18/12				29.89	525.00
MW-10	8/27/11	35	25-35	299.54	Dry	Dry
	9/8/11				34.4	265.14
	1/6/12				34.5	265.04
	3/27/12				24.57	274.97
	4/4/12			554.79	24.79	530.00
	7/18/12				28.71	526.08
MW-11	1/6/12	35	19.5-34.5	293.42	32.0	261.42
	3/27/12				21.4	272.07
	4/4/12			548.76	21.5	527.26
	7/18/12				26.4	522.36

TABLE 3
GROUND WATER MONITORING WELL ELEVATION DATA

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	TOP OF CASING ELEVATION	DEPTH TO GROUND WATER	GROUND WATER ELEVATION
MW-12	1/6/12	35	20-35	290.46	26.05	264.41
	3/27/12				17.69	272.77
	4/4/12			545.68	21.5	524.18
	7/18/12				23.18	522.50
MW-13	1/6/12	35	20-35	289.98	27.9	262.08
	3/27/12				17.45	272.53
	4/4/12			545.2	16.9	528.30
	7/18/12				22.32	522.88
MW-14	1/6/12	35	20-35	291.24	30.72	260.52
	3/27/12				19.34	271.90
	4/4/12			546.48	20.76	525.72
	7/18/12				22.52	523.96
MW-15	4/4/12	32	17-32	545.77	25.45	520.32
	7/18/12				23.52	522.25
MW-15D	4/4/12	60	55-60	545.89	18.11	527.78
	7/18/12				23.86	522.03
MW-16	4/4/12	32	17-32	546.47	19.02	527.45
	7/18/12				24.2	522.27
MW-16D	4/4/12	60	55-60	546.59	19.7	526.89
	7/18/12				24.47	522.12
MW-17	4/4/12	35	20-35	554.33	20.39	533.94
	7/18/12				21.53	532.80
MW-17D	4/4/12	60	55-60	554.3	27.54	526.76
	7/18/12				31.37	522.93
MW-18	4/4/12	32	17-32	546.56	19.65	526.91
	7/18/12				23.9	522.66
MW-18D	4/4/12	60	55-60	546.27	19.17	527.10
	7/18/12				23.17	523.10
MW-19	4/4/12	32	17.5-27.5	544.53	18.5	526.03
	7/18/12				22.53	522.00

TABLE 3
GROUND WATER MONITORING WELL ELEVATION DATA

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	TOP OF CASING ELEVATION	DEPTH TO GROUND WATER	GROUND WATER ELEVATION
MW-19D	4/4/12	60	55-60	544.11	16.2	527.91
	7/18/12				22.41	521.70
MW-20	7/18/12	35	25-35	556.55	27.02	529.53
MW-20D	7/18/12	60	55-60	556.66	33.31	523.35
MW-21	7/18/12	35	25-35	555.73	24.72	531.01
MW-21D	7/18/12	60	55-60	555.75	32.83	522.92
MW-22	7/18/12	35	25-35	555.29	31.34	523.95
MW-22D	7/18/12	60	55-60	554.98	32.23	522.75
TW-14	4/4/12	34	24-34	547.23	20.76	526.47
TW-15	4/4/12	29	19-29	546.42	19.54	526.88
TW-16	4/4/12	29	19-29	545.42	16.4	529.02
TW-17	4/4/12	26	16-26	544.74	15.29	529.45
TW-18	4/4/12	29	19-29	544.3	11.47	532.83
TW-19	4/4/12	28	18-28	545.64	14.15	531.49
TW-20	4/4/12	29	19-29	546.56	18.62	527.94
TW-21	4/4/12	25	15-25	543.4	9.32	534.08
TW-22	4/4/12	25	15-25	544.8	12.7	532.10
TW-23	4/4/12	25	15-25	545.68	14.84	530.84

Notes:

1) Top pf casing elevations surveyed by Terracon personnel

2) * - Maybe altered by drilling fluid and poor development

TABLE 4
GROUND WATER MONITORING WELL ANALYTICAL DATA
Petroleum Compounds

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	BENZENE (ug/l)	TOLUENE (ug/l)	ETHYL-BENZENE (ug/l)	XYLENES (ug/l)	MTBE (ug/l)	NAPHTH-ALENE (ug/l)	EDB (ug/l)	1,2 DCA (ug/l)	Total Lead (ug/l)
RBSLs	--	*5*	*1,000*	*700*	*10,000*	*40*	*25*	*0.05*	*5.0*	*15*
MW-1	5/11/09	**3,250**	265	**1,580**	5,160	< 3.89	**841**	**1.66**	NA	12 *B*
	1/6/12	**3,020**	722	**1,080**	7,510	< 4.20	**773**	**2.91**	**57.5**	< 2.8
	4/5/12	**2,740**	378	**1,940**	9,660	< 3.36	**1,122**	**0.68**	**73.7**	< 2.8
	7/19/12	**2,520**	295	**1,280**	5,710	< 1.21	**663**	**<**	**60.9**	< 2.8
MW-2	5/11/09	**2,290**	73.6	699	2,140	< 1.94	**186**	**0.385**	NA	3.3
	1/6/12	**4,210**	262	**1,390**	6,280	< 3.36	**968**	**1.02**	**113**	< 2.8
	4/5/12	**2,740**	378	**1,940**	9,660	< 3.36	**1,120**	**0.682**	**73.7**	< 2.8
	7/17/12	**3,940**	146	**1,100**	4,250	< 1.51	**604**	**0.210**	**122**	1.1J
MW-3	5/11/09	**290**	63.5	154	217	< 0.194	**39.6**	< 0.0035	NA	**27**
	1/6/12	**138**	< 0.155	47.2	40.9	< 0.168	**105**	< 0.0032	< 0.242	< 2.8
	4/5/12	**148**	1.16	40.7	< 0.176	< 0.084	**73**	< 0.0029	< 0.121	13.0 J
	7/17/12	**91.6**	0.408J	48.9	5.71	< 0.06	**74.6**	< 0.0029	1.26	< 0.28
MW-3D	1/5/12	**165**	< 0.388	42.3	20.1	< 0.42	**56.7**	< 0.0032	**23.7**	**65**
	4/5/12	**405**	10.7	115	83.3	< 0.42	**73**	< 0.0029	**28**	**64**
	7/17/12	**248**	4.08J	71.9	43.6	< 0.302	**51.2**	< 0.0029	**24.3**	5.3
MW-4	5/11/09	**75.8**	< 0.082	14	200	1.16	16.7	0.042	NA	14 B
	1/6/12	**324**	< 0.155	32.6	437	< 0.168	**126**	0.077	< 0.242	< 2.8
	4/5/12	**98.3**	< 0.078	26.6	71.6	< 0.084	**94.4**	< 1.11	< 0.121	6.6 J
	7/18/12	**263**	< 0.254	83.7	361	< 0.121	**146**	0.033	4.97	< 2.8
MW-5	8/9/10	**166**	44.4	539	1,070	< 0.517	**307**	0.269	NA	3.4 B
	1/6/12	**125**	25.7	630	1,260	< 0.839	**334**	< 0.0032	< 1.21	< 2.8
	4/5/12	**93.7**	26.6	497	943	< 0.839	**242**	< 0.0029	< 1.21	< 2.8
	7/19/12	**70.6**	12.9	214	388	< 0.121	**154**	< 0.0029	< 0.238	< 2.8
MW-6	1/6/12	< 0.049	< 0.078	< 0.18	1.37 J	< 0.084	6.42	< 0.0032	< 0.121	4.5 J
	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	6.49	< 0.0029	< 0.121	< 2.8
	7/18/12	< 0.099	< 0.127	< 0.119	< 0.384	< 0.06	7.11	< 0.0029	< 0.119	< 2.8
MW-7	1/6/12	< 0.049	< 0.078	< 0.18	< 0.123	< 0.084	< 0.175	< 0.0032	< 0.121	**22.0**
	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	3.46 J	< 0.0029	< 0.121	12 J
	7/17/12	< 0.099	< 0.127	< 0.119	< 0.384	< 0.06	< 0.065	< 0.119	< 0.0029	< 0.28
MW-8	1/6/12	**970**	31.6	262	450	< 0.839	**91.1**	< 0.0032	< 1.21	< 2.8
	4/5/12	**1,000**	86.4	828	2,420	< 1.68	**389**	< 0.0029	**8.66 J**	3.8 J
	7/19/12	**1,040**	117	962	3,060	< 0.604	**450**	< 0.0029	**7.11 J**	< 2.8
MW-8D	1/5/12	< 0.049	< 0.078	< 0.18	< 0.123	< 0.084	5.21	< 0.0032	1.34	11.0
	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175	< 0.0029	< 0.121	**27.0**
	7/19/12	< 0.099	< 0.127	1.48	4.59	< 0.06	5.24	< 0.0029	< 0.119	< 2.8
MW-9	1/6/12	< 0.049	< 0.078	< 0.18	< 0.123	< 0.084	< 0.175	< 0.0032	< 0.121	0.03
	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175	< 0.0029	< 0.12	< 2.8
	7/17/12	< 0.099	< 0.127	< 0.119	< 0.384	< 0.06	< 0.065	< 0.0029	< 0.119	< 0.28

TABLE 4
GROUND WATER MONITORING WELL ANALYTICAL DATA
Petroleum Compounds

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	BENZENE (ug/l)	TOLUENE (ug/l)	ETHYL-BENZENE (ug/l)	XYLENES (ug/l)	MTBE (ug/l)	NAPHTH-ALENE (ug/l)	EDB (ug/l)	1,2 DCA (ug/l)	Total Lead (ug/l)
RBSLs	--	*5*	*1,000*	*700*	*10,000*	*40*	*25*	*0.05*	*5.0*	*15*
MW-10	1/6/12	**26.3**	< 0.078	11.4	21.8	**48.4**	5.34	0.015	< 0.121	< 2.8
	4/5/12	**2,150**	< 3.1	194	933	**259**	**263**	**0.268**	**57.5**	< 2.8
	7/18/12	**2,680**	< 3.18	148	1,150	**276**	**200**	**0.1**	**68.3**	< 2.8
MW-11	1/6/12	< 0.049	< 0.078	< 0.18	< 0.123	< 0.084	< 0.175	< 0.0032	< 0.121	< 2.8
	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175	< 0.0029	< 0.121	< 2.8
	7/1812	< 0.099	< 0.127	< 0.119	< 0.384	< 0.06	2.15 J	< 0.0029	< 0.119	< 2.8
MW-12	1/6/12	**3,140**	< 3.10	89.5	247	< 3.36	**465**	< 0.0032	< 4.84	< 2.8
	4/5/12	**2,980**	221	485	1,980	< 3.36	**204**	< 0.0029	**33.6 J**	< 2.8
	7/20/12	**5,580**	457	1,150	4,040	< 3.02	**460**	< 0.0029	**39.4 J**	< 2.8
MW-13	1/6/12	**56**	< 0.388	< 0.9	4.56 J	< 0.42	**33.5**	< 0.0032	10.7	4.1 J
	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175	< 0.0029	1.34	< 2.8
	7/20/12	0.584 J	< 0.127	0.522 J	10.2	< 0.06	4.14 J	< 0.0029	< 0.119	< 2.8
MW-14	1/6/12	**5.73**	7.77	< 0.18	< 0.123	< 0.084	5.57	< 0.0032	1.74	**25.0**
	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175	< 0.0029	< 0.121	< 2.8
	7/19/12	< 0.099	< 0.127	< 0.119	< 0.384	< 0.06	< 0.065	< 0.0029	< 0.119	< 2.8
MW-15	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175	< 0.0029	< 0.121	< 2.8
	7/20/12	< 0.099	< 0.127	< 0.119	< 0.384	< 0.06	< 0.065	< 0.0029	< 0.119	< 2.8
MW-15D	4/5/12	**5.95**	< 0.078	6.33	10.9	< 0.084	5.91	< 0.0029	< 0.121	< 2.8
	7/19/12	**9.42**	< 0.127	1.50	< 0.384	< 0.06	3.93 J	< 0.0029	6.78	< 2.8
MW-16	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175	< 0.0029	< 0.121	< 2.8
	7/19/12	< 0.099	< 0.127	< 0.119	< 0.384	< 0.06	< 0.065	< 0.0029	< 0.119	< 2.8
MW-16D	4/5/12	**15.9**	< 0.078	6.1	12.6	< 0.084	6.32	< 0.0029	< 0.121	3.8 J
	7/19/12	**7.7**	< 0.127	< 0.119	2.54 J	< 0.06	2.46 J	< 0.0029	0.942 J	< 2.8
MW-17	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175	< 0.0029	< 0.121	< 2.8
	7/18/12	< 0.099	< 0.127	< 0.119	< 0.384	< 0.06	< 0.065	< 0.0029	< 0.119	< 2.8
MW-17D	4/5/12	1.89	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175	< 0.0029	4.74	< 2.8
	7/18/12	0.618 J	< 0.127	< 0.119	< 0.384	< 0.06	< 0.065	< 0.0029	1.17	< 2.8
MW-18	4/5/12	3.73	< 0.078	19.0	21.9	< 0.084	4.01 J	< 0.0029	< 0.121	4.6 J
	7/20/12	< 0.099	< 0.127	4.8	5.5	< 0.06	4.27 J	< 0.0029	< 0.119	< 2.8
MW-18D	4/5/12	**90.1**	< 0.078	< 0.18	1.17 J	< 0.084	4.46 J	< 0.0029	**21.7**	6.1 J
	7/19/12	< 0.099	< 0.127	< 0.119	< 0.384	< 0.06	< 0.065	< 0.0029	**19.4**	< 2.8
MW-19	4/5/12	4.87	< 0.078	0.328 J	1.01 J	< 0.084	< 0.175	< 0.0029	**12.5**	< 2.8
	7/20/12	< 0.099	< 0.127	< 0.119	< 0.384	< 0.06	< 0.065	< 0.0029	**63.7**	< 2.8
MW-19D	4/5/12	3.07	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175	< 0.0029	4.87	11.0 J
	7/19/12	< 0.099	< 0.127	< 0.119	< 0.384	< 0.06	< 0.065	< 0.0029	1.46	< 2.8
MW-20	7/18/12	**325**	1.77 J	53	105	35	2.56 J	**0.112**	**7.21**	< 2.8
MW-20D	7/18/12	**22.6**	< 0.127	1.7	8.1	25.1	1.26 J	< 0.0029	3.43	< 2.8
MW-21	7/18/12	**11,400**	12,100	1,170	5,840	**2,870**	294 J	**3.75**	**436**	< 2.8

TABLE 4
GROUND WATER MONITORING WELL ANALYTICAL DATA
Petroleum Compounds

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	BENZENE (ug/l)	TOLUENE (ug/l)	ETHYL-BENZENE (ug/l)	XYLENES (ug/l)	MTBE (ug/l)	NAPHTH-ALENE (ug/l)	EDB (ug/l)	1,2 DCA (ug/l)	Total Lead (ug/l)
RBSLs	--	*5*	*1,000*	*700*	*10,000*	*40*	*25*	*0.05*	*5.0*	*15*
MW-21D	7/18/12	**220**	473	151	785	**64.7**	**51.2**	0.017	8.19	< 2.8
MW-22	7/18/12	**262**	37.7	73.9	286	5.85	3.84 J	0.013	1.65 J	< 2.8
MW-22D	7/18/12	**1,300**	80.2	241	639	61	157	0.011	19.6	< 2.8
PW-1	1/5/12	< 0.049	< 0.078	< 0.18	< 0.123	< 0.084	< 0.175	< 0.0032	1.89	NA
On-Site Supply Well	1/27/12	< 0.049	< 0.078	< 0.18	< 0.123	< 0.084	< 0.175	< 0.0029	1.97	NA
	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175	< 0.0029	< 0.121	NA
	7/17/12	< 0.099	< 0.127	< 0.119	< 0.384	< 0.06	< 0.065	< 0.0029	1.22	NA
PW-2	1/5/12	4.64	< 0.078	< 0.18	< 0.123	< 0.084	< 0.175	< 0.0032	< 0.121	NA
Casper Supply Well	1/27/12	1.15	< 0.078	< 0.18	< 0.123	< 0.084	< 0.175	< 0.0029	< 0.121	NA
	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175	< 0.0029	< 0.121	NA
	7/17/12	0.448J	< 0.127	< 0.119	< 0.384	< 0.06	< 0.065	< 0.0029	< 0.119	NA
Casper Residence Municipal Water Supply	1/27/12	< 0.078	< 0.078	< 0.18	< 0.123	< 0.084	< 0.175	< 0.0029	< 0.121	NA

Notes:
1) Results shown in boldface type indicate concentrations which exceed the RBSL for that compound
2) ug/l - micrograms per liter or parts per billion
3) RBSL- Risk-Based Screening Level as defined by the SCDHEC RBCA Document
4) *J* - indicates an estimated value
5) *B* - indicates the result is between the Method Detection Limit and the Reporting Detection Limit
6) *NA* - Not Analyzed
7) 1,2 DCA - 1,2 Dichloroethane

TABLE 5
GROUND WATER MONITORING WELL ANALYTICAL DATA
Petroleum Related Compounds

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	Ethanol (ug/L)	ETBE (ug/L)	DIPE (ug/L)	ETBA (ug/L)	TBA (ug/L)	TAME (ug/L)	TAA (ug/L)	TBF (ug/L)
ALs	--	*10,000*	*47*	*150*	*NE*	*1,400*	*128*	*240*	*NE*
MW-1	1/6/12	< 4090	< 55.5	< 5.25	< 1,880	< 14.5	< 52.5	**3,570**	< 108
	4/5/12	< 3,270	< 44.4	77.9J	< 1,500	< 11.6	< 42	**3,880**	< 86.4
	7/19/12	< 1640	< 22.2	32.8J	< 752	< 5.8	< 21.0	**3,520**	< 43.2
MW-2	1/6/12	< 3,270	< 44.4	**836 J**	< 1,500	< 11.6	< 42	**6,820**	< 86.4
	4/5/12	< 4,090	,55.5	124J	< 1,880	149J	< 52.5	**6,580**	< 108
	7/17/12	< 2,050	< 27.8	71.9J	< 940	158J	< 26.3	**6,590**	< 54
MW-3	1/6/12	< 164	< 2.22	3.40 J	< 75.2	< 0.58	< 2.1	**243**	< 4.32
	4/5/12	< 81.8	< 1.11	4.64 J	< 37.6	< 0.29	< 1.05	**254**	< 2.16
	7/17/12	< 81.8	< 1.11	1.53J	< 37.6	4.73J	< 1.05	**170**	< 2.16
MW-3D	1/5/12	< 409	< 5.55	42.8	< 188	55.5	< 5.25	**2,280**	< 10.8
	4/5/12	< 409	< 5.55	< 43	< 188	< 62.1	< 5.25	**2,120**	< 10.8
	7/17/12	< 409	< 5.55	36.1	< 188	71	< 5.25	**2,340**	< 10.8
MW-4	1/6/12	< 164	< 2.22	3.52 J	< 75.2	< 0.58	< 2.1	**691**	< 4.32
	4/5/12	< 81.8	< 1.11	2.34 J	< 37.6	8.65 J	< 1.05	**380**	< 2.16
	7/18/12	< 164	< 2.22	2.88 J	< 75.2	< 0.58	< 2.1	**463**	< 4.32
MW-5	1/6/12	< 818	< 11.1	< 1.05	< 376	< 2.90	< 10.5	**278**	< 21.6
	4/5/12	< 818	< 11.1	< 1.05	< 376	< 2.9	< 10.5	139 J	< 21.6
	7/19/12	< 164	< 2.22	< 0.210	< 75.2	< 0.58	< 2.10	134	< 4.32
MW-6	1/6/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
	4/5/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
	7/18/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
MW-7	1/6/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
	4/5/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
	7/17/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
MW-8	1/6/12	< 818	< 376	25.9 J	< 11.1	< 2.90	< 10.5	**4,160**	< 21.6
	4/5/12	< 1,640	< 22.2	30.4 J	< 752	< 5.8	< 21.0	**1,360**	< 43.2
	7/19/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
MW-8D	1/5/12	< 81.8	< 1.11	2.74 J	< 37.6	< 0.29	< 1.05	21.4	< 2.16
	4/5/12	< 81.8	< 1.11	< 0.150	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
	7/19/12	< 81.8	< 1.11	< 0.150	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
MW-9	1/6/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	10.5 J	< 2.16
	4/5/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
	7/17/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16

TABLE 5
GROUND WATER MONITORING WELL ANALYTICAL DATA
Petroleum Related Compounds

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	Ethanol (ug/L)	ETBE (ug/L)	DIPE (ug/L)	ETBA (ug/L)	TBA (ug/L)	TAME (ug/L)	TAA (ug/L)	TBF (ug/L)
ALs	--	*10,000*	*47*	*150*	*NE*	*1,400*	*128*	*240*	*NE*
MW-10	1/6/12	< 81.8	< 1.11	1.07 J	< 37.6	41.2	< 1.05	106	< 2.16
	4/5/12	< 3,270	< 44.4	< 4.2	< 1,500	**1,420**	< 42	**3,930**	< 86.4
	7/18/12	< 2050	< 27.8	< 2.63	< 940	1,270	< 26.3	**3,680**	< 54
MW-11	1/6/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
	4/5/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
	7/18/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
MW-12	1/6/12	< 3,270	< 44.4	73.4 J	< 1,500	< 11.6	< 42	**10,600**	< 86.4
	4/5/12	< 3,270	< 44.4	77.5 J	< 1,500	< 11.6	< 42	**6,010**	< 86.4
	7/20/12	< 4090	< 55.5	43.5 J	< 1880	< 14.5	< 52.5	**5,210**	< 108
MW-13	1/6/12	< 409	< 5.55	15.6 J	< 188	47.2 J	< 5.25	**1,710**	< 10.8
	4/5/12	< 81.8	< 1.11	1.95 J	< 37.6	< 0.29	< 1.05	106	< 2.16
	7/20/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
MW-14	1/6/12	< 81.8	< 1.11	1.79 J	< 37.6	< 0.29	< 1.05	158	< 2.16
	4/5/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	12.7 J	< 2.16
	7/19/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
MW-15	4/5/12	< 81.8	< 1.11	< 0.105	< 37.6	2.87 J	< 1.05	24.3	< 2.16
	7/20/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
MW-15D	4/5/12	< 81.8	< 1.11	2.07 J	< 37.6	10.1	< 1.05	36.7	< 2.16
	7/19/12	< 81.8	< 1.11	4.47 J	< 37.6	< 0.29	< 1.05	43.7	< 2.16
MW-16	4/5/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
	7/19/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
MW-16D	4/5/12	< 81.8	< 1.11	1.63 J	< 37.6	< 0.29	< 1.05	49.8	< 2.16
	7/21/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
MW-17	4/5/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	8.2 J	< 2.16
	7/18/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
MW-17D	4/5/12	< 81.8	< 1.11	3.54 J	< 37.6	< 0.29	< 1.05	8.81 J	< 2.16
	7/18/12	< 81.8	< 1.11	0.875 J	< 37.6	< 0.29	< 1.05	6.61 J	< 2.16
MW-18	4/5/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	7.91 J	< 2.16
	7/20/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
MW-18D	4/5/12	< 81.8	< 1.11	31.4	< 37.6	< 0.29	< 1.05	93.6	< 2.16
	7/19/12	< 81.8	< 1.11	< 0.105	< 37.6	< 0.29	< 1.05	53.8	< 2.16
MW-19	4/5/12	< 81.8	< 1.11	< 74.2	< 37.6	190	< 1.05	**301**	< 2.16
	7/20/12	< 81.8	< 1.11	59	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
MW-19D	4/5/12	< 81.8	< 1.11	5.71	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16
	7/19/12	< 81.8	< 1.11	5.22	< 37.6	< 0.29	< 1.05	< 1.39	< 2.16

TABLE 5
GROUND WATER MONITORING WELL ANALYTICAL DATA
Petroleum Related Compounds

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	Ethanol (ug/L)	ETBE (ug/L)	DIPE (ug/L)	ETBA (ug/L)	TBA (ug/L)	TAME (ug/L)	TAA (ug/L)	TBF (ug/L)
ALs	--	*10,000*	*47*	*150*	*NE*	*1,400*	*128*	*240*	*NE*
MW-20	7/18/12	< 164	< 2.22	< 0.210	< 75.2	51.2	< 2.1	420	< 4.32
MW-20D	7/18/12	< 81.8	< 1.11	< 0.105	< 37.6	46.2	2.09 J	66	< 2.16
MW-21	7/18/12	< 8180	< 3760	< 10.5	< 3760	16,300	< 105	32,100	< 216
MW-21D	7/18/12	< 409	< 5.55	< 0.525	< 188	179	< 5.25	670	< 10.8
MW-22	7/18/12	< 164	< 2.22	< 0.21	< 75.2	27.2	< 2.1	163	< 4.32
MW-22D	7/18/12	< 818	< 11.1	< 1.05	< 376	566	< 10.5	2,780	< 21.6
PW-1	1/5/12	NA	NA	NA	NA	NA	NA	NA	NA
	4/5/12	NA	NA	NA	NA	NA	NA	NA	NA
	7/17/12	NA	NA	NA	NA	NA	NA	NA	NA
PW-2	1/5/12	NA	NA	NA	NA	NA	NA	NA	NA
	4/5/12	NA	NA	NA	NA	NA	NA	NA	NA
	7/17/12	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

1) Results shown in boldface type indicate detected compounds.

2) ug/l - micrograms per liter or parts per billion

3) ALs- SCDHEC Action Levels for Oxygenate Compounds, dated November 2008.

4) NE - Not Established

6) J indicates an estimated value below the laboratory reporting limit

7) 8 Oxygenates abbreviated as:

ETBE = ethyl tert-butyl ether
TBA = t-butanol
TBF = tert-butyl formate
DIPE = diisopropyl ether
TAME = t-amyl methyl ether
1,2-DCA = 1,2-dichloroethane
ETBA = ethyl tert-butanol
TAA = tert-amyl alcohol

TABLE 1
GROUND WATER SCREENING ELEVATION DATA

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	DEPTH TO GROUND WATER	Comments
TW-1	7/7/11 7/13/11	29	19-29	Dry 28.9	Abandoned after sample collection and based on analytical results (> RBSLs)
TW-2	7/7/11 7/13/11	29	19-29	Dry 28.7	
TW-3	8/27/11	28	18 - 28	Dry	Geoprobe point to 28 ft. and abandoned (dry) 1-inch well installed to 35 ft and abandoned Re-drilled and completed as 2-in. background well MW-10
	9/8/11 1/3/12	35	25-35	34.4 34.65	
TW-4	8/26/11 8/30/11 9/8/11 1/3/12	35*	24-34	Dry Dry 33.93 33.61	Over-drilled and completed as a background well MW-9
TW-5	8/22/11 8/30/11 9/8/11 1/3/12	28	18-28	Dry Dry Dry Dry	Over-drilled and completed as a sidegradient well MW-11
TW-6	8/22/11 8/30/11 9/8/11 1/3/12	28	18-28	Dry Dry Dry Dry	Abandoned in accordance with state well regulations
TW-7	8/23/11 8/30/11 9/8/11 1/3/12	28	18-28	Dry Dry Dry 26.38	Over-drilled and completed as a downgradient well MW-12
TW-8	8/23/11 8/30/11 9/8/11 1/3/12	28	18-28	Dry 27.3 26.84 26.3	Over-drilled and completed as a downgradient well MW-13
TW-9	8/23/11 8/30/11 9/8/11 1/3/12	28	18-28	Dry Dry Dry 27	Abandoned in accordance with state regulations

PW-1 122ft Drinking well

TABLE 1
GROUND WATER SCREENING ELEVATION DATA

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	DEPTH TO GROUND WATER	Comments
TW-10	8/23/11 8/30/11 9/8/11 1/3/12	28	18-28	Dry Dry Dry Dry	Over-drilled and completed as a side-gradient well MW-14
TW-11	8/25/11 8/30/11 9/8/11 1/3/12	35*	24-34	Dry Dry 33.4 30.55	Completed as side-gradient well MW-7
TW-12	8/23/11 8/30/11 9/8/11 1/3/12	35*	25-35	Dry 30.3 28.45 24.03	Completed as side-gradient well MW-6
TW-13	8/29/11 9/8/11 1/3/12	35*	25-35	Dry Dry 32.3	Completed as side-gradient well MW-8
TW-14	4/5/12	34	24-34	20.76	1-inch PVC wells installed within plowed field and abandoned after sample collection
TW-15	4/5/12	29	19-29	19.54	
TW-16	4/5/12	29	19-29	16.4	
TW-17	4/5/12	26	16-26	15.29	
TW-18	4/5/12	29	19-29	11.47	
TW-19	4/5/12	28	18-28	14.45	
TW-20	4/5/12	29	19-29	18.62	
TW-21	4/5/12	25	15-25	9.32	
TW-22	4/5/12	25	15-25	12.7	
TW-23	4/5/12	25	15-25	14.84	
TW-24	4/5/12	98	na	nm	Exploratory Boring

Notes:

Screening	666
Abandon	554

* - Screening completed as monitoring wells and are not included in screening footage totals
nm=not measured

TABLE 2
GROUND WATER SCREENING ANALYTICAL DATA
Petroleum Compounds

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	BENZENE (ug/l)	TOLUENE (ug/l)	ETHYL-BENZENE (ug/l)	XYLENES (ug/l)	MTBE (ug/l)	NAPHTH-ALENE (ug/l)
RBSLs	--	*5*	*1,000*	*700*	*10,000*	*40*	*25*
TW-1	7/13/11	**608**	123	245	1,160	< 0.420	**151**
TW-2	7/13/11	**11.3**	< 0.078	< 0.180	6.94	1.03	7.03
TW-3	7/13/11	**2,440**	877	460	2,640	**285**	**442**
	9/8/11	0.460 J	< 0.078	< 0.180	< 0.123	8.92	< 0.175
TW-11	9/8/11	< 0.049	< 0.078	< 0.180	< 0.123	3.04	< 0.175
TW-8	9/8/11	0.929 J	< 0.078	0.747 J	13.8	< 0.084	< 0.175
TW-12	9/8/11	< 0.049	< 0.078	< 0.180	< 0.123	< 0.084	< 0.175
TW-14	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175
TW-15	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175
TW-16	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175
TW-17	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175
TW-18	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175
TW-19	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175
TW-20	4/5/12	< 0.049	< 0.078	< 0.18	< 0.176	< 0.084	< 0.175
TW-21	4/5/12	< 0.049	< 0.075	< 0.18	< 0.176	< 0.084	< 0.175
TW-22	4/5/12	< 0.049	< 0.075	< 0.18	< 0.176	< 0.084	< 0.175
TW-23	4/5/12	< 0.049	< 0.075	< 0.18	< 0.176	< 0.084	< 0.175

Notes:

1) Results shown in boldface type indicate concentrations which exceed the RBSL for that compound
2) ug/l - micrograms per liter or parts per billion
3) RBSL- Risk-Based Screening Level as defined by the SCDHEC RBCA Document
4) *J* - indicates an estimated value
5) *B* - indicates the result is between the Method Detection Limit and the Reporting Detection Limit
6) *NA* - Not Analyzed

TABLE 3
GROUND WATER MONITORING WELL ELEVATION DATA

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	TOP OF CASING ELEVATION	DEPTH TO GROUND WATER	GROUND WATER ELEVATION
MW-1	5/20/03	43	33- 43	298.85	35.70	263.15
	5/11/09				19.35	279.50
	9/8/11				36.7	262.15
	1/6/12				34.63	264.22
	3/27/12				26.21	272.64
	4/4/12			554.13	25.8	528.33
	7/18/12				31.0	523.13
MW-2	5/11/09	43	28-43	298.98	17.25	281.73
	7/7/11				25.85	273.13
	8/22/11				31.82	267.16
	9/8/11				33.1	265.88
	1/6/12				31.91	267.07
	3/27/12				23.25	275.73
	4/4/12			554.18	23.65	530.53
	7/18/12				27.52	526.66
MW-3	5/11/09	45	30-45	298.36	19.2	279.16
	9/8/11				36.28	262.08
	1/6/12				35.45	262.91
	3/27/12				31.74	266.62
	4/4/12			553.62	28.89	524.73
	7/18/12				30.1	523.52
MW-3D	9/8/11	60	55-60	298.51	25.19*	273.32
	1/5/12				35.12	263.39
	3/27/12				28.9	269.61
	4/4/12			553.74	29.48	524.26
	7/18/12				30.5	523.24

TABLE 3
GROUND WATER MONITORING WELL ELEVATION DATA

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	TOP OF CASING ELEVATION	DEPTH TO GROUND WATER	GROUND WATER ELEVATION
MW-4	5/11/09	49	34-49	299.29	20.16	279.13
	9/8/11				37.2	262.09
	1/6/12				35.79	263.50
	3/27/12				27.85	271.44
	4/4/12			554.56	27.9	526.66
	7/18/12				32.13	522.43
MW-5	8/9/10	25	15 - 25	296.16	17.35	278.81
	7/7/11				23.1	273.06
	8/22/11				24.92	271.24
	9/8/11				24.91	271.25
	1/6/12				24.36	271.80
	3/27/12				20.22	275.94
	4/4/12			551.42	19.79	531.63
	7/18/12				23.46	527.96
MW-6	8/23/11	35	25-35	298.58	Dry	Dry
	8/30/11				30.3	268.28
	9/8/11				28.45	270.13
	1/6/12				24.43	274.15
	3/27/12				19.21	279.37
	4/4/12			553.79	18.05	535.74
	7/18/12				20.9	532.89
MW-7	8/25/11	35	24-34	298.18	Dry	Dry
	8/30/11				Dry	Dry
	9/8/11				33.4	264.78
	1/6/12				32.39	265.79
	3/27/12				29.95	268.23
	4/4/12			553.42	28.02	525.40
	7/18/12				25.16	528.26

TABLE 3
GROUND WATER MONITORING WELL ELEVATION DATA

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	TOP OF CASING ELEVATION	DEPTH TO GROUND WATER	GROUND WATER ELEVATION
MW-8	8/29/11	35	25-35	297.5	Dry	Dry
	9/8/11				Dry	Dry
	1/6/12				32.85	264.65
	3/27/12				27.32	270.18
	4/4/12			552.76	27.05	525.71
	7/18/12				28.91	523.85
MW-8D	9/8/11	60	55-60	297.35	25.35*	272.00
	1/5/12				34.24	263.11
	3/27/12				26.12	271.23
	4/4/12			552.53	26.07	526.46
	7/18/12				31.3	521.23
MW-9	8/26/11	35	24-34	299.74	Dry	Dry
	8/30/11				Dry	Dry
	9/8/11				33.93	265.81
	1/6/12				33.6	266.14
	3/27/12				30.65	269.09
	4/4/12			554.89	29.12	525.77
	7/18/12				29.89	525.00
MW-10	8/27/11	35	25-35	299.54	Dry	Dry
	9/8/11				34.4	265.14
	1/6/12				34.5	265.04
	3/27/12				24.57	274.97
	4/4/12			554.79	24.79	530.00
	7/18/12				28.71	526.08
MW-11	1/6/12	35	19.5-34.5	293.42	32.0	261.42
	3/27/12				21.4	272.07
	4/4/12			548.76	21.5	527.26
	7/18/12				26.4	522.36

TABLE 3
GROUND WATER MONITORING WELL ELEVATION DATA

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	TOP OF CASING ELEVATION	DEPTH TO GROUND WATER	GROUND WATER ELEVATION
MW-12	1/6/12	35	20-35	290.46	26.05	264.41
	3/27/12				17.69	272.77
	4/4/12			545.68	21.5	524.18
	7/18/12				23.18	522.50
MW-13	1/6/12	35	20-35	289.98	27.9	262.08
	3/27/12				17.45	272.53
	4/4/12			545.2	16.9	528.30
	7/18/12				22.32	522.88
MW-14	1/6/12	35	20-35	291.24	30.72	260.52
	3/27/12				19.34	271.90
	4/4/12			546.48	20.76	525.72
	7/18/12				22.52	523.96
MW-15	4/4/12	32	17-32	545.77	25.45	520.32
	7/18/12				23.52	522.25
MW-15D	4/4/12	60	55-60	545.89	18.11	527.78
	7/18/12				23.86	522.03
MW-16	4/4/12	32	17-32	546.47	19.02	527.45
	7/18/12				24.2	522.27
MW-16D	4/4/12	60	55-60	546.59	19.7	526.89
	7/18/12				24.47	522.12
MW-17	4/4/12	35	20-35	554.33	20.39	533.94
	7/18/12				21.53	532.80
MW-17D	4/4/12	60	55-60	554.3	27.54	526.76
	7/18/12				31.37	522.93
MW-18	4/4/12	32	17-32	546.56	19.65	526.91
	7/18/12				23.9	522.66
MW-18D	4/4/12	60	55-60	546.27	19.17	527.10
	7/18/12				23.17	523.10
MW-19	4/4/12	32	17.5-27.5	544.53	18.5	526.03
	7/18/12				22.53	522.00

TABLE 3
GROUND WATER MONITORING WELL ELEVATION DATA

Eddies' Pit Stop - SCDOT
Route 2, US Hwy 601 N., Pageland, South Carolina
UST Permit # 18871
Terracon Project No. 73098106

WELL NUMBER	SAMPLE DATE	TOTAL WELL DEPTH (ft., bgs)	SCREENED INTERVAL (ft., bgs)	TOP OF CASING ELEVATION	DEPTH TO GROUND WATER	GROUND WATER ELEVATION
MW-19D	4/4/12	60	55-60	544.11	16.2	527.91
	7/18/12				22.41	521.70
MW-20	7/18/12	35	25-35	556.55	27.02	529.53
MW-20D	7/18/12	60	55-60	556.66	33.31	523.35
MW-21	7/18/12	35	25-35	555.73	24.72	531.01
MW-21D	7/18/12	60	55-60	555.75	32.83	522.92
MW-22	7/18/12	35	25-35	555.29	31.34	523.95
MW-22D	7/18/12	60	55-60	554.98	32.23	522.75
TW-14	4/4/12	34	24-34	547.23	20.76	526.47
TW-15	4/4/12	29	19-29	546.42	19.54	526.88
TW-16	4/4/12	29	19-29	545.42	16.4	529.02
TW-17	4/4/12	26	16-26	544.74	15.29	529.45
TW-18	4/4/12	29	19-29	544.3	11.47	532.83
TW-19	4/4/12	28	18-28	545.64	14.15	531.49
TW-20	4/4/12	29	19-29	546.56	18.62	527.94
TW-21	4/4/12	25	15-25	543.4	9.32	534.08
TW-22	4/4/12	25	15-25	544.8	12.7	532.10
TW-23	4/4/12	25	15-25	545.68	14.84	530.84

Notes:

1) Top pf casing elevations surveyed by Terracon personnel

2) * - Maybe altered by drilling fluid and poor development

APPENDIX A

Geologist Logs and Water Well Records

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0 ft. to 29 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
Temporary well - TW-1

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 29 ft. Date Started: 7/7/11 Date Completed: 7/7/11

10. CASING: ☑ Threaded ☐ Welded
Diam.: 1"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 19 ft. depth
in. to ft. depth
Height: Above ☐ Below ☑
Surface ft.
Weight lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 1"
Slot/Gauge: 0.010 Length: 10'
Set Between: 19 ft. and 29 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield:

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ft. to ft.
Effective size Uniformity Coefficient

16. WELL GROUTED? ☐ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other
Depth: From ft. to ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type
Well Disinfected ☐ Yes ☑ No Type: Amount:

18. PUMP: Date installed: ☑ Not Installed
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi CERT. NO.: 1790
Address: (Print) Level: A ☐ B ☑ C ☐ D ☐ (circle one)
2047 Industrial Blvd., Lexington, SC
Telephone No.: 803-429-5001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: Well Driller Date: 7/21/11

If D Level Driller, provide supervising driller's name:

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0 ft. to 29 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
Temporary well - TW-2

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 7/7/11
29 ft. Date Completed: 7/7/11

10. CASING: ☑ Threaded ☐ Welded
Diam.: 1"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 19 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☑
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 1"
Slot/Gauge: 0.010 Length: 10'
Set Between: 19 ft. and 29 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☐ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From _____ ft. to _____ ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi CERT. NO.: 1790
Address: (Print) Level: A ☐ B ☑ C ☐ D ☐ (circle one)
2047 Industrial Blvd., Lexington, SC
Telephone No.: 803-429-5001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ (Well Driller) Date: 7/21/11
If D Level Driller, provide supervising driller's name:

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☑ Yes ☐ No
Grouted Depth: from 0 ft. to 35 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
Temporary well - TW-3

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 35 ft. Date Started: 7/7/11 Date Completed: 7/7/11

10. CASING: ☑ Threaded ☐ Welded
Diam.: 1"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 25 ft. depth
in. to ft. depth
Height: Above ☐ Below ☑
Surface ft.
Weight lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 1"
Slot/Gauge: 0.010 Length: 10'
Set Between: 25 ft. and 35 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield:

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ft. to ft.
Effective size Uniformity Coefficient

16. WELL GROUTED? ☐ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other
Depth: From ft. to ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type
Well Disinfected ☐ Yes ☑ No Type: Amount:

18. PUMP: Date Installed: Not installed ☑
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi CERT. NO.: 1790
Address: (Print) Level: A ☐ B ☑ C ☐ D ☐ (circle one)
2047 Industrial Blvd., Lexington, SC
Telephone No.: 803-429-5001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: Well Driller Date: 7/21/11
If D Level Driller, provide supervising driller's name:

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC DOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Route 2 US Highway 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Yellowish/Orang silt dry	18.0	18
Lt Brown silt	7.0	25
Orang silt trace clay	10.0	35
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
TW-5

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 28 ft. Date Started: 8-22-11 Date Completed: 8-22-11

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 18 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: 010 Length: 10
Set Between: 18 ft. and 28 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 16 ft. to 28 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☐ Neat Cement ☒ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 14 ft. to 16 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☒
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Craig Fredrychowski CERT. NO.: D-2002
Address: (Print) Level: A B C D (circle one)
1042 Goose Platter Rd Batesburg, SC 29006
Telephone No.: 803-518-4703 Fax No.: 803-741-9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ (Well Driller) Date: 08-22-11

If D Level Driller, provide supervising driller's name:

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC DOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Route 2 US Highway 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Yellow Or silty clay	8.0	8.0
Lt Br silt dry	17.0	25.0
Orang silt trace clay	10.0	35.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TW-6

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 28 ft. Date Started: 8-22-11 Date Completed: 8-22-11

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 18 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: 010 Length: 10
Set Between: 18 ft. and 28 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 16 ft. to 18 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☒ No
☐ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 14 ft. to 16 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☒
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Craig Fredrychowski CERT. NO.: D-2002
Address: (Print) Level: A B C D (circle one)
1042 Goose Platter Rd Batesburg, SC 29006
Telephone No.: 803-518-4703 Fax No.: 803-741-9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ Well Driller Date: 08-22-11
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC DOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Route 2 US Highway 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Yellow/Or silt dry	7.0	7.0
Or silt tran clay	4.0	11.0
Lt Br silt dry	12.0	23.
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TW-7

6. TYPE: ☐ Mud Rotary ☐ Jetted ☑ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 08-23-11
28 ft. Date Completed: 8-23-11

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 18 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: 010 Length: 10
Set Between: 18 ft. and 25 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 16 ft. to 28 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☒ No
☐ Neat Cement ☒ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 14 ft. to 16 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not installed ☒
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Craig Fredrychowski CERT. NO.: D-2002
Address: (Print) Level: A B C D (circle one)
1042 Goose Platter Rd Batesburg, SC 29006
Telephone No.: 803-518-4703 Fax No.: 803-741-9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 08-23-11

If D Level Driller, provide supervising driller's name:

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC DOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Route 2 US Highway 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Yellow/Or silt dry	8.0	8.0
Lt Br silt dry	3.0	11.0
Lt Br silt w/ traces	17.0	28
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TW-B

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 28 ft. Date Started: 8-23-11 Date Completed: 8-23-11

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 18 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: 010 Length: 10
Set Between: 18 ft. and 28 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 16 ft. to 28 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☒ No
☐ Neat Cement ☒ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 14 ft. to 16 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not installed ☒
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Craig Fredrychowski CERT. NO.: D-2002
Address: (Print) Level: A B C D (circle one) ✓
1042 Goose Platter Rd Batesburg, SC 29006
Telephone No.: 803-518-4703 Fax No.: 803-741-9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 8-23-11

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC DOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29209
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Route 2 US Highway 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Yellow/or silt dry	5.0	5.0
Yellow silt dry	4.0	9.0
Lt Br silt dry	13.0	22.0
or silt trace clay	6.0	28.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TW-9

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 08-23-11
28 ft. Date Completed: 08-23-11

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 18 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: 010 Length: 10
Set Between: 18 ft. and 28 ft. NOTE: MULTIPLE SCREENS
_____ ft. and _____ ft. USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 16 ft. to 28 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☐ Neat Cement ☒ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 14 ft. to 16 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Craig Fredrychowski CERT. NO.: D-2002
Address: (Print) Level: A B C D (circle one)
1042 Goose Platter Rd Batesburg, SC 29006
Telephone No.: 803-518-4703 Fax No.: 803-741-9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 08-23-11

If D Level Driller, provide supervising driller's name:

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC DOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Route 2 US Highway 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Yellow or silt dry	9.0	9.0
Lt Br silt dry	12.0	21.0
Or silt dry	7.0	28.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
TW-10

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 08-23-11
28 ft. Date Completed: 08-23-11

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 18 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: 010 Length: 10
Set Between: 18 ft. and 28 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 16 ft. to 28 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☐ Neat Cement ☒ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 14 ft. to 16 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Craig Fredrychowski CERT. NO.: D-2002
Address: (Print) Level: A B C ✓ D (circle one)
1042 Goose Platter Rd Bateshurg, SC 29006
Telephone No.: 803-518-4703 Fax No.: 803-741-9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ (Well Driller) Date: 08-25-11

If D Level Driller, provide supervising driller's name:

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 18871 **PUBLIC SYSTEM NUMBER:** TW-14

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 34 ft. Date Started: 3/26/12 Date Completed: 3/27/12

10. CASING: ☑ Threaded ☐ Welded
Diam.: 1"
Type: ☑ PVC ☐ Galvenized ☐ Steel ☐ Other
0 in. to 24 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☑
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 1"
Slot/Gauge: 0.010 Length: 10'
Set Between: 24 ft. and 34 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 25 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 22 ft. to 34 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☑ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 22 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi **CERT. NO.:** 1790
Address: (Print) 2047 Industrial Blvd., Lexington, SC
Level: A ☐ B ☑ C ☐ D ☐ (circle one)
Telephone No.: 803-429-5001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ Well Driller Date: 4/14/12
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 18871 **PUBLIC SYSTEM NUMBER:** TW-15

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 29 ft. Date Started: 3/26/12 Date Completed: 3/27/12

10. CASING: ☑ Threaded ☐ Welded
Diam.: 1"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 19 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☑
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 1"
Slot/Gauge: 0.010 Length: 10'
Set Between: 19 ft. and 29 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 20 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 17 ft. to 29 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☑ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 17 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi CERT. NO.: 1790
Address: (Print) 2047 Industrial Blvd., Lexington, SC
Level: A ☐ B ☑ C ☐ D ☐ (circle one)
Telephone No.: 803-429-5001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 4/14/12

If D Level Driller, provide supervising driller's name:

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 18871 **PUBLIC SYSTEM NUMBER:** TW-16

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 29 ft. Date Started: 3/26/12 Date Completed: 3/27/12

10. CASING: ☑ Threaded ☐ Welded
Diam.: 1"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 19 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☑
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 1"
Slot/Gauge: 0.010 Length: 10'
Set Between: 19 ft. and 29 ft.
_____ ft. end _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 20 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 17 ft. to 29 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☑ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 17 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi CERT. NO.: 1790
Address: (Print) 2047 Industrial Blvd., Lexington, SC
Level: A B C D (circle one) ☐ ☑ ☐ ☐
Telephone No.: 803-429-5001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 4/14/12

If D Level Driller, provide supervising driller's name:

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 18871 **PUBLIC SYSTEM NUMBER:** TW-17

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 26 ft. Date Started: 3/26/12 Date Completed: 3/27/12

10. CASING: ☑ Threaded ☐ Welded
Diam.: 1"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 16 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☑
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 1"
Slot/Gauge: 0.010 Length: 10'
Set Between: 16 ft. and 26 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 18 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 14 ft. to 26 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☑ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 14 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi CERT. NO.: 1790
Address: (Print) 2047 Industrial Blvd., Lexington, SC
Level: A B C D (circle one) ☐ ☑ ☐ ☐
Telephone No.: 803-429-5001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Well Driller Date: 4/14/12

If D Level Driller, provide supervising driller's name:

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 18871 **PUBLIC SYSTEM NUMBER:** TW-18

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 29 ft. Date Started: 3/26/12 Date Completed: 3/27/12

10. CASING: ☑ Threaded ☐ Welded
Diam.: 1"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 19 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☑
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 1"
Slot/Gauge: 0.010 Length: 10'
Set Between: 19 ft. and 29 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 20 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 17 ft. to 29 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☑ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 17 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi **CERT. NO.:** 1790
Address: (Print) 2047 Industrial Blvd., Lexington, SC
Level: A ☐ B ☑ C ☐ D ☐ (circle one)
Telephone No.: 803-429-5001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ Well Driller Date: 4/14/12
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 18871 **PUBLIC SYSTEM NUMBER:** TW-19

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 28 ft. Date Started: 3/26/12 Date Completed: 3/27/12

10. CASING: ☑ Threaded ☐ Welded
Diam.: 1"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 18 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☑
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 1"
Slot/Gauge: 0.010 Length: 10'
Set Between: 18 ft. and 28 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 21 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 16 ft. to 28 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☑ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 16 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi CERT. NO.: 1790
Address: (Print) 2047 Industrial Blvd., Lexington, SC
Level: A ☐ B ☑ C ☐ D ☐ (circle one)
Telephone No.: 803-429-5001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Well Driller Date: 4/14/12

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 18871 **PUBLIC SYSTEM NUMBER:** TW-20

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 29 ft. Date Started: 3/26/12 Date Completed: 3/27/12

10. CASING: ☑ Threaded ☐ Welded
Diam.: 1"
Type: ☑ PVC ☐ Galvenized ☐ Steel ☐ Other
0 in. to 19 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☑
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 1"
Slot/Gauge: 0.010 Length: 10'
Set Between: 19 ft. and 29 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 20 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 17 ft. to 29 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☑ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 17 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi CERT. NO.: 1790
Address: (Print) 2047 Industrial Blvd., Lexington, SC
Level: A ☐ B ☑ C ☐ D ☐ (circle one)
Telephone No.: 803-429-5001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 4/14/12

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 18871 **PUBLIC SYSTEM NUMBER:** TW-21

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 25 ft. Date Started: 3/26/12 Date Completed: 3/27/12

10. CASING: ☑ Threaded ☐ Welded
Diam.: 1"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 15 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☑
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 1"
Slot/Gauge: 0.010 Length: 10'
Set Between: 15 ft. and 25 ft. NOTE: MULTIPLE SCREENS
_____ ft. and _____ ft. USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 18 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 13 ft. to 25 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☑ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 13 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi CERT. NO.: 1790
Address: (Print) 2047 Industrial Blvd., Lexington, SC
Level: A ☐ B ☑ C ☐ D ☐ (circle one)
Telephone No.: 803-429-5001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ (Well Driller) Date: 4/14/12
If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 18871 **PUBLIC SYSTEM NUMBER:** TW-22

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 25 ft. Date Started: 3/26/12 Date Completed: 3/27/12

10. CASING: ☑ Threaded ☐ Welded
Diam.: 1"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 15 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☑
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 1"
Slot/Gauge: 0.010 Length: 10'
Set Between: 15 ft. and 25 ft. NOTE: MULTIPLE SCREENS
_____ ft. and _____ ft. USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 18 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 13 ft. to 25 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☑ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 13 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi CERT. NO.: 1790
Address: (Print) 2047 Industrial Blvd., Lexington, SC
Level: A ☐ B ☑ C ☐ D ☐ (circle one)
Telephone No.: 803-429-5001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 4/14/12

If D Level Driller, provide supervising driller's name:

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddie's Pit Stop
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 18871 **PUBLIC SYSTEM NUMBER:** TW-23

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 25 ft. Date Started: 3/26/12 Date Completed: 3/27/12

10. CASING: ☑ Threaded ☐ Welded
Diam.: 1"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 15 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☑
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 1"
Slot/Gauge: 0.010 Length: 10'
Set Between: 15 ft. and 25 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL 18 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 13 ft. to 25 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☑ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 13 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not Installed ☑
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi CERT. NO.: 1790
Address: (Print) 2047 Industrial Blvd., Lexington, SC
Level: A ☐ B ☑ C ☐ D ☐ (circle one)
Telephone No.: 803-429-5001 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 4/14/12

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **TW-24(Exploratory)**
Client: SCDOT			***No Well Constructed***
Date Started: 3/26/12	Date Completed: 3/26/12		
Logged By: W. Walker	Coordinates:		
Drilling Co.: Saedacco	Driller: Steve P.		
Method: 6.25" HSA/Air Roller Bit	Equipment: Gus Peck		
Boring Depth (ft.): 98.0	TOC Elevation:		
Boring Diameter (in): 6.25/5	GW Level:	Time/Date:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Depth
0						**TOPSOIL**	0
2						**SILT**, trace clay, orange and red some black veins, dry.	2
4		1	4 10 11 15				4
6		2	14 18 22 27			**SILT**, trace clay and black rock, orange and red some black veins, dry.	6
8		3	9 11 18 24			**SILT**, trace clay, mottled (orange, white, red) with black veins, laminated, dry.	8
10		4	16 31 30 36			**SILT**, trace clay, orange and gray with red veins, dry.	10
12		5	15 18 21 27			**SILT**, with rock, trace clay, orange and gray with black grains, dry.	12
14		6	6 12 16 20				14
16		7	16 31 34 50/4"			**SILT**, trace clay, gray some orange, hard, dry.	16
18		8	16 46 50/3"			**SILT**, gray, dry.	18
20		9	16 31 50/5"				20
22		10	16 24 20 22				22
24		11	7 13 33 42			**SILT**, with quartz grains, gray, dry.	24
26		12	24 39 50/4"				26
28						**CLAY**, trace silt, gray and orange, dry.	28
30						**CLAY**, trace silt, gray and orange, hard, dry.	30
32							32
34							34

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/23/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

GEOLOGIST LOG

Project: EDDIE'S PIT STOP	Project Number: 73098106	Boring/Well: TW-24(Exploratory)
Client: SCDOT		*No Well Constructed*

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Depth
36							36
38							38
40						**SILT**, trace clay and medium grains, orange, slight moisture, dry.	40
42							42
44							44
46						**SILT**, with partially weathered rock, trace clay, light brown, slight moisture.	46
48							48
50							50
52							52
54							54
56							56
58							58
60						**PARTIALLY WEATHERED ROCK**, silt, trace clay, gray, wet.	60
62						**PARTIALLY WEATHERED ROCK**, silt, trace clay, gray, dry.	62
64							64
66							66
68							68
70							70
72							72
74							74
76							76
78							78

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/23/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9800

GEOLOGIST LOG

Project: EDDIE'S PIT STOP	Project Number: 73098106	Boring/Well: TW-24(Exploratory)
Client: SCDOT		*No Well Constructed*

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Depth
80						**PARTIALLY WEATHERED ROCK**, silt, trace clay, gray, dry.	80
82							82
84							84
86							86
88							88
90							90
92							92
94							94
96							96
98						**Boring Terminated at 98 ft.**	98

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/23/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-3D**
Client: SCDOT		***Well Construction Data***	
Date Started: 8/24/11	Date Completed: 8/27/11	Screen: 2" (0.010) Slotted PVC	From: 55 - To: 60
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 53 - To: 60
Drilling Co.: Terracon	Driller: C. Fredrychowsi	Seal: Bentonite Pellets	From: 51 - To: 53
Method: 4.25 HSA/4.875/Mud Rotary	Equipment: CME-550	Grout: Portland Cement Type I	From: 0 - To: 51
Boring Depth (ft.): 60.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6.25/5	GW Level: ▼ 35.12 Time/Date: 1/5/2012	Outer Casing/Stick Up: 6" Threaded PVC Sch 40 to 40 ft.	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**ASPHALT**		0
2						**SILT**, orange, dry.		2
4								4
6						**SILT**, trace black medium grains, orange, dry.		6
8								8
10								10
12								12
14								14
16								16
18								18
20						**SILT**, trace clay and medium grains, orange, dry.		20
22						**SILT**, trace clay and medium grains, orange, dry.		22
24								24
26								26
28								28
30								30
32								32
34							▼	34
36								36
38						1 foot layer or quartz rock		38
40						Total Depth of 6" outer casing		40
42								42
44								44
46								46
48								48
50						**PARTIALLY WEATHERED ROCK** silt, brown, moist.		50
52								52
54								54
56								56
58								58
60						**Boring Terminated at 60 ft.**		60

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 5/15/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC DOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Route 2 US Highway 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Asphalt	1.4	1.4
Orange silt dry	48.6	50.0
Orange silty clay	10.0	60.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: MW-3D

6. TYPE: ☒ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 60 ft. Date Started: 08-24-11 Date Completed: 08-27-11

10. CASING: ☒ Threaded ☐ Welded
Diam.: 6
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
6 in. to 50 ft. depth
2 in. to 55 ft. depth
Height: Above /Below
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: 010 Length: 5
Set Between: 55 ft. and 60 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 53 ft. to 60 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☒ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 51 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not Installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Craig Fredrychowski CERT. NO.: D-2002
Address: (Print) Level: A B C ✓ D (circle one)
1042 Goose Platter Rd Batesburg, SC 29006
Telephone No.: 803-518-4703 Fax No.: 803-741-9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ (Well Driller) Date: _____
If D Level Driller, provide supervising driller's name:

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **TW-12 / MW-6**
Client: SCDOT		***Well Construction Data***	
Date Started: 8/23/11	Date Completed: 8/23/11	Screen: 2" (0.010) Slotted PVC	From: 25 - To: 35
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 23 - To: 35
Drilling Co.: Terracon	Driller: C. Fredrychowsi	Seal: Bentonite Pellets	From: 21 - To: 23
Method: 4"/2.25 HSA/4.25 HSA	Equipment: CME-550	Grout: Portland Cement Type I	From: 0 - To: 21
Boring Depth (ft.): 35.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 8.25	GW Level: ▼ 24.43 Time/Date: 1/6/2012	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		0
2						**SILT**, orange, dry.		2
4								4
6								6
8						**SILT**, light brown, dry.		8
10						**SILT**, orange, dry.		10
12								12
14								14
16								16
18								18
20						**SILT**, trace clay and medium grains, orange, dry.		20
22						**SILT**, trace medium grains, orange, dry.		22
24							▼	24
26								26
28								28
30								30
32								32
34								34
						Boring Terminated at 35 ft.		

8/23/11 - Test well installed to 35 ft., dry.
1/3/12 - Well yields 10.97 ft. of water.
Due to tight formation, the well was triple drilled, from 4" solid stem augers, to 2.25 HSA, to 4.25 HSA

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/23/12

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC DOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Route 2 US Highway 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Orange silt dry	7.0	7.0
Lt Br silt dry	2.0	9.0
Orang silt dry	26.0	35.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TW-12/MW-6

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 35 ft. Date Started: 05-23-11 Date Completed: 05-23-11

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 35 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: 010 Length: 10
Set Between: 25 ft. and 35 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 23 ft. to 35 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☒ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 21 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not installed ☒
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Craig Fredrychowski CERT. NO.: D-2002
Address: (Print) Level: A B C D (circle one)
1042 Goose Platter Rd Batesburg, SC 29006
Telephone No.: 803-518-4703 Fax No.: 803-741-9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 05-23-11

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **TW-11 / MW-7**
Client: SCDOT		***Well Construction Data***	
Date Started: 8/25/11	Date Completed: 8/25/11	Screen: 2" (0.010) Slotted PVC	From: 24 - To: 34
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 22 - To: 34
Drilling Co.: Terracon	Driller: C. Fredrychowsi	Seal: Bentonite Pellets	From: 20 - To: 22
Method: 4"/2.25 HSA/4.25 HSA	Equipment: CME-550	Grout: Portland Cement Type I	From: 0 - To: 20
Boring Depth (ft.): 35.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 8.25	GW Level: ▼ 32.31 Time/Date: 1/6/2012	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**ASPHALT**		
2						**SILT**, orange, dry.		2
4								4
6								6
8								8
10								10
12								12
14								14
16								16
18								18
20						**SILT**, trace clay and medium grains, orange, dry.		20
22						**SILT**, trace medium grains, orange, dry.		22
24								24
26								26
28								28
30								30
32							▼	32
34								34
						Boring Terminated at 35 ft.		

8/25/11 - Test well installed to 34 ft., dry.
1/3/12 - Well yields 3.45 ft. of water.
Due to tight formation, the well was triple drilled, from 4" solid stem augers, to 2.25 HSA, to 4.25 HSA

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/23/12

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC DOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Rt 2 US Hwy 601 N
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Asphalt	1.4	1.4
Orange silt dry	20.6	22.0
Orange silt trace clay	13.0	35.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
TW-11/MW-7

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored
☒ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 34 ft. Date Started: 08-25-11 Date Completed: 08-25-11

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 24 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☐
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: 010 Length: 10
Set Between: 24 ft. and 34 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 22 ft. to 34 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☒ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 20.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: CERT. NO.: C-2002
Address: (Print) Craig Fredrickson 1042 Goose Pasture Rd Bates burg SC 29006
Level: A ☐ B ☐ C ☒ D ☐ (circle one)
Telephone No.: 803 519 9703 Fax No.: 803 741-9500

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ (Well Driller) Date: 08-25-11

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **TW-13 / MW-8**
Client: SCDOT		***Well Construction Data***	
Date Started: 8/29/11	Date Completed: 8/29/11	Screen: 2" (0.010) Slotted PVC	From: 25 - To: 35
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 23 - To: 35
Drilling Co.: Terracon	Driller: C. Fredrychowsi	Seal: Bentonite Pellets	From: 21 - To: 23
Method: 4"/2.25 HSA/4.25 HSA	Equipment: CME-550	Grout: Portland Cement Type I	From: 0 - To: 21
Boring Depth (ft.): 35.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 8.25	GW Level: ▼ 32.85 Time/Date: 1/6/2012	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**ASPHALT**		0
2						**SILT**, orange, dry.		2
4								4
6								6
8								8
10								10
12								12
14								14
16								16
18								18
20						**SILT**, trace clay and medium grains, orange, dry.		20
22						**SILT**, trace medium grains, orange, dry.		22
24								24
26								26
28								28
30								30
32						**SILT**, brown, dry. ▼		32
34								34
						Boring Terminated at 35 ft.		
						8/29/11 - Drilled test well to 35 ft., dry.		
						1/3/12 - Well yields 2.7 ft. of water.		
						Due to tight formation, the well was triple drilled, from 4" solid stem augers, to 2.25 HSA, to 4.25 HSA		

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/23/12

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC DOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Rt 2 US Hwy 601 N
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Asphalt	0.5	0.5
Orange silt dry	34.5	35.0

*Indicate Water Bearing Zones
(Use a 2nd sheet if needed)

5. REMARKS:
MW-8

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 35 ft. Date Started: 08-25-11 Date Completed: 08-25-11

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 25 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☐
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: 010 Length: 10
Set Between: 25 ft. and 35 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 23 ft. to 35 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☒ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 21 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe ___ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Craig Freddy Shoosh CERT. NO.: C-2002
Address: (Print) 1042 Goose Plather Rd
Level: A ☐ B ☐ C ☒ D ☐ (circle one)
Telephone No.: 803-518 4703 Fax No.: 803 741 9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ (Well Driller) Date: 08-29-11

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-8D**
Client: SCDOT		***Well Construction Data***	
Date Started: 8/29/11	Date Completed: 8/31/11	Screen: 2" (0.010) Slotted PVC	From: 55 - To: 60
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 53 - To: 60
Drilling Co.: Terracon	Driller: C. Fredrychowsi	Seal: Bentonite Pellets	From: 51 - To: 53
Method: 4.25 HSA/Mud Rotary	Equipment: CME-550	Grout: Portland Cement Type I	From: 0 - To: 51
Boring Depth (ft.): 60.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6.25/5	GW Level: ▼ 34.24 Time/Date: 1/5/2012	Outer Casing/Stick Up: 6" Threaded PVC Sch 40 to 50 ft.	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**ASPHALT**		
2						**SILT**, orange, dry.		2
4								4
6								6
8								8
10								10
12								12
14								14
16								16
18								18
20						**SILT**, trace clay and medium grains, orange, dry.		20
22						**SILT**, trace medium grains, orange.		22
24								24
26								26
28								28
30								30
32						**SILT**, brown, dry.		32
34							▼	34
36								36
38								38
40						Clayey **SILT**, with coarse grains, brown, moist.		40
42								42
44								44
46								46
48								48
50								50
52								52
54								54
56								56
58								58
60						**Boring Terminated at 60 ft.**		60

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 4/17/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC Dot (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Rt 2 US Hwy 601 N
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Asphalt	0.5	0.5
Orange silt dry	49.5	50.0
Orange silty clay	10.0	60.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: MW-8D

6. TYPE: ☐ Mud Rotary ☐ Jetted ☑ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 60 ft. Date Started: 8-29-11 Date Completed: 8-30-11

10. CASING: ☑ Threaded ☐ Welded
Diam.: 6
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
6 in. to 50 ft. depth
2 in. to 55 ft. depth
Height: Above ☐ Below ☐
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: .010 Length: 5
Set Between: 55 ft. and 60 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 53 ft. to 60 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☒ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 51 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Craig Fredrychowski CERT. NO.: C-2002
Address: (Print) 1042 Goose Platter Rd
Bethesburg SC 29006
Level: A ☐ B ☐ C ☑ D ☐ (circle one)
Telephone No.: 803-518-4703 Fax No.: 803 741-9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ (Well Driller) Date: 08-30-11

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **TW-4 / MW-9**
Client: SCDOT		***Well Construction Data***	
Date Started: 8/25/11	Date Completed: 8/26/11	Screen: 2" (0.010) Slotted PVC	From: 24 - To: 34
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 22 - To: 34
Drilling Co.: Terracon	Driller: C. Fredrychowsi	Seal: Bentonite Pellets	From: 20 - To: 22
Method: 4"/2.25 HSA/4.25 HSA	Equipment: CME-550	Grout: Portland Cement Type I	From: 0 - To: 20
Boring Depth (ft.): 35.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 8.25	GW Level: ▼ 33.60 Time/Date: 1/6/2012	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**ASPHALT**		
2						**SILT**, trace clay, orange, dry.		2
4								4
6						**SILT**, trace clay and black medium grains, orange, dry.		6
8								8
10								10
12								12
14								14
16								16
18								18
20								20
22								22
24								24
26								26
28								28
30								30
32								32
34							▼	34
						Boring Terminated at 35 ft.		
						8/20/11 - Drill well to 35 ft., dry		
						1/3/12 - Well yields 0.39 ft. of water		
						Due to tight formation, the well was triple drilled, from 4" solid stem augers, to 2.25 HSA, to 4.25 HSA		

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/23/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC DOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Route 2 US Highway 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Asphalt	1.4	1.4
Orange dry silt	3.6	5.0
Orange dry silt w/ trace bl grains	30.0	35

*Indicate Water Bearing Zones
(Use a 2nd sheet if needed)

5. REMARKS:
TW-4 / MW-9

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 35 ft. Date Started: 8-26-11 Date Completed: 8-26-11

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0.2 in. to 25 ft. depth
_____ in. to _____ ft. depth
Height: Above (Below)
Surface 0.3 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☒ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: .010 Length: 10.0
Set Between: 25 ft. and 35 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 23 ft. to 35 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☒ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 21.6 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not installed ☒
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Craig Fredrychowski CERT. NO.: D-2002
Address: (Print) Level: A B C D (circle one)
1042 Goose Platter Rd Batesburg, SC 29006
Telephone No.: 803-518-4703 Fax No.: 803-741-9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 08-26-11

If D Level Driller, provide supervising driller's name:

GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **TW-3 / MW-10**
Client: SCDOT		***Well Construction Data***	
Date Started: 8/27/11	Date Completed: 8/27/11	Screen: 2" (0.010) Slotted PVC	From: 25 - To: 35
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 23 - To: 35
Drilling Co.: Terracon	Driller: C. Fredrychowsi	Seal: Bentonite Pellets	From: 21 - To: 23
Method: 4"/2.25 HSA/4.25 HSA	Equipment: CME-550	Grout: Portland Cement Type I	From: 0 - To: 21
Boring Depth (ft.): 35.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 8.25	GW Level: ▼ 34.50 Time/Date: 1/6/2012	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		
2						**SILT**, trace clay, orange, dry.		2
4								4
6								6
8								8
10								10
12								12
14								14
16								16
18						**SILT**, trace clay, light brown, dry.		18
20								20
22								22
24								24
26								26
28								28
30								30
32								32
34						▼		34
						Boring Terminated at 35 ft.		

7/7/11 - Through direct push, a 1" test well was created dry.
8/27/11 - Re-drilled in order to be completed as a monitoring well
9/8/11 - 1" test well yields 0.60 ft. of water
Due to tight formation, the well was triple drilled, from 4" solid stem augers, to 2.25 HSA, to 4.25 HSA

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 8/23/12

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC DOT (last) (first)
Address: PO Box 191
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Route 2 US Highway 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☑ No
Grouted Depth: from ____ ft. to ____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Asphalt	0.4	0.4
Orange dry silt	34.2	35.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: TW-3/MW-10

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 35 ft. Date Started: 08-27-11 Date Completed: 08-27-11

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 25 ft. depth
____ in. to ____ ft. depth
Height: Above (Below) Surface 0.3 ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☒ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: 010 Length: 10
Set Between: 25 ft. and 35 ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 23 ft. to 35 ft.
Effective size #2 Uniformity Coefficient ____

16. WELL GROUTED? ☒ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☒ Bentonite/Cement ☐ Other ____
Depth: From 0 ft. to 21 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not Installed ☒
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Craig Fredrychowski CERT. NO.: D-2002
Address: (Print) Level: A B C ✓ D (circle one)
1042 Goose Platter Rd Batesburg, SC 29006
Telephone No.: 803-518-4703 Fax No.: 803-741-9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: ____ (Well Driller) Date: 08-27-11

If D Level Driller, provide supervising driller's name:

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **TW-5 / MW-11**
Client: SCDOT		***Well Construction Data***	
Date Started: 8/22/11	Date Completed: 1/4/12	Screen: 2" (0.010) Slotted PVC	From: 19.5 - To: 34.5
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 17.5 - To: 34.5
Drilling Co.: Terracon	Driller: C. Fredrychowsi	Seal: Bentonite Pellets	From: 15.5 - To: 17.5
Method: 4.25 HSA	Equipment: CME-550	Grout: Portland Cement Type I	From: 0 - To: 15.5
Boring Depth (ft.): 35.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 8.25	GW Level: 32.00 Time/Date: 1/6/2012	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		
2						**SILT**, yellowish orange, dry.		2
4								4
6								6
8								8
10								10
12								12
14								14
16								16
18						**SILT**, light brown, dry.		18
20								20
22								22
24								24
26						**SILT**, trace clay and black medium grains, orange, dry.		26
28						**SILT**, trace clay, brown, dry.		28
30								30
32								32
34						**SILT**, brown, very hard, dry.		34
						Auger Refusal at 35 ft.		

8/22/11 - Test well drilled to 28' dry.
1/3/12 - Over drill to 35 ft.

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 4/17/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC DOT
Address: PO Box 191 (last) Room 324 (first)
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Rt 2 US Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Tan Silt	34.5	34.5
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-11

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 34.5 ft. Date Started: 01-04-12 Date Completed: 01-04-12

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 19.5 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below Surface 0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: 010 Length: 15
Set Between: 19.5 ft. and 34.5 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 17.5 ft. to 34.5 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☒ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 15.5 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not Installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: C Fredy Chavishi CERT. NO.: C 2002
Address: (Print) 521 Clemson Rd
Columbia SC 29229
Level: A B (C) D (circle one)
Telephone No.: 803 741 9000 Fax No.: 803 741 9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Well Driller Date: 01/04/12

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **TW-7 / MW-12**
Client: SCDOT		***Well Construction Data***	
Date Started: 8/23/11	Date Completed: 1/3/12	Screen: 2" (0.010) Slotted PVC	From: 20 - To: 35
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 18 - To: 35
Drilling Co.: Terracon	Driller: C. Fredrychowsi	Seal: Bentonite Pellets	From: 16 - To: 18
Method: 4.25 HSA	Equipment: CME-550	Grout: Portland Cement Type I	From: 0 - To: 16
Boring Depth (ft.): 35.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 8.25	GW Level: ▼ 26.05 Time/Date: 1/6/2012	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		0
2						**SILT**, yellowish orange, dry.		2
4								4
6								6
8						**SILT**, trace clay, orange, dry.		8
10								10
12						**SILT**, light brown, dry.		12
14								14
16						**SILT**, with quartz rock, light brown, dry.		16
18						**SILT**, light brown, dry.		18
20								20
22								22
24								24
26						**SILT**, trace clay and medium grains, light brown, dry. ▼		26
28						**SILT**, trace clay, light brown, moist, petroleum odor.		28
30								30
32								32
34								34
						Boring Terminated at 35 ft.		

8/23/11 - Test well drilled to 28 ft., dry.
1/3/12 - Test well yields 1.62 ft. of water, over drilled to 35 ft.

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 4/17/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: PO Box 191 Room 324
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Rt 2 US Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Tan silt	35	35
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-12

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 01/03/12
35.0 ft. Date Completed: 01/03/12

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 20 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below Surface 0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: 010 Length: 15
Set Between: 20 ft. and 35 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 18 ft. to 35.0 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☒ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 16 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ ☐ Not installed
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Craig Fredrychowski CERT. NO.: C 2002
Address: (Print) 521 Clemson Rd
Columbia, SC 29229
Level: A B (C) D (circle one)
Telephone No.: 803 741 9600 Fax No.: 803 741 9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ (Well Driller) Date: 01/03/12

If D Level Driller, provide supervising driller's name:

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **TW-8 / MW-13**
Client: SCDOT		***Well Construction Data***	
Date Started: 8/23/11	Date Completed: 1/4/12	Screen: 2" (0.010) Slotted PVC	From: 20 - To: 35
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 18 - To: 35
Drilling Co.: Terracon	Driller: C. Fredrychowsi	Seal: Bentonite Pellets	From: 16 - To: 18
Method: 4.25 HSA	Equipment: CME-550	Grout: Portland Cement Type I	From: 0 - To: 16
Boring Depth (ft.): 35.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 8.25	GW Level: ▼ 27.90 Time/Date: 1/6/2012	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		
2						**SILT**, yellowish orange, dry.		2
4								4
6								6
8						**SILT**, trace clay, orange, dry.		8
10								10
12						**SILT**, light brown, dry.		12
14								14
16						**SILT**, with quartz rock, light brown, dry.		16
18						**SILT**, light brown, dry.		18
20								20
22								22
24								24
26						**SILT**, trace clay and medium grains, light brown.		26
28						**SILT**, trace clay, brown, moist. ▼		28
30								30
32								32
34								34
						Boring Terminated at 35 ft.		

8/23/11 - Test well drilled to 28 ft., dry.
1/3/12 - Test well yields 1.7 ft. of water, over drilled to 35 ft.

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 4/17/12

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC DOT
Address: Po Box 191 (last) Room 324 (first)
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Dit Stop
Street Address: Rt 2 US Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Tan silt	35.0	35.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW-13

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 35.0 ft. Date Started: 01/09/12 Date Completed: 01/04/12

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 20 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below Surface 0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: 010 Length: 15
Set Between: 20 ft. and 35 ft. NOTE: MULTIPLE SCREENS
_____ ft. and _____ ft. USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 18.0 ft. to 35.0 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☒ Bentonite/Cement ☐ Other _____
Depth: From 0.0 ft. to 16.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ ☐ Not installed
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: C Fredrychowski CERT. NO.: C 2002
Address: (Print) 521 Clemson Rd Columbia SC 29229
Level: A B (C) D (circle one)
Telephone No.: 803 741 9000 Fax No.: 803 741 9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ (Well Driller) Date: 01/04/12

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

GEOLOGIST LOG

Terracon

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: TW-10 / MW-14
Client: SCDOT		***Well Construction Data***	
Date Started: 8/23/11	Date Completed: 1/4/12	Screen: 2" (0.010) Slotted PVC	From: 20 - To: 35
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 18 - To: 35
Drilling Co.: Terracon	Driller: C. Fredrychowsi	Seal: Bentonite Pellets	From: 16 - To: 18
Method: 4.25 HSA	Equipment: CME-550	Grout: Portland Cement Type I	From: 0 - To: 16
Boring Depth (ft.): 35.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 8.25	GW Level: ▼ 30.72 Time/Date: 1/6/2012	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		0
2						**SILT**, yellowish orange, dry.		2
4								4
6								6
8								8
10						**SILT**, light brown, dry.		10
12								12
14								14
16								16
18								18
20								20
22						**SILT**, trace medium grains, orange, dry.		22
24								24
26								26
28						**SILT**, brown, hard, dry.		28
30						▼		30
32								32
34						**SILT**, brown, moist.		34
						Boring Terminated at 35 ft.		

8/23/11 - Test well drilled to 28 ft., dry.
1/3/12 - Test well dry.
1/4/12 - Well over drilled.

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: SC DOT
Address: PO Box 191 (last) Room 324 (first)
City: Columbia State: SC Zip: 29202
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Rt 2 US Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Tan Silt	35'	35.0
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: MW-14

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: 18871

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 35.0 ft. Date Started: 01/04/12 Date Completed: 01/04/12

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 20 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below Surface 0 ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2
Slot/Gauge: 010 Length: 15
Set Between: 20 ft. and 35 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 18 ft. to 35 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☒ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☒ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 16 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: C Freddy Chandler CERT. NO.: C 2002
Address: (Print) 581 Clemson Rd
Columbia SC 29229
Level: A B C D (circle one)
Telephone No.: 803 741 9000 Fax No.: 803 741 9900

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: _____ (Well Driller) Date: 01/04/12

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-15**
Client: SCDOT		***Well Construction Data***	
Date Started: 4/2/12	Date Completed: 4/2/12	Screen: 2" (0.010) Slotted PVC	From: 17 - To: 32
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 15 - To: 32
Drilling Co.: Saedacco	Driller: Steve P.	Seal: Bentonite Pellets	From: 13 - To: 15
Method: Air Roller Bit	Equipment: Gus Peck	Grout: Portland Cement Type I	From: 0 - To: 13
Boring Depth (ft.): 32.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 5	GW Level: ▼ 25.95 Time/Date: 4/5/2012	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		0
2						**SILT**, orange, dry.		2
4								4
6								6
8								8
10								10
12								12
14								14
16								16
18								18
20						Clayey **SILT**, with medium grains, orange and white, hard, dry.		20
22								22
24								24
26							▼	26
28						Clayey **SILT**, trace fine grains, orange and white, hard, dry.		28
30						**CLAY**, gray, hard, moist.		30
32						**Boring Terminated at 32 ft.**		32

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 4/24/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Poloniewicz (last) Steven (first)
Address: 9088 North Cield Dr
City: Fortmill State: SC Zip: 29707
Telephone: Work: 1-800,849-0353 Home:

2. LOCATION OF WELL: **COUNTY:** Chesterfield
Name: Eddies Pit Stop (ust#18871)
Street Address: Rt. 2 U.S. Hwy 601 North
City: Pageland SC Zip:
Latitude: 34.77021 N Longitude: 80.39935 W

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** MW-15

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Orange silty clay	4'	15'
Brown silty clay	15'	32'
Brown silty clay	32'	32'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS: Bentonite 11' to 13'

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☒ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER:

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 32' ft. Date Started: 4/02/2012 Date Completed: 4/02/2012

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0.6 in. to 17 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☒
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☒ No

11. SCREEN:
Type: Sch 40 pvc Diam.: 2"
Slot/Gauge: .010 Length: 15'
Set Between: 17 ft. and 32 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 15 ft. to 32 ft.
Effective size 1A Uniformity Coefficient Yes

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1.0 ft. to 13 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Steve Poloniewicz **CERT. NO.:** 1097
Address: (Print) 9088 north field dr
□□□□□□9088 north field
Level: A (☒) B (☐) C (☐) D (☐) (circle one)
Telephone No.: (803) 548-2180 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 4/04/2012
Well Driller

If D Level Driller, provide supervising driller's name:

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-15D**
Client: SCDOT		***Well Construction Data***	
Date Started: 3/28/12	Date Completed: 4/2/12	Screen: 2" (0.010) Slotted PVC	From: 55 - To: 60
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 53 - To: 60
Drilling Co.: Saedacco	Driller: Steve P.	Seal: Bentonite Pellets	From: 51 - To: 53
Method: Air Roller Bit	Equipment: Gus Peck	Grout: Portland Cement Type I	From: 0 - To: 51
Boring Depth (ft.): 60.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6/4	GW Level: ▼ 18.40 Time/Date: 4/5/2012	Outer Casing/Stick Up: 6" Threaded PVC Sch 40 to 40 ft.	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0–18						**TOPSOIL** **SILT**, orange, dry.		
18–20						Clayey **SILT**, with medium grains, orange and white, hard, dry.		
20–28						Clayey **SILT**, trace fine grains, orange and white, dry.		
28–40						**CLAY**, gray, hard, dry.		
40						Total Depth of 6" outer casing		
40–58						Clayey **SILT**, orange and white, dry.		
58–60						**PARTIALLY WEATHERED ROCK** silt, orange, dry.		
60						**Boring Terminated at 60 ft.**		

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 5/15/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Poloniewicz (last) Steven (first)
Address: 9088 North Cield Dr
City: Fortmill State: SC Zip: 29707
Telephone: Work: 1-800,849-0353 Home:

2. LOCATION OF WELL: **COUNTY:** Chesterfield
Name: Eddies Pit Stop
Street Address: Rt. 2 U.S. Hwy 601 North
City: Pageland SC Zip:
Latitude: 34.77021 N Longitude: 80.39935 W

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** MW-15D

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Orange silty clay	4'	15'
Brown silty clay	15'	32'
Brown silty clay	32'	40'
Brown silty clay	40'	60'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☒ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER:

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 3/28/2012
60.35 ft. Date Completed: 4/02/2012

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0.6 in. to 55' ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☒
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☒ No

11. SCREEN:
Type: Sch 40 pvc Diam.: 2"
Slot/Gauge: .010 Length: 5'
Set Between: 55' ft. and 60.35 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 53' ft. to 60.35 ft.
Effective size 1A Uniformity Coefficient Yes

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1.0 ft. to 51' ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☒ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Steve Poloniewicz **CERT. NO.:** 1097
Address: (Print) 9088 north field dr
□□□□□□9088 north field
Level: A ☒ B ☐ C ☐ D ☐ (circle one)
Telephone No.: (803) 548-2180 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 4/04/2012
Well Driller

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-16**
Client: SCDOT		***Well Construction Data***	
Date Started: 3/28/12	Date Completed: 3/28/12	Screen: 2" (0.010) Slotted PVC	From: 17 - To: 32
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 15 - To: 32
Drilling Co.: Saedacco	Driller: Steve P.	Seal: Bentonite Pellets	From: 13 - To: 15
Method: Air Roller Bit	Equipment: Gus Peck	Grout: Portland Cement Type I	From: 0 - To: 13
Boring Depth (ft.): 32.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 5	GW Level: ▼ 19.02 Time/Date: 4/5/2012	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		
2						**SILT**, trace clay, orange, dry.		2
4								4
6								6
8								8
10								10
12								12
14								14
16								16
18							▼	18
20						**SILT**, trace clay, with medium grains, orange and white, hard, dry.		20
22								22
24								24
26								26
28								28
30						Silty **CLAY**, trace fine grains, orange and white, dry.		30
32						**CLAY**, gray, hard, dry.		32
						Boring Terminated at 32 ft.		

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 5/9/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Poloniewicz (last) Steven (first)
Address: 9088 North Cield Dr
City: Fortmill State: SC Zip: 29707
Telephone: Work: 1-800,849-0353 Home:

2. LOCATION OF WELL: **COUNTY:** Chesterfield
Name: Eddies Pit Stop
Street Address: Rt. 2 U.S. Hwy 601 North
City: Pageland SC Zip:
Latitude: 34.77021 N Longitude: 80.39935 W

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** MW-16

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from ____ ft. to ____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Orange silty clay	4'	15'
Brown silty clay	15'	32'
Brown silty clay	32'	32.5
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☒ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER:

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 32.5 ft. Date Started: 3/28/2012 Date Completed: 3/28/2012

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0.6 in. to 17 ft. depth
____ in. to ____ ft. depth
Height: Above ☐ Below ☒
Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☒ No

11. SCREEN:
Type: Sch 40 pvc Diam.: 2"
Slot/Gauge: .010 Length: 15'
Set Between: 17 ft. and 32.5 ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: ____

14. WATER QUALITY
Chemical Analysis: ☐ Yes ☒ No Bacterial Analysis: ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 15 ft. to 32.5 ft.
Effective Size 1A Uniformity Coefficient: Yes

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other ____
Depth: From 1.0 ft. to 13 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☒ No Type: ____ Amount: ____

18. PUMP: Date Installed: ____ Not Installed ☐
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☒ Centrifugal

19. WELL DRILLER: Steve Poloniewicz **CERT. NO.:** 1097
Address: (Print) 9088 north field dr 9088 north field
Level: A ☒ B ☐ C ☐ D ☐ (circle one)
Telephone No.: (803) 548-2180 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.
Signed: ____ Date: 4/04/2012
Well Driller
If D-Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-16D**
Client: SCDOT		***Well Construction Data***	
Date Started: 3/27/12	Date Completed: 3/28/12	Screen: 2" (0.010) Slotted PVC	From: 55 - To: 60
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 53 - To: 60
Drilling Co.: Saedacco	Driller: Steve P.	Seal: Bentonite Pellets	From: 51 - To: 53
Method: Air Roller Bit	Equipment: Gus Peck	Grout: Portland Cement Type I	From: 0 - To: 51
Boring Depth (ft.): 60.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6/4	GW Level: ▼ 19.70 Time/Date: 4/5/2012	Outer Casing/Stick Up: 6" Threaded PVC Sch 40 to 40 ft.	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		0
2						**SILT**, trace clay, orange and white, dry.		2
4								4
6								6
8								8
10								10
12								12
14								14
16								16
18								18
20						▼		20
22						**SILT**, trace clay, with medium grains, orange and white, sub-angular.		22
24								24
26								26
28								28
30						Silty **CLAY**, trace fine grains, orange and white, dry.		30
32						**CLAY**, gray, dry.		32
34								34
36						**CLAY**, with rock, gray, hard, dry.		36
38						Total Depth of 6" outer casing		38
40						Clayey **SILT**, orange and white, dry.		40
42								42
44								44
46								46
48								48
50								50
52								52
54								54
56								56
58						**PARTIALLY WEATHERED ROCK** silt, orange and gray, dry.		58
60						**Boring Terminated at 60 ft.**		60

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 5/15/12

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Poloniewicz (last) Steven (first)
Address: 9088 North Cield Dr
City: Fortmill State: SC Zip: 29707
Telephone: Work: 1-800,849-0353 Home:

2. LOCATION OF WELL: **COUNTY:** Chesterfield
Name: Eddies Pit Stop
Street Address: Rt. 2 U.S. Hwy 601 North
City: Pageland SC Zip:
Latitude: 34.77021 N Longitude: 80.39935 W

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** MW-16D

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Orange silty clay	4'	15'
Brown silty clay	15'	32'
Brown silty clay	32'	40'
Brown silty clay	40'	60.3
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☒ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER:

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 3/27/2012
60.3 ft. Date Completed: 3/28/2012

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0.6 in. to 55' ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☒
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☒ No

11. SCREEN:
Type: Sch 40 pvc Diam.: 2"
Slot/Gauge: .010 Length: 5'
Set Between: 55' ft. and 60.3 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 53' ft. to 60.3 ft.
Effective size 1A Uniformity Coefficient Yes

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1.0 ft. to 51' ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☒ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Steve Poloniewicz **CERT. NO.:** 1097
Address: (Print) 9088 north field dr
□□□□□□9088 north field
Level: A ☒ B ☐ C ☐ D ☐ (circle one)
Telephone No.: (803) 548-2180 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ (Well Driller) Date: 4/04/2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-17**
Client: SCDOT		***Well Construction Data***	
Date Started: 3/27/12	Date Completed: 3/27/12	Screen: 2" (0.010) Slotted PVC	From: 20 - To: 35
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 18 - To: 35
Drilling Co.: Saedacco	Driller: Steve P.	Seal: Bentonite Pellets	From: 16 - To: 18
Method: Air Roller Bit	Equipment: Gus Peck	Grout: Portland Cement Type I	From: 0 - To: 16
Boring Depth (ft.): 35.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 5	GW Level: ▼ 20.39 Time/Date: 4/5/2012	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		0
2						**SILT**, trace clay and medium grains, orange, dry.		2
4								4
6						**SILT**, trace clay, orange, dry.		6
8								8
10								10
12								12
14								14
16						**SILT**, trace clay and medium grains, orange and white, dry.		16
18								18
20							▼	20
22								22
24								24
26								26
28								28
30						**SILT**, trace gray clay, orange and white, dry.		30
32								32
34								34
						Boring Terminated at 35 ft.		

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 4/24/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Poloniewicz (last) Steven (first)
Address: 9088 North Cield Dr
City: Fortmill State: SC Zip: 29707
Telephone: Work: 1-800,849-0353 Home:

2. LOCATION OF WELL: **COUNTY:** Chesterfield
Name: Eddies Pit Stop
Street Address: 649 US Highway 601
City: Pageland SC Zip:
Latitude: 34.77021 N Longitude: 80.39935 W

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** MW-17

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Orange silty clay	4'	15'
Brown silty clay	15'	35'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☒ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER:

8. USE:
☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 3/27/2012
35' ft. Date Completed: 3/27/2012

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0.6 in. to 10 ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☒
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☒ No

11. SCREEN:
Type: Sch 40 pvc Diam.: 2"
Slot/Gauge: .010 Length: 10
Set Between: 20 ft. and 35 ft. NOTE: MULTIPLE SCREENS
_____ ft. and _____ ft. USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 18 ft. to 35 ft.
Effective size 1A Uniformity Coefficient Yes

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1.0 ft. to 16 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not Installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Steve Poloniewicz **CERT. NO.:** 1097
Address: (Print) 9088 north field dr Belmont
9088 north field
Level: A ☒ B ☐ C ☐ D ☐ (circle one)
Telephone No.: (803) 548-2180 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 4/04/2012
Well Driller

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-17D**
Client: SCDOT		***Well Construction Data***	
Date Started: 3/27/12	Date Completed: 4/3/12	Screen: 2" (0.010) Slotted PVC	From: 55 - To: 60
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 53 - To: 60
Drilling Co.: Saedacco	Driller: Steve P.	Seal: Bentonite Pellets	From: 51 - To: 53
Method: Air Roller Bit	Equipment: Gus Peck	Grout: Portland Cement Type I	From: 0 - To: 51
Boring Depth (ft.): 60.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 5	GW Level: ▼ 27.54 Time/Date: 4/5/2012	Outer Casing/Stick Up: 6" Threaded PVC Sch 40 to 40 ft.	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		0
2						**SILT**, trace clay and medium grains, orange, hard.		2
4								4
6						**SILT**, trace clay, orange, hard.		6
8								8
10								10
12								12
14								14
16						**SILT**, trace clay and medium grains, orange and white, dry.		16
18								18
20								20
22								22
24								24
26								26
28							▼	28
30						**SILT**, trace gray clay, orange and white, dry.		30
32								32
34								34
36								36
38								38
40						Total Depth of 6" outer casing		40
42						**SILT**, trace clay, white and gray, hard, dry.		42
44								44
46								46
48						**PARTIALLY WEATHERED ROCK** silt, gray, dry.		48
50								50
52								52
54								54
56								56
58								58
60						**Boring Terminated at 60 ft.**		60

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 5/15/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Poloniewicz (last) Steven (first)
Address: 9088 North Cield Dr
City: Fortmill State: SC Zip: 29707
Telephone: Work: 1-800,849-0353 Home:

2. LOCATION OF WELL: **COUNTY:** Chesterfield
Name: Eddies Pit Stop
Street Address: Rt. 2 U.S. Hwy 601 North
City: Pageland SC Zip:
Latitude: 34.77021 N Longitude: 80.39935 W

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** MW-17D

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Orange silty clay	4'	15'
Brown silty clay	15'	32'
Brown silty clay	32'	40'
Brown silty clay	40'	60.35
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☒ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER:

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 60.35 ft. Date Started: 3/27/2012 Date Completed: 4/03/2012

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0.6 in. to 55' ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☒
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☒ No

11. SCREEN:
Type: Sch 40 pvc Diam.: 2"
Slot/Gauge: .010 Length: 5'
Set Between: 55' ft. and 60.35 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface:
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 53' ft. to 60.35 ft.
Effective size 1A Uniformity Coefficient Yes

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1.0 ft. to 51' ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Steve Poloniewicz **CERT. NO.:** 1097
Address: (Print) 9088 north field dr
□□□□□□9088 north field
Level: A ☒ B ☐ C ☐ D ☐ (circle one)
Telephone No.: (803) 548-2180 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 4/04/2012
Well Driller

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-18**
Client: SCDOT		***Well Construction Data***	
Date Started: 3/30/12	Date Completed: 3/30/12	Screen: 2" (0.010) Slotted PVC	From: 17 - To: 32
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 15 - To: 32
Drilling Co.: Saedacco	Driller: Steve P.	Seal: Bentonite Pellets	From: 13 - To: 15
Method: Air Roller Bit	Equipment: Gus Peck	Grout: Portland Cement Type I	From: 0 - To: 13
Boring Depth (ft.): 32.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 4	GW Level: ▼ 19.65 Time/Date: 4/5/2012	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		0
2						**SILT**, orange, dry.		2
4								4
6								6
8						**SILT**, trace clay, orange, dry.		8
10								10
12								12
14						**SILT**, trace clay and quartz, orange and white, dry.		14
16								16
18						**SILT**, trace clay, gray, dry.		18
20						▼		20
22								22
24								24
26						**SILT**, trace clay and grains, gray, dry.		26
28								28
30								30
32						**Boring Terminated at 32 ft.**		32

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 4/24/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: Poloniewicz (last) Steven (first)
Address: 9088 North Cield Dr
City: Fortmill State: SC Zip: 29707
Telephone: Work: 1-800,849-0353 Home:

2. LOCATION OF WELL: **COUNTY:** Chesterfield
Name: Eddies Pit Stop
Street Address: Rt. 2 U.S. Hwy 601 North
City: Pageland SC Zip:
Latitude: 34.77021 N Longitude: 80.39935 W

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** MW-18

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Orange silty clay	4'	15'
Brown silty clay	15'	32'
Brown silty clay	32'	32.2
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☒ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER:

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 32.2 ft. Date Started: 3/30/2012 Date Completed: 3/30/2012

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2" Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0.6 ft. to 17 ft. depth
_____ ft. to _____ ft. depth
Height: Above ☐ Below ☒
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☒ No

11. SCREEN:
Type: Sch 40 pvc Diam.: 2"
Slot/Gauge: .010 Length: 15'
Set Between: 17 ft. and 32.2 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis: ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface:
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis: ☐ Yes ☒ No Bacterial Analysis: ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack): ☒ Yes ☐ No
Installed from 15 ft. to 32.2 ft.
Effective size 1A Uniformity Coefficient: Yes

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1.0 ft. to 13 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not Installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Steve Poloniewicz **CERT. NO.:** 1097
Address: (Print) 9088 north field dr 9088 north field
Level: A ☒ B ☐ C ☐ D ☐ (circle one)
Telephone No.: (803) 548-2180 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 4/04/2012
Well Driller

If D Level Driller, provide supervising driller's name:

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-18D**
Client: SCDOT		***Well Construction Data***	
Date Started: 3/29/12	Date Completed: 4/2/12	Screen: 2" (0.010) Slotted PVC	From: 55 - To: 60
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 53 - To: 60
Drilling Co.: Saedacco	Driller: Steve P.	Seal: Bentonite Pellets	From: 51 - To: 53
Method: Air Roller Bit	Equipment: Gus Peck	Grout: Portland Cement Type I	From: 0 - To: 51
Boring Depth (ft.): 60.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6/4	GW Level: ▼ 19.17 Time/Date: 4/5/2012	Outer Casing/Stick Up: 6" Threaded PVC Sch 40 to 40 ft.	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		0
2						**SILT**, orange, dry.		2
8						**SILT**, trace clay, orange, dry.		8
14						**SILT**, trace clay and quartz, orange and white, dry.		14
18						**SILT**, trace clay, gray, dry. ▼		18
26						**SILT**, trace clay and grains, gray, dry.		26
40						Total Depth of 6" outer casing		40
50						**PARTIALLY WEATHERED ROCK**, silt, gray, dry.		50
60						**Boring Terminated at 60 ft.**		60

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 5/15/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Poloniewicz (last) Steven (first)
Address: 9088 North Cield Dr
City: Fortmill State: SC Zip: 29707
Telephone: Work: 1-800,849-0353 Home:

2. LOCATION OF WELL: **COUNTY:** Chesterfield
Name: Eddies Pit Stop
Street Address: 649 US Highway 601
City: Pageland SC Zip:
Latitude: 34.77021 N Longitude: 80.39935 W

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** MW-18D

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Orange silty clay	4'	15'
Brown silty clay	15'	32'
Brown silty clay	32'	40'
Brown silty clay	40'	60.3
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☒ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER:

8. USE:
☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 60.3 ft. Date Started: 3/29/2012 Date Completed: 4/02/2012

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0.6 in. to 55' ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☒
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☒ No

11. SCREEN:
Type: Sch 40 pvc Diam.: 2"
Slot/Gauge: .010 Length: 5'
Set Between: 55' ft. and 60.3 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 53' ft. to 60.3 ft.
Effective size 1A Uniformity Coefficient Yes

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1.0 ft. to 51' ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Steve Poloniewicz **CERT. NO.:** 1097
Address: (Print) 9088 north field dr
□□□□□□9088 north field
Level: A ☒ B ☐ C ☐ D ☐ (circle one)
Telephone No.: (803) 548-2180 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 4/04/2012
Well Driller

If D Level Driller, provide supervising driller's name:

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-19**
Client: SCDOT		***Well Construction Data***	
Date Started: 3/29/12	Date Completed: 3/29/12	Screen: 2" (0.010) Slotted PVC	From: 17.5 - To: 27.5
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 15.5 - To: 27.5
Drilling Co.: Saedacco	Driller: Steve P.	Seal: Bentonite Pellets	From: 13 - To: 15.5
Method: Air Roller Bit	Equipment: Gus Peck	Grout: Portland Cement Type I	From: 0 - To: 13
Boring Depth (ft.): 28.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 4	GW Level: ▼ 18.50 Time/Date: 4/5/2012	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		0
						SILT, orange, dry.		
2								2
4								4
6								6
8						**SILT**, trace clay, orange, dry.		8
10						**SILT**, trace clay, mottled (orange, gray, white), dry.		10
12								12
14						**SILT**, trace quartz, mottled (orange, gray, white), dry.		14
16								16
18						**SILT**, trace clay, gray, dry. ▼		18
20								20
22								22
24								24
26								26
28						**Boring Terminated at 28 ft.**		28

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 4/24/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Poloniewicz (last) Steven (first)
Address: 9088 North Cield Dr
City: Fortmill State: SC Zip: 29707
Telephone: Work: 1-800,849-0353 Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: 649 US Highway 601
City: Pageland SC Zip:
Latitude: 34.77021 N Longitude: 80.39935 W

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER: MW-19

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Orange silty clay	4'	15'
Brown silty clay	15'	27.65
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☒ Dug ☒ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER:

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 27.65 ft. Date Started: 4/03/2012 Date Completed: 4/03/2012

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0.6 ft. to 17 ft. depth
in. to ft. depth
Height: Above ☐ Below ☒
Surface ft.
Weight lb./ft.
Drive Shoe? ☐ Yes ☒ No

11. SCREEN:
Type: Sch 40 pvc Diam.: 2"
Slot/Gauge: .010 Length: 10'
Set Between: 17 ft. and 27.65 ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface:
ft. after hrs. Pumping G.P.M.
Pumping Test ☐ Yes (please enclose) ☒ No
Yield:

14. WATER QUALITY
Chemical Analysis ☐ Yes ☒ No Bacterial Analysis ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 15 ft. to 27.65 ft.
Effective size 1A Uniformity Coefficient Yes

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other
Depth: From 1.0 ft. to 13 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type
Well Disinfected ☐ Yes ☒ No Type: Amount:

18. PUMP: Date Installed: Not Installed ☐
Mfr. Name: Model No.:
H.P. Volts: Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☒ Centrifugal

19. WELL DRILLER: Steve Poloniewicz CERT. NO.: 1097
Address: (Print) 9088 north field dr 9088 north field
Level: A ☒ B ☐ C ☐ D ☐ (circle one)
Telephone No.: (803) 548-2180 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 4/04/2012
Well Driller

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-19D**
Client: SCDOT		***Well Construction Data***	
Date Started: 3/29/12	Date Completed: 4/3/12	Screen: 2" (0.010) Slotted PVC	From: 55 - To: 60
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 53 - To: 60
Drilling Co.: Saedacco	Driller: Steve P.	Seal: Bentonite Pellets	From: 51 - To: 53
Method: Air Roller Bit	Equipment: Gus Peck	Grout: Portland Cement Type I	From: 0 - To: 51
Boring Depth (ft.): 60.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6/4	GW Level: ▼ 16.20 Time/Date: 4/5/2012	Outer Casing/Stick Up: 6" Threaded PVC Sch 40 to 40 ft.	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**TOPSOIL**		0
2						**SILT**, orange, dry.		2
8						**SILT**, trace clay, orange, dry.		8
10						**SILT**, trace clay, mottled (orange, gray, white), dry.		10
14						**SILT**, trace quartz, mottled (orange, gray, white), dry. ▼		14
18						**SILT**, trace clay, gray, dry.		18
28						**SILT**, trace clay and medium grains, gray, dry.		28
40						Total Depth of 6" outer casing		40
48						**PARTIALLY WEATHERED ROCK**, silt, mottled (gray, orange, white), dry.		48
60						**Boring Terminated at 60 ft.**		60

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

DHEC — PROMOTE PROTECT PROSPER

1. WELL OWNER INFORMATION:
Name: Poloniewicz (last) Steven (first)
Address: 9088 North Cield Dr
City: Fortmill State: SC Zip: 29707
Telephone: Work: 1-800,849-0353 Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Eddies Pit Stop
Street Address: Rt. 2 U.S. Hwy 601 North
City: Pageland SC Zip:
Latitude: 34.77021 N Longitude: 80.39935 W

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER: MW-19D

4. ABANDONMENT: ☐ Yes ☒ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Orange silty clay	4'	15'
Brown silty clay	15'	32'
Brown silty clay	32'	40'
Brown silty clay	40'	60.2
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☒ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER:

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☒ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 60.2 ft. Date Started: 3/29/2012 Date Completed: 4/03/2012

10. CASING: ☒ Threaded ☐ Welded
Diam.: 2"
Type: ☒ PVC ☐ Galvanized ☐ Steel ☐ Other
0.6 in. to 55' ft. depth
_____ in. to _____ ft. depth
Height: Above ☐ Below ☒
Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☒ No

11. SCREEN:
Type: Sch 40 pvc Diam.: 2"
Slot/Gauge: .010 Length: 5'
Set Between: 55' ft. and 60.2 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☒ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield: _____

14. WATER QUALITY
Chemical Analysis: ☐ Yes ☒ No Bacterial Analysis: ☐ Yes ☒ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☒ Yes ☐ No
Installed from 53' ft. to 60.2 ft.
Effective size 1A Uniformity Coefficient Yes

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1.0 ft. to 51' ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☒ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Steve Poloniewicz CERT. NO.: 1097
Address: (Print) 9088 north field dr
□□□□□□9088 north field
Level: A ☒ B ☐ C ☐ D ☐ (circle one)
Telephone No.: (803) 548-2180 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 4/04/2012
Well Driller

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-20**
Client: SCDOT		***Well Construction Data***	
Date Started: 7/9/12	Date Completed: 7/9/12	Screen: 2" (0.010) Slotted PVC	From: 25 - To: 35
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 23 - To: 35
Drilling Co.: Southern Sonic	Driller: B. Cabit	Seal: Bentonite Pellets	From: 21 - To: 23
Method: Sonic	Equipment: Sonic Rig	Grout: Portland Cement Type I	From: 0 - To: 21
Boring Depth (ft.): 35.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6	GW Level: Time/Date:	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						Clayey **SILT**, orange, hard, dry.		0
6						Clayey **SILT**, grayish purple, hard, laminated, dry.		6
6						**SILT**, light brown, dry.		6
12						**SILT**, pink, hard, dry.		12
14						**SILT**, orange and white with black veins, dry.		14
14						**SILT**, with partially weathered rock, orange with black veins, dry.		14
22						**SILT**, orange, hard, dry.		22
24						**SILT**, with partially weathered rock, mottled (green, brown, orange) with black veins, hard, dry.		24
35						**Boring Terminated**		35

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 7/26/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: P.O. Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Liberty Gas
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:

4. ABANDONMENT: ☐ Yes ☐ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Tan silty clay	14	14
Hard clay	10	24
Sand & silt w/clay fraces	11	35
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW - 20S

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 35' ft. Date Started: July 9, 2012 Date Completed: July 9, 2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 25 ft. depth
_____ in. to _____ ft. depth
Height: Above /Below ✓ Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: .010 Length: 10'
Set Between: 25 ft. and 35 ft. NOTE: MULTIPLE SCREENS
_____ ft. and _____ ft. USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 22 ft. to 35 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 20 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Blake Cabit CERT. NO.: 963
Address: (Print) Level: A B C D (circle one) ✓
2078 Alpine Drive, Aiken, SC 29803
Telephone No.: 803.522.3193 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Blake Cabit (Well Driller) Date: July 23, 2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-20D**
Client: SCDOT		***Well Construction Data***	
Date Started: 7/11/12	Date Completed: 7/11/12	Screen: 2" (0.010) Slotted PVC	From: 55 - To: 60
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 53 - To: 60
Drilling Co.: Southern Sonic	Driller: B. Cabit	Seal: Bentonite Pellets	From: 51 - To: 53
Method: Sonic	Equipment: Sonic Rig	Grout: Portland Cement Type I	From: 0 - To: 51
Boring Depth (ft.): 60.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6/9	GW Level: Time/Date:	Outer Casing/Stick Up: 6" Threaded PVC Sch 40 to 40 ft.	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						Clayey **SILT**, orange, hard, dry.		0
6						Clayey **SILT**, grayish purple, hard, laminated, dry.		6
6						**SILT**, light brown, dry.		6
12						**SILT**, pink, hard, dry.		12
14						**SILT**, orange and white with black veins, dry.		14
16						**SILT**, with partially weathered rock, orange with black veins, dry.		16
22						**SILT**, orange, hard, dry.		22
24						**SILT**, with partially weathered rock, mottled (green, brown, orange) with black veins, hard, dry.		24
36						**SILT**, trace clay, white and gray, hard, dry.		36
44								44

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 7/26/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

GEOLOGIST LOG

Project: EDDIE'S PIT STOP	Project Number: 73098106	Boring/Well: MW-20D
Client: SCDOT		*Well Construction Data*

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
46								46
48						PARTIALLY WEATHERED ROCK with silt, gray, dry.		48
50								50
52								52
54								54
56								56
58								58
60						**Boring Terminated at 60 ft.**		60

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 7/26/12

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: P.O. Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Liberty Gas
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☐ No
Grouted Depth: from ____ ft. to ____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Tan silty clay	16	16
Hard clay	15	31
Sand w/clay	10	41
Silty sandy clay	19	60
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW - 20D

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: July 11, 2012
60' ft. Date Completed: July 12, 2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2"/6"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 55 ft. depth
0 in. to 40 ft. depth
Height: Above /Below ✓
Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: .010 Length: 5'
Set Between: 55 ft. and 60 ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 52 ft. to 60 ft.
Effective size #2 Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other ____
Depth: From 0 ft. to 49 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☑ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☑
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Blake Cabit CERT. NO.: 963
Address: (Print) Level: A B C D (circle one) ✓
2078 Alpine Drive, Aiken, SC 29803
Telephone No.: 803.522.3793 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Blake Cabit (Well Driller) Date: July 23, 2012

If D Level Driller, provide supervising driller's name:

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-21**
Client: SCDOT		***Well Construction Data***	
Date Started: 7/10/12	Date Completed: 7/10/12	Screen: 2" (0.010) Slotted PVC	From: 25 - To: 35
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 23 - To: 35
Drilling Co.: Southern Sonic	Driller: B. Cabit	Seal: Bentonite Pellets	From: 21 - To: 23
Method: Sonic	Equipment: Sonic Rig	Grout: Portland Cement Type I	From: 0 - To: 21
Boring Depth (ft.): 35.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6	GW Level: Time/Date:	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**ASPHALT**		0
2						Clayey **SILT**, orange, hard, dry.		2
4								4
6						**SILT**, light brown, hard, dry.		6
8								8
10						**SILT**, pink, hard, dry.		10
12								12
14						**SILT**, trace partially weathered rock, orange and white with black veins, dry.		14
16								16
18								18
20								20
22						**SILT**, trace partially weathered rock, orange with black veins, dry.		22
24								24
26								26
28								28
30								30
32								32
34								34
						Boring Terminated at 35 ft.		

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 7/26/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: P.O. Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:** Chesterfield
Name: Liberty Gas
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☐ No
Grouted Depth: from ____ ft. to ____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Tan silty clay	14	14
Hard clay	10	24
Sand & silt w/clay traces	11	35
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW - 21S

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: July 10, 2012
35' ft. Date Completed: July 10, 2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 25 ft. depth
____ in. to ____ ft. depth
Height: Above /Below ✓
Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: .010 Length: 10'
Set Between: 25 ft. and 35 ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 22 ft. to 35 ft.
Effective size #2 Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other ____
Depth: From 0 ft. to 20 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☑ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☑
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Blake Cabit **CERT. NO.:** 963
Address: (Print) Level: A B C D (circle one) ✓
2078 Alpine Drive, Aiken, SC 29803
Telephone No.: 803.522.3793 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Blake Cabit (Well Driller) Date: July 23, 2012

If D Level Driller, provide supervising driller's name:

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-21D**
Client: SCDOT		***Well Construction Data***	
Date Started: 7/10/12	Date Completed: 7/11/12	Screen: 2" (0.010) Slotted PVC	From: 55 - To: 60
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 53 - To: 60
Drilling Co.: Southern Sonic	Driller: B. Cabit	Seal: Bentonite Pellets	From: 51 - To: 53
Method: Sonic	Equipment: Sonic Rig	Grout: Portland Cement Type I	From: 0 - To: 51
Boring Depth (ft.): 60.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6/9	GW Level: Time/Date:	Outer Casing/Stick Up: 6" Threaded PVC Sch 40 to 40 ft.	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**ASPHALT**		0
2						Clayey **SILT**, orange, hard, dry.		2
4								4
6						**SILT**, light brown, hard, dry.		6
8								8
10						**SILT**, pink, hard, dry.		10
12								12
14						**SILT**, trace partially weathered rock, orange and white with black veins, dry.		14
16								16
18								18
20								20
22						**SILT**, trace partially weathered rock, orange with black veins, dry.		22
24								24
26								26
28								28
30								30
32								32
34								34
36						**SILT**, trace clay, white and gray, hard, dry.		36
38								38
40								40
42								42
44								44

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 7/26/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

GEOLOGIST LOG

Project: EDDIE'S PIT STOP	Project Number: 73098106	Boring/Well: MW-21D
Client: SCDOT		*Well Construction Data*

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
46								46
48								48
50						PARTIALLY WEATHERED ROCK with silt, gray, dry.		50
52								52
54								54
56								56
58								58
60						**Boring Terminated at 60 ft.**		60

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 7/26/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: P.O. Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Liberty Gas
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☐ No
Grouted Depth: from ____ ft. to ____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Tan silty clay	16	16
Hard clay	15	31
Sand w/clay	10	41
Silty sandy clay	19	60
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW - 21D

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: July 10, 2012
60' ft. Date Completed: July 11, 2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2"/6"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 55 ft. depth
0 in. to 40 ft. depth
Height: Above /Below ✓
Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: .010 Length: 5'
Set Between: 55 ft. and 60 ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 52 ft. to 60 ft.
Effective size #2 Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other ____
Depth: From 0 ft. to 49 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☑ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☑
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Blake Cabit CERT. NO.: 963
Address: (Print) Level: A B C D (circle one) ✓
2078 Alpine Drive, Aiken, SC 29803
Telephone No.: 803.522.5795 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Blake Cabit Well Driller Date: July 23, 2012

If D Level Driller, provide supervising driller's name:

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-22**
Client: SCDOT		***Well Construction Data***	
Date Started: 7/11/12	Date Completed: 7/11/12	Screen: 2" (0.010) Slotted PVC	From: 25 - To: 35
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 23 - To: 35
Drilling Co.: Southern Sonic	Driller: B. Cabit	Seal: Bentonite Pellets	From: 21 - To: 23
Method: Sonic	Equipment: Sonic Rig	Grout: Portland Cement Type I	From: 0 - To: 21
Boring Depth (ft.): 35.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6	GW Level: Time/Date:	Outer Casing/Stick Up:	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**ASHALT**		0
2						Clayey **SILT**, orange, hard, dry.		2
4								4
6						**SILT**, light brown, hard, dry.		6
8								8
10								10
12						**SILT**, pink, hard, dry.		12
14						**SILT**, trace partially weathered rock, orange and white with black veins, dry.		14
16								16
18								18
20								20
22								22
24						**SILT**, trace partially weathered rock, orange with black veins, dry.		24
26								26
28								28
30								30
32								32
34								34
						Boring Terminated at 35 ft.		

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 7/26/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: P.O. Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:** Chesterfield
Name: Liberty Gas
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☐ No
Grouted Depth: from ____ ft. to ____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Tan silty clay	14	14
Hard clay	10	24
Sand & silt w/clay traces	11	35
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW - 22S

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: July 11, 2012
35' ft. Date Completed: July 11, 2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 25 ft. depth
____ in. to ____ ft. depth
Height: Above /Below ✓ Surface
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: .010 Length: 10'
Set Between: 25 ft. and 35 ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL ____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: ____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 22 ft. to 35 ft.
Effective size #2 Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other ____
Depth: From 0 ft. to 20 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☑ No Type: ____ Amount: ____

18. PUMP: Date installed: ____ Not installed ☑
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Blake Cabit **CERT. NO.:** 963
Address: (Print) Level: A B C D (circle one) ✓
2078 Alpine Drive, Aiken, SC 29803
Telephone No.: 803.522.3793 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Blake Cabit (Well Driller) Date: July 23, 2012

If D Level Driller, provide supervising driller's name:

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Terracon GEOLOGIST LOG

Project: EDDIE'S PIT STOP		Project Number: 73098106	Boring/Well: **MW-22D**
Client: SCDOT		***Well Construction Data***	
Date Started: 7/9/12	Date Completed: 7/10/12	Screen: 2" (0.010) Slotted PVC	From: 55 - To: 60
Logged By: W. Walker	Coordinates:	Pack: #2 Filter Sand	From: 53 - To: 60
Drilling Co.: Southern Sonic	Driller: B. Cabit	Seal: Bentonite Pellets	From: 51 - To: 53
Method: Sonic	Equipment: Sonic Rig	Grout: Portland Cement Type I	From: 0 - To: 51
Boring Depth (ft.): 60.0	TOC Elevation:	Inner Casing: 2" Threaded PVC Sch 40	
Boring Diameter (in): 6/9	GW Level: Time/Date:	Outer Casing/Stick Up: 6" Threaded PVC Sch 40 to 40 ft.	

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
0						**ASPHALT**		0
2						Clayey **SILT**, orange, hard, dry.		2
4								4
6						**SILT**, light brown, hard, dry.		6
8								8
10								10
12						**SILT**, pink, hard, dry.		12
14						**SILT**, trace partially weathered rock, orange and white with black veins, dry.		14
16								16
18								18
20								20
22								22
24						**SILT**, trace partially weathered rock, orange with black veins, dry.		24
26								26
28								28
30								30
32								32
34								34
36						**SILT**, trace clay, white and gray, hard, dry.		36
38								38
40								40
42								42
44								44

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 7/26/12

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

GEOLOGIST LOG

Project: EDDIE'S PIT STOP	Project Number: 73098106	Boring/Well: MW-22D
Client: SCDOT		*Well Construction Data*

Depth	Sample	Sample Number	Blows/ 6 inches	FID (ppm)	Lithology	Description	Well Detail	Depth
46								46
48								48
50						PARTIALLY WEATHERED ROCK, with silt, gray, dry.		50
52								52
54								54
56								56
58								58
60						**Boring Terminated at 60 ft.**		60

Terracon
521 Clemson Road, Columbia, South Carolina 29229
Phone: 803-741-9000, Fax: 803-741-9900

LOG OF BORING WELL 73098106.GPJ GAGE_GRP.GDT 7/26/12

D H E C
PROMOTE PROTECT PROSPER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SCDOT (last) (first)
Address: P.O. Box 191
City: Columbia State: SC Zip: 29202-0191
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Chesterfield
Name: Liberty Gas
Street Address: Rt. 2 Hwy 601 North
City: Pageland Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**

4. ABANDONMENT: ☐ Yes ☐ No
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Tan silty clay	16	16
Hard clay	15	31
Sand w/clay	10	41
Silty sandy clay	19	60
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:
MW - 22D

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☑ Other

7. PERMIT NUMBER: UST #18871

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: July 9, 2012
60' ft. Date Completed: July 10, 2012

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2"/6"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
0 in. to 55 ft. depth
0 in. to 40 ft. depth
Height: Above /Below ✓ Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☑ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: .010 Length: 5'
Set Between: 55 ft. and 60 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☑ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☑ No Bacterial Analysis ☐ Yes ☑ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 52 ft. to 60 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 49 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☑ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☑
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe ___ ft. Capacity ___ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Blake Cabit CERT. NO.: 963
Address: (Print) Level: A B C D (circle one) ✓
2078 Alpine Drive, Aiken, SC 29803
Telephone No.: 803.522.3793 Fax No.:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Blake Cabit (Well Driller) Date: July 23, 2012

If D Level Driller, provide supervising driller's name:

APPENDIX B

Ground Water Sampling Logs

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-
741-9000

Page ____ of ____

Well ID:	MW-1	Total Well Depth:	43 ft. BTOC
Date:	1/9/2012	Depth to water:	34.63 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	8.37 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	1.423 gal.
Weather Conditions:	sunny	3 Casing Volumes:	gal.
Air Temperature:	50	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1230		

Field Analyses

Volume Purged (gal.)							
Time							
pH	4.59						
Specific Conductivity (umhos/cm)	1821						
Water Temperature ©	20.0						
Turbidity	low						
Dissolved Oxygen (mg/L)	2.82						

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-741-9000

Page ____ of ____

Well ID:	MW-2	Total Well Depth:	43 ft. BTOC
Date:	1/6/2012	Depth to water:	31.91 ft. BTOC
Site Name:	Eddies Pitt Stop	Length of Water Column (LWC):	11.09 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	1.88 gal.
Weather Conditions:	sunny	3 Casing Volumes:	5.65 gal.
Air Temperature:	50	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	~~1200~~ 1150		

Field Analyses

Volume Purged (gal.)	0.00	~~1.88~~	~~3.6~~	~~5.65~~			
Time							
pH	1.39						
Specific Conductivity (umhos/cm)	1485						
Water Temperature ©	15.2						
Turbidity	low						
Dissolved Oxygen (mg/L)	1.86						

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-741-9000

Page ____ of ____

Well ID:	MW-3	Total Well Depth:	45 ft. BTOC
Date:	1/9/2012	Depth to water:	35.45 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	9.55 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	1.62 gal.
Weather Conditions:	sunny	3 Casing Volumes:	4.87 gal.
Air Temperature:	50	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1140		

Field Analyses

Volume Purged (gal.)	0.00	~~1.62~~	~~3.2~~	~~4.47~~			
Time							
pH	4.62						
Specific Conductivity (umhos/cm)	129.8						
Water Temperature ©	17.2						
Turbidity	low						
Dissolved Oxygen (mg/L)	1.65						

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-
741-9000

Page ____ of ____

Well ID:	MW-3D	Total Well Depth:	60 ft. BTOC
Date:	1[illegible]/2012	Depth to water:	35.12 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	24.88 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	4.22 gal.
Weather Conditions:	sunny	3 Casing Volumes:	12.68 gal.
Air Temperature:	50	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1530		

Field Analyses

Volume Purged (gal.)	0.00	4.22	8.44	12.68			
Time							
pH	6.03	5.85	5.93	5.89			
Specific Conductivity (umhos/cm)	383.8	354.2	242.2	230.0			
Water Temperature ©	19.2	20.2	19.8	19.7			
Turbidity	low	Nod	—	—			
Dissolved Oxygen (mg/L)	2.28						

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-
741-9000

Page ____ of ____

Well ID:	MW-4	Total Well Depth:	34-49 ft. BTOC
Date:	1/6/2012	Depth to water:	35.79 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	13.21 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	2.24 gal.
Weather Conditions:	sunny	3 Casing Volumes:	gal.
Air Temperature:	50	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1250		

Field Analyses

Volume Purged (gal.)							
Time							
pH	5.32						
Specific Conductivity (umhos/cm)	81.2						
Water Temperature ©	16.5						
Turbidity	low						
Dissolved Oxygen (mg/L)	4.28						

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-
741-9000

Page ____ of ____

Well ID:	MW-5	Total Well Depth:	25.10 ft. BTOC
Date:	1/6/2012	Depth to water:	24.66 / 24.36 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	0.44 / 0.74 ft.
Project No.:	7309-8106	Casing Diameter:	1/3/4 / 2.0 / 1/4/4 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	0.0748 / 0.1258 gal.
Weather Conditions:	sunny	3 Casing Volumes:	0.37 gal.
Air Temperature:	50	Remarks:	well ran dry on 1/3/12 @ 1230 to collect GL
Well Evacuation Method:	Bailer		not enough H2O for full analyses
Sample Collection Method:	Bailer		full sample taken
Sampled at (time):	1300		

Field Analyses

Volume Purged (gal.)	0.00	0.125					
Time							
pH							
Specific Conductivity (umhos/cm)							
Water Temperature ©							
Turbidity							
Dissolved Oxygen (mg/L)							

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-741-9000

Well ID:	MW-6
Date:	1/6/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	7309-8106
Field Personnel:	W.Walker
Weather Conditions:	sunny
Air Temperature:	50
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1050

Total Well Depth:	35 ft. BTOC
Depth to water:	24.43 ft. BTOC
Length of Water Column (LWC):	10.57 ft.
Casing Diameter:	2.0 in.
1 Casing Volume = LWC x 0.17 =	1.79 gal.
3 Casing Volumes:	5.39 gal.
Remarks:	

Field Analyses

Volume Purged (gal.)	0.00	1.79	3.5	5.39			
Time							
pH	5.93	6.65	6.40	6.07			
Specific Conductivity (umhos/cm)	101.3	88.9	68.5	64.2			
Water Temperature ©	15.3	15.3	16.2	17.5			
Turbidity	low	—	—	—			
Dissolved Oxygen (mg/L)	5.47						

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-741-9000

Well ID:	MW-7
Date:	1/6/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	7309-8106
Field Personnel:	W.Walker
Weather Conditions:	sunny
Air Temperature:	45
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1110

Total Well Depth:	34.19 / ~~3~~	ft. BTOC
Depth to water:	30.55 / 32.39	ft. BTOC
Length of Water Column (LWC):	3.64 / 1.8	ft.
Casing Diameter:	1/3/12 2.0 1/6/12	in.
1 Casing Volume = LWC x 0.17 =	0.61 / 0.306	gal.
3 Casing Volumes:		gal.

Remarks: well ran dry on 1/3/12 @ 1220 to confirm GW

sample on 1/6/12, well ran dry @ 0.25 gal
full sample obtained

Field Analyses

Volume Purged (gal.)	0.00	0.306	0.612	~~1.2~~ 0.9			
Time							
pH	6.72						
Specific Conductivity (umhos/cm)	123.1						
Water Temperature ©	16.1						
Turbidity	low						
Dissolved Oxygen (mg/L)	8.36						

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-
741-9000

Well ID:	MW-8
Date:	1/6/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	7309-8106
Field Personnel:	W.Walker
Weather Conditions:	sunny
Air Temperature:	50
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1220

Total Well Depth:	35.20	ft. BTOC
Depth to water:	32.30 / 32.85	ft. BTOC
Length of Water Column (LWC):	2.35	ft.
Casing Diameter:	2.0	in.
1 Casing Volume = LWC x 0.17 =	0.39	gal.
3 Casing Volumes:	1.19	gal.

Remarks: well ran dry on 1/3/12 @ 1730 to collect GW

Sample 1/6/12, well ran dry @ 0.25 gal

Field Analyses

Volume Purged (gal.)	0.00	0.39	0.7	1.19			
Time							
pH	4.26						
Specific Conductivity (umhos/cm)	150.9						
Water Temperature ©	20.1						
Turbidity	low						
Dissolved Oxygen (mg/L)	7.29						

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Well ID:	MW-8D	Total Well Depth:	~~34.24~~ 60 ft. BTOC
Date:	15/2012	Depth to water:	~~60~~ 34.24 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	25.76 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	4.37 gal.
Weather Conditions:	sunny	3 Casing Volumes:	13.13 gal.
Air Temperature:	50	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1700		

Field Analyses

Volume Purged (gal.)	0.00	4.37	8.7	13.13			
Time							
pH	7.61	6.32	6.98	7.14			
Specific Conductivity (umhos/cm)	308.4	304.9	108.1	92.6			
Water Temperature ©	16.0	14.1	14.5	14.4			
Turbidity	low	Mod	—	—			
Dissolved Oxygen (mg/L)	8.73						

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Well ID:	MW-9
Date:	1/6/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	7309-8106
Field Personnel:	W.Walker
Weather Conditions:	sunny
Air Temperature:	45
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1200

Total Well Depth:	34.00	ft. BTOC
Depth to water:	33.61 (1/3/12) / 33.60	ft. BTOC
Length of Water Column (LWC):	~~0.39~~ (1/3/12) / 0.40	ft.
Casing Diameter:	2.0	in.
1 Casing Volume = LWC x 0.17 =	0.068	gal.
3 Casing Volumes:		gal.

Remarks: well ran dry on 1/3/12 @ 1210 & contain GW sample 1/6/11, had to return to well for sample

not enough H_2O for field analyses

1/10th jar for Lead

Field Analyses

Volume Purged (gal.)							
Time							
pH							
Specific Conductivity (umhos/cm)							
Water Temperature ©							
Turbidity							
Dissolved Oxygen (mg/L)							

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Well ID:	MW-10
Date:	1/6/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	7309-8106
Field Personnel:	W.Walker
Weather Conditions:	sunny
Air Temperature:	45
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	920

Total Well Depth:	34.80		ft. BTOC
Depth to water:	34.65 (1/3/11)	34.50	ft. BTOC
Length of Water Column (LWC):		0.15 (1/3/11) / 0.30 (1/6/11)	ft.
Casing Diameter:		2.0	in.
1 Casing Volume = LWC x 0.17 =		0.017	gal.
3 Casing Volumes:			gal.

Remarks: Well ran dry on 1/3/12 @ 1215, purged to collect GW

1/6/11 must return to well several times for sample only
1/2 containers for ~~met~~ Lead
no H2O for Field Analyses

Field Analyses

Volume Purged (gal.)							
Time							
pH							
Specific Conductivity (umhos/cm)							
Water Temperature ©							
Turbidity	low						
Dissolved Oxygen (mg/L)							

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Well ID:	MW-11	Total Well Depth:	34.22	ft. BTOC
Date:	1/6/2012	Depth to water:	32.00	ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	2.22	ft.
Project No.:	7309-8106	Casing Diameter:	2.0	in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	0.37	gal.
Weather Conditions:	sunny	3 Casing Volumes:	1.13	gal.
Air Temperature:	55	Remarks:	well ran dry @ 0.3 gals	
Well Evacuation Method:	Bailer		full sample obtained	
Sample Collection Method:	Bailer			
Sampled at (time):	1310			

Field Analyses

Volume Purged (gal.)	0.00	0.37	0.7	1.13			
Time							
pH	5.14						
Specific Conductivity (umhos/cm)	97.2						
Water Temperature ©	20.9						
Turbidity	low						
Dissolved Oxygen (mg/L)	9.57						

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Well ID:	MW-12	Total Well Depth:	34.9 ft. BTOC
Date:	1/6/2012	Depth to water:	26.05 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	8.85 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	1.50 gal.
Weather Conditions:	sunny	3 Casing Volumes:	4.5 gal.
Air Temperature:	55	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1320		

Field Analyses

Volume Purged (gal.)	0.00	1.5	3	4.5			
Time							
pH	4.87	4.84	4.74	4.81			
Specific Conductivity (umhos/cm)	203.9	167.1	166.8	150.4			
Water Temperature ©	17.8	17.8	18.2	17.7			
Turbidity	low	—	↓	—			
Dissolved Oxygen (mg/L)	7.93						

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Well ID:	MW-13	Total Well Depth:	~~29.90~~ MW 34.60 ft. BTOC
Date:	1/6/11	Depth to water:	~~34.60~~ 27.90 ft. BTOC
Site Name:	Eddies Pit Stop	Length of Water Column (LWC):	6.7 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	1.14 gal.
Weather Conditions:	Sunny	3 Casing Volumes:	3.4 gal.
Air Temperature:	60	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1330		

Field Analyses

Volume Purged (gal.)	0.00	1.14	2.28	3.4			
Time							
pH	4.37	4.56	4.55	4.51			
Specific Conductivity (umhos/cm)	184.3	161.7	162.1	161.1			
Water Temperature ©	16.8	15.4	16.6	16.0			
Turbidity	low	—	—	—			
Dissolved Oxygen (mg/L)	10.83						

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Well ID:	MW-14	Total Well Depth:	34.59 ft. BTOC
Date:	1/6/2012	Depth to water:	30.72 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	3.87 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	~~3.67~~ 0.66 gal.
Weather Conditions:	sunny	3 Casing Volumes:	1.97 gal.
Air Temperature:	60	Remarks:	well ran dry @ 1.3 gal, let it sample obtained
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):			

Field Analyses

Volume Purged (gal.)	0.00	0.66	1.3	1.97			
Time							
pH	4.10	4.41	4.49				
Specific Conductivity (umhos/cm)	398.8	139.0	125.6				
Water Temperature ©	16.2	16.8	15.9				
Turbidity	low	Mod	Mod				
Dissolved Oxygen (mg/L)	9.38						

Groundwater Sampling Log

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Well ID:	PW-2	Total Well Depth:	unknown ft. BTOC
Date:	10/2012	Depth to water:	unknown ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	____ ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	____ gal.
Weather Conditions:	sunny	3 Casing Volumes:	____ gal.
Air Temperature:	50	Remarks:	Functional well, used for irrigation
Well Evacuation Method:	Bailer		ran well for 5 min, owner says no taste
Sample Collection Method:	Bailer		
Sampled at (time):	1610		

Field Analyses

Volume Purged (gal.)							
Time							
pH	7.10						
Specific Conductivity (umhos/cm)	204.0						
Water Temperature ©	15.0						
Turbidity	low						
Dissolved Oxygen (mg/L)	3.58						

Groundwater Sampling Log

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Well ID:	PW-1	Total Well Depth:	± 100.00 ft. BTOC
Date:	1/5/2012	Depth to water:	27.87 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	____ ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	____ gal.
Weather Conditions:	sunny	3 Casing Volumes:	____ gal.
Air Temperature:	50	Remarks:	6" metal casing in ground, inside of concrete block well house, no roof. Debris piled in well house. Standard cap, no pipe, bends over pipe, no power. Sample w/ bailer, no odor
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1300		

Field Analyses

Volume Purged (gal.)							
Time							
pH	7.29						
Specific Conductivity (umhos/cm)	309.4						
Water Temperature ©	16.7						
Turbidity	low						
Dissolved Oxygen (mg/L)	38.2						

Groundwater Sampling Log

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Well ID:	Casper	Total Well Depth:	ft. BTOC
Date:	1/27/2012	Depth to water:	ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	(sunny) / rainy	3 Casing Volumes:	gal.
Air Temperature:	60	Remarks:	Sample city water out of side of house
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1300		

Field Analyses

Volume Purged (gal.)							
Time							
pH							
Specific Conductivity (umhos/cm)							
Water Temperature ©							
Turbidity							
Dissolved Oxygen (mg/L)							

Groundwater Sampling Log

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Well ID:	PW-1	Total Well Depth:	127' ft. BTOC
Date:	1/27/2012	Depth to water:	ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	(sunny) / rainy	3 Casing Volumes:	gal.
Air Temperature:	60	Remarks:	place pump 5' off bottom of well
Well Evacuation Method:	Bailer		let run for 30 min, water turbidity lessens
Sample Collection Method:	Bailer		
Sampled at (time):	1430		

Field Analyses

Volume Purged (gal.)							
Time							
pH							
Specific Conductivity (umhos/cm)							
Water Temperature ©							
Turbidity							
Dissolved Oxygen (mg/L)							

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Well ID:	PW-2	Total Well Depth:	ft. BTOC
Date:	1/27/2012	Depth to water:	ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	sunny ~~rainy~~	3 Casing Volumes:	gal.
Air Temperature:	60	Remarks:	Sample out of well house
Well Evacuation Method:	Bailer		let run for 10 min
Sample Collection Method:	Bailer		
Sampled at (time):	1330		

Field Analyses

Volume Purged (gal.)							
Time							
pH							
Specific Conductivity (umhos/cm)							
Water Temperature ©							
Turbidity							
Dissolved Oxygen (mg/L)							

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Well ID:	MW-1	Total Well Depth:	33-43 ft. BTOC
Date:	4/5/2012	Depth to water:	25.80 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	17.2 ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	2.9 gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	~~2.9~~ 8.7 gal.
Air Temperature:		Remarks:	mod sheen
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	455		

Field Analyses

Volume Purged (gal.)	0.00	2.9	5.8	8.7			
Time							
pH	5.30	5.28	5.21	5.17			
Specific Conductivity (umhos/cm)	148.3	131.8	123.2	119.8			
Water Temperature ©	21.0	19.3	19.2	19.4			
Turbidity	low	low	mod	HIGH			
Dissolved Oxygen (mg/L)	1.49						

Groundwater Sampling Log

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Well ID:	MW-2
Date:	4/5 /2012
Site Name:	**Eddies Pitt Stop**
Project No.:	73098106
Field Personnel:	W.Walker
Weather Conditions:	sunny / rainy
Air Temperature:	
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	0930

Total Well Depth:	28-43 ft. BTOC
Depth to water:	23.65 ft. BTOC
Length of Water Column (LWC):	19.35 ft.
Casing Diameter:	2.0 in.
1 Casing Volume = LWC x 0.17 =	3.2 gal.
3 Casing Volumes:	9.86 gal.
Remarks:	

Field Analyses

Volume Purged (gal.)	0.00	3.2	6.4	9.86			
Time							
pH	5.56	5.66	5.56	5.64			
Specific Conductivity (umhos/cm)	198.6	140.7	160.1	184.1			
Water Temperature ©	20.3	19.6	19.3	19.1			
Turbidity	low	mod	mod	HIGH			
Dissolved Oxygen (mg/L)	2.50						

Groundwater Sampling Log

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Well ID:	MW-3
Date:	4/5/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	73098106
Field Personnel:	W.Walker
Weather Conditions:	~~sunny/rainy~~ cloudy
Air Temperature:	65
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	945

Total Well Depth:	30-45	ft. BTOC
Depth to water:	28.89	ft. BTOC
Length of Water Column (LWC):	16.11	ft.
Casing Diameter:	2.0	in.
1 Casing Volume = LWC x 0.17 =	2.73	gal.
3 Casing Volumes:	8.21	gal.

Remarks: ____

Field Analyses

Volume Purged (gal.)	0.00	2.73	5.4	8.21			
Time							
pH	5.77	6.01	6.17	5.96			
Specific Conductivity (umhos/cm)	139.1	154.0	136.2	135.6			
Water Temperature ©	19.7	20.8	20.1	19.9			
Turbidity	low	med	HIGH	HIGH			
Dissolved Oxygen (mg/L)	2.00						

Groundwater Sampling Log

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Well ID:	MW-3D
Date:	4/5/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	73098106
Field Personnel:	W.Walker
Weather Conditions:	~~sunny / rainy~~ daily
Air Temperature:	65
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	930

Total Well Depth:	55-60 ft. BTOC
Depth to water:	29.48 ft. BTOC
Length of Water Column (LWC):	30.52 ft.
Casing Diameter:	2.0 in.
1 Casing Volume = LWC x 0.17 =	5.18 gal.
3 Casing Volumes:	15.56 gal.
Remarks:	

Field Analyses

Volume Purged (gal.)	0.00	5.18	10.3	15.56			
Time							
pH	6.96	7.35	6.31	5.74			
Specific Conductivity (umhos/cm)	230.8	235.9	215.8	208.3			
Water Temperature ©	18.9	19.4	19.2	19.4			
Turbidity	low	Mod	low	—			
Dissolved Oxygen (mg/L)	2.38						

Groundwater Sampling Log

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Well ID:	MW-4	Total Well Depth:	34.49 ft. BTOC
Date:	4/5/2012	Depth to water:	27.90 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	21.1 ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	3.5 gal.
Weather Conditions:	sunny / ~~rainy~~	3 Casing Volumes:	10.7 gal.
Air Temperature:	70	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1720		

Field Analyses

Volume Purged (gal.)	0.00	3.5	7	10.7			
Time							
pH	6.80	6.24	6.55	5.57			
Specific Conductivity (umhos/cm)	72.0	67.8	81.3	88.2			
Water Temperature ©	19.0	19.8	21.2	19.8			
Turbidity	low	—	—	—			
Dissolved Oxygen (mg/L)	3.35						

Groundwater Sampling Log

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Well ID:	MW-5	Total Well Depth:	15-25 ft. BTOC
Date:	4/5/2012	Depth to water:	19.79 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	5.21 ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	gal.
Air Temperature:		Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	515		

Field Analyses

Volume Purged (gal.)							
Time							
pH	5.68						
Specific Conductivity (umhos/cm)	90.6						
Water Temperature ©	19.1						
Turbidity	low						
Dissolved Oxygen (mg/L)	1.35						

Groundwater Sampling Log

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Well ID:	MW-6	Total Well Depth:	25-35 ft. BTOC
Date:	4/5/2012	Depth to water:	16.05 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	16.95 ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	2.88 gal.
Weather Conditions:	~~sunny / rainy~~ / cloudy	3 Casing Volumes:	8.6 gal.
Air Temperature:	65	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	700		

Field Analyses

Volume Purged (gal.)	0.00	2.88	5.6	8.4			
Time							
pH	6.03	5.56	6.12	7.93			
Specific Conductivity (umhos/cm)	324.8	98.0	79.4	78.2			
Water Temperature ©	18.3	18.2	18.0	17.8			
Turbidity	low	low	low	low			
Dissolved Oxygen (mg/L)	4.81						

Groundwater Sampling Log

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Well ID:	MW-7	Total Well Depth:	24-34 ft. BTOC
Date:	4/5/2012	Depth to water:	28.02 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	5.98 ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	~~sunny / rainy~~ cloudy	3 Casing Volumes:	gal.
Air Temperature:	70	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1000		

Field Analyses

Volume Purged (gal.)							
Time	~~0.42~~						
pH	6.42						
Specific Conductivity (umhos/cm)	139.6						
Water Temperature ©	20.7						
Turbidity	low						
Dissolved Oxygen (mg/L)	7.03						

Groundwater Sampling Log

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Well ID:	MW-8
Date:	4/5/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	73098106
Field Personnel:	W.Walker
Weather Conditions:	sunny ~~rainy~~
Air Temperature:	70
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1145

Total Well Depth:	25-35 ft. BTOC
Depth to water:	27.05 ft. BTOC
Length of Water Column (LWC):	7.95 ft.
Casing Diameter:	2.0 in.
1 Casing Volume = LWC x 0.17 =	gal.
3 Casing Volumes:	gal.
Remarks:	

Field Analyses

Volume Purged (gal.)							
Time							
pH	6.20						
Specific Conductivity (umhos/cm)	152.4						
Water Temperature ©	19.9						
Turbidity	low						
Dissolved Oxygen (mg/L)	2.26						

Groundwater Sampling Log

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Well ID:	MW-8D	Total Well Depth:	55-60 ft. BTOC
Date:	4/5/2012	Depth to water:	26.07 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	33.93 ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	5.76 gal.
Weather Conditions:	sunny ~~/ rainy~~	3 Casing Volumes:	17.3 gal.
Air Temperature:	70	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1130		

Field Analyses

Volume Purged (gal.)	0.00	5.76	11.4	17.3			
Time							
pH	6.56	6.58	6.56	6.71			
Specific Conductivity (umhos/cm)	159.4	156.7	125.8	130.1			
Water Temperature ©	21.0	22.0	21.9	20.1			
Turbidity	Mod	Mod	Mod	Mod			
Dissolved Oxygen (mg/L)	3.78						

Groundwater Sampling Log

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Well ID:	MW-9	Total Well Depth:	24-34 ft. BTOC
Date:	4/5/2012	Depth to water:	29.12 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	4.88 ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	~~sunny / rainy~~ cloudy	3 Casing Volumes:	gal.
Air Temperature:	65	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	0900		

Field Analyses

Volume Purged (gal.)							
Time							
pH	6.05						
Specific Conductivity (umhos/cm)	103.5						
Water Temperature ©	19.4						
Turbidity	low						
Dissolved Oxygen (mg/L)	3.63						

Groundwater Sampling Log

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Well ID:	MW-10
Date:	4/5/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	73098106
Field Personnel:	W.Walker
Weather Conditions:	~~sunny / rainy~~ cloudy
Air Temperature:	65
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	760

Total Well Depth:	25-35	ft. BTOC
Depth to water:	24.79	ft. BTOC
Length of Water Column (LWC):	10.21	ft.
Casing Diameter:	2.0	in.
1 Casing Volume = LWC x 0.17 =	1.7	gal.
3 Casing Volumes:	5.2	gal.

Remarks:

Field Analyses

Volume Purged (gal.)	0.00	1.7	3.4	5.2			
Time							
pH	5.19	5.11	4.68	4.32			
Specific Conductivity (umhos/cm)	60.5	54.1	54.3	55.8			
Water Temperature ©	18.7	18.8	19.2	19.0			
Turbidity	low	—	—	—			
Dissolved Oxygen (mg/L)	1.76						

Groundwater Sampling Log

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Well ID:	MW-11	Total Well Depth:	19-34 ft. BTOC
Date:	4/5/2012	Depth to water:	21.50 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	12.5 ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	sunny ~~rainy~~	3 Casing Volumes:	gal.
Air Temperature:	70	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1730		

Field Analyses

Volume Purged (gal.)							
Time							
pH	5.38						
Specific Conductivity (umhos/cm)	85.5						
Water Temperature ©	19.2						
Turbidity	low						
Dissolved Oxygen (mg/L)	2.58						

Groundwater Sampling Log

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Well ID:	MW-12	Total Well Depth:	20-35 ft. BTOC
Date:	4/5/2012	Depth to water:	21.50 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	13.5 ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	gal.
Air Temperature:		Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1500		

Field Analyses

Volume Purged (gal.)	✓						
Time							
pH	5.60						
Specific Conductivity (umhos/cm)	210.6						
Water Temperature ©	20.5						
Turbidity	low						
Dissolved Oxygen (mg/L)	1.24						

Groundwater Sampling Log

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Well ID:	MW-13
Date:	4/5/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	73098106
Field Personnel:	W.Walker
Weather Conditions:	sunny / rainy
Air Temperature:	
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1430

Total Well Depth:	20-35 ft. BTOC
Depth to water:	16.90 ft. BTOC
Length of Water Column (LWC):	18.1 ft.
Casing Diameter:	2.0 in.
1 Casing Volume = LWC x 0.17 =	3.07 gal.
3 Casing Volumes:	9.23 gal.
Remarks:	

Field Analyses

Volume Purged (gal.)	0.00	3.07	6.14	9.23			
Time							
pH	5.82	5.84	5.75	5.70			
Specific Conductivity (umhos/cm)	198.7	194.5	190.5	166.7			
Water Temperature ©	18.2	18.6	19.0	18.8			
Turbidity	low	low	mod	mod			
Dissolved Oxygen (mg/L)	1.78						

Groundwater Sampling Log

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Well ID:	MW-14	Total Well Depth:	20-35 ft. BTOC
Date:	4/5/2012	Depth to water:	19.05 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	15.95 ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	2.71 gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	8.13 gal.
Air Temperature:		Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1030		

Field Analyses

Volume Purged (gal.)	0.00	2.71	5.4	8.13			
Time							
pH	6.51	6.32	6.15	5.95			
Specific Conductivity (umhos/cm)	233.2	141.8	137.6	154.2			
Water Temperature ©	19.7	19.1	19.0	19.2			
Turbidity	low	mod	mod	mod			
Dissolved Oxygen (mg/L)	2.09						

Groundwater Sampling Log

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Well ID:	MW-15
Date:	4/5/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	73098106
Field Personnel:	W.Walker
Weather Conditions:	sunny / rainy
Air Temperature:	
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1115

Total Well Depth:	17-35 ft. BTOC
Depth to water:	25.45 ft. BTOC
Length of Water Column (LWC):	9.55 ft.
Casing Diameter:	2.0 in.
1 Casing Volume = LWC x 0.17 =	1.62 gal.
3 Casing Volumes:	4.87 gal.
Remarks:	

Field Analyses

Volume Purged (gal.)	0.00	1.62	3.2	4.87			
Time							
pH	6.09	5.82	5.84	5.76			
Specific Conductivity (umhos/cm)	138.6	101.6	107.1	113.3			
Water Temperature ©	19.8	19.4	18.9	18.9			
Turbidity	low	med	med	High			
Dissolved Oxygen (mg/L)	5.40						

Groundwater Sampling Log

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Well ID:	MW-15D
Date:	4/5/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	73098106
Field Personnel:	W.Walker
Weather Conditions:	sunny / rainy
Air Temperature:	
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1215

Total Well Depth:	55-60 ft. BTOC
Depth to water:	18.11 ft. BTOC
Length of Water Column (LWC):	41.89 ft.
Casing Diameter:	2.0 in.
1 Casing Volume = LWC x 0.17 =	7.12 gal.
3 Casing Volumes:	21.36 gal.
Remarks:	

Field Analyses

Volume Purged (gal.)	0.00	7.12	14.2	21.36			
Time							
pH	6.90	6.72	6.34	6.10			
Specific Conductivity (umhos/cm)	424.4	375.1	216.2	164.6			
Water Temperature ©	20.8	20.2	18.7	18.6			
Turbidity	low	low	mod	mod			
Dissolved Oxygen (mg/L)	1.97						

Groundwater Sampling Log

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Well ID:	MW-16
Date:	4/5/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	73098106
Field Personnel:	W.Walker
Weather Conditions:	sunny ~~/ rainy~~
Air Temperature:	70
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1045

Total Well Depth:	17-32	ft. BTOC
Depth to water:	19.02	ft. BTOC
Length of Water Column (LWC):	12.98	ft.
Casing Diameter:	2.0	in.
1 Casing Volume = LWC x 0.17 =	2.2	gal.
3 Casing Volumes:	6.61	gal.

Remarks:

Field Analyses

Volume Purged (gal.)	0.00	2.2	4.4	6.61			
Time							
pH	6.24	6.03	6.23	6.21			
Specific Conductivity (umhos/cm)	99.2	94.4	89.7	89.1			
Water Temperature ©	19.3	19.1	19.5	19.5			
Turbidity	low	—	—	—			
Dissolved Oxygen (mg/L)	7.89						

Groundwater Sampling Log

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Well ID:	MW-16D	Total Well Depth:	55-60 ft. BTOC
Date:	4/ /2012	Depth to water:	19.70 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	40.3 ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	6.85 gal.
Weather Conditions:	sunny ~~rainy~~	3 Casing Volumes:	20.5 gal.
Air Temperature:	70	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1030		

Field Analyses

Volume Purged (gal.)	0.00	6.85	13.7	20.5			
Time							
pH	5.73	5.44	5.77	6.07			
Specific Conductivity (umhos/cm)	133.3	110.0	77.7	75.0			
Water Temperature ©	23.7	21.0	19.1	18.9			
Turbidity	Mod	Mod	low	low			
Dissolved Oxygen (mg/L)	4.16						

Groundwater Sampling Log

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Well ID:	MW-17
Date:	4/5/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	73098106
Field Personnel:	W.Walker
Weather Conditions:	sunny / rainy
Air Temperature:	
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	840

Total Well Depth:	20-35 ft. BTOC
Depth to water:	20.39 ft. BTOC
Length of Water Column (LWC):	14.61 ft.
Casing Diameter:	2.0 in.
1 Casing Volume = LWC x 0.17 =	2.48 gal.
3 Casing Volumes:	7.45 gal.
Remarks:	

Field Analyses

Volume Purged (gal.)	0.00	2.46	4.9	7.45			
Time			462				
pH	5.36	5.01	~~4.94~~ 4.17	3.99			
Specific Conductivity (umhos/cm)	70.9	63.1	~~18.9~~ 19.0	62.3			
Water Temperature ©	18.8	18.7	~~19.0~~ 19.0	19.2			
Turbidity	low	—	—	—			
Dissolved Oxygen (mg/L)	6.63						

Groundwater Sampling Log

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Well ID:	MW-17D	Total Well Depth:	55-60 ft. BTOC
Date:	4/5/2012	Depth to water:	27.54 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	32.46 ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	5.51 gal.
Weather Conditions:	~~sunny / rainy~~ cloudy	3 Casing Volumes:	16.55 gal.
Air Temperature:	65	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	830		

Field Analyses

Volume Purged (gal.)	0.00	5.51	11	16.55			
Time							
pH	6.36	6.51	4.9	4.23			
Specific Conductivity (umhos/cm)	75.7	80.8	63.5	74.8			
Water Temperature ©	16.6	18.5	19.1	20.3			
Turbidity	low	Med	low	low			
Dissolved Oxygen (mg/L)	6.74						

Groundwater Sampling Log

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Well ID:	MW-18
Date:	4/5/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	73098106
Field Personnel:	W.Walker
Weather Conditions:	sunny / rainy
Air Temperature:	
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	530

Total Well Depth:	17-32	ft. BTOC	
Depth to water:	19.65	ft. BTOC	
Length of Water Column (LWC):	12.35	ft.	
Casing Diameter:	2.0	in.	
1 Casing Volume = LWC x 0.17 =	2.09	gal.	
3 Casing Volumes:	6.29	gal.	

Remarks:

Field Analyses

Volume Purged (gal.)	0.00	2.09	4.1	6.29			
Time							
pH	6.53	5.79	5.65	5.70			
Specific Conductivity (umhos/cm)	115.7	83.1	91.2	100.0			
Water Temperature ©	13.9	14.9	15.7	15.9			
Turbidity	low	mod	Mod	Mod			
Dissolved Oxygen (mg/L)	4.73						

Groundwater Sampling Log

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Well ID:	MW-16D	Total Well Depth:	55-60 ft. BTOC
Date:	4/5/2012	Depth to water:	19.17 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	40.83 ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	6.94 gal.
Weather Conditions:	sunny ~~rainy~~	3 Casing Volumes:	20.82 gal.
Air Temperature:	70	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1430		

Field Analyses

Volume Purged (gal.)	0.00	6.94	13	20.82			
Time							
pH	7.13	7.54	7.96	8.13			
Specific Conductivity (umhos/cm)	352.3	338.1	358.9	366.4			
Water Temperature ©	22.0	21.0	21.2	20.3			
Turbidity	low	Mod	low	low			
Dissolved Oxygen (mg/L)	5.64						

Groundwater Sampling Log

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Well ID:	MW-19
Date:	4/5/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	73098106
Field Personnel:	W.Walker
Weather Conditions:	sunny / rainy
Air Temperature:	
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1330

Total Well Depth:	12-27	ft. BTOC
Depth to water:	4.50	ft. BTOC
Length of Water Column (LWC):	8.5	ft.
Casing Diameter:	2.0	in.
1 Casing Volume = LWC x 0.17 =	1.4	gal.
3 Casing Volumes:	4.3	gal.

Remarks:

Field Analyses

Volume Purged (gal.)	0.00	1.4	2.8	4.3			
Time							
pH	6.13	6.15	6.04	5.97			
Specific Conductivity (umhos/cm)	232.2	231.1	213.3	207.0			
Water Temperature ©	18.2	17.5	17.6	17.4			
Turbidity	low	mod	mod	mod			
Dissolved Oxygen (mg/L)	5.12						

Groundwater Sampling Log

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Well ID:	MW-19D
Date:	4/5/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	73098106
Field Personnel:	W.Walker
Weather Conditions:	sunny / ~~rainy~~
Air Temperature:	65
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1350

Total Well Depth:	55-60 ft. BTOC
Depth to water:	16.20 ft. BTOC
Length of Water Column (LWC):	43.8 ft.
Casing Diameter:	2.0 in.
1 Casing Volume = LWC x 0.17 =	7.4 gal.
3 Casing Volumes:	22.3 gal.
Remarks:	

Field Analyses

Volume Purged (gal.)	0.00	7.4	14.8	22.3			
Time							
pH	6.88	6.36	6.77	6.55			
Specific Conductivity (umhos/cm)	195.1	136.5	135.4	164.9			
Water Temperature ©	23.9	20.8	22.0	20.3			
Turbidity	Med	High	low	low			
Dissolved Oxygen (mg/L)	4.51						

Groundwater Sampling Log

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Well ID:	PW-1	Total Well Depth:	ft. BTOC
Date:	4/5/2012	Depth to water:	ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	ft.
Project No.:	73098106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	sunny ~~/ rainy~~	3 Casing Volumes:	gal.
Air Temperature:	70	Remarks:	drop pump to bottom of well, pull up 2 feet let run for 20 min Sample, B, N, MTBE, 1,2 DCA, EDB
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1530		

Field Analyses

Volume Purged (gal.)							
Time							
pH	6.68						
Specific Conductivity (umhos/cm)	191.8						
Water Temperature ©	19.6						
Turbidity	low						
Dissolved Oxygen (mg/L)	1.96						

Groundwater Sampling Log

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Well ID:	PW-2
Date:	4/5/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	73098106
Field Personnel:	W.Walker
Weather Conditions:	sunny ~~rainy~~
Air Temperature:	70
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1820

Total Well Depth:	ft. BTOC
Depth to water:	ft. BTOC
Length of Water Column (LWC):	ft.
Casing Diameter:	2.0 in.
1 Casing Volume = LWC x 0.17 =	gal.
3 Casing Volumes:	gal.
Remarks:	let pump run for 20min, sample at spigot

Field Analyses

Volume Purged (gal.)							
Time							
pH	6.23						
Specific Conductivity (umhos/cm)	144.2						
Water Temperature ©	15.9						
Turbidity	Mod						
Dissolved Oxygen (mg/L)	3.46						

Groundwater Sampling Log

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Well ID:	PW-1	Total Well Depth:	125' ft. BTOC
Date:	7/17/2012	Depth to water:	ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	~~sunny~~ / rainy	3 Casing Volumes:	gal.
Air Temperature:	100	Remarks:	
Well Evacuation Method:	~~Bailer~~ pump		
Sample Collection Method:	~~Bailer~~ pump		
Sampled at (time):	1445		

Field Analyses

Volume Purged (gal.)							
Time							
pH							
Specific Conductivity (umhos/cm)							
Water Temperature ©							
Turbidity							
Dissolved Oxygen (mg/L)							

Groundwater Sampling Log

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Well ID:	PW-2
Date:	7/17/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	7309-8106
Field Personnel:	W.Walker
Weather Conditions:	sunny / rainy
Air Temperature:	100
Well Evacuation Method:	~~Bailer~~ Pump
Sample Collection Method:	~~Bailer~~ Pump
Sampled at (time):	1500

Total Well Depth:	unknown ft. BTOC
Depth to water:	ft. BTOC
Length of Water Column (LWC):	ft.
Casing Diameter:	2.0 in.
1 Casing Volume = LWC x 0.17 =	gal.
3 Casing Volumes:	gal.
Remarks:	

Field Analyses

Volume Purged (gal.)							
Time							
pH							
Specific Conductivity (umhos/cm)							
Water Temperature ©							
Turbidity							
Dissolved Oxygen (mg/L)							

Groundwater Sampling Log

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Well ID:	MW-2	Total Well Depth:	28.43 ft. BTOC
Date:	7/17/2012	Depth to water:	27.62 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	15.48 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	2.6 gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	7.89 gal.
Air Temperature:	100	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1240		

Field Analyses

Volume Purged (gal.)	2.6	5.2	7.89				
Time							
pH	4.50	6.22	6.35				
Specific Conductivity (umhos/cm)	173.9	211.4	163.0				
Water Temperature ©	27.0	30.4	25.3				
Turbidity	10J	—	—				
Dissolved Oxygen (mg/L)			2.14				

Groundwater Sampling Log

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Well ID:	MW-3	Total Well Depth:	30-45 ft. BTOC
Date:	7/17/2012	Depth to water:	30.10 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	14.9 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	2.53 gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	gal.
Air Temperature:	1100	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1130		

Field Analyses

Volume Purged (gal.)							
Time							
pH	3.78						
Specific Conductivity (umhos/cm)	4644.9						
Water Temperature ©	26.6						
Turbidity	low						
Dissolved Oxygen (mg/L)	1.91						

Groundwater Sampling Log

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Well ID:	MW-3D	Total Well Depth:	55-60 ft. BTOC
Date:	7/17/2012	Depth to water:	30.50 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	29.6 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	5.01 gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	gal.
Air Temperature:	100	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1150		

Field Analyses

Volume Purged (gal.)	5.01	10.02	15.03				
Time							
pH	5.01	5.10	5.14				
Specific Conductivity (umhos/cm)	319.4	266.4	248.7				
Water Temperature ©	24.0	23.5	23.3				
Turbidity	10+	—	—				
Dissolved Oxygen (mg/L)			3.25				

Groundwater Sampling Log

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Well ID:	MW-7	Total Well Depth:	24-34 ft. BTOC
Date:	7/17/2012	Depth to water:	25.16 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	8.84 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	1.5 gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	gal.
Air Temperature:	1000	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1210		

Field Analyses

Volume Purged (gal.)							
Time							
pH	6.04						
Specific Conductivity (umhos/cm)	160.6						
Water Temperature ©	24.8						
Turbidity	low						
Dissolved Oxygen (mg/L)	3.59						

Groundwater Sampling Log

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Well ID:	MW-9	Total Well Depth:	ft. BTOC
Date:	7/17/2012	Depth to water:	ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	gal.
Air Temperature:	100	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1300		

Field Analyses

Volume Purged (gal.)							
Time							
pH	6.21						
Specific Conductivity (umhos/cm)	107.4						
Water Temperature ©	31.0						
Turbidity	low						
Dissolved Oxygen (mg/L)	1.26						

Groundwater Sampling Log

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Well ID:	MW-1
Date:	7/19/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	7309-8106
Field Personnel:	~~W.Walker~~ AKRE
Weather Conditions:	sunny / rainy
Air Temperature:	72
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	815

Total Well Depth:	33-43	ft. BTOC	
Depth to water:	31.00	ft. BTOC	
Length of Water Column (LWC):	12.0	ft.	
Casing Diameter:	2.0	in.	
1 Casing Volume = LWC x 0.17 =	2.04	gal.	
3 Casing Volumes:	6.12	gal.	
Remarks:			

Field Analyses

Volume Purged (gal.)	2.04	4.08	6.12				
Time	750	800	815				
pH	5.30	5.22	5.20				
Specific Conductivity (umhos/cm)	150.1	129.7	126.4				
Water Temperature ©	23.8	22.9	22.6				
Turbidity	low	low	mod				
Dissolved Oxygen (mg/L)	1.40						

Groundwater Sampling Log

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Well ID:	MW-4	Total Well Depth:	34-49 ft. BTOC
Date:	7/18/2012	Depth to water:	32.13 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	16.87 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ AKRE	1 Casing Volume = LWC x 0.17 =	2.86 gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	8.60 gal.
Air Temperature:	77	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1830		

Field Analyses

Volume Purged (gal.)	2.86	5.74	8.60				
Time	1750	1810	1830				
pH	5.77	5.21	5.49				
Specific Conductivity (umhos/cm)	72.9	66.7	80.6				
Water Temperature ©	24.4	23.6	22.4				
Turbidity	low	low	low				
Dissolved Oxygen (mg/L)	3.01						

Groundwater Sampling Log

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Well ID:	MW-5	Total Well Depth:	15-25 ft. BTOC
Date:	7/19/2012	Depth to water:	23.46 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	1.54 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ ACRE	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	gal.
Air Temperature:	72	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	730		

Field Analyses

Volume Purged (gal.)	✓						
Time	730						
pH	5.77						
Specific Conductivity (umhos/cm)	91.4						
Water Temperature ©	24.3						
Turbidity	low						
Dissolved Oxygen (mg/L)	1.22						

Groundwater Sampling Log

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Well ID:	MW-6	Total Well Depth:	25-35 ft. BTOC
Date:	7/18/2012	Depth to water:	20.90 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	14.1 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ AKPE	1 Casing Volume = LWC x 0.17 =	2.39 gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	7.19 gal.
Air Temperature:	77	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1700		

Field Analyses

Volume Purged (gal.)	2.39	4.80	7.19				
Time	1640	1650	1700				
pH	6.12	5.50	6.17				
Specific Conductivity (umhos/cm)	326.1	99.4	78.7				
Water Temperature ©	25.7	24.1	23.6				
Turbidity	low	low	low				
Dissolved Oxygen (mg/L)	4.77						

Groundwater Sampling Log

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Well ID:	MW-8	Total Well Depth:	25-35 ft. BTOC
Date:	7/19/2012	Depth to water:	28.91 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ AHPE	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	gal.
Air Temperature:	72	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	900		

Field Analyses

Volume Purged (gal.)	✓						
Time	900						
pH	6.26						
Specific Conductivity (umhos/cm)	153.7						
Water Temperature ©	24.7						
Turbidity	100						
Dissolved Oxygen (mg/L)	2.15						

Groundwater Sampling Log

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Well ID:	MW-8d	Total Well Depth:	55-60 ft. BTOC
Date:	7/19/2012	Depth to water:	31.30 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	28.70 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W Walker~~ AKDE	1 Casing Volume = LWC x 0.17 =	4.87 gal.
Weather Conditions:	(sunny) / rainy	3 Casing Volumes:	14.63 gal.
Air Temperature:	72	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1000		

Field Analyses

Volume Purged (gal.)	4.87	9.76	14.63				
Time	915	930	1000				
pH	6.62	6.51	6.71				
Specific Conductivity (umhos/cm)	160.2	157.7	144.8				
Water Temperature ©	24.6	23.4	23.0				
Turbidity	low	Mod	mod				
Dissolved Oxygen (mg/L)	3.66						

Groundwater Sampling Log

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Well ID:	MW-10	Total Well Depth:	25-35 ft. BTOC
Date:	7/18/2012	Depth to water:	28.71 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	6.29 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ AKRE	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	(sunny) / rainy	3 Casing Volumes:	gal.
Air Temperature:	77	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1500		

Field Analyses

Volume Purged (gal.)	/						
Time	1500						
pH	5.20						
Specific Conductivity (umhos/cm)	62.1						
Water Temperature ©	24.4						
Turbidity	low						
Dissolved Oxygen (mg/L)	1.81						

Groundwater Sampling Log

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Well ID:	MW-11
Date:	7/14/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	7309-8106
Field Personnel:	~~W.Walker~~ AKPE
Weather Conditions:	sunny / rainy
Air Temperature:	77
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1730

Total Well Depth:	19-34 ft. BTOC
Depth to water:	26.40 ft. BTOC
Length of Water Column (LWC):	7.60 ft.
Casing Diameter:	2.0 in.
1 Casing Volume = LWC x 0.17 =	gal.
3 Casing Volumes:	gal.
Remarks:	

Field Analyses

Volume Purged (gal.)	✓						
Time	1730						
pH	5.41						
Specific Conductivity (umhos/cm)	86.2						
Water Temperature ©	24.4						
Turbidity	low						
Dissolved Oxygen (mg/L)	2.69						

Groundwater Sampling Log

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Well ID:	MW-12	Total Well Depth:	20-35 ft. BTOC
Date:	7/20/2012	Depth to water:	23.18 ft. BTOC
Site Name:	Eddies Pitt Stop	Length of Water Column (LWC):	11.82 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ AJCLE	1 Casing Volume = LWC x 0.17 =	____ gal.
Weather Conditions:	~~sunny / rainy~~ P. Cloudy	3 Casing Volumes:	____ gal.
Air Temperature:	75	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	815		

Field Analyses

Volume Purged (gal.)	✓						
Time	815						
pH	5.71						
Specific Conductivity (umhos/cm)	209.3						
Water Temperature ©	23.9						
Turbidity	low						
Dissolved Oxygen (mg/L)	1.22						

Groundwater Sampling Log

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Well ID:	MW-13
Date:	7/12/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	7309-8106
Field Personnel:	~~W.Walker~~ AKRE
Weather Conditions:	~~sunny / rainy~~ P. Cloudy
Air Temperature:	75
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	545

Total Well Depth:	20-35	ft. BTOC
Depth to water:	22.32	ft. BTOC
Length of Water Column (LWC):	12.68	ft.
Casing Diameter:	2.0	in.
1 Casing Volume = LWC x 0.17 =		gal.
3 Casing Volumes:		gal.
Remarks:		

Field Analyses

Volume Purged (gal.)	/						
Time	545						
pH	5.89						
Specific Conductivity (umhos/cm)	199.2						
Water Temperature ©	23.7						
Turbidity	1000						
Dissolved Oxygen (mg/L)	1.69						

Groundwater Sampling Log

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Well ID:	MW-14	Total Well Depth:	20-35 ft. BTOC
Date:	7/19/2012	Depth to water:	22.52 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	12.48 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ AKRE	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	gal.
Air Temperature:	72	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1400		

Field Analyses

Volume Purged (gal.)	/						
Time	1400						
pH	6.48						
Specific Conductivity (umhos/cm)	230.6						
Water Temperature ©	23.6						
Turbidity	low						
Dissolved Oxygen (mg/L)	2.14						

Groundwater Sampling Log

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Well ID:	MW-15	Total Well Depth:	17-35 ft. BTOC
Date:	7/20/2012	Depth to water:	33.52 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	11.48 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	~~sunny / rainy~~ P. Cloudy	3 Casing Volumes:	gal.
Air Temperature:	75	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	945		

Field Analyses

Volume Purged (gal.)	✓						
Time	945						
pH	6.14						
Specific Conductivity (umhos/cm)	140.2						
Water Temperature ©	24.0						
Turbidity	10W						
Dissolved Oxygen (mg/L)	5.38						

Groundwater Sampling Log

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Well ID:	MW-15d	Total Well Depth:	55-60 ft. BTOC
Date:	7/19/2012	Depth to water:	23.86 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	36.14 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ AKPE	1 Casing Volume = LWC x 0.17 =	6.14 gal.
Weather Conditions:	(sunny) / rainy	3 Casing Volumes:	18.43 gal.
Air Temperature:	72	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1315		

Field Analyses

Volume Purged (gal.)	6.14	12.29	18.43				
Time			1315				
pH	7.01	6.66	6.45				
Specific Conductivity (umhos/cm)	430.6	401.4	231.1				
Water Temperature ©	23.9	23.1	22.3				
Turbidity	low	low	low				
Dissolved Oxygen (mg/L)	1.99						

Terracon

Groundwater Sampling Log

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Well ID:	MW-16
Date:	7-19-12
Site Name:	EDDIES Pitt Stop
Project No.:	7309 8106
Field Personnel:	AKRE
Weather Conditions:	Sun
Air Temperature:	72
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1530

Total Well Depth:	17-32	ft. BTOC
Depth to water:	24.20	ft. BTOC
Length of Water Column (LWC):	7.80	ft.
Casing Diameter:	2.0	in.
1 Casing Volume = LWC x 0.17 =		gal.
3 Casing Volumes:		gal.
Remarks:		

Field Analyses

Volume Purged (gal.)	✓						
Time	1530						
pH	6.34						
Specific Conductivity (umhos/cm)	99.9						
Water Temperature ©	23.6						
Turbidity	low						
Dissolved Oxygen (mg/L)	7.62						

Terracon

Groundwater Sampling Log

Well ID:	MW-16d
Date:	7·19·12
Site Name:	EDDIES pit stop
Project No.:	73098106
Field Personnel:	AKRE
Weather Conditions:	Snow
Air Temperature:	72
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1500

Total Well Depth:	55-60	ft. BTOC		
Depth to water:	24.47	ft. BTOC		
Length of Water Column (LWC):	35.53	ft.		
Casing Diameter:	2.0	in.		
1 Casing Volume = LWC x	0.17	=	6.04	gal.
3 Casing Volumes:			18.12	gal.

Remarks: ____

Field Analyses

Volume Purged (gal.)	6.04	12.08	18.12				
Time	1415	1430	1500				
pH	5.80	5.46	5.69				
Specific Conductivity (umhos/cm)	136.4	126.6	106.4				
Water Temperature ©	23.6	21.4	19.3				
Turbidity	low	mod	low				
Dissolved Oxygen (mg/L)	4.30						

Groundwater Sampling Log

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Well ID:	MW-17	Total Well Depth:	20-35 ft. BTOC
Date:	7/18/2012	Depth to water:	21.53 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	13.47 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ AKRE	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	gal.
Air Temperature:	77	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1530		

Field Analyses

Volume Purged (gal.)	✓						
Time	1530						
pH	5.39						
Specific Conductivity (umhos/cm)	71.7						
Water Temperature ©	24.0						
Turbidity	100						
Dissolved Oxygen (mg/L)	5.14						

Groundwater Sampling Log

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Well ID:	MW-17d
Date:	7/18/2012
Site Name:	**Eddies Pitt Stop**
Project No.:	7309-8106
Field Personnel:	~~W.Walker~~ DICKE
Weather Conditions:	sunny / rainy
Air Temperature:	77
Well Evacuation Method:	Bailer
Sample Collection Method:	Bailer
Sampled at (time):	1630

Total Well Depth:	55-60	ft. BTOC	
Depth to water:	31.37	ft. BTOC	
Length of Water Column (LWC):	28.63	ft.	
Casing Diameter:	2.0	in.	
1 Casing Volume = LWC x 0.17 =	4.86	gal.	
3 Casing Volumes:	14.60	gal.	

Remarks:

Field Analyses

Volume Purged (gal.)	4.86	9.74	14.60				
Time	1600	1615	1630				
pH	6.51	5.80	4.84				
Specific Conductivity (umhos/cm)	76.2	79.5	82.1				
Water Temperature ©	27.6	24.3	20.7				
Turbidity	low	mod	low				
Dissolved Oxygen (mg/L)	6.21						

Groundwater Sampling Log

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Well ID:	MW-18	Total Well Depth:	17-32 ft. BTOC
Date:	7/29/2012	Depth to water:	23.90 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	8.10 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W. Walker~~ AKR	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	~~sunny / rainy~~ P. Cloudy	3 Casing Volumes:	gal.
Air Temperature:	75	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	730		

Field Analyses

Volume Purged (gal.)	/						
Time	730						
pH	6.48						
Specific Conductivity (umhos/cm)	118.6						
Water Temperature ©	23.9						
Turbidity	low						
Dissolved Oxygen (mg/L)	4.67						

Groundwater Sampling Log

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Well ID:	MW-18D	Total Well Depth:	55-60 ft. BTOC
Date:	7/19/2012	Depth to water:	23.17 ft. BTOC
Site Name:	Eddies Pitt Stop	Length of Water Column (LWC):	36.83 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	W.Walker AKE	1 Casing Volume = LWC x 0.17 =	6.26 gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	18.78 gal.
Air Temperature:	72	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1150		

Field Analyses

Volume Purged (gal.)	6.26	12.52	18.78				
Time	1015	1030	1150				
pH	7.16	7.30	7.88				
Specific Conductivity (umhos/cm)	355.1	340.4	359.2				
Water Temperature ©	23.7	23.1	22.9				
Turbidity	low	Mod	low				
Dissolved Oxygen (mg/L)	5.98						

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Well ID:	MW-19	Total Well Depth:	12-27 ft. BTOC
Date:	7/12/2012	Depth to water:	22.53 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	4.47 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ AKPE	1 Casing Volume = LWC x 0.17 =	gal.
Weather Conditions:	~~sunny / rainy~~ P. Cloudy	3 Casing Volumes:	gal.
Air Temperature:	75	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	915		

Field Analyses

Volume Purged (gal.)	✓						
Time	915						
pH	6.22						
Specific Conductivity (umhos/cm)	239.4						
Water Temperature ©	23.2						
Turbidity	low						
Dissolved Oxygen (mg/L)	4.98						

Groundwater Sampling Log

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Well ID:	mw-19d	Total Well Depth:	55-60 ft. BTOC
Date:	7/19/2012	Depth to water:	22.41 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	37.59 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ AK+E	1 Casing Volume = LWC x 0.17 =	6.39 gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	19.17 gal.
Air Temperature:	72	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1200		

Field Analyses

Volume Purged (gal.)	6.39	12.78	19.17				
Time	1130	1145	1200				
pH	6.92	6.77	6.89				
Specific Conductivity (umhos/cm)	199.7	168.4	167.4				
Water Temperature ©	23.4	22.9	22.3				
Turbidity	low	mod	low				
Dissolved Oxygen (mg/L)	4.81						

Groundwater Sampling Log

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Well ID:	MW-20	Total Well Depth:	25-35 ft. BTOC
Date:	7/18/2012	Depth to water:	27.02 ft. BTOC
Site Name:	Eddies Pitt Stop	Length of Water Column (LWC):	7.98 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ AKRE	1 Casing Volume = LWC x 0.17 =	1.35 gal.
Weather Conditions:	(sunny) / rainy	3 Casing Volumes:	4.06 gal.
Air Temperature:	77	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1430		

Field Analyses

Volume Purged (gal.)	1.35	2.71	4.06				
Time	1410	1420	1430				
pH	9.06	8.88	6.64				
Specific Conductivity (umhos/cm)	128.3	110.0	108.2				
Water Temperature ©	24.7	24.1	23.6				
Turbidity	low	mod	mod				
Dissolved Oxygen (mg/L)	3.67						

Groundwater Sampling Log

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Well ID:	MW-20d	Total Well Depth:	55-66 ft. BTOC
Date:	7/18/2012	Depth to water:	33.31 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	26.69 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ AKDE	1 Casing Volume = LWC x 0.17 =	4.53 gal.
Weather Conditions:	(sunny) / rainy	3 Casing Volumes:	13.61 gal.
Air Temperature:	77	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1400		

Field Analyses

Volume Purged (gal.)	4.53	9.08	13.61				
Time	1340	1350	1400				
pH	10.13	10.09	9.81				
Specific Conductivity (umhos/cm)	472.4	344.7	340.1				
Water Temperature ©	29.2	26.1	24.0				
Turbidity	low	low	low				
Dissolved Oxygen (mg/L)	1.97						

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-741-9000

Page ____ of ____

Well ID:	MW-21	Total Well Depth:	25-35 ft. BTOC (T.D. 34.67)
Date:	7/19/2012	Depth to water:	24.72 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	10.28 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ BCRE	1 Casing Volume = LWC x 0.17 =	1.74 gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	5.24 gal.
Air Temperature:	77	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1300		

Field Analyses

Volume Purged (gal.)	1.74	3.50	5.24				
Time	1250	1255	1300				
pH	6.56	6.51	6.45				
Specific Conductivity (umhos/cm)	124.3	116.3	104.0				
Water Temperature ©	24.1	23.8	23.5				
Turbidity	low	HIGH	mod				
Dissolved Oxygen (mg/L)	3.74						

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-741-9000

Page ____ of ____

Well ID:	MW-21d	Total Well Depth:	55-65 ft. BTOC
Date:	7/18/2012	Depth to water:	32.83 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	27.17 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ ALCRE	1 Casing Volume = LWC x 0.17 =	4.61 gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	13.85 gal.
Air Temperature:	77	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1240		

Field Analyses

Volume Purged (gal.)	4.61	9.24	13.85				
Time	1220	1230	1240				
pH	5.29	11.93	12.17				
Specific Conductivity (umhos/cm)	4.99	5.52	6.69				
Water Temperature ©	25.9	24.6	24.0				
Turbidity	100	100	100				
Dissolved Oxygen (mg/L)	3.84						

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-
741-9000

Page ____ of ____

Well ID:	MW-22	Total Well Depth:	25-35 ft. BTOC
Date:	7/18/2012	Depth to water:	31.34 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	3.66 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ AKoE	1 Casing Volume = LWC x 0.17 =	0.62 gal.
Weather Conditions:	sunny / rainy	3 Casing Volumes:	1.86 gal.
Air Temperature:	77	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1156		

Field Analyses

Volume Purged (gal.)	0.62	1.24	1.86				
Time	1045	1050	1100				
pH	7.67	7.76	7.30				
Specific Conductivity (umhos/cm)	581	186.1	119.3				
Water Temperature ©	21.2	23.3	22.5				
Turbidity	low	mod	mod				
Dissolved Oxygen (mg/L)	3.85						

Groundwater Sampling Log

Terracon
521 Clemson Road
Columbia, SC (803)-741-9000

Page ____ of ____

Well ID:	MW-22D	Total Well Depth:	55-60 ft. BTOC
Date:	7/18/2012	Depth to water:	32.23 ft. BTOC
Site Name:	**Eddies Pitt Stop**	Length of Water Column (LWC):	27.77 ft.
Project No.:	7309-8106	Casing Diameter:	2.0 in.
Field Personnel:	~~W.Walker~~ AKRE	1 Casing Volume = LWC x 0.17 =	4.72 gal.
Weather Conditions:	(sunny) / rainy	3 Casing Volumes:	14.16 gal.
Air Temperature:	77	Remarks:	
Well Evacuation Method:	Bailer		
Sample Collection Method:	Bailer		
Sampled at (time):	1200		

Field Analyses

Volume Purged (gal.)	4.72	9.44	14.16				
Time	1136	1145	1200				
pH	6.77	6.65	6.58				
Specific Conductivity (umhos/cm)	153.6	124.5	119.1				
Water Temperature ©	23.8	22.6	22.5				
Turbidity	100	100	100				
Dissolved Oxygen (mg/L)	2.88						

APPENDIX C

Aquifer Tests and Grain Size Analyses

SUMMARY of SLUG TEST

SOUTH CAROLINA
Department of Health and Environmental Control (DHEC)

Site Data

SITE ID: # 18871 COUNTY Chesterfield

FACILITY NAME Eddies Pit Stop

Slug Data

See Appendix E Table _____ Figure _____ for a list of all data measurements.
(water level logs, etc) (complete as appropriate)

Water Level Recovery Data was measured by Manually with water level indicator
(Hermit Data Logger, Manually with Water Level Indicator, etc.) (list method).

Complete the following table for each well tested.
COMPLETE A SECOND SHEET IF MORE THAN FOUR WELLS ARE TESTED

Slug Test Conducted in well(s) number	MW-12	MW-18D		
Initial Rise/Drawdown in well (feet)	0.73	2.86		
Radius of Well Casing (feet)	0.083	0.083		
Effective Radius of Well (feet)	0.667	0.667		
Static Saturated Aquifer Thickness (feet)	73.78	80.7		
Length of Well Screen (feet)	15	5		
Static Height of Water Column in Well (ft)	26.22	19.30		

Calculations

See Appendix D Table _____ Figure _____ for calculations. (complete as appropriate).

The method for aquifer calculations was Bouwer and Rice (i.e. Bouwer and Rice, etc.)

Calculated values by well were as follows:

Slug Test Conducted in Well(s) Number	MW-12	MW-18D	
Hydraulic Conductivity (ft./day)	0.053	0.323	

Upper portion of shallow aquifer

The thickness of the aquifer used to calculate hydraulic conductivity was 73.78 feet.

The aquifer is _____ confined **X** semiconfined _____ Water Table (Check as appropriate)

The estimated seepage velocity of the upper portion of the shallow aquifer is 3.2 feet per year based on:

a hydraulic conductivity of 0.053 , a hydraulic gradient of 0.05 , and

a porosity of 30 percent for silt with trace sand

Lower portion of shallow aquifer

The thickness of the aquifer used to calculate hydraulic conductivity was 73.78 feet.

The aquifer is _____ confined **X** semiconfined _____ Water Table (Check as appropriate)

The estimated seepage velocity of the lower portion of the shallow aquifer is 2.3 ft / year based on:

a hydraulic conductivity of 0.323 ft/day , a hydraulic gradient of 0.006 , and

a porosity of 30 percent for silt with trace sand

SUMMARY of SLUG TEST

Slug Test Calculation

Monitoring Well	MW-12	
Project	Eddies Pit Stop	
Test Date	1/5/2012	

Casing Diameter	=	2.000	in
Borehole Diameter	=	6.000	in
r_c		0.0833	ft
r_c^2	=	0.0069	ft^2
r_w	=	0.2500	ft
r_w^2		0.0625	ft^2
L_e	=	8.78	ft
L_w	=	8.78	ft
L_e/r_w	=	35.12	
L_w/r_w	=	35.12	
H	=	73.78	ft
y_0	=	0.50	ft
y_t	=	0.43	ft
t	=	10.00	min
A	=	3.4	
B	=	0.5	
C	=	0.0	
n	=	0.25	
Depth to Water	=	26.2	ft
Depth to Impermeable	=	100.0	ft
Depth to Screen Bottom	=	35.0	ft

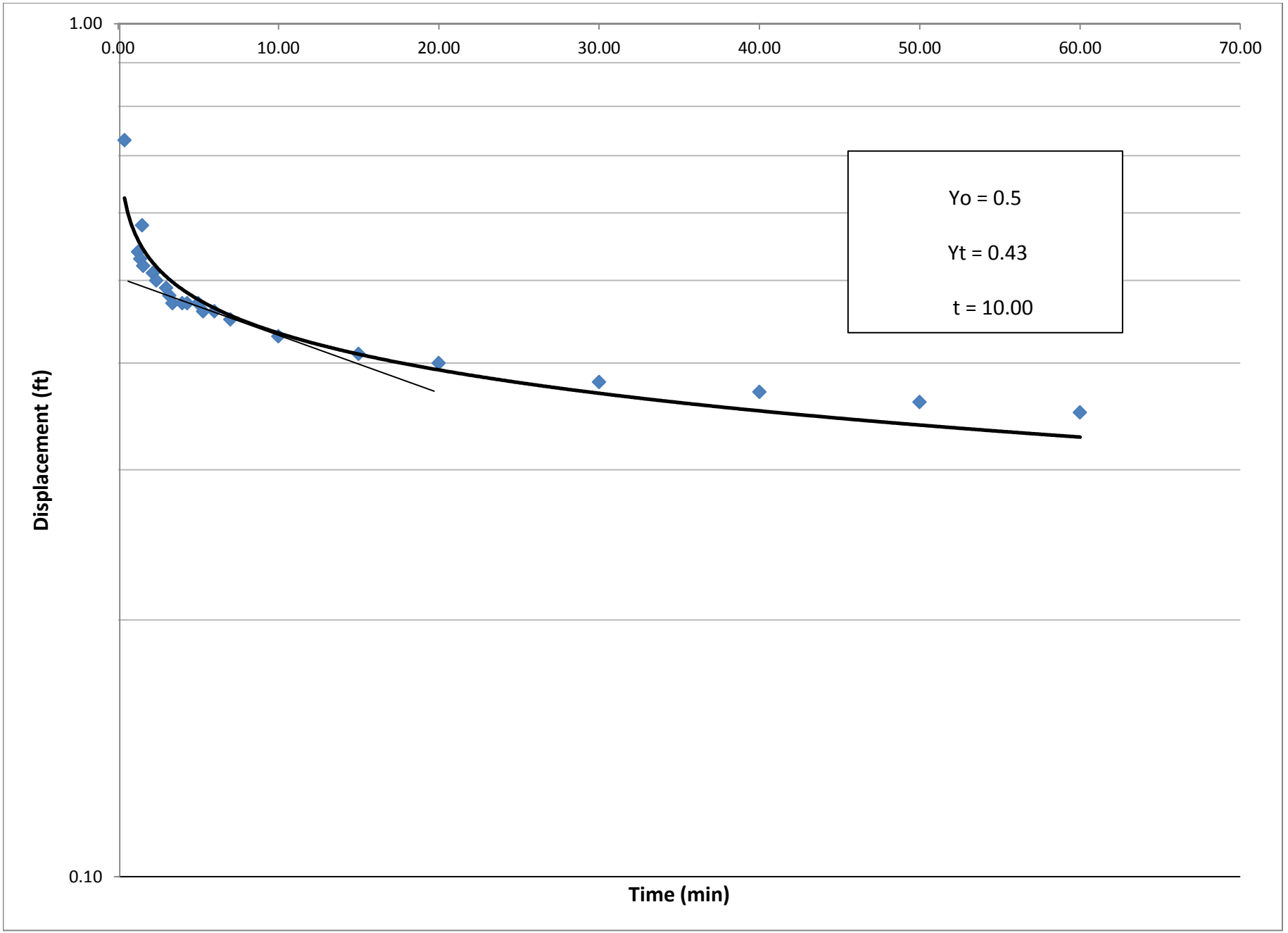
$$r_{eq} = ((1-n)r_c^2 + nr_w^2)^{1/2} = 0.1443 \text{ ft}$$

$$r_{eq}^2 = 0.02083333$$

$$\ln(R_e/R_w) = \left[\frac{1.1}{\text{Ln}(L_w/r_w)} + \frac{A + B\ln[(H - Lw)/ rw]}{L_e/r_w} \right]^{-1} = 2.0615$$

$$K \text{ (ft/min)} = \frac{r_{eq}^2 \ln(Re/Rw)}{2L_e} * \frac{1}{t} \ln\frac{y_0}{y_t} = 0.00003689$$

K (ft/day) =	**0.053**	**ft/day**
K (ft/sec) =	**0.000001**	**ft/sec**
K (cm/sec) =	**0.000019**	**cm/sec**


1.00
0.10
0.00
10.00
20.00
30.00
40.00
50.00
60.00
70.00
Displacement (ft)
Time (min)
Yo = 0.5
Yt = 0.43
t = 10.00

SLUG TEST DATA -- MW-12

Project Name:	Eddies Pit Stop
Project Number:	73098106
Date:	1/5/12
Well ID:	MW-12
Equipment/method:	Electric Water Level Indicator
Test Start Time:	10:00
Static Water Level:	26.22

Elapsed Time (min)	Depth to Water (ft)	Displace-ment (ft)
0.00	26.22	0.00
0.40	26.95	0.73
1.50	26.80	0.58
1.25	26.76	0.54
1.38	26.75	0.53
1.56	26.74	0.52
2.17	26.73	0.51
2.38	26.72	0.50
3.00	26.71	0.49
3.20	26.70	0.48
3.40	26.69	0.47
4.00	26.69	0.47
4.30	26.69	0.47
5.00	26.69	0.47
5.30	26.68	0.46
6.00	26.68	0.46
7.00	26.67	0.45
10.00	26.65	0.43
15.00	26.63	0.41
20.00	26.62	0.40
30.00	26.60	0.38
40.00	26.59	0.37
50.00	26.58	0.36
60.00	26.57	0.35

Slug Test Calculation

Monitoring Well		MW-18D	
Project		Eddies Pitt Stop	
Test Date		4/6/2012	
Casing Diameter	=	2.000	in
Borehole Diameter	=	6.000	in
r_c		0.0833	ft
r_c^2	=	0.0069	ft^2
r_w	=	0.2500	ft
r_w^2		0.0625	ft^2
L_e	=	5.00	ft
L_w	=	40.71	ft
L_e/r_w	=	20.00	
L_w/r_w	=	162.84	
H	=	80.71	ft
y0	=	1.10	ft
yt	=	0.80	ft
t	=	10	min
A	=	2.2	
B	=	0.4	
C	=	1.6	
n	=	0.25	
Depth to Water	=	19.3	ft
Depth to Impermeable	=	100.0	ft
Depth to Screen Bottom	=	60.0	ft
Water Column	=	40.7	ft

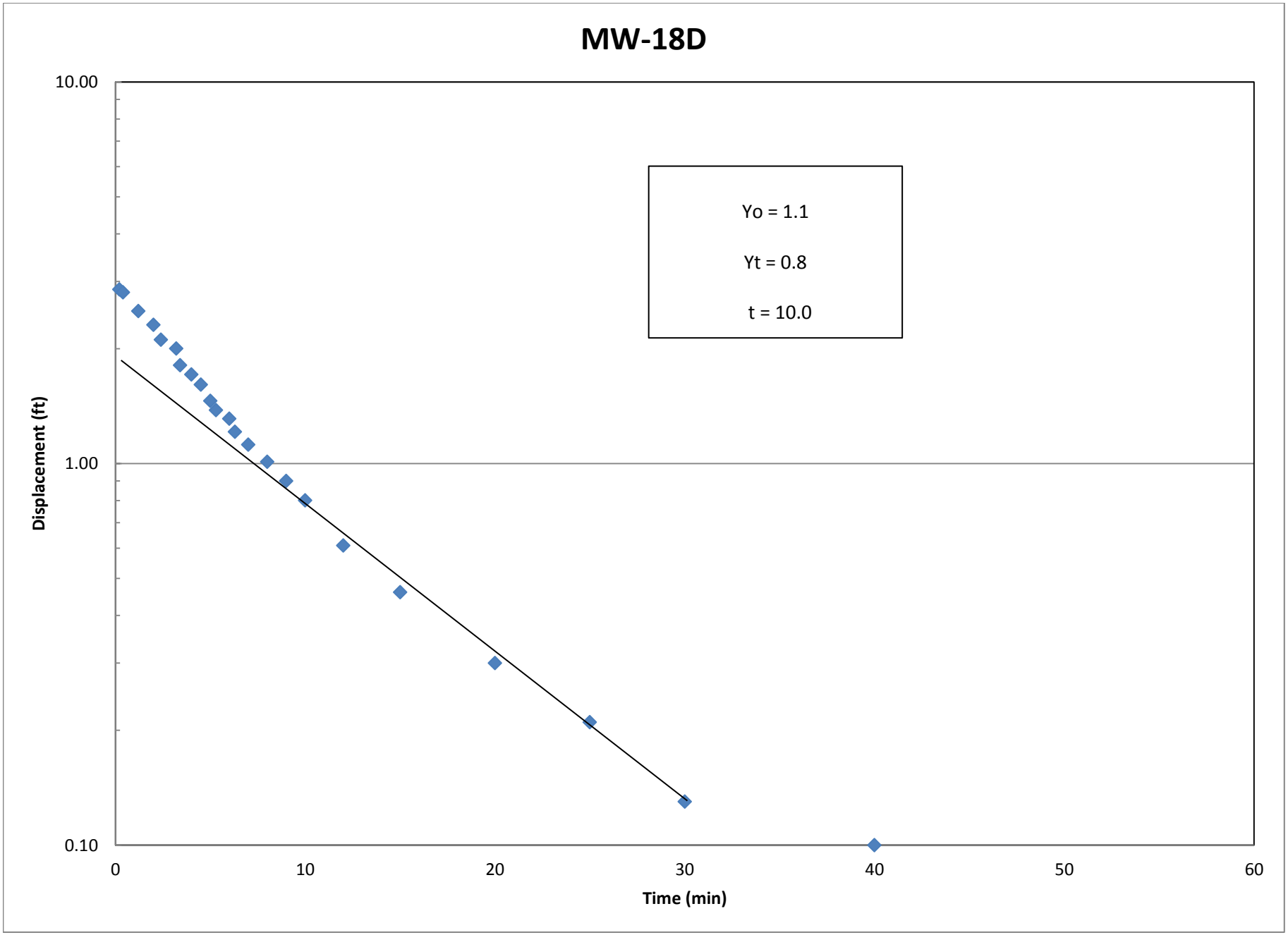
$$r_{eq} = ((1-n)r_c^2 + nr_w^2)^{1/2} = 0.1443 \text{ ft}$$

$$r_{eq}^2 = 0.02083333$$

$$\ln(R_e/R_w) = \left[\frac{1.1}{\ln(L_w/r_w)} + \frac{C}{L_e/r_w} \right]^{-1} = 3.3785$$

$$K \text{ (ft/min)} = \frac{r_{eq}^2 \ln(Re/Rw)}{2L_e} * \frac{1}{t} \ln\frac{y_0}{y_t} = 0.00022414$$

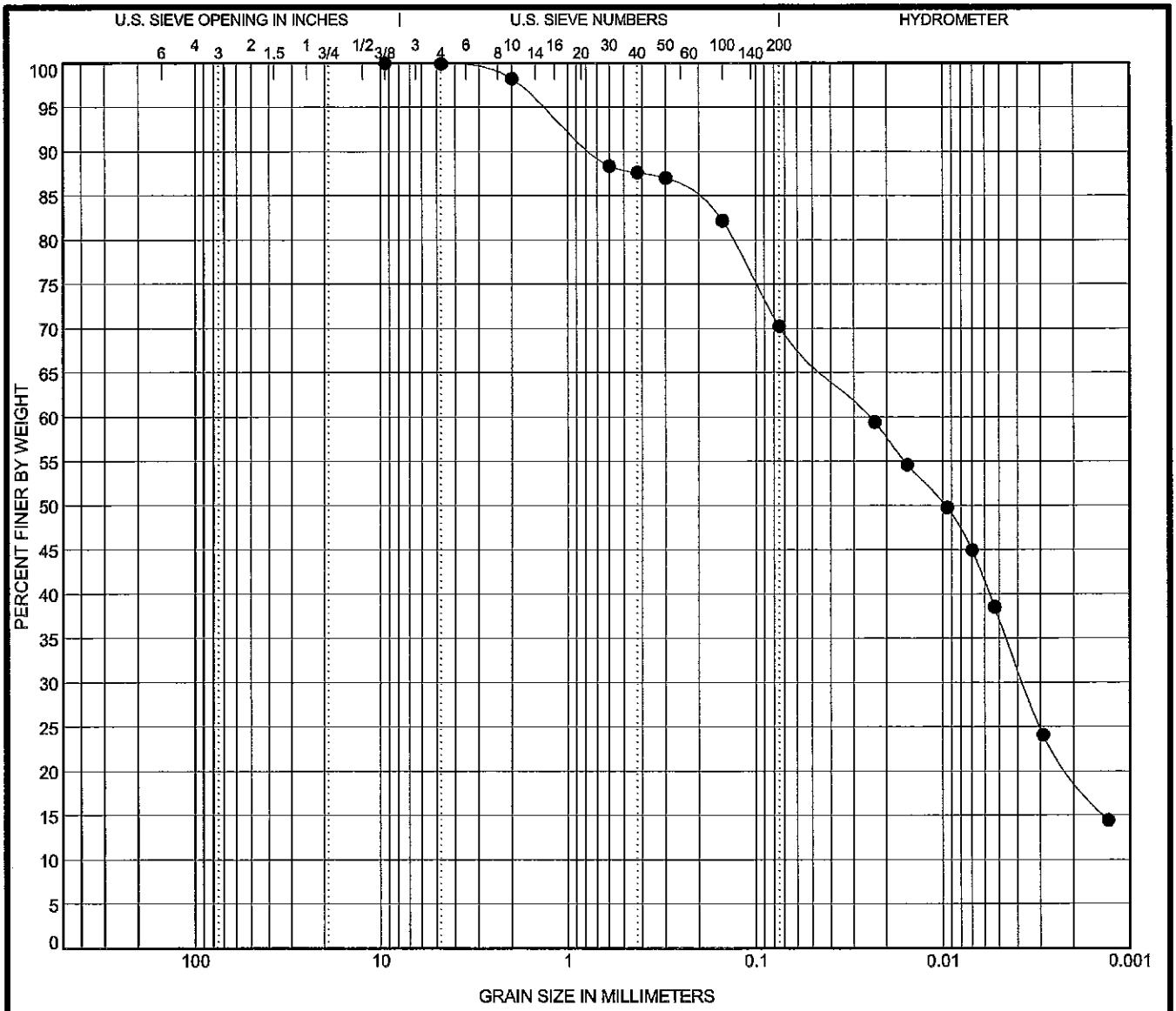
K (ft/day) =	**0.323**	**ft/day**
K (ft/sec) =	**0.000004**	**ft/sec**
K (cm/sec) =	**0.000114**	**cm/sec**


MW-18D
10.00
1.00
0.10
Displacement (ft)
Yo = 1.1
Yt = 0.8
t = 10.0
0
10
20
30
40
50
60
Time (min)

SLUG TEST DATA

Project Name:	Eddies Pitt Stop
Project Number:	7309-8103
Date:	4/6/2012
Well ID:	MW-18D
Equipment/method:	Electric Water Level Indicator/Bouwer and Rice
Test Start Time:	7:30am
Static Water Level:	19.29

Elapsed Time (min)	Depth to Water (ft)	Displace-ment (ft)
0	19.29	0.00
0.2	22.15	2.86
0.4	22.1	2.81
1.2	21.8	2.51
2	21.6	2.31
2.4	21.4	2.11
3.2	21.29	2.00
3.4	21.1	1.81
4	21	1.71
4.5	20.9	1.61
5	20.75	1.46
5.3	20.67	1.38
6	20.6	1.31
6.3	20.5	1.21
7	20.41	1.12
8	20.3	1.01
9	20.19	0.90
10	20.09	0.80
12	19.9	0.61
15	19.75	0.46
20	19.59	0.30
25	19.5	0.21
30	19.42	0.13
40	19.39	0.10
50	19.29	0.00



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Classification	LL	PL	PI	Cc	Cu
●	**TW-7 / MW-12** (33-35 ft.)						

	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**TW-7 / MW-12**	**9.5**	**0.025**	**0.004**		**0.1**	**29.7**	**33.1**	**37.1**

Terracon

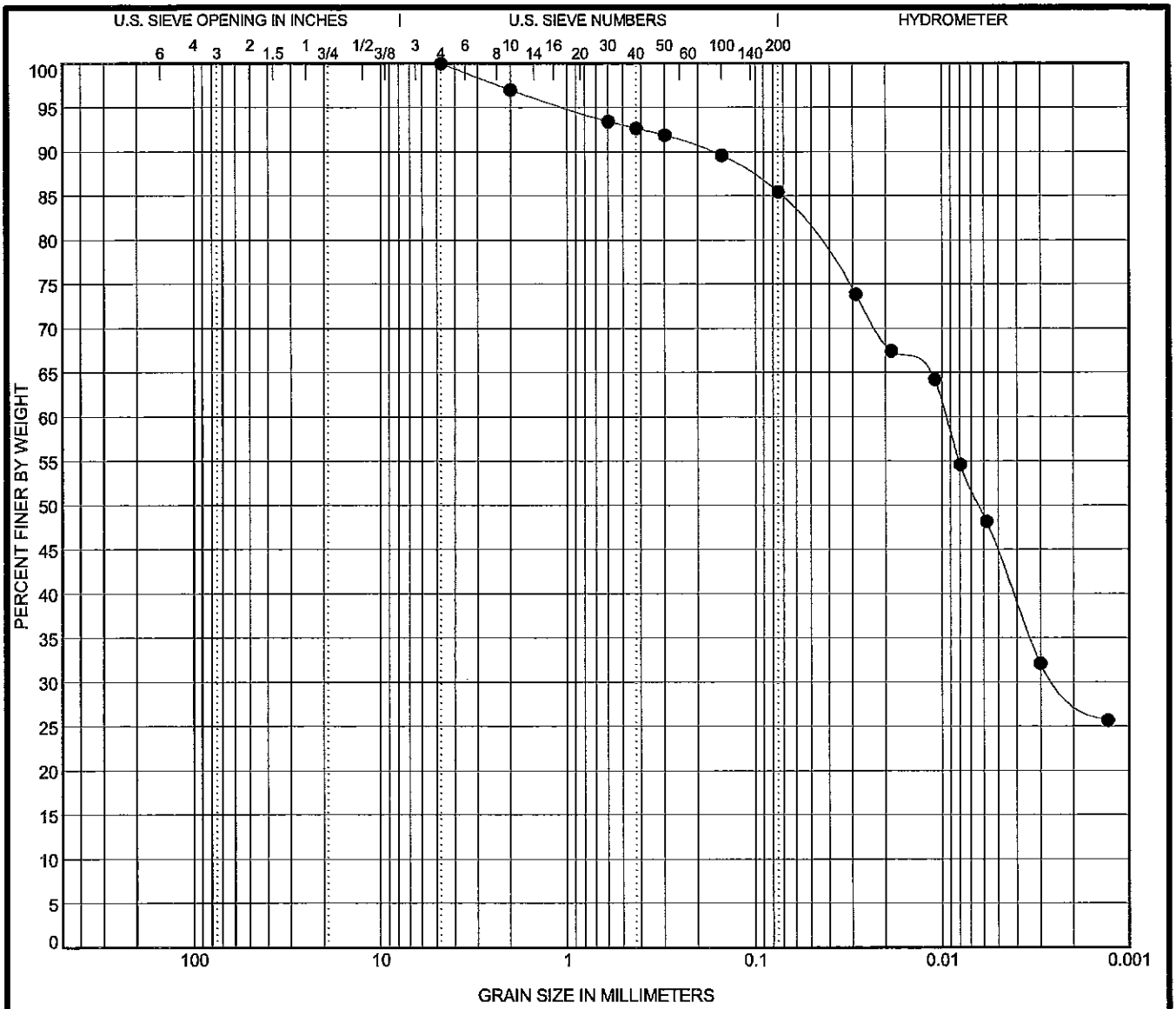
GRAIN SIZE DISTRIBUTION

Project: EDDIE'S PIT STOP

Job #:

Date: 8-21-12

LDO GRAIN SIZE 73098106.GPJ GAGE TERRACON.GDT 8/21/12



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Classification	LL	PL	PI	Cc	Cu
●	**MW-18D** (56-57 ft.)						

	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**MW-18D** (56-57 ft.)	**4.75**	**0.01**	**0.002**		**0.0**	**14.5**	**40.9**	**44.6**

Terracon

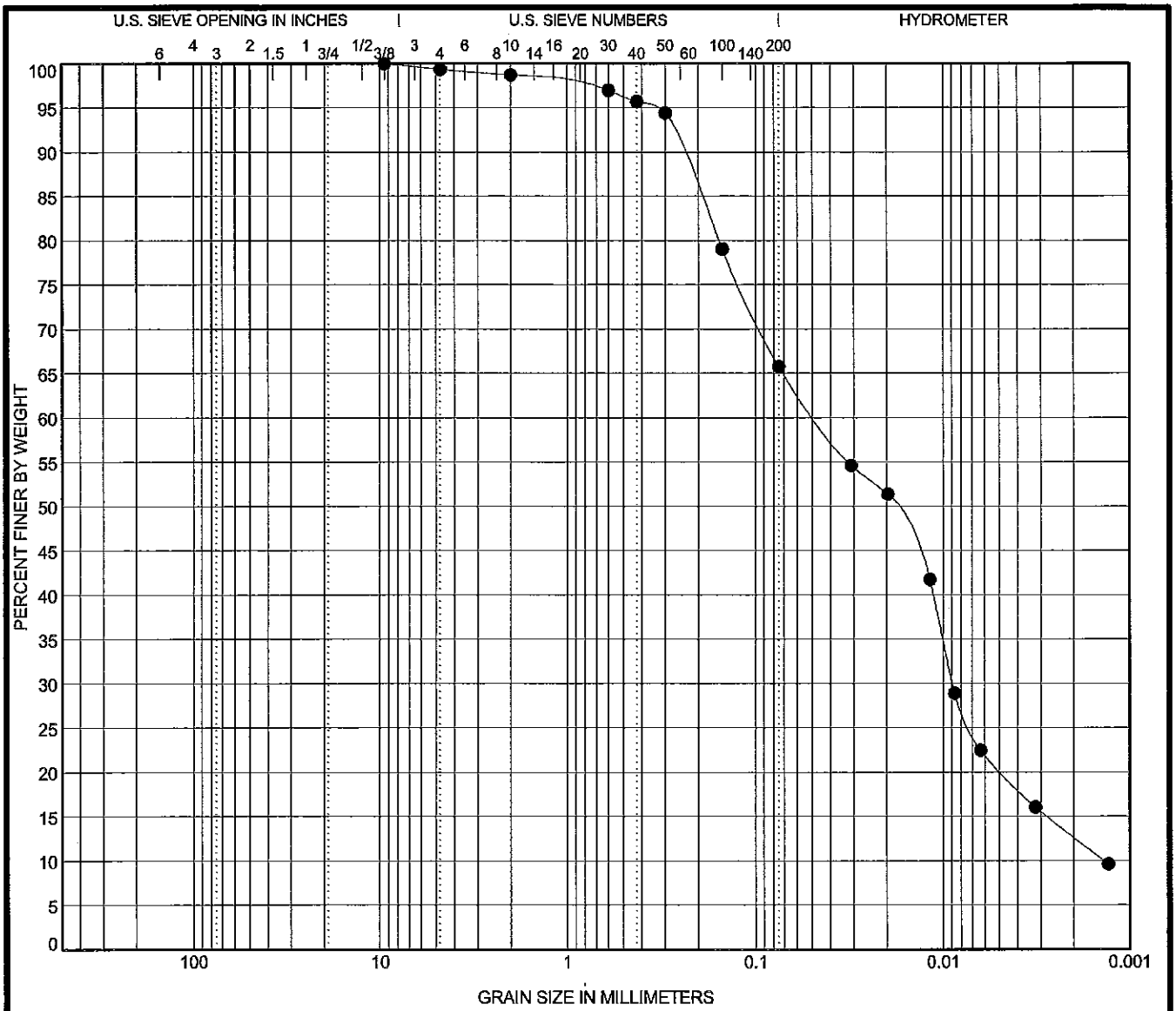
GRAIN SIZE DISTRIBUTION

Project: EDDIE'S PIT STOP

Job #:

Date: 8-21-12

LDO GRAIN SIZE 73098106.GPJ GAGE TERRACON.GDT 8/21/12



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification	Classification	LL	PL	PI	Cc	Cu
●	**TW-24(Exploratory 2)**					**1.23**	**34.74**
	(26-28ft.)						

	Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**TW-24(Exploratory 2)**	**9.5**	**0.048**	**0.009**	**0.001**	**0.6**	**33.6**	**45.5**	**20.3**

Terracon

GRAIN SIZE DISTRIBUTION

Project: EDDIE'S PIT STOP

Job #:

Date: 8-21-12

LDO GRAIN SIZE 73098106.GPJ GAGE TERRACON.GDT 8/21/12

APPENDIX D

Chemical Analytical Data

ACCESS
ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT
Terracon
521 Clemson Rd
Columbia, SC 29229

ATTENTION
William Walker

PROJECT ID
Eddies Pitt Stop

LABORATORY REPORT NUMBER
212010911

DATE
01/13/2012

Primary Data Review By

Curtis Ekker
Data Validation Manager, GCAL

Secondary Data Review By

Ashley B. Amick
Project Manager, Access Analytical, Inc.
aamick@accessanalyticalinc.com

PLEASE NOTE:

- **Unless otherwise noted, all analysis on this report performed at Gulf Coast Analytical Labs (GCAL), 7979 GSRI Avenue, Baton Rouge, LA 70820.**
- **GCAL is SCDHEC certified laboratory # 73006, NCDENR certified lab # 618, GA certified lab # LA-01955, NELAP certified laboratory # 01955**
- Local support services for this project are provided by Access Analytical, Inc.. Access Analytical is a representative of GCAL serving clients in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll free at 888.315.4243.

NELAP CERTIFICATE NUMBER 01955
DOD ELAP CERTIFICATE NUMBER ADE - 1482

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.
7979 GSRI Avenue
Baton Rouge, LA 70820

Report Date 01/13/2012

GCAL Report 212010911

Deliver To	Terracon 521 Clemson Rd Columbia, SC 29229
Attn	William Walker

Project Eddies Pitt Stop

CASE NARRATIVE

Client: Access Analytical **Report:** 212010911

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

VOLATILES MASS SPECTROMETRY

In the SW-846 8260B analysis, sample 21201091103 (MW-3), 21201091115 (MW-13) and 21201091111 (MW-3D) had to be diluted due to the presence of non-target background. This dilution is reflected in the elevated reporting limits.

In the SW-846 8260B - Gas Additives analysis, sample 21201091101 (MW-1), 21201091102 (MW-2), 21201091103 (MW-3), 21201091104 (MW-4), 21201091105 (MW-5), 21201091108 (MW-8), 21201091111 (MW-3D), 21201091114 (MW-12) and 21201091115 (MW-13) had to be diluted due to the presence of non-target background. This dilution is reflected in the elevated reporting limits.

In the SW-846 8260B analysis, sample 21201091101 (MW-1), 21201091102 (MW-2), 21201091104 (MW-4), 21201091105 (MW-5), 21201091108 (MW-8) and 21201091114 (MW-12) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument. The dilution is reflected in elevated detection limits.

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the SW-846 8011 analysis, sample 21201091101(MW-1) had to be diluted to bracket target compounds within the calibration range of the instrument. This is reflected in elevated detection limits.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates the result is between the MDL and RDL
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

IntegriSign

Robyn Migues
Technical Director
GCAL REPORT 212010911

IntegriSign

THIS REPORT CONTAINS 59 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091101	MW-1	Water	01/06/2012 12:30	01/07/2012 08:55
21201091102	MW-2	Water	01/06/2012 11:50	01/07/2012 08:55
21201091103	MW-3	Water	01/06/2012 11:40	01/07/2012 08:55
21201091104	MW-4	Water	01/06/2012 12:50	01/07/2012 08:55
21201091105	MW-5	Water	01/06/2012 13:00	01/07/2012 08:55
21201091106	MW-6	Water	01/06/2012 10:50	01/07/2012 08:55
21201091107	MW-7	Water	01/06/2012 11:10	01/07/2012 08:55
21201091108	MW-8	Water	01/06/2012 12:20	01/07/2012 08:55
21201091109	MW-8D	Water	01/05/2012 17:00	01/07/2012 08:55
21201091110	MW-9	Water	01/06/2012 12:00	01/07/2012 08:55
21201091111	MW-3D	Water	01/05/2012 15:30	01/07/2012 08:55
21201091112	MW-10	Water	01/06/2012 08:20	01/07/2012 08:55
21201091113	MW-11	Water	01/06/2012 13:10	01/07/2012 08:55
21201091114	MW-12	Water	01/06/2012 13:20	01/07/2012 08:55
21201091115	MW-13	Water	01/06/2012 13:30	01/07/2012 08:55
21201091116	MW-14	Water	01/06/2012 13:40	01/07/2012 08:55
21201091117	PW-1	Water	01/05/2012 13:00	01/07/2012 08:55
21201091118	PW-2	Water	01/05/2012 16:10	01/07/2012 08:55

Summary of Compounds Detected

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091101	MW-1	Water	01/06/2012 12:30	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-85-4	tert-amyl alcohol (TAA)	3570	1000	69.5	ug/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	3020	50	2.45	ug/L
108-88-3	Toluene	722	50	3.88	ug/L
100-41-4	Ethylbenzene	1080	50	9.00	ug/L
1330-20-7	Xylene (total)	7510	150	6.15	ug/L
91-20-3	Naphthalene	773	250	8.75	ug/L
107-06-2	1,2-Dichloroethane	57.5	50	6.05	ug/L

SW-846 8011

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	2.91	0.020	0.00640	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091102	MW-2	Water	01/06/2012 11:50	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	4210	40	1.96	ug/L
108-88-3	Toluene	262	40	3.10	ug/L
100-41-4	Ethylbenzene	1390	40	7.20	ug/L
1330-20-7	Xylene (total)	6280	120	4.92	ug/L
91-20-3	Naphthalene	968	200	7.00	ug/L
107-06-2	1,2-Dichloroethane	113	40	4.84	ug/L

SW-846 8011

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	1.02	0.010	0.00320	ug/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
108-20-3	diisopropyl Ether (DIPE)	83.6J	200	4.20	ug/L
75-85-4	tert-amyl alcohol (TAA)	6820	800	55.6	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091103	MW-3	Water	01/06/2012 11:40	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
108-20-3	diisopropyl Ether (DIPE)	3.40J	10	0.210	ug/L
75-85-4	tert-amyl alcohol (TAA)	243	40	2.78	ug/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	138	2	0.098	ug/L
100-41-4	Ethylbenzene	47.2	2	0.360	ug/L
1330-20-7	Xylene (total)	40.9	6	0.246	ug/L
91-20-3	Naphthalene	105	10	0.350	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091104	MW-4	Water	01/06/2012 12:50	01/07/2012 08:55

SW-846 8011

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.077	0.010	0.00320	ug/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
108-20-3	diisopropyl Ether (DIPE)	3.52J	10	0.210	ug/L
75-85-4	tert-amyl alcohol (TAA)	691	40	2.78	ug/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	324	2	0.098	ug/L
100-41-4	Ethylbenzene	32.6	2	0.360	ug/L
1330-20-7	Xylene (total)	437	6	0.246	ug/L
91-20-3	Naphthalene	126	10	0.350	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091105	MW-5	Water	01/06/2012 13:00	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-85-4	tert-amyl alcohol (TAA)	278	200	13.9	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091105	MW-5	Water	01/06/2012 13:00	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	125	10	0.490	ug/L
108-88-3	Toluene	25.7	10	0.776	ug/L
100-41-4	Ethylbenzene	630	10	1.80	ug/L
1330-20-7	Xylene (total)	1260	30	1.23	ug/L
91-20-3	Naphthalene	334	50	1.75	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091106	MW-6	Water	01/06/2012 10:50	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
1330-20-7	Xylene (total)	1.37J	3	0.123	ug/L
91-20-3	Naphthalene	6.42	5	0.175	ug/L

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0045J	0.015	0.0028	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091107	MW-7	Water	01/06/2012 11:10	01/07/2012 08:55

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.022	0.015	0.0028	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091108	MW-8	Water	01/06/2012 12:20	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	970	10	0.490	ug/L
108-88-3	Toluene	31.6	10	0.776	ug/L
100-41-4	Ethylbenzene	262	10	1.80	ug/L
1330-20-7	Xylene (total)	450	30	1.23	ug/L
91-20-3	Naphthalene	91.1	50	1.75	ug/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
108-20-3	diisopropyl Ether (DIPE)	25.9J	50	1.05	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091108	MW-8	Water	01/06/2012 12:20	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-85-4	tert-amyl alcohol (TAA)	4160	200	13.9	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091109	MW-8D	Water	01/05/2012 17:00	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
108-20-3	diisopropyl Ether (DIPE)	2.74J	5	0.105	ug/L
75-85-4	tert-amyl alcohol (TAA)	21.4	20	1.39	ug/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
91-20-3	Naphthalene	5.21	5	0.175	ug/L
107-06-2	1,2-Dichloroethane	1.34	1	0.121	ug/L

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.11	0.015	0.0028	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091110	MW-9	Water	01/06/2012 12:00	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-85-4	tert-amyl alcohol (TAA)	10.5J	20	1.39	ug/L

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.027	0.015	0.0028	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091111	MW-3D	Water	01/05/2012 15:30	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	165	5	0.245	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091111	MW-3D	Water	01/05/2012 15:30	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
100-41-4	Ethylbenzene	42.3	5	0.900	ug/L
1330-20-7	Xylene (total)	20.1	15	0.615	ug/L
91-20-3	Naphthalene	56.7	25	0.875	ug/L
107-06-2	1,2-Dichloroethane	23.7	5	0.605	ug/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-65-0	t-Butanol (TBA)	55.5	50	1.45	ug/L
108-20-3	diisopropyl Ether (DIPE)	42.8	25	0.525	ug/L
75-85-4	tert-amyl alcohol (TAA)	2280	100	6.95	ug/L

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.065	0.015	0.0028	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091112	MW-10	Water	01/06/2012 08:20	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	26.3	1	0.049	ug/L
100-41-4	Ethylbenzene	11.4	1	0.180	ug/L
1330-20-7	Xylene (total)	21.8	3	0.123	ug/L
91-20-3	Naphthalene	5.34	5	0.175	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	48.4	1	0.084	ug/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-65-0	t-Butanol (TBA)	41.2	10	0.290	ug/L
108-20-3	diisopropyl Ether (DIPE)	1.07J	5	0.105	ug/L
75-85-4	tert-amyl alcohol (TAA)	106	20	1.39	ug/L

SW-846 8011

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.015	0.010	0.00320	ug/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091114	MW-12	Water	01/06/2012 13:20	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
108-20-3	diisopropyl Ether (DIPE)	73.4J	200	4.20	ug/L
75-85-4	tert-amyl alcohol (TAA)	10600	800	55.6	ug/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	3140	40	1.96	ug/L
100-41-4	Ethylbenzene	89.5	40	7.20	ug/L
1330-20-7	Xylene (total)	247	120	4.92	ug/L
91-20-3	Naphthalene	465	200	7.00	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091115	MW-13	Water	01/06/2012 13:30	01/07/2012 08:55

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0041J	0.015	0.0028	mg/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	56.0	5	0.245	ug/L
1330-20-7	Xylene (total)	4.56J	15	0.615	ug/L
91-20-3	Naphthalene	33.5	25	0.875	ug/L
107-06-2	1,2-Dichloroethane	10.7	5	0.605	ug/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
75-65-0	t-Butanol (TBA)	47.2J	50	1.45	ug/L
108-20-3	diisopropyl Ether (DIPE)	15.6J	25	0.525	ug/L
75-85-4	tert-amyl alcohol (TAA)	1710	100	6.95	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091116	MW-14	Water	01/06/2012 13:40	01/07/2012 08:55

SW-846 6010C

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.025	0.015	0.0028	mg/L

Summary of Compounds Detected (con't)

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091116	MW-14	Water	01/06/2012 13:40	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
108-20-3	diisopropyl Ether (DIPE)	1.79J	5	0.105	ug/L
75-85-4	tert-amyl alcohol (TAA)	158	20	1.39	ug/L

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	5.73	1	0.049	ug/L
108-88-3	Toluene	7.77	1	0.078	ug/L
91-20-3	Naphthalene	5.57	5	0.175	ug/L
107-06-2	1,2-Dichloroethane	1.74	1	0.121	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091117	PW-1	Water	01/05/2012 13:00	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
107-06-2	1,2-Dichloroethane	1.89	1	0.121	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091118	PW-2	Water	01/05/2012 16:10	01/07/2012 08:55

SW-846 8260B

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	4.64	1	0.049	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091101	MW-1	Water	01/06/2012 12:30	01/07/2012 08:55

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	01/09/2012 15:03	EDS	472554

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	**Benzene**	**3020**	**50**	**2.45**	**ug/L**
108-88-3	**Toluene**	**722**	**50**	**3.88**	**ug/L**
100-41-4	**Ethylbenzene**	**1080**	**50**	**9.00**	**ug/L**
1330-20-7	**Xylene (total)**	**7510**	**150**	**6.15**	**ug/L**
91-20-3	**Naphthalene**	**773**	**250**	**8.75**	**ug/L**
1634-04-4	tert-Butyl methyl ether (MTBE)	4.20U	50	4.20	ug/L
107-06-2	**1,2-Dichloroethane**	**57.5**	**50**	**6.05**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2500	2430	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	2500	2640	ug/L	106	77 - 127
2037-26-5	Toluene d8	2500	2350	ug/L	94	76 - 134
17060-07-0	1,2-Dichloroethane-d4	2500	2500	ug/L	100	71 - 127

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			50	01/09/2012 15:03	EDS	472555

CAS#	Parameter	Result	RDL	MDL	Units
994-05-8	t-amyl methyl ether (TAME)	52.5U	250	52.5	ug/L
75-65-0	t-Butanol (TBA)	14.5U	500	14.5	ug/L
108-20-3	diisopropyl Ether (DIPE)	5.25U	250	5.25	ug/L
637-92-3	Ethyl tert-butyl ether (ETBE)	55.5U	250	55.5	ug/L
624-95-3	ethyl tert-butanol (ETBA)	1880U	5000	1880	ug/L
64-17-5	Ethanol	4090U	5000	4090	ug/L
75-85-4	**tert-amyl alcohol (TAA)**	**3570**	**1000**	**69.5**	**ug/L**
762-75-4	tert-butyl formate (TBF)	108U	250	108	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2500	2430	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	2500	2640	ug/L	106	77 - 127
2037-26-5	Toluene d8	2500	2350	ug/L	94	76 - 134
17060-07-0	1,2-Dichloroethane-d4	2500	2500	ug/L	100	71 - 127

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
01/10/2012 14:45	472578	SW-846 8011	2	01/12/2012 17:14	TLS	472814

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	**1,2-Dibromoethane**	**2.91**	**0.020**	**0.00640**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091101	MW-1	Water	01/06/2012 12:30	01/07/2012 08:55

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
01/10/2012 15:00	472545	SW-846 3010A	1	01/11/2012 18:46	CLB	472702

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0028U	0.015	0.0028	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091102	MW-2	Water	01/06/2012 11:50	01/07/2012 08:55

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			40	01/09/2012 15:24	EDS	472554

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	**Benzene**	**4210**	**40**	**1.96**	**ug/L**
108-88-3	**Toluene**	**262**	**40**	**3.10**	**ug/L**
100-41-4	**Ethylbenzene**	**1390**	**40**	**7.20**	**ug/L**
1330-20-7	**Xylene (total)**	**6280**	**120**	**4.92**	**ug/L**
91-20-3	**Naphthalene**	**968**	**200**	**7.00**	**ug/L**
1634-04-4	tert-Butyl methyl ether (MTBE)	3.36U	40	3.36	ug/L
107-06-2	**1,2-Dichloroethane**	**113**	**40**	**4.84**	**ug/L**

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2000	1940	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	2000	2120	ug/L	106	77 - 127
2037-26-5	Toluene d8	2000	1890	ug/L	95	76 - 134
17060-07-0	1,2-Dichloroethane-d4	2000	1990	ug/L	100	71 - 127

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			40	01/09/2012 15:24	EDS	472555

CAS#	Parameter	Result	RDL	MDL	Units
994-05-8	t-amyl methyl ether (TAME)	42.0U	200	42.0	ug/L
75-65-0	t-Butanol (TBA)	11.6U	400	11.6	ug/L
108-20-3	**diisopropyl Ether (DIPE)**	**83.6J**	**200**	**4.20**	**ug/L**
637-92-3	Ethyl tert-butyl ether (ETBE)	44.4U	200	44.4	ug/L
624-95-3	ethyl tert-butanol (ETBA)	1500U	4000	1500	ug/L
64-17-5	Ethanol	3270U	4000	3270	ug/L
75-85-4	**tert-amyl alcohol (TAA)**	**6820**	**800**	**55.6**	**ug/L**
762-75-4	tert-butyl formate (TBF)	86.4U	200	86.4	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	2000	1940	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	2000	2120	ug/L	106	77 - 127
2037-26-5	Toluene d8	2000	1890	ug/L	95	76 - 134
17060-07-0	1,2-Dichloroethane-d4	2000	1990	ug/L	100	71 - 127

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
01/10/2012 14:45	472578	SW-846 8011	1	01/12/2012 08:45	TLS	472814

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	**1,2-Dibromoethane**	**1.02**	**0.010**	**0.00320**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091102	MW-2	Water	01/06/2012 11:50	01/07/2012 08:55

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
01/10/2012 15:00	472545	SW-846 3010A	1	01/11/2012 18:53	CLB	472702

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0028U	0.015	0.0028	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091103	MW-3	Water	01/06/2012 11:40	01/07/2012 08:55

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	01/09/2012 15:48	EDS	472554

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	**Benzene**	**138**	**2**	**0.098**	**ug/L**
108-88-3	Toluene	0.155U	2	0.155	ug/L
100-41-4	**Ethylbenzene**	**47.2**	**2**	**0.360**	**ug/L**
1330-20-7	**Xylene (total)**	**40.9**	**6**	**0.246**	**ug/L**
91-20-3	**Naphthalene**	**105**	**10**	**0.350**	**ug/L**
1634-04-4	tert-Butyl methyl ether (MTBE)	0.168U	2	0.168	ug/L
107-06-2	1,2-Dichloroethane	0.242U	2	0.242	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	94.6	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	100	103	ug/L	103	77 - 127
2037-26-5	Toluene d8	100	97.8	ug/L	98	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	111	ug/L	111	71 - 127

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	01/09/2012 15:48	EDS	472555

CAS#	Parameter	Result	RDL	MDL	Units
994-05-8	t-amyl methyl ether (TAME)	2.10U	10	2.10	ug/L
75-65-0	t-Butanol (TBA)	0.580U	20	0.580	ug/L
108-20-3	**diisopropyl Ether (DIPE)**	**3.40J**	**10**	**0.210**	**ug/L**
637-92-3	Ethyl tert-butyl ether (ETBE)	2.22U	10	2.22	ug/L
624-95-3	ethyl tert-butanol (ETBA)	75.2U	200	75.2	ug/L
64-17-5	Ethanol	164U	200	164	ug/L
75-85-4	**tert-amyl alcohol (TAA)**	**243**	**40**	**2.78**	**ug/L**
762-75-4	tert-butyl formate (TBF)	4.32U	10	4.32	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	94.6	ug/L	95	78 - 130
1868-53-7	Dibromofluoromethane	100	103	ug/L	103	77 - 127
2037-26-5	Toluene d8	100	97.8	ug/L	98	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	111	ug/L	111	71 - 127

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
01/10/2012 14:45	472578	SW-846 8011	1	01/12/2012 09:29	TLS	472814

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.00320U	0.010	0.00320	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091103	MW-3	Water	01/06/2012 11:40	01/07/2012 08:55

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
01/10/2012 15:00	472545	SW-846 3010A	1	01/11/2012 18:59	CLB	472702

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0028U	0.015	0.0028	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091104	MW-4	Water	01/06/2012 12:50	01/07/2012 08:55

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	01/09/2012 16:11	EDS	472554

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	**Benzene**	**324**	**2**	**0.098**	**ug/L**
108-88-3	Toluene	0.155U	2	0.155	ug/L
100-41-4	**Ethylbenzene**	**32.6**	**2**	**0.360**	**ug/L**
1330-20-7	**Xylene (total)**	**437**	**6**	**0.246**	**ug/L**
91-20-3	**Naphthalene**	**126**	**10**	**0.350**	**ug/L**
1634-04-4	tert-Butyl methyl ether (MTBE)	0.168U	2	0.168	ug/L
107-06-2	1,2-Dichloroethane	0.242U	2	0.242	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	97.1	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	100	106	ug/L	106	77 - 127
2037-26-5	Toluene d8	100	96.6	ug/L	97	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	101	ug/L	101	71 - 127

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			2	01/09/2012 16:11	EDS	472555

CAS#	Parameter	Result	RDL	MDL	Units
994-05-8	t-amyl methyl ether (TAME)	2.10U	10	2.10	ug/L
75-65-0	t-Butanol (TBA)	0.580U	20	0.580	ug/L
108-20-3	**diisopropyl Ether (DIPE)**	**3.52J**	**10**	**0.210**	**ug/L**
637-92-3	Ethyl tert-butyl ether (ETBE)	2.22U	10	2.22	ug/L
624-95-3	ethyl tert-butanol (ETBA)	75.2U	200	75.2	ug/L
64-17-5	Ethanol	164U	200	164	ug/L
75-85-4	**tert-amyl alcohol (TAA)**	**691**	**40**	**2.78**	**ug/L**
762-75-4	tert-butyl formate (TBF)	4.32U	10	4.32	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	100	97.1	ug/L	97	78 - 130
1868-53-7	Dibromofluoromethane	100	106	ug/L	106	77 - 127
2037-26-5	Toluene d8	100	96.6	ug/L	97	76 - 134
17060-07-0	1,2-Dichloroethane-d4	100	101	ug/L	101	71 - 127

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
01/10/2012 14:45	472578	SW-846 8011	1	01/12/2012 09:50	TLS	472814

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	**1,2-Dibromoethane**	**0.077**	**0.010**	**0.00320**	**ug/L**

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091104	MW-4	Water	01/06/2012 12:50	01/07/2012 08:55

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
01/10/2012 15:00	472545	SW-846 3010A	1	01/11/2012 17:52	CLB	472702

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0028U	0.015	0.0028	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091105	MW-5	Water	01/06/2012 13:00	01/07/2012 08:55

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	01/09/2012 16:35	EDS	472554

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	**Benzene**	**125**	**10**	**0.490**	**ug/L**
108-88-3	**Toluene**	**25.7**	**10**	**0.776**	**ug/L**
100-41-4	**Ethylbenzene**	**630**	**10**	**1.80**	**ug/L**
1330-20-7	**Xylene (total)**	**1260**	**30**	**1.23**	**ug/L**
91-20-3	**Naphthalene**	**334**	**50**	**1.75**	**ug/L**
1634-04-4	tert-Butyl methyl ether (MTBE)	0.839U	10	0.839	ug/L
107-06-2	1,2-Dichloroethane	1.21U	10	1.21	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	478	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	500	528	ug/L	106	77 - 127
2037-26-5	Toluene d8	500	486	ug/L	97	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	512	ug/L	102	71 - 127

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			10	01/09/2012 16:35	EDS	472555

CAS#	Parameter	Result	RDL	MDL	Units
994-05-8	t-amyl methyl ether (TAME)	10.5U	50	10.5	ug/L
75-65-0	t-Butanol (TBA)	2.90U	100	2.90	ug/L
108-20-3	diisopropyl Ether (DIPE)	1.05U	50	1.05	ug/L
637-92-3	Ethyl tert-butyl ether (ETBE)	11.1U	50	11.1	ug/L
624-95-3	ethyl tert-butanol (ETBA)	376U	1000	376	ug/L
64-17-5	Ethanol	818U	1000	818	ug/L
75-85-4	**tert-amyl alcohol (TAA)**	**278**	**200**	**13.9**	**ug/L**
762-75-4	tert-butyl formate (TBF)	21.6U	50	21.6	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	500	478	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	500	528	ug/L	106	77 - 127
2037-26-5	Toluene d8	500	486	ug/L	97	76 - 134
17060-07-0	1,2-Dichloroethane-d4	500	512	ug/L	102	71 - 127

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
01/10/2012 14:45	472578	SW-846 8011	1	01/12/2012 10:12	TLS	472814

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.00320U	0.010	0.00320	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091105	MW-5	Water	01/06/2012 13:00	01/07/2012 08:55

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
01/10/2012 15:00	472545	SW-846 3010A	1	01/11/2012 19:06	CLB	472702

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0028U	0.015	0.0028	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091106	MW-6	Water	01/06/2012 10:50	01/07/2012 08:55

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	01/09/2012 16:56	EDS	472554

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	0.049U	1	0.049	ug/L
108-88-3	Toluene	0.078U	1	0.078	ug/L
100-41-4	Ethylbenzene	0.180U	1	0.180	ug/L
1330-20-7	**Xylene (total)**	**1.37J**	**3**	**0.123**	**ug/L**
91-20-3	**Naphthalene**	**6.42**	**5**	**0.175**	**ug/L**
1634-04-4	tert-Butyl methyl ether (MTBE)	0.084U	1	0.084	ug/L
107-06-2	1,2-Dichloroethane	0.121U	1	0.121	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	52.8	ug/L	106	77 - 127
2037-26-5	Toluene d8	50	47.4	ug/L	95	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	48.5	ug/L	97	71 - 127

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	01/09/2012 16:56	EDS	472555

CAS#	Parameter	Result	RDL	MDL	Units
994-05-8	t-amyl methyl ether (TAME)	1.05U	5	1.05	ug/L
75-65-0	t-Butanol (TBA)	0.290U	10	0.290	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.105U	5	0.105	ug/L
637-92-3	Ethyl tert-butyl ether (ETBE)	1.11U	5	1.11	ug/L
624-95-3	ethyl tert-butanol (ETBA)	37.6U	100	37.6	ug/L
64-17-5	Ethanol	81.8U	100	81.8	ug/L
75-85-4	tert-amyl alcohol (TAA)	1.39U	20	1.39	ug/L
762-75-4	tert-butyl formate (TBF)	2.16U	5	2.16	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	52.8	ug/L	106	77 - 127
2037-26-5	Toluene d8	50	47.4	ug/L	95	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	48.5	ug/L	97	71 - 127

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
01/10/2012 14:45	472578	SW-846 8011	1	01/12/2012 10:33	TLS	472814

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.00320U	0.010	0.00320	ug/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
212010911-06	MW-6	Water	01/06/2012 10:50	01/07/2012 08:55

SW-846 6010C

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
01/10/2012 15:00	472545	SW-846 3010A	1	01/11/2012 19:12	CLB	472702

CAS#	Parameter	Result	RDL	MDL	Units
7439-92-1	Lead	0.0045J	0.015	0.0028	mg/L

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21201091107	MW-7	Water	01/06/2012 11:10	01/07/2012 08:55

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	01/09/2012 17:18	EDS	472554

CAS#	Parameter	Result	RDL	MDL	Units
71-43-2	Benzene	0.049U	1	0.049	ug/L
108-88-3	Toluene	0.078U	1	0.078	ug/L
100-41-4	Ethylbenzene	0.180U	1	0.180	ug/L
1330-20-7	Xylene (total)	0.123U	3	0.123	ug/L
91-20-3	Naphthalene	0.175U	5	0.175	ug/L
1634-04-4	tert-Butyl methyl ether (MTBE)	0.084U	1	0.084	ug/L
107-06-2	1,2-Dichloroethane	0.121U	1	0.121	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.1	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	54	ug/L	108	77 - 127
2037-26-5	Toluene d8	50	47.5	ug/L	95	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.6	ug/L	99	71 - 127

SW-846 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
			1	01/09/2012 17:18	EDS	472555

CAS#	Parameter	Result	RDL	MDL	Units
994-05-8	t-amyl methyl ether (TAME)	1.05U	5	1.05	ug/L
75-65-0	t-Butanol (TBA)	0.290U	10	0.290	ug/L
108-20-3	diisopropyl Ether (DIPE)	0.105U	5	0.105	ug/L
637-92-3	Ethyl tert-butyl ether (ETBE)	1.11U	5	1.11	ug/L
624-95-3	ethyl tert-butanol (ETBA)	37.6U	100	37.6	ug/L
64-17-5	Ethanol	81.8U	100	81.8	ug/L
75-85-4	tert-amyl alcohol (TAA)	1.39U	20	1.39	ug/L
762-75-4	tert-butyl formate (TBF)	2.16U	5	2.16	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	48.1	ug/L	96	78 - 130
1868-53-7	Dibromofluoromethane	50	54	ug/L	108	77 - 127
2037-26-5	Toluene d8	50	47.5	ug/L	95	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.6	ug/L	99	71 - 127

SW-846 8011

Prep Date	Prep Batch	Prep Method	Dilution	Analyzed	By	Analytical Batch
01/10/2012 14:45	472578	SW-846 8011	1	01/12/2012 10:55	TLS	472814

CAS#	Parameter	Result	RDL	MDL	Units
106-93-4	1,2-Dibromoethane	0.00320U	0.010	0.00320	ug/L