

CORRECTIVE ACTION SYSTEM EVALUATION REPORT
August 2006 through November 2006

Highway 11 Grocery
13527 North SC Highway 11
Salem, South Carolina
Oconee County
UST Permit Number: 03439
SEI Project Number: 302169

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UNDERGROUND STORAGE
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PREPARED FOR:

Mr. Steve Smith
Highway 11 Grocery
13527 North SC Highway 11
Salem, South Carolina 29676-9801

PREPARED BY:

SEI ENVIRONMENTAL, INC.
130 Penmarc Drive, Suite 108
Raleigh, North Carolina
UST Site Rehabilitation Contractor No. 354

June 28, 2007

UST PROGRAM
DOCKETING # _____

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Submittal Date: February 28, 2007
For Period Covering: February 7, 2007
Facility Name : Highway 11 Grocery
UST Permit Number: 03439
County: Oconee
Latitude: N 35°54'26.02"

Monitoring Report Number: _____
to May 3, 2007
Street Address: 13527 North SC Highway 11
City: Salem, South Carolina
Zip Code: 27603
Longitude: W 82°58'31.29"

Submitted by UST Owner/Operator:

Name: Steve Smith
Company: Highway 11 Grocery
Address: 13527 North Highway 11
City: Salem State: SC
Zip Code: 29676-9801
Telephone: (864) 944-0494
SEI Project Number: 302169

Prepared by Consultant/Contractor:

Name: Chris L. Boggs
Company: SEI Environmental, Inc.
Address: 130 Penmarc Drive Suite 108
City: Raleigh State: NC
Zip Code: 27603
Telephone: (919) 832-2535
UST Site Rehabilitation Contractor No. 354

Registered Professional Engineer or Professional Geologist Certification

I hereby certify that I have directed and supervised the fieldwork and preparation of this Plan, in accordance with State Rules and Regulations. As a registered professional geologist and/or professional engineer, I certify that I am a qualified groundwater professional, as defined by the South Carolina State Board of Professional Geologists. All of the information and laboratory data in this plan and in all of the attachments are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

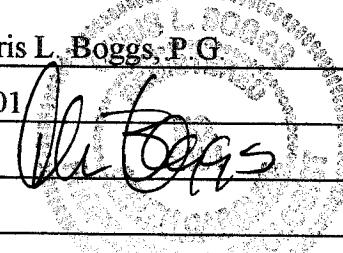
Name: Chris L. Boggs, P.G.
SC Reg. No. 2101
Signature: 
Date: 2/28/07

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LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the former UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

This report has been prepared under the guidance of a Licensed Geologist registered in South Carolina to meet the requirements of the South Carolina Department of Health and Environmental Control. The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of the samples associated with this report were performed by a subcontracted, independent, and certified laboratory. All data have been reviewed for accuracy and, excepting obvious errors, have been accepted as correct. SEI Environmental, Inc. reserves the right to revise estimates of performances as required by changes in the data supplied by Accutest Laboratories.

1.0 INTRODUCTION

The Highway 11 Grocery is a convenience and retail fuel store located at 13527 North SC Highway 11 in Salem, Oconee County, South Carolina. Figure 1 in Appendix A is a portion of the United States Geological Survey (USGS) 7.5-minute topographical quadrangle map identifying the location of the site.

The following is a brief summary of recent events occurring at the site:

- December 18, 2003 – Groundwater Sampling Event
- March 31, 2004 – Groundwater Sampling Event
- September 29, 2004 – Groundwater Sampling Event
- January 11, 2005 – EFR performed on MW-8
- March 17, 2005 – EFR performed on MW-8
- March 17, 2005 – Groundwater Sampling Event
- August 9, 2005 – Groundwater Sampling Event
- November 1, 2005 – Groundwater Sampling Event
- March 22, 2006 – Groundwater Sampling Event
- August 28, 2006 – Groundwater Sampling Event
- November 5, 2006 – Groundwater Sampling Event
- February 7, 2007 – Groundwater Sampling Event
- May 3, 2007 - Groundwater Sampling Event

On May 3, 2007, in accordance with the requirements of the PFP contract, samples were collected from twelve groundwater monitoring wells, one water supply well and two surface locations. This report provides details of the groundwater sampling event.

2.0 FIELD MEASUREMENTS AND SAMPLING

2.1 Groundwater Sampling

On May 3, 2007, groundwater samples were collected from twelve groundwater monitoring wells. Monitoring well MW-8 was not sampled due to the presence of free product. Prior to

sampling, groundwater depth was gauged in the monitoring wells utilizing an oil-water interface probe to measure depth to groundwater, and to detect any phase separated hydrocarbons (PSH) present. The depth to groundwater measurement is used to calculate the groundwater elevation used in determining the current groundwater potentiometric surface, along with hydraulic gradient, and groundwater flow direction.

Figure 3 in Appendix A presents a groundwater poetentiometric map for the current sampling event. The latest groundwater data indicate that groundwater flow at the site is to the northeast with a hydraulic gradient of 0.034 feet per foot between monitoring wells MW-3 and MW-12. This flow direction is consistent with previous determinations of groundwater movement. Table 1 in Appendix B summarizes groundwater measurement data. Appendix C includes field observation data.

Representative groundwater samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Flordia. The groundwater samples were analyzed by EPA Method 8260B for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene.

2.2 Surface Water Sampling

On May 3, 2007, two (CK-1 and CK-3) surface water samples were collected from adjacent creek. CK-2 location is no longer sampled per the March 17, 2005, sampling event report. CK-3 replaced CK-2 to monitor for potential contamination from monitoring well MW-14. Representative samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Flordia. The groundwater samples were analyzed by EPA Method 8260B for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene.

2.3 Water Supply Well Sampling

On May 3, 2007, the onsite water supply well (WW-1) was sampled. The sample was collected from a spigot nearest the water supply well. Prior to sampling, the spigot was allowed to run for at least ten minutes. The sample was placed in a laboratory supplied container, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater sample was analyzed by EPA Method 8260B for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Groundwater Analytical Results

SSTLs have been designated for fourteen (MW-1 through MW-8, MW-10, MW-11, MW-14, DMW-1, DMW-2, and DMW-4). CoCs were detected in six (MW-1, MW-2, MW-6, MW-7, MW-10, and MW-14) monitoring wells at concentrations above their respective Site Specific Target Level (SSTL). Figure 4 in Appendix A is a site map presenting monitoring well location and their CoC concentrations. Table 2 in Appendix B summarizes historical groundwater analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.2 Surface Water Analytical Results

Benzene was detected in surface water sample CK-1 at a concentration of 10.8 µg/L and in sample CK-3 at a concentration of 23.1 µg/L.

3.3 Water Supply Well Analytical Results

CoCs were not detected in water supply well sample WW-1 at concentrations above laboratory detection limits.

4.0 REMEDIATION SYSTEM EFFECTIVENESS

In awarding the Pay-For-Performance (PFP) site remediation contract, the South Carolina Department of Health and Environmental Control (SCDHEC) set remediation goals for this site via site specific target levels (SSTLs). The monitoring wells have individual target concentrations for five (benzene, toluene, ethylbenzene, xylenes, MTBE and naphthalene) identified chemicals of concern (CoC).

Remediation system effectiveness can be calculated comparing the initial May 7, 2002, CoC concentrations that exceeded the SSTLs with the current CoC concentrations that exceeded the SSTLs. For monitoring wells MW-1 and MW-8, the standard values for free product (benzene, 44,390 µg/L; toluene, 26,540 µg/L; ethylbenzene, 3,700 µg/L; xylenes, 21,680 µg/L; MTBE, 173,000 µg/L; and naphthalene 637,000 µg/L) were used in the percent reduction calculation. The formula is as follows:

$$\frac{[08/29/96 \text{ Sample Concentration Above SSTL}] - [Current Sample Concentration Above SSTL]}{[08/29/96 \text{ Sample Concentration Above SSTL}]} *100 = \% \text{ Reduction}$$

Using the current analytical results, the percent concentration reduction is 91.85%. Table 2 in Appendix B presents concentration reduction calculations.

5.0 AFVR EVENT

An eight hour AFVR event was conducted on monitoring wells MW-1 and mw-8 on May 17, 2007. Data collected during this event and a disposal manifest for the petroleum impacted water generated during this event are included as Appendix E.

6.0 CONCLUSIONS

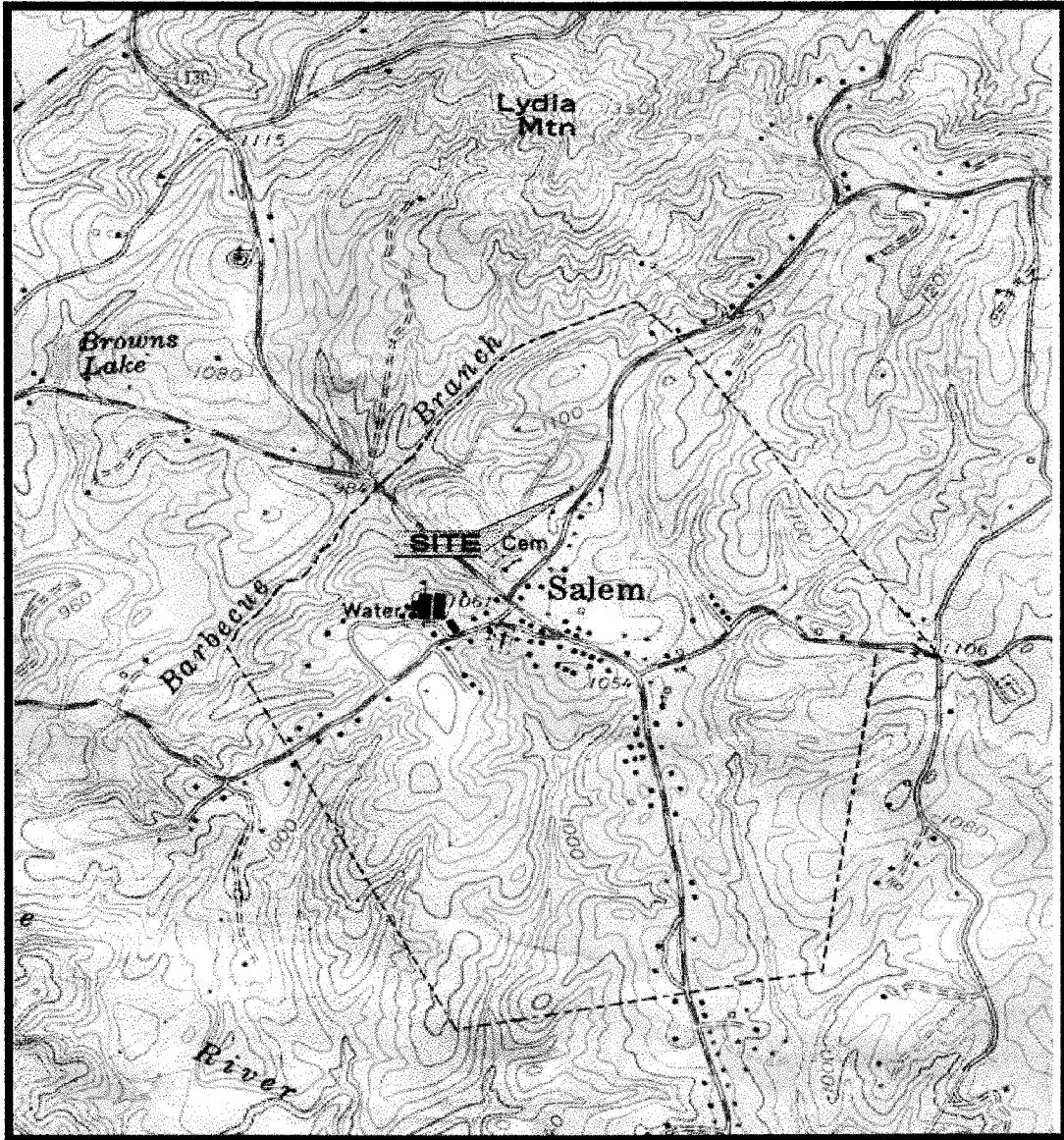
The groundwater flow direction at the time of the May 3, 2007 sampling event was towards the northeast with a hydraulic gradient of 0.034 feet per foot. Free product was present in monitoring wells MW-1 and MW-8. CoC were detected in four monitoring wells above their respective SSTLs. Benzene was detected in two surface water samples at a concentration above the RBSL. No CoC were detected in the water supply well sample above laboratory

detection limits. The percent concentration reduction was calculated at 91.85%.

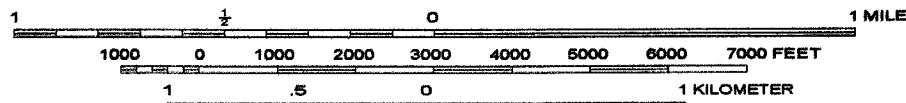
SEI Environmental, Inc recommends continuing the quarterly monitoring to evaluate the continued reduction of chemicals of concern in the monitoring wells on site. The next sampling event will occur in August 2007. In addition SEI recommends continuing AFVR events at monitoring wells MW-1 and MW-7 in conjunction with groundwater sample collection.

APPENDIX A

Figures



SCALE 1:24000



SALEM QUADRANGLE
 SOUTH CAROLINA-OCONEE CO.
 7.5 MINUTE SERIES (TOPOGRAPHIC-BATHYMETRIC)
 BY U.S. GEOLOGICAL SURVEY

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
 HIGHWAY 11 GROCER
 13527 Highway 11, Salem, SC
 FACILITY I.D. #03439

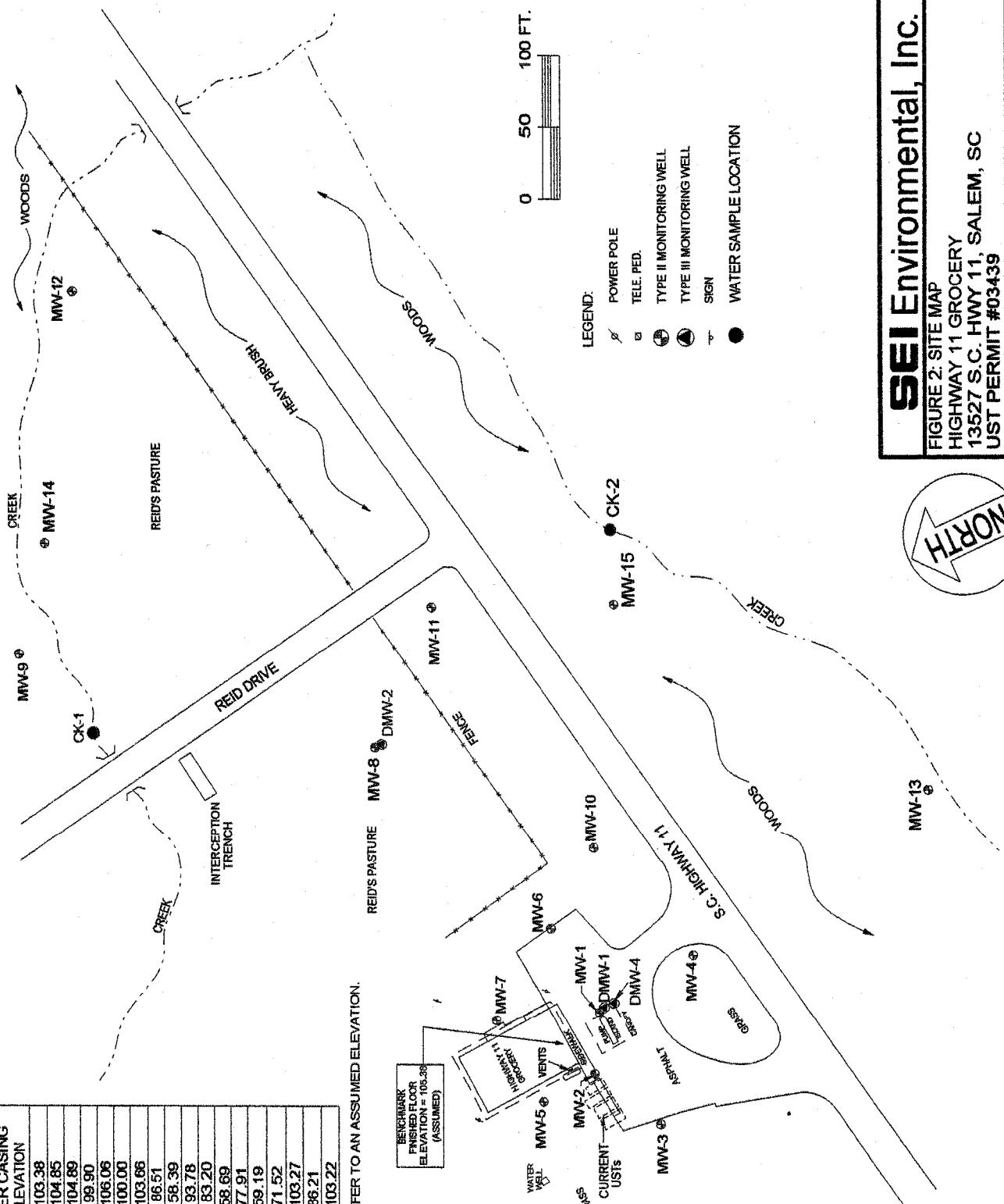
WO # 302169
 DWG # Hw 11_topo_sitemap

DATE: 9/16/05
 DRAWN BY: HWH

WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.89
MW-4	99.90
MW-5	106.06
MW-6	106.00
MW-7	103.66
MW-8	86.51
MW-9	58.39
MW-10	93.78
MW-11	83.20
MW-12	58.69
MW-13	77.91
MW-14	59.19
MW-15	71.52
DMW-1	103.27
DMW-2	88.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.

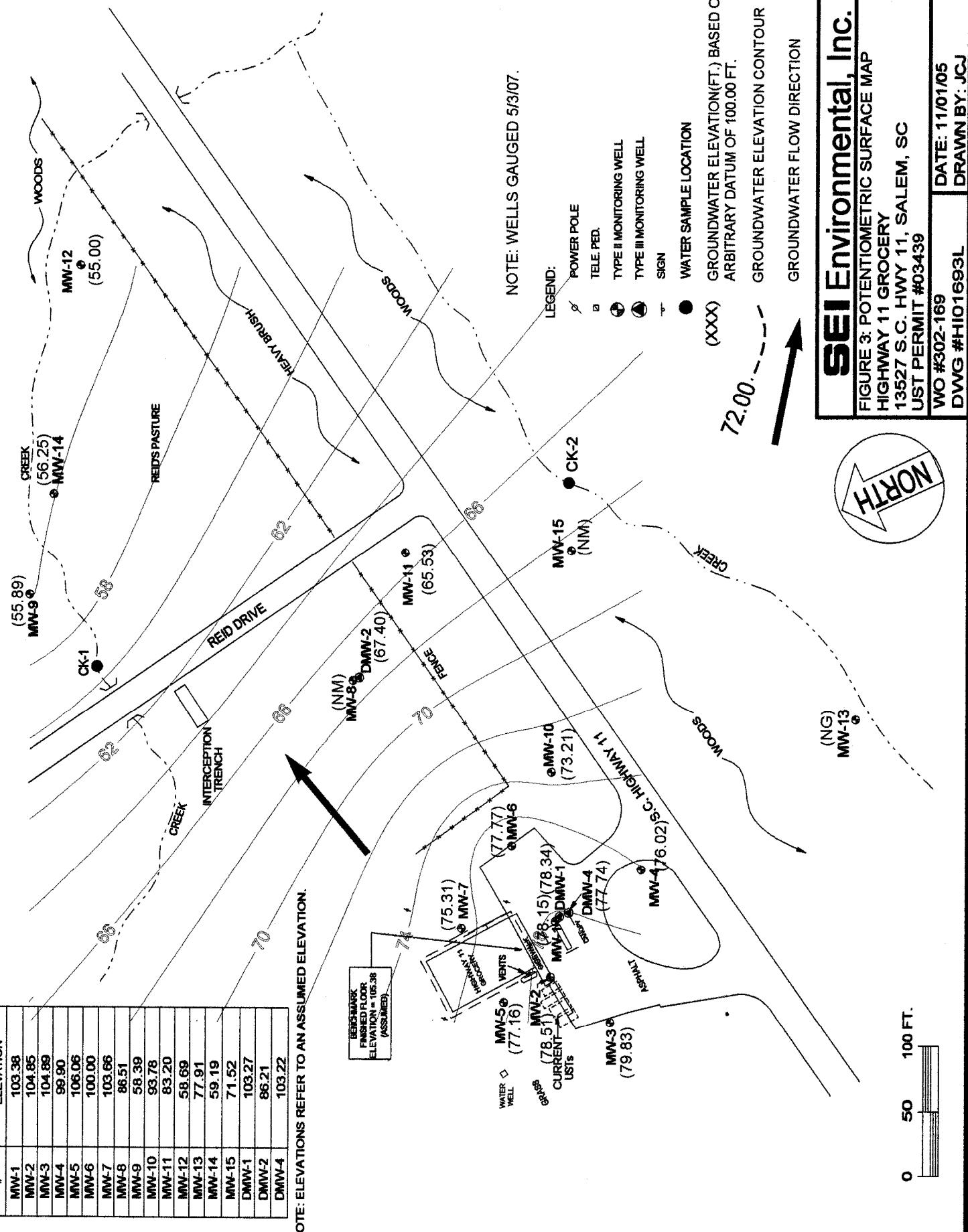
BENCHMARK
FINISHED FLOOR
ELEVATION = 105.38
(ASSUMED)



SEI Environmental, Inc.

FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

DATE: 3/17/05
DRAWN BY: JCJ
WO #302-043
DWG #H101692G



WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.89
MW-4	98.90
MW-5	106.06
MW-6	100.00
MW-7	103.66
MW-8	88.51
MW-9	59.39
MW-10	93.78
MW-11	83.20
MW-12	58.69
MW-13	77.91
MW-14	59.19
MW-15	71.52
DMW-1	103.27
DMW-2	86.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.

BENCH MARK
FINISHED FLOOR
ELEVATION = 105.38
(ASSUMED)

NOTE: WELLS GAUGED 5/3/07.

LEGEND:

- POWER POLE
- TELE. PED.
- TYPE I MONITORING WELL
- TYPE II MONITORING WELL
- SIGN

(XXX) GROUNDWATER ELEVATION(FT.) BASED ON
ARBITRARY DATUM OF 100.00 FT.

GROUNDWATER ELEVATION CONTOUR GROUNDWATER FLOW DIRECTION

SEI Environmental, Inc.

**FIGURE 3: POTENTIOMETRIC SURFACE MAP
HIGHWAY 11 GROCERY**

1352 / S.C. HWY 11, SALEM, SC
UST PERMIT #03439

WO #302-169
DWG #H101693L
DATE: 11/01/05
DRAWN BY: JCJ

SEI Environmental, Inc.

FIGURE 4: GROUNDWATER COC SITE MAP, 5/3/07

HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC

UST PERMIT #03439
WO #302169
DWG #H101694K

0 50 100 FT.



SAMPLING DATE: 5/3/07

UNITS ARE ug/l.
NS = NOT SAMPLED

BENZENE
TOLUENE
ETHYLBENZENE
XYLEMES
MTBE
NAPHTHALENE

POWER POLE

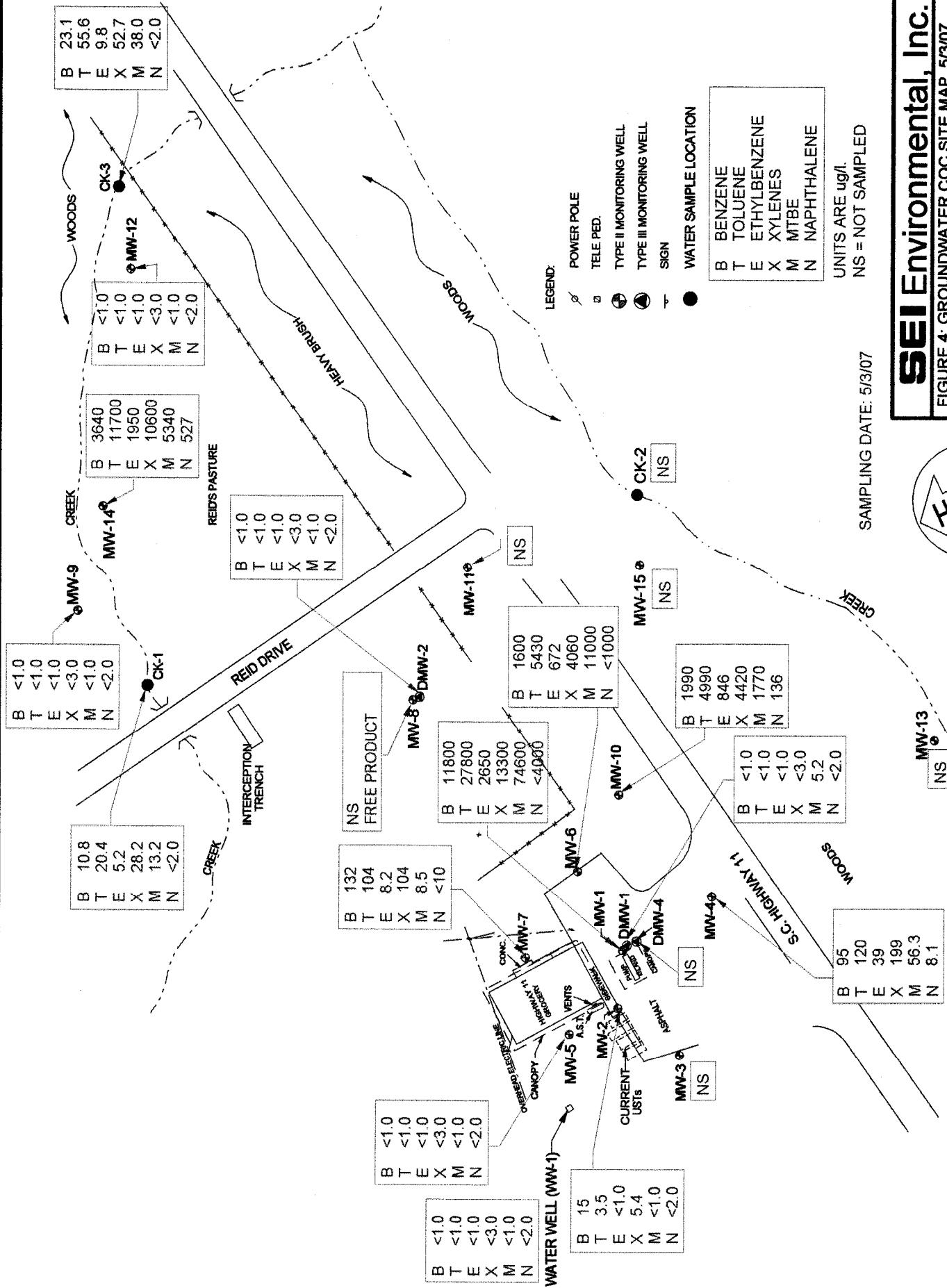
TELE. PED.

TYPE II MONITORING WELL

TYPE III MONITORING WELL

SIGN

WATER SAMPLE LOCATION



APPENDIX B
Tables

Table 1

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-1	05/08/02	24.67	24.71	0.04	103.38	78.74
	07/01/03	23.28	23.52	0.24		80.29
	07/30/03	22.89	22.97	0.08		80.55
	09/15/03	23.78	23.82	0.04		79.63
	10/02/03	24.32	24.45	0.13		79.16
	10/23/03	24.72	24.93	0.21		78.82
	12/18/03	24.06				79.32
	03/31/04	24.61				78.77
	09/29/04	24.20				79.18
	01/11/05	23.77				79.61
	03/17/05	23.97				79.41
	08/09/05	22.86				80.52
	11/01/05	25.20	25.13	0.07		78.23
	03/22/06	23.91				79.47
	08/28/06	27.17	26.64	0.53		76.62
	11/05/06	26.08	25.55	0.53		77.71
	02/07/07	24.30	24.14	0.16		79.20
	05/03/07	25.23				78.15
MW-2	05/08/02	26.08			104.85	78.77
	07/01/03	24.08				80.77
	07/30/03	23.78				81.07
	09/15/03	24.73				80.12
	10/02/03	25.56				79.29
	10/23/03	25.71				79.14
	12/18/03	25.38				79.47
	03/31/04	25.85				79.00
	09/29/04	25.55				79.30
	01/11/05	24.74				80.11
	03/17/05	25.10				79.75
	08/09/05	23.70				81.15
	11/01/05	26.29				78.56
	03/22/06	25.94				78.91
	08/28/06	28.33				76.52
	11/05/06	27.39				77.46
	02/07/07	25.47				79.38
	05/03/07	26.34				78.51
MW-3	05/08/02	24.78			104.86	80.08
	07/01/03	22.51				82.35
	07/30/03	22.21				82.65
	09/15/03	23.23				81.63
	10/02/03	23.87				80.99
	10/23/03	24.23				80.63
	12/18/03	23.93				80.93
	03/31/04	24.44				80.42
	09/29/04	24.20				80.66
	01/11/05	23.36				81.50
	03/17/05	23.65				81.21
	08/09/05	22.11				82.75
	11/01/05	24.85				80.01
	03/22/06	24.57				80.29
	08/28/06	26.95				77.91
	11/05/06	26.05				78.81
	02/07/07	24.15				80.71
	05/03/07	25.03				79.83
MW-4	05/08/02	23.38			99.90	76.62
	07/01/03	22.10				77.80
	07/30/03	22.09				77.81
	09/15/03	22.90				77.00
	10/02/03	23.32				76.58
	10/23/03	23.69				76.21
	12/18/03	22.95				76.95
	03/31/04	23.49				76.41
	09/29/04	23.14				76.76
	01/11/05	22.70				77.20
	03/17/05	22.84				77.06
	08/09/05	26.40				73.50
	11/01/05	27.27				72.63
	03/22/06	23.42				76.48
	08/28/06	25.39				74.51
	11/05/06	24.11				75.79
	02/07/07	22.96				76.94
	05/03/07	23.88				76.02

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-5	05/08/02	28.82			106.06	77.24
	07/01/03	26.82				79.24
	07/30/03	26.53				79.53
	09/15/03	27.40				78.66
	10/02/03	27.92				78.14
	10/23/03	28.40				77.66
	12/18/03	28.40				77.66
	03/31/04	28.56				77.50
	09/29/04	28.46				77.60
	01/11/05	27.41				78.65
	03/17/05	27.86				78.20
	08/09/05	20.02				86.04
	11/01/05	28.91				77.15
	03/22/06	28.59				77.47
	08/28/06	31.06				76.00
	11/05/06	30.40				75.66
	02/07/07	28.30				77.76
	05/03/07	28.90				77.16
MW-6	05/08/02	21.66			100.00	78.34
	07/01/03	19.77				80.23
	07/30/03	19.88				80.12
	09/15/03	20.63				79.37
	10/02/03	21.34				78.66
	10/23/03	21.74				78.26
	12/18/03	21.00				79.00
	03/31/04	21.71				78.29
	09/29/04	21.33				78.67
	01/11/05	20.81				79.19
	03/17/05	20.10				79.90
	08/09/05	26.18				73.82
	11/01/05	22.41				77.59
	03/22/06	21.77				78.23
	08/28/06	23.86				76.14
	11/05/06	22.71				77.29
	02/07/07	21.13				78.87
	05/03/07	22.23				77.77
MW-7	05/08/02	28.12			103.66	75.54
	07/01/03	26.55	-			77.11
	07/30/03	26.22				77.44
	09/15/03	26.83				76.83
	10/02/03	27.69				75.97
	10/23/03	28.10				75.66
	12/18/03	27.71				75.95
	03/31/04	28.00				75.66
	09/29/04	27.60				76.06
	01/11/05	26.88				76.78
	03/17/05	27.83				75.83
	08/09/05	20.27				83.39
	11/01/05	28.63				75.03
	03/22/06	N/L				N/L
	08/28/06	30.43				73.23
	11/05/06	29.56				74.10
	02/07/07	27.41				76.25
	05/03/07	28.35				75.31
MW-8	05/08/02	21.00			86.51	65.51
	07/01/03	20.96				65.55
	07/30/03	20.46				66.05
	09/15/03	21.17				65.34
	10/02/03	20.44				66.07
	10/23/03	21.54				64.97
	12/18/03	20.82				65.69
	03/31/04	21.35				65.16
	09/29/04	21.10				65.41
	01/11/05	21.04				65.47
	03/17/05	20.95				65.66
	08/09/05	22.16				64.35
	11/01/05	23.31				63.20
	03/22/06	22.00	21.23	0.77		65.11
	08/28/06	24.46	22.05	2.41		63.93
	11/05/06	NM				
	02/07/07	NM				
	05/03/07	NM				

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-9	05/08/02	2.47			58.39	55.92
	07/01/03	2.30				56.09
	07/30/03	2.26				56.13
	09/15/03	2.42				55.97
	10/02/03	2.16				56.23
	10/23/03	2.42				55.97
	12/18/03	2.20				56.19
	03/31/04	2.56				55.83
	09/29/04	1.90				56.49
	01/11/05	2.23				56.16
	03/17/05	2.11				56.28
	08/09/05	2.04				56.35
	11/01/05	2.33				56.06
	03/22/06	2.23				56.16
	08/28/06	2.50				55.89
	11/05/06	2.38				56.01
	02/07/07	2.36				56.03
	05/03/07	2.50				55.89
MW-10	05/08/02	20.04			93.78	73.74
	07/01/03	16.20				77.58
	07/30/03	18.95				74.83
	09/15/03	16.53				77.26
	10/02/03	20.19				73.59
	10/23/03	20.51				73.27
	12/18/03	19.83				73.95
	03/31/04	18.85				74.93
	09/29/04	20.02				73.76
	01/11/05	19.47				74.31
	03/17/05	18.84				74.94
	08/09/05	18.94				74.84
	11/01/05	21.07				72.71
	03/22/06	20.16				73.62
	08/28/06	22.16				71.62
	11/05/06	20.94				72.84
	02/07/07	19.65				74.13
	05/03/07	20.57				73.21
MW-11	05/08/02	16.22			83.20	66.98
	07/01/03	16.53				66.67
	07/30/03	16.70				66.50
	09/15/03	17.35				65.85
	10/02/03	16.40				66.80
	10/23/03	17.83				65.37
	12/18/03	17.58				65.62
	03/31/04	16.21				66.99
	09/29/04	15.92				67.28
	01/11/05	15.93				67.27
	03/17/05	16.86				66.34
	08/09/05	15.80				67.40
	11/01/05	18.22				64.98
	03/22/06	17.28				65.92
	08/28/06	19.09				64.11
	11/05/06	17.79				65.41
	02/07/07	16.44				66.76
	05/03/07	17.67				65.53
MW-12	05/08/02	2.80			58.69	55.89
	07/01/03	3.16				55.53
	07/30/03	2.55				56.14
	09/15/03	3.26				55.43
	10/02/03	2.60				56.09
	10/23/03	3.50				55.19
	12/18/03	2.97				55.72
	03/31/04	3.19				55.50
	09/29/04	3.02				55.67
	01/11/05	3.10				55.59
	03/17/05	3.12				55.57
	08/09/05	2.72				55.97
	11/01/05	3.63				55.06
	03/22/06	3.23				55.46
	08/28/06	3.84				54.85
	11/05/06	3.48				55.21
	02/07/07	3.15				55.54
	05/03/07	3.69				55.00

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-13	05/08/02	6.29			77.72	71.43
	07/01/03	6.44				71.28
	07/30/03	N/L				N/L
	09/15/03	6.36				71.36
	10/02/03	6.24				71.48
	10/23/03	6.78				70.94
	12/18/03	7.51				70.21
	03/31/04	6.62				71.10
	09/29/04	6.28				71.44
	01/11/05	6.44				71.28
	03/17/05	6.52				71.20
	08/09/05	10.52				67.20
	11/01/05	N/L				N/L
	03/22/06	N/L				N/L
	08/28/06	N/L				N/L
	02/07/07	N/L				N/L
	05/03/07	N/L				N/L
MW-14	05/08/02	2.00			59.19	57.19
	07/01/03	2.28				56.91
	07/30/03	2.03				57.16
	09/15/03	2.42				56.77
	10/02/03	1.98				57.21
	10/23/03	2.67				56.52
	12/18/03	1.58				57.61
	03/31/04	2.03				57.16
	09/29/04	1.77				57.42
	01/11/05	1.92				57.27
	03/17/05	2.14				57.05
	08/09/05	1.75				57.44
	11/01/05	N/L				N/L
	03/22/06	N/L				N/L
	08/28/06	3.36				55.83
	11/05/06	N/L				N/L
	02/07/07	N/L				N/L
	05/03/07	2.94				56.25
MW-15	05/08/02	10.82			71.52	60.70
	07/01/03	10.76				60.76
	07/30/03	10.11				61.41
	09/15/03	11.00				60.52
	10/02/03	10.20				61.32
	10/23/03	11.07				60.45
	12/18/03	11.88				59.64
	03/31/04	11.02				60.50
	09/29/04	10.67				60.85
	01/11/05	10.83				60.69
	03/17/05	10.61				60.91
	08/09/05	10.68				60.84
	11/01/05	11.32				60.20
	03/22/06	NG				NG
	08/28/06	11.62				59.90
	11/05/06	NM				NM
	02/07/07	NM				NM
	05/03/07	NM				NM

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
DMW-1	05/08/02	23.88			103.27	79.39
	07/01/03	23.61				79.66
	07/30/03	24.24				79.03
	09/15/03	24.60				78.67
	10/02/03	24.00				79.27
	10/23/03	24.50				78.77
	12/18/03	24.11				79.16
	03/31/04	23.61				79.66
	09/29/04	22.72				80.55
	01/11/05	22.97				80.30
	03/17/05	24.68				78.59
	08/09/05	22.66				80.61
	11/01/05	25.11				78.16
	03/22/06	24.71				78.56
	08/28/06	26.95				76.32
	11/05/06	25.85				77.42
	02/07/07	24.59				78.68
	05/03/07	24.93				78.34
DMW-2	05/08/02	17.83			86.21	68.38
	07/01/03	16.67				69.54
	07/30/03	17.20				69.01
	09/15/03	17.31				68.90
	10/02/03	16.80				69.41
	10/23/03	17.63				68.58
	12/18/03	17.11				69.10
	03/31/04	15.75				70.46
	09/29/04	16.49				69.72
	01/11/05	16.44				69.77
	03/17/05	17.22				68.99
	08/09/05	16.71				69.50
	11/01/05	18.08				68.13
	03/22/06	17.40				68.81
	08/28/06	18.72				67.49
	11/05/06	18.00				68.21
	11/05/06	18.93				67.28
	05/03/07	18.81				67.40
DMW-4	05/08/02	24.30			103.22	78.92
	07/01/03	23.93				79.29
	07/30/03	24.75				78.47
	09/15/03	24.95				78.27
	10/02/03	24.45				78.77
	10/23/03	24.95				78.27
	12/18/03	24.39				78.83
	03/31/04	23.88				79.34
	09/29/04	23.18				80.04
	01/11/05	23.32				79.90
	03/17/05	25.08				78.14
	08/09/05	22.96				80.26
	11/01/05	26.51				76.71
	03/22/06	25.00				78.22
	08/28/06	27.33				75.89
	11/05/06	26.39				76.83
	02/07/07	24.59				78.63
	05/03/07	25.48				77.74

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethybenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-1	05/07/02	226,000	301,000	280,000	278,000	5,110,000	2,000			6,197,000.00
	07/01/03	10,000	34,000	4,400	23,000	34,000	1,200			106,600.00
	07/30/03	7,600	28,000	6,300	32,000	25,000.0	2,500			101,400.00
	12/18/03	2,200	6,200	910	5,800	16,000	2,500			33,610.00
	03/31/04	3,400	9,300	1,100	6,200	20,000	1,200			41,200.00
	09/29/04	3,200	7,300	<1,000	4,500	12,000	<5,000			27,000.00
	03/17/05	6,800	9,550	1,570	7,610	19,300	325			43,955.00
	08/09/05	16,900	42,600	3,520	19,000	115,000	705			197,725.00
	11/01/05	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	03/22/06	20,700	41,100	3,100	11,700	103,000	<4,000			179,600.00
	08/28/06	44,390	26,540	3,700	21,680	173,000	637,000	0.53		906,310.00
	08/28/06	44,390	26,540	3,700	21,680	173,000	637,000	0.53		906,310.00
	02/07/07	44,390	26,540	3,700	21,680	173,000	637,000	0.16		906,310.00
	05/03/07	11,800	27,800	2,650	13,300	74,600	<4000			130,150.00
	SSTL	22	4,497	3,148	44,989	180	112			
	> SSTL	11,778	23,303	0	0	74,420	0			
MW-2	05/07/02	13	8.0	1.0	5.0	5.0	5.0			37.00
	07/01/03	4.7	5.0	1.0	3.0	1.0	5.0			19.70
	07/30/03	5.8	5.0	1.0	5.3	1.0	5.0			23.10
	12/18/03	2.2	5.0	1.0	3.0	1.0	5.0			17.20
	03/31/04	2.6	6.0	1.0	3.0	1.0	5.0			17.60
	09/29/04	14	<25	<5.0	<15	<5.0	<25			14.00
	03/17/05	13	5	<1.0	5	<1.0	<2.0			22.40
	08/09/05	39.7	14.5	1.2	27.5	<1.0	<2.0			82.90
	11/01/05	3.8	1.6	<1.0	<3.0	<1.0	<2.0			5.40
	03/22/06	11.8	4.2	<1.0	3.4	<1.0	<2.0			19.40
	08/28/06	32.0	3.1	<1.0	4.5	<1.0	<2.0			39.60
	08/28/06	8.2	<1.0	<1.0	<3	<1.0	<2.0			8.20
	02/07/07	6.9	2.1	<1.0	3.4	<1.0	<2.0			12.40
	05/03/07	15.0	3.5	<1.0	5.4	<1.0	<2.0			23.90
	SSTL	13	8.0	1.0	5.0	5.0	5.0			
	> SSTL	2.0	0.0	0.0	0.4	0.0	0.0			
MW-3	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	1.4	<1.0	<3.0	<1.0	<2.0			1.40
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.4	0.0	0.0	0.0	0.0			
MW-4	05/07/02	1,500	5,320	620	3,360	810	500			12,110.00
	07/01/03	4,800	14,000	2,300	12,000	12,000	2,600			47,700.00
	07/30/03	4,000	14,000	2,700	13,000	2,100	500			36,300.00
	12/18/03	1,100	2,400	230	1,900	1,200	250			7,080.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	53	<25	7.1	70	210	<25			340.10
	03/17/05	<1.0	<1.0	<1.0	<3.0	17	<2.0			16.80
	08/09/05	<1.0	<1.0	<1.0	<3.0	5.9	<2.0			5.90
	11/01/05	3,720	3,660	745	4,170	4,540	<200			16,835.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	1.2	<2.0			1.20
	08/28/06	43	7	4	88	153.0	3.6			298.70
	11/05/06	195	24	19	164	225.0	11.6			638.90
	02/07/07	25	59	13	67	47.1	<2.0			
	05/03/07	95	120	39	199	56.3	8.1			517.30
	SSTL	1,500	5,320	620	3,360	810	500.0			
	> SSTL	0	0.0	0	0	0	0.0			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-5	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	4.2	17.0	3.6	18.0	2.2	<5.0			45.00
	12/18/03	2.3	<5.0	<1.0	3.2	1.3	<5.0			6.80
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
MW-6	05/07/02	1,780	4,950	490	2,880	6,350	500.0			16,950.00
	07/01/03	2,200	6,600	820	4,400	12,000	2,500			28,520.00
	07/30/03	4,200	13,000	1,600	8,900	21,000	400			49,100.00
	12/18/03	5,100	14,000	1,700	11,000	19,000	2,500			53,300.00
	03/31/04	280	840	100	2,200	900	250			4,570.00
	09/29/04	2,400	<5,000	<1,000	<3,000	17,000	<5,000			19,400.00
	03/17/05	3,490	7,500	982	5,380	15,500	262			33,084.00
	08/09/05	1,370	4,630	295	2,220	7,640	<400			16,155.00
	11/01/05	979	2,220	282	1,810	8,410	<200			14,701.00
	03/22/06	1,280	3,480	399	2,880	8,600	<200			16,639.00
	08/28/06	99	76	<2.0	243	22	<4.0			439.60
	11/05/06	34.0	60.9	<2.0	194	355	<20			643.90
	02/07/07	4,970.0	18,100.0	2,070	12,000	30,500	<500			67,640.00
	05/03/07	1,600.0	5,430.0	672	4,060	11,000	<1000			22,762.00
	SSTL	1,780	4,950	490	2,880	6,350	500.0			
	> SSTL	0.0	480.0	182.0	1,180.0	4,650.0	0.0			
MW-7	05/07/02	34	20	<1.0	8.0	7.0	<5.0			69.00
	07/01/03	37	36	1.7	20	9.2	<5.0			103.90
	07/30/03	18	18	<1.0	10	<1.0	<5.0			45.70
	12/18/03	41	20	<1.0	<3.0	<1.0	<5.0			61.00
	03/31/04	30	34	<1.0	16	<1.0	<5.0			80.00
	09/29/04	370	500	<100	<300	<100	<500			870.00
	03/17/05	505	590	34	280	65	<2.0			1,473.40
	08/09/05	52	56	2.6	34	9.2	<2.0			154.00
	11/01/05	27	42	3.7	24	<1.0	<2.0			96.10
	03/22/06	Not Sampled								
	08/28/06	99	95	3.6	127	7	<2.0			331.90
	11/05/06	50	44.5	<1.0	23.5	1.9	<2.0			119.90
	02/07/07	182	261.0	12.8	202.0	18.7	<2.0			676.50
	05/03/07	132	104.0	8.2	104.0	8.5	<10.0			356.70
	SSTL	22	20	1.0	8.0	7.0	5.0			
	> SSTL	110.0	84.0	7.2	96.0	1.5	0.0			
MW-8	05/07/02	226,000	301,000	280,000	278,000	5,110,000	2,000			6,197,000.00
	07/01/03	12,000	51,000	7,800	40,000	11,000	2,500			124,300.00
	07/30/03	12,000	40,000	3,600	18,000	15,000	660			89,260.00
	12/18/03	10,000	27,000	3,300	18,000	14,000	2,500			74,800.00
	03/31/04	17,000	140,000	32,000	180,000	8,600	<25,000			377,600.00
	09/29/04	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	03/17/05	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	08/09/05	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	11/01/05	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	03/22/06	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	08/28/06	44,390	26,540	3,700	21,680	173,000	637,000	2.41		906,310.00
	11/05/06	44,390	26,540	3,700	21,680	173,000	637,000	NM		906,310.00
	02/07/07	44,390	26,540	3,700	21,680	173,000	637,000	0.89		906,310.00
	05/03/07	44,390	26,540	3,700	21,680	173,000	637,000	NM		906,310.00
	SSTL	204	40,888	28,622	278,000	1,362	1,021			
	> SSTL	44,186.0	0.0	0.0	0.0	171,638.0	635,979.0			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-9	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	1.2	8.8	<1.0	<5.0			10.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	1.5	<1.0	<3.0	<1.0	<2.0			1.50
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	RBSL	5.0	1,000	700	10,000	40	25			
MW-10	05/07/02	116	185	68.0	328	86	9.0			791.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	170	420	43	240	540	6.5			1,419.50
	12/18/03	89	280	74	480	91	25.0			1,039.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	1.7	4.4	<1.0	<3.0	18	<2.0			24.00
	11/01/05	10,000	23,500	1,410	7,510	21,600	<1,000			64,020.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	79	98	16	69	169	<2.0			430.90
	11/05/06	203	412	67	226	137	4.7			1,049.90
	02/07/07	376	1,080	454	2,440	507	82.8			4,939.80
	05/03/07	1,980	4,890	846	4,420	1,770	136.0			14,152.00
	SSTL	116	185	68	328	86	9.0			
	> SSTL	1,875.0	4,805.0	778.0	4,092.0	1,684.0	127.0			
MW-11	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	42.2	<1.0	<1.0	93.6	4.5	3.8			144.10
	03/22/06	<1.0	<1.0	<1.0	<3.0	1.9	<2.0			1.90
	08/28/06	6.4	<1	<1	82.6	4.4	2.5			95.90
	11/05/06	2.8	<1	<1	8.9	4.7	<2.0			16.40
	02/07/07	<1	<1	<1	8.9	1.1	<2.0			10.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
MW-12	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	1.5	24.8	10.1	58.6	<1.0	11.3			106.30
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	RBSL	6.0	1,000	700	10,000	40	25			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-13	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	NS	NS	NS	NS	NS	NS			0.00
	03/22/06	NS	NS	NS	NS	NS	NS			0.00
	08/28/06	NS	NS	NS	NS	NS	NS			0.00
	11/05/06	NS	NS	NS	NS	NS	NS			0.00
	02/07/07	NS	NS	NS	NS	NS	NS			0.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	RBSL	5.0	1,000	700	10,000	40	25			
MW-14	05/07/02	6,780	13,800	27,000	14,700	7,010	500			66,790.00
	07/01/03	3,500	10,000	1,900	10,000	5,300	500			31,200.00
	07/30/03	3,100	9,700	1,800	9,300	4,300	500			28,700.00
	12/18/03	3,300	11,000	2,000	11,000	4,100	500			31,900.00
	03/31/04	5,500	17,000	2,800	13,000	7,100	570			45,770.00
	09/29/04	3,200	12,000	1,600	9,100	3,200	<5,000			29,100.00
	03/17/05	5,140	13,000	1,710	10,900	4,970	339			36,059.00
	08/09/05	3,290	10,600	1,820	11,000	4,950	<400			31,660.00
	11/01/05	NL	NL	NL	NL	NL	NL			0.00
	03/22/06	NL	NL	NL	NL	NL	NL			0.00
	08/28/06	2,010.0	4,080.0	1,160.0	6,320.0	3,320.0	261.0			17,151.00
	11/05/06	NL	NL	NL	NL	NL	NL			0.00
	02/07/07	NL	NL	NL	NL	NL	NL			0.00
	05/03/07	3,640.0	11,700.0	1,850.0	10,600.0	5,340.0	527.0			33,757.00
	SSTL	5.0	1,000	700	10,000	40	25			11,770.00
	> SSTL	0	0	0	0	0	0			
MW-15	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	NS	NS	NS	NS	NS	NS			0.00
	03/22/06	NS	NS	NS	NS	NS	NS			0.00
	08/28/06	NS	NS	NS	NS	NS	NS			0.00
	11/05/06	NS	NS	NS	NS	NS	NS			0.00
	02/07/07	NS	NS	NS	NS	NS	NS			0.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	RBSL	5.0	1,000	700	10,000	40	25			
DMW-1	05/07/02	215	430	50	50	1,780	250			2,775.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	<1.0	<5.0	<1.0	<3.0	4.2	<5.0			4.20
	12/18/03	1.5	<5.0	<1.0	<3.0	<1.0	<5.0			1.50
	03/31/04	<1.0	<15.0	<1.0	<3.0	3.9	<5.0			3.90
	09/29/04	8.4	<25	<5.0	<15	130	<25			138.40
	03/17/05	<1.0	1.2	<1.0	<3.0	8.1	<2.0			9.30
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<5.0	<5.0	<5.0	<15	<5.0	<10			0.00
	03/22/06	3.0	35.1	16	92.2	21.9	13.1			181.30
	08/28/06	<1.0	<1.0	<1.0	<3.0	20.3	<2.0			20.30
	11/05/06	<1.0	<1.0	<1.0	<3.0	90.8	<2.0			90.80
	02/07/07	9.2	2.5	<1.0	9.7	164.0	<4.0			185.40
	05/03/07	<1.0	<1.0	<1.0	<3.0	5.2	<2.0			5.20
	SSTL	215	430	50	50	1,780	250			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
DMW-2	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	6.4	<5.0			6.40
	07/30/03	<1.0	8.4	6.8	30.0	<1.0	6.7			51.90
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
DMW-4	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	NS	NS	NS	NS	NS	NS			0.00
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
CK-1	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	2.6	<5.0	<1.0	4.8	4.5	<5.0			11.90
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	11	18	4.1	20.0	9.0	<5.0			62.10
	09/29/04	16	30	6.1	32.0	22.0	<5.0			106.10
	03/17/05	10.4	17.5	4.1	20.8	12.3	<2.0			65.10
	08/09/05	7.6	17.6	2.9	15.8	6.9	<2.0			50.80
	11/01/05	20.3	38.2	8.8	48.8	27.3	<2.0			143.40
	03/22/06	6.6	12.9	3.2	15.2	7.8	<2.0			45.70
	08/28/06	13.1	29.0	6.7	27.8	16.7	<2.0			93.30
	11/05/06	13.9	22.3	6.7	34.3	17.8	<2.0			95.00
	02/07/07	7.9	16.4	4.0	21.1	9.8	<2.0			59.20
	05/03/07	10.8	20.4	5.2	28.2	13.2	<2.0			77.80
	RBSL	5.0	1,000	700	10,000	40	25			
CK-2	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	NS	NS	NS	NS	NS	NS			0.00
	03/22/06	NS	NS	NS	NS	NS	NS			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	NS	NS	NS	NS	NS	NS			0.00
	02/07/07	NS	NS	NS	NS	NS	NS			0.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	RBSL	5.0	1,000	700	10,000	40	25			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
CK-3	08/09/05	14.4	< 33.3	7.1	41.1	25.8	<2.0			121.70
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	23.3	49.7	10.1	48.2	33.8	<2.0			165.10
	11/05/06	26.2	49.1	11.4	63.8	49.3	<2.0			198.80
	02/07/07	21.7	57.5	10.3	57.9	30.8	<2.0			178.20
	05/03/07	23.1	55.6	9.8	52.7	38.0	<2.0			179.20
	RBSL	5.0	1,000	700	10,000	40	25			
WW-1	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	RBSL	5.0	1,000	700	10,000	40	25			
TOTAL MASS										1,107,677
TOTAL SSTL MASS	3,881	57,303	33,705	339,605	10,645	2,452				447,591
INITIAL MASS ABOVE SSTL										12,046,007
CURRENT MASS ABOVE SSTL										981,459
PERCENT TOTAL MASS REDUCTION ABOVE SSTL										91.85

Reported in parts per billion ($\mu\text{g/l}$)

ND: Compound not detected

BDL: Below analytical Detection Limits

SSTL: Site Specific Treatment Level

APPENDIX C
Field Data Information Sheets for Groundwater Sampling

SEI Environmental

SC Monitoring Well Gauging Data Sheet

Site Name: Highway 11 Grocery

WO# 302169

Date 5-3-0

Gauge MW-3, run 11
8 DHW-4 Donut
Sample

Well ID	Total Depth (feet)	Well Dia. (in.)	Depth to Product (feet)	Product Thickness (feet)	Depth to Water (feet)	Notes
MW-1	30	2			25.23	
MW-2	35	2			26.34	
MW-3	35	2			25.03	Semi-annual
MW-4	35	2			23.88	
MW-5	35	2			28.90	
MW-6	35	2			22.23	
MW-7	40	2			28.35	
MW-9	11	2			2.50	
MW-10	24	2			20.57	
MW-11	23	2			17.67	Semi-annual
MW-12	11	2			3.69	
MW-14	9	2			2.94	
DW-1	45	2			24.93	
DW-2	75	2	20.20		18.81	
DMW-4	61	2	20.20		25.48	Semi-annual

Water Supply Well Sample: WW-1

Surface Water Samples: CK-1 & CK-3

Analysis: EPA Method 8260B for BTEX, MTBE, and Naphthalene

2-inch diameter well: Well Volume = (water column) x (0.163 gallon/foot)

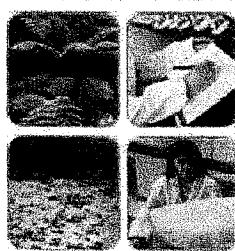
4-inch diameter well: Well Volume = (water column) x (0.652 gallon/foot)

Purge amount = Well Volume x 3

APPENDIX D
Laboratory Analytical Results and Chain-of-Custody



05/22/07



Technical Report for

SEI-Columbia, SC

Hwy 11 Grocery; Salem, SC

302169

Accutest Job Number: F49324

Sampling Date: 05/03/07

Report to:

SEI Environmental-Raleigh

cboggs@sei-environmental.com

ATTN: Chris Boggs

Total number of pages in report: 24



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director



Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (368), LA (03051), KS (E-10327), SC, AK
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Sample Summary

SEI-Columbia, SC

Job No: F49324

Hwy 11 Grocery; Salem, SC
Project No: 302169

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID	
F49324-1	05/03/07	11:10 RR	05/05/07	AQ	Ground Water	MW-1
F49324-2	05/03/07	11:15 RR	05/05/07	AQ	Ground Water	DMW-1
F49324-3	05/03/07	11:21 RR	05/05/07	AQ	Ground Water	MW-6
F49324-4	05/03/07	11:30 RR	05/05/07	AQ	Ground Water	MW-7
F49324-5	05/03/07	11:37 RR	05/05/07	AQ	Ground Water	MW-10
F49324-6	05/03/07	11:43 RR	05/05/07	AQ	Ground Water	MW-2
F49324-7	05/03/07	11:52 RR	05/05/07	AQ	Ground Water	MW-5
F49324-8	05/03/07	12:00 RR	05/05/07	AQ	Ground Water	MW-4
F49324-9	05/03/07	12:00 RR	05/05/07	AQ	Ground Water	WW-1
F49324-10	05/03/07	12:15 RR	05/05/07	AQ	Ground Water	DMW-2
F49324-11	05/03/07	12:30 RR	05/05/07	AQ	Ground Water	MW-9
F49324-12	05/03/07	12:36 RR	05/05/07	AQ	Ground Water	MW-14
F49324-13	05/03/07	12:40 RR	05/05/07	AQ	Ground Water	MW-12

Sample Summary
(continued)

SEI-Columbia, SC

Job No: F49324

Hwy 11 Grocery; Salem, SC
Project No: 302169

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID
F49324-14	05/03/07	12:32 RR	05/05/07	AQ	Ground Water CK-1
F49324-15	05/03/07	12:45 RR	05/05/07	AQ	Ground Water CK-3



Sample Results

Report of Analysis

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Report of Analysis

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Client Sample ID:	MW-1	Date Sampled:	05/03/07
Lab Sample ID:	F49324-1	Date Received:	05/05/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		
Run #1	File ID B045986.D	DF 2000	Analyzed 05/17/07
Run #2			By KW
	Purge Volume		
Run #1	5.0 ml		
Run #2			

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	11800	2000	ug/l	
108-88-3	Toluene	27800	2000	ug/l	
100-41-4	Ethylbenzene	2650	2000	ug/l	
1330-20-7	Xylene (total)	13300	6000	ug/l	
1634-04-4	Methyl Tert Butyl Ether	74600	2000	ug/l	
91-20-3	Naphthalene	ND	4000	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		87-116%
17060-07-0	1,2-Dichloroethane-D4	93%		76-127%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	109%		84-120%

ND = Not detected

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-2	Date Sampled:	05/03/07
Lab Sample ID:	F49324-6	Date Received:	05/05/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B045991.D	1	05/17/07	KW	n/a	n/a	VB1940
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	15.0	1.0	ug/l	
108-88-3	Toluene	3.5	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	5.4	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		87-116%
17060-07-0	1,2-Dichloroethane-D4	102%		76-127%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	105%		84-120%

ND = Not detected

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: MW-4
 Lab Sample ID: F49324-8
 Matrix: AQ - Ground Water
 Method: SW846 8260B
 Project: Hwy 11 Grocery; Salem, SC

Date Sampled: 05/03/07
 Date Received: 05/05/07
 Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B045993.D	1	05/17/07	KW	n/a	n/a	VB1940
Run #2 ^a	B046014.D	2	05/18/07	KW	n/a	n/a	VB1942

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	95.3	1.0	ug/l	
108-88-3	Toluene	120 ^b	2.0	ug/l	
100-41-4	Ethylbenzene	38.6	1.0	ug/l	
1330-20-7	Xylene (total)	199	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	56.3	1.0	ug/l	
91-20-3	Naphthalene	8.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	102%	87-116%
17060-07-0	1,2-Dichloroethane-D4	102%	100%	76-127%
2037-26-5	Toluene-D8	96%	99%	86-112%
460-00-4	4-Bromofluorobenzene	95%	96%	84-120%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.

(b) Result is from Run# 2

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-5	Date Sampled:	05/03/07
Lab Sample ID:	F49324-7	Date Received:	05/05/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B045992.D	1	05/17/07	KW	n/a	n/a	VB1940
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		87-116%
17060-07-0	1,2-Dichloroethane-D4	101%		76-127%
2037-26-5	Toluene-D8	103%		86-112%
460-00-4	4-Bromofluorobenzene	100%		84-120%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-6	Date Sampled:	05/03/07
Lab Sample ID:	F49324-3	Date Received:	05/05/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		
Run #1	File ID B045988.D	DF 500	Analyzed 05/17/07
Run #2			By KW
			Prep Date n/a
			Prep Batch n/a
			Analytical Batch VB1940
	Purge Volume		
Run #1	5.0 ml		
Run #2			

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	1600	500	ug/l	
108-88-3	Toluene	5430	500	ug/l	
100-41-4	Ethylbenzene	672	500	ug/l	
1330-20-7	Xylene (total)	4060	1500	ug/l	
1634-04-4	Methyl Tert Butyl Ether	11000	500	ug/l	
91-20-3	Naphthalene	ND	1000	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		87-116%
17060-07-0	1,2-Dichloroethane-D4	89%		76-127%
2037-26-5	Toluene-D8	106%		86-112%
460-00-4	4-Bromofluorobenzene	110%		84-120%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-7	Date Sampled:	05/03/07
Lab Sample ID:	F49324-4	Date Received:	05/05/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B045989.D	5	05/17/07	KW	n/a	n/a	VB1940
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	132	5.0	ug/l	
108-88-3	Toluene	104	5.0	ug/l	
100-41-4	Ethylbenzene	8.2	5.0	ug/l	
1330-20-7	Xylene (total)	104	15	ug/l	
1634-04-4	Methyl Tert Butyl Ether	8.5	5.0	ug/l	
91-20-3	Naphthalene	ND	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		87-116%
17060-07-0	1,2-Dichloroethane-D4	102%		76-127%
2037-26-5	Toluene-D8	103%		86-112%
460-00-4	4-Bromofluorobenzene	107%		84-120%

ND = Not detected

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest LabLink@63716 16:03 22-May-2007

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-9	Date Sampled:	05/03/07
Lab Sample ID:	F49324-11	Date Received:	05/05/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B045999.D	1	05/17/07	KW	n/a	n/a	VB1940
Run #2							

Purge Volume	
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		87-116%
17060-07-0	1,2-Dichloroethane-D4	101%		76-127%
2037-26-5	Toluene-D8	101%		86-112%
460-00-4	4-Bromofluorobenzene	99%		84-120%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-10	Date Sampled:	05/03/07
Lab Sample ID:	F49324-5	Date Received:	05/05/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B045990.D	20	05/17/07	KW	n/a	n/a	VB1940
Run #2 ^a	B046013.D	100	05/18/07	KW	n/a	n/a	VB1942

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	1990	20	ug/l	
108-88-3	Toluene	4990 ^b	100	ug/l	
100-41-4	Ethylbenzene	846	20	ug/l	
1330-20-7	Xylene (total)	4420	60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1770	20	ug/l	
91-20-3	Naphthalene	136	40	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	103%	87-116%
17060-07-0	1,2-Dichloroethane-D4	101%	101%	76-127%
2037-26-5	Toluene-D8	100%	100%	86-112%
460-00-4	4-Bromofluorobenzene	101%	102%	84-120%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.

(b) Result is from Run# 2

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-12	Date Sampled:	05/03/07
Lab Sample ID:	F49324-13	Date Received:	05/05/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		
Run #1	File ID B046001.D	DF 1	Analyzed 05/17/07
Run #2 ^a	B046016.D	1	05/18/07
Purge Volume			
Run #1	5.0 ml		
Run #2	5.0 ml		

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND ^b	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	102%	87-116%
17060-07-0	1,2-Dichloroethane-D4	104%	100%	76-127%
2037-26-5	Toluene-D8	102%	101%	86-112%
460-00-4	4-Bromofluorobenzene	103%	99%	84-120%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.

(b) Result is from Run# 2

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-14	Date Sampled:	05/03/07
Lab Sample ID:	F49324-12	Date Received:	05/05/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B046000.D	20	05/17/07	KW	n/a	n/a	VB1940
Run #2 ^a	B046015.D	200	05/18/07	KW	n/a	n/a	VB1942

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	3640 ^b	200	ug/l	
108-88-3	Toluene	11700 ^b	200	ug/l	
100-41-4	Ethylbenzene	1950	20	ug/l	
1330-20-7	Xylene (total)	10600 ^b	600	ug/l	
1634-04-4	Methyl Tert Butyl Ether	5340 ^b	200	ug/l	
91-20-3	Naphthalene	527	40	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	100%	87-116%
17060-07-0	1,2-Dichloroethane-D4	97%	100%	76-127%
2037-26-5	Toluene-D8	91%	99%	86-112%
460-00-4	4-Bromofluorobenzene	92%	97%	84-120%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.

(b) Result is from Run# 2

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	DMW-1	Date Sampled:	05/03/07
Lab Sample ID:	F49324-2	Date Received:	05/05/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	B046012.D	1	05/18/07	KW	n/a	n/a	VB1942
Run #2 ^b	B045987.D	2	05/17/07	KW	n/a	n/a	VB1940

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	5.2	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	104%	87-116%
17060-07-0	1,2-Dichloroethane-D4	100%	90%	76-127%
2037-26-5	Toluene-D8	101%	105%	86-112%
460-00-4	4-Bromofluorobenzene	101%	112%	84-120%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.

(b) Confirmation run.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	DMW-2	Date Sampled:	05/03/07
Lab Sample ID:	F49324-10	Date Received:	05/05/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		
Run #1	File ID B045998.D	DF 1	Analyzed 05/17/07
Run #2			By KW
			Prep Date n/a
			Prep Batch n/a
			Analytical Batch VB1940
Run #1	Purge Volume 5.0 ml		
Run #2			

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7	Dibromofluoromethane	102%		87-116%	
17060-07-0	1,2-Dichloroethane-D4	103%		76-127%	
2037-26-5	Toluene-D8	103%		86-112%	
460-00-4	4-Bromofluorobenzene	103%		84-120%	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	CK-1	Date Sampled:	05/03/07
Lab Sample ID:	F49324-14	Date Received:	05/05/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		
Run #1	File ID B046002.D	DF 1	Analyzed 05/17/07
Run #2			By KW
			Prep Date n/a
			Prep Batch n/a
			Analytical Batch VB1940
Purge Volume			
Run #1	5.0 ml		
Run #2			

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	10.8	1.0	ug/l	
108-88-3	Toluene	20.4	1.0	ug/l	
100-41-4	Ethylbenzene	5.2	1.0	ug/l	
1330-20-7	Xylene (total)	28.2	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	13.2	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		87-116%
17060-07-0	1,2-Dichloroethane-D4	102%		76-127%
2037-26-5	Toluene-D8	101%		86-112%
460-00-4	4-Bromofluorobenzene	101%		84-120%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	CK-3	Date Sampled:	05/03/07
Lab Sample ID:	F49324-15	Date Received:	05/05/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		
Run #1	File ID B046003.D	DF 1	Analyzed 05/17/07
Run #2			By KW
			Prep Date n/a
			Prep Batch n/a
			Analytical Batch VB1940
Run #1	Purge Volume 5.0 ml		
Run #2			

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	23.1	1.0	ug/l	
108-88-3	Toluene	55.6	1.0	ug/l	
100-41-4	Ethylbenzene	9.8	1.0	ug/l	
1330-20-7	Xylene (total)	52.7	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	38.0	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		87-116%
17060-07-0	1,2-Dichloroethane-D4	100%		76-127%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	98%		84-120%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	WW-1	Date Sampled:	05/03/07
Lab Sample ID:	F49324-9	Date Received:	05/05/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B045997.D	1	05/17/07	KW	n/a	n/a	VB1940
Run #2							

Purge Volume	
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		87-116%
17060-07-0	1,2-Dichloroethane-D4	104%		76-127%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	103%		84-120%

ND = Not detected

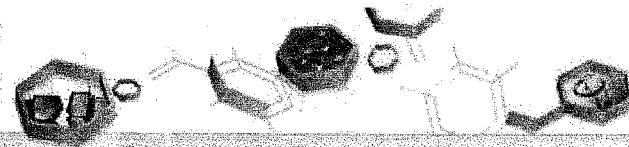
RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



ACCUTEST.
Laboratories

CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACG TEST 版權所有

F49324

ACCUTEST QUOTE

CLIENT INFORMATION		FACILITY INFORMATION				ANALYTICAL INFORMATION		MATRIX CODES	
SEI Environmental NAME ADDRESS CITY, STATE, ZIP SEND REPORT TO: PHONE #		Hwy 11 Grocery PROJECT NAME LOCATION PROJECT NO. FAX #				EPA 8210B TEXAS MATERIAL NUMBER		DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID	
								LAB USE ONLY	
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION			PRESERVATION				
		DATE	TIME	SAMPLED BY:		MATRIX	# OF BOTTLES	ICE	SHAKE	RUSH	None
1	MW-1	5/30/07	110	RR GW	3				
2	DMW-1		115						
3	MW-6		121						
4	MW-7		130						
5	MW-10		137						
6	MW-2		143						
7	MW-5		152						
8	MW-4		1200						
9	WW-1		1200	ZS DW					
10	DMW-2		1215	RR GW					
11	MW-9	v	1230	RR GW	v				
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION				COMMENTS/REMARKS			
<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER _____	APPROVED BY: _____	<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____							
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED									
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY									
RELINQUISHED BY SAMPLE# 1. <i>Karen J. Clark</i>	DATE TIME: 5-4-07/000	RECEIVED BY: 1.	RELINQUISHED BY: 2.	DATE TIME: 5-5-07	RECEIVED BY: 2.	1. <i>Choppe</i> 11:00			
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.				
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	RESEAL #	PRESERVE WHERE APPLICABLE				ON ICE <input type="checkbox"/>	TEMPERATURE <i>0.9 C</i>

F49324: Chain of Custody

Page 1 of 3



ACCUTEST.
Laboratories

CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-5700 • FAX: 407-425-0707

ACCUTEST JOB #:

F-49324

F49324: Chain of Custody

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F49325 CLIENT: SEI PROJECT: Hwy 11 Grocery
DATE/TIME RECEIVED: 6-5-07 11:50 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 0.8
METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
AIRBILL NUMBERS: B936 3068 2354

COOLER INFORMATION

- CUSTODY SEAL NOT PRESENT OR NOT INTACT
- CHAIN OF CUSTODY NOT RECEIVED (COC)
- ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- TRIP BLANK PROVIDED
- TRIP BLANK NOT PROVIDED
- TRIP BLANK NOT ON COC
- TRIP BLANK INTACT
- TRIP BLANK NOT INTACT
- RECEIVED WATER TRIP BLANK
- RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

- NUMBER OF ENCORES ? 0
NUMBER OF 5035 FIELD KITS ? 0
NUMBER OF LAB FILTERED METALS ? 0

SUMMARY OF COMMENTS:

SAMPLE INFORMATION

- SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
- CORRECT NUMBER OF CONTAINERS USED
- SAMPLE RECEIVED IMPROPERLY PRESERVED
- INSUFFICIENT VOLUME FOR ANALYSIS
- TIMES ON COC DOES NOT MATCH LABEL(S)
- ID'S ON COC DOES NOT MATCH LABEL(S)
- VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- UNCLEAR FILTERING INSTRUCTIONS
- UNCLEAR COMPOSITING INSTRUCTIONS
- SAMPLE CONTAINER(S) RECEIVED BROKEN
- % SOLIDS JAR NOT RECEIVED
- 5035 FIELD KIT NOT FROZEN WITHIN 48 HOURS
- RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE Se S -5-07

TECHNICIAN SIGNATURE/DATE

ASBD 10/03/06

F49324: Chain of Custody
Page 3 of 3

APPENDIX E
AFVR Data and Disposal Manifest



HAZ-MAT

TRANSPORTATION AND DISPOSAL

P.O. BOX 37392 • CHARLOTTE, N.C. 28237

(704) 332-5600

FAX (704) 375-7183

Manifest No. 28071

P.O. No. *177-000*Job No. *177-000*

NON-HAZARDOUS SPECIAL WASTE

Section I.**GENERATOR** (Generator complete all of Section I)**GENERATOR LOCATION**NAME _____
ORIGINATING ADDRESS _____

MAILING ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE NO. _____

CONTACT NAME _____

S. OF WASTE: *Non-hazardous Special Waste***WORK CONTRACTED BY**

Bill To (If different from information at left)

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE NO. _____

CONTACT NAME _____

No.	Type	Units	Quantity

Section II. INVOICE INFORMATION**GALLONS DRUMS**

DESCRIPTION	QUANTITY	LINE TOTAL
PETROLEUM CONTACT WATER PUMPED FROM TANKS, DRUMS OR AFVR	195	301
2. OFF-SPEC LIGHT OIL, DIESEL OR GAS PUMPED FROM TANKS OR DRUMS		
SOLUBLE OILS OR COOLANTS PUMPED FROM STORAGE		
SEDIMENT OR SOLIDS VACUUMED FROM CONTAINMENT AREA		
5. 55-GALLON DRUM REMOVED - SOLID OR EMPTY		
55-GALLON DRUM REMOVED - LIQUID		
8.		
ARRIVAL TIME: DEPARTURE TIME:		

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

Generator Authorized Agent Name

Signature

Shipment Date

Section III. TRANSPORTER

TRANSPORTER (Generator complete a-i; Transporter I complete e-g; Transporter II complete h-n)

HAZ-MATTRANSPORTATION AND DISPOSAL
P.O. BOX 37392 • CHARLOTTE, N.C. 28237

Driver Name / Title _____

b. Phone No. _____ c. Truck No. _____

hazardous Waste Transporter Permits
A NCR 000003186
EPA NCD048461370

--	--	--	--	--	--

Driver Signature _____

Shipment Date _____

TRANSPORTER II

e. Name _____

f. Address _____

g. Driver Name / Title _____

h. Phone No. _____ i. Truck No. _____

j. Transporter II Permit Nos. _____

--	--	--	--	--	--

Driver Signature _____

Shipment Date _____

Section IV. FACILITY INFORMATION AND CERTIFICATE OF DISPOSALe. Name: Haz-Mat Transportation & Disposal, Inc.
Physical Address: 210 Dalton Avenue
Charlotte, N.C. 28206a. Phone No. 704-332-5600
b. Mailing Address: P.O. Box 37392
Charlotte, N.C. 28237

Discrepancy Indication Space

I certify that all non-hazardous material removed from above location has been received and will be disposed of in accordance with applicable local, state and federal regulations in the following manner: (1) Petroleum products are blended into a beneficial reusable fuel for use in large industrial burners. (2) Waste waters are to be treated with polymers, pH adjusters, and a flocculant, then flows through a dissolved air flotation system for pretreatment separation, then into the CMUD sanitation sewer system under permit IUP#5012. (3) Sludges from treatment systems are hauled to E.P.A. approved facilities for proper disposal. Manifest and certificate of disposal are on file. (4) Our treatment system operates on a first in, first out basis and product should be processed within seven days.

SIGNATURE OF FACILITY AGENT *Mike Tolson*DATE *10/10/01* MONTH *10* DAY *10* YEAR *01*



C. Earl Hunter, Commissioner

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

01/03/2007

MR STEVEN SMITH
180 SHALLOW FORD RD
SALEM SC 29676

Re: Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; CA #17616
Release reported November 28, 2000
Corrective Action System Evaluation (CASE) received July 2, 2007
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program has reviewed the referenced report. The Program notes the following deficiencies:

- The location of creek sample CK-3 was not plotted on the site map.
- Groundwater elevation and free-phase product thickness data were not given for monitoring well MW-8.
- Other than a disposal manifest, no AFVR data was provided.
- The CoC percentage reduction stated in the report was generated using incorrect solubility values. The correct values are given in corrective action bid solicitation.

Please have your contractor correct the aforementioned deficiencies in the next CASE report. AFVR data provided should include date of the event, starting and ending times, volatile air emission concentration measurements taken at 30-minute intervals, gauging data for the well(s) measured before and after the event, product recovery rate, and estimated amount of product removed.

Based upon the current data, the Program calculates a **50.17%** reduction in total concentrations of chemicals of concern (CoC) across the site (see enclosed CoC reduction calculation sheets). Please note that the calculation uses the **correct** saturation values for free-phase product.

The Program concurs with your contractor's recommendation to continue quarterly AFVR events on monitoring wells MW-1 and MW-7. Please have your contractor submit the next CASE report on or before **November 1, 2007**. The report should document quarterly sampling and AFVR activities conducted in September 2007.

On all correspondence regarding this site, please reference UST Permit #03439. If you have any questions regarding this correspondence, feel free to contact me by telephone at (803) 896-6398, by fax at (803) 896-6245, or by e-mail at padgettjp@dhec.sc.gov.

Sincerely,



Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

JPP/jpp
03439.14

enc: CoC reduction calculation sheets

cc: Chris Boggs, P.G., SEI Environmental, Inc., 130 Penmarc Drive, Suite #108,
Raleigh, NC 27603 (w/enc)
James W. Reid, 185 Reid Drive, Salem, SC 29676 (w/enc)
Technical file (w/o enc)

03439 Highway 11 Grocery

5/3/07 sampling

Enter Initial, SSTL and subsequent

CoC Reduction: 50.1665 %

Well		Benzene	Toluene	Ethylbenzene	Xylene	MtBE	Naphthalene	EDB	Totals
MW-1	Initial	226000	301000	280000	278000	5110000	2000	0	6197000
	SSTL	22	4497	3148	44969	180	112	0	52928
	Initial > SSTL	225978	296503	276852	233031	5109820	1888	0	6144072
	Subsequent	11800	27800	2650	13300	74600	4000	0	134150
	Subsequent > SSTL	11778	23303	0	0	74420	3888	0	113389
MW-2	Initial	13	8	1	5	5	5	0	37
	SSTL	13	8	1	5	5	5	0	37
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	15	3	1	5	1	2	0	27
	Subsequent > SSTL	2	0	0	0	0	0	0	2
MW-3	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	3	1	2	0	9
	Subsequent > SSTL	0	0	0	2	0	0	0	2
MW-4	Initial	1500	5320	620	3360	810	500	0	12110
	SSTL	1500	5320	620	3360	810	500	0	12110
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	95	120	39	199	56	8	0	517
	Subsequent > SSTL	0	0	0	0	0	0	0	0
MW-5	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	3	1	2	0	9
	Subsequent > SSTL	0	0	0	2	0	0	0	2
MW-6	Initial	1780	4950	490	2880	6350	500	0	16950
	SSTL	1780	4950	490	2880	6350	500	0	16950
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1600	5430	672	4060	11000	1000	0	23762
	Subsequent > SSTL	0	480	182	1180	4650	500	0	6992
MW-7	Initial	34	20	1	8	7	5	0	75
	SSTL	22	20	1	8	7	5	0	63
	Initial > SSTL	12	0	0	0	0	0	0	12
	Subsequent	132	104	8	104	8	2	0	358
	Subsequent > SSTL	110	84	7	96	1	0	0	298
MW-8	Initial	226000	301000	280000	278000	5110000	2000	0	6197000
	SSTL	204	40888	28622	278000	1362	1021	0	350097
	Initial > SSTL	225796	260112	251378	0	5108638	979	0	5846903
	Subsequent	226000	301000	280000	278000	5110000	2000	0	6197000
	Subsequent > SSTL	225796	260112	251378	0	5108638	979	0	5846903
MW-10	Initial	115	185	68	328	86	9	0	791
	SSTL	115	185	68	328	86	9	0	791
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1990	4990	846	4420	1770	136	0	14152
	Subsequent > SSTL	1875	4805	778	4092	1684	127	0	13361
MW-11	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	9	1	2	0	15
	Subsequent > SSTL	0	0	0	8	0	0	0	8
MW-14	Initial	3780	13800	27000	14700	7010	500	0	66790
	SSTL	5	1000	700	10000	40	25	0	11770
	Initial > SSTL	3775	12800	26300	4700	6970	475	0	55020
	Subsequent	3640	11700	1950	10600	5340	527	0	33757
	Subsequent > SSTL	3635	10700	1250	600	5300	502	0	21987

03439 Highway 11 Grocery

Total Concentration Reduction		Individual Constituent Reductions					
		CoC	Initial	Subseq.	Initial >SSTL	Subseq. > SSTL	CoC % Reduction
Total Initial Conc. :	12493598 µg/L	Benzene	459442	245278	455561	243196	46.6161502
Total Subsequent Conc. :	6403787 µg/L	Toluene	626718	351153	569415	299484	47.40496826
Total SSTL Conc. :	447591 µg/L	Ethylbenzene	588235	286172	554530	253595	54.26847961
Initial > SSTL :	12046007 µg/L	Xylenes	577336	310712	237731	5984	97.48286929
Subsequent > SSTL :	6002948 µg/L	MtBE	10236073	5202785	10225428	5194693	49.19828295
Total Reduction:	50.1665 %	Naphthalene	5794	7687	3342	5996	-79.41352484
		EDB	0	0	0	0	non-SSTL CoC



Environmental, Inc.

2025 Progress Court
Raleigh, North Carolina 27608
800.474.7049
919.832.2535
Fax 832.5914

RECEIVED

NOV 07 2007

**UNDERGROUND STORAGE
TANK PROGRAM**

November 2, 2007

Mr. Joel P. Padgett, P.G., Hydrogeologist
South Carolina Department of Health and Environmental Control
Assessment & Corrective Action Section, Underground Storage Tank Program
2600 Bull Street
Columbia, South Carolina 29201

**RE: Corrective Action System Evaluation Report
Highway 11 Grocery
13527 North SC Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169**

Dear Mr. Padgett:

Please find enclosed the quarterly Corrective Action System Evaluation (C.A.S.E) Report for the August 21, 2007 groundwater sampling event at the above referenced site. If you have any questions or comments, please contact me at (919) 832-2535.

Sincerely,
SEI Environmental, Inc.

A handwritten signature in black ink that reads "Chris L. Boggs".

Chris L. Boggs, P.G.
Project Manager

cc: Mr. John Smith, Highway 11 Grocery

UST PROGRAM
LOCKETTING # 3

CORRECTIVE ACTION SYSTEM EVALUATION REPORT
May 2007 through August 2007

**Highway 11 Grocery
13527 North SC Highway 11
Salem, South Carolina
Oconee County
UST Permit Number: 03439
SEI Project Number: 302169**

PREPARED FOR:

**Mr. Steve Smith
Highway 11 Grocery
13527 North SC Highway 11
Salem, South Carolina 29676-9801**

PREPARED BY:

**SEI ENVIRONMENTAL, INC.
130 Penmarc Drive, Suite 108
Raleigh, North Carolina
UST Site Rehabilitation Contractor No. 354**

November 2, 2007

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Submittal Date: February 28, 2007
For Period Covering: May 3, 2007
Facility Name : Highway 11 Grocery
UST Permit Number: 03439
County: Oconee
Latitude: N 35°54'26.02"

Monitoring Report Number:
to August 21, 2007
Street Address: 13527 North SC Highway 11
City: Salem, South Carolina
Zip Code: 27603
Longitude W 82°58'31.29"
:

Submitted by UST Owner/Operator:

Name: Steve Smith
Company: Highway 11 Grocery
Address: 13527 North Highway 11
City: Salem State: SC
Zip Code: 29676-9801
Telephone: (864) 944-0494
SEI Project Number: 302169

Prepared by Consultant/Contractor:

Name: Chris L. Bogg
Company: SEI Environmental, Inc.
Address: 2025 Progress Place
City: Raleigh State: NC
Zip Code: 27608
Telephone: (919) 832-2535
UST Site Rehabilitation Contractor No. 354

Registered Professional Engineer or Professional Geologist Certification

I hereby certify that I have directed and supervised the fieldwork and preparation of this Plan, in accordance with State Rules and Regulations. As a registered professional geologist and/or professional engineer, I certify that I am a qualified groundwater professional, as defined by the South Carolina State Board of Professional Geologists. All of the information and laboratory data in this plan and in all of the attachments are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

Name: Chris L. Bogg
SC Reg. No. 2101
Signature: 
Date: 2/27/07

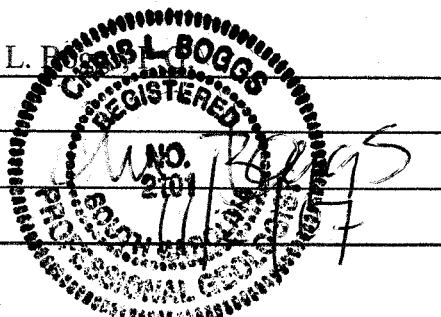


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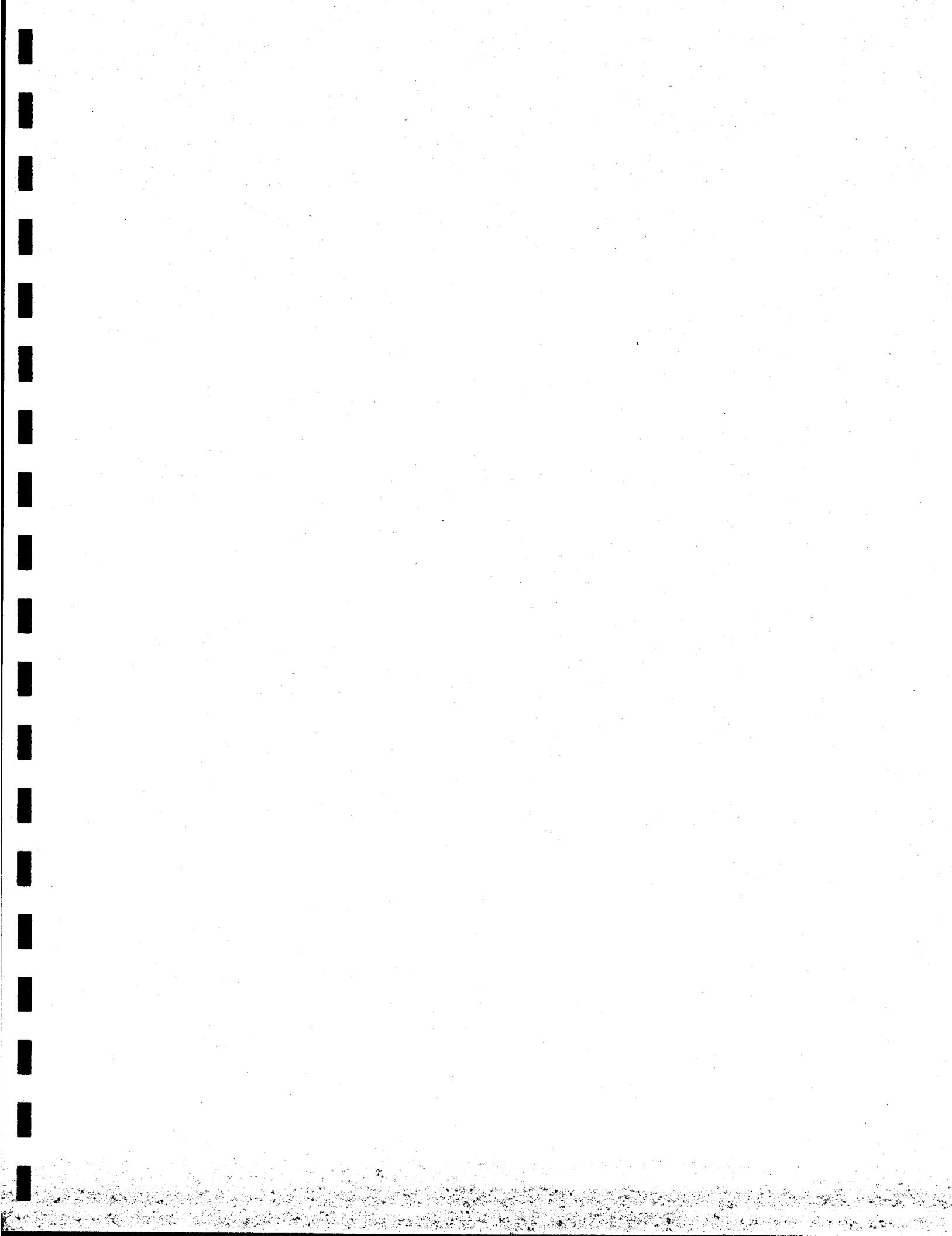
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LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the former UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

This report has been prepared under the guidance of a Licensed Geologist registered in South Carolina to meet the requirements of the South Carolina Department of Health and Environmental Control. The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of the samples associated with this report were performed by a subcontracted, independent, and certified laboratory. All data have been reviewed for accuracy and, excepting obvious errors, have been accepted as correct. SEI Environmental, Inc. reserves the right to revise estimates of performances as required by changes in the data supplied by Accutest Laboratories.

1.0 INTRODUCTION

The Highway 11 Grocery is a convenience and retail fuel store located at 13527 North SC Highway 11 in Salem, Oconee County, South Carolina. Figure 1 in Appendix A is a portion of the United States Geological Survey (USGS) 7.5-minute topographical quadrangle map identifying the location of the site.

The following is a brief summary of recent events occurring at the site:

- December 18, 2003 – Groundwater Sampling Event
- March 31, 2004 – Groundwater Sampling Event
- September 29, 2004 – Groundwater Sampling Event
- January 11, 2005 – EFR performed on MW-8
- March 17, 2005 – EFR performed on MW-8
- March 17, 2005 – Groundwater Sampling Event
- August 9, 2005 – Groundwater Sampling Event
- November 1, 2005 – Groundwater Sampling Event
- March 22, 2006 – Groundwater Sampling Event
- August 28, 2006 – Groundwater Sampling Event
- November 5, 2006 – Groundwater Sampling Event
- February 7, 2007 – Groundwater Sampling Event
- May 3, 2007 - Groundwater Sampling Event
- August 21, 2007 – Groundwater Sampling Event

On August 21, 2007, in accordance with the requirements of the PFP contract, samples were collected from thirteen groundwater monitoring wells and two surface locations. This report provides details of the groundwater sampling event.

2.0 FIELD MEASUREMENTS AND SAMPLING

2.1 Groundwater Sampling

On August 21, 2007, groundwater samples were collected from thirteen groundwater monitoring wells. Prior to sampling, groundwater depth was gauged in the monitoring

wells utilizing an oil-water interface probe to measure depth to groundwater, and to detect any phase separated hydrocarbons (PSH) present. The depth to groundwater measurement is used to calculate the groundwater elevation used in determining the current groundwater potentiometric surface, along with hydraulic gradient, and groundwater flow direction.

Figure 3 in Appendix A presents a groundwater potentiometric map for the current sampling event. The latest groundwater data indicate that groundwater flow at the site is to the northeast with a hydraulic gradient of 0.032 feet per foot between monitoring wells MW-3 and MW-12. This flow direction is consistent with previous determinations of groundwater movement. Table 1 in Appendix B summarizes groundwater measurement data. Appendix C includes field observation data.

Representative groundwater samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Method 8260B for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene.

2.2 Surface Water Sampling

On August 21, 2007, two (CK-1 and CK-3) surface water samples were collected from adjacent creek. CK-2 location is no longer sampled per the March 17, 2005, sampling event report. CK-3 replaced CK-2 to monitor for potential contamination from monitoring well MW-14. Representative samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Method 8260B for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Groundwater Analytical Results

SSTLs have been designated for fourteen (MW-1 through MW-8, MW-10, MW-11, MW-14, DMW-1, DMW-2, and DMW-4). CoCs were detected in six (MW-1, MW-2, MW-6, MW-7, MW-10, and MW-14) monitoring wells at concentrations above their respective Site Specific Target Level (SSTL). Figure 4 in Appendix A is a site map presenting monitoring well location and their CoC concentrations. Table 2 in Appendix B summarizes historical groundwater analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

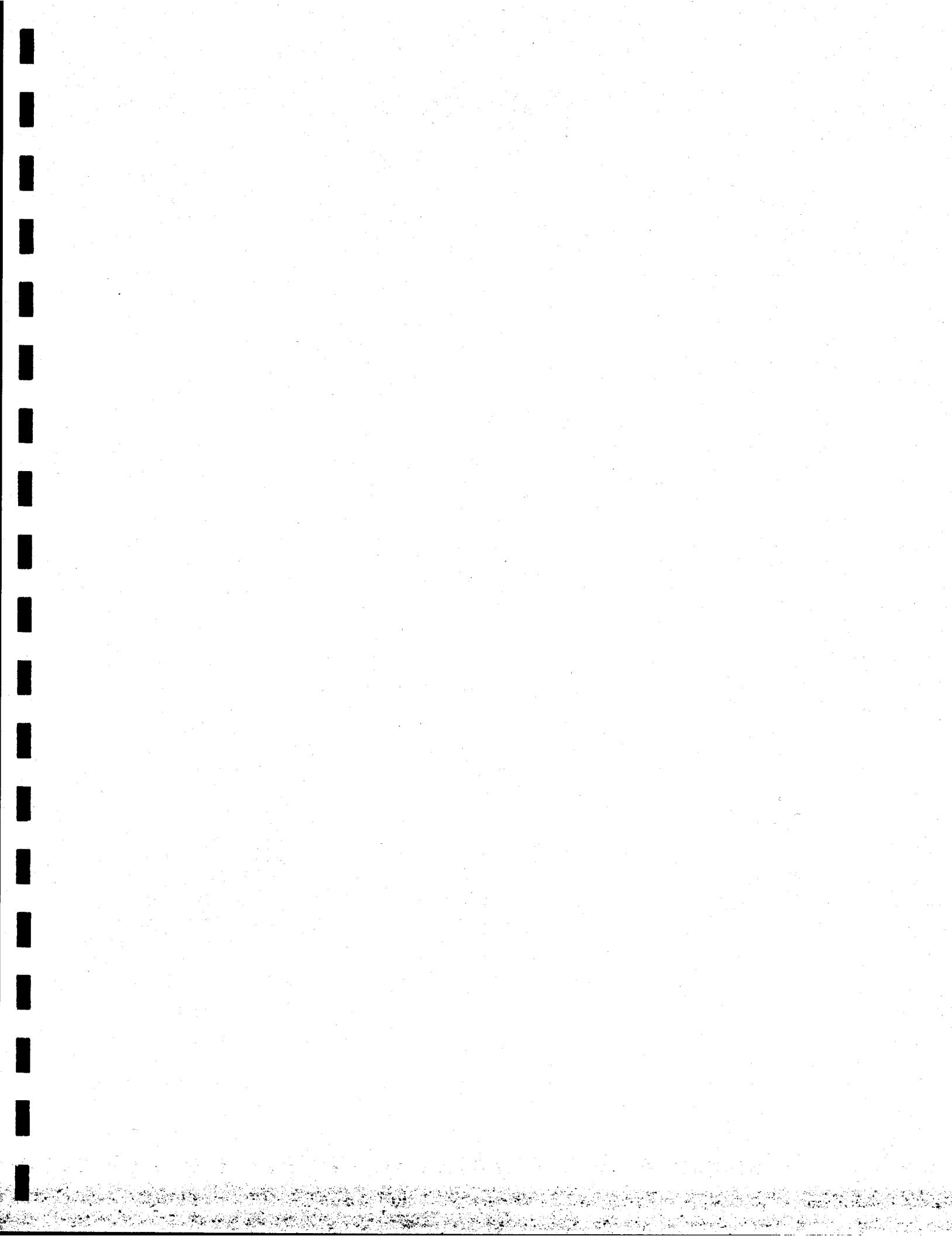
3.2 Surface Water Analytical Results

Benzene was detected in surface water sample CK-1 at a concentration of 40.4 µg/L.

4.0 REMEDIATION SYSTEM EFFECTIVENESS

In awarding the Pay-For-Performance (PFP) site remediation contract, the South Carolina Department of Health and Environmental Control (SCDHEC) set remediation goals for this site via site specific target levels (SSTLs). The monitoring wells have individual target concentrations for five (benzene, toluene, ethylbenzene, xylenes, MTBE and naphthalene) identified chemicals of concern (CoC).

Remediation system effectiveness can be calculated comparing the initial May 7, 2002, CoC concentrations that exceeded the SSTLs with the current CoC concentrations that exceeded the SSTLs. For monitoring wells MW-1 and MW-8, the standard values for free product (benzene, 226,000 µg/L; toluene, 301,000 µg/L; ethylbenzene, 280,000 µg/L; xylenes, 278,000 µg/L; MTBE, 5,110,000 µg/L; and naphthalene 2,000 µg/L) were used in the percent reduction calculation. The formula is as follows:



$$\frac{[08/29/96 \text{ Sample Concentration Above SSTL}] - [Current Sample Concentration Above SSTL]}{[08/29/96 \text{ Sample Concentration Above SSTL}]} * 100 = \% \text{ Reduction}$$

Using the current analytical results, the percent concentration reduction is 40.08%. Table 2 in Appendix B presents concentration reduction calculations.

5.0 AFVR EVENT

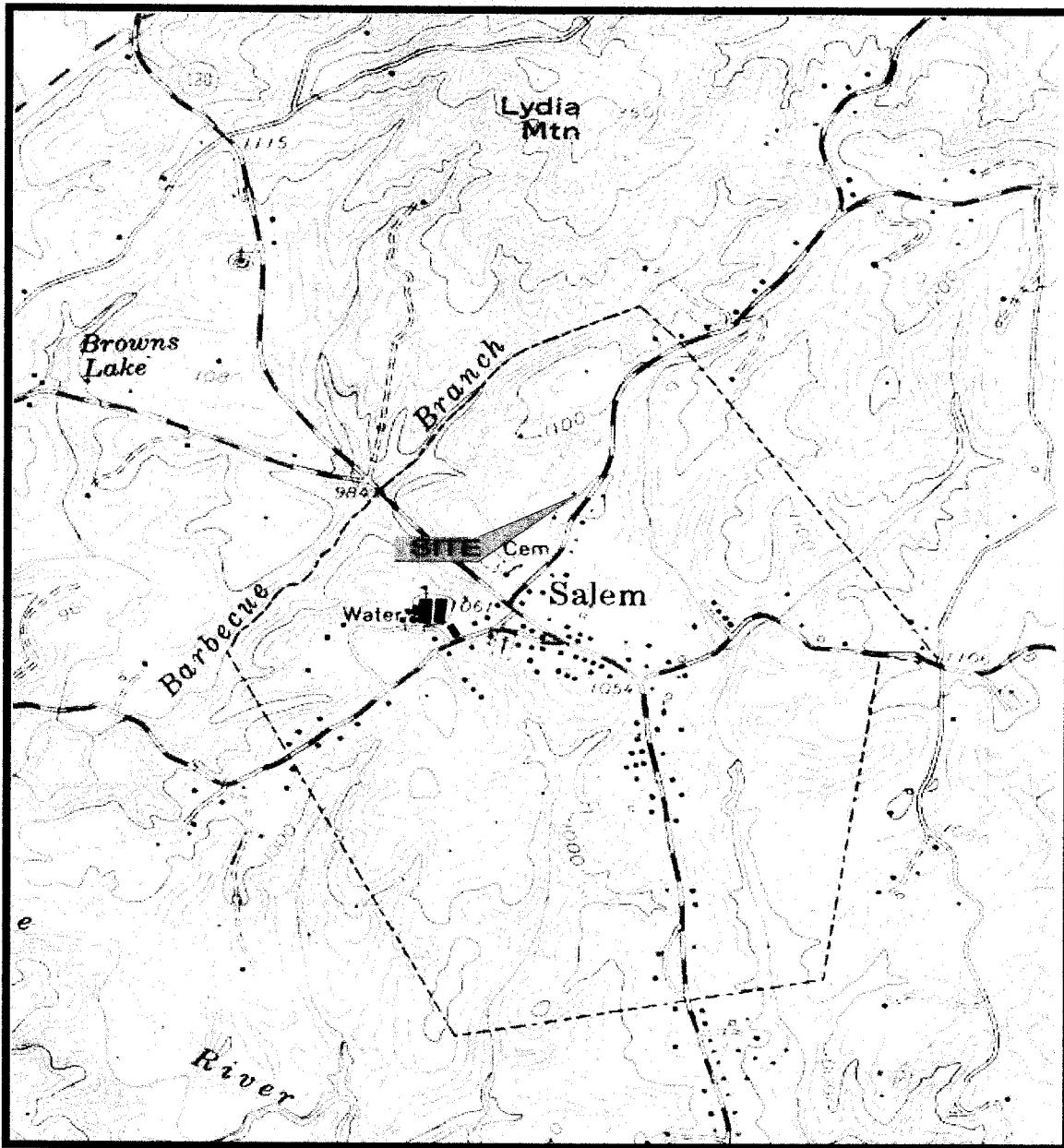
An eight hour AFVR event was conducted on monitoring wells MW-1 and MW-8 on August 21, 2007. Data collected during this event and a disposal manifest for the petroleum impacted water generated during this event are included as Appendix E.

6.0 CONCLUSIONS

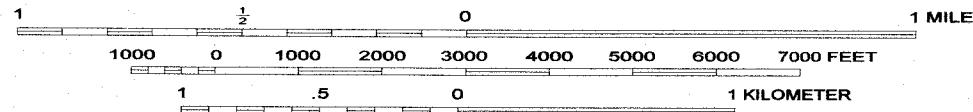
The groundwater flow direction at the time of the August 21, 2007 sampling event was towards the northeast with a hydraulic gradient of 0.032 feet per foot. Free product was present in monitoring wells MW-8 and MW-14. CoC were detected in four monitoring wells above their respective SSTLs. Benzene was detected in one surface water sample at a concentration above the RBSL. The percent concentration reduction was calculated at 40.08%.

SEI Environmental, Inc recommends continuing the quarterly monitoring to evaluate the continued reduction of chemicals of concern in the monitoring wells on site. The next sampling event will occur in November 2007. In addition SEI recommends continuing AFVR events at monitoring wells MW-1 and MW-8 in conjunction with groundwater sample collection.

APPENDIX A
Figures



SCALE 1:24000



SALEM QUADRANGLE
SOUTH CAROLINA-OCONEE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC-BATHYMETRIC)
BY U.S. GEOLOGICAL SURVEY

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
HIGHWAY 11 GROCER
13527 Highway 11, Salem, SC
FACILITY I.D. #03439

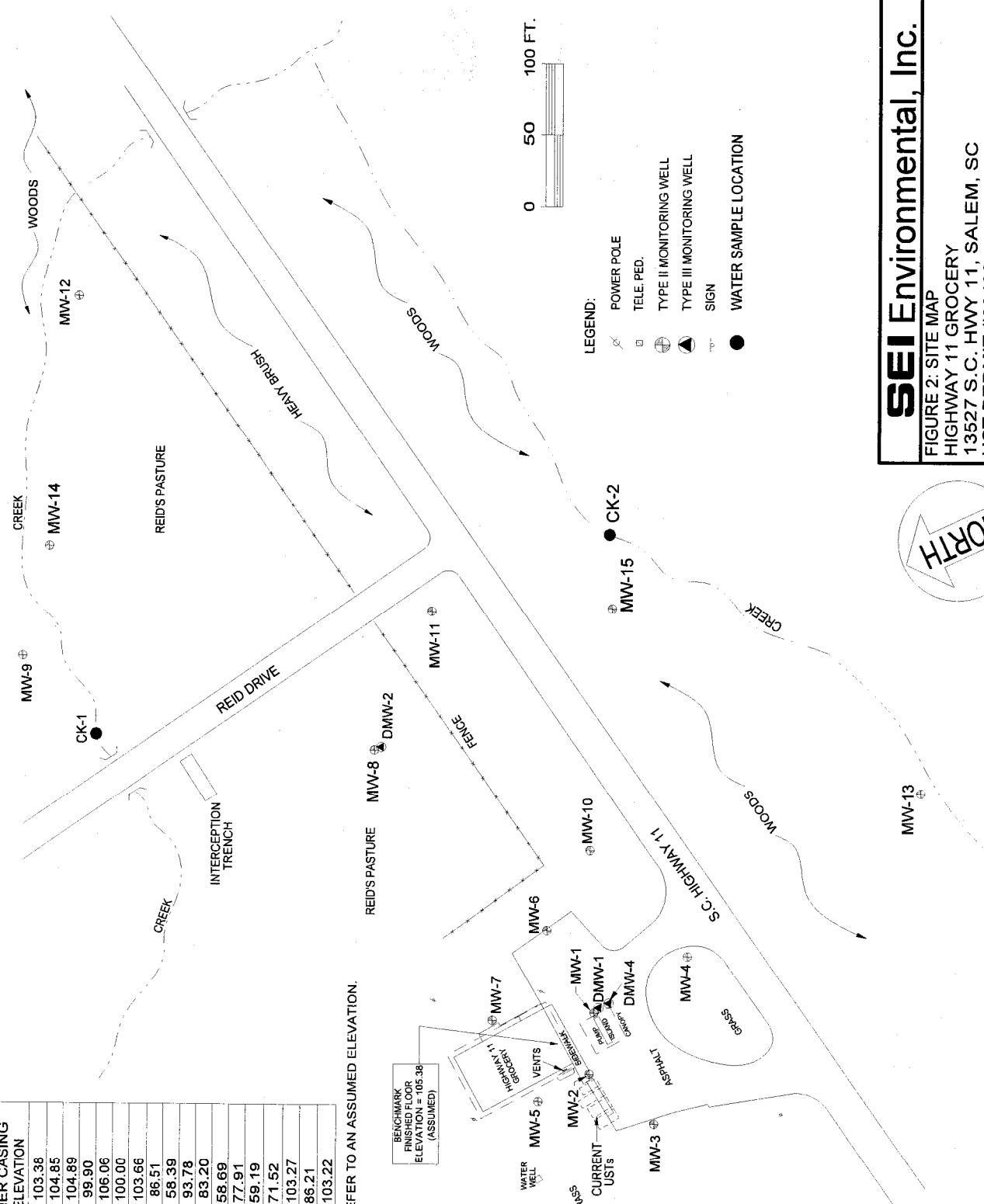
WO # 302169
DWG # Hw 11_topo_sitemap

DATE: 9/16/05
DRAWN BY: HWH

WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.89
MW-4	99.90
MW-5	106.06
MW-6	100.00
MW-7	103.66
MW-8	86.51
MW-9	58.39
MW-10	93.78
MW-11	83.20
MW-12	58.69
MW-13	77.91
MW-14	59.19
MW-15	71.52
DMW-1	103.27
DMW-2	86.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.

BENCHMARK
FINISHED FLOOR
ELEVATION = 105.38
(ASSUMED)

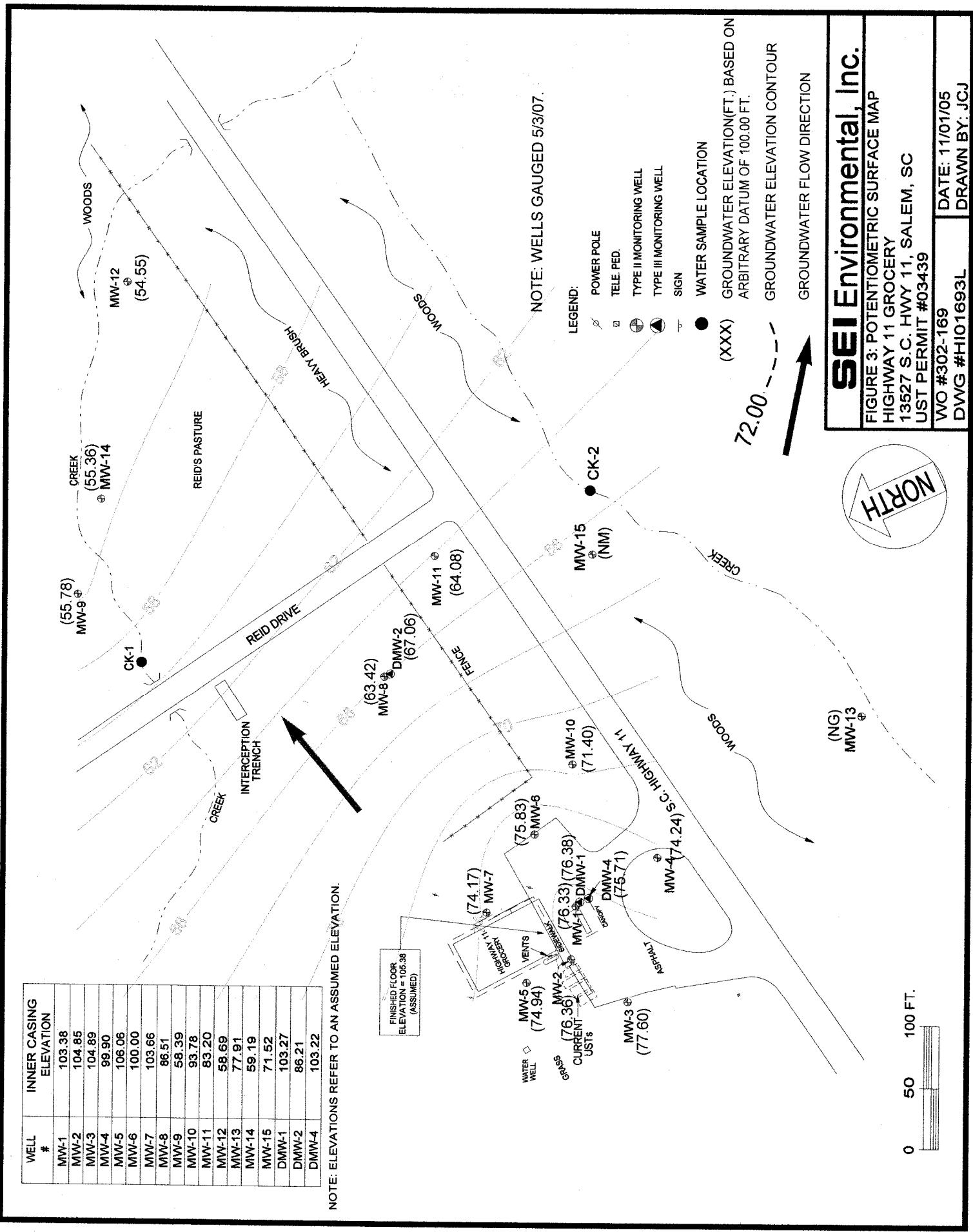


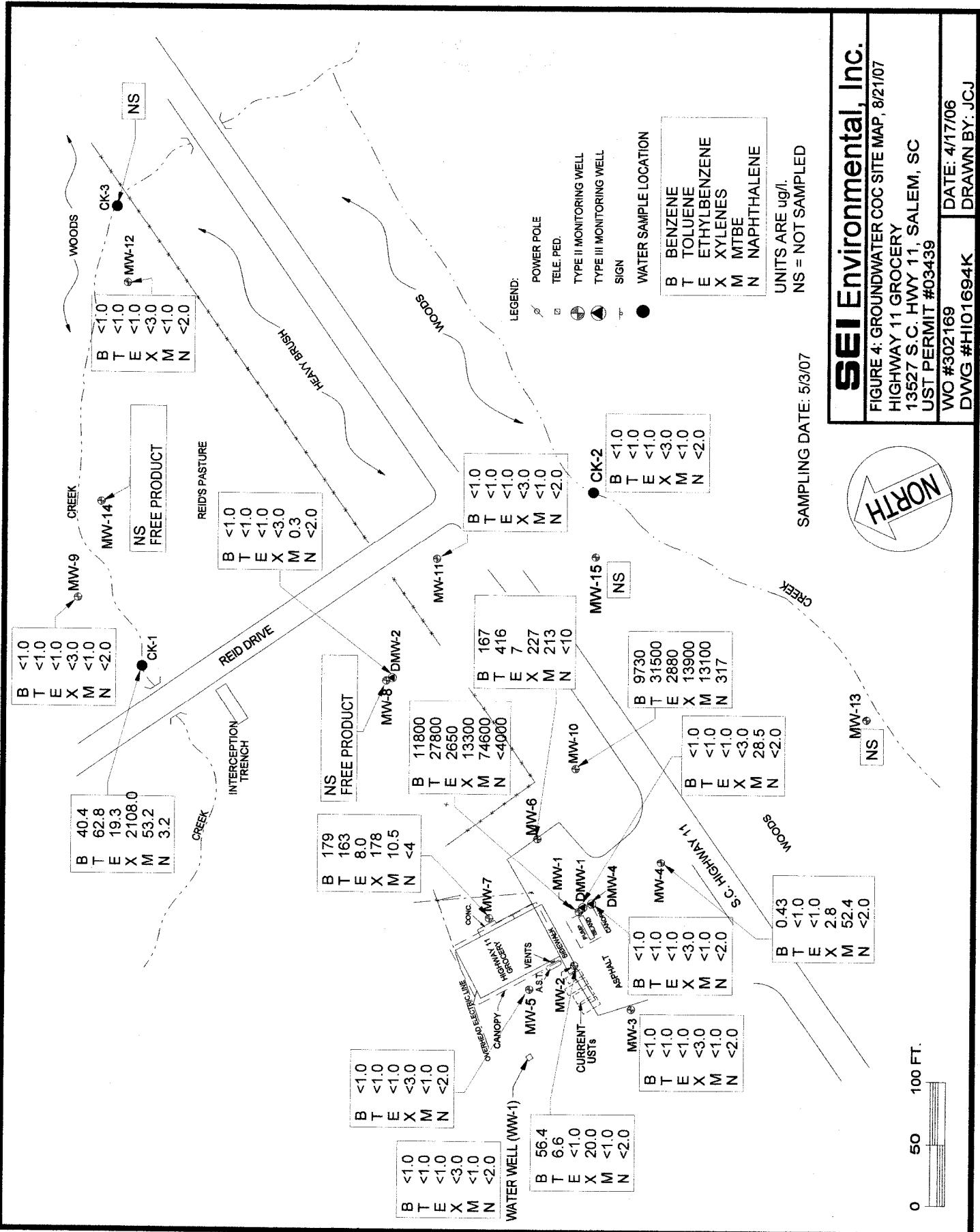
SEI Environmental, Inc.

FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

DATE: 3/17/05
WO #302-043
DWG #H101692G DRAWN BY: JCJ







APPENDIX B
Tables

Table 1

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302168

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-1	05/08/02	24.67	24.71	0.04	103.38	78.74
	07/01/03	23.28	23.52	0.24		80.29
	07/30/03	22.89	22.97	0.08		80.55
	09/15/03	23.78	23.82	0.04		79.63
	10/02/03	24.32	24.45	0.13		79.16
	10/23/03	24.72	24.93	0.21		78.82
	12/18/03	24.06				79.32
	03/31/04	24.61				78.77
	09/29/04	24.20				79.18
	01/11/05	23.77				79.61
	03/17/05	23.97				79.41
	08/09/05	22.86				80.52
	11/01/05	25.20	25.13	0.07		78.23
	03/22/06	23.91				79.47
	08/28/06	27.17	26.64	0.53		76.62
	11/05/06	26.08	25.56	0.53		77.71
	02/07/07	24.30	24.14	0.16		79.20
	05/03/07	25.23				78.15
	08/21/07	27.05				76.33
MW-2	05/08/02	26.08			104.85	78.77
	07/01/03	24.08				80.77
	07/30/03	23.78				81.07
	09/15/03	24.73				80.12
	10/02/03	25.56				79.29
	10/23/03	25.71				79.14
	12/18/03	25.38				79.47
	03/31/04	25.85				79.00
	09/29/04	25.55				79.30
	01/11/05	24.74				80.11
	03/17/05	25.10				79.75
	06/09/05	23.70				81.15
	11/01/05	26.29				78.56
	03/22/06	25.94				78.91
	08/28/06	28.33				76.52
	11/05/06	27.39				77.46
	02/07/07	25.47				79.38
	05/03/07	26.34				78.51
	08/21/07	28.49				76.36
MW-3	05/08/02	24.78			104.86	80.08
	07/01/03	22.51				82.35
	07/30/03	22.21				82.65
	09/15/03	23.23				81.63
	10/02/03	23.87				80.99
	10/23/03	24.23				80.63
	12/18/03	23.93				80.93
	03/31/04	24.44				80.42
	09/29/04	24.20				80.66
	01/11/05	23.36				81.50
	03/17/05	23.65				81.21
	08/09/05	22.11				82.75
	11/01/05	24.85				80.01
	03/22/06	24.57				80.29
	08/28/06	26.95				77.91
	11/05/06	26.05				78.81
	02/07/07	24.15				80.71
	05/03/07	25.03				79.83
	08/21/07	27.26				77.60
MW-4	05/08/02	23.38			99.90	76.52
	07/01/03	22.10				77.80
	07/30/03	22.09				77.81
	09/15/03	22.90				77.00
	10/02/03	23.32				76.58
	10/23/03	23.69				76.21
	12/18/03	22.95				76.95
	03/31/04	23.49				76.41
	09/29/04	23.14				76.76
	01/11/05	22.70				77.20
	03/17/05	22.84				77.06
	08/09/05	26.40				73.50
	11/01/05	27.27				72.63
	03/22/06	23.42				76.48
	08/28/06	25.39				74.51
	11/05/06	24.11				75.79
	02/07/07	22.96				76.94
	05/03/07	23.88				76.02
	08/21/07	25.66				74.24

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-5	05/08/02	28.82			106.06	77.24
	07/01/03	26.82				79.24
	07/30/03	26.53				79.53
	09/16/03	27.40				78.66
	10/02/03	27.92				78.14
	10/23/03	28.40				77.66
	12/18/03	28.40				77.66
	03/31/04	28.56				77.50
	09/29/04	28.46				77.60
	01/11/05	27.41				78.65
	03/17/05	27.86				78.20
	08/09/05	20.02				86.04
	11/01/05	28.91				77.15
	03/22/06	28.59				77.47
	08/28/06	31.06				75.00
	11/05/06	30.40				75.66
	02/07/07	28.30				77.76
	05/03/07	28.90				77.16
	08/21/07	31.12				74.94
MW-6	05/08/02	21.66			100.00	78.34
	07/01/03	19.77				80.23
	07/30/03	19.88				80.12
	09/15/03	20.63				79.37
	10/02/03	21.34				78.66
	10/23/03	21.74				78.26
	12/18/03	21.00				79.00
	03/31/04	21.71				78.29
	09/29/04	21.33				78.67
	01/11/05	20.81				79.19
	03/17/05	20.10				79.90
	08/09/05	26.18				73.82
	11/01/05	22.41				77.59
	03/22/06	21.77				78.23
	08/28/06	23.86				76.14
	11/05/06	22.71				77.29
	02/07/07	21.13				78.87
	05/03/07	22.23				77.77
	08/21/07	24.17				75.83
MW-7	05/08/02	28.12			103.66	75.54
	07/01/03	26.55				77.11
	07/30/03	26.22				77.44
	09/15/03	26.83				76.83
	10/02/03	27.69				75.97
	10/23/03	28.10				75.56
	12/18/03	27.71				75.95
	03/31/04	28.00				75.66
	09/29/04	27.60				76.06
	01/11/05	26.88				76.78
	03/17/05	27.83				75.83
	08/09/05	20.27				83.39
	11/01/05	28.63				75.03
	03/22/06	N/L				N/L
	08/28/06	30.43				73.23
	11/05/06	29.56				74.10
	02/07/07	27.41				76.25
	05/03/07	28.35				75.31
	08/21/07	29.49				74.17
MW-8	05/08/02	21.00			86.51	65.51
	07/01/03	20.96				65.55
	07/30/03	20.46				66.05
	09/15/03	21.17				65.34
	10/02/03	20.44				66.07
	10/23/03	21.64				64.97
	12/18/03	20.82				65.69
	03/31/04	21.35				65.16
	09/29/04	21.10				65.41
	01/11/05	21.04				65.47
	03/17/05	20.95				65.56
	08/09/05	22.16				64.35
	11/01/05	23.31				63.20
	03/22/06	22.00	21.23	0.77		65.11
	08/28/06	24.46	22.05	2.41		63.93
	11/05/06	NM				
	02/07/07	NM				
	05/03/07	NM				
	08/21/07	26.61	22.10	4.51		63.42

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-9	05/08/02	2.47			58.39	55.92
	07/01/03	2.30				56.09
	07/30/03	2.26				56.13
	09/15/03	2.42				55.97
	10/02/03	2.16				56.23
	10/23/03	2.42				55.97
	12/18/03	2.20				56.19
	03/31/04	2.56				55.83
	09/29/04	1.90				56.49
	01/11/05	2.23				56.16
	03/17/05	2.11				56.28
	08/09/05	2.04				56.35
	11/01/05	2.33				56.06
	03/22/06	2.23				56.16
	08/28/06	2.50				55.89
	11/05/06	2.38				56.01
	02/07/07	2.36				56.03
	05/03/07	2.50				55.89
	08/21/07	2.61				55.78
MW-10	05/08/02	20.04			93.78	73.74
	07/01/03	16.20				77.58
	07/30/03	18.95				74.83
	09/15/03	16.53				77.25
	10/02/03	20.19				73.59
	10/23/03	20.51				73.27
	12/18/03	19.83				73.95
	03/31/04	18.85				74.93
	09/29/04	20.02				73.76
	01/11/05	19.47				74.31
	03/17/05	18.84				74.94
	08/09/05	18.94				74.84
	11/01/05	21.07				72.71
	03/22/06	20.16				73.62
	08/28/06	22.16				71.62
	11/05/06	20.94				72.84
	02/07/07	19.65				74.13
	05/03/07	20.57				73.21
	08/21/07	22.38				71.40
MW-11	05/08/02	16.22			83.20	66.98
	07/01/03	16.53				66.67
	07/30/03	16.70				66.50
	09/15/03	17.35				65.85
	10/02/03	16.40				66.80
	10/23/03	17.83				65.37
	12/18/03	17.58				65.62
	03/31/04	16.21				66.99
	09/29/04	15.92				67.28
	01/11/05	15.93				67.27
	03/17/05	16.86				66.34
	08/09/05	15.80				67.40
	11/01/05	18.22				64.98
	03/22/06	17.28				65.92
	08/28/06	19.09				64.11
	11/05/06	17.79				65.41
	02/07/07	16.44				66.76
	05/03/07	17.67				65.53
	08/21/07	19.12				64.08
MW-12	05/08/02	2.80			58.69	55.89
	07/01/03	3.16				55.53
	07/30/03	2.55				56.14
	09/15/03	3.26				55.43
	10/02/03	2.60				56.09
	10/23/03	3.50				55.19
	12/18/03	2.97				55.72
	03/31/04	3.19				55.50
	09/29/04	3.02				55.67
	01/11/05	3.10				55.59
	03/17/05	3.12				55.57
	08/09/05	2.72				55.97
	11/01/05	3.63				55.06
	03/22/06	3.23				55.46
	08/28/06	3.84				54.85
	11/05/06	3.48				55.21
	02/07/07	3.15				55.54
	05/03/07	3.69				55.00
	08/21/07	4.14				54.55

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-13	05/08/02	6.29			77.72	71.43
	07/01/03	6.44				71.28
	07/30/03	N/L				N/L
	09/15/03	6.36				71.36
	10/02/03	6.24				71.48
	10/23/03	6.78				70.94
	12/18/03	7.51				70.21
	03/31/04	6.62				71.10
	09/29/04	6.28				71.44
	01/11/05	6.44				71.28
	03/17/05	6.52				71.20
	08/09/05	10.52				67.20
	11/01/05	N/L				N/L
	03/22/06	N/L				N/L
	08/28/06	N/L				N/L
	08/28/06	N/L				N/L
	02/07/07	N/L				N/L
	05/03/07	N/L				N/L
	08/21/07	N/L				N/L
MW-14	05/08/02	2.00			59.19	57.19
	07/01/03	2.28				56.91
	07/30/03	2.03				57.16
	09/15/03	2.42				56.77
	10/02/03	1.98				57.21
	10/23/03	2.67				56.52
	12/18/03	1.58				57.61
	03/31/04	2.03				57.16
	09/29/04	1.77				57.42
	01/11/05	1.92				57.27
	03/17/05	2.14				57.05
	08/09/05	1.75				57.44
	11/01/05	N/L				N/L
	03/22/06	N/L				N/L
	08/28/06	3.36				55.83
	11/05/06	N/L				N/L
	02/07/07	N/L				N/L
	05/03/07	2.94				56.25
	08/21/07	3.85	3.82	0.03		55.36
MW-15	05/08/02	10.82			71.52	60.70
	07/01/03	10.76				60.76
	07/30/03	10.11				61.41
	09/15/03	11.00				60.52
	10/02/03	10.20				61.32
	10/23/03	11.07				60.45
	12/18/03	11.88				59.64
	03/31/04	11.02				60.50
	09/29/04	10.67				60.85
	01/11/05	10.83				60.69
	03/17/05	10.61				60.91
	08/09/05	10.68				60.84
	11/01/05	11.32				60.20
	03/22/06	NG				NG
	08/28/06	11.62				59.90
	11/05/06	NM				NM
	02/07/07	NM				NM
	05/03/07	NM				NM
	05/03/07	DRY				DRY

Historical Groundwater Elevation And Product Thickness Data

Highway 11 Grocery
13627 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302189

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
DMW-1	05/08/02	23.88			103.27	79.39
	07/01/03	23.61				79.66
	07/30/03	24.24				79.03
	09/15/03	24.60				78.67
	10/02/03	24.00				79.27
	10/23/03	24.50				78.77
	12/18/03	24.11				79.16
	03/31/04	23.61				79.66
	09/29/04	22.72				80.55
	01/11/05	22.97				80.30
	03/17/05	24.68				78.59
	08/09/05	22.66				80.61
	11/01/05	25.11				78.16
	03/22/06	24.71				78.56
	08/28/06	26.95				76.32
	11/05/06	25.85				77.42
	02/07/07	24.59				78.68
	05/03/07	24.93				78.34
	08/21/07	26.89				76.38
DMW-2	05/08/02	17.83			86.21	68.38
	07/01/03	16.67				69.54
	07/30/03	17.20				69.01
	09/15/03	17.31				68.90
	10/02/03	16.80				69.41
	10/23/03	17.63				68.58
	12/18/03	17.11				69.10
	03/31/04	15.75				70.46
	09/29/04	16.49				69.72
	01/11/05	16.44				69.77
	03/17/05	17.22				68.99
	08/09/05	16.71				69.50
	11/01/05	18.08				68.13
	03/22/06	17.40				68.81
	08/28/06	18.72				67.49
	11/05/06	18.00				68.21
	11/05/06	18.93				67.28
	05/03/07	18.81				67.40
	08/21/07	19.15				67.06
DMW-4	05/08/02	24.30			103.22	78.92
	07/01/03	23.93				79.29
	07/30/03	24.75				78.47
	09/15/03	24.95				78.27
	10/02/03	24.45				78.77
	10/23/03	24.95				78.27
	12/18/03	24.39				78.83
	03/31/04	23.88				79.34
	09/29/04	23.18				80.04
	01/11/05	23.32				79.90
	03/17/05	25.08				78.14
	08/09/05	22.96				80.26
	11/01/05	26.51				76.71
	03/22/06	25.00				78.22
	08/28/06	27.33				75.89
	11/05/06	26.39				76.83
	02/07/07	24.59				78.63
	05/03/07	25.48				77.74
	08/21/07	25.48				77.74

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-1	05/07/02	226,000	301,000	280,000	278,000	5,110,000	2,000			6,197,000.00
	07/01/03	10,000	34,000	4,400	23,000	34,000	1,200			106,600.00
	07/30/03	7,600	28,000	6,300	32,000	25,000.0	2,500			101,400.00
	12/18/03	2,200	6,200	910	5,800	16,000	2,500			33,610.00
	03/31/04	3,400	9,300	1,100	6,200	20,000	1,200			41,200.00
	09/29/04	3,200	7,300	<1,000	4,500	12,000	<5,000			27,000.00
	03/17/05	5,600	9,550	1,570	7,610	19,300	326			43,955.00
	08/09/05	16,900	42,800	3,520	19,000	115,000	705			197,725.00
	11/01/05	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	03/22/06	20,700	41,100	3,100	11,700	103,000	<4,000			179,600.00
	08/28/06	44,390	26,540	3,700	21,680	173,000	637,000	0.53		906,310.00
	08/28/06	44,390	26,540	3,700	21,680	173,000	637,000	0.53		906,310.00
	02/07/07	44,390	26,540	3,700	21,680	173,000	637,000	0.16		906,310.00
	05/03/07	11,800	27,800	2,650	13,300	74,600	<4000			130,150.00
	08/21/07	11,800	27,800	2,650	13,300	74,600	<4000			130,150.00
	SSTL	22	4,497	3,148	44,969	180	112			
	> SSTL	11,778.0	23,303.0	0.0	0.0	74,420.0	0.0			
MW-2	05/07/02	13	8.0	1.0	5.0	5.0				37.00
	07/01/03	4.7	5.0	1.0	3.0	1.0	5.0			19.70
	07/30/03	5.8	5.0	1.0	5.3	1.0	5.0			23.10
	12/18/03	2.2	5.0	1.0	3.0	1.0	5.0			17.20
	03/31/04	2.6	5.0	1.0	3.0	1.0	5.0			17.60
	09/29/04	14	<25	<5.0	<15	<5.0	<25			14.00
	03/17/05	13	5	<1.0	5	<1.0	<2.0			22.40
	08/09/05	39.7	14.5	1.2	27.5	<1.0	<2.0			82.90
	11/01/05	3.8	1.6	<1.0	<3.0	<1.0	<2.0			5.40
	03/22/06	11.8	4.2	<1.0	3.4	<1.0	<2.0			19.40
	08/26/06	32.0	3.1	<1.0	4.5	<1.0	<2.0			39.60
	08/28/06	8.2	<1.0	<1.0	<3	<1.0	<2.0			8.20
	02/07/07	6.9	2.1	<1.0	3.4	<1.0	<2.0			12.40
	05/03/07	15.0	3.5	<1.0	5.4	<1.0	<2.0			23.90
	08/21/07	56.4	6.6	<1.0	20.0	<1.0	<2.0			83.00
	SSTL	13	8.0	1.0	5.0	5.0				
	> SSTL	43.4	0.0	0.0	15.0	0.0	0.0			
MW-3	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	1.4	<1.0	<3.0	<1.0	<2.0			1.40
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.4	0.0	0.0	0.0	0.0			
MW-4	05/07/02	1,500	5,320	620	3,360	810	500			12,110.00
	07/01/03	4,800	14,000	2,300	12,000	12,000	2,600			47,700.00
	07/30/03	4,000	14,000	2,700	13,000	2,100	500			36,300.00
	12/18/03	1,100	2,400	230	1,900	1,200	250			7,080.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	53	<25	7.1	70	210	<25			340.10
	03/17/05	<1.0	<1.0	<1.0	<3.0	17	<2.0			16.80
	08/09/05	<1.0	<1.0	<1.0	<3.0	5.9	<2.0			5.90
	11/01/05	3,720	3,660	745	4,170	4,540	<200			16,835.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	1.2	<2.0			1.20
	08/28/06	43	7	4	88	153.0	3.6			298.70
	11/05/06	195	24	19	164	225.0	11.6			638.90
	02/07/07	25	59	13	67	47.1	<2.0			
	05/03/07	95	120	39	199	56.3	8.1			517.30
	08/21/07	0	<1.0	<1.0	3	52.4	<2.0			55.63
	SSTL	1,500	5,320	620	3,360	810	500.0			
	> SSTL	0	0.0	0	0	0	0.0			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-5	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	4.2	17.0	3.6	18.0	2.2	<5.0			45.00
	12/18/03	2.3	<5.0	<1.0	3.2	1.3	<5.0			6.80
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
MW-6	05/07/02	1,780	4,950	490	2,880	6,350	500.0			16,950.00
	07/01/03	2,200	6,600	820	4,400	12,000	2,500			28,520.00
	07/30/03	4,200	13,000	1,600	8,900	21,000	400			49,100.00
	12/18/03	5,100	14,000	1,700	11,000	19,000	2,500			53,300.00
	03/31/04	280	840	100	2,200	900	250			4,570.00
	09/29/04	2,400	<5,000	<1,000	<3,000	17,000	<5,000			19,400.00
	03/17/05	3,490	7,500	952	5,380	15,500	262			33,084.00
	08/09/05	1,370	4,630	295	2,220	7,640	<400			16,155.00
	11/01/05	979	2,220	282	1,810	9,410	<200			14,701.00
	03/22/06	1,280	3,480	399	2,880	8,600	<200			16,639.00
	08/28/06	99	76	<2.0	243	22	<4.0			439.60
	11/05/06	34.0	60.9	<2.0	194	355	<20			643.90
	02/07/07	4,970.0	18,100.0	2,070	12,000	30,500	<500			67,640.00
	05/03/07	1,600.0	5,430.0	672	4,060	11,000	<1000			22,762.00
	08/21/07	167.0	416.0	7	227	213	<10			1,029.80
	SSTL	1,780	4,950	490	2,880	6,350	500.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
MW-7	05/07/02	34	20	<1.0	8.0	7.0	<6.0			69.00
	07/01/03	37	36	1.7	20	9.2	<5.0			103.90
	07/30/03	18	18	<1.0	10	<1.0	<5.0			45.70
	12/18/03	41	20	<1.0	<3.0	<1.0	<5.0			61.00
	03/31/04	30	34	<1.0	16	<1.0	<5.0			80.00
	09/29/04	370	500	<100	<300	<100	<500			870.00
	03/17/05	505	590	34	280	65	<2.0			1,473.40
	08/09/05	52	56	2.6	34	9.2	<2.0			154.00
	11/01/05	27	42	3.7	24	<1.0	<2.0			96.10
	03/22/06	Not Sampled								
	08/28/06	99	95	3.6	127	7	<2.0			331.90
	11/05/06	50	44.5	<1.0	23.5	1.9	<2.0			119.90
	02/07/07	182	261.0	12.8	202.0	18.7	<2.0			676.50
	05/03/07	132	104.0	8.2	104.0	8.5	<10.0			356.70
	08/21/07	179	163.0	8.0	178.0	10.5	<4.0			538.50
	SSTL	22	20	1.0	8.0	7.0	5.0			
	> SSTL	157.0	143.0	7.0	170.0	3.5	0.0			
MW-8	05/07/02	226,000	301,000	280,000	278,000	5,110,000	2,000			6,197,000.00
	07/01/03	12,000	51,000	7,800	40,000	11,000	2,500			124,300.00
	07/30/03	12,000	40,000	3,600	18,000	15,000	660			89,260.00
	12/18/03	10,000	27,000	3,300	18,000	14,000	2,500			74,800.00
	03/31/04	17,000	140,000	32,000	180,000	8,600	<25,000			377,600.00
	09/29/04	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	03/17/05	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	08/09/05	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	11/01/05	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	03/22/06	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	08/28/06	44,390	26,540	3,700	21,680	173,000	637,000	2.41		906,310.00
	11/05/06	44,390	26,540	3,700	21,680	173,000	637,000	NM		906,310.00
	02/07/07	44,390	26,540	3,700	21,680	173,000	637,000	0.89		906,310.00
	05/03/07	44,390	26,540	3,700	21,680	173,000	637,000	NM		906,310.00
	08/21/07	226,000	301,000	280,000	278,000	5,110,000	2,000	4.51		6,197,000.00
> SSTL	204	40,888	28,622	278,000	1,362	1,021				
	> SSTL	44,186.0	0.0	0.0	0.0	171,638.0	635,979.0			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-9	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	1.2	8.8	<1.0	<5.0			10.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	1.5	<1.0	<3.0	<1.0	<2.0			1.50
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	RBSL	5.0	1,000	700	10,000	40	26			
MW-10	05/07/02	115	185	68.0	328	86	9.0			791.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	170	420	43	240	540	6.5			1,419.50
	12/18/03	89	280	74	480	91	25.0			1,039.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	1.7	4.4	<1.0	<3.0	18	<2.0			24.00
	11/01/05	10,000	23,500	1,410	7,510	21,600	<1,000			64,020.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	79	98	16	69	169	<2.0			430.90
	11/05/06	203	412	67	226	137	4.7			1,049.90
	02/07/07	376	1,080	454	2,440	507	82.8			4,939.80
	05/03/07	1,990	4,990	846	4,420	1,770	136.0			14,152.00
	08/21/07	9,730	31,500	2,880	13,900	13,100	317.0			71,427.00
	SSTL	115	185	68	328	86	9.0			
	> SSTL	9,615.0	31,315.0	2,812.0	13,572.0	13,014.0	308.0			
MW-11	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	42.2	<1.0	<1.0	93.6	4.5	3.8			144.10
	03/22/06	<1.0	<1.0	<1.0	<3.0	1.9	<2.0			1.80
	08/28/06	6.4	<1	<1	82.6	4.4	2.5			95.90
	11/05/06	2.8	<1	<1	8.9	4.7	<2.0			16.40
	02/07/07	<1	<1	<1	8.9	1.1	<2.0			10.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	2	<1.0	<1.0	9	6	<2.0			17.00
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	1.0	0.0	0.0	0.0	0.8	0.0			
MW-12	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	1.5	24.8	10.1	58.6	<1.0	11.3			106.30
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	RBSL	5.0	1,000	700	10,000	40	26			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-13	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	NS	NS	NS	NS	NS	NS			0.00
	03/22/06	NS	NS	NS	NS	NS	NS			0.00
	08/28/06	NS	NS	NS	NS	NS	NS			0.00
	11/05/06	NS	NS	NS	NS	NS	NS			0.00
	02/07/07	NS	NS	NS	NS	NS	NS			0.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	NS	NS	NS	NS	NS	NS			0.00
	RBSL	5.0	1,000	700	10,000	40	25			
MW-14	05/07/02	3,780	13,800	27,000	14,700	7,010	500			66,790.00
	07/01/03	3,500	10,000	1,900	10,000	5,300	500			31,200.00
	07/30/03	3,100	9,700	1,800	9,300	4,300	500			26,700.00
	12/18/03	3,300	11,000	2,000	11,000	4,100	500			31,900.00
	03/31/04	5,500	17,000	2,600	13,000	7,100	570			45,770.00
	09/29/04	3,200	12,000	1,600	9,100	3,200	<5,000			29,100.00
	03/17/05	5,140	13,000	1,710	10,900	4,970	339			36,059.00
	08/09/05	3,280	10,600	1,820	11,000	4,950	<400			31,660.00
	11/01/05	NL	NL	NL	NL	NL	NL			0.00
	03/22/06	NL	NL	NL	NL	NL	NL			0.00
	08/28/06	2,010.0	4,080.0	1,160.0	6,320.0	3,320.0	261.0			17,151.00
	11/05/06	NL	NL	NL	NL	NL	NL			0.00
	02/07/07	NL	NL	NL	NL	NL	NL			0.00
	05/03/07	3,640.0	11,700.0	1,950.0	10,600.0	5,340.0	527.0			33,757.00
	08/21/07	226,000	301,000	280,000	278,000	5,110,000	2,000	0		6,197,000.00
	SSTL	5.0	1,000	700	10,000	40	25			11,770.00
	> SSTL	225,995.0	300,000.0	279,300.0	268,000.0	5,109,960.0	1,975.0			
MW-15	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	NS	NS	NS	NS	NS	NS			0.00
	03/22/06	NS	NS	NS	NS	NS	NS			0.00
	08/28/06	NS	NS	NS	NS	NS	NS			0.00
	11/05/06	NS	NS	NS	NS	NS	NS			0.00
	02/07/07	NS	NS	NS	NS	NS	NS			0.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	NS	NS	NS	NS	NS	NS			0.00
	RBSL	5.0	1,000	700	10,000	40	25			
DMW-1	05/07/02	215	430	50	50	1,780	250			2,775.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	<1.0	<5.0	<1.0	<3.0	4.2	<5.0			4.20
	12/18/03	1.5	<5.0	<1.0	<3.0	<1.0	<5.0			1.50
	03/31/04	<1.0	<15.0	<1.0	<3.0	3.9	<5.0			3.90
	09/29/04	8.4	<25	<5.0	<15	130	<25			138.40
	03/17/05	<1.0	1.2	<1.0	<3.0	8.1	<2.0			9.30
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<5.0	<5.0	<5.0	<15	<5.0	<10			0.00
	03/22/06	3.0	35.1	16	92.2	21.9	13.1			181.30
	08/28/06	<1.0	<1.0	<1.0	<3.0	20.3	<2.0			20.30
	11/05/06	<1.0	<1.0	<1.0	<3.0	90.8	<2.0			90.80
	02/07/07	9.2	2.5	<1.0	9.7	164.0	<4.0			185.40
	05/03/07	<1.0	<1.0	<1.0	<3.0	5.2	<2.0			5.20
	08/21/07	<1.0	<1.0	<1.0	<3.0	28.5	<2.0			28.50
	SSTL	215	430	50	50	1,780	250			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
DMW-2	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	6.4	<5.0			6.40
	07/30/03	<1.0	8.4	6.8	30.0	<1.0	6.7			51.90
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	0.3	<2.0			0.26
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
DMW-4	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
CK-1	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	2.6	<5.0	<1.0	4.8	4.5	<5.0			11.90
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	11	18	4.1	20.0	9.0	<5.0			62.10
	09/29/04	16	30	6.1	32.0	22.0	<5.0			106.10
	03/17/05	10.4	17.5	4.1	20.8	12.3	<2.0			65.10
	08/09/05	7.6	17.6	2.9	15.8	6.9	<2.0			50.80
	11/01/05	20.3	38.2	8.8	48.8	27.3	<2.0			143.40
	03/22/06	6.6	12.9	3.2	15.2	7.8	<2.0			45.70
	08/28/06	13.1	29.0	6.7	27.8	16.7	<2.0			93.30
	11/05/06	13.9	22.3	6.7	34.3	17.8	<2.0			95.00
	02/07/07	7.9	16.4	4.0	21.1	9.8	<2.0			59.20
	05/03/07	10.8	20.4	5.2	28.2	13.2	<2.0			77.80
	08/21/07	40.4	62.8	19.3	108.0	53.2	3.2			286.90
	RBSL	5.0	1,000	700	10,000	40	25			
CK-2	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	NS	NS	NS	NS	NS	NS			0.00
	03/22/06	NS	NS	NS	NS	NS	NS			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	NS	NS	NS	NS	NS	NS			0.00
	02/07/07	NS	NS	NS	NS	NS	NS			0.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	RBSL	5.0	1,000	700	10,000	40	25			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
CK-3	08/09/05	14.4	33.3	7.1	41.1	25.8	<2.0			121.70
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	23.3	49.7	10.1	48.2	33.8	<2.0			165.10
	11/05/06	25.2	49.1	11.4	63.8	49.3	<2.0			198.80
	02/07/07	21.7	57.5	10.3	57.9	30.8	<2.0			178.20
	05/03/07	23.1	55.6	9.8	52.7	38.0	<2.0			179.20
	08/21/07	NS	NS	NS	NS	NS	NS			0.00
	RBSL	5.0	1,000	700	10,000	40	25			
WW-1	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/21/07	NS	NS	NS	NS	NS	NS			0.00
	RBSL	5.0	1,000	700	10,000	40	25			
TOTAL MASS										7,306,101
TOTAL SSTL MASS	3,881	57,303	33,705	339,605	10,645	2,452				447,591
INITIAL MASS ABOVE SSTL										12,046,007
CURRENT MASS ABOVE SSTL										7,217,711
PERCENT TOTAL MASS REDUCTION ABOVE SSTL										40.08

Reported in parts per billion ($\mu\text{g/l}$)

ND: Compound not detected

BDL: Below analytical Detection Limits

SSTL: Site Specific Treatment Level

APPENDIX C
Field Data Information Sheets for Groundwater Sampling

Conduct AFUR on MW-1
Take all reading on system
Every

8/21/07

SEI Environmental

Site Name: Hwy 11 Grocery

WO# 300477

Well ID	Total Depth (feet)	Well Dia. (In)	Depth to Product (feet)	Product Thickness (feet)	Depth to Water (feet)	Notes
MW-1	30	2			27.05	
MW-2	35	2			28.49	
MW-3	35	2			27.26	
MW-4	35	2			25.66	
MW-5	35	2			31.12	
MW-6	35	2			24.17	
MW-7	40	2			29.49	
MW-9	11	2			2.61	
MW-10	24	2			22.38	
MW-11	23	2			19.12	
MW-12	11	2			4.14	
MW-14	9	2	3.82		3.85	
DMW-1	45	2			26.89	
DMW-2	75	2			19.15	
DMW-4	61	2			27.51	
MW-15					0.71	
MW-8			22.10		26.61	
CK-2						
CH-1						

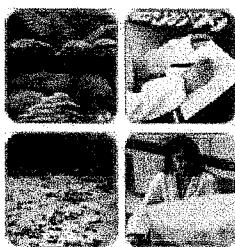
APPENDIX D
Laboratory Analytical Results and Chain-of-Custody



IT'S ALL IN THE CHEMISTRY

09/12/07

Technical Report for



SEI-Columbia, SC

Hwy 11 Grocery; Salem, SC

302043

Accutest Job Number: F52021

Sampling Dates: 08/20/07 - 08/21/07

Report to:

SEI Environmental-Raleigh

cboggs@sei-environmental.com

ATTN: Chris Boggs

Total number of pages in report: 24



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Test results relate only to samples analyzed.



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Sample Summary

SEI-Columbia, SC

Job No: F52021

Hwy 11 Grocery; Salem, SC
Project No: 302043

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID	
F52021-1	08/20/07	16:20 HP	08/23/07	AQ	Ground Water	MW-2
F52021-2	08/20/07	16:30 HP	08/23/07	AQ	Ground Water	MW-3
F52021-3	08/20/07	16:35 HP	08/23/07	AQ	Ground Water	MW-4
F52021-4	08/20/07	16:25 HP	08/23/07	AQ	Ground Water	MW-5
F52021-5	08/20/07	16:45 HP	08/23/07	AQ	Ground Water	MW-6
F52021-6	08/20/07	17:15 HP	08/23/07	AQ	Ground Water	MW-7
F52021-7	08/20/07	16:50 HP	08/23/07	AQ	Ground Water	MW-10
F52021-8	08/20/07	17:00 HP	08/23/07	AQ	Ground Water	DMW-4
F52021-9	08/20/07	17:10 HP	08/23/07	AQ	Ground Water	DMW-1
F52021-10	08/21/07	10:00 HP	08/23/07	AQ	Ground Water	DMW-2
F52021-11	08/21/07	10:15 HP	08/23/07	AQ	Ground Water	CK-2
F52021-12	08/21/07	11:35 HP	08/23/07	AQ	Ground Water	MW-9
F52021-13	08/21/07	11:50 HP	08/23/07	AQ	Ground Water	MW-12

Sample Summary
(continued)

SEI-Columbia, SC

Job No: F52021

Hwy 11 Grocery; Salem, SC
Project No: 302043

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F52021-14	08/21/07	11:10 HP	08/23/07	AQ	Ground Water	MW-11
F52021-15	08/21/07	12:30 HP	08/23/07	AQ	Ground Water	CK-1



IT'S ALL IN THE CHEMISTRY

Sample Results

Report of Analysis

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Client Sample ID:	MW-2	Date Sampled:	08/20/07
Lab Sample ID:	F52021-1	Date Received:	08/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0021122.D	1	08/28/07	MM	n/a	n/a	VN897
Run #2							

Purge Volume
Run #1 5.0 ml
Run #2

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	56.4	1.0	0.20	ug/l	
108-88-3	Toluene	6.6	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	20.0	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		87-116%
17060-07-0	1,2-Dichloroethane-D4	96%		76-127%
2037-26-5	Toluene-D8	105%		86-112%
460-00-4	4-Bromofluorobenzene	98%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	MW-3	Date Sampled:	08/20/07
Lab Sample ID:	F52021-2	Date Received:	08/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0021123.D	1	08/28/07	MM	n/a	n/a	VN897
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		87-116%
17060-07-0	1,2-Dichloroethane-D4	97%		76-127%
2037-26-5	Toluene-D8	106%		86-112%
460-00-4	4-Bromofluorobenzene	99%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	MW-4	Date Sampled:	08/20/07
Lab Sample ID:	F52021-3	Date Received:	08/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0021148.D	1	08/29/07	MM	n/a	n/a	VN898
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.43	1.0	0.20	ug/l	J
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	2.8	3.0	0.56	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	52.4	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		87-116%
17060-07-0	1,2-Dichloroethane-D4	99%		76-127%
2037-26-5	Toluene-D8	103%		86-112%
460-00-4	4-Bromofluorobenzene	96%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID: MW-5	Date Sampled: 08/20/07
Lab Sample ID: F52021-4	Date Received: 08/23/07
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: Hwy 11 Grocery; Salem, SC	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0021124.D	1	08/28/07	MM	n/a	n/a	VN897
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		87-116%
17060-07-0	1,2-Dichloroethane-D4	96%		76-127%
2037-26-5	Toluene-D8	104%		86-112%
460-00-4	4-Bromofluorobenzene	97%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	MW-6	Date Sampled:	08/20/07
Lab Sample ID:	F52021-5	Date Received:	08/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0021166.D	5	08/29/07	MM	n/a	n/a	VN898
Run #2							

Purge Volume	
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	167	5.0	1.0	ug/l	
108-88-3	Toluene	416	5.0	1.4	ug/l	
100-41-4	Ethylbenzene	6.8	5.0	1.0	ug/l	
1330-20-7	Xylene (total)	227	15	2.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	213	5.0	1.3	ug/l	
91-20-3	Naphthalene	ND	10	2.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		87-116%
17060-07-0	1,2-Dichloroethane-D4	99%		76-127%
2037-26-5	Toluene-D8	104%		86-112%
460-00-4	4-Bromofluorobenzene	93%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID: MW-7	Date Sampled: 08/20/07						
Lab Sample ID: F52021-6	Date Received: 08/23/07						
Matrix: AQ - Ground Water	Percent Solids: n/a						
Method: SW846 8260B							
Project: Hwy 11 Grocery; Salem, SC							
Run #1	File ID M0021956.D	DF 2	Analyzed 08/29/07	By MM	Prep Date n/a	Prep Batch n/a	Analytical Batch VM899
Run #2							

Purge Volume	
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	179	2.0	0.40	ug/l	
108-88-3	Toluene	163	2.0	0.54	ug/l	
100-41-4	Ethylbenzene	8.0	2.0	0.40	ug/l	
1330-20-7	Xylene (total)	178	6.0	1.1	ug/l	
1634-04-4	Methyl Tert Butyl Ether	10.5	2.0	0.50	ug/l	
91-20-3	Naphthalene	ND	4.0	0.88	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		87-116%
17060-07-0	1,2-Dichloroethane-D4	103%		76-127%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID:	MW-9	Date Sampled:	08/21/07
Lab Sample ID:	F52021-12	Date Received:	08/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0021947.D	1	08/29/07	MM	n/a	n/a	VM899
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		87-116%
17060-07-0	1,2-Dichloroethane-D4	101%		76-127%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	98%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-10	Date Sampled:	08/20/07
Lab Sample ID:	F52021-7	Date Received:	08/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0021930.D	100	08/28/07	MM	n/a	n/a	VM898
Run #2	M0021949.D	250	08/29/07	MM	n/a	n/a	VM899
Run #3	N0021178.D	500	08/30/07	MM	n/a	n/a	VN899

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml
Run #3	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	9730	100	20	ug/l	
108-88-3	Toluene	31500 ^a	500	140	ug/l	
100-41-4	Ethylbenzene	2880	100	20	ug/l	
1330-20-7	Xylene (total)	13900	300	56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	13100 ^b	250	63	ug/l	
91-20-3	Naphthalene	317	200	44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	103%	102%	94%	87-116%
17060-07-0	1,2-Dichloroethane-D4	100%	102%	99%	76-127%
2037-26-5	Toluene-D8	99%	100%	101%	86-112%
460-00-4	4-Bromofluorobenzene	100%	98%	92%	84-120%

(a) Result is from Run# 3

(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Sample ID:	MW-11	Date Sampled:	08/21/07
Lab Sample ID:	F52021-14	Date Received:	08/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0021925.D	1	08/28/07	MM	n/a	n/a	VM898
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	2.2	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	9.2	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	5.8	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		87-116%
17060-07-0	1,2-Dichloroethane-D4	104%		76-127%
2037-26-5	Toluene-D8	97%		86-112%
460-00-4	4-Bromofluorobenzene	100%		84-120%

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Sample ID: MW-12	Date Sampled: 08/21/07						
Lab Sample ID: F52021-13	Date Received: 08/23/07						
Matrix: AQ - Ground Water	Percent Solids: n/a						
Method: SW846 8260B							
Project: Hwy 11 Grocery; Salem, SC							
Run #1	File ID M0021924.D	DF 1	Analyzed 08/28/07	By MM	Prep Date n/a	Prep Batch n/a	Analytical Batch VM898
Run #2							
Run #1	Purge Volume 5.0 ml						
Run #2							

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		87-116%
17060-07-0	1,2-Dichloroethane-D4	102%		76-127%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	DMW-1	Date Sampled:	08/20/07
Lab Sample ID:	F52021-9	Date Received:	08/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		
Run #1	File ID M0021920.D	DF 1	Analyzed 08/28/07
Run #2		By MM	Prep Date n/a
			Prep Batch n/a
			Analytical Batch VM898

Purge Volume	
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	28.5	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		87-116%
17060-07-0	1,2-Dichloroethane-D4	105%		76-127%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Client Sample ID: DMW-2	Date Sampled: 08/21/07
Lab Sample ID: F52021-10	Date Received: 08/23/07
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: Hwy 11 Grocery; Salem, SC	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0021921.D	1	08/28/07	MM	n/a	n/a	VM898
Run #2							

Purge Volume	
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.26	1.0	0.25	ug/l	J
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		87-116%
17060-07-0	1,2-Dichloroethane-D4	102%		76-127%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	DMW-4	Date Sampled:	08/20/07
Lab Sample ID:	F52021-8	Date Received:	08/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0021919.D	1	08/28/07	MM	n/a	n/a	VM898
Run #2							

Purge Volume	
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		87-116%
17060-07-0	1,2-Dichloroethane-D4	105%		76-127%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	104%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest LabLink@68546 13:59 12-Sep-2007

Report of Analysis

Page 1 of 1

Client Sample ID:	CK-1	Date Sampled:	08/21/07
Lab Sample ID:	F52021-15	Date Received:	08/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0021926.D	1	08/28/07	MM	n/a	n/a	VM898
Run #2							

Purge Volume	
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	40.4	1.0	0.20	ug/l	
108-88-3	Toluene	62.8	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	19.3	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	108	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	53.3	1.0	0.25	ug/l	
91-20-3	Naphthalene	3.2	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		87-116%
17060-07-0	1,2-Dichloroethane-D4	100%		76-127%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	101%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest LabLink@68546 13:59 12-Sep-2007

Report of Analysis

Page 1 of 1

Client Sample ID:	CK-2	Date Sampled:	08/21/07
Lab Sample ID:	F52021-11	Date Received:	08/23/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0021922.D	1	08/28/07	MM	n/a	n/a	VM898
Run #2							

Purge Volume	
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		87-116%
17060-07-0	1,2-Dichloroethane-D4	104%		76-127%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	101%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound



IT'S ALL IN THE CHEMISTRY

63

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



F 52021

CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:

ACCUTEST QUOTE #:

Laboratories

CLIENT INFORMATION		
SET Environmental		
NAME	500 Reagan Dr. Suite 5	
ADDRESS	Charlotte, NC. 28206	
CITY,	STATE	ZIP
SEND REPORT TO: PHONE # 704-596-8624		

FACILITY INFORMATION

High 11 Grocery
Project Name: 3527 S.C. Hwy 11
Location: Salem, S.C.
Project No: 302-043

FAX # 704-596-8605

ANALYTICAL INFORMATION

MATRIX CODES

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

LAB USE ONLY

ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION			E OF BOTTLES	PRESERVATION			
		DATE	TIME	SAMPLED BY:					
1	MW-2	8/21/07	16:20	HP	GW	3	3	X	X
2	MW-3	8/21/07	16:30			1	1	X	X
3	MW-4	8/21/07	16:35			1	1	X	X
4	MW-5	8/21/07	16:35			1	1	X	X
5	MW-6	8/21/07	16:45			1	1	X	X
6	MW-7	8/21/07	17:15			1	1	X	X
7	MW-10	8/21/07	16:50			1	1	X	X
8	DMW-4	8/21/07	17:00			1	1	X	X
9	DMW-1	8/21/07	17:10			1	1	X	X
10	DMW-2	8/21/07	17:00			1	1	X	X
11	CK-2	8/21/07	17:15	↓	↓	↓	↓	X	X

DATA TURNAROUND INFORMATION

STANDARD APPROVED BY: _____
 48 HOUR RUSH
 24 HOUR EMERGENCY _____
 OTHER _____
 EMERGENCY OR RUSH IS FAX DATA
 UNLESS PREVIOUSLY APPROVED

DATA DELIVERABLE INFORMATION

STANDARD
 COMMERCIAL "B"
 DISK DELIVERABLE
 STATE FORMS
 OTHER (SPECIFY) _____

COMMENTS/REMARKS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY									
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:
1. <i>[Signature]</i>	8/21/07 8:00	1. <i>FY</i>	2. <i>FY</i>	8/23/07 06:30	2. <i>Jeanne Otk</i>	3. <i>FY</i>	8/23/07 06:30	3. <i>FY</i>	4. <i>FY</i>
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:
3. <i>Jeanne Otk</i>	8/23/07 06:30	3. <i>FY</i>	4. <i>FY</i>	4. <i>FY</i>	4. <i>FY</i>	5. <i>FY</i>	5. <i>FY</i>	5. <i>FY</i>	5. <i>FY</i>
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPLICABLE		ON ICE	TEMPERATURE		
5. <i>FY</i>	5. <i>FY</i>	5. <i>FY</i>	5. <i>FY</i>			5. <i>FY</i>	5. <i>FY</i>		5. <i>FY</i>

F52021: Chain of Custody

Page 1 of 3



Laboratories

CLIENT INFORMATION

23090

CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOBS

ACCU'TEST QUOTE #:

CLIENT INFORMATION		FACILITY INFORMATION		ANALYTICAL INFORMATION		MATRIX CODES
<p>SET Environmental</p> <p>NAME: 5100 Regan St. Suit 7 ADDRESS: Charlotte, NC. 28206 CITY: STATE: ZIP:</p> <p>SEND REPORT TO: PHONE #: 704-546-8634</p>		<p>PROJECT NAME: Hwy 11 Grocery LOCATION: 3527 S.C. Hwy 11 PROJECT NO: 302-043 FAX #: 704-546-8624</p>				<p>DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - LIQUID SOL - OTHER SOLID</p>
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION		PRESERVATION		LAB USE ONLY
		DATE	TIME	SAMPLED BY:	MATRIX	4 OF 4 BOTTLES
12	MW-9	8/21/07	11:35 AM	HR GW 3 3	XX	
13	MW-12	8/21/07	11:50 AM	HR GW 3 3	XX	
14	MW-11	8/21/07	11:10 AM	HR GW 3 3	XX	
15	CK-1	8/21/07	12:30 PM	HR GW 3 3	XX	
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION		COMMENTS/REMARKS		
<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER _____ EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED		<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____				
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY						
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	
1. <i>[Signature]</i>	8/20/07 9:00	1. <i>[Signature]</i> EX	2. <i>[Signature]</i> EX	8/21/07 09:30	2. <i>[Signature]</i> OTS	
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	
3. <i>[Signature]</i>	8/21/07 09:30	3. <i>[Signature]</i>	4. <i>[Signature]</i>	8/21/07 09:30	4. <i>[Signature]</i>	
RELINQUISHED BY:	DATE/TIME:	RECEIVED BY:	SEAL #	PRESERVE WHERE APPROPRIATE		ON ICE: <input checked="" type="checkbox"/>
5. <i>[Signature]</i>	8/21/07 09:30	5. <i>[Signature]</i>		(B)		TEMPERATURE: <i>30</i> C

F52021: Chain of Custody

Page 2 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATIONACCUTEST'S JOB NUMBER: F52021CLIENT: SETPROJECT: Hwy 11 GroceryDATE/TIME RECEIVED: 8/23/07 09:30# OF COOLERS RECEIVED: 1 COOLER TEMPS: 3.0°C

METHOD OF DELIVERY:

 FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHERAIRBILL NUMBERS: 8336 3067 9494**COOLER INFORMATION**

- CUSTODY SEAL NOT PRESENT OR NOT INTACT
- CHAIN OF CUSTODY NOT RECEIVED (COC)
- ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- TRIP BLANK PROVIDED
- TRIP BLANK NOT PROVIDED
- TRIP BLANK NOT ON COC
- TRIP BLANK INTACT
- TRIP BLANK NOT INTACT
- RECEIVED WATER TRIP BLANK
- RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

- NUMBER OF ENCORES ? 0
- NUMBER OF 5035 FIELD KITS ? 0
- NUMBER OF LAB FILTERED METALS ? 0

SUMMARY OF COMMENTS: _____

_____**SAMPLE INFORMATION**

- SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
- CORRECT NUMBER OF CONTAINERS USED
- SAMPLE RECEIVED IMPROPERLY PRESERVED
- INSUFFICIENT VOLUME FOR ANALYSIS
- TIMES ON COC DOES NOT MATCH LABEL(S)
- ID'S ON COC DOES NOT MATCH LABEL(S)
- VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- UNCLEAR FILTERING INSTRUCTIONS
- UNCLEAR COMPOSITING INSTRUCTIONS
- SAMPLE CONTAINER(S) RECEIVED BROKEN
- % SOLIDS JAR NOT RECEIVED
- 5035 FIELD KIT NOT FROZEN WITHIN 48 HOUR'S
- RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE: J.O. 8/23/07TECHNICIAN SIGNATURE/DATE: J.C. 8-23-07

ASBD 10/03/06

F52021: Chain of Custody

Page 3 of 3

APPENDIX E
AFVR Data and Disposal Manifest

Project Name: Hwy 11 GROC
 Site Address: Hwy 11
 City, State: SAVANNAH, SC
 Facility ID:

SEI Environmental, Inc.
Enhanced Fluid Recovery (EFR) Field Log

Project Number: 8/21/07
 Date:
 Event Number:

Time	Extraction Wells	Vacuum (in/Hg) Extraction Well	Unit	Unit	Stack Temp. F	PPM meas OVA Conc.	Flow FT/MIN	Flow FT/SEC	Magnehelic reading Inches Water Upper Scale	Flow Scale Lower Scale
0	MW - 1	2.0	7.5	7.9	3444	2500				
0.25		2.1	16.0	17.4	2032	2800				
0.5		2.0	16.6	13.2	2685	2600				
0.75		2.0	16.6	13.6	2963	2600				
1		2.0	16.5	13.8	2425	2500				
1.25		2.0	16.8	13.9	2609	3500				
1.5		2.0	16.7	13.8	2827	2500				
1.75		2.0	16.7	13.9	3709	2500				
2		2.0	16.7	13.9	2926	2500				
2.25		2.0	16.3	14.0	3084	3500				
2.5		2.0	16.3	14.0	2630	3500				
2.75		2.0	16.3	14.1	2877	3500				
3		2.0	16.3	14.2	3229	3500				
3.25		2.0	16.3	14.2	4293	3300				
3.5		2.0	16.3	14.3	3534	3300				
3.75		2.0	16.3	14.3	3794	3000				
4		2.0	16.3	14.4	3794	3000				
4.25		2.0	16.3	14.4	3229	3000				
4.5	MW - 8	1.0	12.3	14.3	4293	3300				
5		1.0	12.2	14.3	3534	3300				
5.25		1.0	12.2	14.5	3794	3000				
6		1.0	12.3	14.8	35000	3000				
6.25		1.0	12.5	15.0	31288	3000				
7		1.0	12.5	15.1	25622	3000				
7.25		1.0	12.5	15.1	20984	3000				
8		1.0	12.6	15.2	22375	3000				
8.25		1.0	12.6	15.2	26403	3000				
9		1.0	12.6	15.3	27422	3000				

Well #	Observation Wells		Observation Wells		Change in GW Level		Field Comments:		Personnel:	Pump Type (wet or dry):	Total Hours of This Event:
	Before Event DTW	After Event DTW	DTP	Prod. (ft)	Prod. (ft)	Prod. (ft)					
MW - 1	27.05									Coolant (oil, water, etc):	Calibration Gas (FID):
MW - B	26.61	22.10	4.51							Slack Diameter ID (in):	Total Gal. of Water:



HAZ-MAT

TRANSPORTATION AND DISPOSAL
P.O. BOX 37392 • CHARLOTTE, N.C. 28237
(704) 332-5600
FAX (704) 375-7183

Manifest No. 28087

P.O. No.

Job No.

NON-HAZARDOUS SPECIAL WASTE

Section I.

GENERATOR

(Generator complete all of Section I.)

GENERATOR LOCATION

NAME

ORIGINATING ADDRESS

MAILING ADDRESS

CITY

STATE

ZIP

PHONE NO.

CONTACT NAME

DIS. OF WASTE:

WORK CONTRACTED BY

Bill To (If different from information at left)

NAME

ADDRESS

CITY

STATE

ZIP

PHONE NO.

CONTACT NAME

<input type="checkbox"/>							
No.	Type	Units					Quantity

Section II. INVOICE INFORMATION

GALLONS DRUMS

DESCRIPTION

QUANTITY

LINE TOTAL

1. PETROLEUM CONTACT WATER PUMPED FROM TANKS, DRUMS OR AFVR

2. OFF-SPEC LIGHT OIL, DIESEL OR GAS PUMPED FROM TANKS OR DRUMS

SOLUBLE OILS OR COOLANTS PUMPED FROM STORAGE

4. SEDIMENT OR SOLIDS VACUUMED FROM CONTAINMENT AREA

5. 55-GALLON DRUM REMOVED - SOLID OR EMPTY

55-GALLON DRUM REMOVED - LIQUID

7.

8.

9.

10. ARRIVAL TIME: DEPARTURE TIME:

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Generator Authorized Agent Name

Signature

Shipment Date

Section III. TRANSPORTER

TRANSPORTER (Generator complete a-d; Transporter I complete e-g;
Transporter II complete h-j)

HAZ-MAT

TRANSPORTER II

TRANSPORTATION AND DISPOSAL

P.O. BOX 37392 • CHARLOTTE, N.C. 28237

e. Name

f. Address

a. Driver Name / Title

b. Phone No. c. Truck No.

Hazardous Waste Transporter Permits

EPA NCR 000003186

EPA NCD048461370

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------

Shipment Date

g. Driver Name / Title

h. Phone No. i. Truck No.

j. Transporter II Permit Nos.

<input type="checkbox"/>				
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Driver Signature

Shipment Date

Section IV.

FACILITY INFORMATION AND CERTIFICATE OF DISPOSAL

Site Name: Haz-Mat Transportation & Disposal, Inc.

a. Phone No.

704-332-5600

Physical Address: 210 Dalton Avenue

b. Mailing Address:

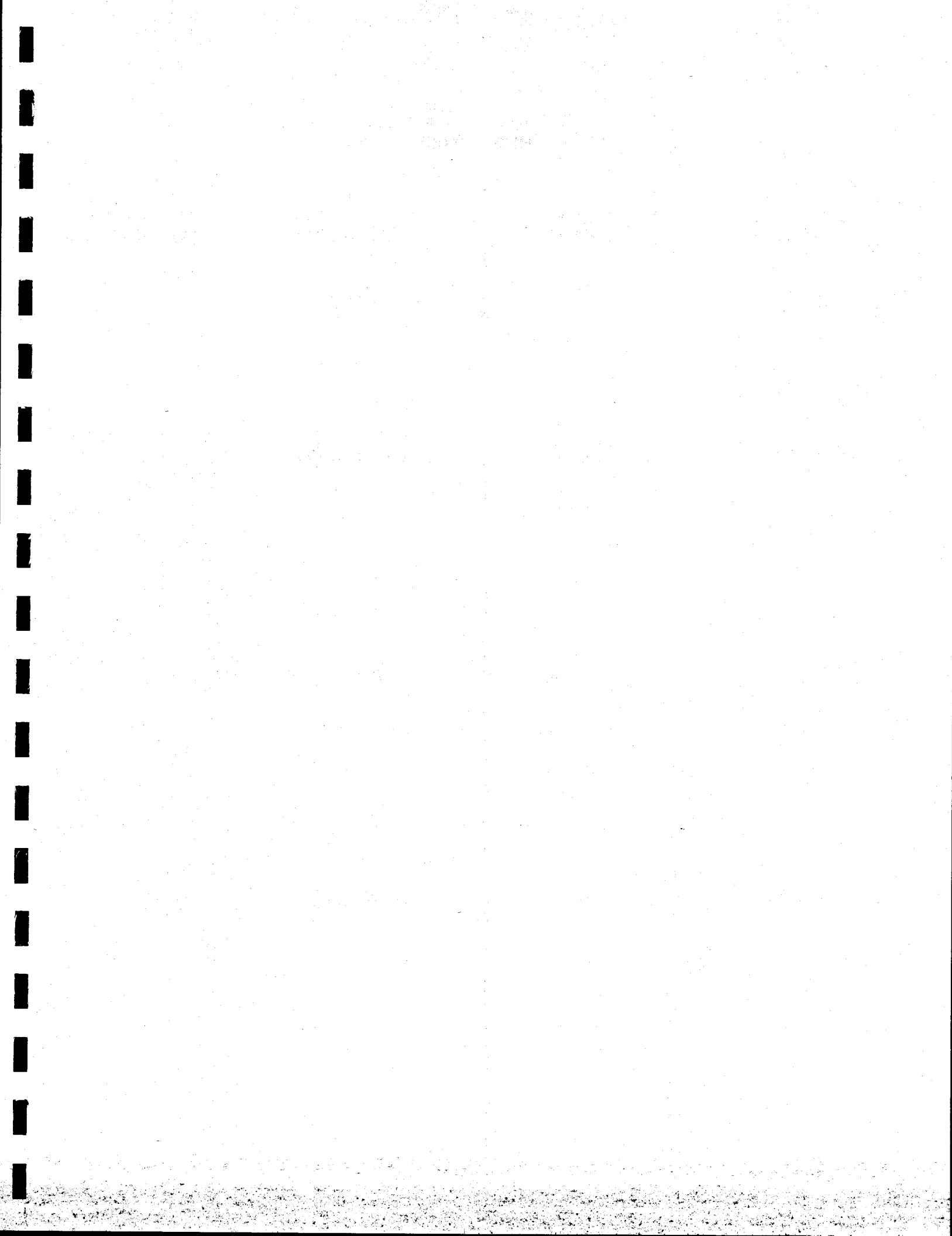
P.O. Box 37392

Charlotte, N.C. 28206

Charlotte, N.C. 28237

Discrepancy Indication Space

This is to certify that all non-hazardous material removed from above location has been received and will be disposed of in accordance with applicable local, state and federal regulations in the following manner: (1) Petroleum products are blended into a beneficial reusable fuel for use in large industrial burners. (2) Waste waters are to be treated with polymers, pH adjusters, and a flocculant, then flows through a dissolved air flotation system for pre-treatment separation, then into the CMWU separation tower system under permit #P45012. All effluents from treatment systems are hauled to E.P.A. approved facilities for proper disposal. Manifest and certificate of disposal are on file.



RECEIVED

Joel

NOV 29 2007

PERMISSION FORM

UNDERGROUND STORAGE TANK AND PROPERTY OWNER

UST Permit #03439

UNDERGROUND STORAGE
TANK PROGRAM

If you are the owner of the former or existing underground storage tanks and the property owner, please complete this form.

I, Steven Smith, certify that I am the legal owner of the underground storage tanks and property located at the facility identified below or serve as the authorized representative for the owner. I grant permission to the South Carolina Department of Health and Environmental Control (SCDHEC) to secure on my behalf contractor services to conduct assessment and corrective action activities as required, and authorize SCDHEC, or a contractor selected by SCDHEC, to enter this property at reasonable times only to accomplish these site rehabilitation tasks. The contractor(s) will be designated as my contractor for only the required site rehabilitation activities. Compensation to the contractor(s) will be from the SUPERB Account and I will have no obligation to pay the contractor(s). I understand that SCDHEC will be responsible for notifying me of all activities that are necessary prior to their initiation and will promptly provide to me a copy of each environmental report. I understand that I may choose to select my own contractor at the completion of any phase of work by notifying the Bureau of Underground Storage Tank Management in writing.

Name of Facility Hwy 11 Grocery Phone # 864 944-0494

Street Address of Facility 13527 N Hwy 11

Town, City, District, Suburb Salem SC 29676

Name of nearest intersecting street, road, highway, alley
SC Hwy 11 / 130

Is this facility within the city limits? (yes or no) NO

Does a public water or sewer utility service this facility? (yes or no) NO, if no, please provide the name and phone number of a person that we can contact that can assist in the location of private water and septic tank lines Steven Smith, phone number 944 - 0494

Were underground storage tanks previously removed from the ground at this facility? (yes or no) NO
If yes, please provide the name of a person we can contact that can assist in the location of the former underground storage tank excavation _____

Phone number _____

Is the property currently leased or rented to someone? (yes or no) NO. If yes, please provide their name _____ and phone number _____ and let them know about the pending assessment activities. If vehicles or other mobile structures are parked over the former or existing underground storage tanks, they should be moved before SCDHEC's contractor gets to the site.

NAME of UST/property owner (Please Print): Steven Smith

Phone Number (home) _____ (work) 864 944 0494

Signature of UST/property Owner: Sten M. Smith

Witness: Elaine C. Lee

Date: 11 Month 28 Day 2007 Year

UST PROGRAM
DOCKETING # 4



C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

MR STEVEN SMITH
180 SHALLOW FORD RD
SALEM SC 29676

Re: Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; CA #17616
Release reported November 28, 2000
Corrective Action System Evaluation (CASE) received November 7, 2007
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program has reviewed the referenced report. The Program notes that the AFVR events conducted on monitoring wells MW-1 and MW-8 were effective in removing free-phase product based upon reported off-gas measurements. However, as product persists in MW-8 and has emerged in MW-14, continued AFVR events are warranted. Please have your contractor focus AFVR events on MW-8 and, in particular, MW-14 as this well is adjacent to the creek. Also, please include creek sample CK-3 in the sampling protocol since this location is downstream from MW-14.

Based upon the current data, the Program calculates a **-1.42%** reduction in total concentrations of chemicals of concern (CoC) across the site (see enclosed CoC reduction calculation sheets). Please note that the calculation uses the last known concentrations for MW-1, which was not sampled during the August 2007 monitoring event. The low reduction is a result of the emergence of free-phase product in MW-14.

The next CASE report documenting the December monitoring event and quarterly AFVR events is due on or before **February 1, 2008**. On all correspondence regarding this site, please reference UST Permit #03439. If you have any questions regarding this correspondence, feel free to contact me by telephone at (803) 896-6398, by fax at (803) 896-6245, or by e-mail at padgettjp@dhec.sc.gov.

Sincerely,

Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

UST PROGRAM
DOCKETING # *[Signature]*

JPP/jpp
03439.15

enc: CoC reduction calculation sheets

cc: Chris Boggs, P.G., SEI Environmental, Inc., 130 Penmarc Drive, Suite #108,
Raleigh, NC 27603 (w/enc)
James W. Reid, 185 Reid Drive, Salem, SC 29676 (w/enc)
Technical file (w/o enc)



2025 Progress Court
Raleigh, North Carolina 27608
800.474.7049
919.832.2535
Fax 832.5914

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FEB 11 2008

UNDERGROUND STORAGE
TANK PROGRAM

February 5, 2008

Mr. Joel P. Padgett, P.G., Hydrogeologist
South Carolina Department of Health and Environmental Control
Assessment & Corrective Action Section, Underground Storage Tank Program
2600 Bull Street
Columbia, South Carolina 29201

**RE: Corrective Action System Evaluation Report
Highway 11 Grocery
13527 North SC Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169**

Dear Mr. Padgett:

Please find enclosed the quarterly Corrective Action System Evaluation (C.A.S.E) Report for the December 12, 2007 groundwater sampling event at the above referenced site. If you have any questions or comments, please contact me at (919) 832-2535.

Sincerely,
SEI Environmental, Inc.

A handwritten signature in black ink that reads "Chris L. Boggs".

Chris L. Boggs, P.G.
Project Manager

cc: Mr. John Smith, Highway 11 Grocery

UST PROGRAM
SITTING #

A large handwritten number "6" is written over a blue horizontal line.

CORRECTIVE ACTION SYSTEM EVALUATION REPORT
September 2007 through December 2007

**Highway 11 Grocery
13527 North SC Highway 11
Salem, South Carolina
Oconee County
UST Permit Number: 03439
SEI Project Number: 302169**

PREPARED FOR:

**Mr. Steve Smith
Highway 11 Grocery
13527 North SC Highway 11
Salem, South Carolina 29676-9801**

PREPARED BY:

**SEI ENVIRONMENTAL, INC.
130 Penmarc Drive, Suite 108
Raleigh, North Carolina
UST Site Rehabilitation Contractor No. 354**

February 5, 2008

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Submittal Date: February 5, 2008
For Period Covering: August 21, 2007
Facility Name : Highway 11 Grocery
UST Permit Number: 03439
County: Oconee
Latitude: N 35°54'26.02"

Monitoring Report Number:
to December 12, 2007
Street Address: 13527 North SC Highway 11
City: Salem, South Carolina
Zip Code: 27603
Longitude W 82°58'31.29"
:

Submitted by UST Owner/Operator:

Name: Steve Smith
Company: Highway 11 Grocery
Address: 13527 North Highway 11
City: Salem State: SC
Zip Code: 29676-9801
Telephone: (864) 944-0494
SEI Project Number: 302169

Prepared by Consultant/Contractor:

Name: Chris L. Boggs
Company: SEI Environmental, Inc.
Address: 2025 Progress Place
City: Raleigh State: NC
Zip Code: 27608
Telephone: (919) 832-2535
UST Site Rehabilitation Contractor No. 354

Registered Professional Engineer or Professional Geologist Certification

I hereby certify that I have directed and supervised the fieldwork and preparation of this Plan, in accordance with State Rules and Regulations. As a registered professional geologist and/or professional engineer, I certify that I am a qualified groundwater professional, as defined by the South Carolina State Board of Professional Geologists. All of the information and laboratory data in this plan and in all of the attachments are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

Name: Chris L. Boggs, P.G.
SC Reg. No. 2101
Signature:
Date:



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LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the former UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

This report has been prepared under the guidance of a Licensed Geologist registered in South Carolina to meet the requirements of the South Carolina Department of Health and Environmental Control. The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of the samples associated with this report were performed by a subcontracted, independent, and certified laboratory. All data have been reviewed for accuracy and, excepting obvious errors, have been accepted as correct. SEI Environmental, Inc. reserves the right to revise estimates of performances as required by changes in the data supplied by Accutest Laboratories.

1.0 INTRODUCTION

The Highway 11 Grocery is a convenience and retail fuel store located at 13527 North SC Highway 11 in Salem, Oconee County, South Carolina. Figure 1 in Appendix A is a portion of the United States Geological Survey (USGS) 7.5-minute topographical quadrangle map identifying the location of the site.

The following is a brief summary of recent events occurring at the site:

- December 18, 2003 – Groundwater Sampling Event
- March 31, 2004 – Groundwater Sampling Event
- September 29, 2004 – Groundwater Sampling Event
- January 11, 2005 – EFR performed on MW-8
- March 17, 2005 – EFR performed on MW-8
- March 17, 2005 – Groundwater Sampling Event
- August 9, 2005 – Groundwater Sampling Event
- November 1, 2005 – Groundwater Sampling Event
- March 22, 2006 – Groundwater Sampling Event
- August 28, 2006 – Groundwater Sampling Event
- November 5, 2006 – Groundwater Sampling Event
- February 7, 2007 – Groundwater Sampling Event
- May 3, 2007 - Groundwater Sampling Event
- August 21, 2007 – Groundwater Sampling Event
- December 12, 2007- Groundwater Sampling Event

On December 12, 2007, in accordance with the requirements of the PFP contract, samples were collected from sixteen groundwater monitoring wells and two surface locations. This report provides details of the groundwater sampling event.

2.0 FIELD MEASUREMENTS AND SAMPLING

2.1 Groundwater Sampling

On December 12, 2007, groundwater samples were collected from sixteen groundwater monitoring wells. Prior to sampling, groundwater depth was gauged in the monitoring wells utilizing an oil-water interface probe to measure depth to groundwater, and to detect any phase separated hydrocarbons (PSH) present. The depth to groundwater measurement is used to calculate the groundwater elevation used in determining the current groundwater potentiometric surface, along with hydraulic gradient, and groundwater flow direction.

Figure 3 in Appendix A presents a groundwater potentiometric map for the current sampling event. The latest groundwater data indicate that groundwater flow at the site is to the northeast with a hydraulic gradient of 0.032 feet per foot between monitoring wells MW-3 and MW-12. This flow direction is consistent with previous determinations of groundwater movement. Table 1 in Appendix B summarizes groundwater measurement data. Appendix C includes field observation data.

Representative groundwater samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Method 8260B for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene.

2.2 Surface Water Sampling

On December 12, 2007, two (CK-1 and CK-3) surface water samples were collected from adjacent creek. CK-2 location is no longer sampled per the March 17, 2005, sampling event report. CK-3 replaced CK-2 to monitor for potential contamination from monitoring well MW-14. Representative samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The

groundwater samples were analyzed by EPA Method 8260B for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Groundwater Analytical Results

SSTLs have been designated for fourteen (MW-1 through MW-8, MW-10, MW-11, MW-14, DMW-1, DMW-2, and DMW-4). Sixteen wells were sampled on December 12, 2007 and CoCs were detected in three (MW-7, MW-10, MW-11) monitoring wells at concentrations above their respective Site Specific Target Level (SSTL). Figure 4 in Appendix A is a site map presenting monitoring well location and their CoC concentrations. Table 2 in Appendix B summarizes historical groundwater analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.2 Surface Water Analytical Results

Benzene was detected in surface water sample CK-1 at a concentration of 13.2 µg/L. MTBE was detected in surface water sample CK-3 at a concentration of 50.2 µg/L.

4.0 REMEDIATION SYSTEM EFFECTIVENESS

In awarding the Pay-For-Performance (PFP) site remediation contract, the South Carolina Department of Health and Environmental Control (SCDHEC) set remediation goals for this site via site specific target levels (SSTLs). The monitoring wells have individual target concentrations for five (benzene, toluene, ethylbenzene, xylenes, MTBE and naphthalene) identified chemicals of concern (CoC).

Remediation system effectiveness can be calculated comparing the initial May 7, 2002, CoC concentrations that exceeded the SSTLs with the current CoC concentrations that exceeded the SSTLs. For monitoring wells MW-1 and MW-8, the standard values for free product (benzene, 226,000 µg/L; toluene, 301,000 µg/L; ethylbenzene, 280,000 µg/L; xylenes, 278,000 µg/L; MTBE, 5,110,000 µg/L; and naphthalene 2,000 µg/L) were used in the percent reduction calculation. The formula is follows:

$$\left[\frac{[08/29/96 \text{ Sample Concentration Above SSTL}] - [\text{Current Sample Concentration Above SSTL}]}{[08/29/96 \text{ Sample Concentration Above SSTL}]} \right] *100 = \% \text{ Reduction}$$

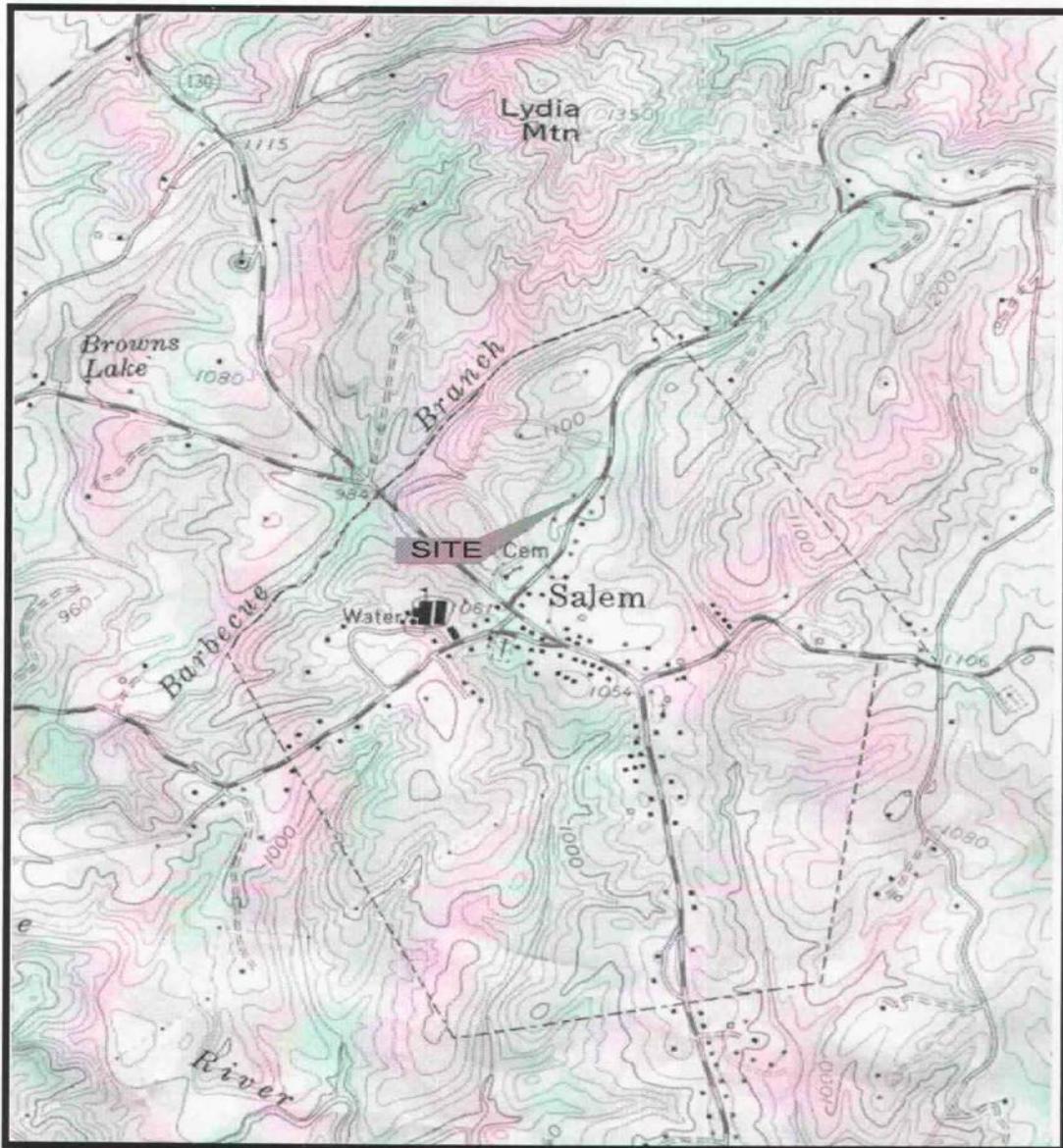
Using the current analytical results, the percent concentration reduction is 99.81%. Table 2 in Appendix B presents concentration reduction calculations.

5.0 CONCLUSIONS

The groundwater flow direction at the time of the December 12, 2007 sampling event was towards the northeast with a hydraulic gradient of 0.032 feet per foot. Free product was present in monitoring wells MW-1, MW-8, and MW-14. CoCs were detected in three monitoring wells above their respective SSTLs. Benzene and MTBE were detected in CK-1 and CK-3 surface water samples at a concentration above the RBSL, respectively. The percent concentration reduction was calculated at 99.81%.

SEI Environmental, Inc recommends continuing the quarterly monitoring to evaluate the continued reduction of chemicals of concern in the monitoring wells on site. In addition SEI recommends continuing AFVR events at monitoring wells MW-1 and MW-8 in conjunction with groundwater sample collection.

APPENDIX A
Figures



SCALE 1:24000

1 $\frac{1}{2}$ 0 1 MILE
 1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
 1 .5 0 1 KILOMETER



SALEM QUADRANGLE
 SOUTH CAROLINA-OCONEE CO.
 7.5 MINUTE SERIES (TOPOGRAPHIC-BATHYMETRIC)
 BY U.S. GEOLOGICAL SURVEY

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
 HIGHWAY 11 GROCER
 13527 Highway 11, Salem, SC
 FACILITY I.D. #03439

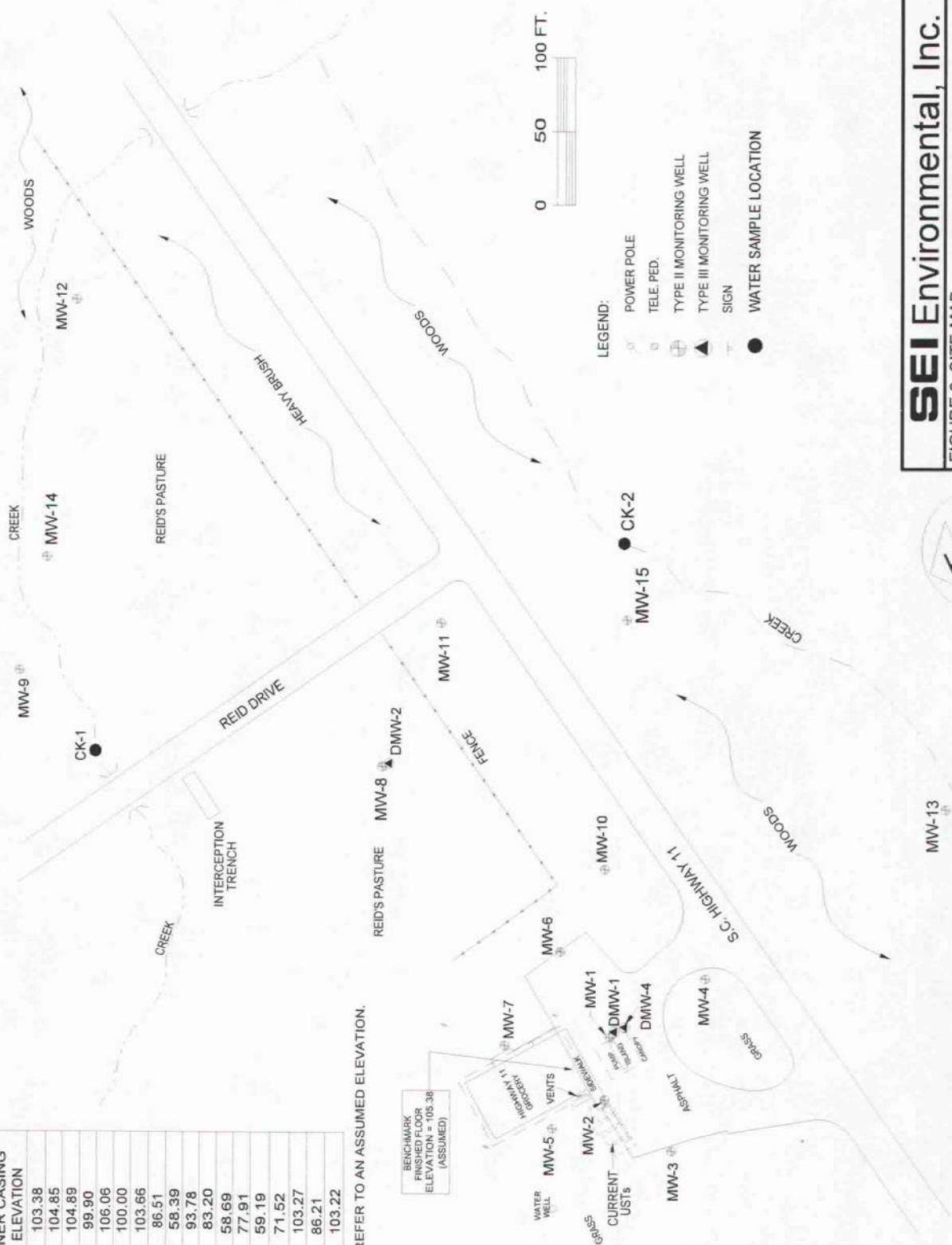
WO # 302169
 DWG # Hw 11_topo_sitemap

DATE: 9/16/05
 DRAWN BY: HWH

WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.89
MW-4	99.90
MW-5	106.06
MW-6	100.00
MW-7	103.66
MW-8	86.51
MW-9	58.39
MW-10	93.78
MW-11	83.20
MW-12	58.69
MW-13	77.91
MW-14	59.19
MW-15	71.52
DMW-1	103.27
DMW-2	86.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.

BENCHMARK
FINISHED FLOOR
ELEVATION = 105.38
(ASSUMED)



LEGEND:

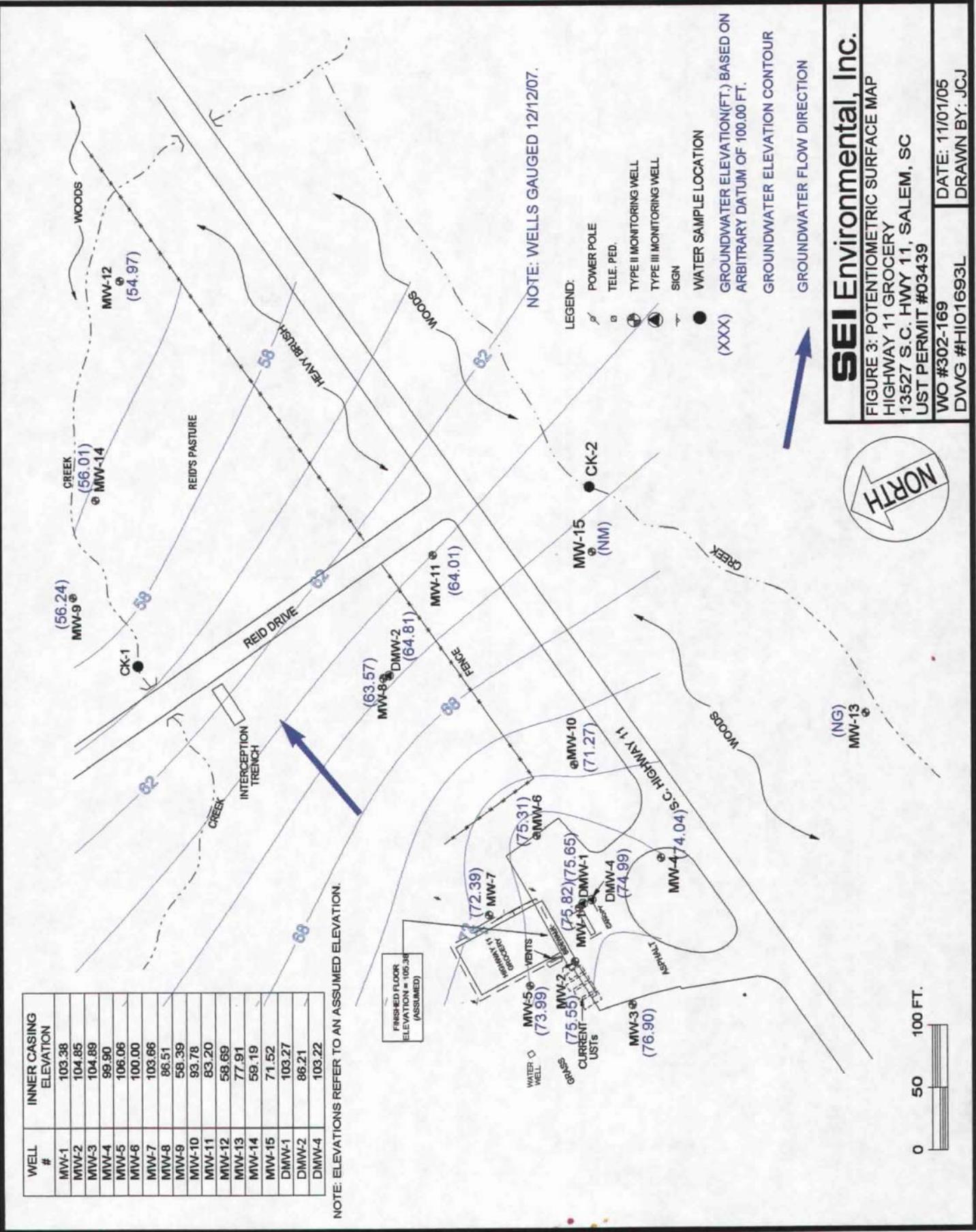
- POWER POLE
- TELE. PED.
- ⊕ TYPE II MONITORING WELL
- ▲ TYPE III MONITORING WELL
- SIGN
- WATER SAMPLE LOCATION

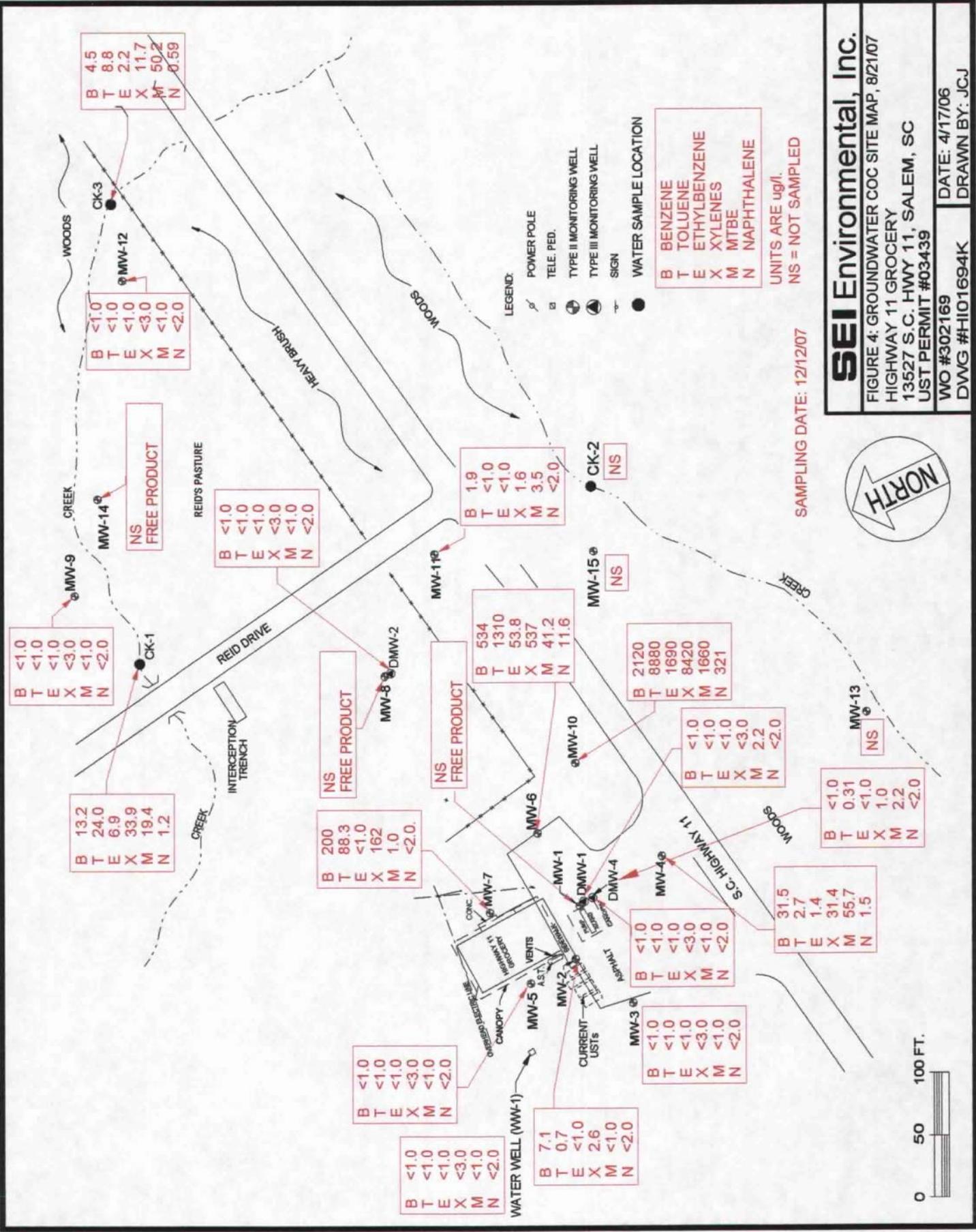
SEI Environmental, Inc.

FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439
WO #302-043
DWG #HIO1692G

DATE: 3/17/05
DRAWN BY: JCJ







APPENDIX B
Tables

APPENDIX B
Tables

Table 1

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-1	05/08/02	24.67	24.71	0.04	103.38	78.74
	07/01/03	23.28	23.52	0.24		80.29
	07/30/03	22.89	22.97	0.08		80.55
	09/15/03	23.78	23.82	0.04		79.63
	10/02/03	24.32	24.45	0.13		79.16
	10/23/03	24.72	24.93	0.21		78.82
	12/18/03	24.06				79.32
	03/31/04	24.61				78.77
	09/29/04	24.20				79.18
	01/11/05	23.77				79.61
	03/17/05	23.97				79.41
	08/09/05	22.86				80.52
	11/01/05	25.20	25.13	0.07		78.23
	03/22/06	23.91				79.47
	03/28/06	27.17	26.64	0.53		76.62
	11/05/06	26.08	25.55	0.53		77.71
	02/07/07	24.30	24.14	0.16		79.20
	05/03/07	25.23				78.15
	08/21/07	27.05				76.33
	12/12/07	28.18	27.38	0.80		75.82
MW-2	05/08/02	26.08			104.85	78.77
	07/01/03	24.08				80.77
	07/30/03	23.78				81.07
	09/15/03	24.73				80.12
	10/02/03	25.56				79.29
	10/23/03	25.71				79.14
	12/18/03	25.38				79.47
	03/31/04	25.85				79.00
	09/29/04	25.55				79.30
	01/11/05	24.74				80.11
	03/17/05	25.10				79.75
	08/09/05	23.70				81.15
	11/01/05	26.29				78.56
	03/22/06	25.94				78.91
	08/28/06	28.33				76.52
	11/05/06	27.39				77.46
	02/07/07	25.47				79.38
	05/03/07	26.34				78.51
	08/21/07	28.49				76.36
	12/12/07	29.30				75.55
MW-3	05/08/02	24.78			104.86	80.08
	07/01/03	22.51				82.35
	07/30/03	22.21				82.65
	09/15/03	23.23				81.63
	10/02/03	23.87				80.99
	10/23/03	24.23				80.63
	12/18/03	23.93				80.93
	03/31/04	24.44				80.42
	09/29/04	24.20				80.66
	01/11/05	23.36				81.50
	03/17/05	23.65				81.21
	08/09/05	22.11				82.75
	11/01/05	24.85				80.01
	03/22/06	24.57				80.29
	08/28/06	26.95				77.91
	11/05/06	26.05				78.81
	02/07/07	24.15				80.71
	05/03/07	25.03				79.83
	08/21/07	27.26				77.60
	12/12/07	27.96				76.90
MW-4	05/08/02	23.38			99.90	76.52
	07/01/03	22.10				77.80
	07/30/03	22.09				77.81
	09/15/03	22.90				77.00
	10/02/03	23.32				76.58
	10/23/03	23.69				76.21
	12/18/03	22.95				76.95
	03/31/04	23.49				76.41
	09/29/04	23.14				76.76
	01/11/05	22.70				77.20
	03/17/05	22.84				77.06
	08/09/05	26.40				73.50
	11/01/05	27.27				72.63
	03/22/06	23.42				76.48
	08/28/06	25.39				74.51
	11/05/06	24.11				75.79
	02/07/07	22.96				76.94
	05/03/07	23.88				76.02
	08/21/07	25.66				74.24
	12/12/07	25.86				74.04

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-5	05/08/02	28.82			106.06	77.24
	07/01/03	26.82				79.24
	07/30/03	26.53				79.53
	09/15/03	27.40				78.66
	10/02/03	27.92				78.14
	10/23/03	28.40				77.66
	12/18/03	28.40				77.66
	03/31/04	28.56				77.50
	09/29/04	28.46				77.60
	01/11/05	27.41				78.65
	03/17/05	27.86				78.20
	08/09/05	20.02				86.04
	11/01/05	28.91				77.15
	03/22/06	28.59				77.47
	08/28/06	31.06				75.00
	11/05/06	30.40				75.66
	02/07/07	28.30				77.76
	05/03/07	28.90				77.16
	08/21/07	31.12				74.94
	12/12/07	32.07				73.99
MW-6	05/08/02	21.66			100.00	78.34
	07/01/03	19.77				80.23
	07/30/03	19.88				80.12
	09/15/03	20.63				79.37
	10/02/03	21.34				78.66
	10/23/03	21.74				78.26
	12/18/03	21.00				79.00
	03/31/04	21.71				78.29
	09/29/04	21.33				78.67
	01/11/05	20.81				79.19
	03/17/05	20.10				79.90
	08/09/05	26.18				73.82
	11/01/05	22.41				77.59
	03/22/06	21.77				78.23
	08/28/06	23.86				76.14
	11/05/06	22.71				77.29
	02/07/07	21.13				78.87
	05/03/07	22.23				77.77
	08/21/07	24.17				75.83
	12/12/07	24.69				75.31
MW-7	05/08/02	28.12			103.66	75.54
	07/01/03	26.55				77.11
	07/30/03	26.22				77.44
	09/15/03	26.83				76.83
	10/02/03	27.69				75.97
	10/23/03	28.10				75.56
	12/18/03	27.71				75.95
	03/31/04	28.00				75.66
	09/29/04	27.60				76.06
	01/11/05	26.88				76.78
	03/17/05	27.83				75.83
	08/09/05	20.27				83.39
	11/01/05	28.63				75.03
	03/22/06	N/L				N/L
	08/28/06	30.43				73.23
	11/05/06	29.56				74.10
	02/07/07	27.41				76.25
	05/03/07	28.35				75.31
	08/21/07	29.49				74.17
	12/12/07	31.27				72.39
MW-8	05/08/02	21.00			86.51	65.51
	07/01/03	20.96				65.55
	07/30/03	20.46				66.05
	09/15/03	21.17				65.34
	10/02/03	20.44				66.07
	10/23/03	21.54				64.97
	12/18/03	20.82				65.69
	03/31/04	21.35				65.16
	09/29/04	21.10				65.41
	01/11/05	21.04				65.47
	03/17/05	20.95				65.56
	08/09/05	22.16				64.35
	11/01/05	23.31				63.20
	03/22/06	22.00	21.23	0.77		65.11
	08/28/06	24.46	22.05	2.41		63.93
	11/05/06	NM				
	02/07/07	NM				
	05/03/07	NM				
	08/21/07	26.61	22.10	4.51		63.42
	12/12/07	23.24	22.85	0.39		63.57

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-9	05/08/02	2.47			58.39	55.92
	07/01/03	2.30				56.09
	07/30/03	2.26				56.13
	09/15/03	2.42				55.97
	10/02/03	2.16				56.23
	10/23/03	2.42				55.97
	12/18/03	2.20				56.19
	03/31/04	2.56				55.83
	09/29/04	1.90				56.49
	01/11/05	2.23				56.16
	03/17/05	2.11				56.28
	08/09/05	2.04				56.35
	11/01/05	2.33				56.06
	03/22/06	2.23				56.16
	08/28/06	2.50				55.89
	11/05/06	2.38				56.01
	02/07/07	2.36				56.03
	05/03/07	2.50				55.89
	08/21/07	2.61				55.78
	12/12/07	2.15				56.24
MW-10	05/08/02	20.04			93.78	73.74
	07/01/03	16.20				77.58
	07/30/03	18.95				74.83
	09/15/03	16.53				77.25
	10/02/03	20.19				73.59
	10/23/03	20.51				73.27
	12/18/03	19.83				73.95
	03/31/04	18.85				74.93
	09/29/04	20.02				73.76
	01/11/05	19.47				74.31
	03/17/05	18.84				74.94
	08/09/05	18.94				74.84
	11/01/05	21.07				72.71
	03/22/06	20.16				73.62
	08/28/06	22.16				71.62
	11/05/06	20.94				72.84
	02/07/07	19.65				74.13
	05/03/07	20.57				73.21
	08/21/07	22.38				71.40
	12/12/07	22.51				71.27
MW-11	05/08/02	16.22			83.20	66.98
	07/01/03	16.53				66.67
	07/30/03	16.70				66.50
	09/15/03	17.35				65.85
	10/02/03	16.40				66.80
	10/23/03	17.83				65.37
	12/18/03	17.58				65.62
	03/31/04	16.21				66.99
	09/29/04	15.92				67.28
	01/11/05	15.93				67.27
	03/17/05	16.86				66.34
	08/09/05	15.80				67.40
	11/01/05	18.22				64.98
	03/22/06	17.28				65.92
	08/28/06	19.09				64.11
	11/05/06	17.79				65.41
	02/07/07	16.44				66.76
	05/03/07	17.67				65.53
	08/21/07	19.12				64.08
	12/12/07	19.19				64.01
MW-12	05/08/02	2.80			58.69	55.89
	07/01/03	3.16				55.53
	07/30/03	2.55				56.14
	09/15/03	3.26				55.43
	10/02/03	2.60				56.09
	10/23/03	3.50				55.19
	12/18/03	2.97				55.72
	03/31/04	3.19				55.50
	09/29/04	3.02				55.67
	01/11/05	3.10				55.59
	03/17/05	3.12				55.57
	08/09/05	2.72				55.97
	11/01/05	3.63				55.06
	03/22/06	3.23				55.46
	08/28/06	3.84				54.85
	11/05/06	3.48				55.21
	02/07/07	3.15				55.54
	05/03/07	3.69				55.00
	08/21/07	4.14				54.55
	12/12/07	3.72				54.97

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-13	05/08/02	6.29			77.72	71.43
	07/01/03	6.44				71.28
	07/30/03	N/L				N/L
	09/15/03	6.36				71.36
	10/02/03	6.24				71.48
	10/23/03	6.78				70.94
	12/18/03	7.51				70.21
	03/31/04	6.62				71.10
	09/29/04	6.28				71.44
	01/11/05	6.44				71.28
	03/17/05	6.52				71.20
	08/09/05	10.52				67.20
	11/01/05	N/L				N/L
	03/22/06	N/L				N/L
	08/28/06	N/L				N/L
	08/28/06	N/L				N/L
	02/07/07	N/L				N/L
	05/03/07	N/L				N/L
	08/21/07	N/L				N/L
	12/12/07	N/L				N/L
MW-14	05/08/02	2.00			59.19	57.19
	07/01/03	2.28				56.91
	07/30/03	2.03				57.16
	09/15/03	2.42				56.77
	10/02/03	1.98				57.21
	10/23/03	2.67				56.52
	12/18/03	1.58				57.61
	03/31/04	2.03				57.16
	09/29/04	1.77				57.42
	01/11/05	1.92				57.27
	03/17/05	2.14				57.05
	08/09/05	1.75				57.44
	11/01/05	N/L				N/L
	03/22/06	N/L				N/L
	08/28/06	3.36				55.83
	11/05/06	N/L				N/L
	02/07/07	N/L				N/L
	05/03/07	2.94				56.25
	08/21/07	3.85	3.82	0.03		55.36
	12/12/07	3.41	3.12	0.29		56.01
MW-15	05/08/02	10.82			71.52	60.70
	07/01/03	10.76				60.76
	07/30/03	10.11				61.41
	09/15/03	11.00				60.52
	10/02/03	10.20				61.32
	10/23/03	11.07				60.45
	12/18/03	11.88				59.64
	03/31/04	11.02				60.50
	09/29/04	10.67				60.85
	01/11/05	10.83				60.69
	03/17/05	10.61				60.91
	08/09/05	10.58				60.84
	11/01/05	11.32				60.20
	03/22/06	NG				NG
	08/28/06	11.62				59.90
	11/05/06	NM				NM
	02/07/07	NM				NM
	05/03/07	NM				NM
	08/21/07	DRY				DRY

Historical Groundwater Elevation And Product Thickness Data

Highway 11 Grocery
 13527 South Carolina Highway 11
 Salem, Oconee County, South Carolina
 UST Permit Number: 03439
 SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
DMW-1	05/08/02	23.88			103.27	79.39
	07/01/03	23.61				79.66
	07/30/03	24.24				79.03
	09/15/03	24.60				78.67
	10/02/03	24.00				79.27
	10/23/03	24.50				78.77
	12/18/03	24.11				79.16
	03/31/04	23.61				79.66
	09/29/04	22.72				80.55
	01/11/05	22.97				80.30
	03/17/05	24.68				78.59
	08/09/05	22.66				80.61
	11/01/05	25.11				78.16
	03/22/06	24.71				78.56
	08/28/06	26.95				76.32
	11/05/06	25.85				77.42
	02/07/07	24.59				78.68
	05/03/07	24.93				78.34
	08/21/07	26.89				76.38
	12/12/07	27.62				75.65
DMW-2	05/08/02	17.83			86.21	68.38
	07/01/03	16.67				69.54
	07/30/03	17.20				69.01
	09/15/03	17.31				68.90
	10/02/03	16.80				69.41
	10/23/03	17.63				68.58
	12/18/03	17.11				69.10
	03/31/04	15.75				70.46
	09/29/04	16.49				69.72
	01/11/05	16.44				69.77
	03/17/05	17.22				68.99
	08/09/05	16.71				69.50
	11/01/05	18.08				68.13
	03/22/06	17.40				68.81
	08/28/06	18.72				67.49
	11/05/06	18.00				68.21
	11/05/06	18.93				67.28
	05/03/07	18.81				67.40
	08/21/07	19.15				67.06
	12/12/07	21.40				64.81
DMW-4	05/08/02	24.30			103.22	78.92
	07/01/03	23.93				79.29
	07/30/03	24.75				78.47
	09/15/03	24.95				78.27
	10/02/03	24.45				78.77
	10/23/03	24.95				78.27
	12/18/03	24.39				78.83
	03/31/04	23.88				79.34
	09/29/04	23.18				80.04
	01/11/05	23.32				79.90
	03/17/05	25.08				78.14
	08/09/05	22.96				80.26
	11/01/05	26.51				76.71
	03/22/06	25.00				78.22
	08/28/06	27.33				75.89
	11/05/06	26.39				76.83
	02/07/07	24.59				78.63
	05/03/07	25.48				77.74
	08/21/07	25.48				77.74
	12/12/07	28.23				74.99

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-1	05/07/02	226,000	301,000	280,000	278,000	5,110,000	2,000		6,197,000.00	
	07/01/03	10,000	34,000	4,400	23,000	34,000	1,200		106,600.00	
	07/30/03	7,600	28,000	6,300	32,000	25,000.0	2,500		101,400.00	
	12/18/03	2,200	6,200	910	5,800	16,000	2,500		33,610.00	
	03/31/04	3,400	9,300	1,100	6,200	20,000	1,200		41,200.00	
	09/29/04	3,200	7,300	<1,000	4,500	12,000	<5,000		27,000.00	
	03/17/05	5,600	9,550	1,570	7,610	19,300	325		43,955.00	
	08/09/05	16,900	42,600	3,520	19,000	115,000	705		197,725.00	
	11/01/05	44,390	26,540	3,700	21,680	173,000	637,000		906,310.00	
	03/22/06	20,700	41,100	3,100	11,700	103,000	<4,000		179,600.00	
	08/28/06	44,390	26,540	3,700	21,680	173,000	637,000	0.53	906,310.00	
	08/28/06	44,390	26,540	3,700	21,680	173,000	637,000	0.53	906,310.00	
	02/07/07	44,390	26,540	3,700	21,680	173,000	637,000	0.16	906,310.00	
	05/03/07	11,800	27,800	2,650	13,300	74,600	<4000		130,150.00	
	08/21/07	11,800	27,800	2,650	13,300	74,600	<4000		130,150.00	
	12/12/07	NS	NS	NS	NS	NS	NS	0.81	0.00	
	SSTL	22	4,497	3,148	44,969	180	112			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
MW-2	05/07/02	13	8.0	1.0	5.0	5.0	5.0		37.00	
	07/01/03	4.7	5.0	1.0	3.0	1.0	5.0		19.70	
	07/30/03	5.8	5.0	1.0	5.3	1.0	5.0		23.10	
	12/18/03	2.2	5.0	1.0	3.0	1.0	5.0		17.20	
	03/31/04	2.6	5.0	1.0	3.0	1.0	5.0		17.60	
	09/29/04	14	<25	<5.0	<15	<5.0	<25		14.00	
	03/17/05	13	5	<1.0	5	<1.0	<2.0		22.40	
	08/09/05	39.7	14.5	1.2	27.5	<1.0	<2.0		82.90	
	11/01/05	3.8	1.6	<1.0	<3.0	<1.0	<2.0		5.40	
	03/22/06	11.8	4.2	<1.0	3.4	<1.0	<2.0		19.40	
	08/28/06	32.0	3.1	<1.0	4.5	<1.0	<2.0		39.60	
	08/28/06	3.2	<1.0	<1.0	<3	<1.0	<2.0		8.20	
	02/07/07	6.9	2.1	<1.0	3.4	<1.0	<2.0		12.40	
	05/03/07	15.0	3.5	<1.0	5.4	<1.0	<2.0		23.90	
	08/21/07	56.4	6.6	<1.0	20.0	<1.0	<2.0		83.00	
	12/12/07	7.1	0.7	<1.0	2.6	<1.0	<2.0		10.42	
	SSTL	13	8.0	1.0	5.0	5.0	5.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
MW-3	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0		0.00	
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0.00	
	07/30/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0.00	
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0.00	
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0.00	
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0.00	
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	08/09/05	NS	NS	NS	NS	NS	NS		0.00	
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	03/22/06	<1.0	1.4	<1.0	<3.0	<1.0	<2.0		1.40	
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	05/03/07	NS	NS	NS	NS	NS	NS		0.00	
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	12/12/07	<1.0	0	<1.0	1	<1.0	<2.0		1.74	
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.4	0.0	0.0	0.0	0.0			
MW-4	05/07/02	1,500	5,320	620	3,360	810	500		12,110.00	
	07/01/03	4,800	14,000	2,300	12,000	12,000	2,600		47,700.00	
	07/30/03	4,000	14,000	2,700	13,000	2,100	500		36,300.00	
	12/18/03	1,100	2,400	230	1,900	1,200	250		7,080.00	
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0.00	
	09/29/04	53	<25	7.1	70	210	<25		340.10	
	03/17/05	<1.0	<1.0	<1.0	<3.0	17	<2.0		16.80	
	08/09/05	<1.0	<1.0	<1.0	<3.0	5.9	<2.0		5.90	
	11/01/05	3,720	3,860	745	4,170	4,540	<200		16,835.00	
	03/22/06	<1.0	<1.0	<1.0	<3.0	1.2	<2.0		1.20	
	08/28/06	43	7	4	88	153.0	3.6		288.70	
	11/05/06	195	24	19	164	225.0	11.6		638.90	
	02/07/07	25	59	13	67	47.1	<2.0			
	05/03/07	95	120	39	199	56.3	8.1		517.30	
	08/21/07	0	<1.0	<1.0	3	52.4	<2.0		55.63	
	12/12/07	32	3	1	31	55.7	1.5		124.20	
	SSTL	1,500	5,320	620	3,360	810	500.0			
	> SSTL	0	0.0	0	0	0	0.0			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-5	05/07/02	<1.0	<1.0	<1.0	<3.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<1.0	<1.0	<5.0			0.00
	07/30/03	4.2	17.0	3.6	18.0	2.2	<5.0			45.00
	12/16/03	2.3	<5.0	<1.0	3.2	1.3	<5.0			6.80
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	12/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
MW-6	05/07/02	1,780	4,950	490	2,880	6,350	500.0			16,950.00
	07/01/03	2,200	6,600	820	4,400	12,000	2,500			28,520.00
	07/30/03	4,200	13,000	1,600	8,900	21,000	400			49,100.00
	12/18/03	5,100	14,000	1,700	11,000	19,000	2,500			53,300.00
	03/31/04	280	840	100	2,200	900	250			4,570.00
	09/29/04	2,400	<5,000	<1,000	<3,000	17,000	<5,000			19,400.00
	03/17/05	3,490	7,500	952	5,380	15,500	262			33,084.00
	08/09/05	1,370	4,630	295	2,220	7,640	<400			16,155.00
	11/01/05	979	2,220	282	1,810	9,410	<200			14,701.00
	03/22/06	1,280	3,480	399	2,880	8,600	<200			16,639.00
	08/28/06	99	76	<2.0	243	22	<4.0			439.60
	11/05/06	34.0	60.9	<2.0	194	355	<20			643.90
	02/07/07	4,970.0	18,100.0	2,070	12,000	30,500	<500			67,640.00
	05/03/07	1,600.0	5,430.0	672	4,060	11,000	<1000			22,762.00
	08/21/07	167.0	416.0	7	227	213	<10			1,029.80
	12/12/07	534.0	1,310.0	54	537	41	11.6			2,487.60
	SSTL	1,780	4,950	490	2,880	6,350	500.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
MW-7	05/07/02	34	20	<1.0	8.0	7.0	<5.0			69.00
	07/01/03	37	36	1.7	20	9.2	<5.0			103.90
	07/30/03	18	18	<1.0	10	<1.0	<5.0			45.70
	12/18/03	41	20	<1.0	<3.0	<1.0	<5.0			61.00
	03/31/04	30	34	<1.0	16	<1.0	<5.0			80.00
	09/29/04	370	500	<100	<300	<100	<500			870.00
	03/17/05	505	590	34	280	65	<2.0			1,473.40
	08/09/05	52	56	2.6	34	9.2	<2.0			154.00
	11/01/05	27	42	3.7	24	<1.0	<2.0			96.10
	03/22/06	Not Sampled								
	08/28/06	99	95	3.6	127	7	<2.0			331.90
	11/05/06	50	44.5	<1.0	23.5	1.9	<2.0			119.90
	02/07/07	182	261.0	12.8	202.0	18.7	<2.0			676.50
	05/03/07	132	104.0	8.2	104.0	8.5	<10.0			356.70
	08/21/07	179	163.0	8.0	178.0	10.5	<4.0			538.50
	12/12/07	200	88.3	<1.0	162.0	<1.0	<2.0			450.30
	SSTL	22	20	1.0	8.0	7.0	5.0			
	> SSTL	178.0	68.3	0.0	154.0	0.0	0.0			
MW-8	05/07/02	226,000	301,000	280,000	278,000	5,110,000	2,000			6,197,000.00
	07/01/03	12,000	51,000	7,800	40,000	11,000	2,500			124,300.00
	07/30/03	12,000	40,000	3,600	18,000	15,000	660			89,260.00
	12/18/03	10,000	27,000	3,300	18,000	14,000	2,500			74,800.00
	03/31/04	17,000	140,000	32,000	180,000	8,600	<25,000			377,600.00
	09/29/04	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	03/17/05	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	08/09/05	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	11/01/05	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	03/22/06	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	08/28/06	44,390	26,540	3,700	21,680	173,000	637,000	2.41		906,310.00
	11/05/06	44,390	26,540	3,700	21,680	173,000	637,000	NM		906,310.00
	02/07/07	44,390	26,540	3,700	21,680	173,000	637,000	0.89		906,310.00
	05/03/07	44,390	26,540	3,700	21,680	173,000	637,000	NM		906,310.00
	08/21/07	226,000	301,000	280,000	278,000	5,110,000	2,000	4.51		6,197,000.00
	12/12/07	NS	NS	NS	NS	NS	0.39			0.00
	SSTL	204	40,888	28,622	278,000	1,362	1,021			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-9	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	1.2	8.8	<1.0	<5.0			10.00
	08/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	1.5	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			1.50
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	12/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	RBSL	5.0	1,000	700	10,000	40	25			
MW-10	05/07/02	115	185	68.0	328	86	9.0			791.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	170	420	43	240	540	6.5			1,419.50
	12/18/03	89	280	74	480	91	25.0			1,039.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	08/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	1.7	4.4	<1.0	<3.0	18	<2.0			24.00
	11/01/05	10,000	23,500	1,410	7,510	21,600	<1,000			64,020.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	79	98	16	69	169	<2.0			430.90
	11/05/06	203	412	67	226	137	4.7			1,049.90
	02/07/07	376	1,080	454	2,440	507	82.8			4,939.80
	05/03/07	1,990	4,990	846	4,420	1,770	136.0			14,152.00
	08/21/07	9,730	31,500	2,880	13,900	13,100	317.0			71,427.00
	12/12/07	2,120	8,880	1,690	8,420	1,660	321.0			23,091.00
	SSTL	115	185	68	328	86	9.0			
	> SSTL	2,005.0	8,695.0	1,622.0	8,092.0	1,574.0	312.0			
MW-11	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	42.2	<1.0	<1.0	93.6	4.5	3.8			144.10
	03/22/06	<1.0	<1.0	<1.0	<3.0	1.9	<2.0			1.90
	08/28/06	6.4	<1	<1	82.6	4.4	2.5			95.90
	11/05/06	2.8	<1	<1	8.9	4.7	<2.0			16.40
	02/07/07	<1	<1	<1	8.9	1.1	<2.0			10.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	2	<1.0	<1.0	9	6	<2.0			17.00
	12/12/07	2	<1.0	<1.0	2	4	<2.0			7.00
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.9	0.0	0.0	0.0	0.0	0.0			
MW-12	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	1.5	24.8	10.1	58.6	<1.0	11.3			106.30
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	12/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	RBSL	5.0	1,000	700	10,000	40	25			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-13	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	NS	NS	NS	NS	NS	NS			0.00
	03/22/06	NS	NS	NS	NS	NS	NS			0.00
	08/28/06	NS	NS	NS	NS	NS	NS			0.00
	11/05/06	NS	NS	NS	NS	NS	NS			0.00
	02/07/07	NS	NS	NS	NS	NS	NS			0.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	NS	NS	NS	NS	NS	NS			0.00
	12/12/07	NS	NS	NS	NS	NS	NS			0.00
	RBSL	5.0	1,000	700	10,000	40	25			
MW-14	05/07/02	3,780	13,800	27,000	14,700	7,010	500			66,790.00
	07/01/03	3,500	10,000	1,900	10,000	5,300	500			31,200.00
	07/30/03	3,100	9,700	1,800	9,300	4,300	500			28,700.00
	12/18/03	3,300	11,000	2,000	11,000	4,100	500			31,900.00
	03/31/04	5,500	17,000	2,800	13,000	7,100	570			45,770.00
	09/29/04	3,200	12,000	1,600	9,100	3,200	<5,000			29,100.00
	03/17/05	5,140	13,000	1,710	10,900	4,970	339			36,059.00
	08/09/05	3,290	10,600	1,820	11,000	4,950	<400			31,660.00
	11/01/05	NL	NL	NL	NL	NL	NL			0.00
	03/22/06	NL	NL	NL	NL	NL	NL			0.00
	08/28/06	2,010.0	4,080.0	1,160.0	6,320.0	3,320.0	261.0			17,151.00
	11/05/06	NL	NL	NL	NL	NL	NL			0.00
	02/07/07	NL	NL	NL	NL	NL	NL			0.00
	05/03/07	3,640.0	11,700.0	1,950.0	10,600.0	5,340.0	527.0			33,757.00
	08/21/07	226,000	301,000	280,000	278,000	5,110,000	2,000	0		6,197,000.00
	12/12/07	NS	NS	NS	NS	NS	NS	0		0.00
	SSTL	5.0	1,000	700	10,000	40	25			11,770.00
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
MW-15	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	NS	NS	NS	NS	NS	NS			0.00
	03/22/06	NS	NS	NS	NS	NS	NS			0.00
	08/28/06	NS	NS	NS	NS	NS	NS			0.00
	11/05/06	NS	NS	NS	NS	NS	NS			0.00
	02/07/07	NS	NS	NS	NS	NS	NS			0.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	NS	NS	NS	NS	NS	NS			0.00
	12/12/07	NS	NS	NS	NS	NS	NS			0.00
	RBSL	5.0	1,000	700	10,000	40	25			
DMW-1	05/07/02	215	430	50	50	1,780	250			2,775.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	<1.0	<5.0	<1.0	<3.0	4.2	<5.0			4.20
	12/18/03	1.5	<5.0	<1.0	<3.0	<1.0	<5.0			1.50
	03/31/04	<1.0	<15.0	<1.0	<3.0	3.9	<5.0			3.90
	09/29/04	8.4	<25	<5.0	<15	130	<25			138.40
	03/17/05	<1.0	1.2	<1.0	<3.0	8.1	<2.0			9.30
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<5.0	<5.0	<5.0	<15	<5.0	<10			0.00
	03/22/06	3.0	33.1	16	92.2	21.9	13.1			181.30
	08/28/06	<1.0	<1.0	<1.0	<3.0	20.3	<2.0			20.30
	11/05/06	<1.0	<1.0	<1.0	<3.0	90.8	<2.0			90.80
	02/07/07	9.2	2.5	<1.0	9.7	164.0	<4.0			185.40
	05/03/07	<1.0	<1.0	<1.0	<3.0	5.2	<2.0			5.20
	08/21/07	<1.0	<1.0	<1.0	<3.0	28.5	<2.0			28.50
	12/12/07	<1.0	<1.0	<1.0	<3.0	2.2	<2.0			2.20
	SSTL	215	430	50	50	1,780	250			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
DMW-2	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	6.4	<5.0			6.40
	07/30/03	<1.0	8.4	6.8	30.0	<1.0	6.7			51.90
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	0.3	<2.0			0.26
	12/12/07	<1.0	<1.0	<1.0	<3.0	0.3	<2.0			0.26
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
DMW-4	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	12/12/07	<1.0	0.3	<1.0	<3.0	<1.0	<2.0			0.31
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
CK-1	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	2.6	<5.0	<1.0	4.8	4.5	<5.0			11.90
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	11	18	4.1	20.0	9.0	<5.0			62.10
	09/29/04	16	30	6.1	32.0	22.0	<5.0			106.10
	03/17/05	10.4	17.5	4.1	20.8	12.3	<2.0			65.10
	08/09/05	7.6	17.6	2.9	15.8	6.9	<2.0			50.80
	11/01/05	20.3	38.2	8.8	48.8	27.3	<2.0			143.40
	03/22/06	6.6	12.9	3.2	15.2	7.8	<2.0			45.70
	08/28/06	13.1	29.0	6.7	27.8	16.7	<2.0			93.30
	11/05/06	13.9	22.3	6.7	34.3	17.8	<2.0			95.00
	02/07/07	7.9	16.4	4.0	21.1	9.8	<2.0			59.20
	05/03/07	10.8	20.4	5.2	28.2	13.2	<2.0			77.80
	08/21/07	40.4	62.8	19.3	108.0	53.2	3.2			286.90
	12/12/07	13.2	24.0	6.9	33.9	18.4	1.2			98.60
	RBSL	5.0	1,000	700	10,000	40	25			
CK-2	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	NS	NS	NS	NS	NS	NS			0.00
	03/22/06	NS	NS	NS	NS	NS	NS			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	NS	NS	NS	NS	NS	NS			0.00
	02/07/07	NS	NS	NS	NS	NS	NS			0.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	12/12/07	NS	NS	NS	NS	NS	NS			0.00
	RBSL	5.0	1,000	700	10,000	40	25			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
CK-3	08/09/05	14.4	33.3	7.1	41.1	25.8	<2.0			121.70
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	23.3	49.7	10.1	48.2	33.8	<2.0			165.10
	11/05/06	25.2	49.1	11.4	63.8	49.3	<2.0			198.80
	02/07/07	21.7	57.5	10.3	57.9	30.8	<2.0			178.20
	05/03/07	23.1	55.6	9.8	52.7	38.0	<2.0			179.20
	08/21/07	NS	NS	NS	NS	NS	NS			0.00
	12/12/07	4.5	8.8	2.2	11.7	50.2	0.6			77.99
	RBSL	5.0	1,000	700	10,000	40	25			
	WW-1									
WW-1	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/21/07	NS	NS	NS	NS	NS	NS			0.00
	12/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	RBSL	5.0	1,000	700	10,000	40	25			
TOTAL MASS										932,034
TOTAL SSTL MASS										447,591
INITIAL MASS ABOVE SSTL										12,046,007
CURRENT MASS ABOVE SSTL										22,702
PERCENT TOTAL MASS REDUCTION ABOVE SSTL										99.81

Reported in parts per billion ($\mu\text{g/l}$)

ND: Compound not detected

BDL: Below analytical Detection Limits

SSTL: Site Specific Treatment Level

APPENDIX C
Field Data Information Sheets for Groundwater Sampling

SEI Environmental
SC Monitoring Well Gauging Data Sheet

Site Name: Hwy 11 GROCERY WO# 302043
 Date 12/12/07

Well ID	Total Depth (feet)	Well Dia. (in.)	Depth to Product (feet)	Product Thickness (feet)	Depth to Water (feet)	Notes
✓ DMW-4	2				28.23	
✓ DMW-1	2				27.62	
✓ MW-2	2				29.30	
✓ MW-5	2				32.07	
✓ MW-3	2				27.96	
✓ MW-4	2				25.86	
✓ MW-10	2				22.51	
✓ MW-6	2				24.69	
✓ MW-7	2	20' MWB			31.27	
✓ MW-1	2	27.38			28.19	
✓ MW-9	2				2.15	
✓ MW-12	2				3.72	
✓ MW-14	2	3.12			3.41	
✓ MW-11	2				19.19	
✓ DMW-2	2				21.40	
✓ MW-8	2	22.85			23.24	

Purging is only necessary if water table is not across the screening interval. (Usually DMW-1 only)

Analysis: EPA Method 8260B for BTEX, MTBE, and Naphthalene

2-inch diameter well: Well Volume = (water column) x (0.163 gallon/foot)

4-inch diameter well: Well Volume = (water column) x (0.652 gallon/foot)

Purge amount = Well Volume x 3

APPENDIX D
Laboratory Analytical Results and Chain-of-Custody



IT'S ALL IN THE CHEMISTRY

02/05/08

Technical Report for

SEI-Charlotte, NC

Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC
302043

Accutest Job Number: F54614

Sampling Date: 12/12/07



Report to:

SEI Environmental-Raleigh

cboggs@sei-environmental.com

ATTN: Chris Boggs

Total number of pages in report: 25



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

A handwritten signature in black ink.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.



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2

3

Sample Summary

SEI-Charlotte, NC

Job No: F54614

Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC
Project No: 302043

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID	
F54614-1	12/12/07	15:12	HPZS	12/14/07	AQ	Ground Water	MW-5
F54614-2	12/12/07	15:14	HPZS	12/14/07	AQ	Ground Water	MW-2
F54614-3	12/12/07	15:20	HPZS	12/14/07	AQ	Ground Water	MW-3
F54614-4	12/12/07	15:25	HPZS	12/14/07	AQ	Ground Water	MW-4
F54614-5	12/12/07	15:29	HPZS	12/14/07	AQ	Ground Water	MW-10
F54614-6	12/12/07	15:34	HPZS	12/14/07	AQ	Ground Water	MW-6
F54614-7	12/12/07	15:38	HPZS	12/14/07	AQ	Ground Water	MW-7
F54614-8	12/12/07	15:45	HPZS	12/14/07	AQ	Ground Water	DMW-4
F54614-9	12/12/07	15:50	HPZS	12/14/07	AQ	Ground Water	DMW-1
F54614-10	12/12/07	15:56	HPZS	12/14/07	AQ	Ground Water	WW-1
F54614-11	12/12/07	16:15	HPZS	12/14/07	AQ	Ground Water	MW-12
F54614-12	12/12/07	16:19	HPZS	12/14/07	AQ	Ground Water	CK-3
F54614-13	12/12/07	16:29	HPZS	12/14/07	AQ	Ground Water	CK-1



Sample Summary

(continued)

SEI-Charlotte, NC

Job No: F54614

Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC
Project No: 302043

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F54614-14	12/12/07	16:30 HPZS	12/14/07	AQ	Ground Water	MW-9
F54614-15	12/12/07	16:52 HPZS	12/14/07	AQ	Ground Water	DMW-2
F54614-16	12/12/07	16:58 HPZS	12/14/07	AQ	Ground Water	MW-11



Sample Results

Report of Analysis

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Report of Analysis

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Client Sample ID:	MW-5	Date Sampled:	12/12/07
Lab Sample ID:	F54614-1	Date Received:	12/14/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	C0052776.D	1	12/19/07	LD	n/a	n/a	VC2134

Run #1	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		87-116%
17060-07-0	1,2-Dichloroethane-D4	102%		76-127%
2037-26-5	Toluene-D8	102%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-2	Date Sampled:	12/12/07	
Lab Sample ID:	F54614-2	Date Received:	12/14/07	
Matrix:	AQ - Ground Water	Percent Solids:	n/a	
Method:	SW846 8260B	Project: Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0052746.D	1	12/18/07	LD	n/a	n/a	VC2133
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	7.1	1.0	0.20	ug/l	
108-88-3	Toluene	0.72	1.0	0.27	ug/l	J
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	2.6	3.0	0.56	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		87-116%
17060-07-0	1,2-Dichloroethane-D4	113%		76-127%
2037-26-5	Toluene-D8	99%		86-112%
460-00-4	4-Bromofluorobenzene	101%		84-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

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Report of Analysis

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Client Sample ID:	MW-3	Date Sampled:	12/12/07
Lab Sample ID:	F54614-3	Date Received:	12/14/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC		
Run #1	File ID C0052747.D	DF 1	Analyzed 12/18/07
Run #2			By LD
			Prep Date n/a
			Prep Batch n/a
			Analytical Batch VC2133
	Purge Volume		
Run #1	5.0 ml		
Run #2			

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	0.44	1.0	0.27	ug/l	J
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	1.3	3.0	0.56	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7	Dibromofluoromethane	101%		87-116%		
17060-07-0	1,2-Dichloroethane-D4	111%		76-127%		
2037-26-5	Toluene-D8	100%		86-112%		
460-00-4	4-Bromofluorobenzene	103%		84-120%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	MW-4	Date Sampled:	12/12/07
Lab Sample ID:	F54614-4	Date Received:	12/14/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0052777.D	1	12/19/07	LD	n/a	n/a	VC2134
Run #2	C0052740.D	5	12/18/07	LD	n/a	n/a	VC2133

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	31.5	1.0	0.20	ug/l	
108-88-3	Toluene	2.7	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	1.4	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	31.4	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	55.7	1.0	0.25	ug/l	
91-20-3	Naphthalene	1.5	2.0	0.44	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	94%	87-116%
17060-07-0	1,2-Dichloroethane-D4	102%	111%	76-127%
2037-26-5	Toluene-D8	102%	102%	86-112%
460-00-4	4-Bromofluorobenzene	98%	101%	84-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-10	Date Sampled:	12/12/07
Lab Sample ID:	F54614-5	Date Received:	12/14/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0052743.D	2	12/18/07	LD	n/a	n/a	VC2133
Run #2	C0052769.D	50	12/19/07	LD	n/a	n/a	VC2134
Run #3	C0052821.D	200	12/21/07	LD	n/a	n/a	VC2136

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml
Run #3	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	2120 a	50	10	ug/l	
108-88-3	Toluene	8880 b	200	54	ug/l	
100-41-4	Ethylbenzene	1690 a	50	10	ug/l	
1330-20-7	Xylene (total)	8420 a	150	28	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1660 a	50	13	ug/l	
91-20-3	Naphthalene	321 a	100	22	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	94%	99%	94%	87-116%
17060-07-0	1,2-Dichloroethane-D4	104%	100%	99%	76-127%
2037-26-5	Toluene-D8	98%	100%	98%	86-112%
460-00-4	4-Bromofluorobenzene	103%	97%	93%	84-120%

(a) Result is from Run# 2

(b) Result is from Run# 3

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

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Client Sample ID:	MW-6	Date Sampled:	12/12/07
Lab Sample ID:	F54614-6	Date Received:	12/14/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0052744.D	2	12/18/07	LD	n/a	n/a	VC2133
Run #2	C0052773.D	20	12/19/07	LD	n/a	n/a	VC2134

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	534 ^a	20	4.0	ug/l	
108-88-3	Toluene	1310 ^a	20	5.4	ug/l	
100-41-4	Ethylbenzene	53.8	2.0	0.40	ug/l	
1330-20-7	Xylene (total)	537 ^a	60	11	ug/l	
1634-04-4	Methyl Tert Butyl Ether	41.2	2.0	0.50	ug/l	
91-20-3	Naphthalene	11.6	4.0	0.88	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	98%	87-116%
17060-07-0	1,2-Dichloroethane-D4	112%	100%	76-127%
2037-26-5	Toluene-D8	101%	100%	86-112%
460-00-4	4-Bromofluorobenzene	103%	101%	84-120%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

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Client Sample ID:	MW-7	Date Sampled:	12/12/07
Lab Sample ID:	F54614-7	Date Received:	12/14/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0052748.D	1	12/18/07	LD	n/a	n/a	VC2133
Run #2	C0052774.D	5	12/19/07	LD	n/a	n/a	VC2134

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	200 ^a	5.0	1.0	ug/l	
108-88-3	Toluene	88.3	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	162	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	98%	87-116%
17060-07-0	1,2-Dichloroethane-D4	110%	100%	76-127%
2037-26-5	Toluene-D8	100%	101%	86-112%
460-00-4	4-Bromofluorobenzene	99%	103%	84-120%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	DMW-4	Date Sampled:	12/12/07
Lab Sample ID:	F54614-8	Date Received:	12/14/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0052749.D	1	12/18/07	LD	n/a	n/a	VC2133
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	0.31	1.0	0.27	ug/l	J
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	1.0	3.0	0.56	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		87-116%
17060-07-0	1,2-Dichloroethane-D4	110%		76-127%
2037-26-5	Toluene-D8	103%		86-112%
460-00-4	4-Bromofluorobenzene	103%		84-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest LabLink@73135 15:42 05-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID:	DMW-1	Date Sampled:	12/12/07
Lab Sample ID:	F54614-9	Date Received:	12/14/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0052750.D	1	12/18/07	LD	n/a	n/a	VC2133
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.2	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		87-116%
17060-07-0	1,2-Dichloroethane-D4	111%		76-127%
2037-26-5	Toluene-D8	101%		86-112%
460-00-4	4-Bromofluorobenzene	101%		84-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest LabLink@73135 15:42 05-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID:	WW-1	Date Sampled:	12/12/07
Lab Sample ID:	F54614-10	Date Received:	12/14/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC		

Run #1	File ID C0052775.D	DF 1	Analyzed 12/19/07	By LD	Prep Date n/a	Prep Batch n/a	Analytical Batch VC2134
Run #2							

Run #1	Purge Volume 5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		87-116%
17060-07-0	1,2-Dichloroethane-D4	101%		76-127%
2037-26-5	Toluene-D8	101%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest LabLink@73135 15:42 05-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-12	Date Sampled:	12/12/07
Lab Sample ID:	F54614-11	Date Received:	12/14/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0023321.D	1	12/18/07	MM	n/a	n/a	VN995
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		87-116%
17060-07-0	1,2-Dichloroethane-D4	95%		76-127%
2037-26-5	Toluene-D8	104%		86-112%
460-00-4	4-Bromofluorobenzene	117%		84-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest LabLink@73135 15:42 05-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID:	CK-3	Date Sampled:	12/12/07
Lab Sample ID:	F54614-12	Date Received:	12/14/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0023322.D	1	12/19/07	MM	n/a	n/a	VN995
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	4.5	1.0	0.20	ug/l	
108-88-3	Toluene	8.8	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	2.2	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	11.7	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	50.2	1.0	0.25	ug/l	
91-20-3	Naphthalene	0.59	2.0	0.44	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		87-116%
17060-07-0	1,2-Dichloroethane-D4	95%		76-127%
2037-26-5	Toluene-D8	104%		86-112%
460-00-4	4-Bromofluorobenzene	113%		84-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest LabLink@73135 15:42 05-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID:	CK-1	Date Sampled:	12/12/07
Lab Sample ID:	F54614-13	Date Received:	12/14/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0023323.D	1	12/19/07	MM	n/a	n/a	VN995
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	13.2	1.0	0.20	ug/l	
108-88-3	Toluene	24.0	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	6.9	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	33.9	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	19.4	1.0	0.25	ug/l	
91-20-3	Naphthalene	1.2	2.0	0.44	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		87-116%
17060-07-0	1,2-Dichloroethane-D4	94%		76-127%
2037-26-5	Toluene-D8	103%		86-112%
460-00-4	4-Bromofluorobenzene	109%		84-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest LabLink@73135 15:42 05-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID: MW-9
 Lab Sample ID: F54614-14
 Matrix: AQ - Ground Water
 Method: SW846 8260B
 Project: Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0023324.D	1	12/19/07	MM	n/a	n/a	VN995
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		87-116%
17060-07-0	1,2-Dichloroethane-D4	96%		76-127%
2037-26-5	Toluene-D8	104%		86-112%
460-00-4	4-Bromofluorobenzene	116%		84-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest LabLink@73135 15:42 05-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID:	DMW-2	Date Sampled:	12/12/07
Lab Sample ID:	F54614-15	Date Received:	12/14/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	M0024178.D	1	12/19/07	MM	n/a	n/a	VM994

Run #1	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		87-116%
17060-07-0	1,2-Dichloroethane-D4	95%		76-127%
2037-26-5	Toluene-D8	97%		86-112%
460-00-4	4-Bromofluorobenzene	97%		84-120%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest LabLink@73135 15:42 05-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-11	Date Sampled:	12/12/07
Lab Sample ID:	F54614-16	Date Received:	12/14/07
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Highway 11 Grocery; 13527 SC Hwy 11, Salem, SC		
Run #1	File ID M0024179.D	DF 1	Analyzed 12/19/07
Run #2			By MM n/a
		Prep Date	Prep Batch
			Analytical Batch VM994
Run #1	Purge Volume 5.0 ml		
Run #2			

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.9	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	1.6	3.0	0.56	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	3.5	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7	Dibromofluoromethane	102%		87-116%		
17060-07-0	1,2-Dichloroethane-D4	94%		76-127%		
2037-26-5	Toluene-D8	97%		86-112%		
460-00-4	4-Bromofluorobenzene	95%		84-120%		

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody



CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #: **F54614**
ACCUTEST QUOTE #:

CLIENT INFORMATION		FACILITY INFORMATION				ANALYTICAL INFORMATION			MATRIX CODES
NAME: SEI ENVIRONMENTAL INC ADDRESS: 5100 REAGAN DR. CITY: CHARLOTTE STATE: NC ZIP: 28206 SEND REPORT TO: PHONE #: 704-596-8684		PROJECT NAME: Hwy 11 GROCERY LOCATION: SALEM, NC PROJECT NO.: 302-043 FAX #: 704-596-8605							DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOIL SL - SLUDGE OI - OIL LIQ - OTHER LIQUID SOL - OTHER SOLID
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION			LAB USE ONLY				
		DATE	TIME	SAMPLED BY:		MATRIX	# OF BOTTLES	PRESERVATION	
1	MW-5	12/12/07	1512	HPLC, ZSGW	3	X			
2	MW-2		1514						
3	MW-3		1520						
4	MW-4		1525						
5	MW-10		1529						
6	MW-6		1534						
7	MW-7		1538						
8	DMW-4		1545						
9	DMW-1		1550						
10	WW-1		1556						
11	MW-12		1615	↓	↓	↓	↓	↓	
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION				COMMENTS/REMARKS			
<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY _____ <input type="checkbox"/> OTHER _____		<input type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____							
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED									
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY									
RELINQUISHED BY SAMPLER: 1. <i>H.P.T.</i>	DATE TIME: 1700 12/13/07	RECEIVED BY: 1. FX	RELINQUISHED BY: 2. FX	DATE TIME:	RECEIVED BY: 2. FM	RELINQUISHED BY: 3. FX	DATE TIME:	RECEIVED BY: 3. FM	RELINQUISHED BY: 4. FX
RELINQUISHED BY: 3.	DATE TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE TIME:	RECEIVED BY: 4.	RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	RELINQUISHED BY: 5.
RELINQUISHED BY: 5.	DATE TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE			ON ICE	TEMPERATURE	1.0 °C

F54614: Chain of Custody

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CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:

F54614

ACCUTEST QUOTE #:

CLIENT INFORMATION		FACILITY INFORMATION				ANALYTICAL INFORMATION		MATRIX CODES	
SEI ENVIRONMENTAL INC NAME: 5100 REAGAN DR ADDRESS: CHARLOTTE NC 28206 CITY: SEI STATE: ZIP: SEND REPORT TO: PHONE #: 704-596-8624		PROJECT NAME: Hwy 11 GROCERY LOCATION: SALEM, SC PROJECT NO.: 302043 FAX #: 704-596-8605							
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION				PRESERVATION		LAB USE ONLY	
		DATE	TIME	SAMPLED BY:	MATRIX	# OF BOTTLES	HU	HR03	HR04	None
12	CK-3	12/14/07 1619	4P25	GW	3	X			
13	CK-1		1629						
14	MW - 9		1630						
15	DMW - 2		1652						
16	MW - 11		1658						
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION				COMMENTS/REMARKS			
<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER _____		<input type="checkbox"/> STANDARD <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____							
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED									
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY									
RELINQUISHED BY SAMPLER: 1. <i>MP</i>	DATE/TIME: 12/14/07 1700	RECEIVED BY: 1. FX	RELINQUISHED BY: 2. FX	DATE/TIME:	RECEIVED BY:	0900			
RELINQUISHED BY: 3.	DATE/TIME:	RECEIVED BY: 3.	RELINQUISHED BY: 4.	DATE/TIME:	RECEIVED BY: 4.				
RELINQUISHED BY: 5.	DATE/TIME:	RECEIVED BY: 5.	SEAL #	PRESERVE WHERE APPLICABLE		ON ICE	TEMPERATURE	1-0	C

F54614: Chain of Custody

Page 2 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F54614 CLIENT: SCI PROJECT: HWY 11 Grocery
DATE/TIME RECEIVED: 12-14-07 0900 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 1.0
METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
AIRBILL NUMBERS: 861918267360

COOLER INFORMATION

- CUSTODY SEAL NOT PRESENT OR NOT INTACT
- CHAIN OF CUSTODY NOT RECEIVED (COC)
- ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- TRIP BLANK PROVIDED
- TRIP BLANK NOT PROVIDED
- TRIP BLANK NOT ON COC
- TRIP BLANK INTACT
- TRIP BLANK NOT INTACT
- RECEIVED WATER TRIP BLANK
- RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 0
NUMBER OF 5035 FIELD KITS ? 0
NUMBER OF LAB FILTERED METALS ? 0

SUMMARY OF COMMENTS:

SAMPLE INFORMATION

- SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
- CORRECT NUMBER OF CONTAINERS USED
- SAMPLE RECEIVED IMPROPERLY PRESERVED
- INSUFFICIENT VOLUME FOR ANALYSIS
- TIMES ON COC DOES NOT MATCH LABEL(S)
- ID'S ON COC DOES NOT MATCH LABEL(S)
- VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- UNCLEAR FILTERING INSTRUCTIONS
- UNCLEAR COMPOSITING INSTRUCTIONS
- SAMPLE CONTAINER(S) RECEIVED BROKEN
- % SOLIDS JAR NOT RECEIVED
- 5035 FIELD KIT NOT FROZEN WITHIN 48 HOUR'S
- RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE FM 12-14-07 TECHNICIAN SIGNATURE/DATE JG 12-14-07 ASBD 10/03/06

F54614: Chain of Custody
Page 3 of 3



C. Earl Hunter, Commissioner

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

FEB 19 2008

MR STEVEN SMITH
180 SHALLOW FORD RD
SALEM SC 29676

Re: Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; CA #17616
Release reported November 28, 2000
Corrective Action System Evaluation (CASE) received February 11, 2008
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program has reviewed the referenced report. The report indicates the free phase product has reemerged in monitoring well MW-1, and persists in monitoring wells MW-6 and MW-14. Further, benzene and MtBE concentrations in creek samples CK-1 and CK-3 exceed risk-based screening levels. As the free-phase continues to negatively impact the creek, the Program requests that your contractor take immediate steps to remove it.

Based upon the current data, the Program calculates a **-51.08%** reduction in total concentrations of chemicals of concern (CoC) across the site (see enclosed CoC reduction calculation sheets).

The next CASE report documenting the December monitoring event and quarterly AFVR events is due on or before **May 1, 2008**. On all correspondence regarding this site, please reference UST Permit #03439. If you have any questions regarding this correspondence, feel free to contact me by telephone at (803) 896-6398, by fax at (803) 896-6245, or by e-mail at padgettjp@dhec.sc.gov.

Sincerely,

Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

JPP/jpp
03439.16

UST PROGRAM
DOCKETING # 7Kcr

SEI
Environmental, Inc.

2025 Progress Court
Raleigh, North Carolina 27608
800.474.7049
919.832.2535
Fax 832.5914

March 5, 2008

Mr. Joel P. Padgett, P.G., Hydrogeologist
South Carolina Department of Health and Environmental Control
Assessment & Corrective Action Section, Underground Storage Tank Program
2600 Bull Street
Columbia, South Carolina 29201

RE: Corrective Action System Evaluation Report
Highway 11 Grocery
13527 North SC Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

RECEIVED

MAR 13 2008

UNDERGROUND STORAGE
TANK PROGRAM

Dear Mr. Padgett:

Please find enclosed the quarterly Corrective Action System Evaluation (C.A.S.E) Report for the February 14, 2008 groundwater sampling event at the above referenced site. If you have any questions or comments, please contact me at (919) 832-2535.

Sincerely,
SEI Environmental, Inc.

Laura Dell'Olio

Laura Dell'Olio
Staff Scientist

cc: Mr. John Smith, Highway 11 Grocery

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

December 2007 through February 2008

**Highway 11 Grocery
13527 North SC Highway 11
Salem, South Carolina
Oconee County
UST Permit Number: 03439
SEI Project Number: 302169**

PREPARED FOR:

**Mr. Steve Smith
Highway 11 Grocery
13527 North SC Highway 11
Salem, South Carolina 29676-9801**

RECEIVED

MAR 13 2008

PREPARED BY:

**SEI ENVIRONMENTAL, INC.
2025 Progress Court
Raleigh, NC, 27608
UST Site Rehabilitation Contractor No. 354**

**UNDERGROUND STORAGE
TANK PROGRAM**

March 5, 2008

**UST PROGRAM
DOCKETING # 9T**

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CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Submittal Date: March 5, 2008
For Period Covering: December 12, 2007
Facility Name: Highway 11 Grocery
UST Permit Number: 03439
County: Oconee
Latitude: N 35°54'26.02"

Monitoring Report Number: _____
to February 14, 2008
Street Address: 13527 North SC Highway 11
City: Salem, South Carolina
Zip Code: 27603
Longitude W 82°58'31.29"
:

Submitted by UST Owner/Operator:

Name: Steve Smith
Company: Highway 11 Grocery
Address: 13527 North Highway 11
City: Salem State: SC
Zip Code: 29676-9801
Telephone: (864) 944-0494
SEI Project Number: 302169

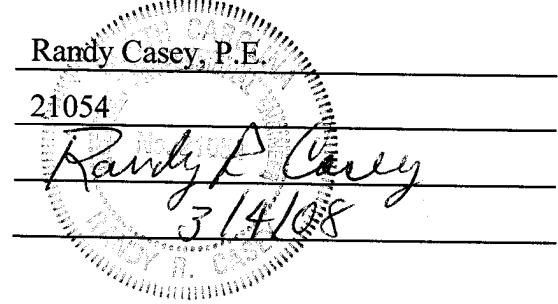
Prepared by Consultant/Contractor:

Name: Randy Casey
Company: SEI Environmental, Inc.
Address: 2025 Progress Place
City: Raleigh State: NC
Zip Code: 27608
Telephone: (919) 832-2535
UST Site Rehabilitation Contractor No. 354

Registered Professional Engineer or Professional Geologist Certification

I hereby certify that I have directed and supervised the fieldwork and preparation of this Plan, in accordance with State Rules and Regulations. As a registered professional geologist and/or professional engineer, I certify that I am a qualified groundwater professional, as defined by the South Carolina State Board of Professional Geologists. All of the information and laboratory data in this plan and in all of the attachments are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

Name: Randy Casey, P.E.
SC Reg. No. 21054
Signature: Randy R. Casey
Date: 3/4/08



LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the former UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

This report has been prepared under the guidance of a Licensed Geologist registered in South Carolina to meet the requirements of the South Carolina Department of Health and Environmental Control. The information and conclusions expressed in this report are based upon normal standards of the profession and limited to information available at this time. Chemical analyses of the samples associated with this report were performed by a subcontracted, independent, and certified laboratory. All data have been reviewed for accuracy and, excepting obvious errors, have been accepted as correct. SEI Environmental, Inc. reserves the right to revise estimates of performances as required by changes in the data supplied by Accutest Laboratories.

1.0 INTRODUCTION

The Highway 11 Grocery is a convenience and retail fuel store located at 13527 North SC Highway 11 in Salem, Oconee County, South Carolina. Figure 1 in Appendix A is a portion of the United States Geological Survey (USGS) 7.5-minute topographical quadrangle map identifying the location of the site.

The following is a brief summary of recent events occurring at the site:

- December 18, 2003 – Groundwater Sampling Event
- March 31, 2004 – Groundwater Sampling Event
- September 29, 2004 – Groundwater Sampling Event
- January 11, 2005 – EFR performed on MW-8
- March 17, 2005 – EFR performed on MW-8
- March 17, 2005 – Groundwater Sampling Event
- August 9, 2005 – Groundwater Sampling Event
- November 1, 2005 – Groundwater Sampling Event
- March 22, 2006 – Groundwater Sampling Event
- August 28, 2006 – Groundwater Sampling Event
- November 5, 2006 – Groundwater Sampling Event
- February 7, 2007 – Groundwater Sampling Event
- May 3, 2007 - Groundwater Sampling Event
- August 21, 2007 – Groundwater Sampling Event
- December 12, 2007- Groundwater Sampling Event
- February 14, 2008 – Groundwater Sampling Event

On February 14, 2008, in accordance with the requirements of the PFP contract, samples were collected from sixteen groundwater monitoring wells and two surface locations. This report provides details of the groundwater sampling event. An AFVR event will be performed before May 1, 2008.

2.0 FIELD MEASUREMENTS AND SAMPLING

2.1 Groundwater Sampling

On February 14, 2008, groundwater samples were collected from sixteen groundwater monitoring wells. Prior to sampling, groundwater depth was gauged in the monitoring wells utilizing an oil-water interface probe to measure depth to groundwater, and to detect any phase separated hydrocarbons (PSH) present. The depth to groundwater measurement is used to calculate the groundwater elevation used in determining the current groundwater potentiometric surface, along with hydraulic gradient, and groundwater flow direction.

Figure 3 in Appendix A presents a groundwater potentiometric map for the current sampling event. The latest groundwater data indicate that groundwater flow at the site is to the northeast with a hydraulic gradient of 0.032 feet per foot between monitoring wells MW-3 and MW-12. This flow direction is consistent with previous determinations of groundwater movement. Table 1 in Appendix B summarizes groundwater measurement data. Appendix C includes field observation data.

Representative groundwater samples were collected utilizing new, disposable bailers. Samples were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Method 8260B for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene.

2.2 Surface Water Sampling

On February 14, 2008, two (CK-1 and CK-3) surface water samples were collected from adjacent creek. CK-2 location is no longer sampled per the March 17, 2005, sampling event report. CK-3 replaced CK-2 to monitor for potential contamination from monitoring well MW-14. Representative samples were collected utilizing new, disposable bailers. Samples

were placed in laboratory supplied containers, maintained at 4° Celsius, and shipped via FedEx under chain-of-custody to AccuTest, Inc. Laboratories in Orlando, Florida. The groundwater samples were analyzed by EPA Method 8260B for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Groundwater Analytical Results

SSTLs have been designated for fourteen (MW-1 through MW-8, MW-10, MW-11, MW-14, DMW-1, DMW-2, and DMW-4). Sixteen wells were sampled on February 14, 2008 and CoCs were detected in four (MW-7, MW-10, MW-11, and MW-14) monitoring wells at concentrations above their respective Site Specific Target Level (SSTL). Free products was observed in monitoring wells MW-1 and MW-8. Figure 4 in Appendix A is a site map presenting monitoring well location and their CoC concentrations. Table 2 in Appendix B summarizes historical groundwater analytical results. A copy of the laboratory report and completed chain-of-custody form is included in Appendix C.

3.2 Surface Water Analytical Results

Benzene was detected in surface water sample CK-1 at a concentration of 8.7 µg/L.

4.0 REMEDIATION SYSTEM EFFECTIVENESS

In awarding the Pay-For-Performance (PFP) site remediation contract, the South Carolina Department of Health and Environmental Control (SCDHEC) set remediation goals for this site via site specific target levels (SSTLs). The monitoring wells have individual target concentrations for five (benzene, toluene, ethylbenzene, xylenes, MTBE and naphthalene) identified chemicals of concern (CoC).

Remediation system effectiveness can be calculated comparing the initial May 7, 2002, CoC concentrations that exceeded the SSTLs with the current CoC concentrations that exceeded the SSTLs. For monitoring wells MW-1 and MW-8, the standard values for

free product (benzene, 226,000 µg/L; toluene, 301,000 µg/L; ethylbenzene, 280,000 µg/L; xylenes, 278,000 µg/L; MTBE, 5,110,000 µg/L; and naphthalene 2,000 µg/L) were used in the percent reduction calculation. The formula is as follows:

$$\frac{[08/29/96 \text{ Sample Concentration Above SSTL}] - [\text{Current Sample Concentration Above SSTL}]}{[08/29/96 \text{ Sample Concentration Above SSTL}]} * 100 = \% \text{ Reduction}$$

Using the current analytical results, the percent concentration reduction is 99.75%. Table 2 in Appendix B presents concentration reduction calculations.

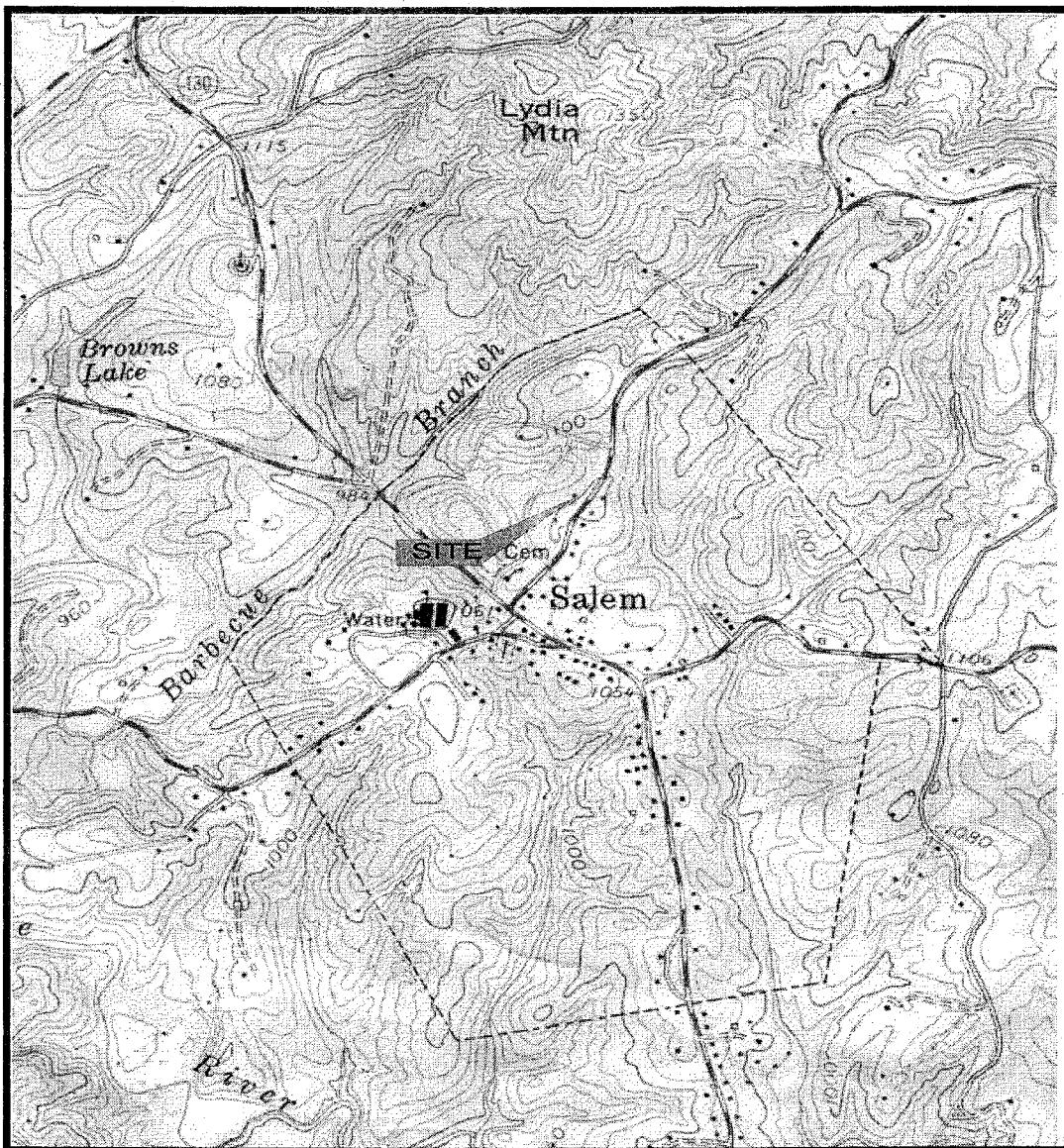
5.0 CONCLUSIONS

The groundwater flow direction at the time of the February 14, 2008 sampling event was towards the northeast with a hydraulic gradient of 0.032 feet per foot. Free product was present in monitoring wells MW-1 and MW-8. CoCs were detected in four monitoring wells above their respective SSTLs. Benzene was detected in CK-1 surface water samples at a concentration above the RBSL. The percent concentration reduction was calculated at 99.75%.

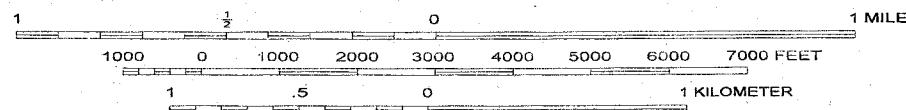
SEI Environmental, Inc recommends continuing the quarterly monitoring to evaluate the continued reduction of chemicals of concern in the monitoring wells on site. In addition SEI will perform an AFVR event before May 1, 2008 on monitoring wells MW-1, MW-6, and MW-14 as directed in the letter from DHEC dated Feb 19, 2008.

APPENDIX A

Figures



SCALE 1:24000



SALEM QUADRANGLE
SOUTH CAROLINA-OCONEE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC-BATHYMETRIC)
BY U.S. GEOLOGICAL SURVEY

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
HIGHWAY 11 GROCER
13527 Highway 11, Salem, SC
FACILITY I.D. #03439

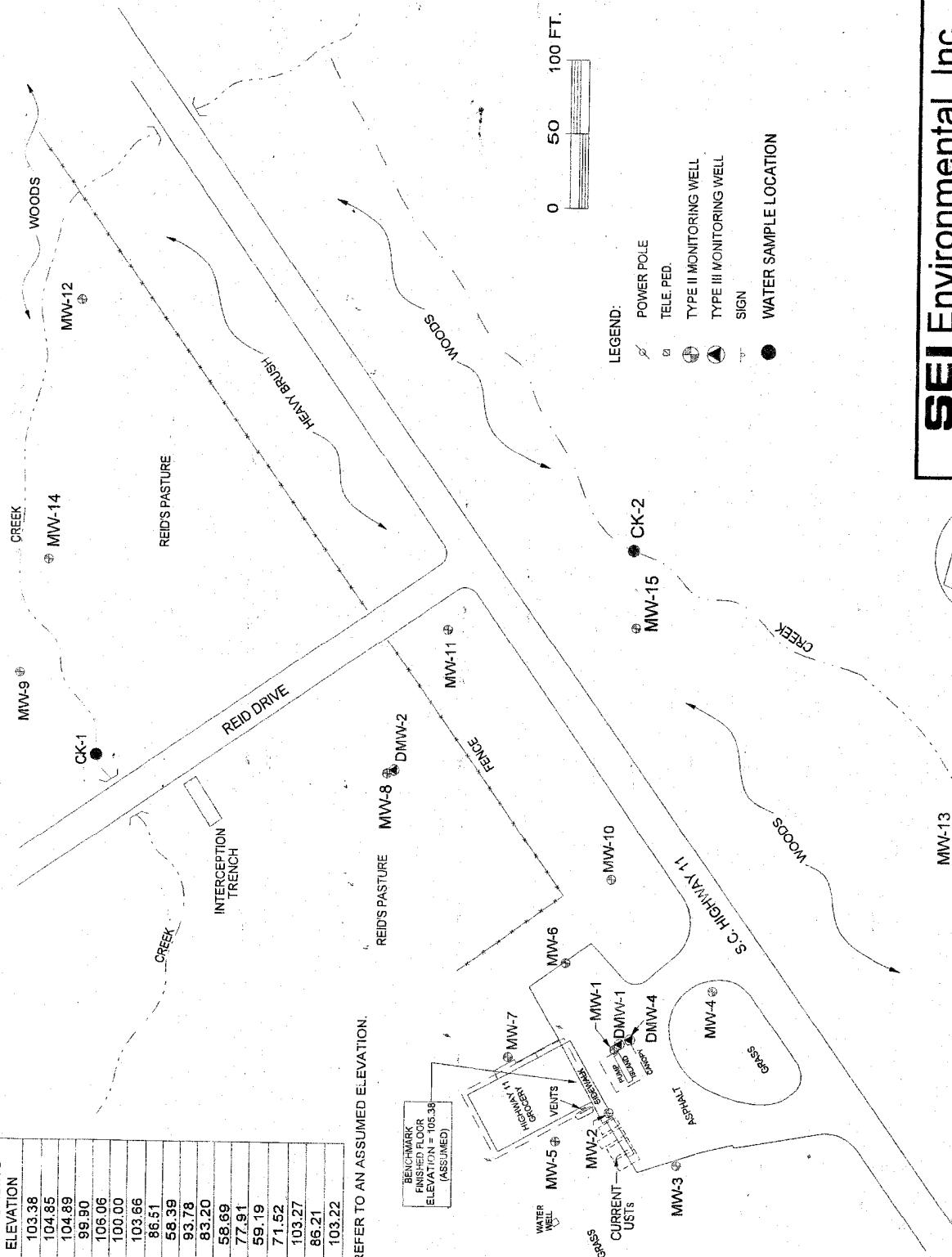
WO # 302169
DWG # Hw 11_topo_sitemap

DATE: 9/16/05
DRAWN BY: HWH

WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.89
MW-4	99.90
MW-5	106.06
MW-6	100.00
MW-7	103.66
MW-8	86.51
MW-9	58.39
MW-10	93.78
MW-11	83.20
MW-12	58.69
MW-13	77.91
MW-14	59.19
MW-15	71.52
DNW-1	103.27
DNW-2	86.21
DNW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.

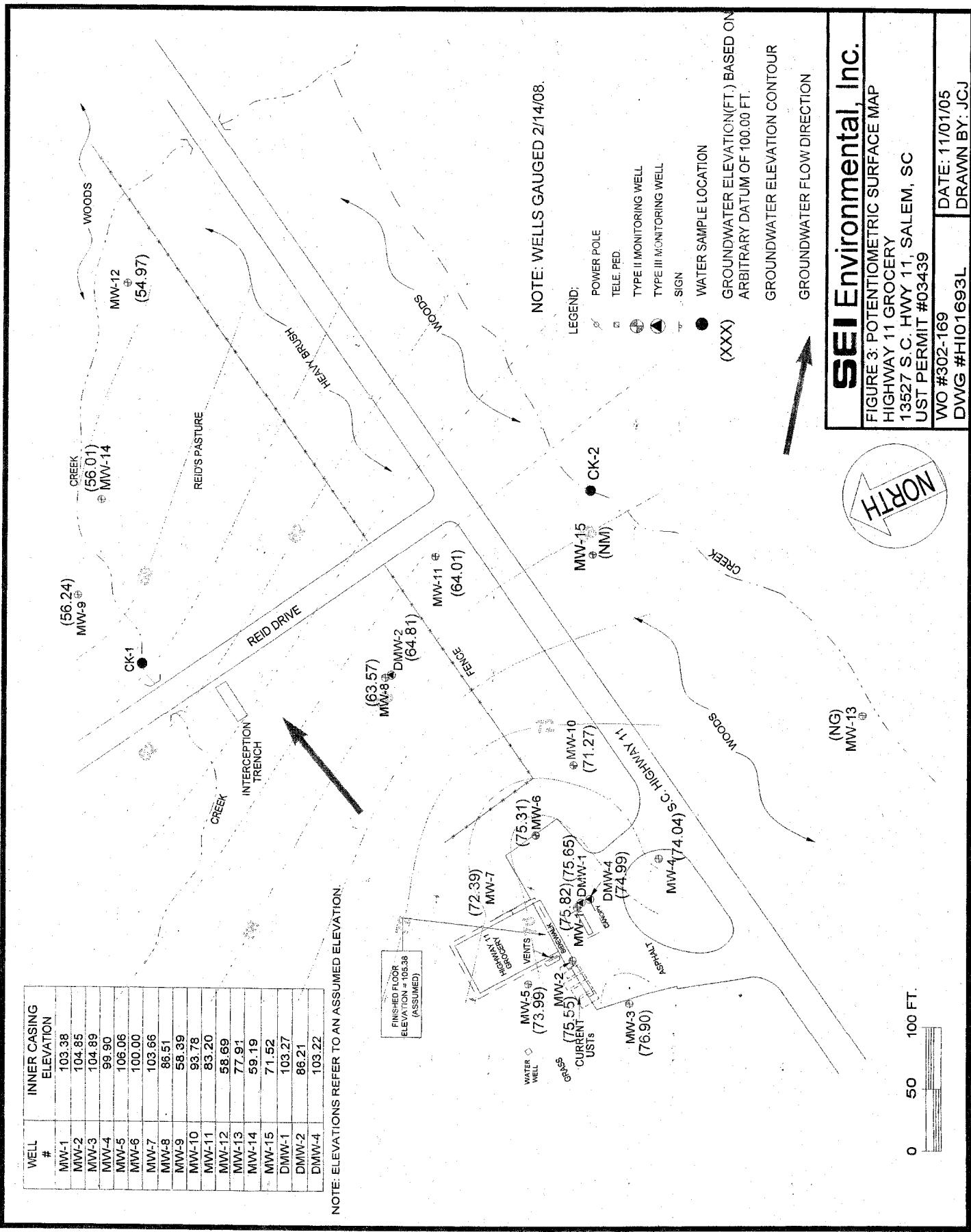
BENCHMARK
FINISHED FLOOR
ELEVATION = 105.38
(ASSUMED)

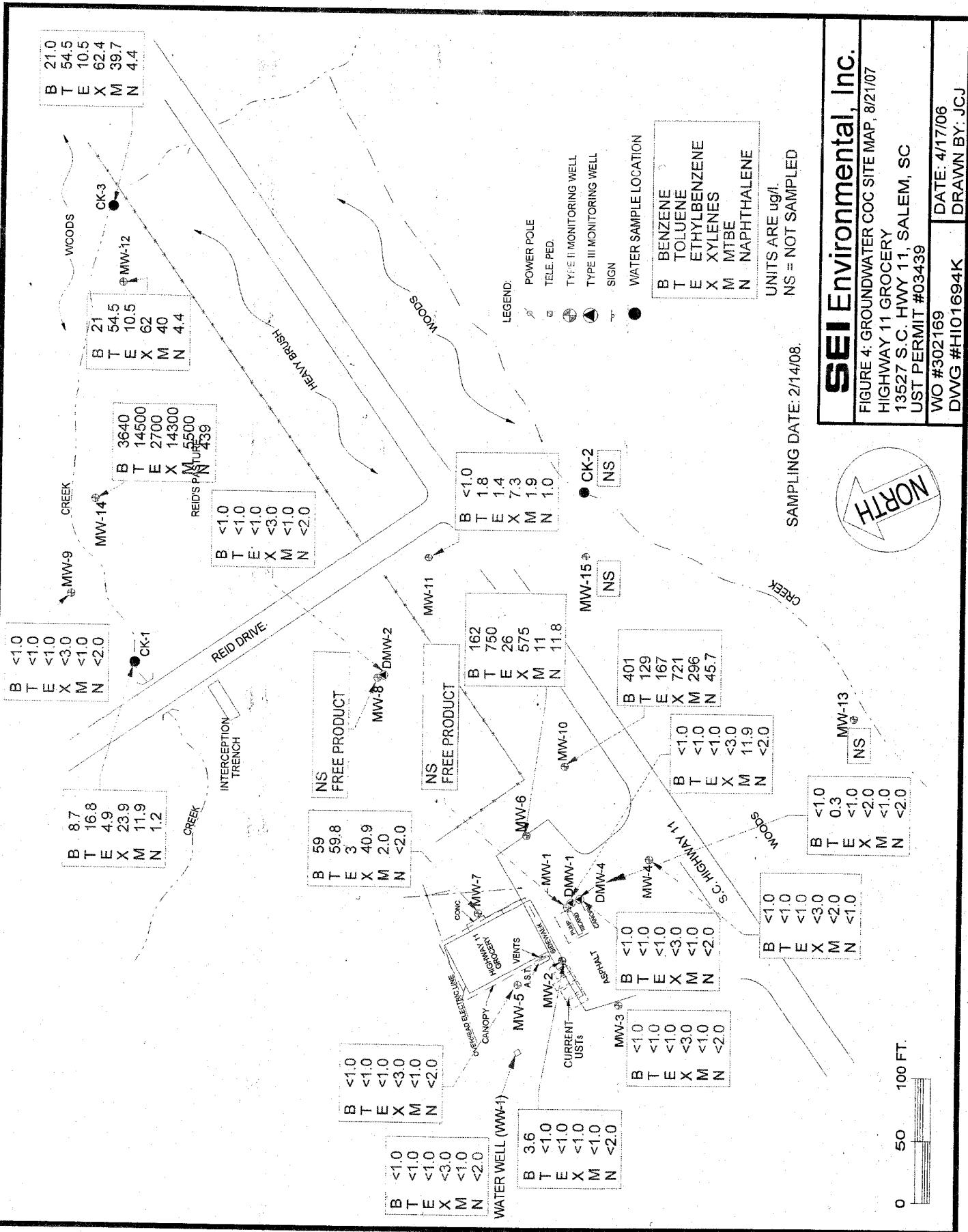


SEI Environmental, Inc.

FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

DATE: 3/17/05
DRAWN BY: JCJ
WO #302-043
DWG #H101692G





APPENDIX B

Tables

Table 1

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-1	05/08/02	24.67	24.71	0.04	103.38	78.74
	07/01/03	23.28	23.52	0.24		80.29
	07/30/03	22.89	22.97	0.08		80.55
	09/15/03	23.78	23.82	0.04		79.63
	10/02/03	24.32	24.45	0.13		79.16
	10/23/03	24.72	24.93	0.21		78.82
	12/18/03	24.06				79.32
	03/31/04	24.61				78.77
	09/29/04	24.20				79.18
	01/11/05	23.77				79.61
	03/17/05	23.97				79.41
	08/09/05	22.86				80.52
	11/01/05	25.20	25.13	0.07		78.23
	03/22/06	23.91				79.47
	08/28/06	27.17	26.64	0.53		76.62
	11/05/06	26.08	25.55	0.53		77.71
	02/07/07	24.30	24.14	0.16		79.20
	05/03/07	25.23				78.15
	08/21/07	27.05				76.33
	12/12/07	28.18	27.38	0.80		75.82
	02/14/08	25.72	25.69	0.03		77.68
MW-2	05/08/02	26.08			104.85	78.77
	07/01/03	24.08				80.77
	07/30/03	23.78				81.07
	09/15/03	24.73				80.12
	10/02/03	25.56				79.29
	10/23/03	25.71				79.14
	12/18/03	25.38				79.47
	03/31/04	25.85				79.00
	09/29/04	25.55				79.30
	01/11/05	24.74				80.11
	03/17/05	25.10				79.75
	08/09/05	23.70				81.15
	11/01/05	26.29				78.56
	03/22/06	25.94				78.91
	08/28/06	28.33				76.52
	11/05/06	27.39				77.46
	02/07/07	25.47				79.38
	05/03/07	26.34				78.51
	08/21/07	28.49				76.36
	12/12/07	29.30				75.55
	02/14/08	27.53				77.32
MW-3	05/08/02	24.78			104.86	80.08
	07/01/03	22.51				82.35
	07/30/03	22.21				82.65
	09/15/03	23.23				81.63
	10/02/03	23.87				80.99
	10/23/03	24.23				80.63
	12/18/03	23.93				80.93
	03/31/04	24.44				80.42
	09/29/04	24.20				80.66
	01/11/05	23.36				81.50
	03/17/05	23.65				81.21
	08/09/05	22.11				82.75
	11/01/05	24.85				80.01
	03/22/06	24.57				80.29
	08/28/06	26.95				77.91
	11/05/06	26.05				78.81
	02/07/07	24.15				80.71
	05/03/07	25.03				79.83
	08/21/07	27.26				77.80
	12/12/07	27.96				76.90
	02/14/08	26.21				78.65

Historical Groundwater Elevation And Product Thickness Data
 Highway 11 Grocery
 13527 South Carolina Highway 11
 Salem, Oconee County, South Carolina
 UST Permit Number: 03439
 SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-4	05/08/02	23.38			99.90	76.52
	07/01/03	22.10				77.80
	07/30/03	22.09				77.81
	09/15/03	22.90				77.00
	10/02/03	23.32				76.58
	10/23/03	23.69				76.21
	12/18/03	22.95				76.95
	03/31/04	23.49				76.41
	09/29/04	23.14				76.76
	01/11/05	22.70				77.20
	03/17/05	22.84				77.06
	08/09/05	26.40				73.50
	11/01/05	27.27				72.63
	03/22/06	23.42				76.48
	08/28/06	25.39				74.51
	11/05/06	24.11				75.79
	02/07/07	22.96				76.94
	05/03/07	23.88				76.02
	08/21/07	25.66				74.24
	12/12/07	25.86				74.04
	02/14/08	26.44				73.46
MW-5	05/08/02	28.82			106.06	77.24
	07/01/03	26.82				79.24
	07/30/03	26.53				79.53
	09/15/03	27.40				78.66
	10/02/03	27.92				78.14
	10/23/03	28.40				77.66
	12/18/03	28.40				77.66
	03/31/04	28.56				77.50
	09/29/04	28.46				77.60
	01/11/05	27.41				78.65
	03/17/05	27.86				78.20
	08/09/05	20.02				86.04
	11/01/05	28.91				77.15
	03/22/06	28.59				77.47
	08/28/06	31.06				75.00
	11/05/06	30.40				75.66
	02/07/07	28.30				77.76
	05/03/07	28.90				77.16
	08/21/07	31.12				74.94
	12/12/07	32.07				73.99
	02/14/08	30.60				75.46
MW-6	05/08/02	21.66			100.00	78.34
	07/01/03	19.77				80.23
	07/30/03	19.88				80.12
	09/15/03	20.63				79.37
	10/02/03	21.34				78.66
	10/23/03	21.74				78.26
	12/18/03	21.00				79.00
	03/31/04	21.71				78.29
	09/29/04	21.33				78.67
	01/11/05	20.81				79.19
	03/17/05	20.10				79.90
	08/09/05	26.18				73.82
	11/01/05	22.41				77.59
	03/22/06	21.77				78.23
	08/28/06	23.86				76.14
	11/05/06	22.71				77.29
	02/07/07	21.13				78.87
	05/03/07	22.23				77.77
	08/21/07	24.17				75.83
	12/12/07	24.69				75.31
	02/14/08	22.77				77.23

Historical Groundwater Elevation And Product Thickness Data

Highway 11 Grocery
 13527 South Carolina Highway 11
 Salem, Oconee County, South Carolina
 UST Permit Number: 03439
 SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-7	05/08/02	28.12			103.66	75.54
	07/01/03	26.55				77.11
	07/30/03	26.22				77.44
	09/15/03	26.83				76.83
	10/02/03	27.69				75.97
	10/23/03	28.10				75.56
	12/18/03	27.71				75.95
	03/31/04	28.00				75.66
	09/29/04	27.60				76.06
	01/11/05	26.88				76.78
	03/17/05	27.83				75.83
	08/09/05	20.27				83.39
	11/01/05	28.63				75.03
	03/22/06	N/L				N/L
	08/28/06	30.43				73.23
	11/05/06	29.56				74.10
	02/07/07	27.41				76.25
	05/03/07	28.35				75.31
	08/21/07	29.49				74.17
	12/12/07	31.27				72.39
	02/14/08	29.64				74.02
MW-8	05/08/02	21.00			86.51	66.51
	07/01/03	20.96				65.55
	07/30/03	20.46				66.05
	09/15/03	21.17				65.34
	10/02/03	20.44				66.07
	10/23/03	21.54				64.97
	12/18/03	20.82				65.69
	03/31/04	21.35				65.16
	09/29/04	21.10				65.41
	01/11/05	21.04				65.47
	03/17/05	20.95				65.56
	08/09/05	22.16				64.35
	11/01/05	23.31				63.20
	03/22/06	22.00	21.23	0.77		65.11
	08/28/06	24.46	22.05	2.41		63.93
	11/05/06	NM				
	02/07/07	NM				
	05/03/07	NM				
	08/21/07	26.61	22.10	4.51		63.42
	12/12/07	23.24	22.85	0.39		63.57
	02/14/08	23.54	21.61	1.93		64.48
MW-9	05/08/02	2.47			58.39	55.92
	07/01/03	2.30				56.09
	07/30/03	2.26				56.13
	09/15/03	2.42				55.97
	10/02/03	2.16				56.23
	10/23/03	2.42				55.97
	12/18/03	2.20				56.19
	03/31/04	2.56				55.83
	09/29/04	1.90				56.49
	01/11/05	2.23				56.16
	03/17/05	2.11				56.28
	08/09/05	2.04				56.35
	11/01/05	2.33				56.06
	03/22/06	2.23				56.16
	08/28/06	2.50				55.88
	11/05/06	2.38				56.01
	02/07/07	2.36				56.03
	05/03/07	2.50				55.89
	08/21/07	2.61				55.78
	12/12/07	2.15				56.24
	02/14/08	2.22				56.17

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-10	05/08/02	20.04			93.78	73.74
	07/01/03	16.20				77.58
	07/30/03	18.95				74.83
	09/15/03	16.53				77.25
	10/02/03	20.19				73.59
	10/23/03	20.51				73.27
	12/18/03	19.83				73.95
	03/31/04	18.85				74.93
	09/29/04	20.02				73.76
	01/11/05	19.47				74.31
	03/17/05	18.84				74.94
	08/09/05	18.94				74.84
	11/01/05	21.07				72.71
	03/22/06	20.16				73.62
	08/28/06	22.16				71.62
	11/05/06	20.94				72.84
	02/07/07	19.65				74.13
	05/03/07	20.57				73.21
	08/21/07	22.38				71.40
	12/12/07	22.51				71.27
	02/14/08	20.72				73.06
MW-11	05/08/02	16.22			83.20	66.98
	07/01/03	16.53				66.67
	07/30/03	16.70				66.50
	09/15/03	17.35				65.85
	10/02/03	16.40				66.80
	10/23/03	17.83				65.37
	12/18/03	17.58				65.62
	03/31/04	16.21				66.99
	09/29/04	15.92				67.28
	01/11/05	15.93				67.27
	03/17/05	16.86				66.34
	08/09/05	15.80				67.40
	11/01/05	18.22				64.98
	03/22/06	17.28				65.92
	08/28/06	19.09				64.11
	11/05/06	17.79				65.41
	02/07/07	16.44				66.76
	05/03/07	17.67				65.53
	08/21/07	19.12				64.08
	12/12/07	19.19				64.01
	02/14/08	16.90				66.30
MW-12	05/08/02	2.80			58.69	55.89
	07/01/03	3.16				55.53
	07/30/03	2.55				56.14
	09/15/03	3.26				55.43
	10/02/03	2.60				56.09
	10/23/03	3.50				55.19
	12/18/03	2.97				55.72
	03/31/04	3.19				55.50
	09/29/04	3.02				55.67
	01/11/05	3.10				55.59
	03/17/05	3.12				55.57
	08/09/05	2.72				55.97
	11/01/05	3.63				55.06
	03/22/06	3.23				55.46
	08/28/06	3.84				54.85
	11/05/06	3.48				55.21
	02/07/07	3.15				55.54
	05/03/07	3.69				55.00
	08/21/07	4.14				54.55
	12/12/07	3.72				54.97
	02/14/08	3.15				55.54

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
MW-13	05/08/02	6.29			77.72	71.43
	07/01/03	6.44				71.28
	07/30/03	N/L				N/L
	09/15/03	6.36				71.36
	10/02/03	6.24				71.48
	10/23/03	6.78				70.94
	12/18/03	7.51				70.21
	03/31/04	6.62				71.10
	09/29/04	6.28				71.44
	01/11/05	6.44				71.28
	03/17/05	6.52				71.20
	08/09/05	10.52				67.20
	11/01/05	N/L				N/L
	03/22/06	N/L				N/L
	08/28/06	N/L				N/L
	08/28/06	N/L				N/L
	02/07/07	N/L				N/L
	05/03/07	N/L				N/L
	08/21/07	N/L				N/L
	12/12/07	N/L				N/L
	02/14/08	N/L				N/L
MW-14	05/08/02	2.00			59.19	57.19
	07/01/03	2.28				56.91
	07/30/03	2.03				57.16
	09/15/03	2.42				56.77
	10/02/03	1.98				57.21
	10/23/03	2.67				56.52
	12/18/03	1.58				57.61
	03/31/04	2.03				57.16
	09/29/04	1.77				57.42
	01/11/05	1.92				57.27
	03/17/05	2.14				57.05
	08/09/05	1.75				57.44
	11/01/05	N/L				N/L
	03/22/06	N/L				N/L
	08/28/06	3.36				55.83
	11/05/06	N/L				N/L
	02/07/07	N/L				N/L
	05/03/07	2.94				56.25
	08/21/07	3.85	3.82	0.03		55.36
	12/12/07	3.41	3.12	0.29		56.01
	02/14/08	2.09				57.10
MW-15	05/08/02	10.82			71.52	60.70
	07/01/03	10.76				60.76
	07/30/03	10.11				61.41
	09/15/03	11.00				60.52
	10/02/03	10.20				61.32
	10/23/03	11.07				60.45
	12/18/03	11.88				59.64
	03/31/04	11.02				60.50
	09/29/04	10.67				60.85
	01/11/05	10.83				60.69
	03/17/05	10.61				60.91
	08/09/05	10.68				60.84
	11/01/05	11.32				60.20
	03/22/06	NG				NG
	08/28/06	11.62				59.90
	11/05/06	NM				NM
	02/07/07	NM				NM
	05/03/07	NM				NM
	08/21/07	DRY				DRY
	02/14/08	NM				DRY

Historical Groundwater Elevation And Product Thickness Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Location	Date	Depth To Water	Depth To Product	Product Thickness	Well Head Elevation	Groundwater Elevation
DMW-1	05/08/02	23.88			103.27	79.39
	07/01/03	23.61				79.66
	07/30/03	24.24				79.03
	09/15/03	24.60				78.67
	10/02/03	24.00				79.27
	10/23/03	24.50				78.77
	12/18/03	24.11				79.16
	03/31/04	23.61				79.66
	09/29/04	22.72				80.55
	01/11/05	22.97				80.30
	03/17/05	24.68				78.59
	08/09/05	22.66				80.61
	11/01/05	25.11				78.16
	03/22/06	24.71				78.56
	08/28/06	26.95				76.32
	11/05/06	25.85				77.42
	02/07/07	24.59				78.68
	05/03/07	24.93				78.34
	08/21/07	26.89				76.38
	12/12/07	27.62				75.65
	02/14/08	26.18				77.09
DMW-2	05/08/02	17.83			86.21	68.38
	07/01/03	16.67				69.54
	07/30/03	17.20				69.01
	09/15/03	17.31				68.90
	10/02/03	16.80				69.41
	10/23/03	17.63				68.58
	12/18/03	17.11				69.10
	03/31/04	15.75				70.46
	09/29/04	16.49				69.72
	01/11/05	16.44				69.77
	03/17/05	17.22				68.99
	08/09/05	16.71				69.50
	11/01/05	18.08				68.13
	03/22/06	17.40				68.81
	08/28/06	18.72				67.49
	11/05/06	18.00				68.21
	11/05/06	18.93				67.28
	05/03/07	18.81				67.40
	08/21/07	19.15				67.06
	12/12/07	21.40				64.81
	02/14/08	20.86				65.35
DMW-4	05/08/02	24.30			103.22	78.92
	07/01/03	23.93				79.29
	07/30/03	24.75				78.47
	09/15/03	24.95				78.27
	10/02/03	24.45				78.77
	10/23/03	24.95				78.27
	12/18/03	24.39				78.83
	03/31/04	23.88				79.34
	09/29/04	23.18				80.04
	01/11/05	23.32				79.90
	03/17/05	25.08				78.14
	08/09/05	22.96				80.26
	11/01/05	26.51				76.71
	03/22/06	25.00				78.22
	08/28/06	27.33				75.89
	11/05/06	26.39				76.83
	02/07/07	24.59				78.63
	05/03/07	25.48				77.74
	08/21/07	25.48				77.74
	12/12/07	28.23				74.99
	02/14/08	26.44				76.78

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03438
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-1	05/07/02	226,000	301,000	280,000	278,000	5,110,000	2,000			6,197,000.00
	07/01/03	10,000	34,000	4,400	23,000	34,000	1,200			106,600.00
	07/30/03	7,600	28,000	6,300	32,000	25,000.0	2,500			101,400.00
	12/18/03	2,200	6,200	910	5,800	16,000	2,500			33,610.00
	03/31/04	3,400	9,300	1,100	6,200	20,000	1,200			41,200.00
	09/29/04	3,200	7,300	<1,000	4,500	12,000	<5,000			27,000.00
	03/17/05	5,600	9,550	1,570	7,610	19,300	325			43,985.00
	08/09/05	16,900	42,600	3,520	19,000	115,000	705			197,725.00
	11/01/05	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	03/22/06	20,700	41,100	3,100	11,700	103,000	<4,000			179,600.00
	08/28/06	44,390	26,540	3,700	21,680	173,000	637,000	0.53		906,310.00
	08/28/06	44,390	26,540	3,700	21,680	173,000	637,000	0.53		906,310.00
	02/07/07	44,390	26,540	3,700	21,680	173,000	637,000	0.16		906,310.00
	05/03/07	11,800	27,800	2,650	13,300	74,600	<4000			130,150.00
	08/21/07	11,800	27,800	2,650	13,300	74,600	<4000			130,150.00
	12/12/07	226,000	301,000	280,000	278,000	5,110,000	2,000	0.81		6,197,000.00
	02/14/08	NS	NS	NS	NS	NS	NS	0.03		0.00
	SSTL	22	4,497	3,148	44,969	180	112			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
MW-2	05/07/02	13	8.0	1.0	5.0	5.0	5.0			37.00
	07/01/03	4.7	5.0	1.0	3.0	1.0	5.0			19.70
	07/30/03	5.8	5.0	1.0	5.3	1.0	5.0			23.10
	12/18/03	2.2	5.0	1.0	3.0	1.0	5.0			17.20
	03/31/04	2.6	5.0	1.0	3.0	1.0	5.0			17.60
	09/29/04	14	<25	<5.0	<15	<5.0	<25			14.00
	03/17/05	13	5	<1.0	5	<1.0	<2.0			22.40
	08/09/05	39.7	14.5	1.2	27.5	<1.0	<2.0			82.90
	11/01/05	3.8	1.6	<1.0	<3.0	<1.0	<2.0			5.40
	03/22/06	11.8	4.2	<1.0	3.4	<1.0	<2.0			19.40
	08/28/06	32.0	3.1	<1.0	4.5	<1.0	<2.0			39.60
	08/28/06	8.2	<1.0	<1.0	<3	<1.0	<2.0			8.20
	02/07/07	6.9	2.1	<1.0	3.4	<1.0	<2.0			12.40
	05/03/07	15.0	3.5	<1.0	5.4	<1.0	<2.0			23.90
	08/21/07	56.4	6.6	<1.0	20.0	<1.0	<2.0			83.00
	12/12/07	7.1	0.7	<1.0	2.6	<1.0	<2.0			10.42
	02/14/08	3.6	<1.0	<1.0	1.0	<1.0	<2.0			4.59
	SSTL	13	8.0	1.0	5.0	5.0	5.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
MW-3	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	1.4	<1.0	<3.0	<1.0	<2.0			1.40
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	12/12/07	<1.0	0.4	<1.0	1.3	<1.0	<2.0			1.74
	02/14/08	<1.0	<1.0	<1.0	0.7	<1.0	<2.0			0.65
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.4	0.0	0.0	0.0	0.0			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-4	05/07/02	1,500	5,320	620	3,360	810	500			12,110.00
	07/01/03	4,800	14,000	2,300	12,000	12,000	2,600			47,700.00
	07/30/03	4,000	14,000	2,700	13,000	2,100	500			36,300.00
	12/18/03	1,100	2,400	230	1,900	1,200	250			7,080.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	53	<25	7.1	70	210	<25			340.10
	03/17/05	<1.0	<1.0	<1.0	<3.0	17	<2.0			16.80
	08/09/05	<1.0	<1.0	<1.0	<3.0	5.9	<2.0			5.90
	11/01/05	3,720	3,660	745	4,170	4,540	>200			16,835.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	1.2	<2.0			1.20
	08/28/06	43	7	4	88	153.0	3.6			298.70
	11/05/06	195	24	19	164	225.0	11.6			638.90
	02/07/07	25	.59	13	67	47.1	<2.0			
	05/03/07	95	120	39	199	56.3	8.1			517.30
	08/21/07	0	<1.0	<1.0	3	52.4	<2.0			55.63
	12/12/07	32	3	1	31	55.7	1.5			124.20
	02/14/08	<1.0	<1.0	<1.0	<3.0	0.8	<2.0			0.83
	SSTL	1,500	5,320	620	3,360	810	500.0			
	> SSTL	0	0.0	0	0	0	0.0			
MW-5	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	4.2	17.0	3.6	18.0	2.2	<5.0			45.00
	12/18/03	2.3	<5.0	<1.0	3.2	1.3	<5.0			6.80
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	12/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/14/08	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
MW-6	05/07/02	1,780	4,950	490	2,880	6,350	500.0			16,950.00
	07/01/03	2,200	6,600	820	4,400	12,000	2,500			28,520.00
	07/30/03	4,200	13,000	1,600	8,900	21,000	400			49,100.00
	12/18/03	5,100	14,000	1,700	11,000	19,000	2,500			53,300.00
	03/31/04	280	340	100	2,200	900	250			4,570.00
	09/29/04	2,400	<5,000	<1,000	<3,000	17,000	<5,000			19,400.00
	03/17/05	3,490	7,500	952	5,380	15,500	262			33,084.00
	08/09/05	1,370	4,630	295	2,220	7,640	<400			16,155.00
	11/01/05	979	2,220	282	1,810	9,410	<200			14,701.00
	03/22/06	1,280	3,480	399	2,880	8,600	<200			16,639.00
	08/28/06	99	76	<2.0	243	22	<4.0			439.60
	11/05/06	34.0	60.9	<2.0	194	355	<20			643.90
	02/07/07	4,970.0	18,100.0	2,070	12,000	30,500	<500			67,640.00
	05/03/07	1,600.0	5,430.0	672	4,060	11,000	<1000			22,762.00
	08/21/07	167.0	416.0	7	227	213	<10			1,029.80
	12/12/07	534.0	1,310.0	54	537	41	11.6			2,487.60
	02/14/08	162.0	750.0	26	575	11	11.8			1,535.40
	SSTL	1,780	4,950	490	2,880	6,350	500.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-7	05/07/02	34	20	<1.0	8.0	7.0	<5.0			69.00
	07/01/03	37	36	1.7	20	9.2	<5.0			103.90
	07/30/03	18	18	<1.0	10	<1.0	<5.0			45.70
	12/18/03	41	20	<1.0	<3.0	<1.0	<5.0			61.00
	03/31/04	30	34	<1.0	16	<1.0	<5.0			80.00
	09/29/04	370	500	<100	<300	<100	<500			870.00
	03/17/05	505	590	34	280	65	<2.0			1,473.40
	08/09/05	52	56	2.6	34	9.2	<2.0			154.00
	11/01/05	27	42	3.7	24	<1.0	<2.0			96.10
	03/22/06	Not Sampled								
	08/28/06	99	95	3.6	127	7	<2.0			331.90
	11/05/06	50	44.5	<1.0	23.5	1.9	<2.0			119.90
	02/07/07	182	261.0	12.8	202.0	18.7	<2.0			676.50
	05/03/07	132	104.0	8.2	104.0	8.5	<10.0			356.70
	08/21/07	179	163.0	8.0	178.0	10.5	<4.0			538.50
	12/12/07	200	88.3	<1.0	162.0	<1.0	<2.0			450.30
	02/14/08	59	59.8	3.0	40.9	2.0	<2.0			164.50
	SSTL	22	20	1.0	8.0	7.0	5.0			
	> SSTL	36.8	39.8	2.0	32.9	0.0	0.0			
MW-8	05/07/02	226,000	301,000	280,000	278,000	5,110,000	2,000			6,197,000.00
	07/01/03	12,000	51,000	7,800	40,000	11,000	2,500			124,300.00
	07/30/03	12,000	40,000	3,600	18,000	15,000	660			89,260.00
	12/18/03	10,000	27,000	3,300	18,000	14,000	2,500			74,800.00
	03/31/04	17,000	140,000	32,000	180,000	8,600	<25,000			377,600.00
	09/29/04	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	03/17/05	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	08/09/05	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	11/01/05	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	03/22/06	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	08/29/06	44,390	26,540	3,700	21,680	173,000	637,000	2.41		906,310.00
	11/05/06	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	02/07/07	44,390	26,540	3,700	21,680	173,000	637,000			906,310.00
	05/03/07	44,390	26,540	3,700	21,680	173,000	637,000	0.89		906,310.00
	08/21/07	226,000	301,000	280,000	278,000	5,110,000	2,000	4.51		6,197,000.00
	12/12/07	226,000	301,000	280,000	278,000	5,110,000	2,000	0.39		6,197,000.00
	02/14/08	NS	NS	NS	NS	NS	NS	1.93		0.00
	SSTL	204	40,888	28,622	278,000	1,362	1,021			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
MW-9	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	1.2	8.8	<1.0	<5.0			10.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	1.5	<1.0	<3.0	<1.0	<2.0			1.50
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	12/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/14/08	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	RBSL	5.0	1,000	700	10,000	40	25			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-10	05/07/02	115	185	68.0	32E	86	9.0			791.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	170	420	43	240	540	6.5			1,419.50
	12/18/03	89	280	74	480	91	25.0			1,039.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	1.7	4.4	<1.0	<3.0	18	<2.0			24.00
	11/01/05	10,000	23,500	1,410	7,510	21,800	<1,000			64,020.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	79	98	16	69	169	<2.0			430.90
	11/05/06	203	412	67	226	137	4.7			1,049.90
	02/07/07	376	1,080	454	2,440	507	82.8			4,939.80
	05/03/07	1,990	4,990	846	4,420	1,770	138.0			14,152.00
	08/21/07	9,730	31,500	2,880	13,900	13,100	317.0			71,427.00
	12/12/07	2,120	8,880	1,690	8,420	1,660	321.0			23,091.00
	02/14/08	401	129	167	721	296	45.7			1,759.70
	SSTL	115	185	68	328	86	9.0			
	> SSTL	286.0	0.0	99.0	393.0	210.0	36.7			
MW-11	05/07/02	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	42.2	<1.0	<1.0	93.6	4.5	3.8			144.10
	03/22/06	<1.0	<1.0	<1.0	<3.0	1.9	<2.0			1.90
	08/28/06	6.4	<1	<1	82.6	4.4	2.5			95.90
	11/05/06	2.8	<1	<1	8.9	4.7	<2.0			16.40
	02/07/07	<1	<1	<1	8.9	1.1	<2.0			10.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	2.0	<1.0	<1.0	9.2	5.8	<2.0			17.00
	12/12/07	1.9	<1.0	<1.0	1.6	3.5	<2.0			7.00
	02/14/08	<1.0	1.8	1.4	7.3	1.9	1.0			13.40
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.8	0.4	6.3	0.0	0.0			
MW-12	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	1.5	24.8	10.1	58.6	<1.0	11.3			106.30
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	12/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/14/08	21	54.5	10.5	62	40	4.4			192.50
	RBSL	5.0	1,000	700	10,000	40	25			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
MW-13	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	NS	NS	NS	NS	NS	NS			0.00
	03/22/06	NS	NS	NS	NS	NS	NS			0.00
	08/28/06	NS	NS	NS	NS	NS	NS			0.00
	11/05/06	NS	NS	NS	NS	NS	NS			0.00
	02/07/07	NS	NS	NS	NS	NS	NS			0.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	NS	NS	NS	NS	NS	NS			0.00
	12/12/07	NS	NS	NS	NS	NS	NS			0.00
	02/14/08	NS	NS	NS	NS	NS	NS			0.00
	RBSL	5.0	1,000	700	10,000	40	25			
MW-14	05/07/02	3,780	13,800	27,000	14,700	7,010	500			66,790.00
	07/01/03	3,500	10,000	1,900	10,000	5,300	500			31,200.00
	07/30/03	3,100	9,700	1,800	9,300	4,300	500			28,700.00
	12/18/03	3,300	11,000	2,000	11,000	4,100	500			31,900.00
	03/31/04	5,500	17,000	2,600	13,000	7,100	570			45,770.00
	09/29/04	3,200	12,000	1,600	9,100	3,200	<5,000			29,100.00
	03/17/05	5,140	13,000	1,710	10,900	4,970	339			36,059.00
	08/09/05	3,290	10,600	1,820	11,000	4,950	<400			31,660.00
	11/01/05	NL	NL	NL	NL	NL	NL			0.00
	03/22/06	NL	NL	NL	NL	NL	NL			0.00
	08/28/06	2,010.0	4,080.0	1,160.0	6,320.0	3,320.0	261.0			17,151.00
	11/05/06	NL	NL	NL	NL	NL	NL			0.00
	02/07/07	NL	NL	NL	NL	NL	NL			0.00
	05/03/07	3,640.0	11,700.0	1,950.0	10,600.0	5,340.0	527.0			33,757.00
	08/21/07	226,000	301,000	280,000	278,000	5,110,000	2,000	0		6,197,000.00
	12/12/07	226,000	301,000	280,000	278,000	5,110,000	2,000	0		6,197,000.00
	02/14/08	3,640	14,500	2,700	14,300	5,500	439	0		41,079.00
	SSTL	5.0	1,000	700	10,000	40	25			11,770.00
	> SSTL	3,635.0	13,500.0	2,000.0	4,300.0	5,460.0	414.0			
MW-15	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	NS	NS	NS	NS	NS	NS			0.00
	03/22/06	NS	NS	NS	NS	NS	NS			0.00
	08/28/06	NS	NS	NS	NS	NS	NS			0.00
	11/05/06	NS	NS	NS	NS	NS	NS			0.00
	02/07/07	NS	NS	NS	NS	NS	NS			0.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	NS	NS	NS	NS	NS	NS			0.00
	12/12/07	NS	NS	NS	NS	NS	NS			0.00
	02/14/08	NS	NS	NS	NS	NS	NS			0.00
	RBSL	5.0	1,000	700	10,000	40	25			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
DMW-1	05/07/02	215	430	50	50	1,780	250		2,775.00	
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0.00	
	07/30/03	<1.0	<5.0	<1.0	<3.0	4.2	<5.0		4.20	
	12/19/03	1.5	<5.0	<1.0	<3.0	<1.0	<5.0		1.50	
	03/31/04	<1.0	<15.0	<1.0	<3.0	3.9	<5.0		3.90	
	09/29/04	8.4	<25	<5.0	<15	130	<25		138.40	
	03/17/05	<1.0	1.2	<1.0	<3.0	8.1	<2.0		9.30	
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	11/01/05	<5.0	<5.0	<5.0	<15	<5.0	<10		0.00	
	03/22/06	3.0	35.1	16	92.2	21.9	13.1		181.30	
	08/28/06	<1.0	<1.0	<1.0	<3.0	<20.3	<2.0		20.30	
	11/05/06	<1.0	<1.0	<1.0	<3.0	90.8	<2.0		90.80	
	02/07/07	9.2	2.5	<1.0	9.7	164.0	<4.0		185.40	
	05/03/07	<1.0	<1.0	<1.0	<3.0	5.2	<2.0		5.20	
	08/21/07	<1.0	<1.0	<1.0	<3.0	28.5	<2.0		28.50	
	12/12/07	<1.0	<1.0	<1.0	<3.0	2.2	<2.0		2.20	
	02/14/08	<1.0	<1.0	<1.0	<3.0	11.9	<2.0		11.90	
	SSTL	215	430	50	50	1,780	250			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
DMW-2	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0		0.00	
	07/01/03	<1.0	<5.0	<1.0	<3.0	6.4	<5.0		6.40	
	07/30/03	<1.0	8.4	6.8	30.0	<1.0	6.7		51.90	
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0.00	
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0.00	
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0.00	
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	08/21/07	<1.0	<1.0	<1.0	<3.0	0.3	<2.0		0.26	
	12/12/07	<1.0	<1.0	<1.0	<3.0	0.3	<2.0		0.26	
	02/14/08	<1.0	0.4	<1.0	<3.0	0.3	<2.0		0.65	
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			
DMW-4	05/07/02	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0		0.00	
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0.00	
	07/30/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0.00	
	12/18/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0.00	
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0.00	
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0		0.00	
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	08/09/05	NS	NS	NS	NS	NS	NS		0.00	
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	02/07/07	NS	NS	NS	NS	NS	NS		0.00	
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0		0.00	
	12/12/07	<1.0	0.3	<1.0	<3.0	<1.0	<2.0		0.31	
	02/14/08	<1.0	0.3	<1.0	<3.0	<1.0	<2.0		0.31	
	SSTL	1.0	1.0	1.0	1.0	5.0	5.0			
	> SSTL	0.0	0.0	0.0	0.0	0.0	0.0			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
CK-1	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	2.6	<5.0	<1.0	4.8	4.5	<5.0			11.90
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	11	18	4.1	20.0	9.0	<5.0			62.10
	09/29/04	16	30	6.1	32.0	22.0	<5.0			106.10
	03/17/05	10.4	17.5	4.1	20.8	12.3	<2.0			65.10
	08/09/05	7.6	17.6	2.9	15.8	6.9	<2.0			50.80
	11/01/05	20.3	38.2	8.8	48.8	27.3	<2.0			143.40
	03/22/06	6.6	12.9	3.2	15.2	7.8	<2.0			45.70
	08/28/06	13.1	29.0	6.7	27.8	16.7	<2.0			93.30
	11/05/06	13.9	22.3	6.7	34.3	17.8	<2.0			95.00
	02/07/07	7.9	16.4	4.0	21.1	9.8	<2.0			59.20
	05/03/07	10.8	20.4	5.2	28.2	13.2	<2.0			77.80
	08/21/07	40.4	62.8	19.3	108.0	53.2	3.2			286.90
	12/12/07	13.2	24.0	6.9	33.9	19.4	1.2			98.60
	02/14/08	8.7	16.8	4.9	23.9	11.9	1.2			67.40
	RBSL	5.0	1,000	700	10,000	40	25			
CK-2	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/15/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	NS	NS	NS	NS	NS	NS			0.00
	11/01/05	NS	NS	NS	NS	NS	NS			0.00
	03/22/06	NS	NS	NS	NS	NS	NS			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	NS	NS	NS	NS	NS	NS			0.00
	02/07/07	NS	NS	NS	NS	NS	NS			0.00
	05/03/07	NS	NS	NS	NS	NS	NS			0.00
	08/21/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	12/12/07	NS	NS	NS	NS	NS	NS			0.00
	02/14/08	NS	NS	NS	NS	NS	NS			0.00
	RBSL	5.0	1,000	700	10,000	40	25			
CK-3	08/09/05	14.4	33.3	7.1	41.1	25.8	<2.0			121.70
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	23.3	49.7	10.1	48.2	33.8	<2.0			165.10
	11/05/06	25.2	49.1	11.4	63.8	49.3	<2.0			198.80
	02/07/07	21.7	57.5	10.3	57.9	30.8	<2.0			178.20
	05/03/07	23.1	55.6	9.8	52.7	38.0	<2.0			179.20
	08/21/07	NS	NS	NS	NS	NS	NS			0.00
	12/12/07	4.5	8.8	2.2	11.7	50.2	0.6			77.99
	02/14/08	21.0	54.5	10.5	62.4	39.7	4.4			192.50
	RBSL	5.0	1,000	700	10,000	40	25			

Table 2

Historical Groundwater Analytical Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169

Well	Date	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	FP	Initial Mass	Current Mass
WW-1	05/07/02	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	07/01/03	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	07/30/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	12/18/03	N/A	N/A	N/A	N/A	N/A	N/A			0.00
	03/31/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	09/29/04	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0			0.00
	03/17/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/09/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/01/05	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	03/22/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/28/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	11/05/06	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	08/21/07	NS	NS	NS	NS	NS	NS			0.00
	12/12/07	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
	02/14/08	<1.0	<1.0	<1.0	<3.0	<1.0	<2.0			0.00
RBSL		5.0	1,000	700	10,000	40	25			
TOTAL MASS										950,716
TOTAL SSTL MASS		3,881	57,303	33,705	339,605	10,645	2,452			447,591
INITIAL MASS ABOVE SSTL										12,046,007
CURRENT MASS ABOVE SSTL										30,453
PERCENT TOTAL MASS REDUCTION ABOVE SSTL										99.75

Reported in parts per billion ($\mu\text{g/l}$)

ND: Compound not detected

BDL: Below analytical Detection Limits

SSTL: Site Specific Treatment Level

APPENDIX C
Field Data Information Sheets for Groundwater Sampling

SEI Environmental
SC Monitoring Well Gauging Data Sheet

Site Name: Hwy 11 Grocery WO# 302043
 Date 2/14/08

Well ID	Total Depth (feet)	Well Dia. (in.)	Depth to Product (feet)	Product Thickness (feet)	Depth to Water (feet)	Notes
MW-7					29.64	
MW-6					20.77	
MW-10					20.72	
MW-4					23.89	
DMW-4					26.44	
DMW-1					26.18	
MW-2					27.53	
MW-5					30.60	
MW-3					26.21	
MW-1			25.69	0.03'	25.72	N.S.
DMW-2					20.86	
MW-8			21.61	1.93'	23.54	N.S.
MW-11					16.90	
MW-9					2.22	
MW-12					3.15	
MW-14					2.09	

Purging is only necessary if water table is not across the screening interval. (Usually DMW-1 only)

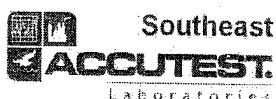
Analysis: EPA Method 8260B for BTEX, MTBE, and Naphthalene

2-inch diameter well: Well Volume = (water column) x (0.163 gallon/foot)

4-inch diameter well: Well Volume = (water column) x (0.652 gallon/foot)

Purge amount = Well Volume x 3

APPENDIX D
Laboratory Analytical Results and Chain-of-Custody



IT'S ALL IN THE CHEMISTRY

02/21/08

Technical Report for

SEI-Columbia, SC

Hwy 11 Grocery; Salem, SC

302043

Accutest Job Number: F55712

Sampling Date: 02/14/08

Report to:

darker@sei-environmental.com

ATTN: Distribution6

Total number of pages in report: 33



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Client Service contact: Heather Wandrey 407-425-6700

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Test results relate only to samples analyzed.

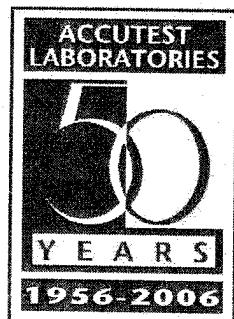


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2.8: F55712-8: MW-5	13
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2.10: F55712-10: MW-3	15
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Sample Summary

SEI-Columbia, SC

Hwy 11 Grocery; Salem, SC
Project No: 302043

Job No: F55712

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
F55712-1	02/14/08	13:05	HPRR	02/16/08 AQ	Ground Water MW-7
F55712-2	02/14/08	13:11	HPRR	02/16/08 AQ	Ground Water MW-6
F55712-3	02/14/08	13:18	HPRR	02/16/08 AQ	Ground Water MW-10
F55712-4	02/14/08	13:24	HPRR	02/16/08 AQ	Ground Water MW-4
F55712-5	02/14/08	13:40	HPRR	02/16/08 AQ	Ground Water DMW-4
F55712-6	02/14/08	13:43	HPRR	02/16/08 AQ	Ground Water DMW-1
F55712-7	02/14/08	13:56	HPRR	02/16/08 AQ	Ground Water MW-2
F55712-8	02/14/08	14:03	HPRR	02/16/08 AQ	Ground Water MW-5
F55712-9	02/14/08	14:08	HPRR	02/16/08 AQ	Ground Water WSW-1
F55712-10	02/14/08	14:13	HPRR	02/16/08 AQ	Ground Water MW-3
F55712-11	02/14/08	15:00	HPRR	02/16/08 AQ	Ground Water DMW-2
F55712-12	02/14/08	15:15	HPRR	02/16/08 AQ	Ground Water MW-11
F55712-13	02/14/08	15:32	HPRR	02/16/08 AQ	Ground Water MW-9

Sample Summary
(continued)

SEI-Columbia, SC

Job No: F55712

Hwy 11 Grocery; Salem, SC
Project No: 302043

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID
F55712-14	02/14/08	15:38	HPRR	02/16/08 AQ	Ground Water MW-12
F55712-15	02/14/08	15:42	HPRR	02/16/08 AQ	Ground Water CK-3
F55712-16	02/14/08	15:48	HPRR	02/16/08 AQ	Ground Water CK-1
F55712-17	02/14/08	15:51	HPRR	02/16/08 AQ	Ground Water MW-14



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Section 2

2

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-7	Date Sampled:	02/14/08
Lab Sample ID:	F55712-1	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0024580.D	1	02/19/08	MM	n/a	n/a	VN1044
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	58.8	1.0	0.20	ug/l	
108-88-3	Toluene	59.8	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	3.0	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	40.9	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.0	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		87-116%
17060-07-0	1,2-Dichloroethane-D4	89%		76-127%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	100%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-6	Date Sampled:	02/14/08
Lab Sample ID:	F55712-2	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		
File ID	DF	Analyzed	By
Run #1	M0025319.D	5	02/18/08
Run #2	N0024585.D	10	02/19/08
			MM
			MM
			n/a
			n/a
			n/a
			VM1045
			VN1044
Purge Volume			
Run #1	5.0 ml		
Run #2	5.0 ml		

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	162	5.0	1.0	ug/l	
108-88-3	Toluene	750 ^a	10	2.7	ug/l	
100-41-4	Ethylbenzene	25.9	5.0	1.0	ug/l	
1330-20-7	Xylene (total)	575	15	2.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	10.7	5.0	1.3	ug/l	
91-20-3	Naphthalene	11.8	10	2.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	98%	87-116%
17060-07-0	1,2-Dichloroethane-D4	99%	91%	76-127%
2037-26-5	Toluene-D8	98%	95%	86-112%
460-00-4	4-Bromofluorobenzene	98%	96%	84-120%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Report of Analysis

Page 1 of 1

Client Sample ID:	MW-10	Date Sampled:	02/14/08
Lab Sample ID:	F55712-3	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0024586.D	5	02/19/08	MM	n/a	n/a	VN1044
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	401	5.0	1.0	ug/l	
108-88-3	Toluene	129	5.0	1.4	ug/l	
100-41-4	Ethylbenzene	167	5.0	1.0	ug/l	
1330-20-7	Xylene (total)	721	15	2.8	ug/l	
1634-04-4	Methyl Tert Butyl Ether	296	5.0	1.3	ug/l	
91-20-3	Naphthalene	45.7	10	2.2	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7	Dibromofluoromethane	95%			87-116%	
17060-07-0	1,2-Dichloroethane-D4	87%			76-127%	
2037-26-5	Toluene-D8	97%			86-112%	
460-00-4	4-Bromofluorobenzene	98%			84-120%	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-4	Date Sampled:	02/14/08
Lab Sample ID:	F55712-4	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	M0025302.D	1	02/18/08	MM	n/a	n/a	VM1045

Purge Volume	
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.83	1.0	0.25	ug/l	J
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		87-116%
17060-07-0	1,2-Dichloroethane-D4	107%		76-127%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	103%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID: DMW-4
 Lab Sample ID: F55712-5
 Matrix: AQ - Ground Water
 Method: SW846 8260B
 Project: Hwy 11 Grocery; Salem, SC

Date Sampled: 02/14/08
 Date Received: 02/16/08
 Percent Solids: n/a

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	M0025303.D	1	02/18/08	MM	n/a	n/a	VM1045

Purge Volume	
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7	Dibromofluoromethane	107%		87-116%		
17060-07-0	1,2-Dichloroethane-D4	105%		76-127%		
2037-26-5	Toluene-D8	102%		86-112%		
460-00-4	4-Bromofluorobenzene	102%		84-120%		

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest LabLink@14:13 21-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID:	DMW-1	Date Sampled:	02/14/08
Lab Sample ID:	F55712-6	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0025304.D	1	02/18/08	MM	n/a	n/a	VM1045
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	11.9	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		87-116%
17060-07-0	1,2-Dichloroethane-D4	105%		76-127%
2037-26-5	Toluene-D8	101%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

ND = Not detected . MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-2	Date Sampled:	02/14/08
Lab Sample ID:	F55712-7	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #1	File ID M0025305.D	DF 1	Analyzed 02/18/08	By MM	Prep Date n/a	Prep Batch n/a	Analytical Batch VM1045
Run #2							

Run #1	Purge Volume 5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	3.6	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	0.99	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	J
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		87-116%
17060-07-0	1,2-Dichloroethane-D4	102%		76-127%
2037-26-5	Toluene-D8	99%		86-112%
460-00-4	4-Bromofluorobenzene	101%		84-120%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest LabLink@14:13 21-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-5	Date Sampled:	02/14/08
Lab Sample ID:	F55712-8	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0025306.D	1	02/18/08	MM	n/a	n/a	VM1045
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		87-116%
17060-07-0	1,2-Dichloroethane-D4	103%		76-127%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	100%		84-120%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest LabLink@14:13 21-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID:	WSW-1	Date Sampled:	02/14/08
Lab Sample ID:	F55712-9	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0025322.D	1	02/18/08	MM	n/a	n/a	VM1045
Run #2							

Purge Volume	
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		87-116%
17060-07-0	1,2-Dichloroethane-D4	103%		76-127%
2037-26-5	Toluene-D8	101%		86-112%
460-00-4	4-Bromofluorobenzene	100%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest LabLink@14:13 21-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-3	Date Sampled:	02/14/08
Lab Sample ID:	F55712-10	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		
Run #1	File ID M0025307.D	DF 1	Analyzed 02/18/08
Run #2			By MM
			Prep Date n/a
			Prep Batch n/a
			Analytical Batch VM1045
Run #1	Purge Volume 5.0 ml		
Run #2			

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	0.65	3.0	0.56	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7	Dibromofluoromethane	107%		87-116%		
17060-07-0	1,2-Dichloroethane-D4	103%		76-127%		
2037-26-5	Toluene-D8	100%		86-112%		
460-00-4	4-Bromofluorobenzene	100%		84-120%		

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest LabLink@14:13 21-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID:	DMW-2	Date Sampled:	02/14/08
Lab Sample ID:	F55712-11	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0025308.D	1	02/18/08	MM	n/a	n/a	VM1045
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	0.36	1.0	0.27	ug/l	J
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.29	1.0	0.25	ug/l	J
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		87-116%
17060-07-0	1,2-Dichloroethane-D4	101%		76-127%
2037-26-5	Toluene-D8	100%		86-112%
460-00-4	4-Bromofluorobenzene	100%		84-120%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest LabLink@14:13 21-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-11	Date Sampled:	02/14/08
Lab Sample ID:	F55712-12	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0024577.D	1	02/19/08	MM	n/a	n/a	VN1044
Run #2							

Purge Volume	
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	1.8	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	1.4	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	7.3	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.9	1.0	0.25	ug/l	
91-20-3	Naphthalene	1.0	2.0	0.44	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		87-116%
17060-07-0	1,2-Dichloroethane-D4	91%		76-127%
2037-26-5	Toluene-D8	97%		86-112%
460-00-4	4-Bromofluorobenzene	99%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest LabLink@14:13 21-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-9	Date Sampled:	02/14/08
Lab Sample ID:	F55712-13	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		
Run #1	File ID M0025310.D	DF 1	Analyzed 02/18/08
Run #2			By MM n/a
			Prep Date n/a
			Prep Batch n/a
			Analytical Batch VM1045
	Purge Volume		
Run #1	5.0 ml		
Run #2			

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7	Dibromofluoromethane	106%		87-116%		
17060-07-0	1,2-Dichloroethane-D4	100%		76-127%		
2037-26-5	Toluene-D8	100%		86-112%		
460-00-4	4-Bromofluorobenzene	100%		84-120%		

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-12	Date Sampled:	02/14/08
Lab Sample ID:	F55712-14	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	N0024578.D	1	02/19/08	MM	n/a	n/a	VN1044
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		87-116%
17060-07-0	1,2-Dichloroethane-D4	89%		76-127%
2037-26-5	Toluene-D8	96%		86-112%
460-00-4	4-Bromofluorobenzene	102%		84-120%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	CK-3	Date Sampled:	02/14/08
Lab Sample ID:	F55712-15	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0025321.D	1	02/18/08	MM	n/a	n/a	VM1045
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	21.0	1.0	0.20	ug/l	
108-88-3	Toluene	54.5	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	10.5	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	62.4	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	39.7	1.0	0.25	ug/l	
91-20-3	Naphthalene	4.4	2.0	0.44	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		87-116%
17060-07-0	1,2-Dichloroethane-D4	100%		76-127%
2037-26-5	Toluene-D8	99%		86-112%
460-00-4	4-Bromofluorobenzene	98%		84-120%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Report of Analysis

Page 1 of 1

Client Sample ID:	CK-1	Date Sampled:	02/14/08
Lab Sample ID:	F55712-16	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	N0024579.D	1	02/19/08	MM	n/a	n/a	VN1044

Purge Volume
Run #1 5.0 ml
Run #2

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	8.7	1.0	0.20	ug/l	
108-88-3	Toluene	16.8	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	4.9	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	23.9	3.0	0.56	ug/l	
1634-04-4	Methyl Tert Butyl Ether	11.9	1.0	0.25	ug/l	
91-20-3	Naphthalene	1.2	2.0	0.44	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		87-116%
17060-07-0	1,2-Dichloroethane-D4	89%		76-127%
2037-26-5	Toluene-D8	97%		86-112%
460-00-4	4-Bromofluorobenzene	96%		84-120%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest LabLink@14:13 21-Feb-2008

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-14	Date Sampled:	02/14/08
Lab Sample ID:	F55712-17	Date Received:	02/16/08
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Hwy 11 Grocery; Salem, SC		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	M0025317.D	200	02/18/08	MM	n/a	n/a	VM1045

Purge Volume	
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	3640	200	40	ug/l	
108-88-3	Toluene	14500	200	54	ug/l	
100-41-4	Ethylbenzene	2700	200	40	ug/l	
1330-20-7	Xylene (total)	14300	600	110	ug/l	
1634-04-4	Methyl Tert Butyl Ether	5500	200	50	ug/l	
91-20-3	Naphthalene	439	400	88	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		87-116%
17060-07-0	1,2-Dichloroethane-D4	100%		76-127%
2037-26-5	Toluene-D8	101%		86-112%
460-00-4	4-Bromofluorobenzene	97%		84-120%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody



Accutest Laboratories Southeast Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # **F55712** PAGE 1 OF 2

Accutest Quote #	SKIFF#
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Client / Reporting Information		Project Information		Analytical Information		Matrix Codes	
Company Name	SGI ENVIRONMENTAL	Project Name	Hwy 11 GROCERY				
Address	5100 REAGAN DR.	Street	SC Hwy 11				
City	CHARLOTTE NC	City	SALEM	State	SC		
Project Contact	CHRIS BOGGS	Project #	302043				
Phone	704-596-8624	Fax #	704-596-8605				
Sample(s) Name(s) (Printed)		Client Purchase Order #					
Accutest Sample #	Field ID / Point of Collection	COLLECTION	CONTAINER INFORMATION				LAB USE ONLY
1	MW-7	3/14 1305 AM RR GW	SAMPLED BY	MATRIX	TOTAL # OF ROTTERS	OTHER	
2	MW-6	1311					
3	MW-10	1318					
4	MW-4	1324					
5	DMW-4	1340					
6	DMW-1	1343					
7	MW-2	1356					
8	MW-5	1403					
9	WSW-1	1408					
10	MW-3	1413					
11	DMW-2	1500					
12	MW-11	1515	↓	↓	↓	↓	↓
TURNAROUND TIME (Business Days)							
Approved By: / Rush Code				Data Deliverable Information			
<input checked="" type="checkbox"/> 10 Days Standard	<input type="checkbox"/> COMMERCIAL "A" (RESULTS ONLY)						
<input type="checkbox"/> 7 Day RUSH	<input type="checkbox"/> COMMERCIAL "B" (RESULTS PLUS QC)						
<input type="checkbox"/> 5 Day RUSH	<input type="checkbox"/> REDT1 (EPA LEVEL 3)						
<input type="checkbox"/> 3 Day EMERGENCY	<input type="checkbox"/> FULT1 (EPA LEVEL 4)						
<input type="checkbox"/> 2 Day EMERGENCY	<input type="checkbox"/> EDD'S						
<input type="checkbox"/> 1 Day EMERGENCY							
<input type="checkbox"/> OTHER							
Emergency or Rush T/A Data Available VIA Email or Lablink							
Sample Custody must be documented below each time samples change possession, including courier delivery.							
Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:		
1 <i>[Signature]</i>	2/15/08 1700	2 <i>[Signature]</i>	3 <i>[Signature]</i>	4 <i>[Signature]</i>	5 <i>[Signature]</i>		
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:		
5		6	7		8		
Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers:				Cooler Temperature (s) Celsius: 1 - 8			

F55712: Chain of Custody
Page 1 of 3



Accutest Laboratories Southeast

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL. 407-425-6700 • FAX: 407-425-0707

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Accutest Job # **F55712** PAGE 2 OF 2

Accutest Quote # **SKIFF#**

Client / Reporting Information		Project Information		Analytical Information		Matrix Codes	
Company Name	SOI ENVIRONMENTAL INC	Project Name	Awy 11 GROCERY				DW - Drinking Water
Address	5100 REAGAN DR. STE 5	Street	S.C. Hwy 11				GW - Ground Water
City	CHARLOTTE NC	City	SALEM	State	SC		VW - Water
Project Contact	CHRIS BOOGES	Project #	302043				SW - Surface Water
Phone#	704-596-8624	Fax #	704-596-8605				SO - Soil
Sampler(s) Name(s) (Printed)		Client Purchase Order #					SL - Sludge
Accutest Sample #	Field ID / Point of Collection	COLLECTION	CONTAINER INFORMATION				OT - Oil
13	MW-9	DATE 3/08	TIME 1530	SAMPLED BY HPRRGW	MATRIX 3	TOTAL # OF BOTTLES X	LIO - Other Liquid
14	MW-12						AIR - Air
15	CK-3						SOL - Other Solid
16	CK-1						WP - Wipe
17	MW-14						
LAB USE ONLY							
TURNAROUND TIME (Business Days)							
Approved By / Rush Code		Data Deliverable Information				Comments / Remarks	
<input checked="" type="checkbox"/> 10 Days Standard	<input type="checkbox"/> COMMERCIAL "A" (RESULTS ONLY)						
<input type="checkbox"/> 7 Day RUSH	<input type="checkbox"/> COMMERCIAL "B" (RESULTS PLUS QC)						
<input type="checkbox"/> 5 Day RUSH	<input type="checkbox"/> REDT1 (EPA LEVEL 3)						
<input type="checkbox"/> 3 Day EMERGENCY	<input type="checkbox"/> FULT1 (EPA LEVEL 4)						
<input type="checkbox"/> 2 Day EMERGENCY	<input type="checkbox"/> EDD'S						
<input type="checkbox"/> 1 Day EMERGENCY							
<input type="checkbox"/> OTHER							
Emergency or Rush T/A Data Available VIA Email or Lablink							
Sample Custody must be documented below each time samples change possession, including courier delivery.							
Relinquished by Sampler:	Date Time: 3/15/08 1700	Received By: 2	Relinquished by: 3	Date Time: 3/16/08 0900	Received By: 4 House Panel 09:00		
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:		
5		6	7		8		
Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: 1						Cooler Temperature (s) Celsius: 1.8	

F55712: Chain of Custody

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ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F55712 09:00
DATE/TIME RECEIVED: 2-16-08
METHOD OF DELIVERY: FEDEX UPS
AIRBILL NUMBERS: 860043403673

CLIENT: SEI PROJECT: HWY 11 GROCERY
OF COOLERS RECEIVED: 1 COOLER TEMPS: 1.8
ACCUTEST COURIER GREYHOUND DELIVERY OTHER

3.1

33

COOLER INFORMATION

- CUSTODY SEAL NOT PRESENT OR NOT INTACT
- CHAIN OF CUSTODY NOT RECEIVED (COC)
- ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- TEMPERATURE CRITERIA NOT MET
- WET ICE RECEIVED IN COOLER

TRIP BLANK INFORMATION

- TRIP BLANK PROVIDED
- TRIP BLANK NOT PROVIDED
- TRIP BLANK NOT ON COC
- TRIP BLANK INTACT
- TRIP BLANK NOT INTACT
- RECEIVED WATER TRIP BLANK
- RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 0

NUMBER OF 5035 FIELD KITS ? 0

NUMBER OF LAB FILTERED METALS ? 0

SUMMARY OF COMMENTS:

SAMPLE INFORMATION

- SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
- CORRECT NUMBER OF CONTAINERS USED
- SAMPLE RECEIVED IMPROPERLY PRESERVED
- INSUFFICIENT VOLUME FOR ANALYSIS
- TIMES ON COC DOES NOT MATCH LABEL(S)
- ID'S ON COC DOES NOT MATCH LABEL(S)
- VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- UNCLEAR FILTERING INSTRUCTIONS
- UNCLEAR COMPOSITING INSTRUCTIONS
- SAMPLE CONTAINER(S) RECEIVED BROKEN
- % SOLIDS JAR NOT RECEIVED
- 5035 FIELD KIT NOT FROZEN WITHIN 48 HOUR'S
- RESIDUAL CHLORINE PRESENT

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE J.P. 2-16-08

TECHNICIAN SIGNATURE/DATE E.T. 2-16-08 ASBD 12/17/07

F55712: Chain of Custody

Page 3 of 3



26 of 33

F55712

Laboratories



IT'S ALL IN THE CHEMISTRY

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: F55712
Account: SEISCC SEI-Columbia, SC
Project: Hwy 11 Grocery; Salem, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1045-MB	M0025301.D1		02/18/08	MM	n/a	n/a	VM1045

The QC reported here applies to the following samples:

Method: SW846 8260B

F55712-2, F55712-4, F55712-5, F55712-6, F55712-7, F55712-8, F55712-9, F55712-10, F55712-11, F55712-13, F55712-15, F55712-17

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	0.64	2.0	0.44	ug/l	J
108-88-3	Toluene	ND	1.0	0.27	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	107%
17060-07-0	1,2-Dichloroethane-D4	109%
2037-26-5	Toluene-D8	102%
460-00-4	4-Bromofluorobenzene	106%

Method Blank Summary

Page 1 of 1

Job Number: F55712
Account: SEISCC SEI-Columbia, SC
Project: Hwy 11 Grocery; Salem, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN1044-MB	N0024576.D	1	02/19/08	MM	n/a	n/a	VN1044

The QC reported here applies to the following samples:

Method: SW846 8260B

F55712-1, F55712-2, F55712-3, F55712-12, F55712-14, F55712-16

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.25	ug/l	
91-20-3	Naphthalene	ND	2.0	0.44	ug/l	
108-88-3	Toluene	ND	1.0	0.27	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	96%
17060-07-0	1,2-Dichloroethane-D4	90%
2037-26-5	Toluene-D8	99%
460-00-4	4-Bromofluorobenzene	103%

Blank Spike Summary

Page 1 of 1

Job Number: F55712

Account: SEISCC SEI-Columbia, SC

Project: Hwy 11 Grocery; Salem, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1045-BS	M0025300.D1		02/18/08	MM	n/a	n/a	VM1045

The QC reported here applies to the following samples:

Method: SW846 8260B

F55712-2, F55712-4, F55712-5, F55712-6, F55712-7, F55712-8, F55712-9, F55712-10, F55712-11, F55712-13, F55712-15, F55712-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	24.2	97	83-124
100-41-4	Ethylbenzene	25	25.3	101	87-118
1634-04-4	Methyl Tert Butyl Ether	25	23.2	93	75-116
91-20-3	Naphthalene	25	22.8	91	59-125
108-88-3	Toluene	25	25.7	103	86-116
1330-20-7	Xylene (total)	75	77.3	103	86-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	87-116%
17060-07-0	1,2-Dichloroethane-D4	109%	76-127%
2037-26-5	Toluene-D8	102%	86-112%
460-00-4	4-Bromofluorobenzene	103%	84-120%

Blank Spike Summary

Job Number: F55712

Account: SEISCC SEI-Columbia, SC

Project: Hwy 11 Grocery; Salem, SC

Page 1 of 1

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VN1044-BS	N0024575.D 1		02/19/08	MM	n/a	n/a	VN1044

The QC reported here applies to the following samples:

Method: SW846 8260B

F55712-1, F55712-2, F55712-3, F55712-12, F55712-14, F55712-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	26.3	105	83-124
100-41-4	Ethylbenzene	25	25.2	101	87-118
1634-04-4	Methyl Tert Butyl Ether	25	22.9	92	75-116
91-20-3	Naphthalene	25	24.5	98	59-125
108-88-3	Toluene	25	25.8	103	86-116
1330-20-7	Xylene (total)	75	74.5	99	86-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	95%	87-116%
17060-07-0	1,2-Dichloroethane-D4	91%	76-127%
2037-26-5	Toluene-D8	97%	86-112%
460-00-4	4-Bromofluorobenzene	98%	84-120%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: F55712

Account: SEISCC SEI-Columbia, SC

Project: Hwy 11 Grocery; Salem, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F55712-4MS	M0025311.D1		02/18/08	MM	n/a	n/a	VM1045
F55712-4MSD	M0025312.D1		02/18/08	MM	n/a	n/a	VM1045
F55712-4	M0025302.D1		02/18/08	MM	n/a	n/a	VM1045

The QC reported here applies to the following samples:

Method: SW846 8260B

F55712-2, F55712-4, F55712-5, F55712-6, F55712-7, F55712-8, F55712-9, F55712-10, F55712-11, F55712-13, F55712-15, F55712-17

CAS No.	Compound	F55712-4 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		25	23.4	94	22.6	90	3 83-124/11
100-41-4	Ethylbenzene	ND		25	23.4	94	23.0	92	2 87-118/10
1634-04-4	Methyl Tert Butyl Ether	0.83	J	25	21.3	82	21.5	83	1 75-116/10
91-20-3	Naphthalene	ND		25	20.7	83	21.7	87	5 59-125/15
108-88-3	Toluene	ND		25	23.9	96	23.6	94	1 86-116/10
1330-20-7	Xylene (total)	ND		75	70.1	93	69.1	92	1 86-120/10

CAS No.	Surrogate Recoveries	MS	MSD	F55712-4	Limits
1868-53-7	Dibromofluoromethane	103%	102%	106%	87-116%
17060-07-0	1,2-Dichloroethane-D4	102%	103%	107%	76-127%
2037-26-5	Toluene-D8	99%	99%	100%	86-112%
460-00-4	4-Bromofluorobenzene	96%	97%	103%	84-120%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: F55712

Account: SEISCC SEI-Columbia, SC
Project: Hwy 11 Grocery; Salem, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F55712-12MS	N0024587.D	1	02/19/08	MM	n/a	n/a	VN1044
F55712-12MSD	N0024588.D	1	02/19/08	MM	n/a	n/a	VN1044
F55712-12	N0024577.D	1	02/19/08	MM	n/a	n/a	VN1044

The QC reported here applies to the following samples:

Method: SW846 8260B

F55712-1, F55712-2, F55712-3, F55712-12, F55712-14, F55712-16

CAS No.	Compound	F55712-12 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	25	26.7	107	25.7	103	4	83-124/11
100-41-4	Ethylbenzene	1.4	25	26.5	100	26.2	99	1	87-118/10
1634-04-4	Methyl Tert Butyl Ether	1.9	25	23.1	85	23.8	88	3	75-116/10
91-20-3	Naphthalene	1.0	25	25.9	100	25.5	98	2	59-125/15
108-88-3	Toluene	1.8	25	27.9	104	27.3	102	2	86-116/10
1330-20-7	Xylene (total)	7.3	75	83.2	101	81.0	98	3	86-120/10

CAS No.	Surrogate Recoveries	MS	MSD	F55712-12	Limits
1868-53-7	Dibromofluoromethane	95%	96%	99%	87-116%
17060-07-0	1,2-Dichloroethane-D4	89%	89%	91%	76-127%
2037-26-5	Toluene-D8	97%	99%	97%	86-112%
460-00-4	4-Bromofluorobenzene	97%	97%	99%	84-120%



C. Earl Hunter, Commissioner

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

APR 09 2008

MR STEVEN SMITH
180 SHALLOW FORD RD
SALEM SC 29676

Re: CASE report review
Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; CA #17616
Release reported November 28, 2000
Corrective Action System Evaluation (CASE) received March 13, 2008
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program has reviewed the referenced report. The report indicates the free phase product persists in monitoring wells MW-1 and MW-8. Benzene concentrations in creek samples CK-1 and CK-3 continue to exceed risk-based screening levels. Accordingly, please have your contractor take immediate and appropriate actions to remove the free-phase product and mitigate the impact to the creek. The Program notes that no AFVR events were conducted at the site during the last quarter.

Based upon the current data, the Program calculates a **0.20%** reduction in total concentrations of chemicals of concern (CoC) across the site (see enclosed CoC reduction calculation sheets). The increase in CoC reduction is due to the disappearance of measurable free-phase product from monitoring well MW-14. Please note that your contractor's calculated CoC reduction of 99.75% does not take into account the presence of free-phase product in monitoring well MW-1 and MW-8.

The next CASE report documenting the May 2008 quarterly monitoring event is due on or before **July 1, 2008**. On all correspondence regarding this site, please reference UST Permit #03439. If you have any questions regarding this correspondence, feel free to contact me by telephone at (803) 896-6398, by fax at (803) 896-6245, or by e-mail at padgettj@dhec.sc.gov.

Sincerely,

Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

UST PROGRAM
DOCKETING # 10Steel

JPP/jpp
03439.18

enc: CoC reduction calculation sheets

cc: Laura Dell'Olio, SEI Environmental, Inc., 2025 Progress Place, Raleigh, NC 27608
(w/enc)
James W. Reid, 185 Reid Drive, Salem, SC 29676 (w/enc)
Technical file (w/o enc)

03439 Highway 11 Grocery

2/8/08 sampling

Enter Initial, SSTL and subsequent

CoC Reduction: 0.2040 %

Well		Benzene	Toluene	Ethylbenzene	Xylene	MtBE	Naphthalene	EDB	Totals
MW-1	Initial	226000	301000	280000	278000	5110000	2000	0	6197000
	SSTL	22	4497	3148	44969	180	112	0	52928
	Initial > SSTL	225978	296503	276852	233031	5109820	1888	0	6144072
	Subsequent	226000	301000	280000	278000	5110000	2000	0	6197000
	Subsequent > SSTL	225978	296503	276852	233031	5109820	1888	0	6144072
MW-2	Initial	13	8	1	5	5	5	0	37
	SSTL	13	8	1	5	5	5	0	37
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	4	1	1	1	1	2	0	10
	Subsequent > SSTL	0	0	0	0	0	0	0	0
MW-3	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	1	1	2	0	7
	Subsequent > SSTL	0	0	0	0	0	0	0	0
MW-4	Initial	1500	5320	620	3360	810	500	0	12110
	SSTL	1500	5320	620	3360	810	500	0	12110
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	3	1	2	0	9
	Subsequent > SSTL	0	0	0	0	0	0	0	0
MW-5	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	3	1	2	0	9
	Subsequent > SSTL	0	0	0	2	0	0	0	2
MW-6	Initial	1780	4950	490	2880	6350	500	0	16950
	SSTL	1780	4950	490	2880	6350	500	0	16950
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	162	750	26	575	11	12	0	1536
	Subsequent > SSTL	0	0	0	0	0	0	0	0
MW-7	Initial	34	20	1	8	7	5	0	75
	SSTL	22	20	1	8	7	5	0	63
	Initial > SSTL	12	0	0	0	0	0	0	12
	Subsequent	59	60	3	41	2	2	0	167
	Subsequent > SSTL	37	40	2	33	0	0	0	112
MW-8	Initial	226000	301000	280000	278000	5110000	2000	0	6197000
	SSTL	204	40888	28622	278000	1362	1021	0	350097
	Initial > SSTL	225796	260112	251378	0	5108638	979	0	5846903
	Subsequent	226000	301000	280000	278000	5110000	2000	0	6197000
	Subsequent > SSTL	225796	260112	251378	0	5108638	979	0	5846903
MW-10	Initial	115	185	68	328	86	9	0	791
	SSTL	115	185	68	328	86	9	0	791
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	401	129	167	721	296	46	0	1760
	Subsequent > SSTL	286	0	99	393	210	37	0	1025
MW-11	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	2	1	7	2	1	0	14
	Subsequent > SSTL	0	1	0	6	0	0	0	7
MW-14	Initial	3780	13800	27000	14700	7010	500	0	66790
	SSTL	5	1000	700	10000	40	25	0	11770
	Initial > SSTL	3775	12800	26300	4700	6970	475	0	55020
	Subsequent	3640	14500	2700	14300	5500	439	0	41079
	Subsequent > SSTL	3635	13500	2000	4300	5460	414	0	29309

03439 Highway 11 Grocery

<u>Total Concentration Reduction</u>		<u>Individual Constituent Reductions</u>					
		CoC	Initial	Subseq.	Initial >SSTL	Subseq. > SSTL	CoC % Reduction
Total Initial Conc. :	12493598 µg/L	Benzene	459442	456273	455561	455732	-0.037536137
Total Subsequent Conc. :	12438629 µg/L	Toluene	626718	617448	569415	570156	-0.130133558
Total SSTL Conc. :	447591 µg/L	Ethylbenzene	588235	562904	554530	530331	4.363875715
Initial > SSTL :	12046007 µg/L	Xylenes	577336	571661	237731	237769	-0.015984453
Subsequent > SSTL :	12021434 µg/L	MtBE	10236073	10225829	10225428	10224128	0.012713404
Total Reduction:	0.20399 %	Naphthalene	5794	4514	3342	3318	0.718132855
		EDB	0	0	0	0	non-SSTL CoC



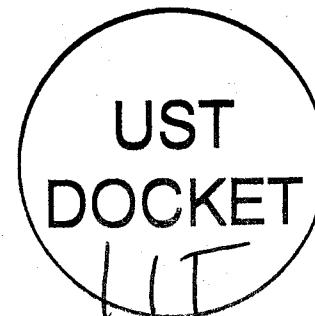
C. Earl Hunter, Commissioner

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

NOV 16 2009

**BRYAN SHANE
MIDLANDS ENVIRONMENTAL CONSULTANTS
PO BOX 854
LEXINGTON SC 29071**

Re: **Notice to Proceed-Groundwater Sampling**
Bid # IFB-33335-3/11/08-EMW; PO# 719459



Dear Mr. Shane:

Based on the award of the referenced bid package, enclosed are the information packets to conduct thirteen (13) groundwater-sampling events. The packets contain all necessary information for work to begin. The facility has been assigned an individual Cost Agreement (CA) number as listed below. Please reference the CA number and Purchase Order # 719459 on the appropriate invoice submitted for payment against the facility.

UST Permit #	Facility	County	# wells	UST Project Manager	Sampling Due Date	Parameters-Groundwater	PACE CA#	MECI CA#
04581	Donahue Grocery	Spartanburg	2	M. River	ASAP	BTEXMN-RUSH analysis	37562	37563
11756	EZ Shop 25	Orangeburg	18	R. Miner	12/18/09	BTEXMN, DCA, EDB, & Oxygenates	37673	37674
16093	Frye Enterprises	Jasper	15	J. Koon	12/18/09	BTEXMN, DCA, & EDB	37624	37625
14429	Carmichael 66	Dillon	17	S. Fulmer	12/18/09	BTEXMN, DCA, EDB, & Oxygenates	37540	37539
12030	Curgins Corner	Aiken	19	J. Koon	12/18/09	BTEXMN, DCA, EDB, & Oxygenates	37358	37359
18906	Beaton's Grocery	Jasper	33	J. Koon	12/18/09	BTEXMN, DCA, EDB, & Oxygenates	37622	37623
03439	Highway 11 Grocery	Oconee	21	J. Padgett	12/18/09	BTEXMN, DCA, EDB, Oxygenates, & total Pb	37520	37519
05981	Circle Stop & Shop	Saluda	24	R. Miner	12/18/09	BTEXMN, DCA, EDB, & Oxygenates	37500	37501
15930	Lloyd's Place	Lancaster	21	S. Fulmer	12/18/09	BTEXMN, DCA, EDB, & Oxygenates	37517	37516
10114	Jim's Variety Shop	Chesterfield	15	S. Fulmer	12/18/09	BTEXMN, DCA, EDB, & Oxygenates	37532	37531
04622	Lil Cricket 855	Greenville	12	S. Briney	12/18/09	BTEXMN, DCA, EDB, Oxygenates, & total pb	37542	37543
09160	Rock Hill Maint.	York	15	D. Thoma	12/18/09	BTEXMN & DCA	37439	37440

02233	Danny Melton	Chesterfield	22	S. Fulmer	12/18/09	BTEXMN, DCA, & EDB	37477	37476
18212	Frm Engle's Store	Charleston	42	J. Padgett	12/18/09	42-BTEXMN, DCA 1-EDB 3-Oxygenates	37481	37482
11180	Fleet Operations	Horry	23	J. Martin	12/18/09	BTEXMN, DCA, & EDB	37378	37377
06155	Food Fair 3	Richland	19	S. Fulmer	12/18/09	Sampling already completed	36705	36704

MECI will perform services at the sites on behalf of the site's responsible party (RP); however, payment will be made from the SUPERB Account. The site's RP has no obligation for payment for this scope of work. Please coordinate access to the facility with the property owner. Contact information has been provided in the information packet. 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. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included with the final report. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs. **Please note, the final report is due within 3 weeks from the date the site is sampled. If the site is not sampled by the specified due date or the report is not received in the specified time period, a late fee may be imposed.**

Please contact me with the sampling schedule before commencing work at these facilities. If you have any questions or need further assistance, please contact me at (803) 896-6397 or thomadl@dhec.sc.gov.

Sincerely,

Debra L. Thoma, Hydrogeologist
 Corrective Action Section
 UST Management Division
 Bureau of Land & Waste Management

enc: Information Packets
 Approved Cost Agreements

cc: Renee Spencer, PACE Analytical, 9800 Kincey Ave. Ste. 100, Huntersville, NC, 28078 (w/ Approved CAs)
 Technical Files (w/o. enc.)

Approved Cost Agreement 37520

Facility: 03439 HWY 11 GROCERY

PADGETJP

PO Number:

<u>Task / Description</u>	<u>Categories</u>	<u>Item Description</u>	<u>Qty / Pct</u>	<u>Unit Price</u>	<u>Amount</u>
11 ANALYSES					
	GW GROUNDWATER	A BTEX+NAPTH+MTBE	21.0000	23.00	483.00
		E LEAD	18.0000	10.00	180.00
		F EDB	21.0000	25.00	525.00
		P 8 OXYGENATES	21.0000	30.00	630.00
				Total Amount	1,818.00

Approved Cost Agreement 37519

Facility: 03439 HWY 11 GROCERY

PADGETJP

PO Number:

<u>Task / Description</u>	<u>Categories</u>	<u>Item Description</u>	<u>Qty / Pct</u>	<u>Unit Price</u>	<u>Amount</u>
04 MOB/DEMOB		B PERSONNEL	2.0000	150.00	300.00
10 SAMPLE COLLECTION		A GROUND WATER	3.0000	12.00	36.00
		C WATER SUPPLY	3.0000	10.00	30.00
		D GROUNDWATER NO-PURGE	15.0000	10.00	150.00
17 DISPOSAL		A1 WASTEWATER - PURGING/SAMPLING	15.0000	0.30	4.50
				Total Amount	520.50

Midlands Environmental Consultants, Inc.



May 17, 2010

Ms. Debra Thoma, Hydrogeologist
Northeastern SC Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Report of Groundwater Sampling
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID Number 03439, CA # 37519
MECI Project Number 09-2563
Certified Site Rehabilitation Contractor UCC-0009



Dear Ms. Thoma,

Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached Report of Sampling for the referenced site.

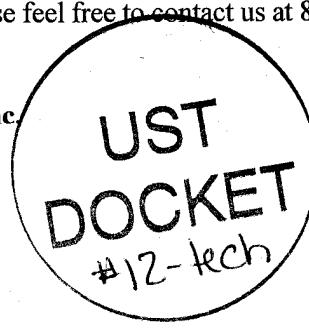
On April 27, 2010 fourteen monitoring wells (MW-2 through MW-4, MW-6, MW-9 through MW-15, DMW-1, DMW-2, and DMW-4) and three surface waters (CK-1 through CK-3) were sampled. Three monitoring wells (DMW-1, DMW-2 and DMW-4) were purged prior to sampling. Two monitoring wells (MW-1 and MW-8) were gauged and contained free phase petroleum product. Two monitoring wells (MW-5 and MW-7) were not sampled. Groundwater samples obtained were transported to Pace Analytical Services, Inc. of Huntersville, NC for analysis.

Purge water produced by the purging process was treated on-site utilizing a granular activated carbon unit. A total of 54.0 gallons of purge water was disposed of in this manner. A disposal manifest for the referenced purge water is attached at the end of this report.

If you have any question or comments please feel free to contact us at 803-808-2043.

Sincerely,
Midlands Environmental Consultants, Inc.

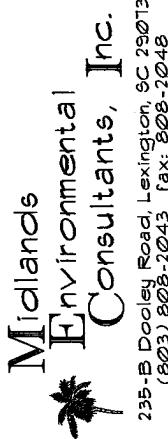
Brian Owen
Field Technician



Brendon P. Kelly
Project Scientist

Site Activity Summary

UST Permit #: 03439
Facility Name: Highway
County: Ocone
Field Personnel: Alex W



Sample ID	Sampled?	Date	Time	Screened Interval	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	# Gals. Purged	Comments
MW-1	N	***	***	15-30	23.90	24.45	0.55	***	0.55 ft. Free Phase Product
MW-2	Y	4/27/10	14:20	20-35	***	25.39	***	***	No Odor
MW-3	Y	4/27/10	14:00	20-30	***	24.09	***	***	No Odor
MW-4	Y	4/27/10	13:40	20-35	***	22.28	***	***	No Odor
MW-5	N	***	***	20-35	***	***	***	***	Truck parked on top of well.
MW-6	Y	4/27/10	13:20	20-35	***	21.02	***	***	Odor
MW-7	N	***	***	25-40	***	***	***	***	Truck parked on top of well.
MW-8	N	***	***	15-30	20.50	20.95	0.45	***	0.45 ft. Free Phase Product
MW-9	Y	4/27/10	17:00	2-10	***	***	***	***	No Odor
MW-10	Y	4/27/10	13:00	13-28	***	18.91	***	***	No Odor
MW-11	Y	4/27/10	12:30	8-23	***	16.04	***	***	No Odor
MW-12	Y	4/27/10	16:50	2-12	***	2.71	***	***	No Odor
MW-13	Y	4/27/10	12:00	2-12	***	6.31	***	***	No Odor; Stick-up 3.0'
MW-14	Y	4/27/10	16:40	2-10	***	2.21	***	***	Odor
MW-15	Y	4/27/10	12:15	4-9	***	10.30	***	***	No Odor; Stick-up 3.2'
									TOTAL GALLONS PURGED 0.0

Site Activity Summary

**Midlands Environmental
Consultants, Inc.**

235-B Dooly Road, Lexington, SC 29013
(803) 326-2013 fax: (803) 326-2018

UST Permit #: 034
Facility Name: High
County: Oco
Field Personnel: Alex

South Carolina Department of Health and Environmental Control
 Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy):	4/27/2010	
Field Personnel:	Alex Wolfson	
General Weather Conditions:	Sunny	
Ambient Air Temperature:	28.0 °C	
<u>Quality Assurance</u>		
pH Meter	YSI Model 550A	
serial no.	02A0831	
pH=4.0	standard	X
pH=7.0	standard	_____
pH=10.0	standard	_____
Conductivity Meter		
serial no.	02A0831	
standard	X	
standard	_____	
standard	_____	
Chain of Custody		
Relinquished by	Date/Time	Received by
Date/Time		

Facility Name:	Highway 11 Grocery	
Site ID#:	03439	
Water Supply Well	Public	Private
Monitoring Well Diameter (D):	2 inches	
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652	
* Free Product Thickness:	feet	
Depth to Free Product (DFP)	feet	
Depth to Ground Water (DGW)	feet	
Total Well Depth (TWD)	feet	
Length of the water column (LWC=TWD-DGW)	feet	
1 casing volume (CV=LWC X C)=	X	0.163
3 casing volume (3 X CV)=	3	3.40
	gallons	gallons
	3	10.21
Total Volume of Water Purged Before Sampling	11 gals.	
*If free product is present over 1/8 inch, sampling will not be required.		

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)	14:30	14:33	14:36	14:40			
pH (s.u.)	6.35	6.35	6.35	6.36			
Specific Conductivity (μ mhos/cm)	52.8	50.5	48.6	45.5			
Water Temperature (°C)	19.2	19.0	18.9	18.7			
Dissolved Oxygen	4.05	3.75	3.21	2.93			
PID readings, if required							
Remarks:	Sample Time:	14:30					

South Carolina Department of Health and Environmental Control
 Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy):	4/27/2010
Field Personnel:	Alex Wolfson
General Weather Conditions:	Sunny
Ambient Air Temperature:	28.0 °C
Quality Assurance	
pH Meter	YSI Model 550A
serial no.	02A0831
pH=4.0	X
pH=7.0	X
pH=10.0	
Conductivity Meter	
serial no.	02A0831
standard	X
standard	
standard	
Chain of Custody	
Relinquished by	Date/Time
	Received by
	Date/Time

Facility Name:	Highway 11 Grocery		
Site ID#:	03439	Monitoring Well #	DMW-2
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	2 inches		
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	feet		
Depth to Free Product (DFP)	feet		
Depth to Ground Water (DGW)	feet		
Total Well Depth (TWD)	feet		
Length of the water column (LWC=TWD-DGW)	feet		
1 casing volume (CV=LWC X C)=	X		
3 casing volume (3 X CV)=	gallons		
3 casing volume (3 X CV)=	gallons		
Total Volume of Water Purged Before Sampling	25 gals.		
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)		16:25	16:30				
pH (s.u.)	6.97	6.81					
Specific Conductivity (umhos/cm)	62.1	59.8					
Water Temperature (°C)	18.4	18.3					
Dissolved Oxygen	4.08	3.99					
PID readings, if required							
Remarks:	Sample Time:	16:25	Parameters within 10%				

South Carolina Department of Health and Environmental Control
 Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

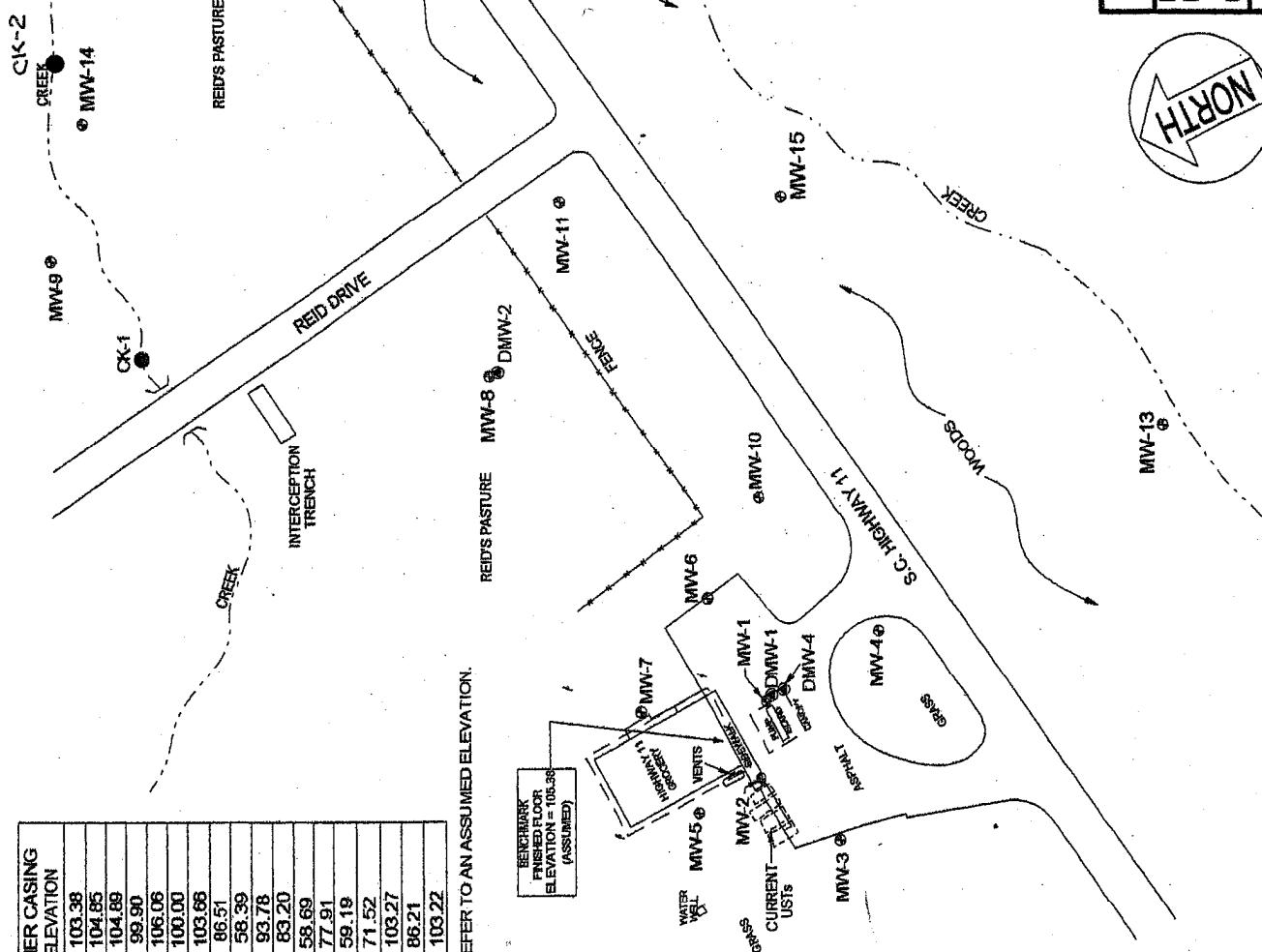
Date (mm/dd/yy):	4/27/2010	
Field Personnel:	Alex Wolfson	
General Weather Conditions:	Sunny	
Ambient Air Temperature:	28.0 °C	
Quality Assurance		
pH Meter	YSI Model 550A	
serial no.	02A0831	
pH=4.0	standard	X
pH=7.0	standard	_____
pH=10.0	standard	_____
Conductivity Meter		
serial no.	02A0831	
standard	X	
standard	_____	
standard	_____	
Chain of Custody		
Relinquished by	Date/Time	Received by
Date/Time		
Conversion Factor (C): $3.14 \times (D/2)^2$		
for a 2 inch well C=0.163		
for a 4 inch well C=0.652		
feet		
Length of the water column (LWC=TWD-DGW)		
1 casing volume (CV=LWC X C)= _____ X 0.163 = 5.83 gallons		
3 casing volume (3 X CV)= _____ X 0.163 = 17.50 gallons		
Total Volume of Water Purged Before Sampling 18 gals.		
*If free product is present over 1/8 inch, sampling will not be required.		

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)		14:50	14:52				
pH (s.u.)		6.26	6.13				
Specific Conductivity ($\mu\text{mhos/cm}$)		29.2	27.7				
Water Temperature (°C)		18.4	18.5				
Dissolved Oxygen		6.02	6.32				
PID readings, if required							
Remarks:	Sample Time:	14:50					Parameters within 10%

WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.68
MW-4	99.90
MW-5	106.96
MW-6	100.00
MW-7	103.68
MW-8	86.51
MW-9	58.39
MW-10	93.78
MW-11	83.20
MW-12	58.69
MW-13	77.91
MW-14	59.19
MW-15	71.52
DMW-1	103.27
DMW-2	86.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.

BENCHMARK
FINISHED FLOOR
ELEVATION = 103.38
(ASSUMED)



LEGEND:
 ✓ POWER POLE
 □ TELE. PNL.
 ○ TYPE II MONITORING WELL
 △ TYPE III MONITORING WELL
 ▽ SIGN
 ● WATER SAMPLE LOCATION

0 50 100 FT.

SEI Environmental, Inc.

FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

WO #302-043
DWG #H101692G
DATE: 3/17/05
DRAWN BY: JCJ





CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company: **SCOTT UST**
Address: **200 Bull Street**
Atlanta, GA 30312
Email To: **SCOTT.UST@PaceAnalytical.com**
Phone: **(404) 873-6740** Fax: **(404) 873-6745**
Requested Due Date/TAT: **03/07/2011**

Section B Required Project Information:

Report To: **P. Tiana**
Copy To:
Purchase Order No.: **2101459**
Project Name: **Hazardous Waste**
Project Number: **03937/CPD-7520**

Section C Invoice Information:

Attention: **Finance (P. Tiana)**
Company Name: **SCOTT UST**
Address:
Phone: Reference:
Fax: Pace Project Manager: **P. Spencer**
Pace Profile #: **SC**

1357500

Section D Required Client Information:		Section E Analytical Test												Section F Requested Analysis Filtered (Y/N)		
SAMPLE ID (A-Z, 0-9, -,) Sample IDs MUST BE UNIQUE		COLLECTED			Preservatives			# OF CONTAINERS			SAMPLE TEMP AT COLLECTION			Residual Chlorine (Y/N)		
#		MATRIX CODES MATRIX / CODE	MATRIX CODES Drinking Water Water Waste Water Product Soil/Solid Oil Wipe Air Tissue Other	MATRIX CODES COMPOSITE START	MATRIX CODES COMPOSITE END/GRAB	MATRIX CODES P SL OL WP AIR TS OT	MATRIX CODES NaOH HCl HNO3 H2SO4 Na2S2O3	MATRIX CODES Other Methanol	MATRIX CODES Unpreserved	MATRIX CODES # OF CONTAINERS	MATRIX CODES SAMPLE TEMP AT COLLECTION	MATRIX CODES DATE	MATRIX CODES TIME	MATRIX CODES DATE	MATRIX CODES TIME	MATRIX CODES Y/N
1	MW-1															X
2	MW-2															X
3	MW-3															X
4	MW-4															X
5	MW-5															X
6	MW-6															X
7	MW-7															X
8	MW-8															X
9	MW-9															X
10	MW-10															X
11	MW-11															X
12	MW-12															X
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS		
Relinquish "3" Values		Alex Wofford		11-27-11												

SAMPLER NAME AND SIGNATURE

2

Samples intact

Custody Seal/Coder (Y/N)

Received on **4/27/11 at **10:00 AM** from **Pace Analytical Inc.****

Temp in °C **22**

DRINKING WATER

OTHER

GROUND WATER

RCRA

UST

NPDES

DRINKING WATER

OTHER

RCRA

UST

NPDES

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F ALL Q-020rev.07, 15-May-2007



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a **LEGAL DOCUMENT**. All relevant fields must be completed accurately.



Midlands Environmental Consultants, Inc.

May 17, 2010

Re: Treatment of Purge Water
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID Number 03439
MECI Project Number 09-2563

To Whom It May Concern:

Midlands Environmental Consultants, Inc. is providing the following letter as certification that treatment of the referenced purge water complied with the conditions of "Proposed Conditions for Use of Portable Activated Carbon Units for the Treatment of Small Volumes of Petroleum Hydrocarbon Contaminated Groundwater", as described in the following:

Applicability:

Groundwater treated was obtained as a result development of wells and sampling.

Conditions:

1. The purge/bail water from all wells is mixed before usage of the Activated Carbon Unit.
2. No free-product was detected in any of the purge water drums.
3. Analytical results of from well sampling show average concentrations of petroleum hydrocarbon constituents less than 5000 parts per billion (ppb) Benzene and less than 20,000 ppb total BTEX.
4. The existing carbon pack will be replaced/reactivated every 5,000 gallons.
5. Record of usage is maintained by Contractor.
6. Any and all recommendations and conditions issued by the Manufacturer have been adhered to.
7. Any and all recommendations and conditions (even on a site by site basis) issued by the SCDHEC must be adhered to.

All purge waters were treated on-site using an up-flow treatment drum loaded with 30 pounds of activated carbon. Carbon will be loaded to a maximum of 3 pounds of total organic compounds or 5,000 gallons of development/purge water, whichever occurs first.

May 17, 2010

A total of 54 gallons were treated on April 27, 2010 at the referenced site.

Midlands Environmental also tracks cumulative organic compounds adsorbed on the activated carbon to ensure the capacity of carbon mass is not over-charged. This data is available upon request.

Should you have any questions or comments, please contact the undersigned.

Sincerely,
Midlands Environmental Consultants, Inc.



Brian Owen
Field Technician

May 05, 2010

Ms. Debra Thoma
SCDHEC
UST Program
2600 Bull Street
Columbia, SC 29201



RE: Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Dear Ms. Thoma:

Enclosed are the analytical results for sample(s) received by the laboratory on April 28, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Erin L. Waters for
Renee Spencer

reneee.spencer@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Page 1 of 29

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CERTIFICATIONS

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Charlotte Certification IDs

Kentucky UST Certification #: 84
Florida/NELAP Certification #: E87627
Louisiana/LELAP Certification #: 04034
New Jersey Certification #: NC012
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
Pennsylvania Certification #: 68-00784

South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Tennessee Certification #: 04010
Virginia Certification #: 00213
West Virginia Certification #: 357
9800 Kincey Ave. - Ste 100 Huntersville, NC 28078
Connecticut Certification #: PH-0104

Asheville Certification IDs

2225 Riverside Dr. Asheville, NC 28804
Connecticut Certification #: PH-0106
Louisiana/LELAP Certification #: 03095
Massachusetts Certification #: M-NC030
New Jersey Certification #: NC011
North Carolina Bioassay Certification #: 9
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40

Pennsylvania Certification #: 68-03578
South Carolina Bioassay Certification #: 9903002
South Carolina Certification #: 9903001
Tennessee Certification #: 2980
Virginia Certification #: 00072
West Virginia Certification #: 356
Florida/NELAP Certification #: E87648

REPORT OF LABORATORY ANALYSIS

Page 2 of 29

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SAMPLE SUMMARY

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9268269001	MW-2	Water	04/27/10 14:20	04/28/10 15:15
9268269002	MW-3	Water	04/27/10 14:00	04/28/10 15:15
9268269003	MW-4	Water	04/27/10 13:40	04/28/10 15:15
9268269004	MW-6	Water	04/27/10 13:20	04/28/10 15:15
9268269005	MW-9	Water	04/27/10 17:00	04/28/10 15:15
9268269006	MW-10	Water	04/27/10 13:00	04/28/10 15:15
9268269007	MW-11	Water	04/27/10 12:30	04/28/10 15:15
9268269008	MW-12	Water	04/27/10 16:50	04/28/10 15:15
9268269009	MW-13	Water	04/27/10 12:00	04/28/10 15:15
9268269010	MW-14	Water	04/27/10 16:40	04/28/10 15:15
9268269011	MW-15	Water	04/27/10 12:15	04/28/10 15:15
9268269012	DMW-1	Water	04/27/10 14:30	04/28/10 15:15
9268269013	DMW-2	Water	04/27/10 16:25	04/28/10 15:15
9268269014	DMW-4	Water	04/27/10 14:50	04/28/10 15:15
9268269015	CK-1	Water	04/27/10 16:00	04/28/10 15:15
9268269016	CK-2	Water	04/27/10 16:10	04/28/10 15:15
9268269017	CK-3	Water	04/27/10 16:20	04/28/10 15:15

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Lab ID	Sample ID	Method	Analysts	Analytes Reported
9268269001	MW-2	EPA 8011	CAH	2
		EPA 6010	JMW	1
		EPA 8260	BLC	21
9268269002	MW-3	EPA 8011	CAH	2
		EPA 6010	JMW	1
		EPA 8260	BLC	21
9268269003	MW-4	EPA 8011	CAH	2
		EPA 6010	JMW	1
		EPA 8260	BLC, MCK	21
9268269004	MW-6	EPA 8011	CAH	2
		EPA 6010	JMW	1
		EPA 8260	BLC, MCK	21
9268269005	MW-9	EPA 8011	CAH	2
		EPA 6010	JMW	1
		EPA 8260	MCK	21
9268269006	MW-10	EPA 8011	CAH	2
		EPA 6010	JMW	1
		EPA 8260	MCK	21
9268269007	MW-11	EPA 8011	CAH	2
		EPA 6010	JMW	1
		EPA 8260	BLC	21
9268269008	MW-12	EPA 8011	CAH	2
		EPA 6010	JMW	1
		EPA 8260	BLC	21
9268269009	MW-13	EPA 8011	CAH	2
		EPA 6010	JMW	1
		EPA 8260	BLC	21
9268269010	MW-14	EPA 8011	CAH	2
		EPA 6010	JMW	1
		EPA 8260	BLC, MCK	21
9268269011	MW-15	EPA 8011	CAH	2
		EPA 6010	JMW	1
		EPA 8260	MCK	21
9268269012	DMW-1	EPA 8011	CAH	2
		EPA 6010	JMW	1
		EPA 8260	BLC	21
9268269013	DMW-2	EPA 8011	CAH	2

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Lab ID	Sample ID	Method	Analysts	Analytes Reported
9268269014	DMW-4	EPA 6010	JMW	1
		EPA 8260	BLC	21
		EPA 8011	CAH	2
		EPA 6010	JMW	1
9268269015	CK-1	EPA 8260	BLC	21
		EPA 8011	CAH	2
		EPA 8260	BLC	21
9268269016	CK-2	EPA 8011	CAH	2
		EPA 8260	BLC	21
9268269017	CK-3	EPA 8011	CAH	2
		EPA 8260	BLC	21

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Sample: MW-2	Lab ID: 9268269001	Collected: 04/27/10 14:20	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND ug/L		0.020	0.020	1	04/29/10 15:09	04/29/10 21:21	106-93-4	
1-Chloro-2-bromopropane (S)	103 %		60-140		1	04/29/10 15:09	04/29/10 21:21	301-79-56	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Lead	ND ug/L		5.0	4.0	1	04/30/10 14:15	05/04/10 19:56	7439-92-1	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND ug/L		100	62.0	1		04/29/10 19:22	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		04/29/10 19:22	994-05-8	
Benzene	3.7J ug/L		5.0	1.2	1		04/29/10 19:22	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		04/29/10 19:22	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		04/29/10 19:22	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		04/29/10 19:22	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		04/29/10 19:22	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		04/29/10 19:22	108-20-3	
Ethanol	ND ug/L		200	170	1		04/29/10 19:22	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		04/29/10 19:22	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		04/29/10 19:22	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		04/29/10 19:22	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		04/29/10 19:22	91-20-3	
Toluene	ND ug/L		5.0	1.8	1		04/29/10 19:22	108-88-3	
Xylene (Total)	3.2J ug/L		10.0	2.7	1		04/29/10 19:22	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		04/29/10 19:22	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		04/29/10 19:22	95-47-6	
Dibromofluoromethane (S)	102 %		70-130		1		04/29/10 19:22	1868-53-7	
Toluene-d8 (S)	98 %		70-130		1		04/29/10 19:22	2037-26-5	
4-Bromofluorobenzene (S)	98 %		70-130		1		04/29/10 19:22	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %		70-130		1		04/29/10 19:22	17060-07-0	

ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Sample: MW-3	Lab ID: 9268269002	Collected: 04/27/10 14:00	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND ug/L		0.020	0.020	1	04/29/10 15:09	04/29/10 21:40	106-93-4	
1-Chloro-2-bromopropane (S)	89 %		60-140		1	04/29/10 15:09	04/29/10 21:40	301-79-56	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Lead	9.1 ug/L		5.0	4.0	1	04/30/10 14:15	05/04/10 20:03	7439-92-1	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND ug/L		100	62.0	1		04/29/10 19:41	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		04/29/10 19:41	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		04/29/10 19:41	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		04/29/10 19:41	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		04/29/10 19:41	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		04/29/10 19:41	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		04/29/10 19:41	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		04/29/10 19:41	108-20-3	
Ethanol	ND ug/L		200	170	1		04/29/10 19:41	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		04/29/10 19:41	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		04/29/10 19:41	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		04/29/10 19:41	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		04/29/10 19:41	91-20-3	
Toluene	ND ug/L		5.0	1.8	1		04/29/10 19:41	108-88-3	
Xylene (Total)	ND ug/L		10.0	2.7	1		04/29/10 19:41	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		04/29/10 19:41	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		04/29/10 19:41	95-47-6	
Dibromofluoromethane (S)	102 %		70-130		1		04/29/10 19:41	1868-53-7	
Toluene-d8 (S)	98 %		70-130		1		04/29/10 19:41	2037-26-5	
4-Bromofluorobenzene (S)	100 %		70-130		1		04/29/10 19:41	460-00-4	
1,2-Dichloroethane-d4 (S)	97 %		70-130		1		04/29/10 19:41	17060-07-0	

ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Sample: MW-4	Lab ID: 9268269003	Collected: 04/27/10 13:40	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND ug/L		0.020	0.020	1	04/29/10 15:09	04/29/10 22:18	106-93-4	
1-Chloro-2-bromopropane (S)	75 %		60-140		1	04/29/10 15:09	04/29/10 22:18	301-79-56	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Lead	ND ug/L		5.0	4.0	1	04/30/10 14:15	05/04/10 20:07	7439-92-1	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	355 ug/L		100	62.0	1		04/29/10 19:59	75-85-4	
tert-Amylmethyl ether	14.5 ug/L		10.0	4.5	1		04/29/10 19:59	994-05-8	
Benzene	532 ug/L		50.0	12.0	10		05/01/10 15:47	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		04/29/10 19:59	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		04/29/10 19:59	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		04/29/10 19:59	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		04/29/10 19:59	107-06-2	
Diisopropyl ether	21.9 ug/L		5.0	2.7	1		04/29/10 19:59	108-20-3	
Ethanol	ND ug/L		200	170	1		04/29/10 19:59	64-17-5	
Ethylbenzene	179 ug/L		5.0	1.1	1		04/29/10 19:59	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		04/29/10 19:59	637-92-3	
Methyl-tert-butyl ether	381 ug/L		50.0	20.0	10		05/01/10 15:47	1634-04-4	
Naphthalene	31.3 ug/L		5.0	2.9	1		04/29/10 19:59	91-20-3	
Toluene	906 ug/L		50.0	18.0	10		05/01/10 15:47	108-88-3	
Xylene (Total)	895 ug/L		100	27.0	10		05/01/10 15:47	1330-20-7	
m&p-Xylene	597 ug/L		100	27.0	10		05/01/10 15:47	179601-23-1	
o-Xylene	298 ug/L		50.0	17.0	10		05/01/10 15:47	95-47-6	
Dibromofluoromethane (S)	104 %		70-130		1		04/29/10 19:59	1868-53-7	
Toluene-d8 (S)	97 %		70-130		1		04/29/10 19:59	2037-26-5	
4-Bromofluorobenzene (S)	100 %		70-130		1		04/29/10 19:59	460-00-4	
1,2-Dichloroethane-d4 (S)	99 %		70-130		1		04/29/10 19:59	17060-07-0	

ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Sample: MW-6	Lab ID: 9268269004	Collected: 04/27/10 13:20	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	04/29/10 15:09	04/29/10 22:37	106-93-4	
1-Chloro-2-bromopropane (S)	102	%	60-140		1	04/29/10 15:09	04/29/10 22:37	301-79-56	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Lead	8.1	ug/L	5.0	4.0	1	04/30/10 14:15	05/04/10 20:10	7439-92-1	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	3110	ug/L	100	62.0	1		04/29/10 20:17	75-85-4	
tert-Amylmethyl ether	914J	ug/L	1000	450	100		05/01/10 16:06	994-05-8	
Benzene	5570	ug/L	500	120	100		05/01/10 16:06	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		04/29/10 20:17	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		04/29/10 20:17	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		04/29/10 20:17	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		04/29/10 20:17	107-06-2	
Diisopropyl ether	536	ug/L	500	270	100		05/01/10 16:06	108-20-3	
Ethanol	ND	ug/L	200	170	1		04/29/10 20:17	64-17-5	
Ethylbenzene	2260	ug/L	500	110	100		05/01/10 16:06	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		04/29/10 20:17	637-92-3	
Methyl-tert-butyl ether	35300	ug/L	2500	1000	500		05/04/10 16:57	1634-04-4	
Naphthalene	463J	ug/L	500	290	100		05/01/10 16:06	91-20-3	
Toluene	19900	ug/L	500	180	100		05/01/10 16:06	108-88-3	
Xylene (Total)	12300	ug/L	1000	270	100		05/01/10 16:06	1330-20-7	
m&p-Xylene	8470	ug/L	1000	270	100		05/01/10 16:06	179601-23-1	
o-Xylene	3820	ug/L	500	170	100		05/01/10 16:06	95-47-6	
Dibromofluoromethane (S)	107	%	70-130		1		04/29/10 20:17	1868-53-7	
Toluene-d8 (S)	77	%	70-130		1		04/29/10 20:17	2037-26-5	
4-Bromofluorobenzene (S)	103	%	70-130		1		04/29/10 20:17	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		04/29/10 20:17	17060-07-0	

ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Sample: MW-9	Lab ID: 9268269005	Collected: 04/27/10 17:00	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND ug/L		0.020	0.020	1	04/29/10 15:09	04/29/10 22:56	106-93-4	
1-Chloro-2-bromopropane (S)	102 %		60-140		1	04/29/10 15:09	04/29/10 22:56	301-79-56	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Lead	ND ug/L		5.0	4.0	1	04/30/10 14:15	05/04/10 20:14	7439-92-1	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND ug/L		100	62.0	1		05/01/10 16:43	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		05/01/10 16:43	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		05/01/10 16:43	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		05/01/10 16:43	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		05/01/10 16:43	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		05/01/10 16:43	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		05/01/10 16:43	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		05/01/10 16:43	108-20-3	
Ethanol	ND ug/L		200	170	1		05/01/10 16:43	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		05/01/10 16:43	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		05/01/10 16:43	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		05/01/10 16:43	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		05/01/10 16:43	91-20-3	
Toluene	ND ug/L		5.0	1.8	1		05/01/10 16:43	108-88-3	
Xylene (Total)	ND ug/L		10.0	2.7	1		05/01/10 16:43	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		05/01/10 16:43	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		05/01/10 16:43	95-47-6	
Dibromofluoromethane (S)	100 %		70-130		1		05/01/10 16:43	1868-53-7	
Toluene-d8 (S)	93 %		70-130		1		05/01/10 16:43	2037-26-5	
4-Bromofluorobenzene (S)	97 %		70-130		1		05/01/10 16:43	460-00-4	
1,2-Dichloroethane-d4 (S)	94 %		70-130		1		05/01/10 16:43	17060-07-0	

ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Sample: MW-10	Lab ID: 9268269006	Collected: 04/27/10 13:00	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND ug/L		0.020	0.020	1	04/29/10 15:09	04/29/10 23:14	106-93-4	
1-Chloro-2-bromopropane (S)	102 %		60-140		1	04/29/10 15:09	04/29/10 23:14	301-79-56	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Lead	4.4J ug/L		5.0	4.0	1	04/30/10 14:15	05/04/10 20:28	7439-92-1	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND ug/L		100	62.0	1		05/01/10 17:01	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		05/01/10 17:01	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		05/01/10 17:01	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		05/01/10 17:01	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		05/01/10 17:01	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		05/01/10 17:01	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		05/01/10 17:01	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		05/01/10 17:01	108-20-3	
Ethanol	ND ug/L		200	170	1		05/01/10 17:01	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		05/01/10 17:01	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		05/01/10 17:01	637-92-3	
Methyl-tert-butyl ether	4.0J ug/L		5.0	2.0	1		05/01/10 17:01	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		05/01/10 17:01	91-20-3	
Toluene	ND ug/L		5.0	1.8	1		05/01/10 17:01	108-88-3	
Xylene (Total)	ND ug/L		10.0	2.7	1		05/01/10 17:01	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		05/01/10 17:01	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		05/01/10 17:01	95-47-6	
Dibromofluoromethane (S)	101 %		70-130		1		05/01/10 17:01	1868-53-7	
Toluene-d8 (S)	96 %		70-130		1		05/01/10 17:01	2037-26-5	
4-Bromofluorobenzene (S)	98 %		70-130		1		05/01/10 17:01	460-00-4	
1,2-Dichloroethane-d4 (S)	98 %		70-130		1		05/01/10 17:01	17060-07-0	

ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439
 Pace Project No.: 9268269

Sample: MW-11	Lab ID: 9268269007	Collected: 04/27/10 12:30	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND ug/L		0.020	0.020	1	04/29/10 15:10	04/29/10 23:33	106-93-4	
1-Chloro-2-bromopropane (S)	104 %		60-140		1	04/29/10 15:10	04/29/10 23:33	301-79-56	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Lead	ND ug/L		5.0	4.0	1	04/30/10 14:15	05/04/10 20:32	7439-92-1	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND ug/L		100	62.0	1		04/29/10 21:13	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		04/29/10 21:13	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		04/29/10 21:13	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		04/29/10 21:13	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		04/29/10 21:13	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		04/29/10 21:13	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		04/29/10 21:13	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		04/29/10 21:13	108-20-3	
Ethanol	ND ug/L		200	170	1		04/29/10 21:13	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		04/29/10 21:13	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		04/29/10 21:13	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		04/29/10 21:13	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		04/29/10 21:13	91-20-3	
Toluene	3.2J ug/L		5.0	1.8	1		04/29/10 21:13	108-88-3	
Xylene (Total)	4.2J ug/L		10.0	2.7	1		04/29/10 21:13	1330-20-7	
m&p-Xylene	3.1J ug/L		10.0	2.7	1		04/29/10 21:13	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		04/29/10 21:13	95-47-6	
Dibromofluoromethane (S)	100 %		70-130		1		04/29/10 21:13	1868-53-7	
Toluene-d8 (S)	99 %		70-130		1		04/29/10 21:13	2037-26-5	
4-Bromofluorobenzene (S)	99 %		70-130		1		04/29/10 21:13	460-00-4	
1,2-Dichloroethane-d4 (S)	98 %		70-130		1		04/29/10 21:13	17060-07-0	

ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Sample: MW-12	Lab ID: 9268269008	Collected: 04/27/10 16:50	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	04/29/10 15:10	04/29/10 23:52	106-93-4	
1-Chloro-2-bromopropane (S)	102 %		60-140		1	04/29/10 15:10	04/29/10 23:52	301-79-56	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Lead	4.3	J ug/L	5.0	4.0	1	04/30/10 14:15	05/04/10 20:35	7439-92-1	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		04/29/10 21:31	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		04/29/10 21:31	994-05-8	
Benzene	ND	ug/L	5.0	1.2	1		04/29/10 21:31	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		04/29/10 21:31	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		04/29/10 21:31	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		04/29/10 21:31	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		04/29/10 21:31	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		04/29/10 21:31	108-20-3	
Ethanol	ND	ug/L	200	170	1		04/29/10 21:31	64-17-5	
Ethylbenzene	ND	ug/L	5.0	1.1	1		04/29/10 21:31	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		04/29/10 21:31	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.0	1		04/29/10 21:31	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		04/29/10 21:31	91-20-3	
Toluene	ND	ug/L	5.0	1.8	1		04/29/10 21:31	108-88-3	
Xylene (Total)	ND	ug/L	10.0	2.7	1		04/29/10 21:31	1330-20-7	
m&p-Xylene	ND	ug/L	10.0	2.7	1		04/29/10 21:31	179601-23-1	
o-Xylene	ND	ug/L	5.0	1.7	1		04/29/10 21:31	95-47-6	
Dibromofluoromethane (S)	100 %		70-130		1		04/29/10 21:31	1868-53-7	
Toluene-d8 (S)	85 %		70-130		1		04/29/10 21:31	2037-26-5	
4-Bromofluorobenzene (S)	97 %		70-130		1		04/29/10 21:31	460-00-4	
1,2-Dichloroethane-d4 (S)	97 %		70-130		1		04/29/10 21:31	17060-07-0	

ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439

Pace Project No.: 9268269

Sample: MW-13	Lab ID: 9268269009	Collected: 04/27/10 12:00	Received: 04/28/10 15:15	Matrix: Water			
Parameters	Results	Units	Report Limit MDL DF Prepared Analyzed CAS No. Qual				
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011						
1,2-Dibromoethane (EDB)	0.052 ug/L		0.020	0.020	1	04/29/10 15:10	04/30/10 00:11 106-93-4
1-Chloro-2-bromopropane (S)	100 %		60-140		1	04/29/10 15:10	04/30/10 00:11 301-79-56
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Lead	6.4 ug/L		5.0	4.0	1	04/30/10 14:15	05/04/10 20:38 7439-92-1
8260 MSV Oxygenates	Analytical Method: EPA 8260						
tert-Amyl Alcohol	ND ug/L		100	62.0	1		04/29/10 21:50 75-85-4
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		04/29/10 21:50 994-05-8
Benzene	ND ug/L		5.0	1.2	1		04/29/10 21:50 71-43-2
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		04/29/10 21:50 624-95-3
tert-Butyl Alcohol	ND ug/L		100	27.0	1		04/29/10 21:50 75-65-0
tert-Butyl Formate	ND ug/L		50.0	9.0	1		04/29/10 21:50 762-75-4
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		04/29/10 21:50 107-06-2
Diisopropyl ether	ND ug/L		5.0	2.7	1		04/29/10 21:50 108-20-3
Ethanol	ND ug/L		200	170	1		04/29/10 21:50 64-17-5
Ethylbenzene	ND ug/L		5.0	1.1	1		04/29/10 21:50 100-41-4
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		04/29/10 21:50 637-92-3
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		04/29/10 21:50 1634-04-4
Naphthalene	ND ug/L		5.0	2.9	1		04/29/10 21:50 91-20-3
Toluene	ND ug/L		5.0	1.8	1		04/29/10 21:50 108-88-3
Xylene (Total)	ND ug/L		10.0	2.7	1		04/29/10 21:50 1330-20-7
m&p-Xylene	ND ug/L		10.0	2.7	1		04/29/10 21:50 179601-23-1
o-Xylene	ND ug/L		5.0	1.7	1		04/29/10 21:50 95-47-6
Dibromofluoromethane (S)	102 %		70-130		1		04/29/10 21:50 1868-53-7
Toluene-d8 (S)	88 %		70-130		1		04/29/10 21:50 2037-26-5
4-Bromofluorobenzene (S)	98 %		70-130		1		04/29/10 21:50 460-00-4
1,2-Dichloroethane-d4 (S)	99 %		70-130		1		04/29/10 21:50 17060-07-0

ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439

Pace Project No.: 9268269

Sample: MW-14	Lab ID: 9268269010	Collected: 04/27/10 16:40	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	04/29/10 15:10	04/30/10 00:30	106-93-4	
1-Chloro-2-bromopropane (S)	106	%	60-140		1	04/29/10 15:10	04/30/10 00:30	301-79-56	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Lead	ND	ug/L	5.0	4.0	1	04/30/10 14:15	05/04/10 20:42	7439-92-1	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	717	ug/L	100	62.0	1		04/29/10 22:08	75-85-4	
tert-Amylmethyl ether	134	ug/L	10.0	4.5	1		04/29/10 22:08	994-05-8	
Benzene	1770	ug/L	250	60.0	50		05/01/10 16:24	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		04/29/10 22:08	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		04/29/10 22:08	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		04/29/10 22:08	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		04/29/10 22:08	107-06-2	
Diisopropyl ether	96.0	ug/L	5.0	2.7	1		04/29/10 22:08	108-20-3	
Ethanol	ND	ug/L	200	170	1		04/29/10 22:08	64-17-5	
Ethylbenzene	1560	ug/L	250	55.0	50		05/01/10 16:24	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		04/29/10 22:08	637-92-3	
Methyl-tert-butyl ether	2020	ug/L	250	100	50		05/01/10 16:24	1634-04-4	
Naphthalene	432	ug/L	250	145	50		05/01/10 16:24	91-20-3	
Toluene	6420	ug/L	250	90.0	50		05/01/10 16:24	108-88-3	
Xylene (Total)	8850	ug/L	500	135	50		05/01/10 16:24	1330-20-7	
m&p-Xylene	6050	ug/L	500	135	50		05/01/10 16:24	179601-23-1	
o-Xylene	2800	ug/L	250	85.0	50		05/01/10 16:24	95-47-6	
Dibromofluoromethane (S)	101	%	70-130		1		04/29/10 22:08	1868-53-7	
Toluene-d8 (S)	93	%	70-130		1		04/29/10 22:08	2037-26-5	
4-Bromofluorobenzene (S)	105	%	70-130		1		04/29/10 22:08	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130		1		04/29/10 22:08	17060-07-0	

ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Sample: MW-15	Lab ID: 9268269011	Collected: 04/27/10 12:15	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report						
			Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND ug/L		0.020	0.020	1	04/29/10 15:10	04/30/10 00:48	106-93-4	
1-Chloro-2-bromopropane (S)	103 %		60-140		1	04/29/10 15:10	04/30/10 00:48	301-79-56	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Lead	ND ug/L		5.0	4.0	1	04/30/10 14:15	05/04/10 20:46	7439-92-1	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND ug/L		100	62.0	1		05/01/10 17:20	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		05/01/10 17:20	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		05/01/10 17:20	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		05/01/10 17:20	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		05/01/10 17:20	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		05/01/10 17:20	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		05/01/10 17:20	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		05/01/10 17:20	108-20-3	
Ethanol	ND ug/L		200	170	1		05/01/10 17:20	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		05/01/10 17:20	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		05/01/10 17:20	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		05/01/10 17:20	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		05/01/10 17:20	91-20-3	
Toluene	ND ug/L		5.0	1.8	1		05/01/10 17:20	108-88-3	
Xylene (Total)	ND ug/L		10.0	2.7	1		05/01/10 17:20	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		05/01/10 17:20	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		05/01/10 17:20	95-47-6	
Dibromofluoromethane (S)	102 %		70-130		1		05/01/10 17:20	1868-53-7	
Toluene-d8 (S)	96 %		70-130		1		05/01/10 17:20	2037-26-5	
4-Bromofluorobenzene (S)	99 %		70-130		1		05/01/10 17:20	460-00-4	
1,2-Dichloroethane-d4 (S)	100 %		70-130		1		05/01/10 17:20	17060-07-0	

ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Sample: DMW-1	Lab ID: 9268269012	Collected: 04/27/10 14:30	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report					CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND ug/L		0.020	0.020	1	04/29/10 15:10	04/30/10 01:07	106-93-4	
1-Chloro-2-bromopropane (S)	102 %		60-140		1	04/29/10 15:10	04/30/10 01:07	301-79-56	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Lead	ND ug/L		5.0	4.0	1	04/30/10 14:15	05/04/10 20:49	7439-92-1	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND ug/L		100	62.0	1		04/29/10 22:45	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		04/29/10 22:45	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		04/29/10 22:45	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		04/29/10 22:45	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		04/29/10 22:45	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		04/29/10 22:45	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		04/29/10 22:45	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		04/29/10 22:45	108-20-3	
Ethanol	ND ug/L		200	170	1		04/29/10 22:45	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		04/29/10 22:45	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		04/29/10 22:45	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		04/29/10 22:45	1634-04-4	
Naphthalene	4.0J ug/L		5.0	2.9	1		04/29/10 22:45	91-20-3	
Toluene	2.6J ug/L		5.0	1.8	1		04/29/10 22:45	108-88-3	
Xylene (Total)	5.1J ug/L		10.0	2.7	1		04/29/10 22:45	1330-20-7	
m&p-Xylene	3.8J ug/L		10.0	2.7	1		04/29/10 22:45	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		04/29/10 22:45	95-47-6	
Dibromofluoromethane (S)	98 %		70-130		1		04/29/10 22:45	1868-53-7	
Toluene-d8 (S)	93 %		70-130		1		04/29/10 22:45	2037-26-5	
4-Bromofluorobenzene (S)	98 %		70-130		1		04/29/10 22:45	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %		70-130		1		04/29/10 22:45	17060-07-0	

ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Sample: DMW-2	Lab ID: 9268269013	Collected: 04/27/10 16:25	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND ug/L		0.020	0.020	1	04/29/10 14:56	04/30/10 02:41	106-93-4	
1-Chloro-2-bromopropane (S)	119 %		60-140		1	04/29/10 14:56	04/30/10 02:41	301-79-56	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Lead	ND ug/L		5.0	4.0	1	04/30/10 14:15	05/04/10 20:53	7439-92-1	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND ug/L		100	62.0	1		04/29/10 23:03	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		04/29/10 23:03	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		04/29/10 23:03	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		04/29/10 23:03	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		04/29/10 23:03	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		04/29/10 23:03	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		04/29/10 23:03	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		04/29/10 23:03	108-20-3	
Ethanol	ND ug/L		200	170	1		04/29/10 23:03	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		04/29/10 23:03	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		04/29/10 23:03	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		04/29/10 23:03	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		04/29/10 23:03	91-20-3	
Toluene	ND ug/L		5.0	1.8	1		04/29/10 23:03	108-88-3	
Xylene (Total)	3.3J ug/L		10.0	2.7	1		04/29/10 23:03	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		04/29/10 23:03	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		04/29/10 23:03	95-47-6	
Dibromofluoromethane (S)	99 %		70-130		1		04/29/10 23:03	1868-53-7	
Toluene-d8 (S)	95 %		70-130		1		04/29/10 23:03	2037-26-5	
4-Bromofluorobenzene (S)	98 %		70-130		1		04/29/10 23:03	460-00-4	
1,2-Dichloroethane-d4 (S)	99 %		70-130		1		04/29/10 23:03	17060-07-0	

ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Sample: DMW-4	Lab ID: 9268269014	Collected: 04/27/10 14:50	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND ug/L		0.020	0.020	1	04/29/10 14:56	04/30/10 03:00	106-93-4	
1-Chloro-2-bromopropane (S)	110 %		60-140		1	04/29/10 14:56	04/30/10 03:00	301-79-56	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Lead	ND ug/L		5.0	4.0	1	04/30/10 14:15	05/04/10 20:56	7439-92-1	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND ug/L		100	62.0	1		04/29/10 23:21	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		04/29/10 23:21	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		04/29/10 23:21	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		04/29/10 23:21	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		04/29/10 23:21	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		04/29/10 23:21	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		04/29/10 23:21	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		04/29/10 23:21	108-20-3	
Ethanol	ND ug/L		200	170	1		04/29/10 23:21	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		04/29/10 23:21	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		04/29/10 23:21	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		04/29/10 23:21	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		04/29/10 23:21	91-20-3	
Toluene	ND ug/L		5.0	1.8	1		04/29/10 23:21	108-88-3	
Xylene (Total)	ND ug/L		10.0	2.7	1		04/29/10 23:21	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		04/29/10 23:21	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		04/29/10 23:21	95-47-6	
Dibromofluoromethane (S)	98 %		70-130		1		04/29/10 23:21	1868-53-7	
Toluene-d8 (S)	96 %		70-130		1		04/29/10 23:21	2037-26-5	
4-Bromofluorobenzene (S)	100 %		70-130		1		04/29/10 23:21	460-00-4	
1,2-Dichloroethane-d4 (S)	98 %		70-130		1		04/29/10 23:21	17060-07-0	

ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Sample: CK-1	Lab ID: 9268269015	Collected: 04/27/10 16:00	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND ug/L		0.020	0.020	1	04/29/10 14:56	04/30/10 03:19	106-93-4	
1-Chloro-2-bromopropane (S)	106 %		60-140		1	04/29/10 14:56	04/30/10 03:19	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND ug/L		100	62.0	1		04/29/10 23:40	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		04/29/10 23:40	994-05-8	
Benzene	3.0J ug/L		5.0	1.2	1		04/29/10 23:40	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		04/29/10 23:40	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		04/29/10 23:40	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		04/29/10 23:40	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		04/29/10 23:40	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		04/29/10 23:40	108-20-3	
Ethanol	ND ug/L		200	170	1		04/29/10 23:40	64-17-5	
Ethylbenzene	1.6J ug/L		5.0	1.1	1		04/29/10 23:40	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		04/29/10 23:40	637-92-3	
Methyl-tert-butyl ether	5.3 ug/L		5.0	2.0	1		04/29/10 23:40	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		04/29/10 23:40	91-20-3	
Toluene	6.0 ug/L		5.0	1.8	1		04/29/10 23:40	108-88-3	
Xylene (Total)	8.3J ug/L		10.0	2.7	1		04/29/10 23:40	1330-20-7	
m&p-Xylene	5.7J ug/L		10.0	2.7	1		04/29/10 23:40	179601-23-1	
o-Xylene	2.6J ug/L		5.0	1.7	1		04/29/10 23:40	95-47-6	
Dibromofluoromethane (S)	100 %		70-130		1		04/29/10 23:40	1868-53-7	
Toluene-d8 (S)	96 %		70-130		1		04/29/10 23:40	2037-26-5	
4-Bromofluorobenzene (S)	97 %		70-130		1		04/29/10 23:40	460-00-4	
1,2-Dichloroethane-d4 (S)	96 %		70-130		1		04/29/10 23:40	17060-07-0	

ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439
 Pace Project No.: 9268269

Sample: CK-2	Lab ID: 9268269016	Collected: 04/27/10 16:10	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.020	1	04/29/10 14:56	04/30/10 03:38	106-93-4	
1-Chloro-2-bromopropane (S)	111	%	60-140		1	04/29/10 14:56	04/30/10 03:38	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND	ug/L	100	62.0	1		04/29/10 23:58	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	4.5	1		04/29/10 23:58	994-05-8	
Benzene	12.8	ug/L	5.0	1.2	1		04/29/10 23:58	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	48.0	1		04/29/10 23:58	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	27.0	1		04/29/10 23:58	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	9.0	1		04/29/10 23:58	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.3	1		04/29/10 23:58	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	2.7	1		04/29/10 23:58	108-20-3	
Ethanol	ND	ug/L	200	170	1		04/29/10 23:58	64-17-5	
Ethylbenzene	6.0	ug/L	5.0	1.1	1		04/29/10 23:58	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	4.6	1		04/29/10 23:58	637-92-3	
Methyl-tert-butyl ether	17.1	ug/L	5.0	2.0	1		04/29/10 23:58	1634-04-4	
Naphthalene	ND	ug/L	5.0	2.9	1		04/29/10 23:58	91-20-3	
Toluene	36.0	ug/L	5.0	1.8	1		04/29/10 23:58	108-88-3	
Xylene (Total)	32.1	ug/L	10.0	2.7	1		04/29/10 23:58	1330-20-7	
m&p-Xylene	22.0	ug/L	10.0	2.7	1		04/29/10 23:58	179601-23-1	
o-Xylene	10.2	ug/L	5.0	1.7	1		04/29/10 23:58	95-47-6	
Dibromofluoromethane (S)	99	%	70-130		1		04/29/10 23:58	1868-53-7	
Toluene-d8 (S)	96	%	70-130		1		04/29/10 23:58	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		1		04/29/10 23:58	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-130		1		04/29/10 23:58	17060-07-0	

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ANALYTICAL RESULTS

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

Sample: CK-3	Lab ID: 9268269017	Collected: 04/27/10 16:20	Received: 04/28/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011								
1,2-Dibromoethane (EDB)	ND ug/L		0.020	0.020	1	04/29/10 14:56	04/30/10 03:57	106-93-4	
1-Chloro-2-bromopropane (S)	103 %		60-140		1	04/29/10 14:56	04/30/10 03:57	301-79-56	
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND ug/L		100	62.0	1		04/30/10 00:17	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		04/30/10 00:17	994-05-8	
Benzene	13.5 ug/L		5.0	1.2	1		04/30/10 00:17	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		04/30/10 00:17	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		04/30/10 00:17	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		04/30/10 00:17	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		04/30/10 00:17	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		04/30/10 00:17	108-20-3	
Ethanol	ND ug/L		200	170	1		04/30/10 00:17	64-17-5	
Ethylbenzene	6.7 ug/L		5.0	1.1	1		04/30/10 00:17	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		04/30/10 00:17	637-92-3	
Methyl-tert-butyl ether	19.1 ug/L		5.0	2.0	1		04/30/10 00:17	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		04/30/10 00:17	91-20-3	
Toluene	38.1 ug/L		5.0	1.8	1		04/30/10 00:17	108-88-3	
Xylene (Total)	36.7 ug/L		10.0	2.7	1		04/30/10 00:17	1330-20-7	
m&p-Xylene	24.9 ug/L		10.0	2.7	1		04/30/10 00:17	179601-23-1	
o-Xylene	11.8 ug/L		5.0	1.7	1		04/30/10 00:17	95-47-6	
Dibromofluoromethane (S)	101 %		70-130		1		04/30/10 00:17	1868-53-7	
Toluene-d8 (S)	95 %		70-130		1		04/30/10 00:17	2037-26-5	
4-Bromofluorobenzene (S)	98 %		70-130		1		04/30/10 00:17	460-00-4	
1,2-Dichloroethane-d4 (S)	96 %		70-130		1		04/30/10 00:17	17060-07-0	

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QUALITY CONTROL DATA

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

QC Batch:	OEXT/9855	Analysis Method:	EPA 8011
QC Batch Method:	EPA 8011	Analysis Description:	GCS 8011 EDB DBCP
Associated Lab Samples:	9268269001, 9268269002, 9268269003, 9268269004, 9268269005, 9268269006, 9268269007, 9268269008, 9268269009, 9268269010, 9268269011, 9268269012		

METHOD BLANK: 435294 Matrix: Water

Associated Lab Samples: 9268269001, 9268269002, 9268269003, 9268269004, 9268269005, 9268269006, 9268269007, 9268269008,
9268269009, 9268269010, 9268269011, 9268269012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	04/29/10 17:17	
1-Chloro-2-bromopropane (S)	%	103	60-140	04/29/10 17:17	

LABORATORY CONTROL SAMPLE & LCSD: 435295 435296

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.28	0.28	0.29	100	102	60-140	2	20	
1-Chloro-2-bromopropane (S)	%				100	102	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 435297 435298

Parameter	Units	9268267001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	0.083	.28	.28	0.36	0.37	100	102	60-140	2	20	
1-Chloro-2-bromopropane (S)	%						104	105	60-140			

SAMPLE DUPLICATE: 435299

Parameter	Units	9268269002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1-Chloro-2-bromopropane (S)	%	89	105	16		

QUALITY CONTROL DATA

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

QC Batch:	OEXT/9856	Analysis Method:	EPA 8011
QC Batch Method:	EPA 8011	Analysis Description:	GCS 8011 EDB DBCP
Associated Lab Samples:	9268269013, 9268269014, 9268269015, 9268269016, 9268269017		

METHOD BLANK: 435306 Matrix: Water

Associated Lab Samples: 9268269013, 9268269014, 9268269015, 9268269016, 9268269017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	04/30/10 01:45	
1-Chloro-2-bromopropane (S)	%	115	60-140	04/30/10 01:45	

LABORATORY CONTROL SAMPLE & LCSD: 435307 435308

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.29	0.30	0.30	104	106	60-140	0	20	
1-Chloro-2-bromopropane (S)	%				103	102	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 435309 435310

Parameter	Units	9268282001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	0.044	.29	.29	0.33	0.34	98	104	60-140	5	20	
1-Chloro-2-bromopropane (S)	%						95	101	60-140			

SAMPLE DUPLICATE: 435311

Parameter	Units	9268218003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1-Chloro-2-bromopropane (S)	%	104	102	1		

QUALITY CONTROL DATA

Project: HIGHWAY 11 GROCERY 03439
 Pace Project No.: 9268269

QC Batch:	MPRP/6242	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3010	Analysis Description:	6010 MET
Associated Lab Samples:	9268269001, 9268269002, 9268269003, 9268269004, 9268269005, 9268269006, 9268269007, 9268269008, 9268269009, 9268269010, 9268269011, 9268269012, 9268269013, 9268269014		

METHOD BLANK: 435843 Matrix: Water

Associated Lab Samples: 9268269001, 9268269002, 9268269003, 9268269004, 9268269005, 9268269006, 9268269007, 9268269008, 9268269009, 9268269010, 9268269011, 9268269012, 9268269013, 9268269014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	ug/L	ND	5.0	05/04/10 19:42	

LABORATORY CONTROL SAMPLE: 435844

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	500	516	103	80-120	

MATRIX SPIKE SAMPLE: 435845

Parameter	Units	9268267003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	ND	500	489	98	75-125	

SAMPLE DUPLICATE: 435846

Parameter	Units	9268269001 Result	Dup Result	RPD	Max RPD	Qualifiers
Lead	ug/L	ND	ND		20	

QUALITY CONTROL DATA

Project: HIGHWAY 11 GROCERY 03439
 Pace Project No.: 9268269

QC Batch:	MSV/10794	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV Oxygenates SC
Associated Lab Samples:	9268269001, 9268269002, 9268269003, 9268269004, 9268269005, 9268269006, 9268269007, 9268269008, 9268269009, 9268269010, 9268269011, 9268269012, 9268269013, 9268269014, 9268269015, 9268269016, 9268269017		

METHOD BLANK:	435390	Matrix:	Water
Associated Lab Samples:	9268269001, 9268269002, 9268269003, 9268269004, 9268269005, 9268269006, 9268269007, 9268269008, 9268269009, 9268269010, 9268269011, 9268269012, 9268269013, 9268269014, 9268269015, 9268269016, 9268269017		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	04/29/10 16:18	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	04/29/10 16:18	
Benzene	ug/L	ND	5.0	04/29/10 16:18	
Diisopropyl ether	ug/L	ND	5.0	04/29/10 16:18	
Ethanol	ug/L	ND	200	04/29/10 16:18	
Ethyl-tert-butyl ether	ug/L	ND	10.0	04/29/10 16:18	
Ethylbenzene	ug/L	ND	5.0	04/29/10 16:18	
m&p-Xylene	ug/L	ND	10.0	04/29/10 16:18	
Methyl-tert-butyl ether	ug/L	ND	5.0	04/29/10 16:18	
Naphthalene	ug/L	ND	5.0	04/29/10 16:18	
o-Xylene	ug/L	ND	5.0	04/29/10 16:18	
tert-Amyl Alcohol	ug/L	ND	100	04/29/10 16:18	
tert-Amylmethyl ether	ug/L	ND	10.0	04/29/10 16:18	
tert-Butyl Alcohol	ug/L	ND	100	04/29/10 16:18	
tert-Butyl Formate	ug/L	ND	50.0	04/29/10 16:18	
Toluene	ug/L	ND	5.0	04/29/10 16:18	
Xylene (Total)	ug/L	ND	10.0	04/29/10 16:18	
1,2-Dichloroethane-d4 (S)	%	100	70-130	04/29/10 16:18	
4-Bromofluorobenzene (S)	%	99	70-130	04/29/10 16:18	
Dibromofluoromethane (S)	%	102	70-130	04/29/10 16:18	
Toluene-d8 (S)	%	98	70-130	04/29/10 16:18	

METHOD BLANK:	437423	Matrix:	Water
Associated Lab Samples:	9268269001, 9268269002, 9268269003, 9268269004, 9268269005, 9268269006, 9268269007, 9268269008, 9268269009, 9268269010, 9268269011, 9268269012, 9268269013, 9268269014, 9268269015, 9268269016, 9268269017		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	05/01/10 14:52	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	05/01/10 14:52	
Benzene	ug/L	ND	5.0	05/01/10 14:52	
Diisopropyl ether	ug/L	ND	5.0	05/01/10 14:52	
Ethanol	ug/L	ND	200	05/01/10 14:52	
Ethyl-tert-butyl ether	ug/L	ND	10.0	05/01/10 14:52	
Ethylbenzene	ug/L	ND	5.0	05/01/10 14:52	
m&p-Xylene	ug/L	ND	10.0	05/01/10 14:52	
Methyl-tert-butyl ether	ug/L	ND	5.0	05/01/10 14:52	
Naphthalene	ug/L	ND	5.0	05/01/10 14:52	

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QUALITY CONTROL DATA

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

METHOD BLANK: 437423

Matrix: Water

Associated Lab Samples: 9268269001, 9268269002, 9268269003, 9268269004, 9268269005, 9268269006, 9268269007, 9268269008, 9268269009, 9268269010, 9268269011, 9268269012, 9268269013, 9268269014, 9268269015, 9268269016, 9268269017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
o-Xylene	ug/L	ND	5.0	05/01/10 14:52	
tert-Amyl Alcohol	ug/L	ND	100	05/01/10 14:52	
tert-Amyl/methyl ether	ug/L	ND	10.0	05/01/10 14:52	
tert-Butyl Alcohol	ug/L	ND	100	05/01/10 14:52	
tert-Butyl Formate	ug/L	ND	50.0	05/01/10 14:52	
Toluene	ug/L	ND	5.0	05/01/10 14:52	
Xylene (Total)	ug/L	ND	10.0	05/01/10 14:52	
1,2-Dichloroethane-d4 (S)	%	93	70-130	05/01/10 14:52	
4-Bromofluorobenzene (S)	%	96	70-130	05/01/10 14:52	
Dibromofluoromethane (S)	%	99	70-130	05/01/10 14:52	
Toluene-d8 (S)	%	96	70-130	05/01/10 14:52	

LABORATORY CONTROL SAMPLE: 435391

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	51.1	102	70-130	
3,3-Dimethyl-1-Butanol	ug/L	1000	903	90	70-130	
Benzene	ug/L	50	47.0	94	70-130	
Diisopropyl ether	ug/L	50	52.0	104	70-130	
Ethanol	ug/L	2000	1990	100	70-130	
Ethyl-tert-butyl ether	ug/L	100	104	104	70-130	
Ethylbenzene	ug/L	50	46.7	93	70-130	
m&p-Xylene	ug/L	100	94.0	94	70-130	
Methyl-tert-butyl ether	ug/L	50	49.4	99	70-130	
Naphthalene	ug/L	50	50.7	101	70-130	
o-Xylene	ug/L	50	47.2	94	70-130	
tert-Amyl Alcohol	ug/L	1000	900	90	70-130	
tert-Amyl/methyl ether	ug/L	100	96.5	96	70-130	
tert-Butyl Alcohol	ug/L	500	441	88	70-130	
tert-Butyl Formate	ug/L	400	353	88	70-130	
Toluene	ug/L	50	48.9	98	70-130	
Xylene (Total)	ug/L	150	141	94	70-130	
1,2-Dichloroethane-d4 (S)	%			103	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Dibromofluoromethane (S)	%			105	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 435392 435393

Parameter	Units	9268269017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Max Qual
1,2-Dichloroethane	ug/L	ND	50	50	44.1	56.5	88	113	70-130	25	30	

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QUALITY CONTROL DATA

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 435392			435393									
Parameter	Units	9268269017 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	
			Spike Conc.	Spike Conc.							% Rec	Limits	RPD	RPD	Qual
3,3-Dimethyl-1-Butanol	ug/L	ND	1000	1000	592	812	59	81	70-130	31	30	M0,R1
Benzene	ug/L	13.5	50	50	56.3	67.3	86	108	70-130	18	30	
Diisopropyl ether	ug/L	ND	50	50	43.6	56.4	86	111	70-130	26	30	
Ethanol	ug/L	ND	2000	2000	1330	1910	67	96	70-130	36	30	M0,R1
Ethyl-tert-butyl ether	ug/L	ND	100	100	85.7	111	86	111	70-130	26	30	
Ethylbenzene	ug/L	6.7	50	50	48.1	58.3	83	103	70-130	19	30	
m&p-Xylene	ug/L	24.9	100	100	107	127	82	102	70-130	17	30	
Methyl-tert-butyl ether	ug/L	19.1	50	50	58.9	71.3	80	104	70-130	19	30	
Naphthalene	ug/L	ND	50	50	36.4	53.0	70	103	70-130	37	30	R1
o-Xylene	ug/L	11.8	50	50	53.0	63.5	82	103	70-130	18	30	
tert-Amyl Alcohol	ug/L	ND	1000	1000	626	867	63	87	70-130	32	30	M0,R1
tert-Amylmethyl ether	ug/L	ND	100	100	81.1	104	81	104	70-130	25	30	
tert-Butyl Alcohol	ug/L	ND	500	500	405	551	81	110	70-130	31	30	R1
tert-Butyl Formate	ug/L	ND	400	400	ND	ND	0	0	70-130		30	P5
Toluene	ug/L	38.1	50	50	82.8	94.4	89	113	70-130	13	30	
1,2-Dichloroethane-d4 (S)	%						96	101	70-130			
4-Bromofluorobenzene (S)	%						100	101	70-130			
Dibromofluoromethane (S)	%						103	103	70-130			
Toluene-d8 (S)	%						98	98	70-130			

QUALIFIERS

Project: HIGHWAY 11 GROCERY 03439
Pace Project No.: 9268269

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

ANALYTE QUALIFIERS

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

P5 The EPA or method required sample preservation degrades this compound, therefore acceptable recoveries may not be achieved in sample matrix spikes.

R1 RPD value was outside control limits.



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a **LEGAL DOCUMENT**. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	SURE DT	Report To:	J. J. M. C.	Attention:	J. J. M. C. (P. J. M. C.)
Address:	1000 B. Street	Copy To:		Company Name:	CLIMATE ENERGY
Email To:	J. J. M. C. @CLIMATE.ENERGY.COM			Address:	
Phone:	(319) 384-7400	Purchase Order No.:	J. J. M. C.	Pace Quote Reference:	<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> OTHER _____
Fax:	(319) 384-7401	Project Name:	J. J. M. C. - PROJECT	Pace Project Manager:	J. J. M. C.
Requested Due Date/TAT:		Project Number:	J. J. M. C. 1000	Pace Profile #:	949-5
		Site Location:	STATE:	Page: 1 of 1	
REGULATORY AGENCY					
1357500					

6

SAMPLER NAME AND SIGNATURE	
PRINT Name of Sampler:	
SIGNATURE of SAMPLER:	
	DATE Signed (MM/DD/YY):
Temp in °C	
Received on Ice (Y/N)	
Custody Sealed Cooler (Y/N)	
Samples Intact (Y/N)	

***Important Note:** By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a **LEGAL DOCUMENT**. All relevant fields must be completed accurately.

Section A Required Client Information:												Section B Required Project Information:												Section C Invoice Information:												Page: of
Company: <i>City of Lakewood</i>						Report To: <i>Pace Project Manager</i>						Attention: <i>Project Manager</i>						1357902																		
Address: <i>1000 18th Street, Lakewood, CO 80401</i>			Copy To:			Company Name: <i>City of Lakewood</i>			REGULATORY AGENCY			NPDES			GROUND WATER			DRINKING WATER			OTHER															
Email To: <i>[Redacted]</i>			Purchase Order No.: <i>[Redacted]</i>			Address: <i>[Redacted]</i>			Pace Quote Reference:			<input checked="" type="checkbox"/> UST			<input checked="" type="checkbox"/> RCRA																					
Phone: <i>[Redacted]</i>			Fax: <i>[Redacted]</i>			Project Name: <i>[Redacted]</i>			Pace Project Manager:			Pace Profile #:			Site Location: <i>SC</i>			STATE: <i>SC</i>																		
Requested Due Date/TAT:												Requested Analysis Filtered (Y/N)																								
SAMPLE ID (A-Z, 0-9) Sample IDs MUST BE UNIQUE												Section D Required Client Information																								
Matrix Codes MATRIX / CODE												MATRIX CODE <small>(see valid codes to left)</small>																								
Drinking Water Water Waste Water Product Soil/Solid Oil Wipe Air Tissue Other												DW WT WW P SL OL WP AR TS OT																								
COLLECTED												SAMPLE TYPE (G=GRAB C=COMP)																								
DATE TIME DATE TIME												COMPOSITE <small>START</small> COMPOSITE <small>END/GRAB</small>																								
SAMPLE TEMP AT COLLECTION												# OF CONTAINERS																								
Unpreserved H ₂ SO ₄ HNO ₃ HCl NaOH Na ₂ S ₂ O ₃ Methanol Other												Preservatives																								
Analysis Test												Y/N																								
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SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

***Important Note:** By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



C. Earl Hunter, Commissioner

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

JUN 11 2010

BRIAN SHANE
MIDLANDS ENVIRONMENTAL CONSULTANTS INC
P O BOX 854
LEXINGTON SC 29071-0854



Re: Bid # IBF-36815-8/27/09-EMW; PO # 782295
Notice to Proceed

Dear Mr. Shane:

Based on the award of the referenced bid package, enclosed are the information packets to conduct Free Product (FP) recovery using Aggressive Fluid Vapor Recovery (AFVR) or passive skimmers at several facilities. The packets contain the necessary approval for work to begin. You may commence with a site reconnaissance before the AFVR and/or passive skimmers installation. If monitoring wells do not contain measurable free phase product, contact the UST project manager for further instructions. The facilities have been assigned Cost Agreement (CA) numbers as listed below. Please reference the CA numbers and Purchase Order # 782295 on the appropriate invoices submitted for payment against the facilities. As specified in the referenced bid, the completed invoice forms and associated reports (include contract certification number) are expected on or before the designated due date (see below).

UST Permit #	Facility	County	R e l e a s	Work Scope	Due Date*	CA #	Approved Amt.
10658	Joker Joe's Truck Stop	Jasper	1	4 AFVR	60 days	39138	4,475.00
04768	Bole's Enterprises	Greenwood	1	2 AFVR	60 days	39139	2,925.00
18131	Former Fast Fare	Greenwood	1	3AFVR	60 days	39142	3,375.00
14935	Hartzog Farm	Barnwell	1	5 AFVR	60 days	39147	5,475.00
03439	Highway 11 Grocery	Oconee	1	4 AFVR	60 days	39196	4,675.00

*From receipt of letter

Midland's Environmental Consultants, Inc. will perform services at the sites on behalf of the site's UST owners; however, payments will be made from the SUPERB Account. The site's UST owners have no obligation for payment for this scope of work. Please note that Sections 44-2-110(4) and 44-2-130(B) of the SUPERB Statute state that no costs will be allowed (considered for payment) unless prior approval from the Department is obtained.

If for any reason there are changes in these cost agreements, any associated changes to this cost agreement must be pre-approved by this Department in order for Midlands Environmental Consultants to seek future cost compensation. Please contact the site's project manager for technical and/or financial approval. Any item(s) not clearly or completely addressed in the report (disposal manifest for generated ground water, etc.) WILL NOT be compensated by the SUPERB Account.

The Department grants pre-approval for transportation of free phase product and petroleum contaminated groundwater from the referenced site to a permitted treatment facility. The free product and contaminated groundwater must be accepted by the approved treatment facility. There can be no spillage or leakage in transport. A copy of the disposal manifest from the receiving facility that clearly designates the quantity received must be included as an appendix to the report.

If you have any questions concerning this correspondence or need further assistance, please contact me by phone at (803) 896-6664, by fax at (803) 896-6245 or by email at milenkmp@dhec.sc.gov.

Sincerely,



Maia Milenkova, Hydrogeologist
Assessment Section
UST Management Division
Bureau of Land and Waste Management

enc.: Approved Cost Agreements (ACA)
Information Packets
cc: Technical File (w/copy of ACA)

SCDHEC/UST/06/10/10/MPM

Approved Cost Agreement 39196

Facility: 03439 HWY 11 GROCERY

PADGETJP

PO Number:

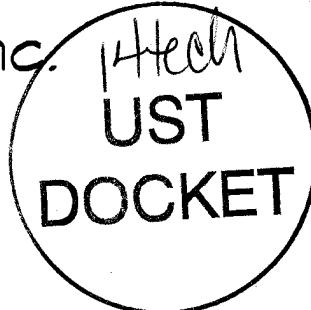
<u>Task / Description</u>	<u>Categories</u>	<u>Item Description</u>	<u>Qty / Pct</u>	<u>Unit Price</u>	<u>Amount</u>
04 MOB/DEMOB		A EQUIPMENT	4.0000	350.00	1,400.00
17 DISPOSAL		A2 WASTEWATER - PUMPING TEST	4,000.0000	0.10	400.00
23 EFR		A 8 HOUR EVENT	4.0000	600.00	2,400.00
		C OFF GAS TREATMENT	4.0000	100.00	400.00
		D SITE RECONNAISSANCE	1.0000	75.00	75.00
				Total Amount	4,675.00

Midlands Environmental Consultants, Inc.



September 17, 2010

Mr. Joel P. Padgett, P.G., Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health and
Environmental Control
2600 Bull Street
Columbia, South Carolina 29201



Subject: Aggressive Fluid Vapor Recovery Report
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID # 03439; CA #39196
MECI Project Number 10-2910A
Certified Site Rehabilitation Contractor UCC-0009

Dear Mr. Padgett,

Midlands Environmental Consultants, Inc. (MECI) is pleased to submit the attached Aggressive Fluid Vapor Recovery Report for the referenced site. This describes the aggressive fluid vapor recovery activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

AGGRESSIVE FLUID VAPOR RECOVERY

On August 24, 2010 MECI personnel conducted a site visit at Highway 11 Grocery to locate/gauge monitoring wells and evaluate current site conditions. MECI personnel conducted an Aggressive Fluid Vapor Recovery (AFVR) event at Highway 11 Grocery on September 1, 2010. The event was conducted on monitoring well MW-1 to remove free phase petroleum product. Free phase petroleum product was detected in monitoring well MW-1 at a thickness of 0.36 feet prior to the AFVR event. The event was conducted continuously for eight hours by MECI personnel utilizing a vacuum extraction unit. Free phase petroleum product was not detected in the wells immediately following the event.

MECI treated the off gas produced during the AFVR event using an activated carbon filter system. Calculated total petroleum hydrocarbons removed from the well were 18.50 pounds or approximately 3.20 equivalent gallons. The average rate of removal for the hydrocarbons was calculated to be 2.31 pounds per hour. Concentrations of off gas produced during the event were recorded from 422 parts per million by volume (PPM) to 2,350 PPM. Measurements were obtained from vapors prior to entering off gas treatment. Vacuum readings were recorded at a range of 11.0 to 23.0 inches of mercury during the event. A complete compilation of measurements recorded is presented in attached Table 1A.

Differential pressures and groundwater levels were measured and recorded for selected site monitoring wells at regular intervals. This data is summarized in the attached Table 2A. Monitoring well locations are depicted on attached Figure 1.

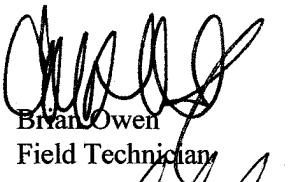
A total of 100 gallons of liquid was removed from MW-1 during this event. Free phase petroleum product was observed in the sight tube of the knock-out tank at a thickness of 0.083 feet immediately following the event. The fluids produced were transported to TK Tank Services, Inc of Sumter, S.C. for disposal. A disposal manifest for these fluids is attached at the end of this report.

QUALIFICATIONS OF REPORT

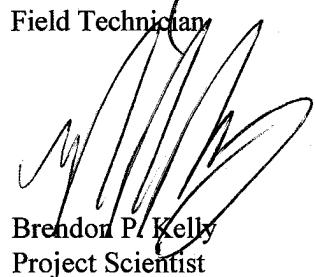
The activities and evaluative approaches used in this assignment are consistent with those normally employed in enhanced fluid recovery events and waste management projects of this type. Contents of this report are intended for the use by MECI and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental related services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.



Brian Owen
Field Technician



Brendon P. Kelly
Project Scientist

Attachments:

TABLE 1A
AFVR MONITORING DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 10-2910A
SCDHFC SITE ID NUMBER 03439

TABLE 2A
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 10-2910A
SCDHEC SITE ID NUMBER 03439

DIFFERENTIAL PRESSURE DATA

		Well Designation:		
		MW-2	MW-4	MW-6
Nearest Extraction Well:		MW-1	MW-1	MW-1
Approximate Distance:		40 ft	73 ft	65 ft
Time	Elapsed Time	Differential Pressure Readings (inches of water)		
10:30	0.0	0	0	0
11:00	0.5	0	0	0
11:30	1.0	0	0	0
12:00	1.5	0	0	0
12:30	2.0	0	0	0
13:00	2.5	0	0	0
13:30	3.0	0	0	0
14:00	3.5	0	0	0
14:30	4.0	0	0	0
15:00	4.5	0	0	0
15:30	5.0	0	0	0
16:00	5.5	0	0	0
16:30	6.0	0	0	0
17:00	6.5	0	0	0
17:30	7.0	0	0	0
18:00	7.5	0	0	0
18:30	8.0	0	0	0
Maximum Change:		0	0	0

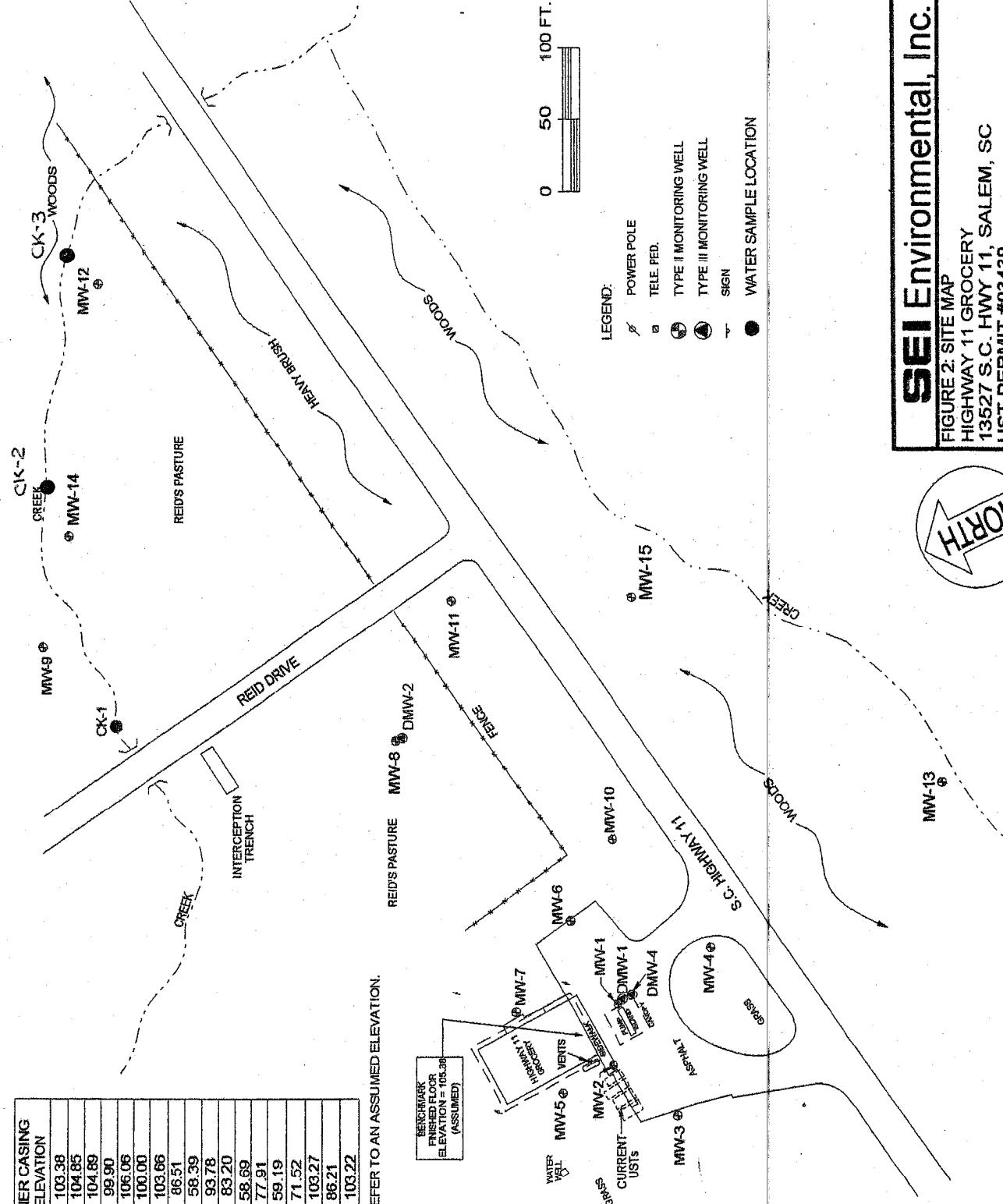
GROUNDWATER DRAWDOWN DATA

		Well Designation:		
		MW-2	MW-4	MW-6
Nearest Extraction Well:		MW-1	MW-1	MW-1
Approximate Distance:		40 ft	73 ft	65 ft
Time	Elapsed Time	Depth to Liquid (feet below of casing):		
Prior to AFVR		27.48	24.35	23.17
14:30	4 hours	27.48	24.33	23.18
18:30	8 hours	27.51	24.35	23.27
Maximum Change:		-0.03	-0.02	-0.10

WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.89
MW-4	99.90
MW-5	106.06
MW-6	100.00
MW-7	103.66
MW-8	86.51
MW-9	58.39
MW-10	93.78
MW-11	83.20
MW-12	58.69
MW-13	77.91
MW-14	59.19
MW-15	71.52
DMW-1	103.27
DMW-2	86.21
DMW-4	103.22

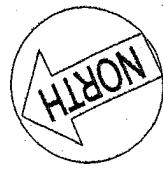
NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.

BENCHMARK
FINISHED FLOOR
ELEVATION = 105.38
(ASSUMED)



SEI Environmental, Inc.

FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439
WO #302-043 DWG #H101692G DATE: 3/17/05
DRAWN BY: JCJ



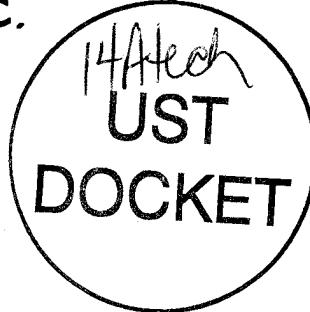
NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number	
5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address)				
		MIDLANDS ENVIRONMENTAL 1425 TWO NOTCH ROAD COLUMBIA, SC				
Generator's Phone:						
6. Transporter 1 Company Name		U.S.		EPA ID Number		
T & K TANK SERVICES INC.				303-418-2311		
7. Transporter 2 Company Name		U.S.		EPA ID Number		
8. Designated Facility Name and Site Address		U.S.		EPA ID Number		
		T & K TANK SERVICES INC. 1425 BOULEVARD ROAD COLUMBIA, SC 29133		303-418-2314		
Facility's Phone:						
9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt./Vol.	
		No.	Type			
1. Site UST # Gallons						
Hwy Groc. 03439 TOLUEUM CONCENTRATED WATER/PRODUCT 1000		100		3360		
Phillips Rent. Prop. 03439 150		100		3360		
Phillips Rent. Prop. 14928 100		100		3360		
Shelton Food store 00877 275		275		3360		
Best Buy *** 645		645		3360		
Best Buy 04768 225		225		3360		
Bolles 13046 100		100		3360		
Midway 07435 125		125		3360		
Pantry 640 300		300		3360		
Joker Joes 10658 150		150		3360		
Handy Pantry 04733 70		70		3360		
Sportsman Corner 12151 150		150		3360		
Sport New. 12151 160		160		3360		
Handy Pantry 10492 325		325		3360		
Handy Pantry 0904783 200		200		3360		
13. Special Handling Instructions and Additional Information		Site	UST #	Gallons		
		JH Cromer	14564	60		
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		Signature		Month	Day	Year
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____						
Transporter Signature (for exports only):						
16. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name		Signature		Month	Day	Year
Joseph W. Stanley		<i>J. W. Stanley</i>		9	17	2010
Transporter 2 Printed/Typed Name		Signature		Month	Day	Year
17. Discrepancy						
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number:						
17b. Alternate Facility (or Generator)		U.S.		EPA ID Number		
Facility's Phone:				Month	Day	Year
17c. Signature of Alternate Facility (or Generator)						
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a						
Printed/Typed Name		Signature		Month	Day	Year

Midlands Environmental Consultants, Inc.



September 17, 2010

Mr. Joel P. Padgett, P.G., Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health and
Environmental Control
2600 Bull Street
Columbia, South Carolina 29201



Subject: Aggressive Fluid Vapor Recovery Report
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID # 03439; CA #39196
MECI Project Number 10-2910B
Certified Site Rehabilitation Contractor UCC-0009

Dear Mr. Padgett,

Midlands Environmental Consultants, Inc. (MECI) is pleased to submit the attached Aggressive Fluid Vapor Recovery Report for the referenced site. This describes the aggressive fluid vapor recovery activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

AGGRESSIVE FLUID VAPOR RECOVERY

MECI personnel conducted an Aggressive Fluid Vapor Recovery (AFVR) event at Highway 11 Grocery on September 1, 2010. The event was conducted on monitoring well MW-8 to remove free phase petroleum product. Free phase petroleum product was detected in monitoring well MW-8 at a thickness of 1.90 feet prior to the AFVR event. The event was conducted continuously for eight hours by MECI personnel utilizing a vacuum extraction unit. Free phase petroleum product was not detected in the well immediately following the event.

MECI treated the off gas produced during the AFVR event using an activated carbon filter system. Calculated total petroleum hydrocarbons removed from the well were 15.36 pounds or approximately 2.65 equivalent gallons. The average rate of removal for the hydrocarbons was calculated to be 1.92 pounds per hour. Concentrations of off gas produced during the event were recorded from 356 parts per million by volume (PPM) to 2,510 PPM. Measurements were obtained from vapors prior to entering off gas treatment. Vacuum readings were recorded at a range of 11.0 to 21.0 inches of mercury during the event. A complete compilation of measurements recorded is presented in attached Table 1B.

Differential pressures and groundwater levels were measured and recorded for selected site monitoring wells at regular intervals. This data is summarized in the attached Table 2B. Monitoring well locations are depicted on attached Figure 1.

A total of 150 gallons of liquid was removed from MW-8 during this event. Free phase petroleum product was observed in the sight tube of the knock-out tank at a thickness of 0.042 feet immediately following the event. The fluids produced were transported to TK Tank Services, Inc. of Sumter, S.C. for disposal. A disposal manifest for these fluids is attached at the end of this report.

QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assignment are consistent with those normally employed in enhanced fluid recovery events and waste management projects of this type. Contents of this report are intended for the use by MECI and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental related services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.



Brian Owen
Field Technician

Brendon P. Kelly
Project Scientist

Attachments:

TABLE 1B
AFVR MONITORING DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 10-2910B
SCDHEC SITE ID NUMBER 03439

TABLE 2B
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 10-2910B
SCDHEC SITE ID NUMBER 03439

DIFFERENTIAL PRESSURE DATA

		Well Designation:		
		MW-6	MW-10	MW-11
Nearest Extraction Well:		MW-8	MW-8	MW-8
Approximate Distance:		169 ft	160 ft	100 ft
Time	Elapsed Time	Differential Pressure Readings (inches of water)		
19:00	0.0	0	0	0
19:30	0.5	0	0	0
20:00	1.0	0	0	0
20:30	1.5	0	0	0
21:00	2.0	0	0	0
21:30	2.5	0	0	0
22:00	3.0	0	0	0
22:30	3.5	0	0	0
23:00	4.0	0	0	0
23:30	4.5	0	0	0
0:00	5.0	0	0	0
0:30	5.5	0	0	0
1:00	6.0	0	0	0
1:30	6.5	0	0	0
2:00	7.0	0	0	0
2:30	7.5	0	0	0
3:00	8.0	0	0	0
Maximum Change:		0	0	0

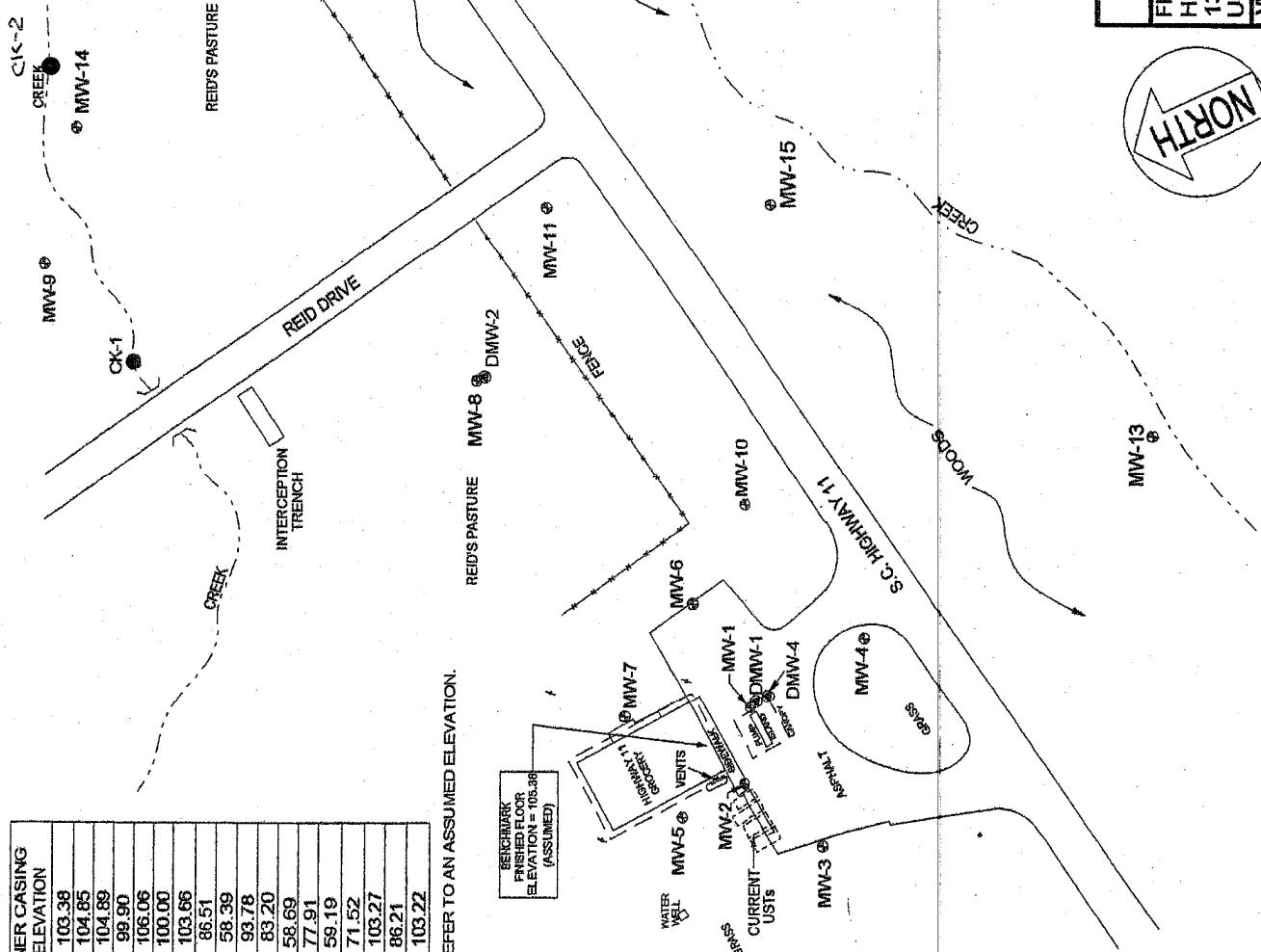
GROUNDWATER DRAWDOWN DATA

		Well Designation:		
		MW-6	MW-10	MW-11
Nearest Extraction Well:		MW-8	MW-8	MW-8
Approximate Distance:		169 ft	160 ft	100 ft
Time	Elapsed Time	Depth to Liquid (feet below of casing):		
Prior to AFVR		23.22	21.01	18.12
23:00	4 hours	23.22	21.06	18.13
3:00	8 hours	23.21	21.06	18.12
Maximum Change:		0.01	-0.05	0.01

WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.89
MW-4	99.90
MW-5	106.06
MW-6	100.00
MW-7	103.66
MW-8	86.51
MW-9	58.39
MW-10	93.78
MW-11	83.20
MW-12	58.69
MW-13	77.91
MW-14	59.19
MW-15	71.52
DRIV-1	103.27
DRIV-2	86.21
DRIV-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.

BENCHMARK
FINISHED FLOOR
EL. ELEVATION = 103.38
(ASSUMED)



SEI Environmental, Inc.

FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439
WO #302-043

DATE: 3/17/05
DRAWN BY: JCJ
DWG #HII01692G

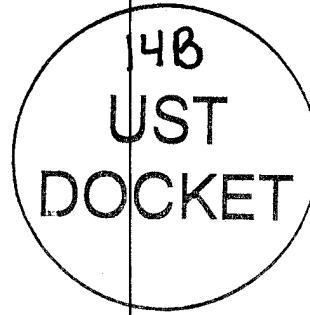
NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number	
5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address)				
		MIDLANDS ENVIRONMENTAL 1144 TWO NOTCH ROAD COLUMBIA, SC				
Generator's Phone:						
6. Transporter 1 Company Name		U.S. EPA ID Number 303-418-2314				
7. Transporter 2 Company Name		U.S. EPA ID Number				
8. Designated Facility Name and Site Address		U.S. EPA ID Number J K TANK SERVICES INC. 125 BOULEVARD ROAD SUMTER, SC 29158 303-418-2314				
Facility's Phone:						
9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt./Vol.	
1. Site UST # HAZARDOUS OIL/ROLEUM CONCENTRATED WATER/PRODUCT Gallons 1. 749 Groc. 03439 150 Phillips Bent. Prop. 14928 100 Shellton Food Store 00877 275 Best Buy 645 Bales 04768 225 Midway 13046 100 Pantry 07435 125 Pantry 640 10658 Fisher Joes 10658 Handy Pantry 09A 04733 300 11 118 04733 150 200 Sportsman Corner 12151 150 Sport Newb. 12151 160 10492 325 Handy Pantry 09A 10492 325 200		No.	Type	AP 3360 33 GAL		
13. Special Handling Instructions and Additional Information		Site J H Cromer		UST # 14564	Gallons 60	
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		Signature		Month	Day	Year
15. International Shipments		<input type="checkbox"/> Import to U.S.	<input type="checkbox"/> Export from U.S.	Port of entry/exit: _____		
Transporter Signature (for exports only):		Date leaving U.S.: _____				
16. Transporter Acknowledgment of Receipt of Materials		Signature		Month	Day	Year
Transporter 1 Printed/Typed Name		<i>Joseph W. Stanfill</i>		<i>J W Stanfill</i>	9/17/00	
Transporter 2 Printed/Typed Name		Signature		Month	Day	Year
17. Discrepancy						
17a. Discrepancy Indication Space		<input type="checkbox"/> Quantity	<input type="checkbox"/> Type	<input type="checkbox"/> Residue	<input type="checkbox"/> Partial Rejection	<input type="checkbox"/> Full Rejection
17b. Alternate Facility (or Generator)		Manifest Reference 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		Signature		Month	Day	Year



October 14, 2010

Mr. Joel P. Padgett, P.G., Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health and
Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Aggressive Fluid Vapor Recovery Report
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID # 03439; CA #39196
MECI Project Number 10-2910C
Certified Site Rehabilitation Contractor UCC-0009



Dear Mr. Padgett,

Midlands Environmental Consultants, Inc. (MECI) is pleased to submit the attached Aggressive Fluid Vapor Recovery Report for the referenced site. This describes the aggressive fluid vapor recovery activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

AGGRESSIVE FLUID VAPOR RECOVERY

MECI personnel conducted an Aggressive Fluid Vapor Recovery (AFVR) event at Highway 11 Grocery on October 4, 2010. The event was conducted on monitoring well MW-1 to reduce dissolved CoC concentrations. Free phase petroleum product was not detected in monitoring well MW-1 prior to the AFVR event. The event was conducted continuously for eight hours by MECI personnel utilizing a vacuum extraction unit. Free phase petroleum product was not detected in the well immediately following the event.

MECI treated the off gas produced during the AFVR event using an activated carbon filter system. Calculated total petroleum hydrocarbons removed from the well were 6.12 pounds or approximately 1.06 equivalent gallons. The average rate of removal for the hydrocarbons was calculated to be 0.77 pounds per hour. Concentrations of off gas produced during the event were recorded from 721 parts per million by volume (PPM) to 1,479 PPM. Measurements were obtained from vapors prior to entering off gas treatment. Vacuum readings were recorded at a range of 17.0 to 24.0 inches of mercury during the event. A complete compilation of measurements recorded is presented in attached Table 1C.

Differential pressures and groundwater levels were measured and recorded for selected site monitoring wells at regular intervals. This data is summarized in the attached Table 2C. Monitoring well locations are depicted on attached Figure 1.

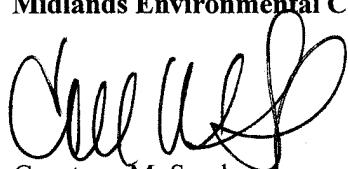
A total of 50 gallons of liquid was removed from MW-1 during this event. Free phase petroleum product was not observed in the holding tank immediately following the event. The fluids produced were transported to TK Tank Services, Inc of Sumter, S.C. for disposal. A disposal manifest for these fluids is attached at the end of this report.

QUALIFICATIONS OF REPORT

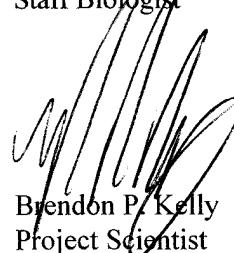
The activities and evaluative approaches used in this assignment are consistent with those normally employed in enhanced fluid recovery events and waste management projects of this type. Contents of this report are intended for the use by MECI and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental related services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.



Courtney M. Sanders
Staff Biologist



Brendon P. Kelly
Project Scientist

Attachments:

TABLE 1C
AFVR MONITORING DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 10-2910C
SCDHEC SITE ID NUMBER 03439

TABLE 2C
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 10-2910C
SCDHEC SITE ID NUMBER 03439

DIFFERENTIAL PRESSURE DATA

		Well Designation:		
		DMW-1	DMW-4	MW-4
Nearest Extraction Well:		MW-1	MW-1	MW-1
Approximate Distance:		6 ft	12 ft	73 ft
Time	Elapsed Time	Differential Pressure Readings (inches of water)		
11:30	0.0	0	0	0
12:00	0.5	0	0	0
12:30	1.0	0	0	0
13:00	1.5	0	0	0
13:30	2.0	0	0	0
14:00	2.5	0	0	0
14:30	3.0	0	0	0
15:00	3.5	0	0	0
15:30	4.0	0	0	0
16:00	4.5	0	0	0
16:30	5.0	0	0	0
17:00	5.5	0	0	0
17:30	6.0	0	0	0
18:00	6.5	0	0	0
18:30	7.0	0	0	0
19:00	7.5	0	0	0
19:30	8.0	0	0	0
Maximum Change:		0	0	0

GROUNDWATER DRAWDOWN DATA

		Well Designation:		
		DMW-1	DMW-4	MW-4
Nearest Extraction Well:		MW-1	MW-1	MW-1
Approximate Distance:		6 ft	12 ft	73 ft
Time	Elapsed Time	Depth to Liquid (feet below of casing):		
Prior to AFVR		26.50	26.91	24.52
15:30	4 hours	26.57	27.00	24.53
19:30	8 hours	26.58	27.01	24.55
Maximum Change:		-0.08	-0.10	-0.03

WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.89
MW-4	99.90
MW-5	106.06
MW-6	100.00
MW-7	103.66
MW-8	86.51
MW-9	58.39
MW-10	93.78
MW-11	83.20
MW-12	58.69
MW-13	77.91
MW-14	59.19
MW-15	71.52
DMMW-1	103.27
DMMW-2	86.24
DMMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.

BENCHMARK
FINISHED FLOOR
ELEVATION = 105.38
(ASSUMED)

CK-2

MW-9

④ MW-14

MW-12

WOODS

CREEK

④ MW-1

REID'S PASTURE

CK-1

REID DRIVE

INTERCEPTION
TRENCH

CREEK

REID'S PASTURE

MW-8

④ DMMW-2

MW-11

④ MW-15

/

MW-10

④ MW-1

/

MW-6

④ MW-7

/

MW-1

④ MW-4

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MW-3

④ MW-2

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MW-5

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MW-15

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④ MW-157

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MW-158

④ MW-159

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MW-160

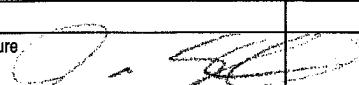
④ MW-161

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MW-162

④ MW-163

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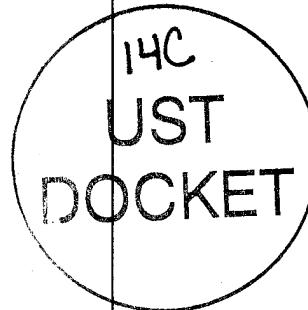
GENERATOR	NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number				
	5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address)						
			MIDLANDS ENVIRONMENTAL 1144 TWO NOTCH ROAD LEXINGTON, SC 29072						
	Generator's Phone:								
	6. Transporter 1 Company Name					U.S. EPA ID Number			
	TK TANK SERVICE		SUMTER, SC			4B7573557			
	7. Transporter 2 Company Name					U.S. EPA ID Number			
	8. Designated Facility Name and Site Address					U.S. EPA ID Number			
			TK TANK SERVICES 415 TWO NOTCH ROAD SUMTER, SC 29150						
	Facility's Phone:		803-413-8314			803-413-8314			
9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt/Vol.				
1. NON-HAZARDOUS PETROLEUM CONTAMINATED WATER		No.	Type	AP 2500 Gal.					
2. Pantry 3418-05042-170 Gal. Pantry 3418-05042-170 Gal. Highway 11 Grocery -03439-50 Gal.									
3 Highway 11 Grocery -03439-10 Gal. Former Royal Petro-19426-270 Gal. Town of Winnsboro-03148-100 Gal.									
4 Town of Winnsboro-03148-150 Gal. Midway Service -13046-105 Gal. Chester School Bus-02044-250 Gal.									
13. Special Handling Instructions and Additional Information		Winners Circle - 230 Gal. Pantry 3235 175 Gal. SC DOT Marion-04175-140 Gal. Mark's Camp 70253-175 Gal. Comer Cupboard 01779-150 Gal. Ridgeway -03144-75 Gal. Ridgeway -03144-75 Gal. S. STORE 583-125 Gal. Scatterfield-1W2124 N3 Gal.							
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/Officer's Printed/Typed Name		Signature		Month	Day	Year			
INT'L		15. International Shipments							
		<input type="checkbox"/> Import to U.S.	<input type="checkbox"/> 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		Signature		Month	Day	Year	
		Joseph W. Stanton				10/15/11			
		Transporter 2 Printed/Typed Name		Signature		Month	Day	Year	
DESIGNATED FACILITY		17. Discrepancy							
		17a. Discrepancy Indication Space		<input type="checkbox"/> Quantity	<input type="checkbox"/> Type	<input type="checkbox"/> Residue	<input type="checkbox"/> Partial Rejection	<input type="checkbox"/> 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		Signature			Month	Day	Year



October 14, 2010

Mr. Joel P. Padgett, P.G., Hydrogeologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health and
Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Aggressive Fluid Vapor Recovery Report
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID # 03439; CA #39196
MECI Project Number 10-2910D
Certified Site Rehabilitation Contractor UCC-0009



Dear Mr. Padgett,

Midlands Environmental Consultants, Inc. (MECI) is pleased to submit the attached Aggressive Fluid Vapor Recovery Report for the referenced site. This describes the aggressive fluid vapor recovery activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

AGGRESSIVE FLUID VAPOR RECOVERY

MECI personnel conducted an Aggressive Fluid Vapor Recovery (AFVR) event at Highway 11 Grocery on October 4 and 5, 2010. The event was conducted on monitoring well MW-8 to remove free phase petroleum product. Free phase petroleum product was detected in monitoring well MW-8 at a thickness of 0.37 feet prior to the AFVR event. The event was conducted continuously for eight hours by MECI personnel utilizing a vacuum extraction unit. Free phase petroleum product was not detected in the well immediately following the event.

MECI treated the off gas produced during the AFVR event using an activated carbon filter system. Calculated total petroleum hydrocarbons removed from the well were 1.13 pounds or approximately 0.20 equivalent gallons. The average rate of removal for the hydrocarbons was calculated to be 0.14 pounds per hour. Concentrations of off gas produced during the event were recorded from 9.9 parts per million by volume (PPM) to 521 PPM. Measurements were obtained from vapors prior to entering off gas treatment. Vacuum readings were recorded at a range of 11.0 to 25.0 inches of mercury during the event. A complete compilation of measurements recorded is presented in attached Table 1D.

Differential pressures and groundwater levels were measured and recorded for selected site monitoring wells at regular intervals. This data is summarized in the attached Table 2D. Monitoring well locations are depicted on attached Figure 1.

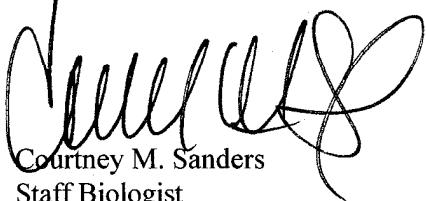
A total of 50 gallons of liquid was removed from MW-8 during this event. Free phase petroleum product was not observed in the holding tank immediately following the event. The fluids produced were transported to TK Tank Services, Inc. of Sumter, S.C. for disposal. A disposal manifest for these fluids is attached at the end of this report.

QUALIFICATIONS OF REPORT

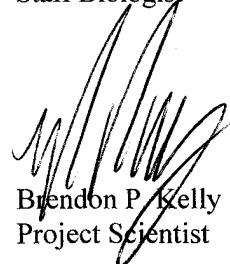
The activities and evaluative approaches used in this assignment are consistent with those normally employed in enhanced fluid recovery events and waste management projects of this type. Contents of this report are intended for the use by MECI and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental related services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.



Courtney M. Sanders
Staff Biologist



Brendon P. Kelly
Project Scientist

Attachments:

TABLE 1D
AFVR MONITORING DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 10-2910D
SCDHEC SITE ID NUMBER 03439

TABLE 2D
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 10-2910D
SCDHEC SITE ID NUMBER 03439

DIFFERENTIAL PRESSURE DATA

		Well Designation:		
		DMW-2	MW-10	MW-11
Nearest Extraction Well:		MW-8	MW-8	MW-8
Approximate Distance:		8 ft	160 ft	100 ft
Time	Elapsed Time	Differential Pressure Readings (inches of water)		
20:00	0.0	0	0	0
20:30	0.5	0	0	0
21:00	1.0	0	0	0
21:30	1.5	0	0	0
22:00	2.0	0	0	0
22:30	2.5	0	0	0
23:00	3.0	0	0	0
23:30	3.5	0	0	0
0:00	4.0	0	0	0
0:30	4.5	0	0	0
1:00	5.0	0	0	0
1:30	5.5	0	0	0
2:00	6.0	0	0	0
2:30	6.5	0	0	0
3:00	7.0	0	0	0
3:30	7.5	0	0	0
4:00	8.0	0	0	0
Maximum Change:		0	0	0

GROUNDWATER DRAWDOWN DATA

		Well Designation:		
		DMW-2	MW-10	MW-11
Nearest Extraction Well:		MW-8	MW-8	MW-8
Approximate Distance:		8 ft	160 ft	100 ft
Time	Elapsed Time	Depth to Liquid (feet below of casing):		
Prior to AFVR		18.48	21.20	18.27
0:00	4 hours	18.41	21.21	18.30
4:00	8 hours	18.36	21.22	18.34
Maximum Change:		0.12	-0.02	-0.07

WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.89
MW-4	99.90
MW-5	106.06
MW-6	100.00
MW-7	103.66
MW-8	86.51
MW-9	58.39
MW-10	93.78
MW-11	83.20
MW-12	58.69
MW-13	77.91
MW-14	59.19
MW-15	71.52
DMW-1	103.27
DMW-2	86.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.

BENCHMARK
THIS RED FLOOR
ELEVATION = 105.38
(ASSUMED)

CK-2

CREEK

④ MW-14

CK-3

WOODS

④ MW-12

REID'S PASTURE

INTERCEPTION

FRENCH

CREEK

④ MW-1

REID DRIVE

REID'S PASTURE

④ MW-8

DMW-2

FE

FE

④ MW-11

FE

FE

④ MW-15

/

FE

FE

④ MW-10

FE

FE

④ MW-6

/

FE

FE

④ MW-7

/

FE

FE

④ MW-1

/

FE

FE

④ MW-4

/

FE

FE

④ MW-3

/

FE

FE

④ MW-13

WOODS

④ HWY 11

SC

④ HWY 11

SC

0 50 100 FT.

LEGEND:

POWER POLE

TELE. PED.

TYPE II MONITORING WELL

SIGN

TYPE III MONITORING WELL

WATER SAMPLE LOCATION

SEI Environmental, Inc.

FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

WO #302-043
DWG #H101692G
DATE: 3/17/05
DRAWN BY: JCJ



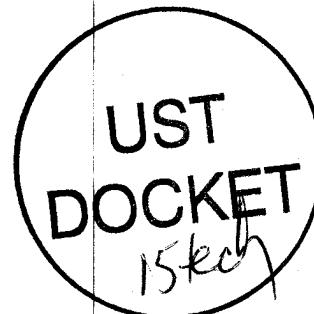
NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number	
	5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address) TEE TOXIC		
	MIDLANDS ENVIRONMENTAL 1144 TWO MOOR ROAD CLINTON, SC 29026				
	Generator's Phone:				
	6. Transporter 1 Company Name		U.S. EPA ID Number		
	TR TANK SERVICE		SUMTER, SC 43362-5637		
	7. Transporter 2 Company Name		U.S. EPA ID Number		
	8. Designated Facility Name and Site Address		U.S. EPA ID Number		
	TE TANK SERVICES 115 SOUTH LEYARD BOULEVARD SUMTER, SC 29160				
	Facility's Phone: 803-413-5314		037513357		
GENERATOR	9. Waste Shipping Name and Description		10. Containers		
	1. NON-HAZARDOUS PETROLEUM CONTAMINATED		No.	Type	
	Pantry 3N18 - 05042-170 Gal. Pantry 3418 - 05042-170 Gal. Highway 11 Grocery - 03439-50 Gal.		1	1	AT 2500 Gal.
	Highway 11 Grocery - 03439-50 Gal. Former Royal Petro - 19426-270 Gal. Town of Winnsboro - 03149-100 Gal.				
	Town of Winnsboro - 03148-150 Gal. Midway Service - 13046-105 Gal. Chester School Bus - 02044-250 Gal.				
	13. Special Handling Instructions and Additional Information		Winners Circle - 230 Gal. Pantry 3235 175 Gal. SC DOT Norton - 0475-140 Gal. Mack's Cupboard - 01293-175 Gal. Corner Cupboard - 01779-150 Gal.		
	Ridgeway - 03144-75 Gal. Ridgeway - 03144-75 Gal. 5. Store 583-125 Gal. Satterfield - 1W212-113 Gal.				
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/Offeree's Printed/Typed Name		Signature		Month Day Year	
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit:			
Transporter Signature (for exports only):		Date leaving U.S.:			
16. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name Joseph W. STANTON		Signature J. STANTON		Month Day Year 10/15/11	
Transporter 2 Printed/Typed Name		Signature		Month Day Year	
17. Discrepancy					
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue		<input type="checkbox"/> Partial Rejection <input type="checkbox"/> 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		Signature		Month Day Year	
169-BLC-O 5 11977 (Rev. 8/06)					
GENERATOR'S/SHIPPER'S INITIAL COPY					



C. Earl Hunter, Commissioner

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

NOV 04 2010



BRYAN SHANE
MIDLANDS ENVIRONMENTAL CONSULTANTS INC
P O BOX 854
LEXINGTON SC 29071

Re: Bid # IFB-34007-6/3/08-EMW; PO# 4500011317
Notice to Proceed

Dear Mr. Shane:

Based on the award of the referenced bid package, enclosed are the information packets to conduct assessments at several facilities. The packets contain the necessary approval for work to begin. The facilities have been assigned Cost Agreement (CA) numbers as listed below. Please reference the CA numbers and Purchase Order # 4500011317 on the appropriate invoices submitted for payment against the facilities. As specified in the referenced bid, **the completed invoice forms and associated reports (include contract certification number) are expected on or before the designated due date (see below).**

UST Permit#	Facility	County	Release #	Work Scope	Due Date*	CA #	Approved Amt
02032	Southern Store 583	Cherokee	1	Monitoring Well Installation	60 Days	40343	\$6,825.00
03439	Highway 11 Grocery	Oconee	1	Monitoring Well Installation	60 Days	40438	\$6,574.00
15120	Davis Site	Clarendon	1	Monitoring Well Installation	60 Days	40402	\$9,100.00

*From receipt of letter

Midland's Environmental Consultants, Inc. will perform services at the sites on behalf of the site's UST owners; however, payments will be made from the SUPERB Account. The site's UST owners have no obligation for payment for this scope of work. **Please note, if there are any changes in the established cost agreement amounts (e.g., additional water supply wells sampled, additional well footage, etc.) contact the site's project manager for technical and/or financial approval. Failure to do so prior to submittal of invoice may result in delay of payment.**

The Bureau grants pre-approval for transportation of drums of virgin petroleum contaminated soil and drums of groundwater from the referenced site to a permitted treatment facility. The contaminated soil and/or groundwater must be properly stored in labeled 55-gallon drums or equivalent containers.

The contaminated soil and/or groundwater must be accepted by the approved treatment facility. There can be no spillage or leakage in transport. A copy of the disposal manifest from the receiving facility that clearly designates the quantity received must be included as an appendix to the final report. Please note, transportation of waste oil contaminated soil must receive pre-approval from the Division of Waste Assessment & Emergency Response.

Please provide this office with a schedule of drilling dates and coordinate all work with me before commencing work at the facility. If you have any questions or need further assistance, please contact me at (803) 896-6633.

Sincerely,



Cathleen Ridgley, Hydrogeologist
Assessment Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc.: Monitoring Well Approvals (MWA)
Approved Cost Agreements (ACA)
Information Packets

cc: Cathleen Ridgley, UST Management Division (w/out enc)
Technical Files (w/ copy of MWA, ACA, & Site Map)



C. Earl Hunter, Commissioner

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

Monitoring Well Approval

Approval is hereby granted to: **Midlands Environmental Consultants, Inc.**

On behalf of: **Mr. Steve Smith**

Facility: **Highway 11 Grocery**
13527 North SC-11, Salem, SC 29676

UST Permit #: **03439**

County: **Oconee**

This approval is for the installation of four four-inch monitoring/recovery wells and one two-inch monitoring well. The wells are to be installed in the approved locations in accordance with the South Carolina Well Standards, R.61-71, and applicable guidance documents.

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 the project manager (tel:803-896-6633 or e-mail: ridglect@dhec.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 Issue: 10/21/2010

Approval: 23956

Joel P. Padgett, P.G., Geologist/Hydrologist
Corrective Action Section
UST Management Division
Bureau of Land and Waste Management

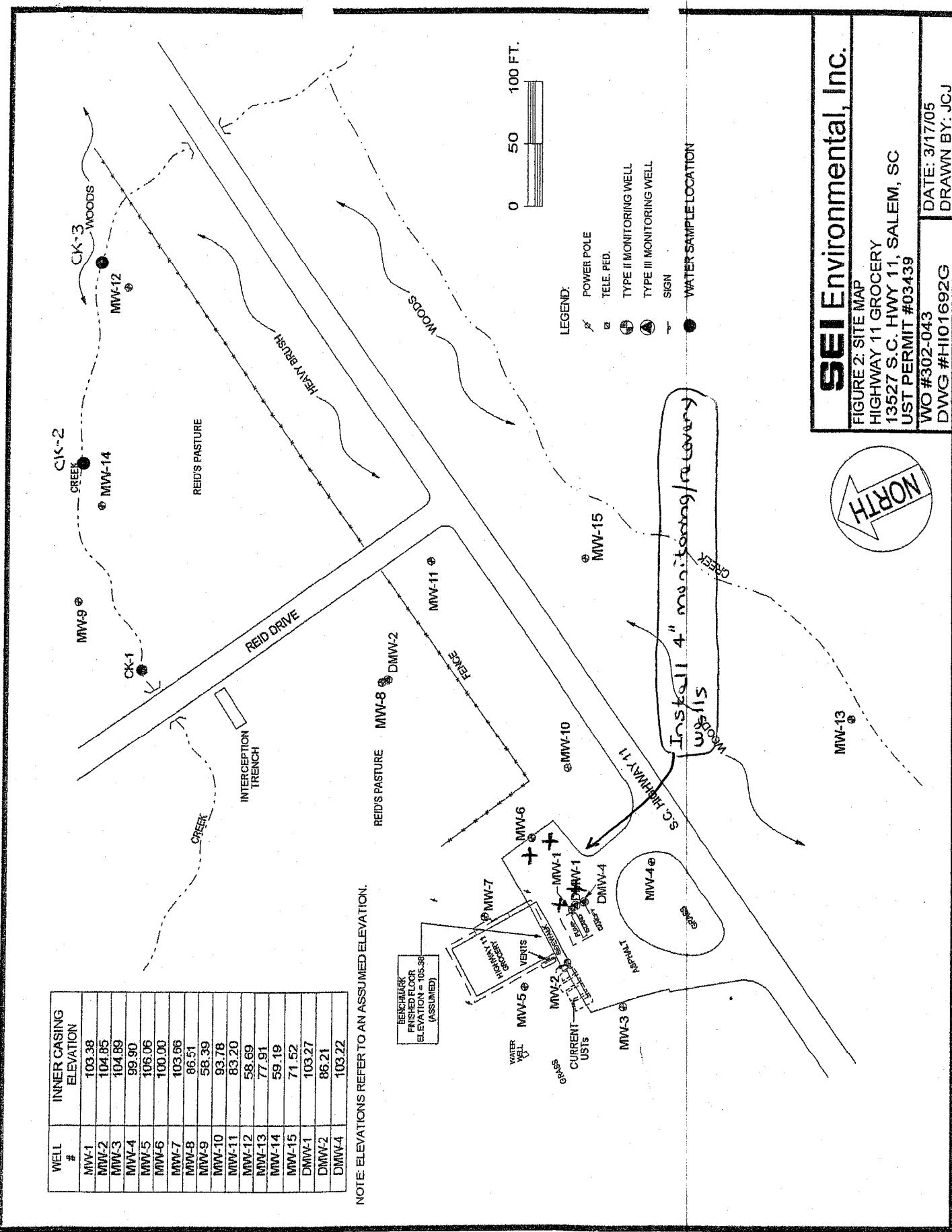
Approved Cost Agreement 40348

Facility: 03439 HWY 11 GROCERY

PADGETJP

PO Number:

<u>Task / Description</u>	<u>Categories</u>	<u>Item Description</u>	<u>Qty / Pct</u>	<u>Unit Price</u>	<u>Amount</u>
04 MOB/DEMOB		A EQUIPMENT B PERSONNEL	1.0000 3.0000	100.00 100.00	100.00 300.00
09 WELL INSTALLATION		B WATER TABLE (DRILLED)	30.0000	20.00	600.00
10 SAMPLE COLLECTION		A GROUND WATER C WATER SUPPLY D GROUNDWATER NO-PURGE	3.0000 1.0000 15.0000	25.00 25.00 25.00	75.00 25.00 375.00
11 ANALYSES	GW GROUNDWATER	A BTEX+NAPTH+MTBE P 8 OXYGENATES	22.0000 22.0000	30.00 42.00	660.00 924.00
16 SUBSEQUENT SURVEY		SUBSEQUENT SURVEY	1.0000	50.00	50.00
17 DISPOSAL		A1 WASTEWATER - PURGING/SAMPLING C SOIL (TREATMENT/DISPOSAL)	1.0000 10.0000	50.00 50.00	50.00 500.00
18 MISCELLANEOUS		4 INCH MONITORING WELL SURFACE WATER	120.0000 3.0000	22.00 25.00	2,640.00 75.00
23 EFR		D SITE RECONNAISSANCE	1.0000	100.00	100.00
25 WELL REPAIR		B REPAIR 2X2 MONITORING WELL PAD D REPLACE WELL VAULT	1.0000 1.0000	50.00 50.00	50.00 50.00
				Total Amount	6,574.00



WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.89
MW-4	99.90
MW-5	106.06
MW-6	100.00
MW-7	103.66
MW-8	86.51
MW-9	58.39
MW-10	93.78
MW-11	83.20
MW-12	58.69
MW-13	77.91
MW-14	59.19
MW-15	71.52
DMW-1	103.27
DMW-2	86.21
DMW-4	103.22

Midlands Environmental Consultants, Inc.



January 5, 2011

Mr. Joel Padgett, P.G., Geologist/Hydrologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land & Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Report of Recovery Well Installation
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
SCDHEC Site ID# 03439, CA # 40438
MECI Project Number 10-3090
Certified Site Rehabilitation Contractor UCC-0009

Dear Mr. Padgett,

Midlands Environmental Consultants Inc. (MECI) is pleased to submit the attached Report of Recovery Well Installation for the referenced site. This report describes assessment activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

PROJECT INFORMATION

The subject site (Highway 11 Grocery) is located at 13527 South Carolina Highway 11 in Salem, South Carolina (see Figure 1). The property is currently a bar (The Post), which is adjoined to a vacant space for lease (former store front). The subject site previously maintained one 3,000 gallon gasoline underground storage tank (UST), two 6,000 gallon gasoline UST's, and one 2,000 gallon diesel UST. According to the South Carolina Underground Storage Tank Registry, these tanks were removed from the ground on September 15, 2009. The South Carolina Department of Health and Environmental Control (SCDHEC) reported and confirmed a release of petroleum product on November 28, 2000. MECI conducted a sampling event at the subject property on April 27, 2010.

The above information is based on reports and correspondence obtained from SCDHEC files.

Post Office Box 854, Lexington SC 29071 • 235-B Doolley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

FIELD EXPLORATION

Field exploration conducted at the site included:

- construction of four groundwater/free phase product recovery wells;
- monitoring well pad repair and vault replacement;
- groundwater sampling and chemical analyses of groundwater samples; and,
- a subsequent survey to locate the newly installed recovery wells.

The monitoring well location was selected based on SCDHEC project manager instructions, existing site conditions, and drilling accessibility.

RECOVERY WELL INSTALLATION

On December 1, 2010, MECI mobilized a Truck-mounted auger rig to the subject site to install several recovery wells requested by SCDHEC. During installation, auger refusal was encountered 20.0 feet below ground surface (BGS) on the initial boring (SB-1). A second attempt was made to install the recovery well approximately fifteen feet from the first boring. During this second attempt, auger refusal was encountered at 13.0 feet BGS. After consultation with SCDHEC project manager, it was decided to mobilize an air-rotary drilling rig to the subject site to install the wells at the requested depth. On December 21, 2010, three single cased 4"-recovery wells (RW-1, RW-2, RW-3, and RW-4) were installed at the subject site. These wells were installed by Geologic Exploration, of Statesville, North Carolina (S.C. Driller Certification: Jerry Watkins # B 01979). These 4-inch recovery wells were installed using a truck-mounted air rotary drilling rig employing an 10.0-inch outer diameter air hammer to construct the borehole. Monitoring well MW-7 was not replaced during the assessment due to lack of access and recent construction. Monitoring well MW-7 is enclosed in a wooden fence and under a newly constructed deck. The following table presents select well installation details.

Well Number	Screened Interval (ft)	Total Depth (ft)
RW-1	10.0-30.0	30.0
RW-2	10.0-30.0	30.0
RW-3	10.0-30.0	30.0
RW-4	10.0-30.0	30.0

The soils encountered during drilling activities consisted of micaceous fine to coarse grained sandy silts, sands, partially weathered rock, and rock of the Piedmont Physiographic Province. Rock was encountered during the installation of monitoring well RW-1, RW-2, and RW-4. Representative portions of soil samples were screened with an Photo Ionization Detector (PID) and classified by MECI personnel. Test boring records showing soil descriptions and screening result are attached.

Based on PID readings and lack on access to spread soils onsite, soil cuttings were transported to Waste Management Richland County Landfill in Elgin, South Carolina by MECI. A total 3.15 tons

was disposed of in this manner. A disposal manifest for these soils is attached at the end of this report.

Following completion of the monitoring wells, the wells were developed by bailing until they were determined to be functioning properly and turbidity was reduced. Test Boring Records showing soil descriptions and monitoring well installation details are attached. The drummed purge water was treated by MECI personnel using a granular activated carbon drum. A total of two (2) drums of purge/development water were disposed of in this manner. A disposal manifest for the drummed purge water is attached at the end of this report.

MONITORING WELL PAD REPAIR

During site reconnaissance MECI personnel noticed monitoring well MW-8 was buried and the well pad and vault were destroyed. On December 1, 2010, the well pad repair was conducted on MW-8 under the direction of Mr. Brian Cornell (SC Driller's License # C 01299) of Geologic Exploration Inc. of Statesville, NC.

SITE SURVEY

Following the well installation, a subsequent survey was conducted by MECI personnel, utilizing a fiberglass rod, level, and tape to determine the horizontal and vertical position of the newly installed monitoring wells. Elevations were based on site datum provided by SCDHEC. See Table 1 and Figure 2 for Top of Casing elevations for the newly installed recovery wells.

MONITORING WELL SAMPLING AND CHEMICAL ANALYSES

On December 13, 2010, MECI personnel collected groundwater samples from seventeen (17) monitoring wells at the subject site. Monitoring wells MW-5, MW-7, and MW-15 were not located at the time of sampling. Monitoring wells MW-8 and RW-2 were gauged and determined to contain free phase petroleum product. Monitoring well MW-8 contained free phase petroleum product at a thickness of 1.00 feet, and RW-2 at a thickness of 0.02 feet. Based on a request by SCDHEC personnel, not all of the wells were to be purged prior to sampling. Purging was completed by bailing at least three well volumes of water from the well or until pH, conductivity, dissolved oxygen stabilized to within 10%, whichever occurred first. Where applicable, field measurements of pH, conductivity, dissolved oxygen, dissolved carbon dioxide, and water temperature were obtained before well sampling process. Table 1 presents the results of the field measurements obtained. The wells were sampled in accordance with SCDHEC guidelines.

Groundwater samples obtained were sent to Pace Analytical Services, Inc. of Huntersville, NC (SCDHEC Laboratory Certification #99006) for analysis.

The following sampling matrix contains well development and requested analyses for each well:

Monitoring Well	Purge	No Purge	Gauge Only	BTEX, Naphthalene, MTBE (EPA Method 8260-B)	EDB (EPA Method 8011)	1,2 DCA (EPA Method 8260-B)	8 Oxygenates (EPA Method 8260-B)	Total Lead (EPA Method 6010)	Sulfate (EPA Method 375.2)	Nitrate (EPA Method 335.2)	Methane (RSK Method)	PAH's (EPA Method 8270)	8 RCRA Metals (EPA Method 6010)	Ferrous Iron (Field Test)
	Analyte Sampled													
MW-1	X		X				X							
MW-2	X		X					X						
MW-3	X		X						X					
MW-4	X		X						X					
MW-6	X		X					X						
MW-8		X												
MW-9	X		X					X						
MW-10	X		X					X						
MW-11	X		X					X						
MW-12	X		X					X						
MW-13	X		X					X						
MW-14	X		X					X						
DMW-1	X			X				X						
DMW-2	X			X				X						
DMW-4	X			X				X						
RW-1	X				X			X						
RW-2			X											
RW-3	X			X				X						
RW-4	X			X				X						

Notes: BTEX = benzene, toluene, ethylbenzene, & total xylenes MTBE=methyl tertiary butyl ether 1,2 DCA = 1,2 dichloroethane
PAH = polycyclic aromatic hydrocarbons

The results of the laboratory analyses are summarized in Table 2 and Table 3, and presented in the attached analytical data.

SURFACE WATER SAMPLING AND CHEMICAL ANALYSIS

On December 13, 2010, three surface water samples (CK-1, CK-2, and CK-3) were collected from a nearby creek associated with the Barbecue Branch. CK-1 was collected approximately 140 feet west of MW-14. CK-2 was collected approximately 40 feet northeast of MW-14. CK-3 was collected approximately 30 feet northeast of MW-12. These samples were sent to Pace Analytical of Huntersville, North Carolina (SCDHEC Laboratory Certification #99006) for analysis. These samples were analyzed for BTEX, Naphthalene, MTBE, and 8-Oxygenates (EPA Method 8260B). The results of the laboratory analyses are summarized in Table 2 and Table 3. The detection limit for each parameter is provided in the attached laboratory reports (See Figure 2 and 3).

WATER SUPPLY WELL SAMPLING AND CHEMICAL ANALYSIS

On December 13, 2010, one water supply well sample (WSW-1) was collected from the on-site water supply well. WSW-1 is located approximately 80 feet to the northwest of MW-2. This sample was analyzed for BTEX, Naphthalene, MTBE, and 8-Oxygenates (EPA Method 8260B). The results of the laboratory analyses are summarized in Table 2 and Table 3. The detection limit for each parameter is provided in the attached laboratory reports (See Figure 2 and 3).

GROUNDWATER ANALYTICAL RESULTS

As discussed above, groundwater samples obtained from the monitoring wells were analyzed for dissolved phase petroleum constituents. Free phase petroleum product was encountered in monitoring wells MW-8 and RW-2. Free phase petroleum product was detected in MW-8 at a thickness of 1.00 feet and in RW-2 at a thickness of 0.02 feet. The analytical results indicate petroleum impact to the local groundwater with the highest dissolved concentrations detected in the area of monitoring well RW-3. The analytical results indicate dissolved total BTEX concentrations ranging from levels below detection limits (BDL) to 46,400 micrograms per liter in RW-3. The analytical results indicate dissolved MTBE concentrations ranging from below detection limits (BDL) to 30,400 micrograms per liter in MW-1. The results of the analyses for each monitoring well and specific parameters are listed on Table 2 and Table 3. The detection limit for each parameter is provided in the attached laboratory reports.

SURFACE WATER ANALYTICAL RESULTS

The surface water samples (CK-1, CK-2, and CK-3) obtained from a down gradient creek were analyzed by Pace Analytical, Inc. for petroleum constituents. Analytical results indicate petroleum impact to all surface water samples collected. Analytical results indicate Total BTEX concentrations at 22.0J micrograms per liter, and MTBE concentrations 5.4 micrograms per liter in CK-1. Analytical results indicate Total BTEX concentrations at 92.7 micrograms per liter, MTBE concentrations 23.2 micrograms per liter, and Naphthalene concentrations at 6.8 micrograms per liter in CK-2. Analytical results indicate Total BTEX concentrations at 107.0 micrograms per liter, MTBE concentrations 28.1 micrograms per liter, and Naphthalene concentrations at 3.7J micrograms per liter in CK-3. The results of the analyses are presented on Table 2 and Table 3 and the detection limits for each parameter is provided in attached laboratory results.

WATER SUPPLY WELL ANALYTICAL RESULTS

The water supply well sample (WSW-1) obtained from the on-site water supply well was analyzed by Pace Analytical, Inc. for petroleum constituents. Analytical results do not indicate petroleum impact to the on-site water supply well. The results of the analyses are presented on Table 2 and Table 3 and the detection limits for each parameter is provided in attached laboratory results.

ASSESSMENT SUMMARY

Groundwater elevation data for the December 13, 2010, gauging event was plotted, and points of equal elevation were interpolated between the monitoring wells. A groundwater contour map of the

surficial aquifer was thus prepared and is presented on Figure 3. Groundwater appears to be flowing in a northern direction, towards the creek associated with Barbecue Branch.

Free phase petroleum product was encountered in monitoring wells MW-8 and RW-2. Free phase petroleum was detected in MW-8 at a thickness of 1.00 feet and in RW-2 at a thickness of 0.02 feet. The concentrations of dissolved total BTEX (indicator of the dissolved phase plume) in the groundwater on and surrounding the site range from levels below detection limits (BDL) to 46,400 micrograms per liter in RW-3. The concentrations of dissolved MTBE in the groundwater on and surrounding the site range from levels below detection limits (BDL) to 30,400 micrograms per liter in MW-1. Figure 4 depicts graphically the concentrations of Total BTEX (indicator for plume migration) dissolved in the groundwater at the site. Figure 5 depicts graphically the concentrations of MTBE dissolved in the groundwater at the site

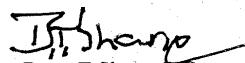
QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assessment are consistent with those normally employed in hydrogeological assessment and waste management projects of this type. Our evaluation of site conditions has been based on our understanding of the site, project information provided to us, and data obtained in our exploration. The general subsurface conditions utilized in our evaluation have been based on interpretation of subsurface data between borings. Contents of this report is intended for the sole use by the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.


Courtney M. Sanders
Staff Biologist


Bryan T. Shane, P.G.
Principal Geologist

Attachments

TABLES

**TABLE 1
PAGE 1 OF 2
FIELD PARAMETERS**
DECEMBER 13, 2010 SAMPLING EVENT
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 10-3090
SCDHEC SITE ID NUMBER 03439

Well Number	Sample Date	Dissolved CO ₂ (mg/l)	Dissolved Oxygen (mg/l)	Temperature (° Celsius)	pH (Initial)	pH (Final)	Conductivity (Initial)	Conductivity (Final)	Screened Interval (ft BGS)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well-head Elevation	Groundwater Elevation
MW-1	12/13/10	75	0.81	14.1	6.62	NT	52.8	NT	15-30	***	26.92	***	103.38	76.46
MW-2	12/13/10	25	1.14	17.0	5.54	NT	26.8	NT	20-35	***	28.00	***	104.85	76.85
MW-3	12/13/10	Too Cloudy	5.38	15.5	6.17	NT	28.6	NT	20-30	***	26.71	***	104.89	78.18
MW-4	12/13/10	200+	0.86	16.1	5.98	NT	52.2	NT	20-35	***	24.04	***	99.90	75.86
MW-5	12/13/10	NL	NL	NL	NL	NL	NL	NL	20-35	***	NL	***	106.06	NL
MW-6	12/13/10	60	0.76	17.9	6.20	NT	46.4	NT	20-35	***	23.60	***	100.00	76.40
MW-7	12/13/10	NL	NL	NL	NL	NL	NL	NL	25-40	***	NL	***	103.66	NL
MW-8	12/13/10	PROD	PROD	PROD	PROD	PROD	PROD	PROD	15-30	22.70	23.70	1.00	86.51	63.66
MW-9	12/13/10	10	4.60	12.6	8.66	NT	36.2	NT	2-10	***	2.30	***	58.39	56.09
MW-10	12/13/10	NT	2.27	16.7	6.15	NT	39.9	NT	13-28	***	20.59	***	93.78	73.19
MW-11	12/13/10	40	3.87	13.1	8.25	NT	41.0	NT	8-23	***	15.80	***	83.20	67.40

Notes:
 1. mg/l = milligrams per liter.
 2. Groundwater depths were measured from the top of the PVC riser.
 3. Final groundwater levels measured 12/13/10.
 4. Elevations based on assumed site datum.

5. Dissolved oxygen, dissolved carbon dioxide, initial pH, initial conductivity, and temperature measurements obtained on 12/13/10.
 6. Groundwater elevation for monitoring wells MW-8 and RW-2 corrected for the presence of free phase petroleum product using a specific gravity of fuel of 0.85

7. NL = Not Located
 8. BGS = Below Ground Surface
 9. NT = Not Tested
 10. SHEEN = Petroleum Sheen Present

TABLE 1
PAGE 2 OF 2
FIELD PARAMETERS
DECEMBER 13, 2010 SAMPLING EVENT
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 10-3090
SCDHEC SITE ID NUMBER 03439

Well Number	Sample Date	Dissolved CO ₂ (mg/l)	Dissolved Oxygen (mg/l)	Temperature (Initial) (Final) (° Celsius)	pH (Initial) (Final)	Conductivity Interval (ft BGS)	Screened Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well-head Elevation	Groundwater Elevation
MW-12	12/13/10	30	2.40	9.6 9.28	NT 26.4	NT 2-12	***	3.33	***	58.69	55.36
MW-13	12/13/10	Too Cloudy	1.89	12.1 8.13	NT 41.2	NT 2-12	***	6.27	***	77.91	71.64
MW-14	12/13/10	200+	1.07	12.3 8.81	NT 87.0	NT 2-10	***	2.53	***	59.19	56.66
MW-15	12/13/10	NL	NL	NL NL	NL NL	NL 4.9	***	NL	***	71.52	NL
DMW-1	12/13/10	175	4.29	17.6 6.26	6.68 33.4	24.8 40-45	***	26.45	***	103.27	76.82
DMW-2	12/13/10	80	2.37	15.2 8.54	7.77 36.3	38.2 55-75	***	17.85	***	86.21	68.36
DMW-4	12/13/10	20	5.08	16.9 7.18	6.70 36.0	29.5 55-60	***	26.90	***	103.22	76.32
RW-1	12/13/10	40	2.92	16.8 7.60	7.37 79.1	72.9 10-30	***	26.65	***	103.29	76.64
RW-2	12/13/10	PROD	PROD	PROD PROD	PROD PROD	PROD 10-30	26.63	26.65	0.02	102.85	76.22
RW-3	12/13/10	20	2.62	17.7 6.25	SHEEN SHEEN	37.7 10-30	***	23.68	***	100.25	76.57
RW-4	12/13/10	35	2.11	16.6 6.47	6.18 43.8	37.1 10-30	***	24.34	***	101.00	76.66

Notes:

1. mg/l = milligrams per liter.
 2. Groundwater depths were measured from the top of the PVC riser.
 3. Final groundwater levels measured 12/13/10.
 4. Elevations based on assumed site datum.

5. Dissolved oxygen, dissolved carbon dioxide, initial pH, initial conductivity,

5. Dissolved oxygen, dissolved carbon dioxide, initial pH, initial conductivity, and temperature measurements obtained on 1/13/10.
 6. Groundwater elevation for monitoring wells MW-8 and RW-2 corrected for the presence of free phase petroleum product using a specific gravity of fuel oil of 0.8

located

- located
w Ground Surface
ested
petroleum Sheen Present

TABLE 2
PAGE 1 OF 2
GROUNDWATER ANALYTICAL RESULTS
DECEMBER 13, 2010 SAMPLING EVENT
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 10-3090
SCDHESC ID NUMBER 03439

Well Number	Sample Date	Benzene ($\mu\text{g/l}$)	Toluene ($\mu\text{g/l}$)	Ethylbenzene ($\mu\text{g/l}$)	Total Xylenes ($\mu\text{g/l}$)	Total BTEX ($\mu\text{g/l}$)	MTBE ($\mu\text{g/l}$)	Naphthalene ($\mu\text{g/l}$)	1,2 DCA ($\mu\text{g/l}$)
MW-1	12/13/10	4,530	8,750	1,150	6,430	20,860	30,400	529	<250
MW-2	12/13/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-3	12/13/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-4	12/13/10	520	224	55.2	482	1,281.2	763	18.2J	<25.0
MW-5	12/13/10	NL	NL	NL	NL	NL	NL	NL	NL
MW-6	12/13/10	1,300	6,340	360	7,910	15,910	2,500	<250	<250
MW-7	12/13/10	NL	NL	NL	NL	NL	NL	NL	NL
MW-8	12/13/10	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
MW-9	12/13/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-10	12/13/10	50.0	8.0	5.2	51.7	114.9	22.9	<5.0	<5.0
MW-11	12/13/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-12	12/13/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-13	12/13/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0

Notes:

1. BDL = Below Practical Quantitative Limits

2. $\mu\text{g/l}$ = micrograms per liter

3. mg/l = milligrams per liter

4. MTBE = Methyl-Tertiary-Butyl Ether

5. See Appendix for Laboratory Detection Limits

6. 1,2 DCA = 1,2-Dichloroethane

7. EDB = Ethylene Dipropamide

8. NL = Not Located

9. PROD = Free Phase Petroleum Product

10. NT = Not Tested

11. "J" Values used in Total BTEX Calculations

12. "J" Values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

PAGE 2 OF 2
GROUNDWATER ANALYTICAL RESULTS
DECEMBER 13, 2010 SAMPLING EVENT
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 10-3090
SCDHEC ID NUMBER 03439

Well Number	Sample Date	Benzene ($\mu\text{g/l}$)	Toluene ($\mu\text{g/l}$)	Ethylbenzene ($\mu\text{g/l}$)	Total Xylenes ($\mu\text{g/l}$)	Total BTEX ($\mu\text{g/l}$)	MTBE ($\mu\text{g/l}$)	Naphthalene ($\mu\text{g/l}$)	1,2 DCA ($\mu\text{g/l}$)
MW-14	12/13/10	1,410	4,840	1,490	8,450	16,190	1,500	359	<250
MW-15	12/13/10	NL	NL	NL	NL	NL	NL	NL	NL
DMMW-1	12/13/10	3.0J	3.6J	<5.0	3.1J	9.7J	104	<5.0	<5.0
DMMW-2	12/13/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
DMMW-4	12/13/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
RW-1	12/13/10	3,550	13,500	1,190	6,220	24,460	24,500	874	<125
RW-2	12/13/10	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
RW-3	12/13/10	4,860	20,800	3,240	17,500	46,400	10,200	1,290	<250
RW-4	12/13/10	2,390	6,720	467	4,020	13,597	7,780	169	<5.0
CK-1	12/13/10	4.4J	6.2	2.1J	9.3J	22.0J	5.4	<5.0	<5.0
CK-2	12/13/10	16.1	35.6	6.8	34.2	92.7	23.2	6.8	<5.0
CK-3	12/13/10	17.9	39.1	8.1	41.9	107.0	28.1	3.7J	<5.0
WSW-1	12/13/10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0

Notes:

1. BDL = Below Practical Quantitative Limits

2. $\mu\text{g/l}$ = micrograms per liter

3. mg/l = milligrams per liter

4. MTBE = Methyl-Tertiary-Butyl Ether

5. See Appendix for Laboratory Detection Limits

6. 1,2 DCA = 1,2-Dichloroethane

7. EDB = Ethylene Dibromide

8. NL = Not Located

9. PROD = Free Phase Petroleum Product

10. NT = Not Tested

11. "J" Values used in Total BTEX Calculations

12. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

**TABLE 3
PAGE 1 OF 2
GROUNDWATER ANALYTICAL RESULTS (OXYGENATES)
DECEMBER 13, 2010 SAMPLING EVENT
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 10-3090
SCDHEC SITE ID NUMBER 03439**

Well Number	Sample Date	tert-Amyl alcohol ($\mu\text{g/l}$)	tert-Amyl methyl ether ($\mu\text{g/l}$)	3,3-Dimethyl-1-butanol ($\mu\text{g/l}$)	tert-Butyl Alcohol ($\mu\text{g/l}$)	tert-Butyl Formate ($\mu\text{g/l}$)	Diisopropyl ether ($\mu\text{g/l}$)	Ethanol ($\mu\text{g/l}$)	Ethyl tert-butyl ether ($\mu\text{g/l}$)
MW-1	12/13/10	3,430J	735	<5,000	1,600J	<2,500	449	<10,000	<500
MW-2	12/13/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-3	12/13/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-4	12/13/10	342J	<50.0	<500	<500	<250	25.3	<1,000	<50.0
MW-5	12/13/10	NL	NL	NL	NL	NL	NL	NL	NL
MW-6	12/13/10	<5,000	<500	<5,000	<5,000	<2,500	<250	<10,000	<500
MW-7	12/13/10	NL	NL	NL	NL	NL	NL	NL	NL
MW-8	12/13/10	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
MW-9	12/13/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-10	12/13/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-11	12/13/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-12	12/13/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
MW-13	12/13/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0

Notes:

1. $\mu\text{g/l}$ = micrograms per liter
2. NL = Not Located
3. PROD = Free Phase Petroleum Product

4. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

**TABLE 3
PAGE 2 OF 2
GROUNDWATER ANALYTICAL RESULTS (OXYGENATES)
NOVEMBER 30, 2010 SAMPLING EVENT
DAVIS SITE
MANNING, SOUTH CAROLINA
MECI PROJECT NUMBER 10-3091
SCDHEC SITE ID NUMBER 15120**

Well Number	Sample Date	tert-Amyl alcohol ($\mu\text{g/l}$)	tert-Amyl methyl ether ($\mu\text{g/l}$)	3,3-Dimethyl-1-butanol ($\mu\text{g/l}$)	tert-Butyl Alcohol ($\mu\text{g/l}$)	tert-Butyl Formate ($\mu\text{g/l}$)	Diisopropyl ether ($\mu\text{g/l}$)	Ethanol ($\mu\text{g/l}$)	Ethyl tert-butyl ether ($\mu\text{g/l}$)
MW-14	12/13/10	<5,000	<500	<5,000	<5,000	<2,500	<250	<10,000	<500
MW-15	12/13/10	NL	NL	NL	NL	NL	NL	NL	NL
DMW-1	12/13/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
DMW-2	12/13/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
DMW-3	12/13/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
RW-1	12/13/10	3,850	586	<2,500	5,200	<1,250	373	<5,000	<250
RW-2	12/13/10	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
RW-3	12/13/10	<5,000	454J	<5,000	<5,000	<2500	284	<10,000	<500
RW-4	12/13/10	581	259	764	203	<50.0	6.1J	<200	
CK-1	12/13/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
CK-2	12/13/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
CK-3	12/13/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0
WSW-1	12/13/10	<100	<10.0	<100	<100	<50.0	<5.0	<200	<10.0

Notes:
 1. $\mu\text{g/l}$ = micrograms per liter
 2. NL = Not Located
 3. PROD = Free Phase Petroleum Product

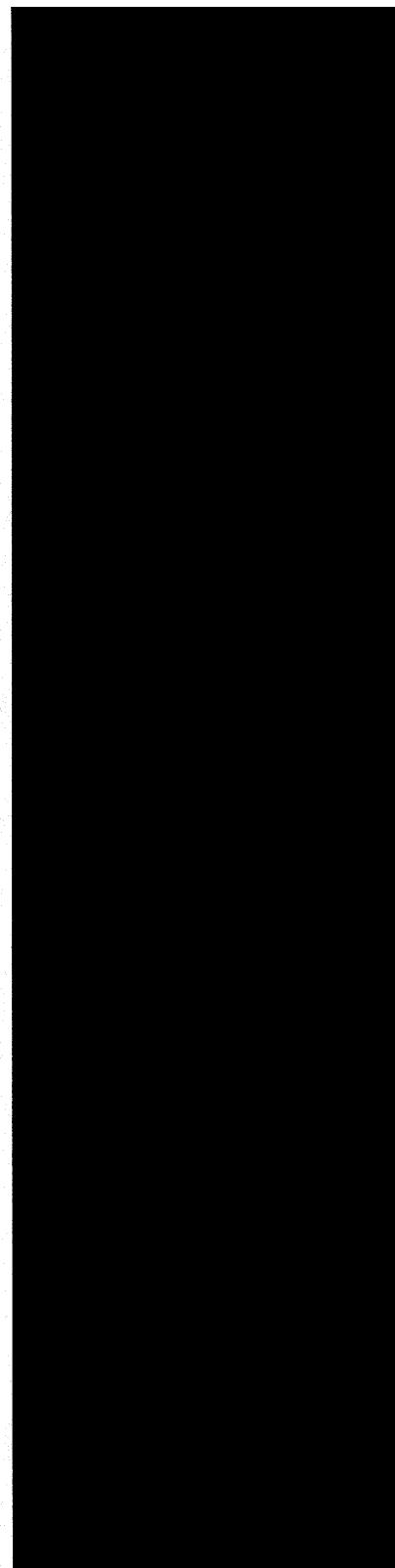
4. "J" values report concentrations above the method detection limits (MDL) and below actual reporting limit (RL).

the first time, the results of the study were presented at the 2003 meeting of the International Society for Traumatic Stress Studies (ISTSS) in San Antonio, Texas. The results were well received and have been published in the *Journal of Traumatic Stress* (Kilpatrick et al., 2004). The present article is a summary of the findings from the study.

FIGURES

The figures in this article are located in the right margin of the page. The first figure is a scatter plot showing the relationship between the number of children in the household and the number of children who experienced child abuse. The second figure is a scatter plot showing the relationship between the number of children in the household and the number of children who experienced child neglect. The third figure is a scatter plot showing the relationship between the number of children in the household and the number of children who experienced both child abuse and child neglect.

The figures are located in the right margin of the page. The first figure is a scatter plot showing the relationship between the number of children in the household and the number of children who experienced child abuse. The second figure is a scatter plot showing the relationship between the number of children in the household and the number of children who experienced child neglect. The third figure is a scatter plot showing the relationship between the number of children in the household and the number of children who experienced both child abuse and child neglect.





GRAPHIC SCALE
0 1000 2000 4000
1IN = 2000FT

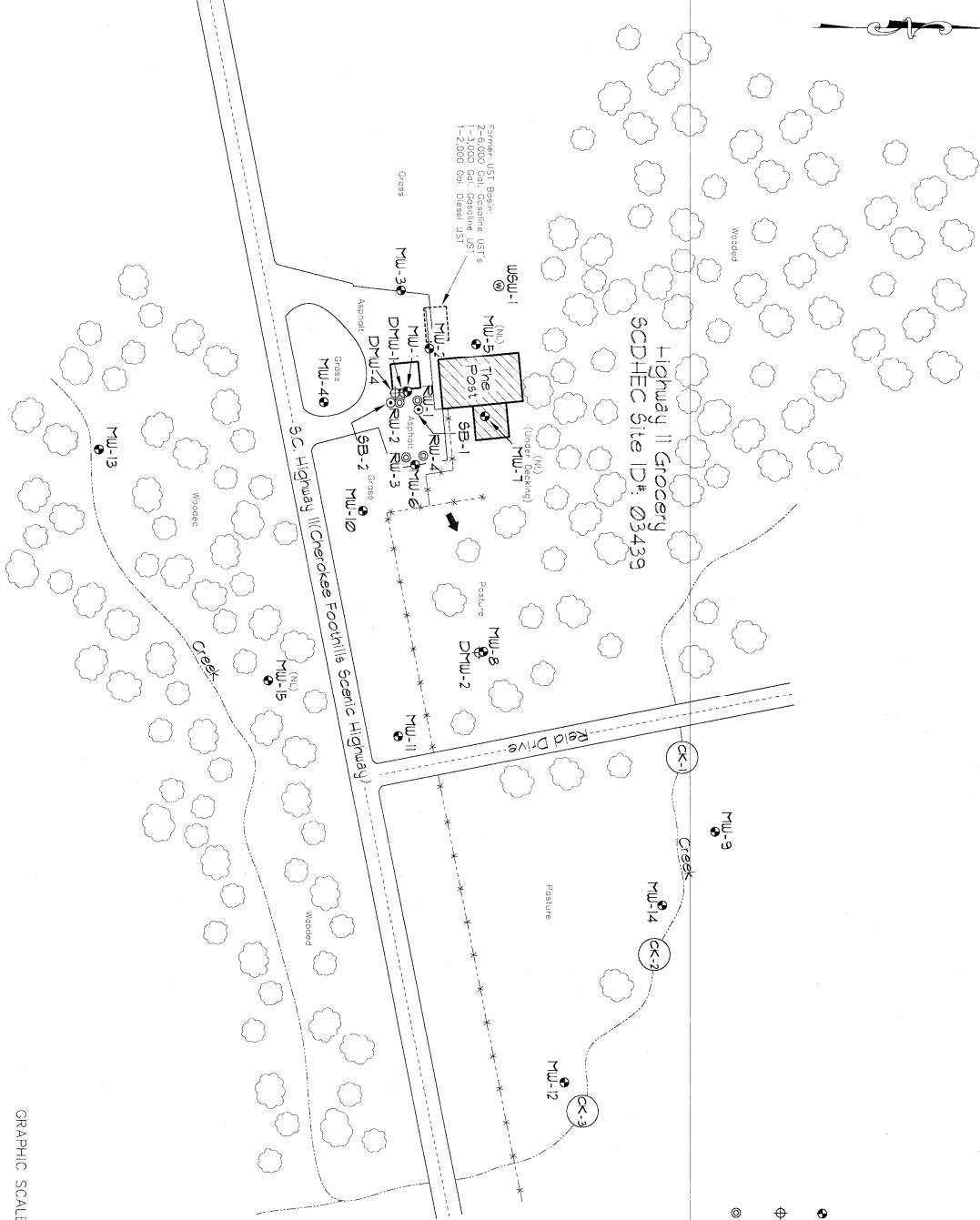
Reference: Salem and Old Pickens, South Carolina
Tomassee and Walhalla, South Carolina
USGS 7.5 Min. Quad
Contour Interval - 20 Feet

 Midlands Environmental Consultants, Inc.	Site Location
Highway II Grocery 13527 South Carolina Highway II, Salem, SC SCDHEC Site ID# 03439	
Figure 1	MECI 10-3090

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Explanation:

- Location of Water Table
Bracketing Monitoring Well
- ◆ Location of Double Cased
"Deep" Monitoring Well
- ◎ Location of 4-inch
Recovery Well
- Location of Surface Water Sample
Collection
- Location of Soil Test Boring
- Estimated Groundwater
Flow Direction
- Estimated Location of
Storage Tanks



GRAPHIC SCALE
0 50 100 150 200
1 IN = 100FT

Site Features

Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID 03439

Midlands
Environmental
Consultants, Inc.

Drawing Based on MECI Field Notes and SCDHEC
Files
All Locations are Approximate

Notes:

Depth to groundwater measured on December 13, 2010.

Contour Interval = 5.00 Foot

Site Datum Based on Assumed Spot Elevation.

NL = Not Located

Monitoring wells DMW-1, DMW-2, and DMW-4 not used

in contouring.

Groundwater elevation for monitoring wells MW-8 and

RW-2 corrected for the presence of free phase

petroleum product using specific gravity of fuel of 0.85.

Groundwater Contours Computer Generated using Surfer

by Golden Graphics and Modified by MECI Personnel.

Explanation:

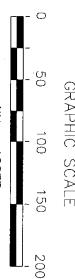
●	Location of Water Table	④	Location of Water Supply Well
◆	Bracketing Monitoring Well	◎	Water Supply Well
⊕	Location of Double Cased Well	▲	Estimated Groundwater
◎	"Deep" Monitoring Well	▼	Flow Direction
○	Location of 4-inch Recovery Well	■	Estimated Location of Removed Underground Storage Tanks
○	Location of Surface Water Sample Collection		

— Groundwater Elevation Contour (feet)

Groundwater Elevation Data					
Well #	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well Head Elevation	Groundwater Elevation
MW-1	---	26.32	---	103.38	76.46
MW-2	---	28.00	---	104.85	76.85
MW-3	---	26.11	---	104.88	76.88
MW-4	---	24.04	---	99.92	75.86
MW-5	---	NL	---	102.00	NL
MW-6	---	23.60	---	102.00	76.40
MW-7	---	NL	---	102.66	NL
MW-8	22.10	23.10	1.00	86.51	63.66
MW-9	---	23.0	---	58.39	56.03
MW-10	---	20.59	---	93.18	73.18
MW-11	---	15.80	---	83.20	67.40
MW-12	---	3.33	---	58.69	55.36
MW-13	---	6.21	---	11.91	71.64
MW-14	---	2.53	---	59.19	56.66
MW-15	---	NL	---	71.52	NL
DRW-1	---	26.45	---	103.21	76.82
DRW-2	---	17.85	---	86.21	68.36
DRW-4	---	26.92	---	103.22	76.32
DRW-1	---	26.65	---	103.23	76.64
RW-2	26.63	26.65	0.02	102.85	76.22
RW-3	---	22.68	---	102.05	76.51
RW-4	---	24.34	---	101.00	76.66

Groundwater Contour Map

Highway II Grocery
Salem, South Carolina
SCDHEC Site ID 03439



Drawing Based on MECI Field Notes and SCDHEC Files. All Locations are Approximate.

Midlands Environmental Consultants, Inc.

JOB NO. 10-390
DATE: January 5, 2010
FIGURE 3

Notes:

Groundwater samples collected on December 13, 2010.

Isopelet Interval = 15,000 ug/l

BDL = Below Detection Limits

NL = Not Located

PROD = Free Phase Petroleum Product

"J" Values included in Total BTEx Calculations
Concentration Isopelets Computer Generated using Surfer
by Golden Graphics and Modified by MECI Personnel.

Explanation:

- Location of Water Table
- ◎ Location of Bracketing Monitoring Well
- NL = Not Located
- ◆ Location of Double Cased "Deep" Monitoring Well
- Location of 4-inch Recovery Well
- ▲ Estimated Groundwater Flow Direction
- Removed Location of Storage Tanks

(CK-1) Location of Surface Water Sample Collection
(CK-2) Total BTEx Concentration Isopelet (ug/l)

COC Concentration Data						
Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEx (ug/l)	MTBE (ug/l)
MW-1	4.530	8.750	1.150	6.430	20,860	30,400
MW-2	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
MW-3	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
MW-4	5.20	22.4	55.2	482	1,281.2	763
MW-5	NL	NL	NL	NL	NL	NL
MW-6	1,300	6,340	7,910	15,910	2,500	<250
MW-7	NL	NL	NL	NL	NL	NL
MW-8	PROD	PROD	PROD	PROD	PROD	PROD
MW-9	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
MW-10	50.0	5.2	51.7	114.9	22.9	NL
MW-11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
MW-12	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
MW-13	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
MW-14	1,410	4,840	8,450	16,190	1,500	359
MW-15	NL	NL	NL	NL	NL	NL
DW-1	3.01	3.61	<5.0	31.1	9.71	104
DW-2	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
DW-4	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
RW-1	3,550	13,500	1,190	6,220	24,460	24,500
RW-2	PROD	PROD	PROD	PROD	PROD	PROD
RW-3	4,850	20,890	3,240	17,500	46,400	10,200
RW-4	2,390	6,120	467	4,020	13,597	7,280
CK-1	4.49	6.2	2.11	9.33	22.01	5.4
CK-2	16.1	35.6	6.8	34.2	23.2	6.8
CK-3	17.9	39.1	8.1	41.9	107.7	28.1
CK-4	<5.0	<5.0	<10.0	BDL	<5.0	<5.0
CK-5	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-6	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-7	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-8	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-9	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-10	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-12	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-13	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-14	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-15	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-16	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-17	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-18	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-19	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-20	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-21	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-22	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-23	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-24	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-25	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-26	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-27	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-28	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-29	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-30	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-31	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-32	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-33	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-34	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-35	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-36	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-37	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-38	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-39	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-40	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-41	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-42	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-43	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-44	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-45	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-46	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-47	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-48	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-49	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-50	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-51	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-52	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-53	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-54	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-55	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-56	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-57	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-58	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-59	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-60	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-61	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-62	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-63	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-64	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-65	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-66	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-67	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
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CK-72	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-73	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-74	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-75	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-76	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-77	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-78	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-79	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-80	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-81	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-82	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-83	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-84	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-85	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-86	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-87	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-88	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-89	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-90	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-91	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-92	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-93	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-94	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-95	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-96	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-97	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-98	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-99	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-100	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-101	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-102	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-103	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
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CK-107	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-108	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-109	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-110	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-111	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-112	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-113	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-114	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-115	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-116	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-117	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-118	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-119	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-120	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-121	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-122	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-123	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-124	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-125	<5.0	<5.0	<5.0	<10.0	BDL	<5.0
CK-126	<5.0	<5.0	<5.0	<		

Notes:

Groundwater samples collected on December 13, 2010.

Isopleth Interval = 12,000 ug/l

BDL = Below Detection Limits

NL = Not Located

PROD = Free Phase Petroleum Product

"j" Values included in Total BTEX Calculations
Concentration Isopleths Computer Generated using Surfer
by Golden Graphics and Modified by MECI Personnel

Explanation:

- Location of Water Tack Bracketing Monitoring Well
- ④ Location of Double Cased Deep Monitoring Well
- ◎ Location of 4-inch Recovery Well
- Location of Surface Water Sample Collection
- Estimated Location of Storage Tanks
- Removed Under-ground

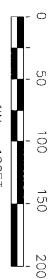
MTBE Concentration Isopleth ($\mu\text{g/l}$)

Sample	Benzene ($\mu\text{g/l}$)	Toluene ($\mu\text{g/l}$)	Ethylbenzene ($\mu\text{g/l}$)	Total BTEX ($\mu\text{g/l}$)	MTBE ($\mu\text{g/l}$)	Naphthalene ($\mu\text{g/l}$)	DCA ($\mu\text{g/l}$)
MW-1	4.530	8.750	1.150	6.430	20,860	30,400	529
MW-2	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<250
MW-3	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<250
MW-4	520	224	55.2	482	1,281.2	763	18.2
MW-5	NL	NL	NL	NL	NL	NL	NL
MW-6	1,300	6,340	360	7,910	15,910	2,500	<250
MW-7	NL	NL	NL	NL	NL	NL	NL
MW-8	PROD	PROD	PROD	PROD	PROD	PROD	PROD
MW-9	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<250
MW-10	8.0	5.2	51.7	114.9	22.9	<5.0	<5.0
MW-11	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<250
MW-12	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<250
MW-13	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0
MW-14	1,910	4,240	1,490	8,450	16,190	3,591	<250
MW-15	NL	NL	NL	NL	NL	NL	NL
DW-1	3.0	3.6	<5.0	31.1	9.71	104	<5.0
DW-2	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<250
DW-4	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<250
RW-1	3,550	13,500	1,190	6,220	24,460	24,500	874
RW-2	PROD	PROD	PROD	PROD	PROD	PROD	PROD
RW-3	4,860	20,800	3,240	17,500	48,400	10,200	1,250
RW-4	2,390	6,720	467	4,020	13,597	7,780	169
CK-1	4.4	6.2	2.1J	9.3J	22.0	5.4	<5.0
CK-2	16.1	35.6	6.8	34.2	92.0	23.2	5.8
CK-3	17.9	39.1	8.1	41.9	107.0	28.1	<5.0
WSW-31	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<250

MTBE Isopleth Map

Highway II Grocery
Salem, South Carolina
SCDHEC Site ID 03439

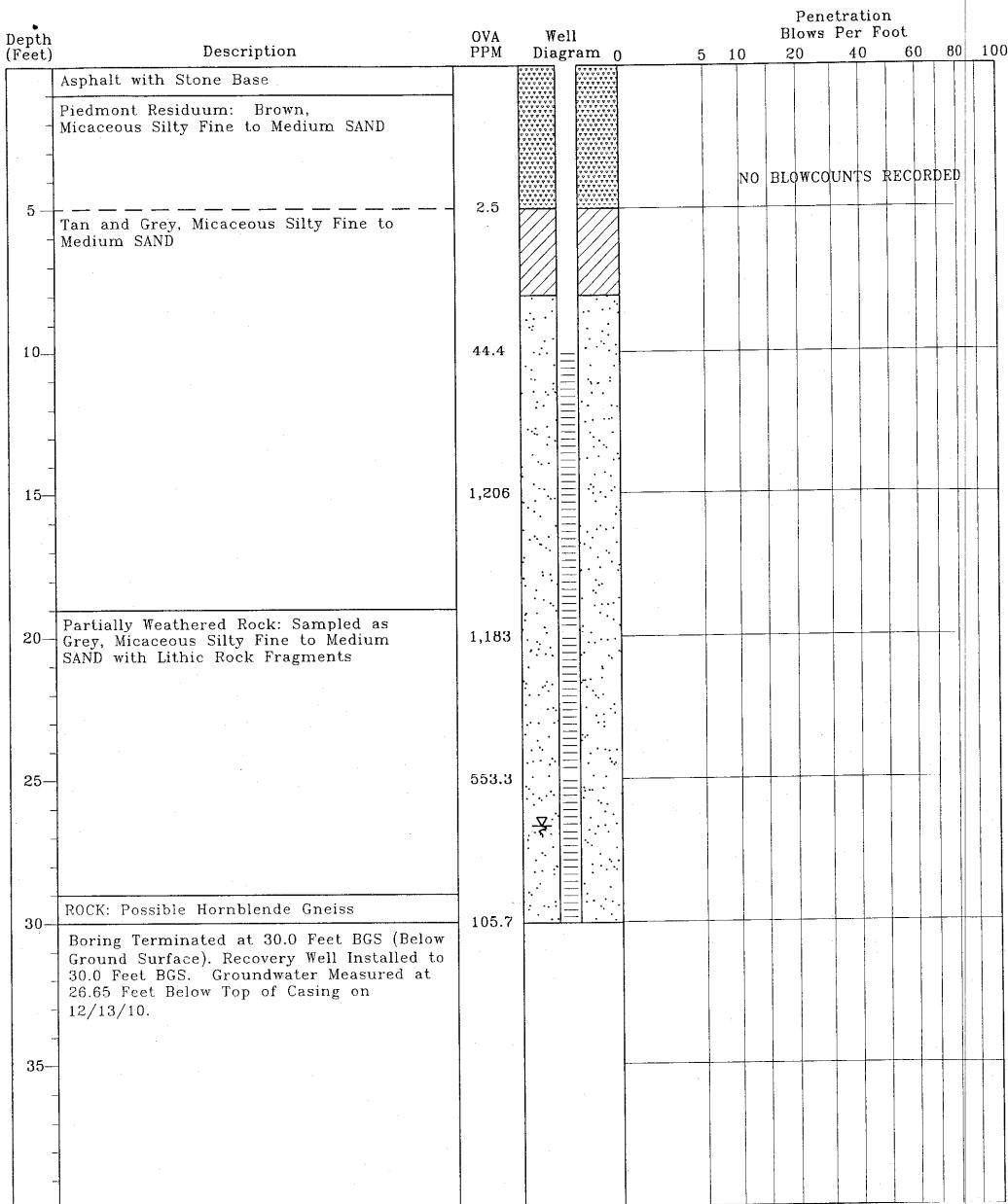
Drawing Based on MECI Field Notes and SCDHEC
Files. All Locations are Approximate.



ALL LOCATIONS ARE APPROXIMATE

MTBE Isopleth Map
Highway II Grocery Salem, South Carolina SCDHEC Site ID 03439
Midlands Environmental Consultants, Inc.
FIGURE 5
JOB NO. 10-590
DATE: January 5, 2010

TEST BORING AND MONITORING WELL INSTALLATION RECORD

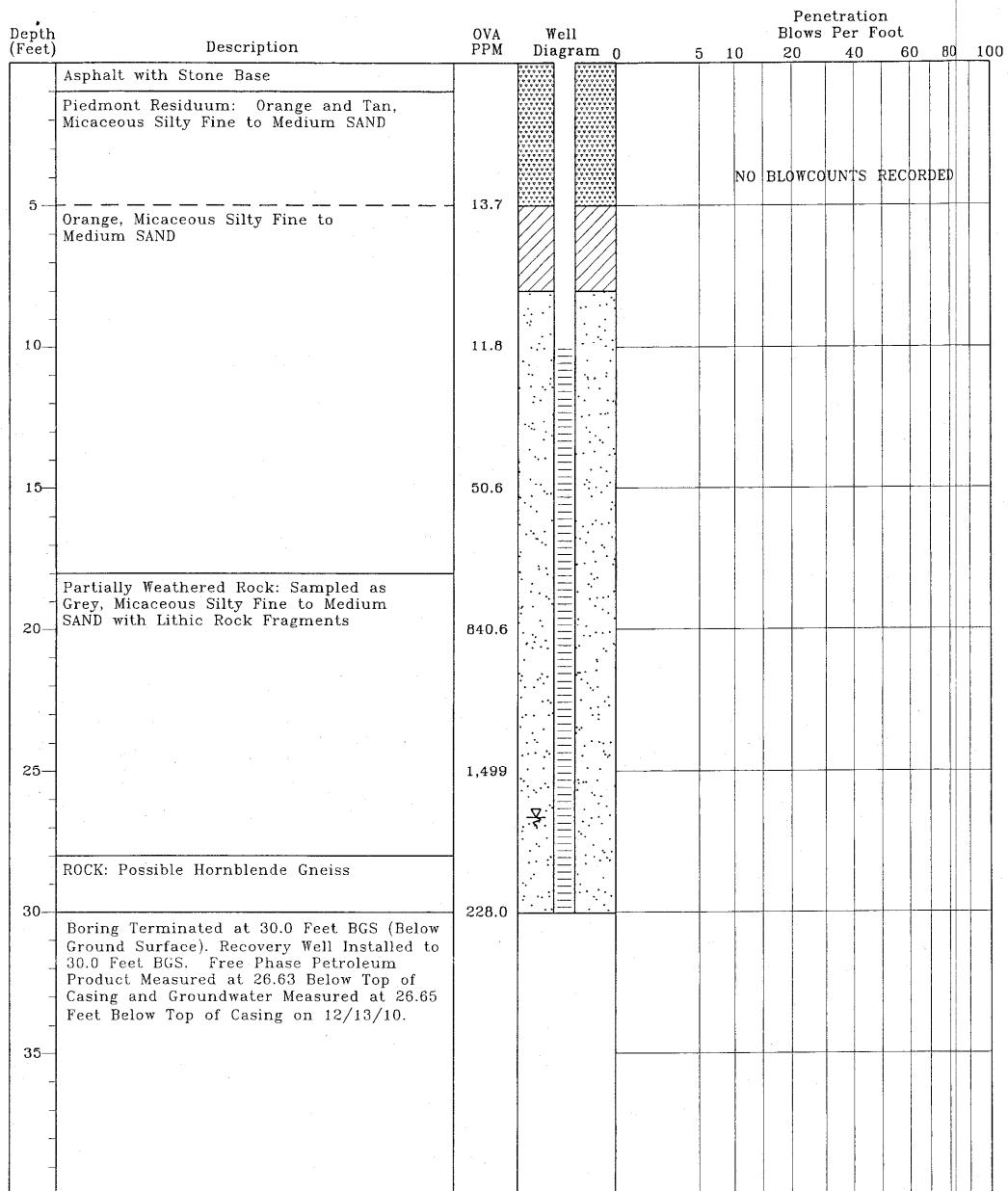


TEST BORING RECORD

Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID# 03439
MECI Project Number 10-3090

Boring Number:	RW-1
Date Drilled:	12/9/10
Drilled By:	Geologic Exploration Inc.
Logged By:	B. Kelly

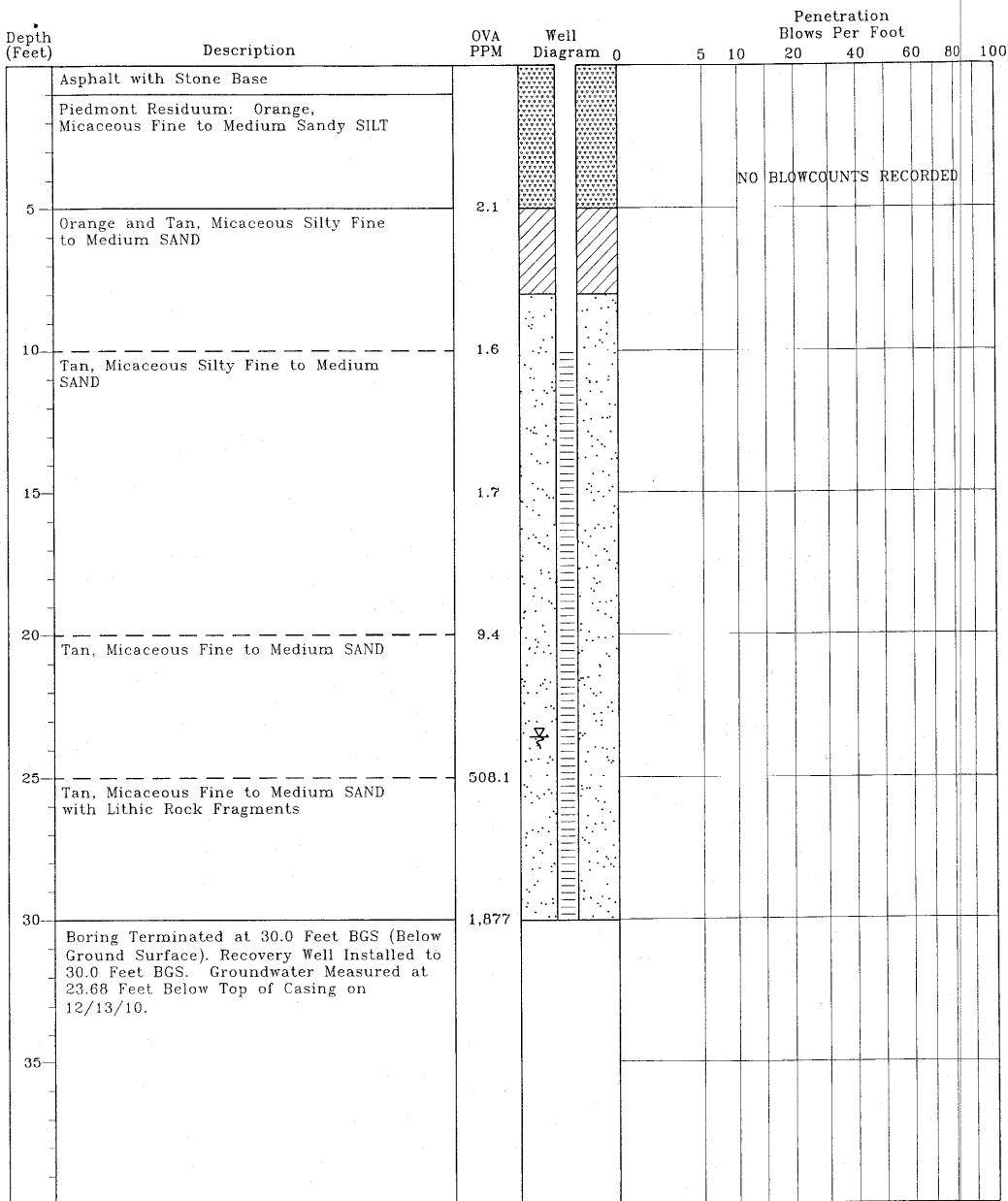
Prepared By:
 Midlands
Environmental
Consultants, Inc.
 235-B Dooley Road
Lexington, South Carolina 29073
(803) 780-2043 Fax: (803) 780-2048



TEST BORING RECORD
 Highway 11 Grocery
 Salem, South Carolina
 SCDHEC Site ID# 03439
 MECI Project Number 10-3090

Boring Number:	RW-2
Date Drilled:	12/9/10
Drilled By:	Geologic Exploration Inc.
Logged By:	B. Kelly

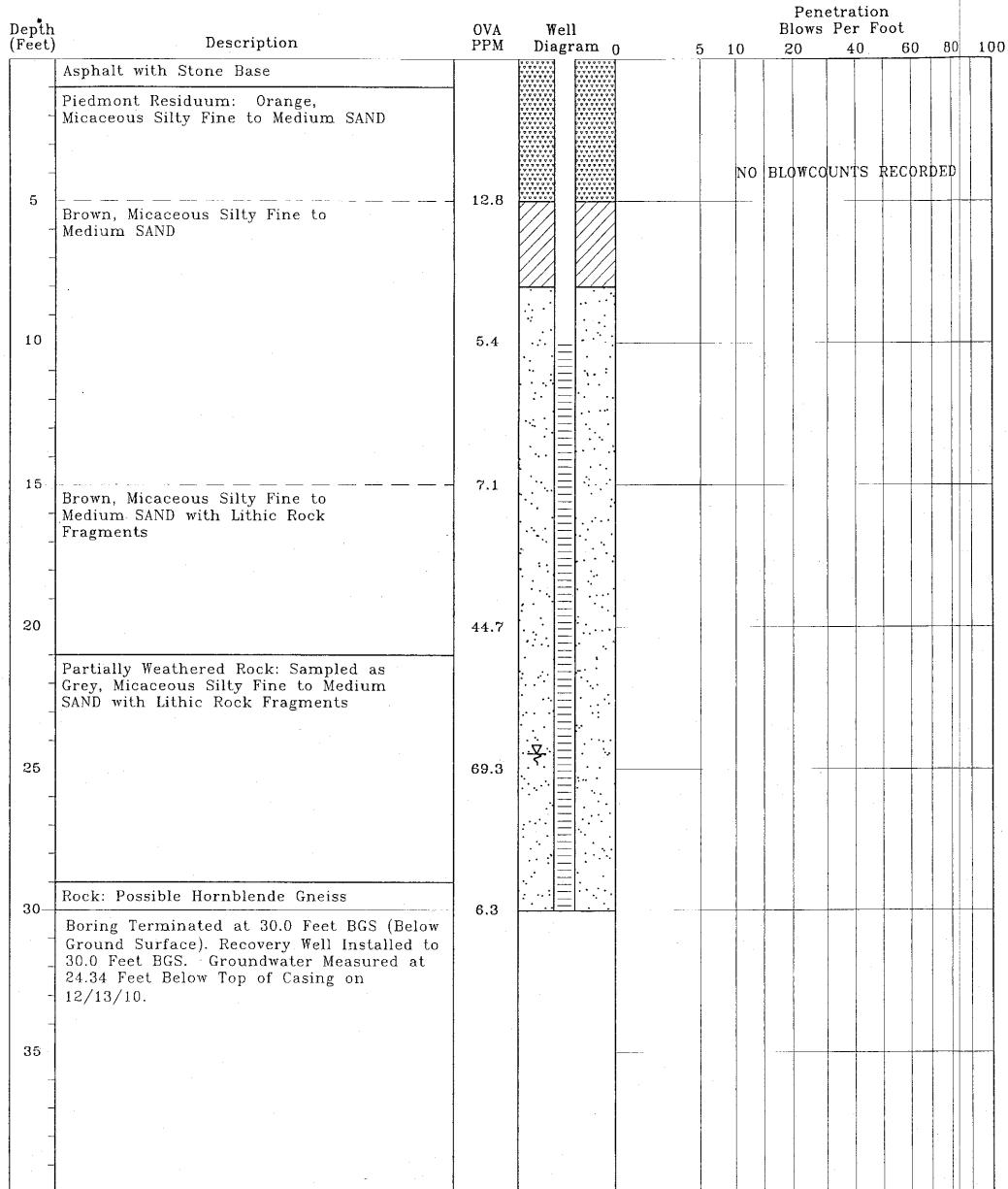
Prepared By:
 Midlands
 Environmental
 Consultants, Inc.
 235-B Dooley Road
 Lexington, South Carolina 29073
 (803) 208-2043 Fax: 803-2048



TEST BORING RECORD
 Highway 11 Grocery
 Salem, South Carolina
 SCDHEC Site ID# 03439
 MECI Project Number 10-3090

Boring Number:	RW-3
Date Drilled:	12/9/10
Drilled By:	Geologic Exploration Inc.
Logged By:	B. Kelly

Prepared By:
 Midlands Environmental Consultants, Inc.
 235-B Dooley Road
 Lexington, South Carolina 29073
 (803) 208-2043 Fax: 803-2048



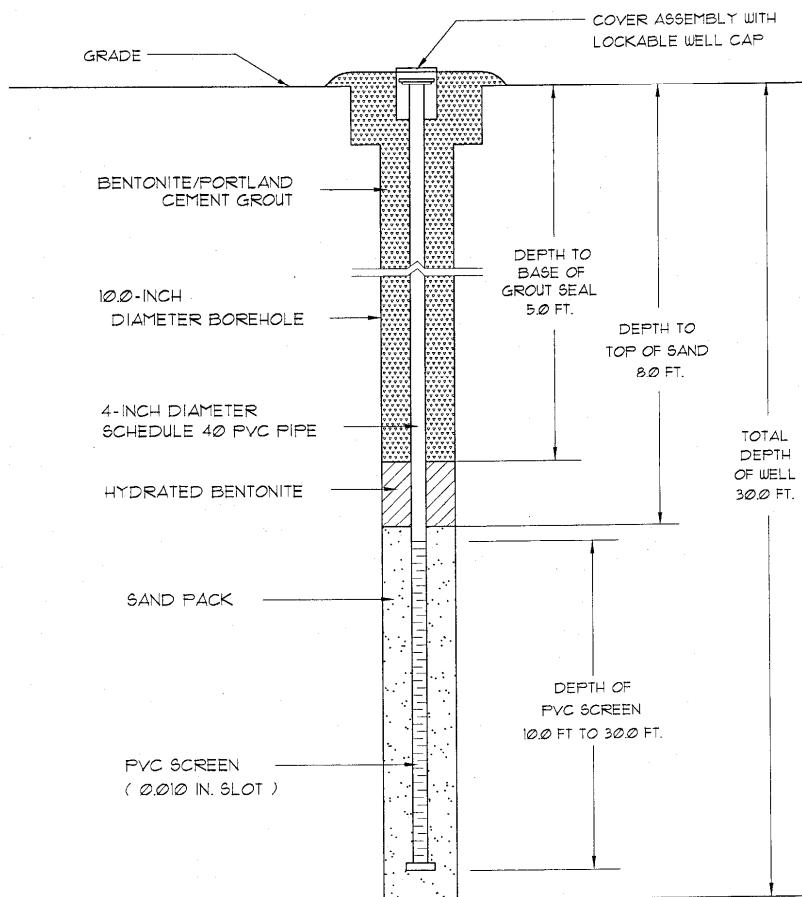
TEST BORING RECORD
 Highway 11 Grocery
 Salem, South Carolina
 SCDHEC Site ID# 03439
 MECI Project Number 10-3090

Boring Number:	RW-4
Date Drilled:	12/9/10
Drilled By:	Geologic Exploration Inc.
Logged By:	B. Kelly

Prepared By:
 Midlands
 Environmental
 Consultants, Inc.
 235-B Dooley Road
 Lexington, South Carolina 29013
 (803) 208-2043 fax: 808-2048

RECOVERY WELL INSTALLATION RECORD

Highway 11 Grocery
 Salem, South Carolina
 SCDHEC Site ID# 03439
 MECI Project Number 10-3090

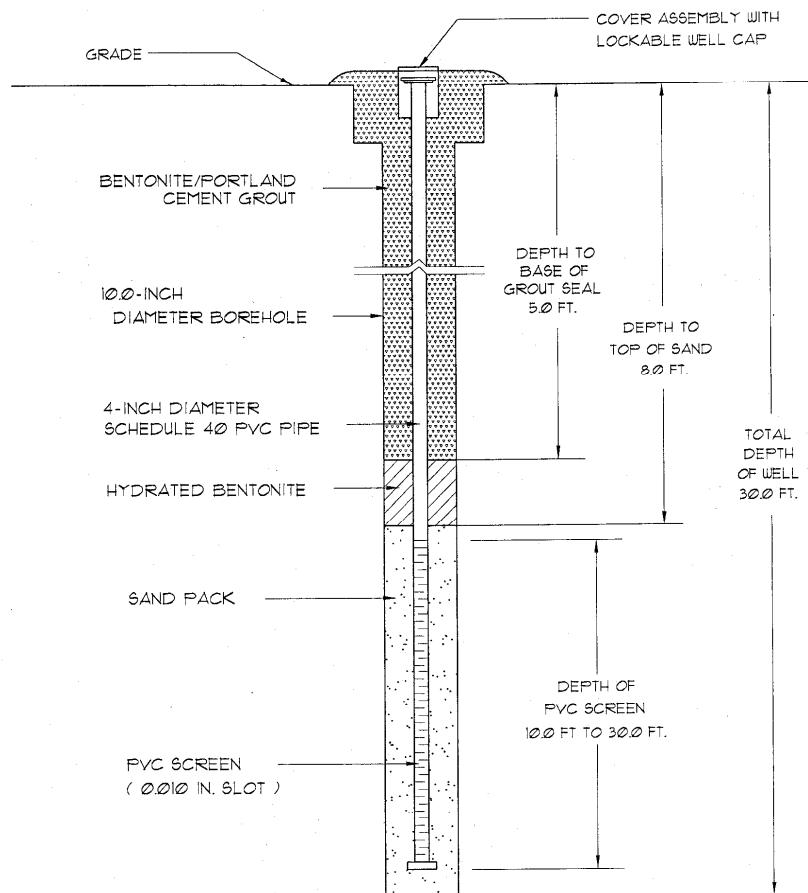


Well Number:	RW-1
Date Drilled:	12/9/10
Drilled By:	Geologic Exploration Inc.
Driller:	J. Watkins S.C. I.D. #: B 01979
Logged By:	B. Kelly

Prepared By:
Midlands Environmental Consultants, Inc.
235-B Dooley Road
 Lexington, South Carolina 29073
 (803) 208-2043 fax: 808-2042

RECOVERY WELL INSTALLATION RECORD

Highway 11 Grocery
 Salem, South Carolina
 SCDHEC Site ID# 03439
 MECI Project Number 10-3090



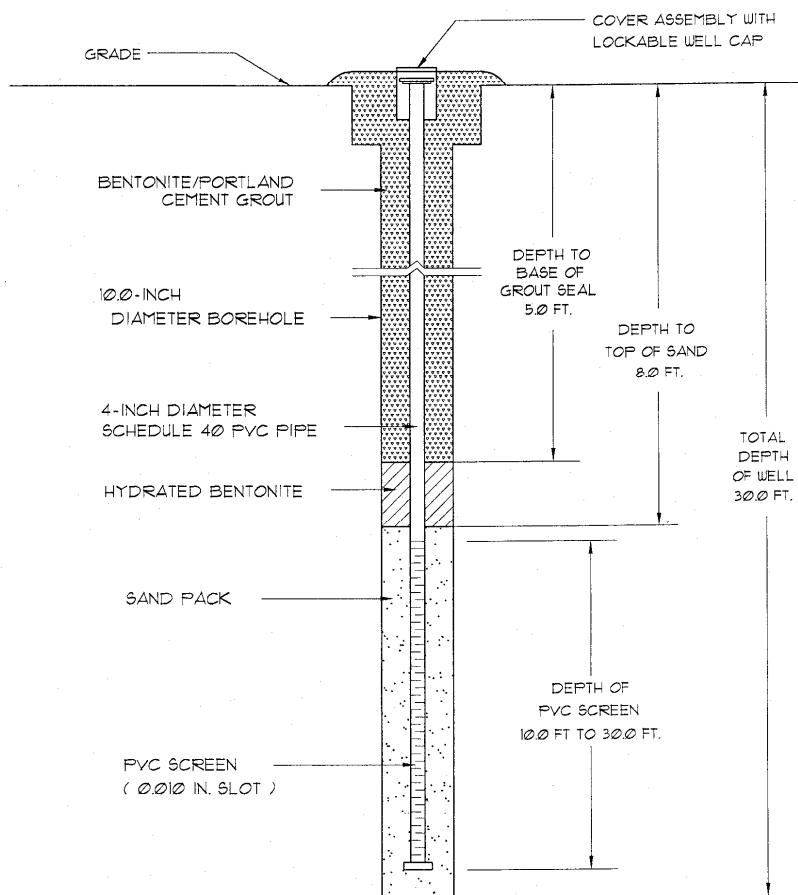
Well Number:	RW-2
Date Drilled:	12/9/10
Drilled By:	Geologic Exploration Inc.
Driller:	J. Watkins S.C. I.D. #: B 01979
Logged By:	B. Kelly

Prepared By:
Midlands Environmental Consultants, Inc.

 235-B Dooley Road
 Lexington, South Carolina 29073
 (803) 208-2043 fax: 208-2048

RECOVERY WELL INSTALLATION RECORD

Highway 11 Grocery
 Salem, South Carolina
 SCDHEC Site ID# 03439
 MECI Project Number 10-3090



Well Number:	RW-3
Date Drilled:	12/9/10
Drilled By:	Geologic Exploration Inc.
Driller:	J. Watkins S.C. I.D. #: B 01979
Logged By:	B. Kelly

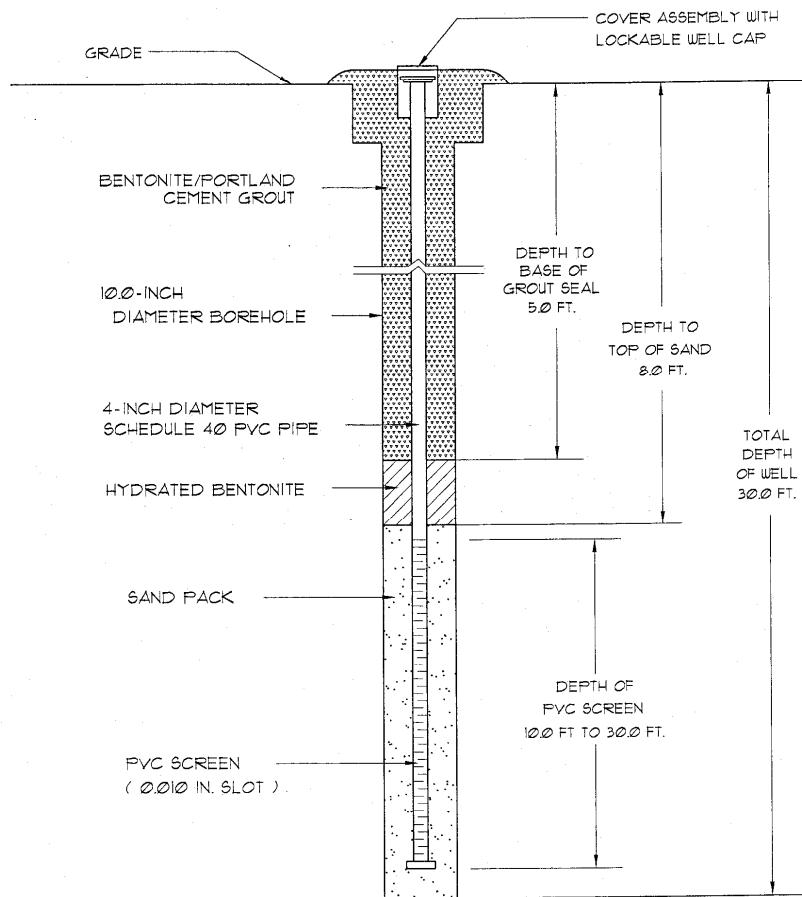
Prepared By:

Midlands Environmental Consultants, Inc.


 235-B Dooley Road
 Lexington, South Carolina 29073
 (803) 808-2043 fax: 808-2048

RECOVERY WELL INSTALLATION RECORD

Highway II Grocery
 Salem, South Carolina
 SCDHEC Site ID# 03439
 MECI Project Number 10-3090



Well Number:	RW-4
Date Drilled:	12/9/10
Drilled By:	Geologic Exploration Inc.
Driller:	J. Watkins S.C. I.D. #: B 01979
Logged By:	B. Kelly

Prepared By:
Midlands Environmental Consultants, Inc.

 235-B Doolley Road
 Lexington, South Carolina 29073
 (803) 928-2043 fax: 808-2048



Water Well Record

Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION: Name: HINKLE, LARRY (last) (first) Address: 102 QUARTER MILE ROAD City: CHESTERFIELD State: SC Zip: 29709 Telephone: Work: Home:		7. PERMIT NUMBER: 03439 8. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement			
2. LOCATION OF WELL: SC COUNTY: OCONEE Name: HIGHWAY 11 GROCERY Street Address: 13527 CHEROKEE Foothills City: SALEM Zip: 29676 Latitude: Longitude:		9. WELL DEPTH (completed) Date Started: 12/09/10 30.0 ft. Date Completed: 12/09/10 10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 4 INCH Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized <input type="checkbox"/> Steel <input type="checkbox"/> Other 4.0 in. to 10.0 ft. depth in. to ft. depth Height: Above <input type="checkbox"/> Below <input type="checkbox"/> Surface 0.0 ft. Weight _____ lb/ft. Drive Shoe? <input type="checkbox"/> Yes <input type="checkbox"/> No			
3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:		11. SCREEN: Type: SCH 40 PVC Diam.: 4 INCH Slot/Gauge: .010 Length: 20.0 FEET Set Between: 10.0 ft. and 30.0 ft. NOTE: MULTIPLE SCREENS ft. and ft. USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No			
4. ABANDONMENT: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Grouted Depth: from _____ ft. to _____ ft.		12. STATIC WATER LEVEL 25.0 ft. below land surface after 24 hours			
Formation Description		*Thickness of Stratum	Depth to Bottom of Stratum	13. PUMPING LEVEL Below Land Surface. ft. after _____ hrs. Pumping _____ G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input type="checkbox"/> No Yield: _____	
ORANGE SANDY SILT		18.0	18.0	14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Please enclose lab results.	
PARTIALLY WEATHERED ROCK		11.0	29.0	15. ARTIFICIAL FILTER (filter pack) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from 8.0 ft. to 30.0 ft. Effective size 1.43 Uniformity Coefficient 1.30	
ROCK		1.0	30.0	16. WELL GROUTED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other Depth: From 0.0 ft. to 5.0 ft.	
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. direction Type _____ Well Disinfected <input type="checkbox"/> Yes <input type="checkbox"/> No Type: _____ Amount: _____			
5. REMARKS: RW-I BENTONITE SEAL FROM 5.0 TO 8.0 FT.		18. PUMP: Date installed: _____ Not installed <input type="checkbox"/> Mr. Name: _____ Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal			
6. TYPE: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input type="checkbox"/> Other		19. WELL DRILLER: JERRY WATKINS CERT. NO.: 01979 Address: (Print) 176 COMMERCE BLVD Level: A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D (circle one) STATESVILLE, NC 28625 Telephone No.: 704-872-7686 Fax No.: 704-872-0248			
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: <i>Jerry Watkins</i> Date: 12/17/10 <small>Well Driller</small>			
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: HINKLE, LARRY (last) (first) Address: 102 QUARTER MILE ROAD City: CHESTERFIELD State: SC Zip: 29709 Telephone: Work: _____ Home: _____		7. PERMIT NUMBER: 03439	
2. LOCATION OF WELL: SC COUNTY: OCONEE Name: HIGHWAY 11 GROCERY Street Address: 13527 CHEROKEE Foothills City: SALEM Zip: 29676 Latitude: _____ Longitude: _____		8. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement	
3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:		9. WELL DEPTH (completed) Date Started: 12/09/10 _____ ft. Date Completed: 12/09/10	
4. ABANDONMENT: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Grouted Depth: from _____ ft. to _____ ft.		10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 4 INCH Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized <input type="checkbox"/> Steel <input type="checkbox"/> Other _____ in. to 10.0 ft. depth _____ in. to _____ ft. depth	
5. REMARKS: RW-2 BENTONITE SEAL FROM 5.0 TO 8.0 FT.		11. SCREEN: Type: SCH 40 PVC Diam.: 4 INCH Slot/Gauge: .010 Length: 20.0 FEET Set Between: 10.0 ft. and 30.0 ft. NOTE: MULTIPLE SCREENS _____ ft. and _____ ft. USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No	
6. TYPE: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input type="checkbox"/> Other		12. STATIC WATER LEVEL 25.0 ft. below land surface after 24 hours	
7. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. direction Type _____ Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Type: _____ Amount: _____		13. PUMPING LEVEL Below Land Surface. _____ ft. after _____ hrs. Pumping _____ G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No Yield: _____	
8. PUMP: Date installed: _____ Not installed <input type="checkbox"/> Mr. Name: _____ Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal		14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Please enclose lab results.	
9. WELL DRILLER: JERRY WATKINS CERT. NO.: 01979 Address: (Print) 176 COMMERCE BLVD Level: A B C D (circle one) STATESVILLE, NC 28625		15. ARTIFICIAL FILTER (filter pack) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from 8.0 ft. to 30.0 ft. Effective size 1.43 Uniformity Coefficient 1.30	
10. 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.		16. WELL GROUTED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other Depth: From 0.0 ft. to 5.0 ft.	
11. SCREEN: _____ ft. direction Type _____ Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Type: _____ Amount: _____		17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. direction Type _____ Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Type: _____ Amount: _____	
12. PUMP: Date installed: _____ Not installed <input type="checkbox"/> Mr. Name: _____ Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal		18. PUMP: Date installed: _____ Not installed <input type="checkbox"/> Mr. Name: _____ Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal	
19. WELL DRILLER: JERRY WATKINS CERT. NO.: 01979 Address: (Print) 176 COMMERCE BLVD Level: A B C D (circle one) STATESVILLE, NC 28625		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.	
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		Signed: <i>Jerry Watkins</i> Date: 12/17/10 Wall Driller	
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: HINKLE, LARRY (last) (first) Address: 102 QUARTER MILE ROAD City: CHESTERFIELD State: SC Zip: 29709 Telephone: Work: Home:		7. PERMIT NUMBER: 03439	
		8. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement	
		9. WELL DEPTH (completed) Date Started: 12/09/10 30.0 ft. Date Completed: 12/09/10	
		10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 4 INCH Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized <input type="checkbox"/> Steel <input type="checkbox"/> Other 4.0 in. to 10.0 ft. depth in. to ft. depth	
		11. SCREEN: Type: SCH 40 PVC Diam.: 4 INCH Slot/Gauge: .010 Length: 20.0 FEET Set Between: 10.0 ft. and 30.0 ft. NOTE: MULTIPLE SCREENS _____ ft. and _____ ft. USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No	
		12. STATIC WATER LEVEL 25.0 ft. below land surface after 24 hours	
		13. PUMPING LEVEL Below Land Surface. ft. after hrs. Pumping G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input type="checkbox"/> No Yield:	
		14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Please enclose lab results.	
		15. ARTIFICIAL FILTER (filter pack) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from 8.0 ft. to 30.0 ft. Effective size 1.43 Uniformity Coefficient 1.30	
		16. WELL GROUTED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other Depth: From 0.0 ft. to 5.0 ft.	
		17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction Type _____ Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Type: Amount:	
		18. PUMP: Date installed: Not installed <input type="checkbox"/> Mfr. Name: Model No.: H.P. Volts Length of drop pipe ft. Capacity gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal	
		19. WELL DRILLER: JERRY WATKINS CERT. NO.: 01979 Address: (Print) 176 COMMERCE BLVD Level: A B C D (circle one) STATESVILLE, NC 28625	
		Telephone No.: 704-872-7686 Fax No.: 704-872-0248 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: <i>Jerry Watkins</i> Date: 12/17/10 Well Driller	
		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

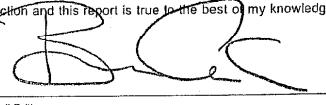
 D H E C FROM OFFICE TO PROTECT & PROSPER		Water Well Record Bureau of Water 2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300		
1. WELL OWNER INFORMATION: Name: HINKLE, LARRY (last) (first) Address: 102 QUARTER MILE ROAD City: CHESTERFIELD State: SC Zip: 29709 Telephone: Work: Home:		7. PERMIT NUMBER: 03439		
2. LOCATION OF WELL: SC COUNTY: OCONEE Name: HIGHWAY 11 GORCERY Street Address: 13527 CHEROKEE FOOTHILLS City: SALEM Zip: 29676 Latitude: Longitude:		8. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement		
3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:		9. WELL DEPTH (completed) Date Started: 12/09/10 30.0 ft. Date Completed: 12/09/10		
4. ABANDONMENT: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Grouted Depth: from _____ ft. to _____ ft.		10. CASING: <input type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 4 INCH Height: Above <input type="checkbox"/> Below <input type="checkbox"/> Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized Surface 0.0 <input type="checkbox"/> Steel <input type="checkbox"/> Other Weight _____ lb./ft. 4.0 in. to 10.0 ft. depth Drive Shoe? <input type="checkbox"/> Yes <input type="checkbox"/> No in. to _____ ft. depth		
3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:		11. SCREEN: Type: SCH 40 PVC Diam.: 4 INCH Slot/Gauge: .010 Length: 20.0 FEET Set Between: 10.0 ft. and 30.0 ft. NOTE: MULTIPLE SCREENS _____ ft. and _____ ft. USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No		
4. ABANDONMENT: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Grouted Depth: from _____ ft. to _____ ft.		12. STATIC WATER LEVEL 25.0 ft. below land surface after 24 hours		
5. REMARKS: RW-4 BENTONITE SEAL FROM 5.0 TO 8.0 FT.		13. PUMPING LEVEL Below Land Surface. _____ ft. after _____ hrs. Pumping _____ G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input type="checkbox"/> No Yield: _____		
6. TYPE: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input type="checkbox"/> Other		14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Please enclose lab results.		
5. REMARKS: RW-4 BENTONITE SEAL FROM 5.0 TO 8.0 FT.		15. ARTIFICIAL FILTER (filter pack) <input type="checkbox"/> Yes <input type="checkbox"/> No Installed from 8.0 ft. to 30.0 ft. Effective size 1.43 Uniformity Coefficient 1.30		
5. REMARKS: RW-4 BENTONITE SEAL FROM 5.0 TO 8.0 FT.		16. WELL GROUTED? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other Depth: From 0.0 ft. to 5.0 ft.		
5. REMARKS: RW-4 BENTONITE SEAL FROM 5.0 TO 8.0 FT.		17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. direction Type _____ Well Disinfected <input type="checkbox"/> Yes <input type="checkbox"/> No Type: _____ Amount: _____		
5. REMARKS: RW-4 BENTONITE SEAL FROM 5.0 TO 8.0 FT.		18. PUMP: Date installed: _____ Not installed <input type="checkbox"/> Mfr. Name: _____ Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal		
5. REMARKS: RW-4 BENTONITE SEAL FROM 5.0 TO 8.0 FT.		19. WELL DRILLER: JERRY WATKINS CERT. NO.: 01979 Address: (Print) 176 COMMERCE BLVD Level: A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D (circle one) STATESVILLE, NC 28625 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
5. REMARKS: RW-4 BENTONITE SEAL FROM 5.0 TO 8.0 FT.		Telephone No.: 704-872-7686 Fax No.: 704-872-0248 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.		
5. REMARKS: RW-4 BENTONITE SEAL FROM 5.0 TO 8.0 FT.		<p style="text-align: right;"><i>Jerry Watkins</i></p> Signed: _____ Date: 12/17/10 Well Driller		
6. TYPE: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input type="checkbox"/> Other		If D Level Driller, provide supervising driller's name: _____		



Water Well Record

Bureau of Water

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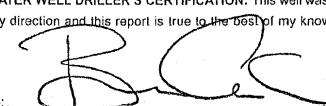
1. WELL OWNER INFORMATION: Name: HINKLE, LARRY (last) (first) Address: 102 QUARTER MILE ROAD City: CHESTERFIELD State: SC Zip: 29709 Telephone: Work: Home:		7. PERMIT NUMBER: 03439
2. LOCATION OF WELL: SC COUNTY: OCONEE Name: HIGHWAY 11 GROCERY Street Address: 13527 CHEROKEE Foothills HWY City: SALEM Zip: 29676 Latitude: Longitude:		8. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement
3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:		9. WELL DEPTH (completed) Date Started: 12/01/10 20.0 ft. Date Completed: 12/01/10
4. ABANDONMENT: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Grouted Depth: from 0.0 ft. to 20.0 ft.		10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 2 INCH Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized <input type="checkbox"/> Steel <input type="checkbox"/> Other _____ in. to _____ ft. depth _____ in. to _____ ft. depth
		Height: Above <input type="checkbox"/> Below <input type="checkbox"/> Surface _____ ft. Weight _____ lb./ft. Drive Shoe? <input type="checkbox"/> Yes <input type="checkbox"/> No
5. REMARKS: SB-I SOIL BORING		11. SCREEN: Type: _____ Diam: _____ Slot/Gauge: _____ Length: _____ Set Between: _____ ft. and _____ ft. NOTE: MULTIPLE SCREENS _____ ft. and _____ ft. USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input type="checkbox"/> 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: <input type="checkbox"/> Yes (please enclose) <input type="checkbox"/> No Yield: _____
		14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Please enclose lab results.
		15. ARTIFICIAL FILTER (filter pack) <input type="checkbox"/> Yes <input type="checkbox"/> No Installed from _____ ft. to _____ ft. Effective size _____ Uniformity Coefficient _____
		16. WELL GROUTED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Bentonite/Cement <input type="checkbox"/> Other _____ Depth: From _____ ft. to _____ ft.
		17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. direction Type _____ Well Disinfected <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Type: _____ Amount: _____
		18. PUMP: Date installed: _____ Not installed <input type="checkbox"/> Mfr. Name: _____ Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jel (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal
		19. WELL DRILLER: BRIAN CORNELL CERT. NO.: 01299 Address: (Print) 176 COMMERCIAL BLVD Level: A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D (circle one) STATESVILLE, NC 28625
		Telephone No.: 704-872-7686 Fax No.: 704-872-0248
		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: 12/06/10 Well Driller
6. TYPE: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input type="checkbox"/> Other		If D Level Driller, provide supervising driller's name:



Water Well Record

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1. WELL OWNER INFORMATION: Name: HINKLE, LARRY (last) (first) Address: 102 QUARTER MILE ROAD City: CHESTERFIELD State: SC Zip: 29709 Telephone: Work: _____ Home: _____		7. PERMIT NUMBER: 03439	
2. LOCATION OF WELL: SC COUNTY: OCONEE Name: HIGHWAY 11 GROCERY Street Address: 13527 CHEROKEE Foothills HWY City: SALEM Zip: 29676 Latitude: _____ Longitude: _____		8. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement	
3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER:		9. WELL DEPTH (completed) Date Started: 12/01/10 13.0 ft. Date Completed: 12/01/10	
4. ABANDONMENT: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Grouted Depth: from 0.0 ft. to 13.0 ft.		10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 2 INCH Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized <input type="checkbox"/> Steel <input type="checkbox"/> Other _____ in. to _____ ft. depth _____ in. to _____ ft. depth	
5. REMARKS: SB-2 SOIL BORING		11. SCREEN: Type: _____ Diam.: _____ Slot/Gauge: _____ Length: _____ Set Between: _____ ft. and _____ ft. NOTE: MULTIPLE SCREENS _____ ft. and _____ ft. USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input type="checkbox"/> No	
6. TYPE: <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input type="checkbox"/> Other		12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours	
7. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. direction Type _____ Well Disinfected <input type="checkbox"/> Yes <input type="checkbox"/> No type: _____ Amount: _____		13. PUMPING LEVEL Below Land Surface. _____ ft. after _____ hrs. Pumping _____ G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input type="checkbox"/> No Yield: _____	
8. PUMP: Date installed: _____ Not installed <input type="checkbox"/> Mfr. Name: _____ Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal		14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Please enclose lab results.	
9. WELL DRILLER: BRIAN CORNELL CERT. NO.: 01299 Address: (Print) 176 COMMERCE BLVD Level: A B C D (circle one) STATESVILLE, NC 28625		15. ARTIFICIAL FILTER (filter pack) <input type="checkbox"/> Yes <input type="checkbox"/> No Installed from _____ ft. to _____ ft. Effective size _____ Uniformity Coefficient _____	
10. 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		11. D LEVEL DRILLER: _____ Date: 12/06/10 If D Level Driller, provide supervising driller's name: _____	

ANALYTICAL RESULTS



Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

December 21, 2010

Mr. Bryan Shane
Midlands Environmental
PO Box 854
Lexington, SC 29071

RE: Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Dear Mr. Shane:

Enclosed are the analytical results for sample(s) received by the laboratory on December 15, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature of 'Renee Spencer'.

Renee Spencer

reneee.spencer@pacelabs.com
Project Manager

Enclosures

cc: Mr. Jeff Coleman, Midlands Environmental

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/LELAP Certification #: 04034
New Jersey Certification #: NC012
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
Pennsylvania Certification #: 68-00784
South Carolina Certification #: 99006001

South Carolina Drinking Water Cert. #: 99006003
Virginia Certification #: 00213
Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DHH Drinking Water # LA 100031
West Virginia Certification #: 357

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SAMPLE SUMMARY

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9284163001	MW-1	Water	12/13/10 13:20	12/15/10 15:15
9284163002	MW-2	Water	12/13/10 14:40	12/15/10 15:15
9284163003	MW-3	Water	12/13/10 14:50	12/15/10 15:15
9284163004	MW-4	Water	12/13/10 15:00	12/15/10 15:15
9284163005	MW-6	Water	12/13/10 14:10	12/15/10 15:15
9284163006	MW-9	Water	12/13/10 11:55	12/15/10 15:15
9284163007	MW-10	Water	12/13/10 14:25	12/15/10 15:15
9284163008	MW-11	Water	12/13/10 12:35	12/15/10 15:15
9284163009	MW-12	Water	12/13/10 11:40	12/15/10 15:15
9284163010	MW-13	Water	12/13/10 15:30	12/15/10 15:15
9284163011	MW-14	Water	12/13/10 11:50	12/15/10 15:15
9284163012	DMW-1	Water	12/13/10 13:50	12/15/10 15:15
9284163013	DMW-2	Water	12/13/10 12:30	12/15/10 15:15
9284163014	DMW-4	Water	12/13/10 13:25	12/15/10 15:15
9284163015	RW-1	Water	12/13/10 13:00	12/15/10 15:15
9284163016	RW-3	Water	12/13/10 14:05	12/15/10 15:15
9284163017	RW-4	Water	12/13/10 14:10	12/15/10 15:15
9284163018	CK-1	Water	12/13/10 11:00	12/15/10 15:15
9284163019	CK-2	Water	12/13/10 11:10	12/15/10 15:15
9284163020	CK-3	Water	12/13/10 11:20	12/15/10 15:15
9284163021	WSW-1	Water	12/13/10 14:50	12/15/10 15:15

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SAMPLE ANALYTE COUNT

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Lab ID	Sample ID	Method	Analysts	Analytes Reported
9284163001	MW-1	EPA 8260	KJM	21
9284163002	MW-2	EPA 8260	KJM	21
9284163003	MW-3	EPA 8260	KJM	21
9284163004	MW-4	EPA 8260	KJM	21
9284163005	MW-6	EPA 8260	KJM	21
9284163006	MW-9	EPA 8260	KJM	21
9284163007	MW-10	EPA 8260	KJM	21
9284163008	MW-11	EPA 8260	KJM	21
9284163009	MW-12	EPA 8260	KJM	21
9284163010	MW-13	EPA 8260	KJM	21
9284163011	MW-14	EPA 8260	KJM	21
9284163012	DMW-1	EPA 8260	KJM	21
9284163013	DMW-2	EPA 8260	KJM	21
9284163014	DMW-4	EPA 8260	KJM	21
9284163015	RW-1	EPA 8260	KJM	21
9284163016	RW-3	EPA 8260	KJM	21
9284163017	RW-4	EPA 8260	KJM	21
9284163018	CK-1	EPA 8260	KJM	21
9284163019	CK-2	EPA 8260	KJM	21
9284163020	CK-3	EPA 8260	KJM	21
9284163021	WSW-1	EPA 8260	KJM	21

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ANALYTICAL RESULTS

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Sample: MW-1	Lab ID: 9284163001	Collected: 12/13/10 13:20	Received: 12/15/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual

8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	3430J ug/L		5000	3100	50		12/19/10 12:25	75-85-4	
tert-Amylmethyl ether	735 ug/L		500	225	50		12/19/10 12:25	994-05-8	
Benzene	4530 ug/L		250	60.0	50		12/19/10 12:25	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		5000	2400	50		12/19/10 12:25	624-95-3	
tert-Butyl Alcohol	1600J ug/L		5000	1350	50		12/19/10 12:25	75-65-0	
tert-Butyl Formate	ND ug/L		2500	450	50		12/19/10 12:25	762-75-4	
1,2-Dichloroethane	ND ug/L		250	65.0	50		12/19/10 12:25	107-06-2	
Diisopropyl ether	449 ug/L		250	135	50		12/19/10 12:25	108-20-3	
Ethanol	ND ug/L		10000	8500	50		12/19/10 12:25	64-17-5	
Ethylbenzene	1150 ug/L		250	55.0	50		12/19/10 12:25	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		500	230	50		12/19/10 12:25	637-92-3	
Methyl-tert-butyl ether	30400 ug/L		2500	1000	500		12/20/10 17:51	1634-04-4	
Naphthalene	529 ug/L		250	145	50		12/19/10 12:25	91-20-3	
Toluene	8750 ug/L		2500	900	500		12/20/10 17:51	108-88-3	
Xylene (Total)	6430 ug/L		500	135	50		12/19/10 12:25	1330-20-7	
m&p-Xylene	4420 ug/L		500	135	50		12/19/10 12:25	179601-23-1	
o-Xylene	2010 ug/L		250	85.0	50		12/19/10 12:25	95-47-6	
Dibromofluoromethane (S)	102 %		70-130		50		12/19/10 12:25	1868-53-7	
Toluene-d8 (S)	98 %		70-130		50		12/19/10 12:25	2037-26-5	
4-Bromofluorobenzene (S)	98 %		70-130		50		12/19/10 12:25	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		70-130		50		12/19/10 12:25	17060-07-0	

Sample: MW-2	Lab ID: 9284163002	Collected: 12/13/10 14:40	Received: 12/15/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND ug/L		100	62.0	1		12/19/10 04:27	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		12/19/10 04:27	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		12/19/10 04:27	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		12/19/10 04:27	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		12/19/10 04:27	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		12/19/10 04:27	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		12/19/10 04:27	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		12/19/10 04:27	108-20-3	
Ethanol	ND ug/L		200	170	1		12/19/10 04:27	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		12/19/10 04:27	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		12/19/10 04:27	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		12/19/10 04:27	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		12/19/10 04:27	91-20-3	
Toluene	ND ug/L		5.0	1.8	1		12/19/10 04:27	108-88-3	
Xylene (Total)	ND ug/L		10.0	2.7	1		12/19/10 04:27	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		12/19/10 04:27	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		12/19/10 04:27	95-47-6	

Date: 12/21/2010 05:08 PM

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ANALYTICAL RESULTS

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Sample: MW-2 Lab ID: 9284163002 Collected: 12/13/10 14:40 Received: 12/15/10 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
Dibromofluoromethane (S)	103 %		70-130		1		12/19/10 04:27	1868-53-7	
Toluene-d8 (S)	89 %		70-130		1		12/19/10 04:27	2037-26-5	
4-Bromofluorobenzene (S)	93 %		70-130		1		12/19/10 04:27	460-00-4	
1,2-Dichloroethane-d4 (S)	109 %		70-130		1		12/19/10 04:27	17060-07-0	

Sample: MW-3 Lab ID: 9284163003 Collected: 12/13/10 14:50 Received: 12/15/10 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Amyl Alcohol	ND ug/L		100	62.0	1		12/19/10 04:45	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		12/19/10 04:45	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		12/19/10 04:45	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		12/19/10 04:45	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		12/19/10 04:45	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		12/19/10 04:45	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		12/19/10 04:45	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		12/19/10 04:45	108-20-3	
Ethanol	ND ug/L		200	170	1		12/19/10 04:45	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		12/19/10 04:45	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		12/19/10 04:45	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		12/19/10 04:45	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		12/19/10 04:45	91-20-3	
Toluene	ND ug/L		5.0	1.8	1		12/19/10 04:45	108-88-3	
Xylene (Total)	ND ug/L		10.0	2.7	1		12/19/10 04:45	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		12/19/10 04:45	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		12/19/10 04:45	95-47-6	
Dibromofluoromethane (S)	102 %		70-130		1		12/19/10 04:45	1868-53-7	
Toluene-d8 (S)	82 %		70-130		1		12/19/10 04:45	2037-26-5	
4-Bromofluorobenzene (S)	93 %		70-130		1		12/19/10 04:45	460-00-4	
1,2-Dichloroethane-d4 (S)	107 %		70-130		1		12/19/10 04:45	17060-07-0	

Sample: MW-4 Lab ID: 9284163004 Collected: 12/13/10 15:00 Received: 12/15/10 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Amyl Alcohol	342J ug/L		500	310	5		12/19/10 09:21	75-85-4	
tert-Amylmethyl ether	ND ug/L		50.0	22.5	5		12/19/10 09:21	994-05-8	
Benzene	520 ug/L		25.0	6.0	5		12/19/10 09:21	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		500	240	5		12/19/10 09:21	624-95-3	
tert-Butyl Alcohol	ND ug/L		500	135	5		12/19/10 09:21	75-65-0	

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ANALYTICAL RESULTS

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Sample: MW-4 Lab ID: 9284163004 Collected: 12/13/10 15:00 Received: 12/15/10 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Butyl Formate	ND ug/L	250	45.0	5			12/19/10 09:21	762-75-4	
1,2-Dichloroethane	ND ug/L	25.0	6.5	5			12/19/10 09:21	107-06-2	
Diisopropyl ether	25.3 ug/L	25.0	13.5	5			12/19/10 09:21	108-20-3	
Ethanol	ND ug/L	1000	850	5			12/19/10 09:21	64-17-5	
Ethylbenzene	55.2 ug/L	25.0	5.5	5			12/19/10 09:21	100-41-4	
Ethyl-tert-butyl ether	ND ug/L	50.0	23.0	5			12/19/10 09:21	637-92-3	
Methyl-tert-butyl ether	763 ug/L	25.0	10.0	5			12/19/10 09:21	1634-04-4	
Naphthalene	18.2J ug/L	25.0	14.5	5			12/19/10 09:21	91-20-3	
Toluene	224 ug/L	25.0	9.0	5			12/19/10 09:21	108-88-3	
Xylene (Total)	482 ug/L	50.0	13.5	5			12/19/10 09:21	1330-20-7	
m&p-Xylene	281 ug/L	50.0	13.5	5			12/19/10 09:21	179601-23-1	
o-Xylene	200 ug/L	25.0	8.5	5			12/19/10 09:21	95-47-6	
Dibromofluoromethane (S)	103 %	70-130		5			12/19/10 09:21	1868-53-7	
Toluene-d8 (S)	100 %	70-130		5			12/19/10 09:21	2037-26-5	
4-Bromofluorobenzene (S)	98 %	70-130		5			12/19/10 09:21	460-00-4	
1,2-Dichloroethane-d4 (S)	107 %	70-130		5			12/19/10 09:21	17060-07-0	

Sample: MW-6 Lab ID: 9284163005 Collected: 12/13/10 14:10 Received: 12/15/10 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Amyl Alcohol	ND ug/L	5000	3100	50			12/20/10 16:19	75-85-4	
tert-Amylmethyl ether	ND ug/L	500	225	50			12/20/10 16:19	994-05-8	
Benzene	1300 ug/L	250	60.0	50			12/20/10 16:19	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L	5000	2400	50			12/20/10 16:19	624-95-3	
tert-Butyl Alcohol	ND ug/L	5000	1350	50			12/20/10 16:19	75-65-0	
tert-Butyl Formate	ND ug/L	2500	450	50			12/20/10 16:19	762-75-4	
1,2-Dichloroethane	ND ug/L	250	65.0	50			12/20/10 16:19	107-06-2	
Diisopropyl ether	ND ug/L	250	135	50			12/20/10 16:19	108-20-3	
Ethanol	ND ug/L	10000	8500	50			12/20/10 16:19	64-17-5	
Ethylbenzene	360 ug/L	250	55.0	50			12/20/10 16:19	100-41-4	
Ethyl-tert-butyl ether	ND ug/L	500	230	50			12/20/10 16:19	637-92-3	
Methyl-tert-butyl ether	2500 ug/L	250	100	50			12/20/10 16:19	1634-04-4	
Naphthalene	ND ug/L	250	145	50			12/20/10 16:19	91-20-3	
Toluene	6340 ug/L	250	90.0	50			12/20/10 16:19	108-88-3	
Xylene (Total)	7910 ug/L	500	135	50			12/20/10 16:19	1330-20-7	
m&p-Xylene	5400 ug/L	500	135	50			12/20/10 16:19	179601-23-1	
o-Xylene	2510 ug/L	250	85.0	50			12/20/10 16:19	95-47-6	
Dibromofluoromethane (S)	100 %	70-130		50			12/20/10 16:19	1868-53-7	
Toluene-d8 (S)	100 %	70-130		50			12/20/10 16:19	2037-26-5	
4-Bromofluorobenzene (S)	98 %	70-130		50			12/20/10 16:19	460-00-4	
1,2-Dichloroethane-d4 (S)	110 %	70-130		50			12/20/10 16:19	17060-07-0	

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ANALYTICAL RESULTS

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Sample: MW-9	Lab ID: 9284163006	Collected: 12/13/10 11:55	Received: 12/15/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Amyl Alcohol	ND ug/L	100	62.0	1			12/19/10 05:04	75-85-4	
tert-Amylmethyl ether	ND ug/L	10.0	4.5	1			12/19/10 05:04	994-05-8	
Benzene	ND ug/L	5.0	1.2	1			12/19/10 05:04	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L	100	48.0	1			12/19/10 05:04	624-95-3	
tert-Butyl Alcohol	ND ug/L	100	27.0	1			12/19/10 05:04	75-65-0	
tert-Butyl Formate	ND ug/L	50.0	9.0	1			12/19/10 05:04	762-75-4	
1,2-Dichloroethane	ND ug/L	5.0	1.3	1			12/19/10 05:04	107-06-2	
Diisopropyl ether	ND ug/L	5.0	2.7	1			12/19/10 05:04	108-20-3	
Ethanol	ND ug/L	200	170	1			12/19/10 05:04	64-17-5	
Ethylbenzene	ND ug/L	5.0	1.1	1			12/19/10 05:04	100-41-4	
Ethyl-tert-butyl ether	ND ug/L	10.0	4.6	1			12/19/10 05:04	637-92-3	
Methyl-tert-butyl ether	ND ug/L	5.0	2.0	1			12/19/10 05:04	1634-04-4	
Naphthalene	ND ug/L	5.0	2.9	1			12/19/10 05:04	91-20-3	
Toluene	ND ug/L	5.0	1.8	1			12/19/10 05:04	108-88-3	
Xylene (Total)	ND ug/L	10.0	2.7	1			12/19/10 05:04	1330-20-7	
m&p-Xylene	ND ug/L	10.0	2.7	1			12/19/10 05:04	179601-23-1	
o-Xylene	ND ug/L	5.0	1.7	1			12/19/10 05:04	95-47-6	
Dibromofluoromethane (S)	103 %	70-130		1			12/19/10 05:04	1868-53-7	
Toluene-d8 (S)	97 %	70-130		1			12/19/10 05:04	2037-26-5	
4-Bromofluorobenzene (S)	93 %	70-130		1			12/19/10 05:04	460-00-4	
1,2-Dichloroethane-d4 (S)	110 %	70-130		1			12/19/10 05:04	17060-07-0	

Sample: MW-10	Lab ID: 9284163007	Collected: 12/13/10 14:25	Received: 12/15/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Amyl Alcohol	ND ug/L	100	62.0	1			12/19/10 05:22	75-85-4	
tert-Amylmethyl ether	ND ug/L	10.0	4.5	1			12/19/10 05:22	994-05-8	
Benzene	50.0 ug/L	5.0	1.2	1			12/19/10 05:22	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L	100	48.0	1			12/19/10 05:22	624-95-3	
tert-Butyl Alcohol	ND ug/L	100	27.0	1			12/19/10 05:22	75-65-0	
tert-Butyl Formate	ND ug/L	50.0	9.0	1			12/19/10 05:22	762-75-4	
1,2-Dichloroethane	ND ug/L	5.0	1.3	1			12/19/10 05:22	107-06-2	
Diisopropyl ether	ND ug/L	5.0	2.7	1			12/19/10 05:22	108-20-3	
Ethanol	ND ug/L	200	170	1			12/19/10 05:22	64-17-5	
Ethylbenzene	5.2 ug/L	5.0	1.1	1			12/19/10 05:22	100-41-4	
Ethyl-tert-butyl ether	ND ug/L	10.0	4.6	1			12/19/10 05:22	637-92-3	
Methyl-tert-butyl ether	22.9 ug/L	5.0	2.0	1			12/19/10 05:22	1634-04-4	
Naphthalene	ND ug/L	5.0	2.9	1			12/19/10 05:22	91-20-3	
Toluene	8.0 ug/L	5.0	1.8	1			12/19/10 05:22	108-88-3	
Xylene (Total)	51.7 ug/L	10.0	2.7	1			12/19/10 05:22	1330-20-7	
m&p-Xylene	21.7 ug/L	10.0	2.7	1			12/19/10 05:22	179601-23-1	
o-Xylene	30.0 ug/L	5.0	1.7	1			12/19/10 05:22	95-47-6	

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ANALYTICAL RESULTS

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Sample: MW-10 Lab ID: 9284163007 Collected: 12/13/10 14:25 Received: 12/15/10 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
Dibromofluoromethane (S)	101 %		70-130		1		12/19/10 05:22	1868 53-7	
Toluene-d8 (S)	98 %		70-130		1		12/19/10 05:22	2037-26-5	
4-Bromofluorobenzene (S)	99 %		70-130		1		12/19/10 05:22	460-00-4	
1,2-Dichloroethane-d4 (S)	105 %		70-130		1		12/19/10 05:22	17060-07-0	

Sample: MW-11 Lab ID: 9284163008 Collected: 12/13/10 12:35 Received: 12/15/10 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Amyl Alcohol	ND ug/L		100	62.0	1		12/19/10 05:40	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		12/19/10 05:40	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		12/19/10 05:40	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		12/19/10 05:40	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		12/19/10 05:40	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		12/19/10 05:40	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		12/19/10 05:40	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		12/19/10 05:40	108-20-3	
Ethanol	ND ug/L		200	170	1		12/19/10 05:40	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		12/19/10 05:40	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		12/19/10 05:40	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		12/19/10 05:40	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		12/19/10 05:40	91-20-3	
Toluene	ND ug/L		5.0	1.8	1		12/19/10 05:40	108-88-3	
Xylene (Total)	ND ug/L		10.0	2.7	1		12/19/10 05:40	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		12/19/10 05:40	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		12/19/10 05:40	95-47-6	
Dibromofluoromethane (S)	101 %		70-130		1		12/19/10 05:40	1868-53-7	
Toluene-d8 (S)	99 %		70-130		1		12/19/10 05:40	2037-26-5	
4-Bromofluorobenzene (S)	95 %		70-130		1		12/19/10 05:40	460-00-4	
1,2-Dichloroethane-d4 (S)	109 %		70-130		1		12/19/10 05:40	17060-07-0	

Sample: MW-12 Lab ID: 9284163009 Collected: 12/13/10 11:40 Received: 12/15/10 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Amyl Alcohol	ND ug/L		100	62.0	1		12/19/10 05:59	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		12/19/10 05:59	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		12/19/10 05:59	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		12/19/10 05:59	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		12/19/10 05:59	75-65-0	

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ANALYTICAL RESULTS

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Sample: MW-12 Lab ID: 9284163009 Collected: 12/13/10 11:40 Received: 12/15/10 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Butyl Formate	ND ug/L		50.0	9.0	1		12/19/10 05:59	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		12/19/10 05:59	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		12/19/10 05:59	108-20-3	
Ethanol	ND ug/L		200	170	1		12/19/10 05:59	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		12/19/10 05:59	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		12/19/10 05:59	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		12/19/10 05:59	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		12/19/10 05:59	91-20-3	
Toluene	ND ug/L		5.0	1.8	1		12/19/10 05:59	108-88-3	
Xylene (Total)	ND ug/L		10.0	2.7	1		12/19/10 05:59	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		12/19/10 05:59	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		12/19/10 05:59	95-47-6	
Dibromofluoromethane (S)	102 %		70-130		1		12/19/10 05:59	1868-53-7	
Toluene-d8 (S)	96 %		70-130		1		12/19/10 05:59	2037-26-5	
4-Bromofluorobenzene (S)	94 %		70-130		1		12/19/10 05:59	460-00-4	
1,2-Dichloroethane-d4 (S)	111 %		70-130		1		12/19/10 05:59	17060-07-0	

Sample: MW-13 Lab ID: 9284163010 Collected: 12/13/10 15:30 Received: 12/15/10 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Amyl Alcohol	ND ug/L		100	62.0	1		12/19/10 06:17	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		12/19/10 06:17	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		12/19/10 06:17	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		12/19/10 06:17	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		12/19/10 06:17	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		12/19/10 06:17	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		12/19/10 06:17	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		12/19/10 06:17	108-20-3	
Ethanol	ND ug/L		200	170	1		12/19/10 06:17	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		12/19/10 06:17	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		12/19/10 06:17	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		12/19/10 06:17	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		12/19/10 06:17	91-20-3	
Toluene	ND ug/L		5.0	1.8	1		12/19/10 06:17	108-88-3	
Xylene (Total)	ND ug/L		10.0	2.7	1		12/19/10 06:17	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		12/19/10 06:17	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		12/19/10 06:17	95-47-6	
Dibromofluoromethane (S)	101 %		70-130		1		12/19/10 06:17	1868-53-7	
Toluene d8 (S)	94 %		70-130		1		12/19/10 06:17	2037-26-5	
4-Bromofluorobenzene (S)	96 %		70-130		1		12/19/10 06:17	460-00-4	
1,2-Dichloroethane-d4 (S)	108 %		70-130		1		12/19/10 06:17	17060-07-0	

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ANALYTICAL RESULTS

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Sample: MW-14	Lab ID: 9284163011	Collected: 12/13/10 11:50	Received: 12/15/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates		Analytical Method: EPA 8260							
tert-Amyl Alcohol	ND ug/L		5000	3100	50		12/19/10 09:58	75-85-4	
tert-Amylmethyl ether	ND ug/L		500	225	50		12/19/10 09:58	994-05-8	
Benzene	1410 ug/L		250	60.0	50		12/19/10 09:58	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		5000	2400	50		12/19/10 09:58	624-95-3	
tert-Butyl Alcohol	ND ug/L		5000	1350	50		12/19/10 09:58	75-65-0	
tert-Butyl Formate	ND ug/L		2500	450	50		12/19/10 09:58	762-75-4	
1,2-Dichloroethane	ND ug/L		250	65.0	50		12/19/10 09:58	107-06-2	
Diisopropyl ether	ND ug/L		250	135	50		12/19/10 09:58	108-20-3	
Ethanol	ND ug/L		10000	8500	50		12/19/10 09:58	64-17-5	
Ethylbenzene	1490 ug/L		250	55.0	50		12/19/10 09:58	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		500	230	50		12/19/10 09:58	637-92-3	
Methyl-tert-butyl ether	1500 ug/L		250	100	50		12/19/10 09:58	1634-04-4	
Naphthalene	359 ug/L		250	145	50		12/19/10 09:58	91-20-3	
Toluene	4840 ug/L		250	90.0	50		12/19/10 09:58	108-88-3	
Xylene (Total)	8450 ug/L		500	135	50		12/19/10 09:58	1330-20-7	
m&p-Xylene	5790 ug/L		500	135	50		12/19/10 09:58	179601-23-1	
o-Xylene	2660 ug/L		250	85.0	50		12/19/10 09:58	95-47-6	
Dibromofluoromethane (S)	101 %		70-130		50		12/19/10 09:58	1868-53-7	
Toluene-d8 (S)	99 %		70-130		50		12/19/10 09:58	2037-26-5	
4-Bromofluorobenzene (S)	99 %		70-130		50		12/19/10 09:58	460-00-4	
1,2-Dichloroethane-d4 (S)	109 %		70-130		50		12/19/10 09:58	17060-07-0	

Sample: DMW-1	Lab ID: 9284163012	Collected: 12/13/10 13:50	Received: 12/15/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates		Analytical Method: EPA 8260							
tert-Amyl Alcohol	ND ug/L		100	62.0	1		12/19/10 06:35	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		12/19/10 06:35	994-05-8	
Benzene	3.0J ug/L		5.0	1.2	1		12/19/10 06:35	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		12/19/10 06:35	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		12/19/10 06:35	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		12/19/10 06:35	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		12/19/10 06:35	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		12/19/10 06:35	108-20-3	
Ethanol	ND ug/L		200	170	1		12/19/10 06:35	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		12/19/10 06:35	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		12/19/10 06:35	637-92-3	
Methyl-tert-butyl ether	104 ug/L		5.0	2.0	1		12/19/10 06:35	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		12/19/10 06:35	91-20-3	
Toluene	3.6J ug/L		5.0	1.8	1		12/19/10 06:35	108-88-3	
Xylene (Total)	3.1J ug/L		10.0	2.7	1		12/19/10 06:35	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		12/19/10 06:35	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		12/19/10 06:35	95-47-6	

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ANALYTICAL RESULTS

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Sample: DMW-1 Lab ID: 9284163012 Collected: 12/13/10 13:50 Received: 12/15/10 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
Dibromofluoromethane (S)	102 %		70-130		1		12/19/10 06:35	1868-53-7	
Toluene-d8 (S)	98 %		70-130		1		12/19/10 06:35	2037-26-5	
4-Bromofluorobenzene (S)	96 %		70-130		1		12/19/10 06:35	460-00-4	
1,2-Dichloroethane-d4 (S)	111 %		70-130		1		12/19/10 06:35	17060-07-0	

Sample: DMW-2 Lab ID: 9284163013 Collected: 12/13/10 12:30 Received: 12/15/10 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Amyl Alcohol	ND ug/L		100	62.0	1		12/19/10 06:54	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		12/19/10 06:54	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		12/19/10 06:54	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		12/19/10 06:54	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		12/19/10 06:54	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		12/19/10 06:54	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		12/19/10 06:54	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		12/19/10 06:54	108-20-3	
Ethanol	ND ug/L		200	170	1		12/19/10 06:54	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		12/19/10 06:54	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		12/19/10 06:54	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		12/19/10 06:54	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		12/19/10 06:54	91-20-3	
Toluene	ND ug/L		5.0	1.8	1		12/19/10 06:54	108-88-3	
Xylene (Total)	ND ug/L		10.0	2.7	1		12/19/10 06:54	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		12/19/10 06:54	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		12/19/10 06:54	95-47-6	
Dibromofluoromethane (S)	104 %		70-130		1		12/19/10 06:54	1868-53-7	
Toluene-d8 (S)	100 %		70-130		1		12/19/10 06:54	2037-26-5	
4-Bromofluorobenzene (S)	95 %		70-130		1		12/19/10 06:54	460-00-4	
1,2-Dichloroethane-d4 (S)	112 %		70-130		1		12/19/10 06:54	17060-07-0	

Sample: DMW-4 Lab ID: 9284163014 Collected: 12/13/10 13:25 Received: 12/15/10 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Amyl Alcohol	ND ug/L		100	62.0	1		12/19/10 07:12	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		12/19/10 07:12	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		12/19/10 07:12	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		12/19/10 07:12	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		12/19/10 07:12	75-65-0	

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(704)875-9092

ANALYTICAL RESULTS

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Sample: DMW-4	Lab ID: 9284163014	Collected: 12/13/10 13:25	Received: 12/15/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates		Analytical Method: EPA 8260							
tert-Butyl Formate	ND ug/L		50.0	9.0	1		12/19/10 07:12	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		12/19/10 07:12	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		12/19/10 07:12	108-20-3	
Ethanol	ND ug/L		200	170	1		12/19/10 07:12	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		12/19/10 07:12	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		12/19/10 07:12	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		12/19/10 07:12	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		12/19/10 07:12	91-20-3	
Toluene	ND ug/L		5.0	1.8	1		12/19/10 07:12	108-88-3	
Xylene (Total)	ND ug/L		10.0	2.7	1		12/19/10 07:12	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		12/19/10 07:12	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		12/19/10 07:12	95-47-6	
Dibromofluoromethane (S)	103 %		70-130		1		12/19/10 07:12	1868-53-7	
Toluene-d8 (S)	100 %		70-130		1		12/19/10 07:12	2037-26-5	
4-Bromofluorobenzene (S)	95 %		70-130		1		12/19/10 07:12	460-00-4	
1,2-Dichloroethane-d4 (S)	112 %		70-130		1		12/19/10 07:12	17060-07-0	

Sample: RW-1	Lab ID: 9284163015	Collected: 12/13/10 13:00	Received: 12/15/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates		Analytical Method: EPA 8260							
tert-Amyl Alcohol	3850 ug/L		2500	1550	25		12/19/10 11:48	75-85-4	
tert-Amylmethyl ether	586 ug/L		250	112	25		12/19/10 11:48	994-05-8	
Benzene	3550 ug/L		125	30.0	25		12/19/10 11:48	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		2500	1200	25		12/19/10 11:48	624-95-3	
tert-Butyl Alcohol	5200 ug/L		2500	675	25		12/19/10 11:48	75-65-0	
tert-Butyl Formate	ND ug/L		1250	225	25		12/19/10 11:48	762-75-4	
1,2-Dichloroethane	ND ug/L		125	32.5	25		12/19/10 11:48	107-06-2	
Diisopropyl ether	373 ug/L		125	67.5	25		12/19/10 11:48	108-20-3	
Ethanol	ND ug/L		5000	4250	25		12/19/10 11:48	64-17-5	
Ethylbenzene	1190 ug/L		125	27.5	25		12/19/10 11:48	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		250	115	25		12/19/10 11:48	637-92-3	
Methyl-tert-butyl ether	24500 ug/L		2500	1000	500		12/20/10 17:14	1634-04-4	
Naphthalene	874 ug/L		125	72.5	25		12/19/10 11:48	91-20-3	
Toluene	13500 ug/L		2500	900	500		12/20/10 17:14	108-88-3	
Xylene (Total)	6220 ug/L		250	67.5	25		12/19/10 11:48	1330-20-7	
m&p-Xylene	4220 ug/L		250	67.5	25		12/19/10 11:48	179601-23-1	
o-Xylene	2000 ug/L		125	42.5	25		12/19/10 11:48	95-47-6	
Dibromofluoromethane (S)	103 %		70-130		25		12/19/10 11:48	1868-53-7	
Toluene-d8 (S)	99 %		70-130		25		12/19/10 11:48	2037-26-5	
4-Bromofluorobenzene (S)	99 %		70-130		25		12/19/10 11:48	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		70-130		25		12/19/10 11:48	17060-07-0	

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ANALYTICAL RESULTS

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Sample: RW-3 Lab ID: 9284163016 Collected: 12/13/10 14:05 Received: 12/15/10 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Amyl Alcohol	ND ug/L		5000	3100	50		12/19/10 12:06	75-85-4	
tert-Amylmethyl ether	454 ug/L		500	225	50		12/19/10 12:06	994-05-8	
Benzene	4860 ug/L		250	60.0	50		12/19/10 12:06	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		5000	2400	50		12/19/10 12:06	624-95-3	
tert-Butyl Alcohol	ND ug/L		5000	1350	50		12/19/10 12:06	75-65-0	
tert-Butyl Formate	ND ug/L		2500	450	50		12/19/10 12:06	762-75-4	
1,2-Dichloroethane	ND ug/L		250	65.0	50		12/19/10 12:06	107-06-2	
Diisopropyl ether	284 ug/L		250	135	50		12/19/10 12:06	108-20-3	
Ethanol	ND ug/L		10000	8500	50		12/19/10 12:06	64-17-5	
Ethylbenzene	3240 ug/L		250	55.0	50		12/19/10 12:06	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		500	230	50		12/19/10 12:06	637-92-3	
Methyl-tert-butyl ether	10200 ug/L		1250	500	250		12/20/10 17:32	1634-04-4	
Naphthalene	1290 ug/L		250	145	50		12/19/10 12:06	91-20-3	
Toluene	20800 ug/L		1250	450	250		12/20/10 17:32	108-88-3	
Xylene (Total)	17500 ug/L		500	135	50		12/19/10 12:06	1330-20-7	
m&p-Xylene	12100 ug/L		500	135	50		12/19/10 12:06	179601-23-1	
o-Xylene	5400 ug/L		250	85.0	50		12/19/10 12:06	95-47-6	
Dibromofluoromethane (S)	102 %		70-130		50		12/19/10 12:06	1868-53-7	
Toluene-d8 (S)	101 %		70-130		50		12/19/10 12:06	2037-26-5	
4-Bromofluorobenzene (S)	99 %		70-130		50		12/19/10 12:06	460-00-4	
1,2-Dichloroethane-d4 (S)	105 %		70-130		50		12/19/10 12:06	17060-07-0	

Sample: RW-4 Lab ID: 9284163017 Collected: 12/13/10 14:10 Received: 12/15/10 15:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Amyl Alcohol	581 ug/L		100	62.0	1		12/19/10 07:31	75-85-4	
tert-Amylmethyl ether	259 ug/L		10.0	4.5	1		12/19/10 07:31	994-05-8	
Benzene	2390 ug/L		1000	240	200		12/20/10 16:56	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		12/19/10 07:31	624-95-3	
tert-Butyl Alcohol	764 ug/L		100	27.0	1		12/19/10 07:31	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		12/19/10 07:31	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		12/19/10 07:31	107-06-2	
Diisopropyl ether	203 ug/L		5.0	2.7	1		12/19/10 07:31	108-20-3	E
Ethanol	ND ug/L		200	170	1		12/19/10 07:31	64-17-5	E
Ethylbenzene	467 ug/L		5.0	1.1	1		12/19/10 07:31	100-41-4	E
Ethyl-tert-butyl ether	6.1J ug/L		10.0	4.6	1		12/19/10 07:31	637-92-3	
Methyl-tert-butyl ether	7780 ug/L		1000	400	200		12/20/10 16:56	1634-04-4	
Naphthalene	169 ug/L		5.0	2.9	1		12/19/10 07:31	91-20-3	
Toluene	6720 ug/L		1000	360	200		12/20/10 16:56	108-88-3	
Xylene (Total)	4020 ug/L		2000	540	200		12/20/10 16:56	1330-20-7	
m&p-Xylene	2730 ug/L		2000	540	200		12/20/10 16:56	179601-23-1	
o-Xylene	1290 ug/L		1000	340	200		12/20/10 16:56	95-47-6	

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ANALYTICAL RESULTS

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Sample: RW-4	Lab ID: 9284163017	Collected: 12/13/10 14:10	Received: 12/15/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates	Analytical Method: EPA 8260								
Dibromofluoromethane (S)	97 %		70 130		1		12/19/10 07:31	1868-53-7	
Toluene-d8 (S)	101 %		70-130		1		12/19/10 07:31	2037-26-5	
4-Bromofluorobenzene (S)	102 %		70-130		1		12/19/10 07:31	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %		70-130		1		12/19/10 07:31	17060-07-0	
Sample: CK-1	Lab ID: 9284163018	Collected: 12/13/10 11:00	Received: 12/15/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND ug/L		100	62.0	1		12/20/10 16:00	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		12/20/10 16:00	994-05-8	
Benzene	4.4J ug/L		5.0	1.2	1		12/20/10 16:00	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		12/20/10 16:00	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		12/20/10 16:00	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		12/20/10 16:00	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		12/20/10 16:00	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		12/20/10 16:00	108-20-3	
Ethanol	ND ug/L		200	170	1		12/20/10 16:00	64-17-5	
Ethylbenzene	2.1J ug/L		5.0	1.1	1		12/20/10 16:00	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		12/20/10 16:00	637-92-3	
Methyl-tert-butyl ether	5.4 ug/L		5.0	2.0	1		12/20/10 16:00	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		12/20/10 16:00	91-20-3	
Toluene	6.2 ug/L		5.0	1.8	1		12/20/10 16:00	108-88-3	
Xylene (Total)	9.3J ug/L		10.0	2.7	1		12/20/10 16:00	1330-20-7	
m&p-Xylene	6.5J ug/L		10.0	2.7	1		12/20/10 16:00	179601-23-1	
o-Xylene	2.8J ug/L		5.0	1.7	1		12/20/10 16:00	95-47-6	
Dibromofluoromethane (S)	104 %		70-130		1		12/20/10 16:00	1868-53-7	
Toluene-d8 (S)	97 %		70-130		1		12/20/10 16:00	2037-26-5	
4-Bromofluorobenzene (S)	94 %		70-130		1		12/20/10 16:00	460-00-4	
1,2-Dichloroethane-d4 (S)	113 %		70-130		1		12/20/10 16:00	17060-07-0	
Sample: CK-2	Lab ID: 9284163019	Collected: 12/13/10 11:10	Received: 12/15/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates	Analytical Method: EPA 8260								
tert-Amyl Alcohol	ND ug/L		100	62.0	1		12/19/10 08:08	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		12/19/10 08:08	994-05-8	
Benzene	16.1 ug/L		5.0	1.2	1		12/19/10 08:08	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		12/19/10 08:08	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		12/19/10 08:08	75-65-0	

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ANALYTICAL RESULTS

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Sample: CK-2	Lab ID: 9284163019	Collected: 12/13/10 11:10	Received: 12/15/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Butyl Formate	ND ug/L		50.0	9.0	1		12/19/10 08:08	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		12/19/10 08:08	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		12/19/10 08:08	108-20-3	
Ethanol	ND ug/L		200	170	1		12/19/10 08:08	64-17-5	
Ethylbenzene	6.8 ug/L		5.0	1.1	1		12/19/10 08:08	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		12/19/10 08:08	637-92-3	
Methyl-tert-butyl ether	23.2 ug/L		5.0	2.0	1		12/19/10 08:08	1634-04-4	
Naphthalene	6.8 ug/L		5.0	2.9	1		12/19/10 08:08	91-20-3	
Toluene	35.6 ug/L		5.0	1.8	1		12/19/10 08:08	108-88-3	
Xylene (Total)	34.2 ug/L		10.0	2.7	1		12/19/10 08:08	1330-20-7	
m&p-Xylene	23.4 ug/L		10.0	2.7	1		12/19/10 08:08	179601-23-1	
o-Xylene	10.8 ug/L		5.0	1.7	1		12/19/10 08:08	95-47-6	
Dibromofluoromethane (S)	101 %		70-130		1		12/19/10 08:08	1868-53-7	
Toluene-d8 (S)	96 %		70-130		1		12/19/10 08:08	2037-26-5	
4-Bromofluorobenzene (S)	97 %		70-130		1		12/19/10 08:08	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		70-130		1		12/19/10 08:08	17060-07-0	
Sample: CK-3	Lab ID: 9284163020	Collected: 12/13/10 11:20	Received: 12/15/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates Analytical Method: EPA 8260									
tert-Amyl Alcohol	ND ug/L		100	62.0	1		12/19/10 08:26	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		12/19/10 08:26	994-05-8	
Benzene	17.9 ug/L		5.0	1.2	1		12/19/10 08:26	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		12/19/10 08:26	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		12/19/10 08:26	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		12/19/10 08:26	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		12/19/10 08:26	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		12/19/10 08:26	108-20-3	
Ethanol	ND ug/L		200	170	1		12/19/10 08:26	64-17-5	
Ethylbenzene	8.1 ug/L		5.0	1.1	1		12/19/10 08:26	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		12/19/10 08:26	637-92-3	
Methyl-tert-butyl ether	28.1 ug/L		5.0	2.0	1		12/19/10 08:26	1634-04-4	
Naphthalene	3.7J ug/L		5.0	2.9	1		12/19/10 08:26	91-20-3	
Toluene	39.1 ug/L		5.0	1.8	1		12/19/10 08:26	108-88-3	
Xylene (Total)	41.9 ug/L		10.0	2.7	1		12/19/10 08:26	1330-20-7	
m&p-Xylene	28.7 ug/L		10.0	2.7	1		12/19/10 08:26	179601-23-1	
o-Xylene	13.3 ug/L		5.0	1.7	1		12/19/10 08:26	95-47-6	
Dibromofluoromethane (S)	100 %		70-130		1		12/19/10 08:26	1868-53-7	
Toluene-d8 (S)	95 %		70-130		1		12/19/10 08:26	2037-26-5	
4-Bromofluorobenzene (S)	99 %		70-130		1		12/19/10 08:26	460-00-4	
1,2-Dichloroethane-d4 (S)	105 %		70-130		1		12/19/10 08:26	17060-07-0	

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ANALYTICAL RESULTS

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

Sample: WSW-1	Lab ID: 9284163021	Collected: 12/13/10 14:50	Received: 12/15/10 15:15	Matrix: Water					
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates									Analytical Method: EPA 8260
tert-Amyl Alcohol	ND ug/L		100	62.0	1		12/19/10 08:44	75-85-4	
tert-Amylmethyl ether	ND ug/L		10.0	4.5	1		12/19/10 08:44	994-05-8	
Benzene	ND ug/L		5.0	1.2	1		12/19/10 08:44	71-43-2	
3,3-Dimethyl-1-Butanol	ND ug/L		100	48.0	1		12/19/10 08:44	624-95-3	
tert-Butyl Alcohol	ND ug/L		100	27.0	1		12/19/10 08:44	75-65-0	
tert-Butyl Formate	ND ug/L		50.0	9.0	1		12/19/10 08:44	762-75-4	
1,2-Dichloroethane	ND ug/L		5.0	1.3	1		12/19/10 08:44	107-06-2	
Diisopropyl ether	ND ug/L		5.0	2.7	1		12/19/10 08:44	108-20-3	
Ethanol	ND ug/L		200	170	1		12/19/10 08:44	64-17-5	
Ethylbenzene	ND ug/L		5.0	1.1	1		12/19/10 08:44	100-41-4	
Ethyl-tert-butyl ether	ND ug/L		10.0	4.6	1		12/19/10 08:44	637-92-3	
Methyl-tert-butyl ether	ND ug/L		5.0	2.0	1		12/19/10 08:44	1634-04-4	
Naphthalene	ND ug/L		5.0	2.9	1		12/19/10 08:44	91-20-3	
Toluene	ND ug/L		5.0	1.8	1		12/19/10 08:44	108-88-3	
Xylene (Total)	ND ug/L		10.0	2.7	1		12/19/10 08:44	1330-20-7	
m&p-Xylene	ND ug/L		10.0	2.7	1		12/19/10 08:44	179601-23-1	
o-Xylene	ND ug/L		5.0	1.7	1		12/19/10 08:44	95-47-6	
Dibromofluoromethane (S)	102 %		70-130		1		12/19/10 08:44	1868-53-7	
Toluene-d8 (S)	97 %		70-130		1		12/19/10 08:44	2037-26-5	
4-Bromofluorobenzene (S)	95 %		70-130		1		12/19/10 08:44	460-00-4	
1,2-Dichloroethane-d4 (S)	110 %		70-130		1		12/19/10 08:44	17060-07-0	

Date: 12/21/2010 05:08 PM

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL DATA

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

QC Batch: MSV/13492 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Oxygenates SC
Associated Lab Samples: 9284163002, 9284163003, 9284163006, 9284163007, 9284163008, 9284163009, 9284163010

METHOD BLANK: 543175 Matrix: Water

Associated Lab Samples: 9284163002, 9284163003, 9284163006, 9284163007, 9284163008, 9284163009, 9284163010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	12/19/10 03:50	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	12/19/10 03:50	
Benzene	ug/L	ND	5.0	12/19/10 03:50	
Diisopropyl ether	ug/L	ND	5.0	12/19/10 03:50	
Ethanol	ug/L	ND	200	12/19/10 03:50	
Ethyl-tert-butyl ether	ug/L	ND	10.0	12/19/10 03:50	
Ethylbenzene	ug/L	ND	5.0	12/19/10 03:50	
m&p-Xylene	ug/L	ND	10.0	12/19/10 03:50	
Methyl-tert-butyl ether	ug/L	ND	5.0	12/19/10 03:50	
Naphthalene	ug/L	ND	5.0	12/19/10 03:50	
o-Xylene	ug/L	ND	5.0	12/19/10 03:50	
tert-Amyl Alcohol	ug/L	ND	100	12/19/10 03:50	
tert-Amylmethyl ether	ug/L	ND	10.0	12/19/10 03:50	
tert-Butyl Alcohol	ug/L	ND	100	12/19/10 03:50	
tert-Butyl Formate	ug/L	ND	50.0	12/19/10 03:50	
Toluene	ug/L	ND	5.0	12/19/10 03:50	
Xylene (Total)	ug/L	ND	10.0	12/19/10 03:50	
1,2-Dichloroethane-d4 (S)	%	103	70-130	12/19/10 03:50	
4-Bromofluorobenzene (S)	%	97	70-130	12/19/10 03:50	
Dibromofluoromethane (S)	%	98	70-130	12/19/10 03:50	
Toluene-d8 (S)	%	99	70-130	12/19/10 03:50	

LABORATORY CONTROL SAMPLE: 543176

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	48.9	98	70-130	
3,3-Dimethyl-1-Butanol	ug/L	1000	1050	105	70-130	
Benzene	ug/L	50	46.2	92	70-130	
Diisopropyl ether	ug/L	50	46.2	92	70-130	
Ethanol	ug/L	2000	2360	118	70-130	
Ethyl-tert-butyl ether	ug/L	100	92.6	93	70-130	
Ethylbenzene	ug/L	50	45.2	90	70-130	
m&p-Xylene	ug/L	100	89.3	89	70-130	
Methyl-tert-butyl ether	ug/L	50	52.6	105	70-130	
Naphthalene	ug/L	50	56.0	112	70-130	
o-Xylene	ug/L	50	45.0	90	70-130	
tert-Amyl Alcohol	ug/L	1000	1060	106	70-130	
tert-Amylmethyl ether	ug/L	100	92.9	93	70-130	
tert-Butyl Alcohol	ug/L	500	666	133	70-130 L3	
tert-Butyl Formate	ug/L	400	295	74	70-130	
Toluene	ug/L	50	45.8	92	70-130	

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QUALITY CONTROL DATA

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

LABORATORY CONTROL SAMPLE: 543176

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Xylene (Total)	ug/L	150	134	90	70-130	
1,2-Dichloroethane-d4 (S)	%			101	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			103	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 543177 543178

Parameter	Units	MS 9284163003		MSD Spike Conc.		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Conc.	Result								
1,2-Dichloroethane	ug/L	ND	50	50	40.2	49.7	80	99	70-130	21	30		
3,3-Dimethyl-1-Butanol	ug/L	ND	1000	1000	578	710	58	71	70-130	21	30	M0	
Benzene	ug/L	ND	50	50	42.3	50.7	85	101	70-130	18	30		
Diisopropyl ether	ug/L	ND	50	50	41.0	50.4	82	101	70-130	20	30		
Ethanol	ug/L	ND	2000	2000	1340	1930	67	96	70-130	36	30	M0,R1	
Ethyl-tert-butyl ether	ug/L	ND	100	100	79.5	98.0	79	98	70-130	21	30		
Ethylbenzene	ug/L	ND	50	50	39.9	48.0	80	96	70-130	18	30		
m&p-Xylene	ug/L	ND	100	100	68.9	84.7	69	85	70-130	21	30	M0	
Methyl-tert-butyl ether	ug/L	ND	50	50	43.9	53.7	88	107	70-130	20	30		
Naphthalene	ug/L	ND	50	50	44.0	52.9	88	106	70-130	18	30		
o-Xylene	ug/L	ND	50	50	35.7	43.4	71	87	70-130	19	30		
tert-Amyl Alcohol	ug/L	ND	1000	1000	702	868	70	87	70-130	21	30		
tert-AmylMethyl ether	ug/L	ND	100	100	76.6	92.7	77	93	70-130	19	30		
tert-Butyl Alcohol	ug/L	ND	500	500	649	869	130	174	70-130	29	30	M0,R1	
tert-Butyl Formate	ug/L	ND	400	400	ND	ND	0	0	70-130		30	P5	
Toluene	ug/L	ND	50	50	38.2	46.7	76	93	70-130	20	30		
1,2-Dichloroethane-d4 (S)	%						101	104	70-130				
4-Bromofluorobenzene (S)	%						96	96	70-130				
Dibromofluoromethane (S)	%						99	101	70-130				
Toluene-d8 (S)	%						95	95	70-130				

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QUALITY CONTROL DATA

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

QC Batch: MSV/13493 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Oxygenates SC
Associated Lab Samples: 9284163001, 9284163004, 9284163011, 9284163012, 9284163013, 9284163014, 9284163015, 9284163016, 9284163017, 9284163019, 9284163020, 9284163021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	5.0	12/19/10 04:08	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	12/19/10 04:08	
Benzene	ug/L	ND	5.0	12/19/10 04:08	
Diisopropyl ether	ug/L	ND	5.0	12/19/10 04:08	
Ethanol	ug/L	ND	200	12/19/10 04:08	
Ethyl-tert-butyl ether	ug/L	ND	10.0	12/19/10 04:08	
Ethylbenzene	ug/L	ND	5.0	12/19/10 04:08	
m&p-Xylene	ug/L	ND	10.0	12/19/10 04:08	
Methyl-tert-butyl ether	ug/L	ND	5.0	12/19/10 04:08	
Naphthalene	ug/L	ND	5.0	12/19/10 04:08	
o-Xylene	ug/L	ND	5.0	12/19/10 04:08	
tert-Amyl Alcohol	ug/L	ND	100	12/19/10 04:08	
tert-Amylmethyl ether	ug/L	ND	10.0	12/19/10 04:08	
tert-Butyl Alcohol	ug/L	ND	100	12/19/10 04:08	
tert-Butyl Formate	ug/L	ND	50.0	12/19/10 04:08	
Toluene	ug/L	ND	5.0	12/19/10 04:08	
Xylene (Total)	ug/L	ND	10.0	12/19/10 04:08	
1,2-Dichloroethane-d4 (S)	%	106	70-130	12/19/10 04:08	
4-Bromofluorobenzene (S)	%	98	70-130	12/19/10 04:08	
Dibromofluoromethane (S)	%	101	70-130	12/19/10 04:08	
Toluene-d8 (S)	%	100	70-130	12/19/10 04:08	

LABORATORY CONTROL SAMPLE: 543180

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	50	47.4	95	70-130	
3,3-Dimethyl-1-Butanol	ug/L	1000	961	96	70-130	
Benzene	ug/L	50	45.5	91	70-130	
Diisopropyl ether	ug/L	50	45.0	90	70-130	
Ethanol	ug/L	2000	1950	98	70-130	
Ethyl-tert-butyl ether	ug/L	100	89.1	89	70-130	
Ethylbenzene	ug/L	50	45.8	92	70-130	
m&p-Xylene	ug/L	100	91.3	91	70-130	
Methyl-tert-butyl ether	ug/L	50	49.9	100	70-130	
Naphthalene	ug/L	50	53.3	107	70-130	
o-Xylene	ug/L	50	45.8	92	70-130	
tert-Amyl Alcohol	ug/L	1000	894	89	70-130	
tert-Amylmethyl ether	ug/L	100	90.1	90	70-130	
tert-Butyl Alcohol	ug/L	500	560	112	70-130	
tert-Butyl Formate	ug/L	400	289	72	70-130	

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QUALITY CONTROL DATA

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

LABORATORY CONTROL SAMPLE: 543180

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	50	45.7	91	70-130	
Xylene (Total)	ug/L	150	137	91	70-130	
1,2-Dichloroethane-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Dibromofluoromethane (S)	%			101	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 543181 543182

Parameter	Units	9284163014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	42.0	48.9	84	98	70-130	15	30	
3,3-Dimethyl-1-Butanol	ug/L	ND	1000	1000	762	907	76	91	70-130	17	30	
Benzene	ug/L	ND	50	50	42.0	49.3	84	99	70-130	16	30	
Diisopropyl ether	ug/L	ND	50	50	39.5	46.4	79	93	70-130	16	30	
Ethanol	ug/L	ND	2000	2000	1730	2100	86	105	70-130	19	30	
Ethyl-tert-butyl ether	ug/L	ND	100	100	76.4	91.5	76	92	70-130	18	30	
Ethylbenzene	ug/L	ND	50	50	42.3	49.9	85	100	70-130	17	30	
m&p-Xylene	ug/L	ND	100	100	83.3	98.4	83	98	70-130	17	30	
Methyl-tert-butyl ether	ug/L	ND	50	50	41.0	49.8	82	100	70-130	19	30	
Naphthalene	ug/L	ND	50	50	47.1	55.5	94	111	70-130	16	30	
o-Xylene	ug/L	ND	50	50	40.7	48.6	81	97	70-130	18	30	
tert-Amyl Alcohol	ug/L	ND	1000	1000	719	865	72	87	70-130	18	30	
tert-Amylmethyl ether	ug/L	ND	100	100	73.7	87.9	74	88	70-130	18	30	
tert-Butyl Alcohol	ug/L	ND	500	500	333	408	67	82	70-130	20	30	M0
tert-Butyl Formate	ug/L	ND	400	400	ND	ND	0	0	70-130	30	P5	
Toluene	ug/L	ND	50	50	41.1	48.1	82	96	70-130	16	30	
1,2-Dichloroethane-d4 (S)	%						100	99	70-130			
4-Bromofluorobenzene (S)	%						97	98	70-130			
Dibromofluoromethane (S)	%						101	102	70-130			
Toluene-d8 (S)	%						99	98	70-130			

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QUALIFIERS

Project: HWY 11 GROCERY 10-3090
Pace Project No.: 9284163

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

ANALYTE QUALIFIERS

- E Analyte concentration exceeded the calibration range. The reported result is estimated.
- L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
- M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
- P5 The EPA or method required sample preservation degrades this compound, therefore acceptable recoveries may not be achieved in sample matrix spikes.
- R1 RPD value was outside control limits.

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Section A

Required Client Information:	
Company: NECI	Report To: B. Shand
Address: 275-B Dooly Road	Copy To:
Lexington, SC 29073	
Email To: JLLC@neci.net	Purchase Order No.:
Phone: (803) 808-2043	Project Name: Hwy II Gully
Requested Due Date/AT: 10/30/20	Project Number: 103020

Section B

Required Project Information:	
Company Name:	Attention:
Address:	
Pace Quote Reference:	<input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER
Pace Project Manager:	<input checked="" type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER
Site Location:	
STATE: SC	

Section C

Invoice Information:	
Company Name:	
Address:	
Pace Profile #:	R. Spencer
Project Profile #:	

Section D

Required Client Information:	
Report To: B. Shand	COPY TO:
275-B Dooly Road	
Lexington, SC 29073	
Email To: JLLC@neci.net	Purchase Order No.:
Phone: (803) 808-2043	Project Name: Hwy II Gully
Requested Due Date/AT: 10/30/20	Project Number: 103020

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA OTHER

OTHER

Residual Chlorine (Y/N)

Pace Project No./Lab ID.

009

Analyst's Test

8/24/08

Request Analysis Filtered (Y/N)

Preservatives

Uppreserved

Sample Matrix Collection

Matrix Codes

Drinking Water

Waste Water

Product

Soil/Solid

Oil

Wipe

As Issue

Other

Sample Type (G=GRAB C=COMP)

Sample Matrix Code (see valid codes to left)

Sample Date

Sample Time

Time

Comments

RElinquished By / Affiliation

Accepted By / Affiliation

Date

Time

Date

Time

Comments

Sample Conditions

Temp in °C

Sample Condition (Y/N)



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

FIELD DATA SHEETS

South Carolina Department of Health and Environmental Control
 Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy):	12/13/2010	
Field Personnel:	Brian Owen, Kyle Pudney	
General Weather Conditions:	Sunny	
Ambient Air Temperature:	28.0	°C
Quality Assurance		
pH Meter	YSI Model 550A	Conductivity Meter
serial no.	02A0831	serial no. 02A0831
pH=4.0	X	standard X
pH=7.0	X	standard
pH=10.0		standard
Chain of Custody		
Relinquished by	Date/Time	Received by Date/Time

Facility Name:	Highway 11 Grocery		
Site ID#:	02439	Monitoring Well #	DMW-1
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	2 inches		
Conversion Factor (C):	3.14 x (D/2) ²		
* Free Product Thickness:	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
Depth to Free Product (DFP)	feet		
Depth to Ground Water (DGW)	feet		
Total Well Depth (TWD)	feet		
Length of the water column (LWC=TWD-DGW)	feet		
1 casing volume (CV=LWC X C)=	X	0.163 3.02 gallons	
3 casing volume (3 X CV)=		3 9.07 gallons	
Total Volume of Water Purged Before Sampling	9 gals.		
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)	13:30	13:35	13:42	13:50			
pH (s.u.)	6.26	6.81	6.77	6.68			
Specific Conductivity (μ mhos/cm)	33.4	26.5	24.1	24.8			
Water Temperature (°C)	17.6	15.9	16.8	16.7			
Dissolved Oxygen	4.29	3.82	3.51	3.12			
PHD readings, if required							
Remarks:	Sample Time:	13:50					

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy):	12/13/2010	
Field Personnel:	Brian Owen, Kyle Pudney	
General Weather Conditions:	Sunny	
Ambient Air Temperature:	28.0	°C
Quality Assurance		
pH Meter	YSI Model 550A	
serial no.	02A0831	
pH=4.0	X	standard
pH=7.0	X	standard
pH=10.0		standard
Chain of Custody		
Relinquished by	Date/Time	Received by Date/Time

Facility Name:	Highway 11 Grocery		
Site ID#:	02439	Monitoring Well #	DMW-4
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	2 inches		
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163		
* Free Product Thickness:	feet		
Depth to Free Product (DFP)	feet		
Depth to Ground Water (DGW)	feet		
Total Well Depth (TWD)	feet		
Length of the water column (LWC=TWD-DGW)	feet		
1 casing volume (CV=LWC X C)=	X	0.163	
3 casing volume (3 X CV)=		5.40	
		gallons	
		3 16.19 gallons	
Total Volume of Water Purged Before Sampling			
16.5 gals.			
* If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)	13:10	13:15	13:20	13:25			
pH (s.u.)	7.18	7.02	6.89	6.70			
Specific Conductivity (umhos/cm)	36.0	31.0	30.4	29.5			
Water Temperature (°C)	16.9	14.8	15.7	16.3			
Dissolved Oxygen	5.08	5.58	6.90	6.21			
PHD readings, if required							
Remarks:	Sample Time:	13:25					

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy):	12/13/2010
Field Personnel:	Brian Owen, Kyle Pudney
General Weather Conditions:	Sunny
Ambient Air Temperature:	28.0 °C
Quality Assurance	
pH Meter	YSI Model 550A
serial no.	<u>02A0831</u>
pH=4.0	<u>X</u>
pH=7.0	<u>X</u>
pH=10.0	<u> </u>
Conductivity Meter	
serial no.	<u>02A0831</u>
standard	<u>X</u>
standard	<u> </u>
standard	<u> </u>
Chain of Custody	
Relinquished by	Date/Time
Received by	Date/Time

Facility Name:	Highway 11 Grocery
Site ID#:	<u>03439</u>
Water Supply Well	Public
Monitoring Well #	RW-1
Private	
Monitoring Well Diameter (D):	4 inches
Conversion Factor (C):	3.14 x (D/2) ²
* Free Product Thickness:	feet
Depth to Free Product (DFP)	<u>26.65</u>
Depth to Ground Water (DGW)	<u>30</u>
Total Well Depth (TWD)	feet
Length of the water column (LWC=TWD-DGW)	3.35 feet
1 casing volume (CV=LWC X C)=	<u>X</u>
3 casing volume (3 X CV)=	<u>3</u>
Total Volume of Water Purged Before Sampling	6.5 gals.
*If free product is present over 1/8 inch, sampling will not be required.	

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)	12:45	12:55	13:00				
pH (s.u.)	7.60	7.42	7.40	7.37			
Specific Conductivity (µmhos/cm)	79.1	76.8	74.1	72.9			
Water Temperature (°C)	16.8	16.9	17.1	17.7			
Dissolved Oxygen	2.92	2.44	2.47	2.44			
PID readings, if required							
Remarks:	Sample Time:	13:00					

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy):	12/13/2010	
Field Personnel:	Brian Owen, Kyle Pudney	
General Weather Conditions:	Sunny	
Ambient Air Temperature:	28.0	°C
Quality Assurance		
pH Meter	YSI Model 550A	Conductivity Meter
serial no.	02A0831	serial no. 02A0831
pH=4.0	X	standard X
pH=7.0	X	standard
pH=10.0	X	standard
Chain of Custody		
Relinquished by	Date/Time	Received by Date/Time

Facility Name:	Highway 11 Grocery	
Site ID#:	03439	Monitoring Well # RW-3
Water Supply Well	Public	Private
Monitoring Well Diameter (D):	4 inches	
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163	
* Free Product Thickness:	for a 4 inch well C=0.652	
Depth to Free Product (DFP)	feet	
Depth to Ground Water (DGW)	feet	
Total Well Depth (TWD)	feet	
Length of the water column (LWC=TWD-DGW)	feet	
1 casing volume (CV=LWC X C)= X	0.652	gallons
3 casing volume (3 X CV)=	3	gallons
Total Volume of Water Purged Before Sampling	8 gals.	
*If free product is present over 1/8 inch, sampling will not be required.		

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)	13:55	14:00	14:05				
pH (s.u.)	6.25	Sheen	Sheen				
Specific Conductivity ($\mu\text{mhos/cm}$)	37.7	Sheen	Sheen				
Water Temperature (°C)	17.7	Sheen	Sheen				
Dissolved Oxygen	2.62	Sheen	Sheen				
PID readings, if required							
Remarks:	Sample Time:	14:05	Dry at 8.0 gallons				

South Carolina Department of Health and Environmental Control
 Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Groundwater Sampling

Date (mm/dd/yy):	12/13/2010																																																									
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pH=10.0	X	standard																																																								
Chain of Custody																																																										
Relinquished by	Date/Time	Received by Date/Time																																																								
Facility Name: Highway 11 Grocery																																																										
Site ID#: 03439		Monitoring Well # RW-4																																																								
Water Supply Well		Public Private																																																								
Monitoring Well Diameter (D): 4 inches																																																										
Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 * Free Product Thickness: _____ feet Depth to Free Product (DFP) _____ feet Depth to Ground Water (DGW) _____ feet Total Well Depth (TWD) _____ feet Length of the water column (LWC=TWD-DGW) _____ feet 1 casing volume (CV=LWC X C)= _____ X 0.652 _____ gallons 3 casing volume (3 X CV)= _____ 3 _____ gallons																																																										
Total Volume of Water Purged Before Sampling _____ 9 gals. * If free product is present over 1/8 inch, sampling will not be required.																																																										
<table border="1"> <thead> <tr> <th>Cumulative Volume Purged (gallons)</th> <th>Initial</th> <th>1st Vol</th> <th>2nd Vol</th> <th>3rd Vol</th> <th>4th Vol</th> <th>5th Vol</th> <th>Post Sampling</th> </tr> </thead> <tbody> <tr> <td>Time (military)</td> <td>14:00</td> <td>14.05</td> <td>14.10</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>pH (s.u.)</td> <td>6.47</td> <td>6.29</td> <td>6.18</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Specific Conductivity ($\mu\text{mhos/cm}$)</td> <td>43.8</td> <td>39.2</td> <td>37.1</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Water Temperature (°C)</td> <td>16.6</td> <td>18.5</td> <td>18.9</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Dissolved Oxygen</td> <td>2.11</td> <td>1.70</td> <td>1.66</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PID readings, if required</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling	Time (military)	14:00	14.05	14.10					pH (s.u.)	6.47	6.29	6.18					Specific Conductivity ($\mu\text{mhos/cm}$)	43.8	39.2	37.1					Water Temperature (°C)	16.6	18.5	18.9					Dissolved Oxygen	2.11	1.70	1.66					PID readings, if required							
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PID readings, if required																																																										
Remarks: Sample Time: 14:10 Parameters within 10 percent																																																										

WASTE DISPOSAL MANIFESTS



January 5, 2011

Re: Treatment of Purge Water
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID Number 03439
MECI Project Number 10-3190

To Whom It May Concern;

Midlands Environmental Consultants, Inc. is providing the following letter as certification that treatment of the referenced purge water complied with the conditions of "Proposed Conditions for Use of Portable Activated Carbon Units for the Treatment of Small Volumes of Petroleum Hydrocarbon Contaminated Groundwater", as described in the following:

Applicability:

Groundwater treated was obtained as a result development of wells and sampling.

Conditions:

1. The purge/bail water from all wells is mixed before usage of the Activated Carbon Unit.
2. No free-product was detected in any of the purge water.
3. Analytical results of from well sampling show average concentrations of petroleum hydrocarbon constituents less than 5000 parts per billion (ppb) Benzene and less than 20,000 ppb total BTEX.
4. The existing carbon pack will be replaced/reactivated every 5,000 gallons.
5. Record of usage is maintained by Contractor.
6. Any and all recommendations and conditions issued by the Manufacturer have been adhered to.
7. Any and all recommendations and conditions (even on a site by site basis) issued by the SCDHEC must be adhered to.

All purge waters were treated on-site using an up-flow treatment drum loaded with 30 pounds of activated carbon. Carbon will be loaded to a maximum of 3 pounds of total organic compounds or 5,000 gallons of development/purge water, whichever occurs first.

SCDHEC
Page 2

January 5, 2011

A total of two (2) drums were treated on December 13, 2010 at the referenced site.

Midlands Environmental also tracks cumulative organic compounds adsorbed on the activated carbon to ensure the capacity of carbon mass is not over-charged. This data is available upon request.

Should you have any questions or comments, please contact the undersigned.

Sincerely,
Midlands Environmental Consultants, Inc.



Courtney M. Sanders
Staff Biologist



Richland County LF
1047 Highway Church Road
Elgin, SC, 29045
Ph: (803) 788-3054

Original
Ticket# 1071174

Customer Name MIDLANDSENVIRON MIDLANDS ENVI Carrier MIDLANDSENVIRON MIDLANDS ENVIRONMENT
Ticket Date 12/13/2010 Vehicle# 1 Volume
Payment Type Credit Account Container
Manual Ticket# Driver
Hauling Ticket# Check#
Route Billing # 0000469
State Waste Code Gen EPA ID
Manifest #
Destination PO
Profile VA2718 (SOIL FROM UST ASSESSMENT)
Generator 126-MIDLANDSENVIRONMENTAL MIDLANDS ENVIRONMENTAL

Time	Scale	ScaleMaster	Gross	16160 lb
In 12/13/2010 12:10:20	Scale2	Dwayne	Tare	9860 lb
Out 12/13/2010 12:32:26	Scale2	Dwayne	Net	6300 lb
			Tons	3.15

Comments

Product	LDX	Qty	UOM	Rate	Fee	Amount	Origin
1 SOIL-Cont. Soil - 100		3.15	Tons				37-OCONEE
2 FUEL-Fuel Surcharge 100		%					37-OCONEE
3 EVF-P-Standard Env 100		%					37-OCONEE

Aug. 11 Grocery

Total Fees
Total Ticket

SIGNATURE JH W

SPECIAL WASTE MANIFEST

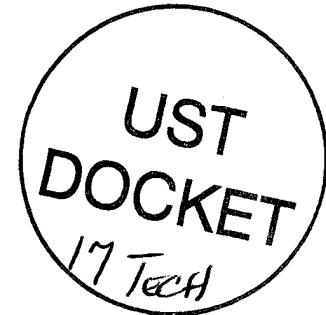
WASTE ID NUMBER VA2718	Richland Landfill 1047 Highway Church Road Elgin, SC 29045 Special Waste Phone: 803-744-3346 Fax: 866-904-7194
EXPIRATION DATE November 17, 2013	Prepared by: Karen Truett/Carol Weldon
GENERATOR OF WASTE: Midlands Env. Consultants, Inc., Various	ACCOUNT NUMBER: 820-469
CUSTOMER Midlands Env. Consultants	
LOCATION OF WASTE: Site Address: CITY: Salem COUNTY: Oconee	
PHONE NUM 803-808-2043	CONTACT: Bryan Shane
FAX NUMBER: 803 808 2048	
GENERATOR'S SIGNATURE <i>Jean Wink</i>	DATE: 12-13-10
TRANSPORTER OF WASTE: Meel	
DATE: 12-13-10	TRUCK NUMBER: 2
DRIVER'S SIGNATURE <i>Jean Wink</i>	
**** TO BE COMPLETED BY RICHLAND LANDFILL*****	
DISPOSAL SITE: RICHLAND LANDFILL ELGIN, SC	Waste Class: Soil
DESCRIPTION OF WASTE: Soil from UST Assessment	
TICKET NUMBER: 1071176	
RECEIVED BY: DCM	



C. Earl Hunter, Commissioner

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

BRIAN SHANE
MIDLANDS ENVIRONMENTAL CONSULTANTS INC
P O BOX 854
LEXINGTON SC 29071-0854



FEB 17 2011

Re: Bid # IBF-36815-8/27/09-EMW; PO # 4500011659
Notice to Proceed

Dear Mr. Shane:

Based on the award of the referenced bid package, enclosed are the information packets to conduct Free Product (FP) recovery using Aggressive Fluid Vapor Recovery (AFVR) or passive skimmers at several facilities. The packets contain the necessary approval for work to begin. You may commence with a site reconnaissance before the AFVR and/or passive skimmers installation. If monitoring wells do not contain measurable free phase product, contact the UST project manager for further instructions. The facilities have been assigned Cost Agreement (CA) numbers as listed below. Please reference the CA numbers and Purchase Order # 4500011659 on the appropriate invoices submitted for payment against the facilities. As specified in the referenced bid, the completed invoice forms and associated reports (include contract certification number) are expected on or before the designated due date (see below).

UST Permit #	Facility	County	R e i e a s	Work Scope	Due Date*	CA #	Approved Amt.
01253	Mack's Camp	Berkeley	1	3 AFVR	60 days	40723	3,315.00
06926	Quick Panty 12	Orangeburg	1	3 AFVR	60 days	40771	3,315.00
07907	USA Petroleum	Richland	1	4 AFVR	60 days	40773	4,675.00
08979	Gregory's Store	Union	1	2 AFVR	60 days	40801	2,375.00
18662	Bay Creek Villas	Colleton	1	5 AFVR	60 days	40831	5,475.00
14555	E Z Stop Food Shop	Lexington	1	3 AFVR	90 days	40849	3,350.00
03439	Highway 11 Grocery	Oconee	1	9 AFVR	90 days	40894	9,975.00
11702	Colonel Creek Landing	Fairfield	1	3 AFVR	60 days	41028	3,315.00

*From receipt of letter

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
2600 Bull Street • Columbia, SC 29201 • Phone: (803) 898-3432 • www.scdhec.gov

Midland's Environmental Consultants, Inc. will perform services at the sites on behalf of the site's UST owners; however, payments will be made from the SUPERB Account. The site's UST owners have no obligation for payment for this scope of work. Please note that Sections 44-2-110(4) and 44-2-130(B) of the SUPERB Statute state that no costs will be allowed (considered for payment) unless prior approval from the Department is obtained.

If for any reason there are changes in these cost agreements, any associated changes to this cost agreement must be pre-approved by this Department in order for Midlands Environmental Consultants to seek future cost compensation. Please contact the site's project manager for technical and/or financial approval. Any item(s) not clearly or completely addressed in the report (disposal manifest for generated ground water, etc.) WILL NOT be compensated by the SUPERB Account.

The Department grants pre-approval for transportation of free phase product and petroleum contaminated groundwater from the referenced site to a permitted treatment facility. The free product and contaminated groundwater must be accepted by the approved treatment facility. There can be no spillage or leakage in transport. A copy of the disposal manifest from the receiving facility that clearly designates the quantity received must be included as an appendix to the report.

If you have any questions concerning this correspondence or need further assistance, please contact me by phone at (803) 896-6664, by fax at (803) 896-6245 or by email at milenkmp@dhec.sc.gov.

Sincerely,



Maia Milenkova, Hydrogeologist
Assessment Section
UST Management Division
Bureau of Land and Waste Management

enc.: Approved Cost Agreements (ACA)

Information Packets

cc: Technical File (w/copy of ACA)

SCDHEC/UST/02/09/11/MPM

Approved Cost Agreement 40894

Facility: 03439 HWY 11 GROCERY

PADGET.JP

PO Number:

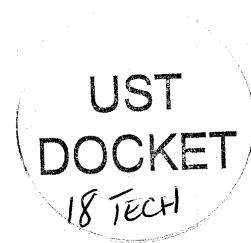
<u>Task / Description</u>	<u>Categories</u>	<u>Item Description</u>	<u>Qty / Pct</u>	<u>Unit Price</u>	<u>Amount</u>
04 MOB/DEMOB		A EQUIPMENT	9.0000	350.00	3,150.00
17 DISPOSAL		A2 WASTEWATER - PUMPING TEST	4,500.0000	0.10	450.00
23 EFR		A 8 HOUR EVENT	9.0000	600.00	5,400.00
		C OFF GAS TREATMENT	9.0000	100.00	900.00
		D SITE RECONNAISSANCE	1.0000	75.00	75.00
				Total Amount	9,975.00



March 2, 2011

Mr. Joel P. Padgett, P.G., Hydrologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Aggressive Fluid Vapor Recovery Report
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID # 03439; CA #40894
MECI Project Number 11-3223A
Certified Site Rehabilitation Site Contractor UCC-0009



Dear Mr. Smith,

Midlands Environmental Consultants, Inc. (MECI) is pleased to submit the attached Aggressive Fluid Vapor Recovery Report for the referenced site. This describes the aggressive fluid vapor recovery activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

AGGRESSIVE FLUID VAPOR RECOVERY

A site visit was conducted at Highway 11 Grocery on February 21, 2011 to gauge/locate relevant monitoring wells and to evaluate current site conditions. MECI personnel conducted an Aggressive Fluid Vapor Recovery (AFVR) event at Highway 11 Grocery on February 28, 2011. The event was conducted on monitoring wells MW-1, RW-1, and RW-2 to remove free phase petroleum product. Free phase petroleum product was detected in MW-1 at a thickness of 0.02 feet, in RW-1 at a thickness of 0.03 feet, and in RW-2 at a thickness of 0.09 feet prior to the AFVR event. The event was conducted continuously for eight hours by MECI personnel utilizing a vacuum extraction unit. Free phase petroleum product was not detected in the wells immediately following the event.

MECI treated the off gas produced during the AFVR event using an activated carbon filter system. Calculated total petroleum hydrocarbons removed from the wells were 31.41 pounds or approximately 5.43 equivalent gallons. The average rate of removal for the hydrocarbons was calculated to be 3.92 pounds per hour. Concentrations of off gas produced during the event were recorded from 1,222 parts per million by volume (PPM) to 2,123 PPM. Measurements were obtained from vapors prior to entering off gas treatment. Vacuum readings were recorded at a range of 15.0 to 19.0 inches of mercury during the event. A complete compilation of measurements recorded is presented in attached Table 1A.

Highway 11 Grocery -AFVR Event
Salem, SC

March 2, 2011
MECI # 11-3223A

Differential pressures and groundwater levels were measured and recorded for selected site monitoring wells at regular intervals. This data is summarized in the attached Table 2A. Monitoring well locations are depicted on attached Figure.

A total of 200 gallons of liquid was removed from MW-1, RW-1, and RW-2 during this event. Free phase petroleum product was not observed in the holding tank at the end of the event. The fluids produced were transported to TK Tank Services, Inc. of Sumter, S.C. for disposal. A disposal manifest for these fluids is attached at the end of this report.

QUALIFICATIONS OF REPORT

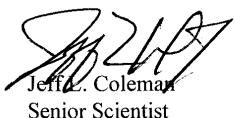
The activities and evaluative approaches used in this assignment are consistent with those normally employed in enhanced fluid recovery events and waste management projects of this type. Contents of this report are intended for the use by MECI and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental related services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.



Courtney M. Sanders
Staff Biologist



Jeff L. Coleman
Senior Scientist

Attachments:

TABLE 1A
AFVR MONITORING DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223A
SCDHEC SITE ID NUMBER 03439

Extraction Well	Date	Time (hh:mm)	Differential Time (hr)	Extraction Well Head Vacuum (in. Hg)	Concentration (PPM)	Off Gas Measurements			Removal Rate Lbs/Hr	Interval Removal Lbs
						Offgas Velocity Ft/Min	CFM	Flow Rate		
MW-1	02/28/11	10:00	0.50	15.0	2,047	1,990	179.10	4.40	2,20	
RW-1	02/28/11	10:30	0.50	15.0	2,123	2,170	195.30	4.98	2.49	
RW-2	02/28/11	11:00	0.50	15.0	1,859	2,420	217.80	4.86	2.43	
					1,638		2,350		2,150	
					1,504		2,210		198.90	
					1,222		1,920		172.80	
					1,437		2,030		182.70	
					1,592		1,960		176.40	
					17.0		1,840		165.60	
					17.0		1,853		168.30	
					17.0		1,831		172.80	
					17.0		1,827		174.60	
					17.0		1,940		162.90	
					19.0		1,810		162.90	
					19.0		1,870		152.10	
					19.0		1,816		149.40	
					19.0		1,660		3.26	
					19.0		1,748		153.90	
					19.0		1,710		3.23	
					19.0		1,670		150.30	
										TOTAL 31.41
Well Data:	Diameter (in)	Screened Interval (ft)	Depth to Product (ft)	Product Thickness (ft)	Depth to Product (ft)	Post AFVR Event Depth to Water (ft)	Product Thickness (ft)	Post AFVR Event Depth to Water (ft)	Product Thickness (ft)	Corrected Depth to Water Change (ft)
MW-1	2"	15-30	25.60	0.02	****	26.24	***	26.24	***	0.64
RW-1	4"	10-30	25.77	0.03	***	26.11	***	26.11	***	0.34
RW-2	4"	10-30	25.00	0.09	***	25.59	***	25.59	***	0.58
Vacuum Truck Information	Well ID	Stinger Depth	Recovery / Disposal Information							
Subcontractor: MECI	MW-1	25.00	Hydro carbons Removed (vapor):							
Truck Operator: G. Globensky	MW-3	24.00	Hydro carbons Removed (liquid):							
Stack I.D. (feet) 0.33 feet			Total Hydrocarbons Removed:							
			Molecular Weight Utilized:							
			Disposal Facility TK Tank Services, Inc.							
			Total Liquids Removed: 200 Gallons							

Corrected depth to water before AFVR Event in MW-1 = 25.60
 Corrected depth to water before AFVR Event in RW-1 = 25.77
 Corrected depth to water before AFVR Event in RW-2 = 25.01

TABLE 2A
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223A
SCDHEC SITE ID NUMBER 03439

DIFFERENTIAL PRESSURE DATA

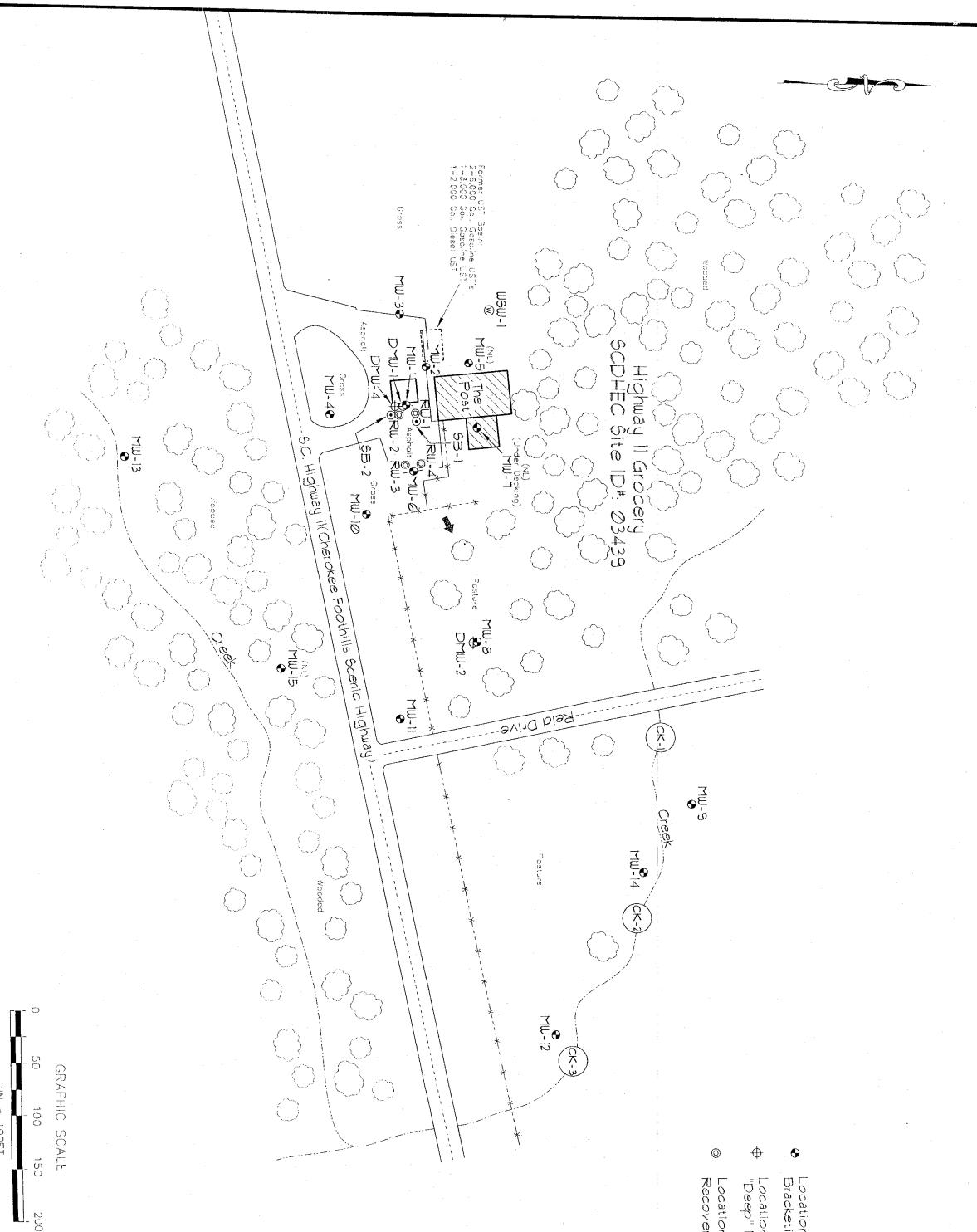
Time	Elapsed Time	Well Designation:		
		MW-2	MW-4	MW-6
		MW-1	RW-2	RW-2
Nearest Extraction Well:				
Approximate Distance:		41 ft	60 ft	55 ft
Time	Elapsed Time	Differential Pressure Readings (inches of water)		
10:00	0.0	0	0	0
10:30	0.5	0	0	0
11:00	1.0	0	0	0
11:30	1.5	0	0	0
12:00	2.0	0	0	0
12:30	2.5	0	0	0
13:00	3.0	0	0	0
13:30	3.5	0	0	0
14:00	4.0	0	0	0
14:30	4.5	0	0	0
15:00	5.0	0	0	0
15:30	5.5	0	0	0
16:00	6.0	0	0	0
16:30	6.5	0	0	0
17:00	7.0	0	0	0
17:30	7.5	0	0	0
18:00	8.0	0	0	0
Maximum Change:		0	0	0

GROUNDWATER DRAWDOWN DATA

Time	Elapsed Time	Well Designation:		
		MW-2	MW-4	MW-6
		MW-1	RW-2	RW-2
Nearest Extraction Well:				
Approximate Distance:		41 ft	60 ft	55 ft
Time	Elapsed Time	Depth to Liquid (feet below of casing):		
Prior to AFVR		27.35	23.52	22.61
14:00	4 hours	27.37	23.52	22.77
18:00	8 hours	27.41	23.55	22.86
Maximum Change:		-0.06	-0.03	-0.25

Explanation:

- Location of Water Table
- Location of Bracketing Monitoring Well
- Location of Double Cased "Deep" Monitoring Well
- Location of 4-inch Recovery Well
- Location of Surface Water Sample Collection
- Location of Soil Test Boring
- fence
- stream—Creek
- storage tanks



GRAPHIC SCALE
0 50 100 150 200
IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

Drawing Based on MECI Field Notes and SCDHEC Files. All Locations are Approximate.

Site Features

Highway II Grocery
Saluda, South Carolina
SCDHEC Site ID 03439

Midlands Environmental Consultants, Inc.

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number	
5. Generator's Name and Mailing Address Generator's Site Address (if different than mailing address) <i>(B) 10371</i>						
Generator's Phone: <i>214-722-5000</i>						
6. Transporter 1 Company Name U.S. EPA ID Number						
7. Transporter 2 Company Name U.S. EPA ID Number						
8. Designated Facility Name and Site Address U.S. EPA ID Number						
Facility's Phone: <i>214-722-5000</i>						
9. Waste Shipping Name and Description			10. Containers		11. Total Quantity	12. Unit Wt/Vol.
			No.	Type	A/P <i>3325</i>	
1. NON-HAZARDOUS PETROLEUM CONTAMINATED WATER			††			
2. Site Site ID Gallons						
Philips Rental Property 19328 30						
Bank of America 19190 150						
Former McCoy Oil Site 19002 325						
Pratts Grocery 06974 200						
Pratts Grocery 06974 125						
4. Heath Self Service 2 08932 220						
Heath Self Service 2 08932 250						
Former Royal Petroleum 19426 325						
13. Specific Site Site ID Gallons						
Anderson Patrol 00769 100						
Gregory's Store 08979 175						
Times Turn Around 10381 150						
Fort Mill 66 09317 150						
Pitt Stop 31 16604 325						
USA Petroleum 17907 150						
14. GENERATOR Generator's Name Signature Month Day Year			Subject to federal regulations for reporting proper disposal of Hazardous Waste.			
15. Int'l. Transporter Signature (for exports only):			From U.S.	Port of entry/exit:		
16. Transporter Acknowledgment of Receipt of Materials			Date leaving U.S.:			
Transporter 1 Printed/Typed Name <i>J. S. Smith</i> Signature <i>J. S. Smith</i> Month Day Year <i>12/30/11</i>						
Transporter 2 Printed/Typed Name <i>J. S. Smith</i> Signature <i>J. S. Smith</i> Month Day Year <i>12/30/11</i>						
17. Discrepancy						
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
17b. Alternate Facility (or Generator)			U.S. EPA ID Number			
Facility's Phone:			Month Day Year			
17c. Signature of Alternate Facility (or Generator)						
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a						
Printed/Typed Name <i>J. S. Smith</i> Signature <i>J. S. Smith</i> Month Day Year <i>12/30/11</i>						

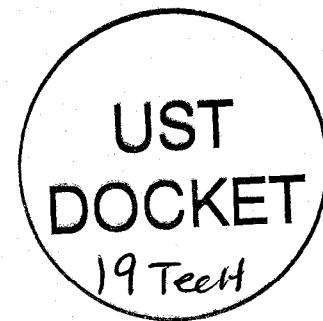
Midlands Environmental Consultants, Inc.

March 18, 2011



Mr. Joel P. Padgett, P.G., Hydrologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Aggressive Fluid Vapor Recovery Report
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID # 03439; CA #40894
MECI Project Number 11-3223B
Certified Site Rehabilitation Site Contractor UCC-0009



Dear Mr. Padgett,

Midlands Environmental Consultants, Inc. (MECI) is pleased to submit the attached Aggressive Fluid Vapor Recovery Report for the referenced site. This describes the aggressive fluid vapor recovery activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

AGGRESSIVE FLUID VAPOR RECOVERY

MECI personnel conducted an Aggressive Fluid Vapor Recovery (AFVR) event at Highway 11 Grocery on March 2, 2011. The event was conducted on monitoring well MW-8 to remove free phase petroleum product. Free phase petroleum product was detected in MW-8 at a thickness of 0.25 feet prior to the AFVR event. The event was conducted continuously for eight hours by MECI personnel utilizing a vacuum extraction unit. Free phase petroleum product was not detected in the wells immediately following the event.

MECI treated the off gas produced during the AFVR event using an activated carbon filter system. Calculated total petroleum hydrocarbons removed from the wells were 9.99 pounds or approximately 1.72 equivalent gallons. The average rate of removal for the hydrocarbons was calculated to be 1.25 pounds per hour. Concentrations of off gas produced during the event were recorded from 477 parts per million by volume (PPM) to 1,590 PPM. Measurements were obtained from vapors prior to entering off gas treatment. Vacuum readings were recorded at a range of 15.0 to 20.0 inches of mercury during the event. A complete compilation of measurements recorded is presented in attached Table 1B.

Differential pressures and groundwater levels were measured and recorded for selected site monitoring wells at regular intervals. This data is summarized in the attached Table 2B. Monitoring well locations are depicted on attached Figure.

A total of 100 gallons of liquid was removed from MW-8 during this event. Free phase petroleum product was not observed in the holding tank at the end of the event. The fluids produced were transported to TK Tank Services, Inc. of Sumter, S.C. for disposal. A disposal manifest for these fluids is attached at the end of this report.

QUALIFICATIONS OF REPORT

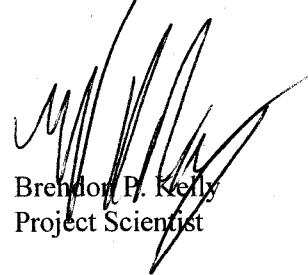
The activities and evaluative approaches used in this assignment are consistent with those normally employed in enhanced fluid recovery events and waste management projects of this type. Contents of this report are intended for the use by MECI and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental related services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.



Courtney M. Sanders
Staff Biologist


Brendon P. Kelly
Project Scientist

Attachments:

TABLE 1B
AFVR MONITORING DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223B
SCDHEC SITE ID NUMBER 03439

Extraction Well	Date	Time (hh:mm)	Differential Time (hr)	Extraction Well Head Vacuum (in. Hg)		Concentration (PPM)	Off Gas Measurements		Removal Rate Lbs/Hr	Interval Removal Lbs
				Ft/Min	CFM		Offgas Velocity Ft/Min	Flow Rate CFM		
MW-8	03/02/11	12:30	0.50	18.0	1,471	920	82.80	1.46	0.73	
	03/02/11	13:00	0.50	18.0	1,590	990	89.10	1.70	0.85	
	03/02/11	13:30	0.50	15.0	1,585	1,260	113.40	2.16	1.08	
	03/02/11	14:00	0.50	15.0	928	1,230	110.70	1.23	0.62	
	03/02/11	14:30	0.50	20.0	1,135	510	45.90	0.63	0.31	
	03/02/11	15:00	0.50	15.0	948	1,190	107.10	1.22	0.61	
	03/02/11	15:30	0.50	15.0	610	1,520	136.80	1.00	0.50	
	03/02/11	16:00	0.50	15.0	485	1,430	128.70	0.75	0.37	
	03/02/11	16:30	0.50	15.0	501	1,470	132.30	0.80	0.40	
	03/02/11	17:00	0.50	15.0	477	1,510	135.90	0.78	0.39	
	03/02/11	17:30	0.50	15.0	710	1,240	111.60	0.95	0.48	
	03/02/11	18:00	0.50	15.0	698	1,260	113.40	0.95	0.47	
	03/02/11	18:30	0.50	15.0	815	1,300	117.00	1.14	0.57	
	03/02/11	19:00	0.50	15.0	874	1,440	129.60	1.36	0.68	
	03/02/11	19:30	0.50	20.0	1,580	840	75.60	1.43	0.72	
	03/02/11	20:00	0.50	20.0	1,486	770	69.30	1.24	0.62	
	03/02/11	20:30	0.50	20.0	1,475	740	66.60	1.18	0.59	
										TOTAL
										9.99
Well Data:				Pre AFVR Event			Post AFVR Event			Corrected Depth to Water
Well No.	Diameter (in)	Screened Interval (ft)	Depth to Product (ft)	Product Thickness (ft)	Depth to Water (ft)	Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Thickness (ft) ***	Change (ft)
MW-8	2"	15-30	21.45	0.25	21.70	***	22.20	***	22.20	0.71
Vacuum Truck Information				Recovery / Disposal Information						
Subcontractor: MECI	C. Lashley	Well ID MW-8	Stinger Depth 23.00	Hydro carbons Removed (vapor):	9.99	Pounds				
Truck Operator: C. Lashley	Stack I.D. (feet): 0.33 feet			Hydro carbons Removed (liquid):	0	Gallons				
Corrected depth to water before AFVR Event in MW-8 = 21.49				Total Hydrocarbons Removed:	1.72	Equivilant Gallons				
				Molecular Weight Utilized: 75	75	g / mole				
				Disposal Facility: TK Tank Services, Inc.						
				Total Liquids Removed: 100	100	Gallons				

TABLE 2B
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223B
SCDHEC SITE ID NUMBER 03439

DIFFERENTIAL PRESSURE DATA

		Well Designation:		
		MW-10	MW-11	MW-12
Nearest Extraction Well:		MW-8	MW-8	MW-8
Approximate Distance:		164 ft	106 ft	386 ft
Time	Elapsed Time	Differential Pressure Readings (inches of water)		
12:30	0.0	0	0	0
13:00	0.5	0	0	0
13:30	1.0	0	0	0
14:00	1.5	0	0	0
14:30	2.0	0	0	0
15:00	2.5	0	0	0
15:30	3.0	0	0	0
16:00	3.5	0	0	0
16:30	4.0	0	0	0
17:00	4.5	0	0	0
17:30	5.0	0	0	0
18:00	5.5	0	0	0
18:30	6.0	0	0	0
19:00	6.5	0	0	0
19:30	7.0	0	0	0
20:00	7.5	0	0	0
20:30	8.0	0	0	0
Maximum Change:		0	0	0

GROUNDWATER DRAWDOWN DATA

		Well Designation:		
		MW-10	MW-11	MW-12
Nearest Extraction Well:		MW-8	MW-8	MW-8
Approximate Distance:		164 ft	106 ft	386 ft
Time	Elapsed Time	Depth to Liquid (feet below of casing):		
Prior to AFVR		20.07	16.95	3.05
16:30	4 hours	20.05	16.94	3.05
20:30	8 hours	20.05	16.94	3.05
Maximum Change:		0.02	0.01	0.00

Highway 111 Grocery
SCDHEC Site ID#: 03439

Former UST Basin:
2-6,000 Gal. Gasoline UST's
1-3,000 Gal. Gasoline UST
1-2,000 Gal. Diesel UST

WSW-1

(NL)
MW-5

The
Post

SB-1

(Under
Decking)

MW-1

RW-1

MW-2

RW-2

MW-3

RW-3

MW-4

RW-4

MW-5

RW-5

MW-6

RW-6

MW-7

RW-7

MW-8

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RW-143

MW-144

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number	
5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address)				
		MIDLANDS ENVIRONMENTAL 1144 TWO NOTCH ROAD LEXINGTON, SC 29072				
Generator's Phone:		704-331-0381				
6. Transporter 1 Company Name		U.S. EPA ID Number				
7. Transporter 2 Company Name		U.S. EPA ID Number				
8. Designated Facility Name and Site Address		U.S. EPA ID Number				
		THE TANK SERVICES 155 BULLYARD ROAD SUMTER, SC 29153				
Facility's Phone:						
9. Waste Shipping Name and Description		803-418-5314	10. Containers	Total Weight	11. Unit Wt./Vol.	
1.			No.	Type		
NON HAZARDOUS PETROLEUM CONTAMINATED WATER			1	L	AD 3385 GAL	
2.						
Site: UST Permit #: Gallons Produced:						
3.		Heath Self Serve 08932 200				
4.		Highway 11 Grocery 03439 100				
		Highway 11 Grocery 03439 50				
		Movie Gallery 19077 160				
		Pantry 3418 05042 165				
		Summers Store 03198 100				
		Phillips Rental 19328 100				
		Bay Creek Villas 18662 100				
13. Special Handling		One Stop 14346 225				
		UST Unknown 18678 100				
		Sweatman's Grocery 15222 225				
		Two Way Mart 12708 100				
		Quick Pantry 12 03040 200				
		Mack's Camp 01253 175				
		Wando Lounge 01077 125				
		McCoy Oil 19002 235				
14. GENERATOR'S		Great Falls Exxon 14469 100	General regulations for reporting proper disposal of Hazardous Waste.			
Generator's/Offeror's		Pratts 06974 25	Month	Day	Year	
		Former Gulf Station 18447 250				
		EZ Stop 14555 100				
15. International Shipper		Pantry 3235 02872 150				
		Colonel Creek 11702 175	Month	Day	Year	
16. Transporter Acknowledgment		Hillcrest Grocery 09383 50				
		Hillcrest Grocery 09383 50				
Transporter 2 Printed/Typed Name		Signature	Month	Day	Year	
17. Discrepancy						
17a. Discrepancy Indication Space		<input type="checkbox"/> Quantity	<input type="checkbox"/> Type	<input type="checkbox"/> Residue	<input type="checkbox"/> Partial Rejection	<input type="checkbox"/> Full Rejection
17b. Alternate Facility (or Generator)		Manifest Reference Number:				
Facility's Phone:		U.S. EPA ID Number				
17c. Signature of Alternate Facility (or Generator)						
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a						
Printed/Typed Name		Signature		Month	Day	Year

 **Midlands
Environmental
Consultants, Inc.**

March 18, 2011

Mr. Joel P. Padgett, P.G., Hydrologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Aggressive Fluid Vapor Recovery Report
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID # 03439; CA #40894
MECI Project Number 11-3223C
Certified Site Rehabilitation Site Contractor UCC-0009

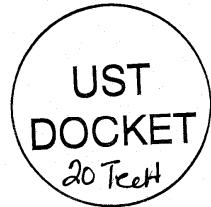
Dear Mr. Padgett,

Midlands Environmental Consultants, Inc. (MECI) is pleased to submit the attached Aggressive Fluid Vapor Recovery Report for the referenced site. This describes the aggressive fluid vapor recovery activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

AGGRESSIVE FLUID VAPOR RECOVERY

MECI personnel conducted an Aggressive Fluid Vapor Recovery (AFVR) event at Highway 11 Grocery on March 3, 2011. The event was conducted on monitoring wells MW-6, RW-3 and RW-4 to reduce dissolved CoC concentrations. Free phase petroleum product was not detected in the wells prior to the AFVR event. The event was conducted continuously for eight hours by MECI personnel utilizing a vacuum extraction unit. Free phase petroleum product was not detected in the wells immediately following the event.

MECI treated the off gas produced during the AFVR event using an activated carbon filter system. Calculated total petroleum hydrocarbons removed from the wells were 8.75 pounds or approximately 1.51 equivalent gallons. The average rate of removal for the hydrocarbons was calculated to be 1.09 pounds per hour. Concentrations of off gas produced during the event were recorded from 698 parts per million by volume (PPM) to 1,154 PPM. Measurements were obtained from vapors prior to entering off gas treatment. Vacuum readings were recorded at a range of 15.0 to 20.0 inches of mercury during the event. A complete compilation of measurements recorded is presented in attached Table 1C.



Post Office Box 854, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

Differential pressures and groundwater levels were measured and recorded for selected site monitoring wells at regular intervals. This data is summarized in the attached Table 2C. Monitoring well locations are depicted on attached Figure.

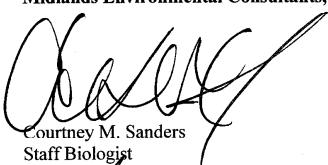
A total of 50 gallons of liquid was removed from MW-6, RW-3, and RW-4 during this event. Free phase petroleum product was not observed in the holding tank at the end of the event. The fluids produced were transported to TK Tank Services, Inc. of Sumter, S.C. for disposal. A disposal manifest for these fluids is attached at the end of this report.

QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assignment are consistent with those normally employed in enhanced fluid recovery events and waste management projects of this type. Contents of this report are intended for the use by MECI and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

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Sincerely,
Midlands Environmental Consultants, Inc.



Courtney M. Sanders
Staff Biologist



Brandon A. Kelly
Project Scientist

Attachments:

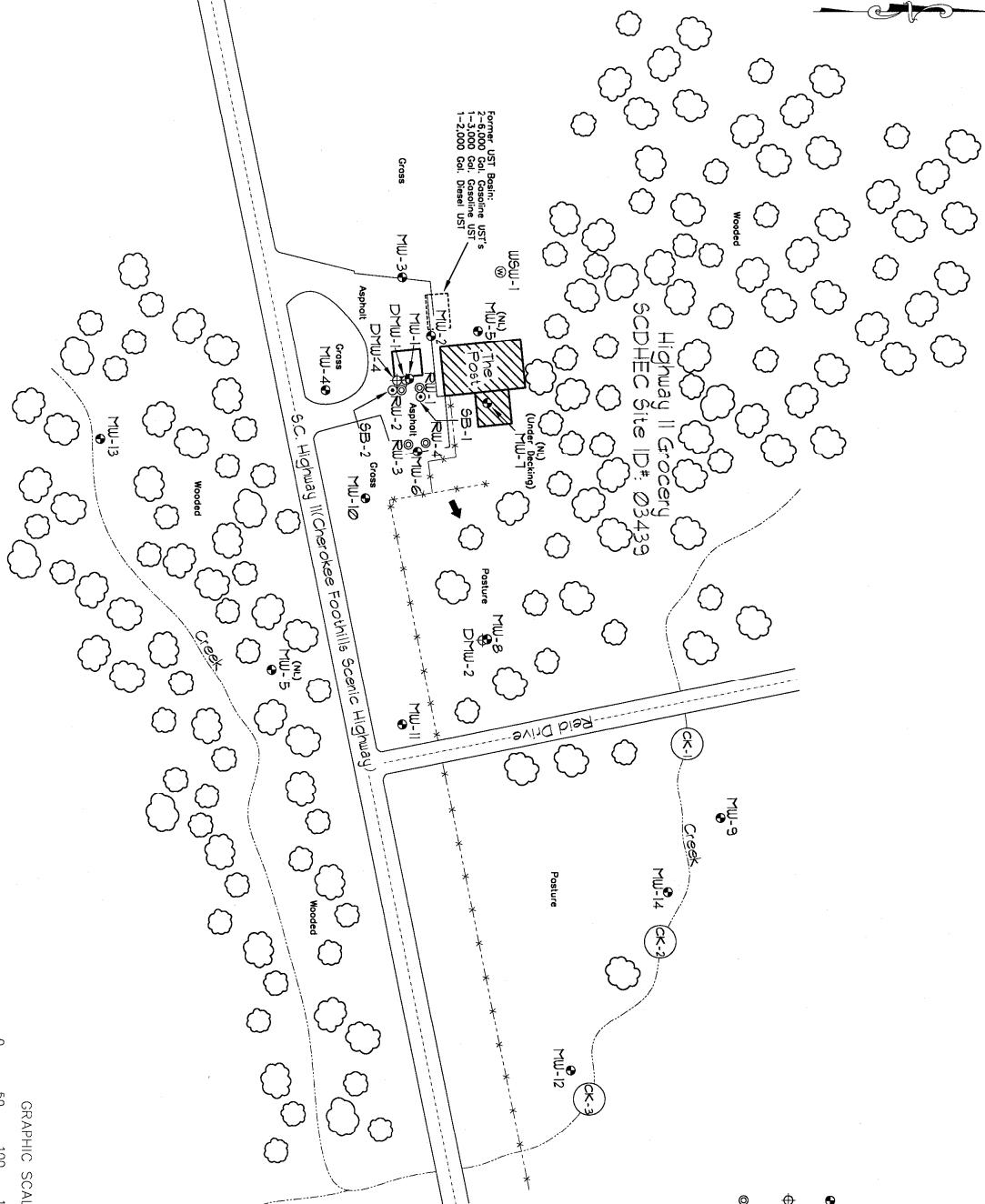
TABLE 1C
AFVR MONITORING DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECP PROJECT NUMBER 11-3223C
SCDHCC SITE ID NUMBER 03439

TABLE 2C
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223C
SCDHEC SITE ID NUMBER 03439

DIFFERENTIAL PRESSURE DATA					
		Well Designation:			
		MW-2	MW-4	MW-10	
Nearest Extraction Well:		RW-4	RW-3	RW-3	
Approximate Distance:		94 ft	86 ft	60 ft	
Time	Elapsed Time	Differential Pressure Readings (inches of water)			
9:30	0.0	0	0	0	
10:00	0.5	0	0	0	
10:30	1.0	0	0	0	
11:00	1.5	0	0	0	
11:30	2.0	0	0	0	
12:00	2.5	0	0	0	
12:30	3.0	0	0	0	
13:00	3.5	0	0	0	
13:30	4.0	0	0	0	
14:00	4.5	0	0	0	
14:30	5.0	0	0	0	
15:00	5.5	0	0	0	
15:30	6.0	0	0	0	
16:00	6.5	0	0	0	
16:30	7.0	0	0	0	
17:00	7.5	0	0	0	
17:30	8.0	0	0	0	
Maximum Change:		0	0	0	
GROUNDWATER DRAWDOWN DATA					
		Well Designation:			
		MW-2	MW-4	MW-10	
Nearest Extraction Well:		RW-4	RW-3	RW-3	
Approximate Distance:		94 ft	86 ft	60 ft	
Time	Elapsed Time	Depth to Liquid (feet below of casing):			
Prior to AFVR		27.35	23.50	20.09	
13:30	4 hours	27.35	23.50	20.07	
17:30	8 hours	27.34	23.53	20.07	
Maximum Change:		0.01	-0.03	0.02	

Explanation:

①	Location of Water Table Bracketing Monitoring Well	Location of Water Supply Well
②	Location of Doubles Cased "Deep" Monitoring Well	Estimated Groundwater Flow Direction
③	Location of 4-inch Recovery Well	Estimated Location of Removed Underground Storage Tanks



Site Features	
 Highway 11 Grocery Saluda, South Carolina SCDHEC Site ID 023439	
 Midlands Environmental Consultants, Inc.	JOB NO. 10-3000 DATE January 5, 2010 FIGURE 

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number	
5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address)				
		MIDLANDS ENVIRONMENTAL 1144 TWO NOTCH ROAD LEXINGTON, SC 29073				
Generator's Phone:		7810-5331				
6. Transporter 1 Company Name		U.S. EPA ID Number				
7. Transporter 2 Company Name		U.S. EPA ID Number				
8. Designated Facility Name and Site Address		U.S. EPA ID Number				
		TK TANK SERVICES 125 TOWER ROAD SUMTER, SC 29153				
Facility's Phone:						
9. Waste Shipping Name and Description		803-418-5140	Containers	Handled	Unhandled	
		No.	Type	Quantity	Wt/Vol.	
1.				AD 3385		
NON HAZARDOUS PETROLEUM CONTAMINATED WATER		††		GAL		
2.						
Site: UST Permit #: Gallons Produced:						
3. Heath Self Serve 08932 200						
Highway 11 Grocery 03439 100						
Highway 11 Grocery 03439 50						
Movie Gallery 19077 160						
Pantry 3418 05042 165						
Summer Store 03198 100						
Phillips Rental 19328 100						
Bay Creek Villas 18662 100						
One Stop 14346 225						
UST Unknown 18678 100						
Sweetman's Grocery 15222 225						
Two Way Mart 12708 100						
Quick Pantry 12 03040 200						
Mack's Camp 01263 175						
Wando Lounge 01077 125						
McCoy Oil 19002 235						
14. GENERATOR'S		General regulations for reporting proper disposal of Hazardous Waste.				
Generator's/Officer's		Month	Day	Year		
Former Gulf Station 18447 250						
EZ Stop 14555 100						
15. International Sh 16. Transporter Signatur 17. Discrepancy		Port of entry/exit:				
Transporter Signatur 16. Transporter Ack 17. Discrepancy		Date leaving U.S.:				
Transporter 1 Printe 17a. Discrepancy Indication Space		Month	Day	Year		
Transporter 2 Printed/Typed Name		Signature	3/16/11			
17a. Discrepancy Indication Space		<input type="checkbox"/> Quantity	<input type="checkbox"/> Type	<input type="checkbox"/> Residue	<input type="checkbox"/> Partial Rejection	<input type="checkbox"/> Full Rejection
17b. Alternate Facility (or Generator)		Manifest Reference Number:				
Facility's Phone:		U.S. EPA ID Number				
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		Signature	Month	Day	Year	

169-BLC-O 5 11977 (Rev. 8/06)

GENERATOR'S/SHIPPER'S INITIAL COPY



April 13, 2011

Mr. Joel P. Padgett, P.G., Hydrologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Aggressive Fluid Vapor Recovery Report
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID # 03439, CA #40894
MECI Project Number 11-3223D
Certified Site Rehabilitation Site Contractor UCC-0009



Dear Mr. Padgett,

Midlands Environmental Consultants, Inc. (MECI) is pleased to submit the attached Aggressive Fluid Vapor Recovery Report for the referenced site. This describes the aggressive fluid vapor recovery activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

AGGRESSIVE FLUID VAPOR RECOVERY

MECI personnel conducted an Aggressive Fluid Vapor Recovery (AFVR) event at Highway 11 Grocery on April 11 & 12, 2011. The event was conducted on monitoring wells MW-6, RW-3 and RW-4 to reduce dissolved CoC concentrations. Free phase petroleum product was not detected in the wells prior to the AFVR event. The event was conducted continuously for eight hours by MECI personnel utilizing a vacuum extraction unit. Free phase petroleum product was not detected in the wells immediately following the event.

MECI treated the off gas produced during the AFVR event using an activated carbon filter system. Calculated total petroleum hydrocarbons removed from the wells were 10.56 pounds or approximately 1.82 equivalent gallons. The average rate of removal for the hydrocarbons was calculated to be 1.32 pounds per hour. Concentrations of off gas produced during the event were recorded from 153.6 parts per million by volume (PPM) to 901.8 PPM. Measurements were obtained from vapors prior to entering off gas treatment. Vacuum readings were recorded at a range of 6.0 to 10.0 inches of mercury during the event. A complete compilation of measurements recorded is presented in attached Table 1D.

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Telephone: (803) 808-2043 • fax: (803) 808-2048

Differential pressures and groundwater levels were measured and recorded for selected site monitoring wells at regular intervals. This data is summarized in the attached Table 2D. Monitoring well locations are depicted on attached Figure.

A total of 165 gallons of liquid was removed from MW-6, RW-3, and RW-4 during this event. Free phase petroleum product was not observed in the holding tank at the end of the event. The fluids produced were transported to TK Tank Services, Inc. of Sumter, S.C. for disposal. A disposal manifest for these fluids is attached at the end of this report.

QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assignment are consistent with those normally employed in enhanced fluid recovery events and waste management projects of this type. Contents of this report are intended for the use by MECI and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental related services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.



Courtney M. Sanders
Staff Biologist



Brendon P. Kelly
Project Scientist

Attachments:

TABLE 1D
AFVR MONITORING DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223D
SCPHEC SITE ID NUMBER 034339

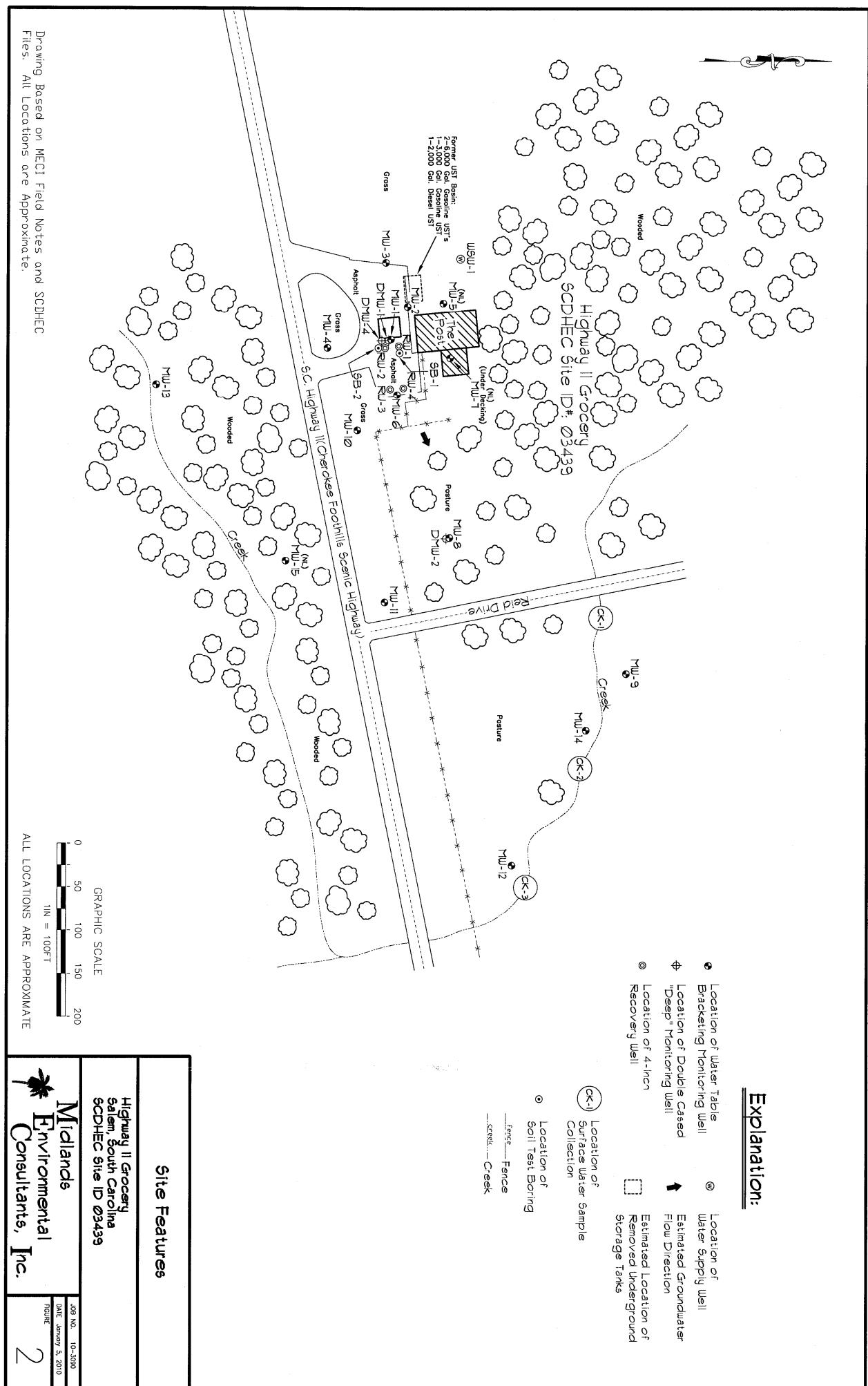
TABLE 2D
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223D
SCDHEC SITE ID NUMBER 03439

DIFFERENTIAL PRESSURE DATA				
		Well Designation:		
		MW-2	MW-4	MW-10
Nearest Extraction Well:		RW-4	RW-3	RW-3
Approximate Distance:		94 ft	86 ft	60 ft
Time	Elapsed Time	Differential Pressure Readings (inches of water)		
18:45	0.0	0	0	0
19:15	0.5	0	0	0
19:45	1.0	0	0	0
20:15	1.5	0	0	0
20:45	2.0	0	0	0
21:15	2.5	0	0	0
21:45	3.0	0	0	0
22:15	3.5	0	0	0
22:45	4.0	0	0	0
23:15	4.5	0	0	0
23:45	5.0	0	0	0
00:15	5.5	0	0	0
0:45	6.0	0	0	0
1:15	6.5	0	0	0
1:45	7.0	0	0	0
2:15	7.5	0	0	0
2:45	8.0	0	0	0
Maximum Change:		0	0	0
GROUNDWATER DRAWDOWN DATA				
		Well Designation:		
		MW-2	MW-4	MW-10
Nearest Extraction Well:		RW-4	RW-3	RW-3
Approximate Distance:		94 ft	86 ft	60 ft
Time	Elapsed Time	Depth to Liquid (feet below of casing):		
Prior to AFVR		25.70	21.93	18.55
22:45	4 hours	25.71	21.96	18.55
2:45	8 hours	25.72	21.98	18.55
Maximum Change:		-0.02	-0.05	0.00

Explanation:

- The diagram illustrates the locations of different types of monitoring wells and underground storage tanks relative to a water supply well. A north arrow is also present.

 - Location of Water Table Monitoring Well
 - Location of Double Cased "Deep" Monitoring Well
 - Location of 4-inch Recovery Well
 - Location of Water Supply Well
 - Estimated Groundwater Flow Direction
 - Estimated Location of Removed Underground Storage Tanks



NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number	
5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address) TK10317				
		MIDLANDS ENVIRONMENTAL 1144 TWO NOTCH ROAD LEXINGTON, SC 29073				
Generator's Phone:						
6. Transporter 1 Company Name		U.S. EPA ID Number				
TK TANK SERVICE		GUNTER, SC U.S. EPA ID Number 027677557				
7. Transporter 2 Company Name						
8. Designated Facility Name and Site Address		U.S. EPA ID Number				
		TK TANK SERVICES 425 BOULEVARD ROAD GUNTER, SC 29153				
Facility's Phone:		903-418-5314 027677557				
9. Waste Shipping Name and Description		10. Containers		11. Total Quantity 12. Unit Wt/Vol.		
		No.	Type			
1. HAZARDOUS PETROLEUM CONTAMINATED WATER		TT	3,381 gallons			
2. Site: UST Permit #: Gallons Produced:						
Former Royal Petroleum 19426 325						
Johnnie's Market 08986 0.5						
3. Highway 11 03439 165						
Highway 11 03439 175						
Highway 11 03439 200						
4. BJ's Wholesale Club 18529 200						
BJ's Wholesale Club 18529 175						
Littleton's Grocery 18574 160						
Littleton's Grocery 18574 175						
Lena Quick Shop 14483 175						
Bank of America 19190 150						
Rogers Auto Parts 00428 0						
Pantry 3418 05042 150						
Nis's Service Station 14793 150						
Pantry 3235 02872 150						
Former Adams Oil 19416 150						
UST Unknown 18678 200						
Colonel Creek 11702 250						
Great Falls Exxon 14469 130						
Cleland's One Stop 5273 175						
Bay Creek Villas 18662 125						
13. Special Handlings		Instructions for reporting proper disposal of Hazardous Waste.				
		Month Day Year				
14. GENERATOR						
Generator's Off						
15. International		<input type="checkbox"/> Import to U.S.	<input type="checkbox"/> Export from U.S.	Port of entry/exit: _____		
		Date leaving U.S.: _____				
16. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name Steve A. Gamble		Signature		Month	Day	Year
Transporter 2 Printed/Typed Name		Signature		Month	Day	Year
17. Discrepancy						
17a. Discrepancy Indication Space		<input type="checkbox"/> Quantity	<input type="checkbox"/> Type	<input type="checkbox"/> Residue	<input type="checkbox"/> Partial Rejection	<input type="checkbox"/> 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		Signature		Month	Day	Year

169-BLC-O 5 11977 (Rev. 8/06)

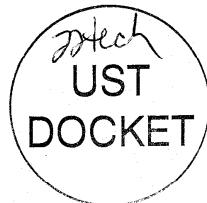
X TRANSPORTER #2



April 13, 2011

Mr. Joel P. Padgett, P.G., Hydrologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Aggressive Fluid Vapor Recovery Report
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID # 03439 CA #40894
MECI Project Number 11-3223E
Certified Site Rehabilitation Site Contractor UCC-0009



Dear Mr. Padgett,

Midlands Environmental Consultants, Inc. (MECI) is pleased to submit the attached Aggressive Fluid Vapor Recovery Report for the referenced site. This describes the aggressive fluid vapor recovery activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

AGGRESSIVE FLUID VAPOR RECOVERY

MECI personnel conducted an Aggressive Fluid Vapor Recovery (AFVR) event at Highway 11 Grocery on April 11 & 12, 2011. The event was conducted on monitoring wells MW-1, RW-1 and RW-2 to reduce dissolved CoC concentrations. Free phase petroleum product was not detected in the wells prior to the AFVR event. The event was conducted continuously for eight hours by MECI personnel utilizing a vacuum extraction unit. Free phase petroleum product was not detected in the wells immediately following the event.

MECI treated the off gas produced during the AFVR event using an activated carbon filter system. Calculated total petroleum hydrocarbons removed from the wells were 9.18 pounds or approximately 1.59 equivalent gallons. The average rate of removal for the hydrocarbons was calculated to be 1.15 pounds per hour. Concentrations of off gas produced during the event were recorded from 722 parts per million by volume (PPM) to 2,257 PPM. Measurements were obtained from vapors prior to entering off gas treatment. Vacuum readings were recorded at a range of 12.0 to 15.0 inches of mercury during the event. A complete compilation of measurements recorded is presented in attached Table 1E.

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Telephone: (803) 808-2043 • fax: (803) 808-2048

Differential pressures and groundwater levels were measured and recorded for selected site monitoring wells at regular intervals. This data is summarized in the attached Table 2E. Monitoring well locations are depicted on attached Figure.

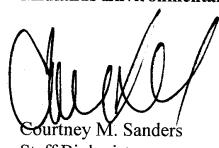
A total of 175 gallons of liquid was removed from MW-1, RW-1, and RW-2 during this event. Free phase petroleum product was not observed in the holding tank at the end of the event. The fluids produced were transported to TK Tank Services, Inc. of Sumter, S.C. for disposal. A disposal manifest for these fluids is attached at the end of this report.

QUALIFICATIONS OF REPORT

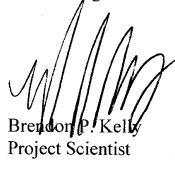
The activities and evaluative approaches used in this assignment are consistent with those normally employed in enhanced fluid recovery events and waste management projects of this type. Contents of this report are intended for the use by MECI and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental related services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.



Courtney M. Sanders
Staff Biologist



Brendon P. Kelly
Project Scientist

Attachments:

TABLE 1
AFVR MONITORING DATA
HIGHWAY 111 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223E
SCDHEC SITE ID NUMBER 03439

Extraction Well	Date	Time (hh:mm)	Differential Time (hr)	Extraction Well Head Vacuum (in. Hg)		Concentration (PPM)	Offgas Velocity FPM	Flow Rate CFM	Removal Rate Lbs/Hr	Interval Removal Lbs
				Head	Vacuum					
MW-1	04/11/11	18:45	0.50	12.0	884	940	84.60	0.90	0.45	
RW-1	04/11/11	19:15	0.50	12.0	1,192	1,250	112.50	1.61	0.80	
RW-2	04/11/11	19:45	0.50	12.0	1,385	1,220	109.30	1.82	0.91	
	04/11/11	20:15	0.50	12.0	944	1,190	107.10	1.21	0.61	
	04/11/11	20:45	0.50	12.0	1,087	1,020	91.80	1.20	0.60	
	04/11/11	21:15	0.50	12.0	1,014	920	82.80	1.01	0.50	
	04/11/11	21:45	0.50	12.0	987	890	80.10	0.95	0.47	
	04/11/11	22:15	0.50	15.0	2,257	670	60.30	1.63	0.82	
	04/11/11	22:45	0.50	15.0	2,122	640	57.60	1.47	0.73	
	04/11/11	23:15	0.50	15.0	2,048	630	56.70	1.39	0.70	
	04/11/11	23:45	0.50	15.0	1,970	600	54.00	1.28	0.64	
	04/12/11	00:15	0.50	15.0	1,554	580	52.20	0.97	0.49	
	04/12/11	04:45	0.50	15.0	1,335	560	50.40	0.81	0.40	
	04/12/11	1:15	0.50	15.0	1,313	550	49.50	0.78	0.39	
	04/12/11	1:45	0.50	15.0	987	530	47.70	0.56	0.28	
	04/12/11	2:15	0.50	15.0	722	440	39.60	0.34	0.17	
	04/12/11	2:45	0.50	15.0	814	480	43.20	0.42	0.21	
										TOTAL 9.18
Well Data:		Pre AFVR Event		Post AFVR Event		Product Thickness (ft)		Product Thickness (ft)		Corrected Depth to Water Change (ft)
Well No.	Diameter (in)	Screened interval (ft)	Depth to Product (ft)	Product Thickness (ft)	Depth to Product (ft)	***	***	***	***	***
MW-1	2"	15.30	***	24.02	24.02	***	***	23.40	***	-0.62
RW-1	4"	10.30	***	24.13	24.13	***	***	23.90	***	-0.23
RW-2	4"	10.30	***	23.45	23.45	***	***	24.52	***	1.07
Vacuum Truck Information		Well ID	Stinger Depth	Recovery / Disposal Information		9.16 Pounds		9.16 Gallons		
Subcontractor: MECI	MW-1	24.50	Hydro carbons Removed (vapor):		0	Equivalent Gallons		1.59		
Truck Operator: C. Lasley	RW-1	24.50	Hydro carbons Removed (liquid):			g / mole		75		
Stack ID (feet) 0.33 feet	RW-2	24.00	Total Hydrocarbons Removed:			TK Tank Services, Inc.		175		
			Molecular Weight Utilized:			Total Liquids Removed:				

TABLE 2E
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223E
SCDHEC SITE ID NUMBER 03439

DIFFERENTIAL PRESSURE DATA					
		Well Designation:			
		MW-2	MW-4	MW-10	
Nearest Extraction Well:		MW-1	RW-2	RW-2	
Approximate Distance:		40 ft	65 ft	100 ft	
Time	Elapsed Time	Differential Pressure Readings (inches of water)			
18:45	0.0	0	0	0	
19:15	0.5	0	0	0	
19:45	1.0	0	0	0	
20:15	1.5	0	0	0	
20:45	2.0	0	0	0	
21:15	2.5	0	0	0	
21:45	3.0	0	0	0	
22:15	3.5	0	0	0	
22:45	4.0	0	0	0	
23:15	4.5	0	0	0	
23:45	5.0	0	0	0	
00:15	5.5	0	0	0	
0:45	6.0	0	0	0	
1:15	6.5	0	0	0	
1:45	7.0	0	0	0	
2:15	7.5	0	0	0	
2:45	8.0	0	0	0	
Maximum Change:		0	0	0	
GROUNDWATER DRAWDOWN DATA					
		Well Designation:			
		MW-2	MW-4	MW-10	
Nearest Extraction Well:		MW-1	RW-2	RW-2	
Approximate Distance:		40 ft	65 ft	100 ft	
Time	Elapsed Time	Depth to Liquid (feet below of casing):			
Prior to AFVR		25.70	21.93	18.55	
22:45	4 hours	25.71	21.96	18.55	
2:45	8 hours	25.72	21.98	18.55	
Maximum Change:		-0.02	-0.05	0.00	

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number	
5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address) TK10317				
		MIDLANDS ENVIRONMENTAL 1144 TWO NOTCH ROAD LEXINGTON, SC 29073				
Generator's Phone:						
6. Transporter 1 Company Name		U.S. EPA ID Number				
TK TANK SERVICE		SUMTER, SC D37577557				
7. Transporter 2 Company Name		U.S. EPA ID Number				
8. Designated Facility Name and Site Address		U.S. EPA ID Number				
TK TANK SERVICES 105 TOWLE LANE ROAD SUMTER, SC 29153		D37577557				
Facility's Phone: 803-118-5714						
9. Waste Shipping Name and Description		10. Containers	11. Total Quantity	12. Unit Wt./Vol.		
1. HAZARDOUS PETROLEUM CONTAMINATED WATER		No. Type	TT 3,381 gallons			
2. Site: UST Permit #: Gallons Produced:						
Former Royal Petroleum 19426 325						
Johnnie's Market 08986 0.5						
3. Highway 11 03439 165						
Highway 11 03439 175						
Highway 11 03439 200						
4. BJ's Wholesale Club 18529 200						
BJ's Wholesale Club 18620 175						
Littleton's Grocery 18574 160						
Littleton's Grocery 18574 175						
13. Special Handlers						
Former Royal Petroleum 19426 325						
Johnnie's Market 08986 0.5						
3. Highway 11 03439 165						
Highway 11 03439 175						
Highway 11 03439 200						
4. BJ's Wholesale Club 18529 200						
BJ's Wholesale Club 18620 175						
Littleton's Grocery 18574 160						
Littleton's Grocery 18574 175						
Lena Quick Shop 14483 175						
Bank of America 19190 150						
Rogers Auto Parts 00428 0						
Pantry 3418 05042 150						
Nix's Service Station 14793 150						
Pantry 3235 02872 150						
Former Adams Oil 19416 150						
UST Unknown 18678 200						
Colonel Creek 11702 250						
Great Falls Exxon 14469 130						
Cleland's One Stop 5273 175						
Bay Creek Villas 18662 125						
14. GENERATOR		Actions for reporting proper disposal of Hazardous Waste.				
Generators/Off		Month	Day	Year		
15. International		<input type="checkbox"/> Import to U.S.	<input type="checkbox"/> Export from U.S.	Port of entry/exit:		
Transporter Signature (for exports only):		Date leaving U.S.:				
16. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name Steve A. Gamble		Signature		Month	Day	Year
Transporter 2 Printed/Typed Name		Signature		Month	Day	Year
17. Discrepancy						
17a. Discrepancy Indication Space		<input type="checkbox"/> Quantity	<input type="checkbox"/> Type	<input type="checkbox"/> Residue	<input type="checkbox"/> Partial Rejection	<input type="checkbox"/> Full Rejection
17b. Alternate Facility (or Generator)		Manifest Reference Number:				
Facility's Phone:		U.S. EPA ID Number				
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		Signature		Month	Day	Year

169-BLC-O 5 11977 (Rev. 8/06)

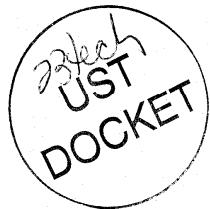
X TRANSPORTER #2



April 15, 2011

Mr. Joel P. Padgett, P.G., Hydrologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Aggressive Fluid Vapor Recovery Report
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID # 03439; CA #40894
MECI Project Number 11-3223F
Certified Site Rehabilitation Site Contractor UCC-0009



Dear Mr. Padgett,

Midlands Environmental Consultants, Inc. (MECI) is pleased to submit the attached Aggressive Fluid Vapor Recovery Report for the referenced site. This describes the aggressive fluid vapor recovery activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

AGGRESSIVE FLUID VAPOR RECOVERY

MECI personnel conducted an Aggressive Fluid Vapor Recovery (AFVR) event at Highway 11 Grocery on April 13, 2011. The event was conducted on monitoring well MW-8 to remove free phase petroleum product. Free phase petroleum product was detected in MW-8 at a thickness of 0.37 feet prior to the AFVR event. The event was conducted continuously for eight hours by MECI personnel utilizing a vacuum extraction unit. Free phase petroleum product was not detected in the well immediately following the event.

MECI treated the off gas produced during the AFVR event using an activated carbon filter system. Calculated total petroleum hydrocarbons removed from the well were 8.22 pounds or approximately 1.42 equivalent gallons. The average rate of removal for the hydrocarbons was calculated to be 1.03 pounds per hour. Concentrations of off gas produced during the event were recorded from 184 parts per million by volume (PPM) to 4,180 PPM. Measurements were obtained from vapors prior to entering off gas treatment. Vacuum readings were recorded at a range of 6.0 to 23.0 inches of mercury during the event. A complete compilation of measurements recorded is presented in attached Table 1F.

Post Office Box 254, Lexington SC 29071 • 235-B Dooley Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048

Differential pressures and groundwater levels were measured and recorded for selected site monitoring wells at regular intervals. This data is summarized in the attached Table 2F. Monitoring well locations are depicted on attached Figure.

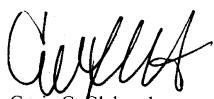
A total of 200 gallons of liquid was removed from MW-8 during this event. Free phase petroleum product was not observed in the holding tank at the end of the event. The fluids produced were transported to TK Tank Services, Inc. of Sumter, S.C. for disposal. A disposal manifest for these fluids is attached at the end of this report.

QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assignment are consistent with those normally employed in enhanced fluid recovery events and waste management projects of this type. Contents of this report are intended for the use by MECI and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental related services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.



Gavin G. Globensky
Staff Biologist



Brendon P. Kelly
Project Scientist

Attachments:

TABLE 1F
AFVR MONITORING DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223F
SCDHEC SITE ID NUMBER 03439

Extraction Well	Date	Time (hh:mm)	Differential Time (hr)	Extraction Well Head / Vacuum (in. Hg)	Concentration (PPM)	Off Gas Measurements		Removal Rate Lbs/Hr	Interval Removal Lbs
						Offgas Velocity Ft/Min	Flow Rate CFM		
MW-8	04/13/11	13:30	0.50	6.0	1,330	1,190	107.10	1.71	0.85
	04/13/11	14:00	0.50	6.0	1,250	112.50	0.25	0.12	
	04/13/11	14:30	0.50	13.0	307	880	79.20	0.29	0.15
	04/13/11	15:00	0.50	17.0	529	600	54.00	0.34	0.17
	04/13/11	15:30	0.50	21.0	1,021	410	36.90	0.45	0.23
	04/13/11	16:00	0.50	22.0	1,823	400	36.00	0.75	0.39
	04/13/11	16:30	0.50	23.0	2,797	400	36.00	1.21	0.60
	04/13/11	17:00	0.50	23.0	3,863	400	36.00	1.67	0.83
	04/13/11	17:30	0.50	23.0	4,180	400	36.00	1.81	0.90
	04/13/11	18:00	0.50	23.0	3,678	400	36.00	1.59	0.79
	04/13/11	18:30	0.50	23.0	3,546	400	36.00	1.53	0.77
	04/13/11	19:00	0.50	21.0	1,868	410	36.90	0.83	0.41
	04/13/11	19:30	0.50	15.0	1,194	650	58.50	0.84	0.42
	04/13/11	20:00	0.50	9.0	589	1,110	99.90	0.71	0.35
	04/13/11	20:30	0.50	9.0	880	1,100	99.00	1.05	0.52
	04/13/11	21:00	0.50	9.0	533	1,100	99.00	0.65	0.32
	04/13/11	21:30	0.50	9.0	631	1,110	99.90	0.76	0.38
									TOTAL 8.22
Well Data:									
Well No.	Diameter (in)	Screened Interval (ft)		Pre AFVR Event Depth to Product Water (ft)	Product Thickness (ft)	Post AFVR Event Depth to Water (ft)	Product Thickness (ft)	Corrected Depth to Water Change (ft)	
MW-9	2"	15-30		20.39	0.37	21.66	***	1.21	
Vacuum Truck Information	MECI	Well ID MW-8	Stinger Depth 22.00						
Subcontractor:				Hydro carbons Removed (vapor):		8.22	Pounds		
Truck Operator:				Hydro carbons Removed (liquid):		0	Gallons		
Stack I.D. (feet)	R-Arial			Total Hydrocarbons Removed:		1.42	Equivalent Gallons		
Corrected depth to water before AFVR Event in MW-8 =	0.33 feet			Molecular Weight Utilized:		75	g / mole		
				Disposal Facility:		TK Tank Services, Inc.			
				Total Liquids Removed:		200	Gallons		

TABLE 2F
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223F
SCDHEC SITE ID NUMBER 03439

DIFFERENTIAL PRESSURE DATA

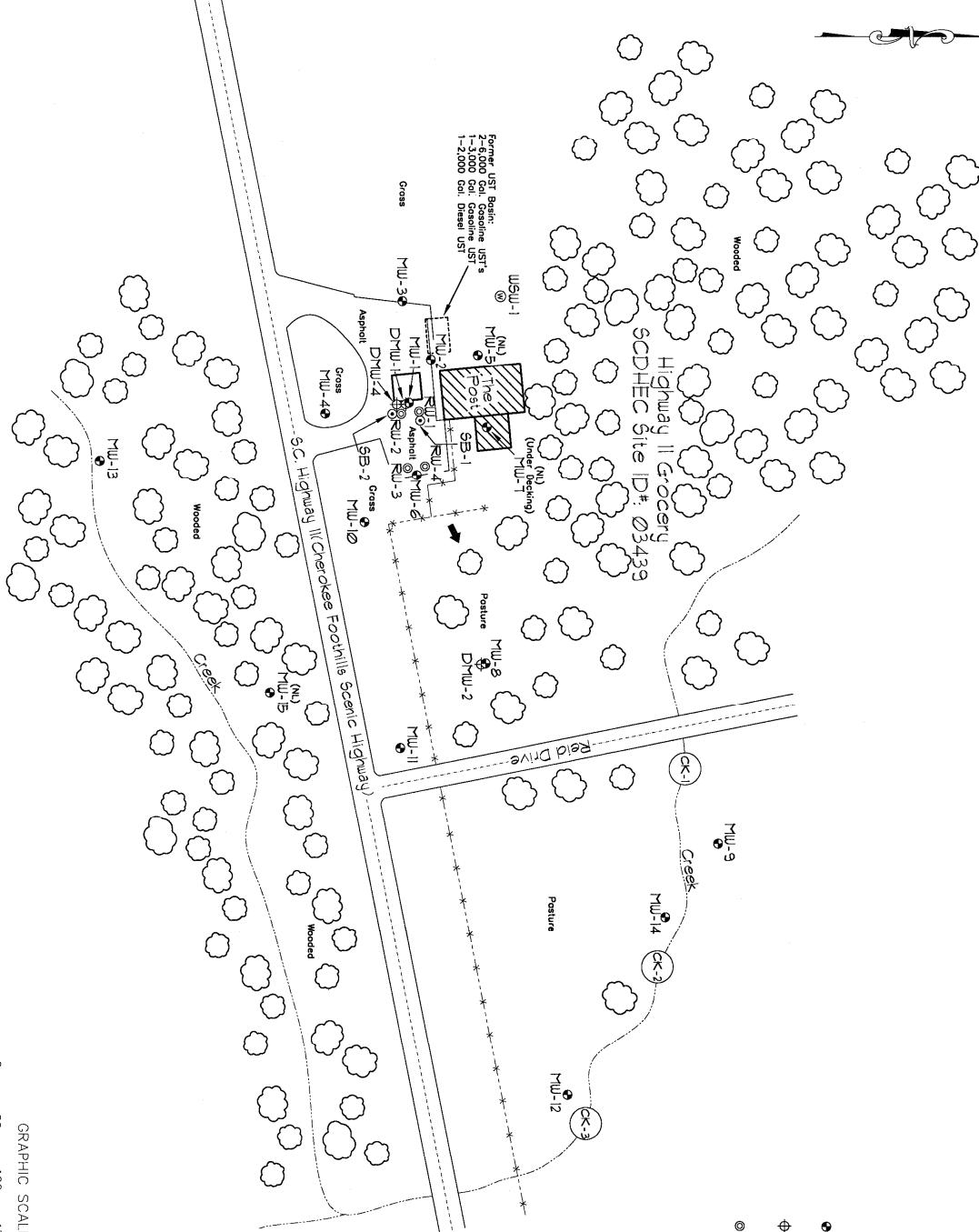
Time	Elapsed Time	Well Designation:		
		MW-6	MW-10	MW-11
		MW-8	MW-8	MW-8
13:30	0.0	0	0	0
14:00	0.5	0	0	0
14:30	1.0	0	0	0
15:00	1.5	0	0	0
15:30	2.0	0	0	0
16:00	2.5	0	0	0
16:30	3.0	0	0	0
17:00	3.5	0	0	0
17:30	4.0	0	0	0
18:00	4.5	0	0	0
18:30	5.0	0	0	0
19:00	5.5	0	0	0
19:30	6.0	0	0	0
20:00	6.5	0	0	0
20:30	7.0	0	0	0
21:00	7.5	0	0	0
21:30	8.0	0	0	0
Maximum Change:		0	0	0

GROUNDWATER DRAWDOWN DATA

Time	Elapsed Time	Well Designation:		
		MW-6	MW-10	MW-11
		MW-8	MW-8	MW-8
Prior to AFVR		20.95	18.55	15.31
17:30	4 hours	20.94	18.57	15.30
21:30	8 hours	20.94	18.58	15.32
Maximum Change:		0.01	-0.03	-0.02

Explanation:

- Location of Water Table
Bracketing Monitoring Well
- Location of Double Cased
"Deep" Monitoring Well
- Location of 4" In
Recovery Well
- Location of
Surface Water Sample
- Location of
Soil Test Boring
- Fence
- Creek
- Water Supply Well
- ↑ Estimated Groundwater
Flow Direction
- Estimated Location of
Removed Underground
Storage Tanks



Drawing Based on MECI Field Notes and SCDEP Files. All Locations are Approximate.



Site Features	
Highway II Grocery Salem, South Carolina SCDHEC Site ID 03439	

FIGURE
DATE January 5, 2010
FIGURE
2

 **Midlands Environmental Consultants, Inc.**

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number	
5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address) TK10317				
		MIDLANDS ENVIRONMENTAL 1144 TWO NOTCH ROAD LEXINGTON, SC 29073				
Generator's Phone:						
6. Transporter 1 Company Name		U.S. EPA ID Number				
TK TANK SERVICE		CUMTER, SC UPT-10317				
7. Transporter 2 Company Name		U.S. EPA ID Number				
8. Designated Facility Name and Site Address		U.S. EPA ID Number				
		TK TANK SERVICES 455 BOULEVARD ROAD CUMTER, SC 29153				
Facility's Phone:		803-418-5714 119777567				
9. Waste Shipping Name and Description		10. Containers	11. Total Quantity	12. Unit Wt/Vol.		
1. NON HAZARDOUS PETROLEUM CONTAMINATED WATER		No. Type	TT 3381	gallons		
2. Site: UST Permit #: Gallons Produced:						
Former Royal Petroleum 19426 325						
Johnnie's Market 08986 0.5						
3. Highway 11 03439 165						
Highway 11 03439 175						
Highway 11 03439 200						
4. BJ's Wholesale Club 18529 200						
BJ's Wholesale Club 18529 175						
Littleton's Grocery 18574 160						
Littleton's Grocery 18574 175						
Lena Quick Shop 14483 175						
Bank of America 19190 150						
Rogers Auto Parts 00428 0						
Pantry 3418 05042 150						
Nix's Service Station 14793 150						
Pantry 3235 02872 150						
Former Adams Oil 19416 150						
UST Unknown 18678 200						
Colonel Creek 11702 250						
Great Falls Exxon 14469 130						
Cleland's One Stop 5273 175						
Bay Creek Villas 18662 125						
15. International		<input type="checkbox"/> Import to U.S.	<input type="checkbox"/> Export from U.S.	Instructions for reporting proper disposal of Hazardous Waste.		
Transporter Signature (for exports only):		Port of entry/exit: _____ Date leaving U.S.: _____				
16. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name Steve A. Gamble		Signature	Steve A. Gamble	Month 9	Day 20	
Transporter 2 Printed/Typed Name		Signature		Year 11		
17. Discrepancy						
17a. Discrepancy Indication Space		<input type="checkbox"/> Quantity	<input type="checkbox"/> Type	<input type="checkbox"/> Residue	<input type="checkbox"/> Partial Rejection	
		<input type="checkbox"/> 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		Signature	Month	Day	Year	

169-BLC-O 5 11977 (Rev. 8/06)

TRANSPORTER #2 X



June 6, 2011

Mr. Joel P. Padgett, P.G., Hydrologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Aggressive Fluid Vapor Recovery Report
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID # 03439; CA #40894
MECI Project Number 11-3223G
Certified Site Rehabilitation Site Contractor UCC-0009

Dear Mr. Smith,

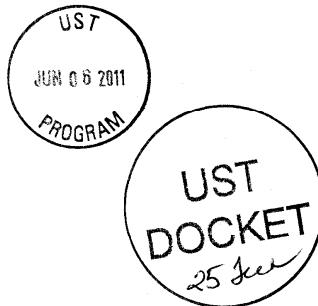
Midlands Environmental Consultants, Inc. (MECI) is pleased to submit the attached Aggressive Fluid Vapor Recovery Report for the referenced site. This describes the aggressive fluid vapor recovery activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

AGGRESSIVE FLUID VAPOR RECOVERY

MECI personnel conducted an Aggressive Fluid Vapor Recovery (AFVR) event at Highway 11 Grocery on May 18 and 19, 2011. The event was conducted on monitoring wells MW-1, RW-1, and RW-2 to remove free phase petroleum product and reduce dissolved CoC concentrations. Free phase petroleum product was detected in MW-1 at a thickness of 0.02 feet and in RW-2 at a thickness of 0.32 feet prior to the AFVR event. Free phase petroleum product was not detected in monitoring well RW-1 prior to the AFVR event. The event was conducted continuously for eight hours by MECI personnel utilizing a vacuum extraction unit. Free phase petroleum product was detected in RW-2 at a thickness of 0.05 feet immediately following the event.

MECI treated the off gas produced during the AFVR event using an activated carbon filter system. Calculated total petroleum hydrocarbons removed from the wells were 8.51 pounds or approximately 1.47 equivalent gallons. The average rate of removal for the hydrocarbons was calculated to be 1.06 pounds per hour. Concentrations of off gas produced during the event were recorded from 527 parts per million by volume (PPM) to 1,269 PPM. Measurements were obtained from vapors prior to entering off gas treatment. Vacuum readings were recorded at a range of 13.0 to 15.0 inches of mercury during the event. A complete compilation of measurements recorded is presented in attached Table 1G.

Post Office Box 854, Lexington SC 29071 • 235-B Dooly Road, Lexington, SC 29073
Telephone: (803) 808-2043 • fax: (803) 808-2048



Differential pressures and groundwater levels were measured and recorded for selected site monitoring wells at regular intervals. This data is summarized in the attached Table 2G. Monitoring well locations are depicted on attached Figure.

A total of 150 gallons of liquid was removed from MW-1, RW-1, and RW-2 during this event. Free phase petroleum product was detected in monitoring well RW-2 at a thickness of 0.05 feet following the AFVR event. Free phase petroleum product was not observed in the holding tank at the end of the event. The fluids produced were transported to TK Tank Services, Inc. of Sumter, S.C. for disposal. A disposal manifest for these fluids is attached at the end of this report.

QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assignment are consistent with those normally employed in enhanced fluid recovery events and waste management projects of this type. Contents of this report are intended for the use by MECI and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental related services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.



Courtney M. Sanders
Staff Biologist



Brendon P. Kelly
Project Scientist

Attachments:

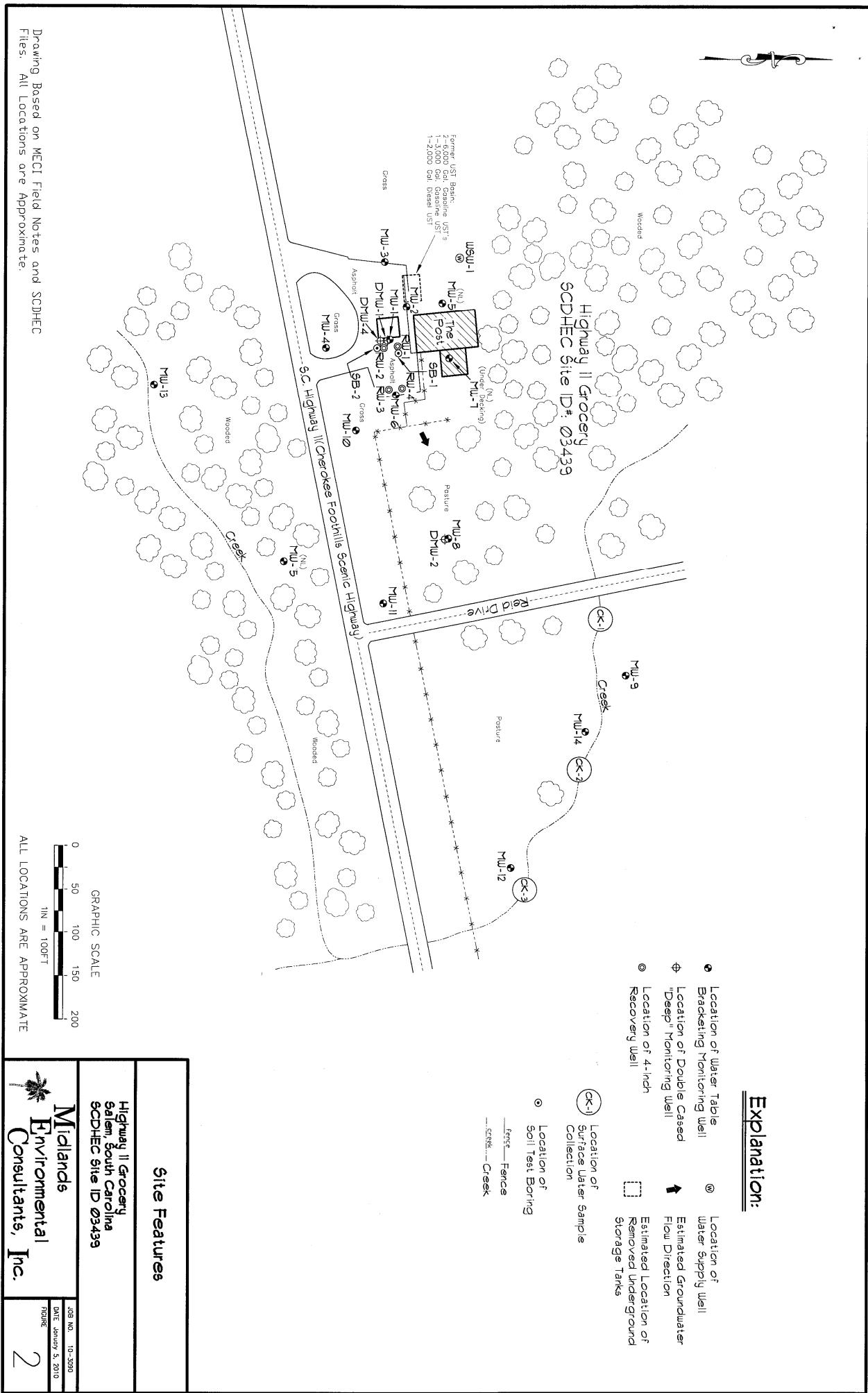
TABLE 1G
AFVR MONITORING DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MCECI PROJECT NUMBER 11-3223G
SCDHEC SITE ID NUMBER 03439

TABLE 2G
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223G
SCDHEC SITE ID NUMBER 03439

DIFFERENTIAL PRESSURE DATA				
		Well Designation:		
		MW-2	MW-4	MW-10
Nearest Extraction Well:		MW-1	RW-2	RW-1
Approximate Distance:		43 ft	68 ft	109 ft
Time	Elapsed Time	Differential Pressure Readings (inches of water)		
20:00	0.0	0	0	0
20:30	0.5	0	0	0
21:00	1.0	0	0	0
21:30	1.5	0	0	0
22:00	2.0	0	0	0
22:30	2.5	0	0	0
23:00	3.0	0	0	0
23:30	3.5	0	0	0
0:00	4.0	0	0	0
0:30	4.5	0	0	0
1:00	5.0	0	0	0
1:30	5.5	0	0	0
2:00	6.0	0	0	0
2:30	6.5	0	0	0
3:00	7.0	0	0	0
3:30	7.5	0	0	0
4:00	8.0	0	0	0
Maximum Change:		0	0	0
GROUNDWATER DRAWDOWN DATA				
		Well Designation:		
		MW-2	MW-4	MW-10
Nearest Extraction Well:		MW-1	RW-2	RW-1
Approximate Distance:		43 ft	68 ft	109 ft
Time	Elapsed Time	Depth to Liquid (feet below of casing):		
Prior to AFVR		26.01	22.79	19.30
0:00	4 hours	26.07	22.82	19.32
4:00	8 hours	26.05	22.81	19.31
Maximum Change:		0.06	0.03	0.02

Explanation:

- Location of Water Table
 - Bracketing Monitoring Well
 - Location of Double Cased "Deep" Monitoring Well
 - Location of 4-inch Recovery Well
 - Location of Water Supply Well
 - Estimated Groundwater Flow Direction
 - Estimated Location of Removed Underground Storage Tanks



NON-HAZARDOUS *WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number		
					ES-101-124		
5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address)					
MIDLAND ENVIRONMENTAL 1144 TWO NOTCH ROAD LEXINGTON, SC 29073							
Generator's Phone:							
6. Transporter 1 Company Name TK TANK SERVICE		SUMTER, SC		U.S. EPA ID Number 387575567			
7. Transporter 2 Company Name		U.S. EPA ID Number					
8. Designated Facility Name and Site Address TK TANK SERVICES 455 BOULEVARD ROAD SUMTER, SC 29153		U.S. EPA ID Number					
Facility's Phone: 6240		803-418-5314		387575567			
GENERATOR	9. Waste Shipping Name and Description NON HAZARDOUS PETROLEUM CONTAMINATED WATER		10. Containers	11. Total Quantity	12. Unit Wt/Vol.		
			No.	Type			
			1	TT	4100 gal/has		
	Site: UST Permit #: Gallons Produced:						
	Littleton's Grocery 18574 175						
	Highway 11 Grocery 03439 150						
	Littleton's Grocery 18574 175						
	Highway 11 Grocery 03439 150						
	Davis Site 15120 100						
	Louis Brown 05751 150						
Rock Hill Maintenance 09160 75							
Chester School Bus 02044 175							
Royal Petroleum 19426 325							
Town of Winnsboro 14433 100							
13. Highway 11 Grocery 03439 175							
Former Adams Oil 19416 150							
Former Krispy Kreme 19367 150							
Pantry 3418 05042 175							
Pinkney Road Property 19360 100							
Copeland's Service 05694 225							
Burrow's Service Station 12487 525							
BB&T 19443 125							
14. EZ Stop 14555 150							
Phillips Rental Property 19328 100							
Brown Brothers 04145 150							
15. Pelzer Gas Mart 00480 175							
Aircrum 01617 200							
Former Minute Saver 19340 125							
16. T							
TRANSPORTER	Transporter 1 Printed/Typed Name <i>Steve A. Gamble</i>		Signature	Month	Day	Year	
	Transporter 2 Printed/Typed Name						
			Signature	Month	Day	Year	
DESIGNATED FACILITY	17. Discrepancy						
	17a. Discrepancy Indication Space		<input type="checkbox"/> Quantity	<input type="checkbox"/> Type	<input type="checkbox"/> Residue	<input type="checkbox"/> Partial Rejection	<input type="checkbox"/> 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)							
		Signature	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		Signature					



June 6, 2011

Mr. Joel P. Padgett, P.G., Hydrologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Aggressive Fluid Vapor Recovery Report
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID # 03439; CA #40894
MECI Project Number 11-3223H
Certified Site Rehabilitation Site Contractor UCC-0009

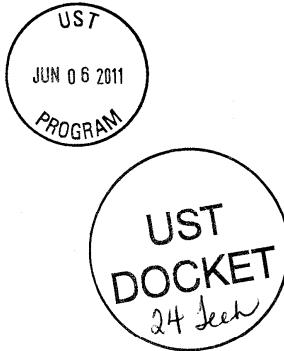
Dear Mr. Smith,

Midlands Environmental Consultants, Inc. (MECI) is pleased to submit the attached Aggressive Fluid Vapor Recovery Report for the referenced site. This describes the aggressive fluid vapor recovery activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

AGGRESSIVE FLUID VAPOR RECOVERY

MECI personnel conducted an Aggressive Fluid Vapor Recovery (AFVR) event at Highway 11 Grocery on May 18 and 19, 2011. The event was conducted on monitoring wells MW-6, RW-3, and RW-4 to remove free phase petroleum product and reduce dissolved CoC concentrations. Free phase petroleum product was detected in MW-6 at a thickness of 0.01 feet prior to the AFVR event. Free phase petroleum product was not detected in RW-3 and RW-4 prior to the AFVR event. The event was conducted continuously for eight hours by MECI personnel utilizing a vacuum extraction unit. Free phase petroleum product was not detected in the wells immediately following the event.

MECI treated the off gas produced during the AFVR event using an activated carbon filter system. Calculated total petroleum hydrocarbons removed from the wells were 1.83 pounds or approximately 0.32 equivalent gallons. The average rate of removal for the hydrocarbons was calculated to be 0.23 pounds per hour. Concentrations of off gas produced during the event were recorded from 33.3 parts per million by volume (PPM) to 226 PPM. Measurements were obtained from vapors prior to entering off gas treatment. Vacuum readings were recorded at a range of 5.0 to 9.0 inches of mercury during the event. A complete compilation of measurements recorded is presented in attached Table 1H.



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Telephone: (803) 808-2043 • fax: (803) 808-2048

Differential pressures and groundwater levels were measured and recorded for selected site monitoring wells at regular intervals. This data is summarized in the attached Table 2H. Monitoring well locations are depicted on attached Figure.

A total of 150 gallons of liquid was removed from MW-6, RW-3, and RW-4 during this event. Free phase petroleum product was not observed in the holding tank at the end of the event. The fluids produced were transported to TK Tank Services, Inc. of Sumter, S.C. for disposal. A disposal manifest for these fluids is attached at the end of this report.

QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assignment are consistent with those normally employed in enhanced fluid recovery events and waste management projects of this type. Contents of this report are intended for the use by MECI and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental related services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.



Courtney M. Sanders
Staff Biologist



Brendon H. Kelly
Project Scientist

Attachments:

TABLE 1H
AFVR MONITORING DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223H
SCDHESC SITE ID NUMBER 03439

Extraction Well	Date	Time (hh:mm)	Differential Time (hr)	Extraction Well Head Vacuum (in. Hg)		Concentration (PPM)	Off Gas Velocity Ft/Min	Flow Rate CFM	Removal Rate Lbs/Hr	Interval Removal Lbs
				166	34.6					
MW-6	05/18/11	20:30	0.50	5.0	166	2.410	216.90	0.43	0.22	0.04
RW-3	05/18/11	21:00	0.50	5.0	34.6	2.350	211.50	0.09	0.27	0.15
RW-4	05/18/11	21:30	0.50	9.0	139	1.960	176.40	0.29	0.14	0.14
	05/18/11	22:00	0.50	9.0	131	1.940	174.60	0.27		
	05/18/11	22:30	0.50	9.0	115	1.850	166.50	0.23		
	05/18/11	23:00	0.50	9.0	226	1.910	171.90	0.47		
	05/18/11	23:30	0.50	8.0	106	2.100	189.00	0.24	0.12	
	05/19/11	0:00	0.50	7.0	101	2.160	194.40	0.24	0.12	
	05/19/11	0:30	0.50	5.0	42.2	2.490	224.10	0.11	0.06	
	05/19/11	1:00	0.50	5.0	40.8	2.450	220.50	0.11	0.05	
	05/19/11	1:30	0.50	5.0	40.7	2.440	219.60			
	05/19/11	2:00	0.50	5.0	62.2	2.410	216.90	0.16	0.08	
	05/19/11	2:30	0.50	5.0	87.4	2.290	206.10	0.22	0.11	
	05/19/11	3:00	0.50	5.0	93.2	2.440	219.60	0.25	0.12	
	05/19/11	3:30	0.50	5.0	94.8	2.510	225.90	0.26	0.13	
	05/19/11	4:00	0.50	5.0	33.3	2.500	225.00	0.39	0.04	
	05/19/11	4:30	0.50	5.0	33.3	2.510	225.90	0.39	0.05	
										TOTAL 1.83

Well No.	Diameter (in)	Screened Interval (ft)	Pre AFVR Event			Post AFVR Event	Corrected Depth to Water Change (ft)
			Depth to Product Water (ft)	Product Thickness (ft)	Depth to Product (ft)		
MW-6	2"	20-35	21.53	0.01	***	21.54	0.26
RW-3	4"	10-30	***	21.80	***	21.79	0.19
RW-4	4"	10-30	***	22.42	***	21.99	0.19

Vacuum Truck Information	Well ID	Stinger Depth	Recovery / Disposal Information		
			Hydro carbons Removed (vapor): Hydro carbons Removed (liquid): Total Hydrocarbons Removed:	Pounds Gallons Equivalent Gallons	Molecular Weight Utilized: Disposal Facility: Total Liquids Removed:
Subcontractor: MECI Truck Operator: R. Arail Stack I.D. (feet): 0.33 feet	MW-6 RW-3 RW-4	22.00 22.00 23.00	21.53 21.80 21.53	0 0.32 75 TK Tank Services, Inc. 150	0.19 0.19 0.29

Corrected depth to water before AFVR Event in MW-6 =

TABLE 2H
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223H
SCDHEC SITE ID NUMBER 03439

DIFFERENTIAL PRESSURE DATA				
		Well Designation:		
		MW-2	MW-4	MW-10
Nearest Extraction Well:		MW-6	RW-3	RW-4
Approximate Distance:		103 ft	88 ft	73 ft
Time	Elapsed Time	Differential Pressure Readings (inches of water)		
20:30	0.0	0	0	0
21:00	0.5	0	0	0
21:30	1.0	0	0	0
22:00	1.5	0	0	0
22:30	2.0	0	0	0
23:00	2.5	0	0	0
23:30	3.0	0	0	0
0:00	3.5	0	0	0
0:30	4.0	0	0	0
1:00	4.5	0	0	0
1:30	5.0	0	0	0
2:00	5.5	0	0	0
2:30	6.0	0	0	0
3:00	6.5	0	0	0
3:30	7.0	0	0	0
4:00	7.5	0	0	0
4:30	8.0	0	0	0
Maximum Change:		0	0	0
GROUNDWATER DRAWDOWN DATA				
		Well Designation:		
		MW-2	MW-4	MW-10
Nearest Extraction Well:		MW-6	RW-3	RW-4
Approximate Distance:		103 ft	88 ft	73 ft
Time	Elapsed Time	Depth to Liquid (feet below of casing):		
Prior to AFVR		26.01	22.79	19.30
0:30	4 hours	26.07	22.82	19.32
4:30	8 hours	26.05	22.81	19.31
Maximum Change:		0.06	0.03	0.02

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
					187575574
5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address)			
		RIDLWOOD ENVIRONMENTAL 1144 TWO NOTCH ROAD LEXINGTON, SC 29073			
Generator's Phone:					
6. Transporter 1 Company Name		SOUTHERN TANK		U.S. EPA ID Number	
TR TANK SERVICE		SUMTER, SC		U8757557	
7. Transporter 2 Company Name					
8. Designated Facility Name and Site Address		TK TANK SERVICES 425 BOULEVARD ROAD SUMTER, SC 29153		U.S. EPA ID Number	
Facility's Phone:		803-418-5314		28757557	
9. Waste Shipping Name and Description		10. Containers		11. Total	12. Unit
		No.	Type	Quantity	Wt/Vol.
10. HAZARDOUS PETROLEUM CONTAMINATED WATER		1	TOT	4100	gallons
Site: UST Permit #: Gallons Produced:					
Littleton's Grocery 18574 .175					
Highway 11 Grocery 03439 150					
Littleton's Grocery 18574 .175					
Highway 11 Grocery 03439 150					
Davis Site 15120 100					
Louis Brown 05751 150					
Rock Hill Maintenance 09160 75					
Chester School Bus 02044 175					
Royal Petroleum 19426 325					
Town of Winnsboro 14433 100					
Highway 11 Grocery 03439 175					
Former Adams Oil 19416 150					
Former Krispy Kreme 19367 150					
Pantry 3418 05042 175					
Pinkney Road Property 19360 100					
Copeland's Service 05694 225					
Burrow's Service Station 12487 525					
BB&T 19443 125					
EZ Stop 14555 150					
Phillips Rental Property 19328 100					
Brown Brothers 04145 150					
Pelzer Gas Mart 00480 175					
Aircar 01617 200					
Former Minute Saver 19340 125					
13. If transported from U.S. Port of entry/exit: _____ Date leaving U.S.: _____					
14. If transported outside U.S. Signature Month Day Year					
15. If transported from U.S. Signature Month Day Year					
16. If transported outside U.S. Signature Month Day Year					
17. Discrepancy					
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> 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)		Signature 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		Signature		Month Day Year	

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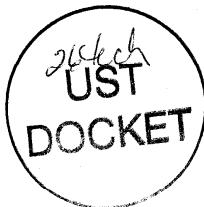
GENERATOR'S/SHIPPER'S INITIAL COPY



June 6, 2011



Mr. Joel P. Padgett, P.G., Hydrologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201



Subject: Aggressive Fluid Vapor Recovery Report
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID# 03439; CA #40894
MECI Project Number 11-32231
Certified Site Rehabilitation Site Contractor UCC-0009

Dear Mr. Smith,

Midlands Environmental Consultants, Inc. (MECI) is pleased to submit the attached Aggressive Fluid Vapor Recovery Report for the referenced site. This describes the aggressive fluid vapor recovery activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

AGGRESSIVE FLUID VAPOR RECOVERY

MECI personnel conducted an Aggressive Fluid Vapor Recovery (AFVR) event at Highway 11 Grocery on May 24, 2011. The event was conducted on monitoring wells MW-6, RW-3, and RW-4 to reduce dissolved CoC concentrations. Free phase petroleum product was not detected in monitoring wells MW-6, RW-3 and RW-4 prior to the AFVR event. The event was conducted continuously for eight hours by MECI personnel utilizing a vacuum extraction unit. Free phase petroleum product was not detected in the wells immediately following the event.

MECI treated the off gas produced during the AFVR event using an activated carbon filter system. Calculated total petroleum hydrocarbons removed from the wells were 4.70 pounds or approximately 0.81 equivalent gallons. The average rate of removal for the hydrocarbons was calculated to be 0.59 pounds per hour. Concentrations of off gas produced during the event were recorded from 192 parts per million by volume (PPM) to 989 PPM. Measurements were obtained from vapors prior to entering off gas treatment. Vacuum readings were recorded at a range of 8.0 to 15.0 inches of mercury during the event. A complete compilation of measurements recorded is presented in attached Table II.

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Telephone: (803) 808-2043 • Fax: (803) 808-2048

Differential pressures and groundwater levels were measured and recorded for selected site monitoring wells at regular intervals. This data is summarized in the attached Table 2I. Monitoring well locations are depicted on attached Figure.

A total of 175 gallons of liquid was removed from MW-6, RW-3, and RW-4 during this event. Free phase petroleum product was not observed in the holding tank at the end of the event. The fluids produced were transported to TK Tank Services, Inc. of Sumter, S.C. for disposal. A disposal manifest for these fluids is attached at the end of this report.

QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assignment are consistent with those normally employed in enhanced fluid recovery events and waste management projects of this type. Contents of this report are intended for the use by MECI and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental related services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.



Courtney M. Sanders
Staff Biologist

Brendon P. Kelly
Project Scientist

Attachments:

TABLE 1
AFVR MONITORING DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-32231
SCDHEC SITE ID NUMBER 03439

Extraction Well	Date	Time (hh:mm)	Differential Time (hr)	Extraction Well Head Vacuum (in. Hg)	Concentration (PPM)	Off Gas Velocity Ft/Min	Off Gas Measurements		Removal Rate Lbs/Hr	Interval Removal Lbs
							Flow Rate CFM	Stinger Depth ft		
MW-6	05/24/11	11:00	0.50	15.0	989	800	72.00	6.85	0.43	0.43
RW-3	05/24/11	11:30	0.50	15.0	943	846	75.60	6.86	0.41	0.41
RW-4	05/24/11	12:00	0.50	15.0	912	830	74.70	6.82	0.53	0.53
	05/24/11	12:30	0.50	15.0	963	1,010	90.90	1.05	0.53	0.53
	05/24/11	13:00	0.50	15.0	987	1,000	90.00	1.07	0.53	0.53
	05/24/11	13:30	0.50	10.0	429	1,410	126.90	0.65	0.33	0.33
	05/24/11	14:00	0.50	10.0	351	1,430	128.70	0.54	0.27	0.27
	05/24/11	14:30	0.50	9.0	292	1,480	134.10	0.47	0.23	0.23
	05/24/11	15:00	0.50	9.0	259	1,490	134.10	0.42	0.21	0.21
	05/24/11	15:30	0.50	9.0	217	1,500	135.00	0.35	0.18	0.18
	05/24/11	16:00	0.50	8.0	213	1,530	137.70	0.35	0.18	0.18
	05/24/11	16:30	0.50	8.0	210	1,510	135.90	0.34	0.17	0.17
	05/24/11	17:00	0.50	8.0	208	1,520	136.80	0.34	0.17	0.17
	05/24/11	17:30	0.50	8.0	204	1,520	136.80	0.33	0.17	0.17
	05/24/11	18:00	0.50	8.0	198	1,500	135.00	0.32	0.16	0.16
	05/24/11	18:30	0.50	8.0	192	1,520	136.80	0.32	0.16	0.16
	05/24/11	19:00	0.50	8.0	196	1,510	135.90	0.32	0.16	0.16
									TOTAL	4.70
Well Data:										
Well No.	Diameter (in.)	Screened Interval (ft)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Corrected Depth to Water Change (ft)	Corrected Depth
MW-6	2"	20-35	***	21.35	***	***	21.94	***	0.39	0.39
RW-3	4"	10-30	***	21.63	***	***	22.07	***	0.24	0.24
RW-4	4"	10-30	***	22.43	***	***	22.81	***	0.38	0.38
Vacuum Truck Information										
Subcontractor:	MECI	Well ID	Stinger Depth	Recovery / Disposal Information						
Truck Operator:	B. Owen	MW-6	22.50	Hydro carbons Removed (vapor): Hydro carbons Removed (liquid): Total Hydrocarbons Removed:						
Slack I.D. (feet)	0.33 feet	RW-3	22.50	Molecular Weight Utilized: Disposal Facility: Total Liquids Removed:						
		RW-4	23.50	TK Tank Services, Inc. 175 Gallons						

Note: Due to watertable change, stinger depth was re-adjusted on May 24, 2010. (see below)

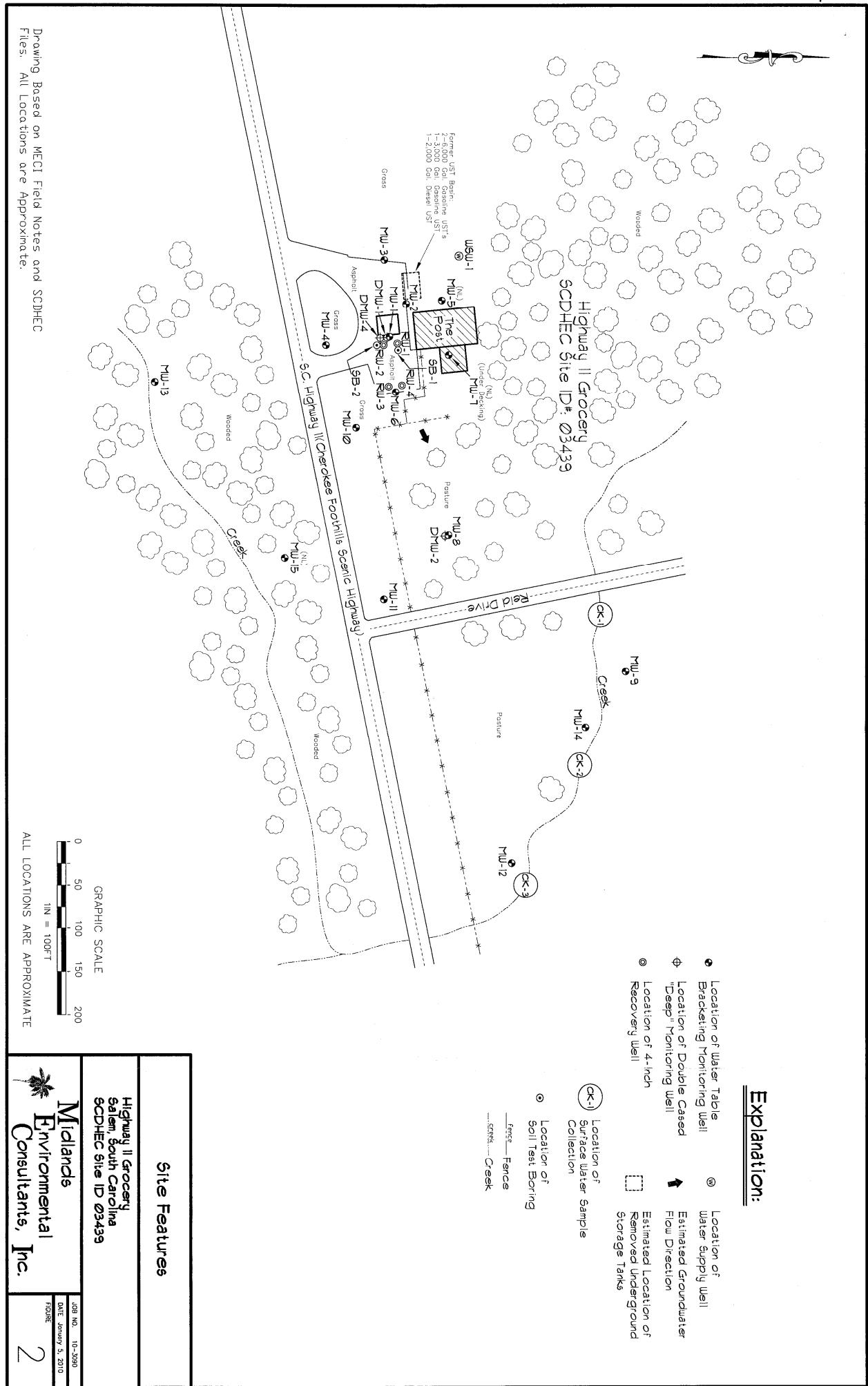
Well No.	Depth to Product (ft)	Depth to Water (ft)	Stinger Depth (ft) at 11:00	Stinger Depth (ft) at 12:30	Stinger Depth (ft) at 14:30	Stinger Depth (ft) at 16:30
MW-6	***	***	22.50	21.50	22.50	23.50
RW-3	***	***	22.50	21.50	22.50	23.50
RW-4	***	***	23.50	22.50	23.50	24.50

TABLE 2I
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223I
SCDHEC SITE ID NUMBER 03439

DIFFERENTIAL PRESSURE DATA					
		Well Designation:			
		MW-2	MW-4	MW-10	
Nearest Extraction Well:		MW-6	RW-3	RW-4	
Approximate Distance:		103 ft	88 ft	73 ft	
Time	Elapsed Time	Differential Pressure Readings (inches of water)			
11:00	0.0	0	0	0	
11:30	0.5	0	0	0	
12:00	1.0	0	0	0	
12:30	1.5	0	0	0	
13:00	2.0	0	0	0	
13:30	2.5	0	0	0	
14:00	3.0	0	0	0	
14:30	3.5	0	0	0	
15:00	4.0	0	0	0	
15:30	4.5	0	0	0	
16:00	5.0	0	0	0	
16:30	5.5	0	0	0	
17:00	6.0	0	0	0	
17:30	6.5	0	0	0	
18:00	7.0	0	0	0	
18:30	7.5	0	0	0	
19:00	8.0	0	0	0	
Maximum Change:		0	0	0	
GROUNDWATER DRAWDOWN DATA					
		Well Designation:			
		MW-2	MW-4	MW-10	
Nearest Extraction Well:		MW-6	RW-3	RW-4	
Approximate Distance:		103 ft	88 ft	73 ft	
Time	Elapsed Time	Depth to Liquid (feet below of casing):			
Prior to AFVR		26.03	22.87	19.36	
15:00	4 hours	26.05	22.87	19.35	
19:00	8 hours	26.05	22.87	19.35	
Maximum Change:		0.02	0.00	0.01	

Explanation:

- Location of Water Table
 - Brackish Monitoring Well
 - Location of Double Cased
Deep Monitoring Well
 - Location of 4-inch Recovery Well
 - Location of water supply well
 - Estimated Groundwater Flow Direction
 - Estimated Location of Removed Underground



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June 22, 2011

Mr. Joel P. Padgett, P.G., Hydrologist
Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Subject: Aggressive Fluid Vapor Recovery Report
Highway 11 Grocery
Salem, South Carolina
SCDHEC Site ID# 03439; CA #40894
MECI Project Number 11-3223J
Certified Site Rehabilitation Site Contractor UCC-0009



Dear Mr. Padgett,

Midlands Environmental Consultants, Inc. (MECI) is pleased to submit the attached Aggressive Fluid Vapor Recovery Report for the referenced site. This describes the aggressive fluid vapor recovery activities conducted at the site in general accordance with South Carolina Department of Health and Environmental Control (SCDHEC) guidelines.

AGGRESSIVE FLUID VAPOR RECOVERY

MECI personnel conducted an Aggressive Fluid Vapor Recovery (AFVR) event at Highway 11 Grocery on June 21, 2011. The event was conducted on monitoring well MW-8 to remove free phase petroleum product. Free phase petroleum product was detected in MW-8 at a thickness of 0.68 feet prior to the AFVR event. The event was conducted continuously for eight hours by MECI personnel utilizing a vacuum extraction unit. Free phase petroleum product was not detected in the well immediately following the event.

MECI treated the off gas produced during the AFVR event using an activated carbon filter system. Calculated total petroleum hydrocarbons removed from the well were 10.35 pounds or approximately 1.79 equivalent gallons. The average rate of removal for the hydrocarbons was calculated to be 1.29 pounds per hour. Concentrations of off gas produced during the event were recorded from 752 parts per million by volume (PPM) to 1,763 PPM. Measurements were obtained from vapors prior to entering off gas treatment. Vacuum readings were recorded at a range of 18.0 to 21.0 inches of mercury during the event. A complete compilation of measurements recorded is presented in attached Table I.J.

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Telephone: (803) 808-2043 • fax: (803) 808-2048

- Differential pressures and groundwater levels were measured and recorded for selected site monitoring wells at regular intervals. This data is summarized in the attached Table 2J. Monitoring well locations are depicted on attached Figure.

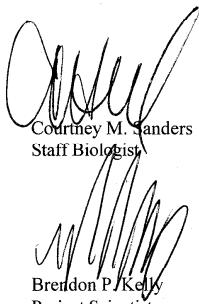
A total of 125 gallons of liquid was removed from MW-8 during this event. Free phase petroleum product was not observed in the holding tank at the end of the event. The fluids produced were transported to TK Tank Services, Inc. of Sumter, S.C. for disposal. A disposal manifest for these fluids is attached at the end of this report.

QUALIFICATIONS OF REPORT

The activities and evaluative approaches used in this assignment are consistent with those normally employed in enhanced fluid recovery events and waste management projects of this type. Contents of this report are intended for the use by MECI and the South Carolina Department of Health and Environmental Control, under mutually agreed upon terms and conditions. If other parties wish to rely on this report please contact MECI prior to their use of this information so that a mutual understanding and agreement of the terms and conditions of our services can be established.

Midlands Environmental appreciates the opportunity to offer our professional environmental related services to you on this project. Please feel free to contact us at 803-808-2043 if you have any immediate questions or comments.

Sincerely,
Midlands Environmental Consultants, Inc.



Courtney M. Sanders
Staff Biologist



Brendon P. Kelly
Project Scientist

Attachments:

TABLE 1J
AFVR MONITORING DATA
HIGHWAY 111 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-322J
SCDHEC SITE ID NUMBER 03439

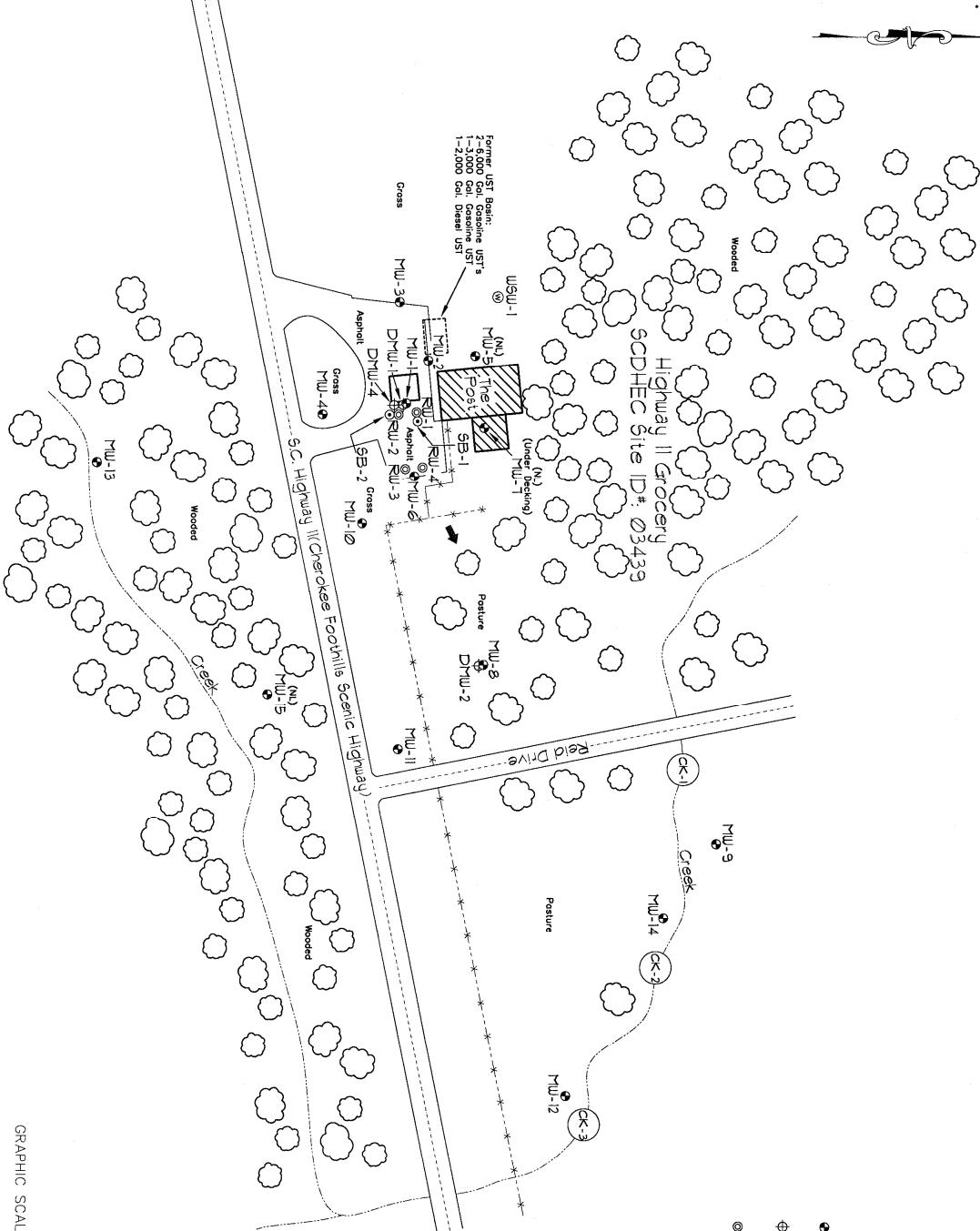
Extraction Well	Date	Time (hh:mm)	Differential Time (hr)	Extraction Well Head Vacuum (in. Hg)	Concentration (PPM)	Off Gas Measurements			Removal Rate Lbs/Hr	Interval Removal Lbs
						Offgas Velocity Ft/Min	Flow Rate CFM	Removal Rate Lbs/Hr		
MW-8	06/21/11	10:30	0.50	20.0	1,609	860	77.40	1.49	0.75	0.89
	06/21/11	11:00	0.50	20.0	1,763	930	83.70	1.77	0.84	0.84
	06/21/11	11:30	0.50	20.0	1,547	1,000	90.00	1.67	0.85	0.85
	06/21/11	12:00	0.50	20.0	1,502	1,050	94.50	1.70	0.88	0.88
	06/21/11	12:30	0.50	20.0	1,458	1,120	100.80	1.76	0.74	0.74
	06/21/11	13:00	0.50	20.0	1,204	1,140	102.60	1.48	0.65	0.65
	06/21/11	13:30	0.50	21.0	1,327	910	81.90	1.30	1.12	0.56
	06/21/11	14:00	0.50	21.0	1,293	800	72.00	1.22	0.49	0.49
	06/21/11	14:30	0.50	21.0	1,215	740	66.60	0.97	0.38	0.38
	06/21/11	15:00	0.50	21.0	1,041	670	60.30	0.75	0.37	0.37
	06/21/11	15:30	0.50	21.0	986	700	63.00	0.75	0.36	0.36
	06/21/11	16:00	0.50	21.0	932	720	64.80	0.72	0.33	0.33
	06/21/11	16:30	0.50	18.0	846	1,170	105.30	1.07	0.53	0.53
	06/21/11	17:00	0.50	18.0	819	1,190	107.10	1.05	0.50	0.50
	06/21/11	17:30	0.50	18.0	752	1,220	109.80	0.99	0.51	0.51
	06/21/11	18:00	0.50	18.0	771	1,230	110.70	1.02	0.54	0.54
	06/21/11	18:30	0.50	18.0	794	1,250	112.50	1.07		
										TOTAL 10.35
Well No.	Diameter (in)	Screened Interval (ft)	Pre AFVR Event Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Depth to Product (ft)	Depth to Water (ft)	Post AFVR Event Depth to Water (ft)	Product Thickness (ft)	Corrected Depth to Water Change (ft)
MW-8	2"	15-30	21.55	22.23	0.68	***	23.61	***	***	1.96
Vacuum Truck Information	Well ID	Stinger Depth				Recovery / Disposal Information				
Subcontractor: MECI	MW-8	23.00				Hydro carbons Removed (vapor):	10.35	Pounds		
Truck Operator: G. Globensky						Hydro carbons Removed (liquid):	0	Gallons		
Stack ID: (feet) 0.33 feet						Total Hydrocarbons Removed:	1.79	Equivalent Gallons		
Corrected depth to water before AFVR Event in MW-8 =			21.65			Molecular Weight Utilized:	75	g / mole		
						Disposal Facility	TK Tank Services, Inc.			
						Total Liquids Removed:	125	Gallons		

TABLE 2J
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
HIGHWAY 11 GROCERY
SALEM, SOUTH CAROLINA
MECI PROJECT NUMBER 11-3223J
SCDHEC SITE ID NUMBER 03439

DIFFERENTIAL PRESSURE DATA				
		Well Designation:		
		MW-4	MW-10	MW-11
Nearest Extraction Well:		MW-8	MW-8	MW-8
Approximate Distance:		262 ft	165 ft	105 ft
Time	Elapsed Time	Differential Pressure Readings (inches of water)		
10:30	0.0	0	0	0
11:00	0.5	0	0	0
11:30	1.0	0	0	0
12:00	1.5	0	0	0
12:30	2.0	0	0	0
13:00	2.5	0	0	0
13:30	3.0	0	0	0
14:00	3.5	0	0	0
14:30	4.0	0	0	0
15:00	4.5	0	0	0
15:30	5.0	0	0	0
16:00	5.5	0	0	0
16:30	6.0	0	0	0
17:00	6.5	0	0	0
17:30	7.0	0	0	0
18:00	7.5	0	0	0
18:30	8.0	0	0	0
Maximum Change:		0	0	0
GROUNDWATER DRAWDOWN DATA				
		Well Designation:		
		MW-4	MW-10	MW-11
Nearest Extraction Well:		MW-8	MW-8	MW-8
Approximate Distance:		262 ft	165 ft	105 ft
Time	Elapsed Time	Depth to Liquid (feet below of casing):		
Prior to AFVR		23.88	20.41	17.70
14:30	4 hours	23.88	20.41	17.70
18:30	8 hours	23.88	20.41	17.70
Maximum Change:		0.00	0.00	0.00

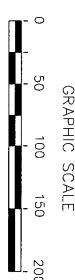
Explanation:

- Location of Water Table
- Bracketing Monitoring Well
- Location of Double Cased Well
- "Deep" Monitoring Well
- Location of 4-inch Recovery Well
- Location of Surface Water Sample Collection
- Location of Soil Test Boring
- Fence
- Creek
- ↑ Estimated Location of Flow Direction
- Estimated Location of Removed Underground Storage Tanks



Drawing Based on MECI Field Notes and SCDHEC Files. All Locations are Approximate.

Site Features	
Highway II Grocery Salmon, South Carolina	SCDHEC Site ID #03439
Midlands Environmental Consultants, Inc.	JOB NO. 10-3990 DATE January 5, 2010 FIGURE 2



NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
5. Generator's Name and Mailing Address		Generator's Site Address (if different than mailing address) MOLLENS ENVIRONMENTAL 1144 TWO HOLLOW ROAD LEXINGTON, SC 29073			
Generator's Phone:					
6. Transporter 1 Company Name TK TANK SERVICE		SUMTER, SC	U.S. EPA ID Number 087573557		
7. Transporter 2 Company Name		U.S. EPA ID Number			
8. Designated Facility Name and Site Address TK TANK SERVICES 325 BOULEVARD ROAD SUMTER, SC 29150		U.S. EPA ID Number			
Facility's Phone: 803-418-5314		987573557			
9. Waste Shipping Name and Description 10. HAZARDOUS PETROLEUM CONTAMINATED WATER		10. Containers No. Type	11. Total Quantity	12. Unit Wt./Vol.	
13. Site ID# Gallons Site ID# Gallons		1 TT 3996 Gallons			
14. Ge		disposal of Hazardous Waste. Month Day Year			
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:			
16. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name STAN A. Gamble		Signature <i>Stan A. Gamble</i> Month Day Year 16 22 11			
Transporter 2 Printed/Typed Name		Signature Month Day Year			
17. Discrepancy 17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection		Manifest Reference Number:			
17b. Alternate Facility (or Generator)		U.S. EPA ID Number			
Facility's Phone:		Month Day Year			
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		Signature Month Day Year			

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SEI ▼
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800.377.2826
803.788.2535
Fax 788.2399

RECEIVED

SEP 26 2001

Underground Storage
Tank Program

September 25, 2001

Mr. Konstantine Akhvlediani, Hydrogeologist
SCDHEC - UST Program
Bureau of Land And Waste Management
2600 Bull Street
Columbia, South Carolina 29201

RE: Tier II Assessment Report
Highway 11 Grocery
UST Permit #03439
Oconee County

Dear Mr. Akhvlediani:

Attached is the Tier II Assessment Report for Highway 11 Grocery. Should you have any questions or require additional information, please contact me at 788-2535.

Sincerely,
SEI Environmental, Inc.

Robert G. Bolton Jr.
Robert G. Bolton, Jr.
Project Manager

Attachment

cc: Mr. Steve Smith, Highway 11 Grocery

28-Tech



TIER II ASSESSMENT REPORT

Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
Ocnee County
UST Permit #03439

PREPARED FOR:

Mr. Steve Smith
Highway 11 Grocery
180 Shallowford Road
Salem, South Carolina

PREPARED BY:

SEI Environmental, Inc.
3021 McNaughton Drive, Suite 9
Columbia, South Carolina 29223
(803) 788-2535

A handwritten signature in black ink, appearing to read "Robert G. Bolton, Jr." Below the signature, the name is typed in a clean, sans-serif font.

Robert G. Bolton, Jr.
Project Manager

A handwritten signature in black ink, appearing to read "Frederick P. Lyke". Below the signature, the name is typed in a clean, sans-serif font.

Frederick P. Lyke, P.G. #1055

September 25, 2001

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3.0	LABORATORY ANALYTICAL RESULTS	7
4.0	TIER II EVALUATION	9
5.0	CONCLUSIONS AND RECOMMENDATIONS	12
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1.0 INTRODUCTION

Mr. Steve Smith contracted SEI Environmental, Inc. (SEI) to conduct a Tier II Assessment at the Highway 11 Grocery facility located at 13527 South Carolina Highway 11 near Salem, South South Carolina. A site location map is presented as Figure 1. The assessment activities were approved by SCDHEC in correspondence to Mr. Smith dated May 24, 2001. A site location map is presented as Figure 1.

1.1 Regional Geology

Salem is located in the Piedmont Geologic Province of South Carolina. Specifically, the Inner Piedmont belt of this province is beneath the subject property. This belt is characterized by medium to high grade metamorphic rocks such as granitic gneiss, mica schist, sillimanite schist, and amphibolite. Structural features of the Inner Piedmont belt include recumbent folds and nappes (Fairey, 1977).

1.2 Regional Hydrogeology

The Piedmont Geologic Province is underlain by granitic and slate-like rocks that contain numerous fractures. These rocks are mantled by a layer of soil and weathered rock, commonly known as saprolite. Groundwater is commonly found in the lower part of the soil zone where the saprolite is common and in the rock fractures located in the upper portions of the bedrock. Specifically, groundwater in this section of the Piedmont can occur in either the clayey, sandy soils, and weathered rock (saprolite) or the bedrock that is located beneath the above mentioned strata.

2.0 METHODOLOGY

2.1 Previous Assessment Activities

Due to the presence of a petroleum sheen and odors existing in the creek located hydraulically down-gradient from the subject property, SCDHEC requested that an assessment be completed at Highway 11 Grocery to determine if the sheen and odors were originating from the subject property. SEI installed two (2) Type II groundwater monitor wells (identified as MW-1 and MW-2 on March 29, 2001. Groundwater laboratory results from these wells identified the presence of elevated petroleum hydrocarbons at these two wells. As a result, a Tier II Assessment was required. During the current assessment activities, ten (10) Type II groundwater wells (identified as MW-3 through MW-12) and one (1) Type III groundwater monitor well (identified as DMW-1) were installed. In addition, eleven (11) soil borings (identified as SB-1 through SB-9, SB-11, and SB-12) were conducted.

2.2 Soil Boring and Field Screening Activities

On July 9-11, 2001, SEI personnel performed eight (8) soil borings (identified as SB-1 through SB-8) with a truck mounted CME-75 drill rig. Borings SB-1 and SB-4 were performed to an approximate depth of 4 feet below ground surface (bgs) due to rock, and Boring SB-2 was performed to an approximate depth of 10 feet bgs. Boring SB-3 was performed to an approximate depth of 32 feet bgs; Boring SB-5 was performed to an approximate depth of 25 feet bgs; and Boring SB-6 was performed to an approximate depth of 33 feet bgs. Borings SB-7 and SB-8 were performed to an approximate depth of 35 feet bgs each. Specifically, Boring SB-1 was performed near the dispenser island; Borings SB-2 and SB-4 were performed along the product lines; Boring SB-5 was performed adjacent to the UST basin. Boring SB-6 was performed west of the UST basin, and Boring SB-3 was performed south of the dispenser island. Boring SB-7 was performed northeast of the dispenser island, and Boring SB-8 was performed

southeast of the dispenser island. Borings SB-6, SB-7, and SB-8 were used as field screening locations, and soil samples were not collected for laboratory analysis from these locations. However, samples from these field screening locations were collected for soil lithology. Soil sample locations are depicted in Figure 2, and lithologic descriptions are presented in Appendix A.

On August 20, 2001, SEI personnel performed three (3) soil borings (identified as SB-9, SB-11, and SB-12) with a truck mounted CME-45 drill rig. Borings SB-9, SB-11, and SB-12 were performed to an approximate depth of 24 feet bgs, 18 feet bgs, and 14 feet bgs, respectively. Specifically Borings SB-9 and SB-11 were performed southeast of the dispenser island, and Boring SB-12 was performed northeast of the dispenser islands. These borings were used as field screening locations, and soil samples were not collected for laboratory analysis from these locations. However, samples from these borings were collected for soil lithology. Soil sample locations are depicted in Figure 2, and lithologic descriptions are presented in Appendix A.

2.3 Monitor Well Installation

A truck mounted CME-75 drill rig installed seven (7) Type II groundwater monitor wells (identified as MW-3 through MW-8 and MW-10) and one (1) Type III groundwater monitor well (identified as DMW-1) on July 9-12, 2001. A truck mounted CME-45 drill rig installed one (1) Type II groundwater monitor well (identified as MW-12) on August 20, 2001, and a truck mounted CME-75 drill rig installed two (2) Type II groundwater monitor wells (identified as MW-9 and MW-11) on August 23, 2001. Monitor Wells MW-3 and MW-8 were installed to an approximate depth of 30 feet bgs each. Monitor Wells MW-4, MW-5, and MW-6 were each installed to an approximate depth of 35 feet bgs. Monitor Well MW-7 was installed to an approximate depth of 40 feet bgs. Monitor Wells MW-9 and MW-12 were each installed to an approximate depth of 12 feet bgs. Monitor Well MW-10 was installed to an approximate depth of 28 feet bgs, and Monitor Well MW-11 was installed to an approximate depth of 23 feet bgs.

Monitor Well DMW-1 was installed to an approximate depth of 45 feet bgs. Specifically, Monitor Well MW-3 was installed in the hydraulically up-gradient direction from Monitor Well MW-1. Monitor Wells MW-4, MW-5, and MW-7 were installed in the hydraulically lateral direction from Monitor Well MW-1. Monitor Wells MW-6, MW-8, and MW-12 were installed in the hydraulically down-gradient direction from Monitor Well MW-1. Monitor Well MW-9 was also installed in the hydraulically down-gradient direction from Monitor Well MW-1 but across Fall Creek from the other wells. Monitor Wells MW-10 and MW-11 were installed in the grassy ditch along SC Highway 11 which is in the hydraulically lateral and down-gradient direction from Monitor Well MW-1. Soil samples were obtained for laboratory analysis during the installation of Monitor Wells MW-3 through MW-8 and DMW-1. However, soil samples were collected for lithologic descriptions during all monitor well installations. Monitor well locations are depicted in Figure 2.

The monitor wells are constructed of 2-inch diameter, Schedule 40, flush threaded PVC well casing with factory slotted (0.01-inch opening) Schedule 40 PVC well screen attached. Each Type II monitor well is constructed with the top of the well screen above the water table to allow for detection of potential free-phase liquid hydrocarbon. A uniformly graded silica filter pack was installed in the annular space from total depth to approximately 0.5 to 2.0 feet above the top of the screen and followed by approximately 0.5 to 2.0 feet of bentonite pellets, which were hydrated. The remainder of the boring was grouted to land surface. All monitor wells were completed with a water tight, locking PVC cap, protected by a flush finished concrete pad with a 9-inch diameter steel, traffic rated manhole with a bolt down cover. Following installations, each monitor well was developed with a clean, centrifugal pump to remove any fine materials that may impede the flow of groundwater into the well. Monitor Well DMW-1 was similarly constructed with the exception of a six-inch diameter outer casing set on top of rock at a depth of 28 feet bgs. Air rotary techniques were used to drill through the outer casing and complete the well (from approximately 28 to 45 feet bgs) the following day. Monitor well construction details and lithologic descriptions are presented in Appendix A.

2.4 Site Geology

Visual analysis of subsurface soils collected from field screening activities and monitor well installations conducted as part of this assessment indicated the soil types ranging from soft silty sand to rock. The maximum depth of the current investigation was approximately 45 feet bgs. A geologic transect map is provided as Figure 4, and geologic cross sections are provided as Figures 5 and 6.

2.5 Site Hydrogeology

During the August 27, 2001, gauging event, liquid phase hydrocarbons (LPH) were not detected in any monitor wells. Groundwater flow direction is toward the east and northeast with a hydraulic gradient of 0.0430 feet per foot as measured between Monitor Well MW-1 and the 60.00 ft. contour line. Groundwater measurements are summarized in Table I, and a groundwater elevation contour map is depicted in Figure 7.

2.6 Soil Organic Vapor Measurements

Soil organic vapor concentration measurements were performed on soil samples obtained during soil sampling events and monitor well installations with a Foxboro™ Model 128 OVA-FID. In addition, soil organic vapor concentration measurements were also performed on saturated soil samples collected during monitor well installations. The OVA-FID was compared with a known standard (i.e. methane at 96 ppm) each day before it was used. Results of this comparison are documented in Table II. Each soil sample was placed in a new, resealable, plastic bag and allowed to volatilize for a minimum of fifteen minutes. The OVA-FID probe was then inserted into the headspace of the bag, and the highest organic vapor reading observed was recorded for each sample. Organic vapor concentrations are recorded on the lithologic and monitor well construction logs.

2.7 Soil Sampling and Analysis

During the current assessment activities, soil samples were collected from Borings SB-1 through SB-5. In addition, soil samples were collected from Monitor Wells MW-3 through MW-8 and DMW-1. New, disposable, latex gloves were used to maintain sample integrity during the sampling process. The soil samples were placed in laboratory supplied containers, placed on ice, and delivered to TestAmerica Inc. in Columbia, South Carolina for proper analysis. Proper preservation methods and chain-of-custody procedures were followed throughout the sampling process. All soil samples, with the exception of Sample DMW-1, were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), and naphthalene by EPA method 8260B; and polynuclear aromatic hydrocarbons (PAH) by EPA method 8270C. The sample from Monitor Well MW-3 was also analyzed for fractional organic carbon. One sample from Monitor Well DMW-1 was analyzed for total petroleum hydrocarbons (TPH) by EPA method 3550, and an additional soil sample, collected from Monitor Well DMW-1, was delivered to Schnabel Engineering in West Columbia, South Carolina for grain size/hydrometer analysis.

2.8 Groundwater Sampling and Analysis

During the current assessment activities, SEI personnel obtained groundwater samples from Monitor Wells MW-3 through MW-12 and DMW-1. Monitor Wells MW-1 and MW-2 were sampled during the March 2001, assessment activities, but their results are also mentioned in this report. In addition, a groundwater sample was collected from the potable water well (identified as WW-1) located at the subject property. Surface water samples were collected from Fall Creek (identified as CK-1) located hydraulically down-gradient from the site and a tributary to Fall Creek (identified as CK-2) across SC Highway 11 from the site. A new, disposable, polyethylene bailer was used for the collection of the water samples from the monitor wells. Each sample was obtained after pH and temperature values had equilibrated unless petroleum odor was emanating from the well. If petroleum odors were observed in the monitor well, the

groundwater sample was obtained after three well volumes were purged. All purge water was drummed for proper disposal at a permitted treatment facility. Field measurements are presented in Appendix B. New, disposable, latex gloves were used to maintain sample integrity during the sampling process. The groundwater samples were placed in laboratory supplied containers, placed on ice, and delivered to TestAmerica Inc. in Columbia, South Carolina for proper analysis. Proper preservation methods and chain-of-custody procedures were followed throughout the sampling process. All groundwater samples were analyzed for BTEX, methyl-tert-butyl-ether (MTBE), and naphthalene by EPA method 8260B; ethylene dibromide (EDB) by EPA method 8011; PAH by EPA method 8270C; and lead by EPA method 200.7. In addition, the samples were analyzed for methane by EPA method RSK175M; nitrate by EPA method 353.2; sulfate by EPA method 9056; and ferrous iron by EPA method 3500D.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Soil Results

Soil laboratory analytical results for the samples collected during the current assessment activities detected the presence of benzene and ethylbenzene concentrations at Sample MW-6. Toluene concentrations were detected at Samples SB-3 and MW-6. Xylenes concentrations were detected at Samples SB-1 through SB-4, MW-3, MW-4, and MW-6. Naphthalene concentrations were detected at Samples SB-1, SB-2, SB-3, MW-3, and MW-6. TPH concentrations were detected at Sample DMW-1; but TOC concentrations were not detected at Sample MW-3. Grain size analysis results, conducted at the soil sample obtained from Monitor Well DMW-1, indicated the soil type as sandy loam.

BTEX concentrations were not detected greater than their respective risk based screening levels (RBSL); but naphthalene concentrations were detected greater than its RBSL of 0.036 mg/kg at Sample SB-1. The risk based screening levels are those for sandy soil. Soil analytical results are

presented in Appendix A, and soil concentrations are depicted in Figures 8-19. Laboratory analyses and chain-of-custody are presented in Appendix B.

3.2 Groundwater Results

Groundwater analytical results for the samples collected during the current assessment activities detected the presence of benzene and ethylbenzene concentrations at Samples MW-1, MW-2, MW-4, MW-6, MW-7, MW-8, MW-10, MW-11, DMW-1, and CK-1. Toluene and xylenes concentrations were detected at Samples MW-1 through MW-4, MW-6, MW-7, MW-8, MW-10, MW-11, DMW-1, and CK-1. MTBE concentrations were detected at Samples MW-1, MW-2, MW-4, MW-6, MW-8, MW-10, MW-11, MW-12, DMW-1, and CK-1. Naphthalene concentrations were detected at Samples MW-1, MW-2, MW-6, MW-8, MW-10, and DMW-1. It is probable that naphthalene concentrations exist at Sample MW-4, but a high dilution factor caused the results to be below detection limits. EDB concentrations and PAH constituents (other than naphthalene) were not detected at any sample locations. Methane concentrations were detected at Samples MW-9 and CK-1. Lead concentrations were detected at Samples MW-1 through MW-12 and DMW-1. Ferrous iron concentrations were detected at Samples MW-3 through MW-12, DMW-1, CK-1, and CK-2. Nitrate concentrations were detected at Samples MW-3, MW-4, MW-5, MW-7, MW-8, MW-9, MW-11, MW-12, CK-1, CK-2, and WW-1. Sulfate concentrations were detected at Samples MW-4, MW-9, MW-11, MW-12, DMW-1, CK-1, and CK-2.

Benzene concentrations were detected greater than its RBSL of 5 µg/l at Samples MW-1, MW-2, MW-4, MW-6, MW-7, MW-8, MW-10, MW-11, DMW-1, and CK-1. Toluene concentrations were detected greater than its RBSL of 1000 µg/l at Samples MW-1, MW-4, MW-6, MW-8, MW-10, and DMW-1. Ethylbenzene concentrations were detected greater than its RBSL of 700 µg/l at Samples MW-1, MW-4, MW-6, and MW-8. Xylenes concentrations were detected greater than its RBSL of 10000 µg/l at Samples MW-6 and MW-8. MTBE concentrations were

detected greater than its RBSL of 40 µg/l at Samples MW-1, MW-2, MW-4, MW-6, MW-8, MW-10, MW-11, DMW-1, and CK-1. Naphthalene concentrations were detected greater than its RBSL of 25 µg/l at Samples MW-1, MW-6, MW-8, MW-10, and DMW-1. Lead concentrations were detected greater than its RBSL of 0.015 mg/l at all sample locations except DMW-1, CK-1, CK-2, and WW-1. Groundwater analytical results are presented in Appendix A, and groundwater concentrations are depicted in Figures 20 through 36. Laboratory analyses and chain-of-custody are presented in Appendix C.

4.0 TIER II EVALUATION

Because dissolved petroleum hydrocarbon concentrations in groundwater, detected as part of this assessment, exceed current RBSL criteria, a Tier II Evaluation is warranted.

4.1 Establishment of Exposure Points

During the current assessment activities, SEI personnel performed a receptor survey for the subject property. This survey detected the presence of one potable water well, identified as WW-1, on the subject property and another potable water well is located approximately 500 feet northeast of the site. There are no restrictions regarding the installation of potable wells in Oconee County. Fall Creek is located approximately 200 feet northeast of the site, and a tributary to Fall Creek is located approximately 150 feet south of the site. No other ponds, lakes, or bodies of water were identified within a 1000 feet radius of the site. A utility location map is provided as Figure 3. A summary of current and future land uses is presented in Appendix D.

4.2 Establishment of SSTL

Based on the current assessment activities, petroleum impacted soil is limited to the southern side of the UST basin, dispenser area, Monitor Wells MW-3, MW-4, and MW-6. Because BTEX and

naphthalene soil concentrations are greater than their respective RBSLs in the dispenser area, the soil leachability model was performed as part of this assessment. The site specific threshold levels (SSTLs) for BTEX and naphthalene, that were calculated with the soil leachability model, are 0.003 mg/kg, 1.115 mg/kg, 1.055 mg/kg, 54.095 mg/kg, and 0.328 mg/kg, respectively. Soil concentrations exist greater than one or more calculated SSTLs at Samples SB-1, MW-1, and MW-2. Soil leachability model results are presented in Appendix E.

The SSTLs of chemicals of concern (COC) in the saturated zone have been determined using collected data from this Tier II Assessment. The worst case concentrations occurred in Monitor Well MW-8, and these concentrations were used as the worst case concentration in the calculation of the SSTL. Sample CK-1 is the point of compliance as it is located hydraulically down-gradient from the worst case concentration. COC concentrations at Monitor Wells MW-1, MW-6, MW-8, MW-10, and DMW-1 for benzene. Other COC concentrations at the sample locations do not exceed the respective calculated SSTLs.

Petroleum Constituent	MW-8 Worst Case Concentration ($\mu\text{g/l}$)	CK-1 Concentration ($\mu\text{g/l}$)	Contamination Reduction Factor	RBSI ($\mu\text{g/l}$)	SSTL ($\mu\text{g/l}$)
Benzene	17,100	53.4	320.22	5	1,601.1
Toluene	34,400	78.0	441.03	1,000	441,030
Ethylbenzene	3,060	15.2	201.32	700	140,924
Xylenes	14,800	77.8	190.23	10,000	1,902,300
MTBE	47,000	46.7	1006.42	40	40,256.8
Naphthalene	500	<5.0	100	25	2,500
EDB	<0.02	<0.02	1.0	5	5

4.3 Fate Transport

Groundwater flow velocity (V) was calculated from the August 27, 2001, gauging event and from the slug test activities conducted during the current assessment activities. During the slug test events, hydraulic conductivity (K) was calculated to be 0.171 feet per day, 0.410 feet per day, and 9.36 feet per day for Monitor Wells MW-3, MW-6, and DMW-1, respectively. The hydraulic conductivity (K) value of 106.03 feet per year was calculated as the average K value determined from the slug tests events for Monitor Wells MW-3 and MW-6. The hydraulic gradient (i) from the August 27, 2001, gauging event, as measured between Monitor Well MW-1 and the 60.00 ft. contour line is 0.0430 feet per foot. Porosity (n) was assumed to be 35% for sandy loam soil. Groundwater flow velocity ($V=Ki/n$) was estimated at 13.03 feet per year, where $K = 106.03$ feet per year and $i = 0.0430$ feet per foot. The slug test data is presented in Appendix F.

BIOSCREEN Natural Attenuation Decision Support System (1996) was utilized to determine fate transport of benzene concentrations. The use of this model assumes that the plume has reached equilibrium. Fate transport of benzene was calculated due to its mobility and elevated concentrations at the site. Data used in this model is illustrated in Appendix G. Seepage velocity of 13.03 feet per year, as calculated above, was used for hydrogeology data. Dispersion data was determined from an estimated plume length of 600 feet. Adsorption values were calculated from specific site data. The 1st order decay coefficient values were substituted in a trial and error method to determine the value that best matches observed site concentrations.

The worse case dissolved concentration of benzene (5,700 µg/l) detected in the groundwater on the subject property was determined by sampling Monitor Well MW-6. A 1st order decay coefficient of 0.35 per year provided the best fit to current site conditions for benzene, assuming the release occurred in 2000. Using data from the one year plume centerline calculations, consecutive plume centerline analyses were also run to determine the maximum distance and

time for benzene migration. The result of these plume centerline analyses illustrates that the maximum migration of the highest benzene concentration will occur approximately 25 years after the release date at a distance of approximately 375 feet to less than 450 feet down-gradient from Monitor Well MW-6. The down-gradient points used in the fate transport model are MW-8 and CK-1. Data for benzene is provided as Figures 1a, 1b, and 1c in Appendix G.

A similar process was also followed for toluene, ethylbenzene, xylenes, and naphthalene. Using current data and source area concentrations from Monitor Well MW-6, 1st order decay coefficients of 9.0, 1.1, 4.5, and 0.98 per year were found to best represent current conditions for these compounds respectively. Data for these compounds is provided in Appendix G as Figures 2 through 5, respectively. Consecutive plume centerline analyses conducted for toluene, xylenes, and naphthalene indicated that the maximum migration distance of these compounds has already occurred at a distance of 0 to less than 75 feet from Monitor Well MW-6. Consecutive plume centerline analyses conducted for ethylbenzene indicated that the maximum migration distance of this compound will occur approximately 8 years from the release date at a distance of 75 feet to less than 150 feet from Monitor Well MW-6.

5.0 CONCLUSIONS AND RECOMMENDATIONS

- Groundwater flow at the site is in a northeastern direction with a hydraulic gradient of 0.0430 feet per foot as measured between Monitor Well MW-1 and the 60.00 ft. contour line.
- Liquid phase hydrocarbons were not detected in any monitor wells during the current assessment activities.
- The onsite potable water well, identified as WW-1, was sampled as part of the current assessment activities. Laboratory analytical results failed to detect petroleum hydrocarbons in this well.
- Surface water samples were collected from Fall Creek (identified as CK-1) located

hydraulically down-gradient from the site and a tributary to Fall Creek (identified as CK-2) across SC Highway 11 from the site. Laboratory analytical results detected BTEX and MTBE concentrations at Sample CK-1, but petroleum hydrocarbons were not detected at Sample CK-2.

- SEI personnel continue to monitor the absorbent booms that have been placed in the interception trench and on Fall Creek directly down-gradient from the site. These booms are replaced on a monthly basis or as needed to prevent the migration of a petroleum sheen from traveling down Fall Creek.
- Petroleum hydrocarbons in the soil have been horizontally delineated during the current assessment activities.
- Petroleum hydrocarbons in the groundwater have been horizontally delineated during the current assessment activities with the exception of the hydraulically lateral direction towards Monitor Well MW-11. Further delineation in this direction is not possible due to the heavy brush that prevents a drill rig across Reid Drive.
- Petroleum hydrocarbons in the groundwater were not vertically delineated with the installation of Monitor Well DMW-1. This well's outer casing was set on bedrock at 28 feet bgs, and the monitor well was rock drilled to a depth of 45 feet bgs. Based on the concentrations that exist at this well, a double telescoping well is needed to further vertically delineate the petroleum hydrocarbons that exist in the source area.

Due to the presence of total BTEX, MTBE, and naphthalene concentrations existing greater than one or more of their respective RBSLs at monitor wells installed as part of this assessment and benzene concentrations existing greater than its RBSL at Sample CK-1, SEI Environmental, Inc. recommends that Highway 11 Grocery be considered a candidate for active corrective action. Furthermore, a double telescoping monitor well should be installed adjacent to Monitor Well DMW-1 to vertically delineate the petroleum hydrocarbons in the source area.

6.0 REPORT LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the current UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

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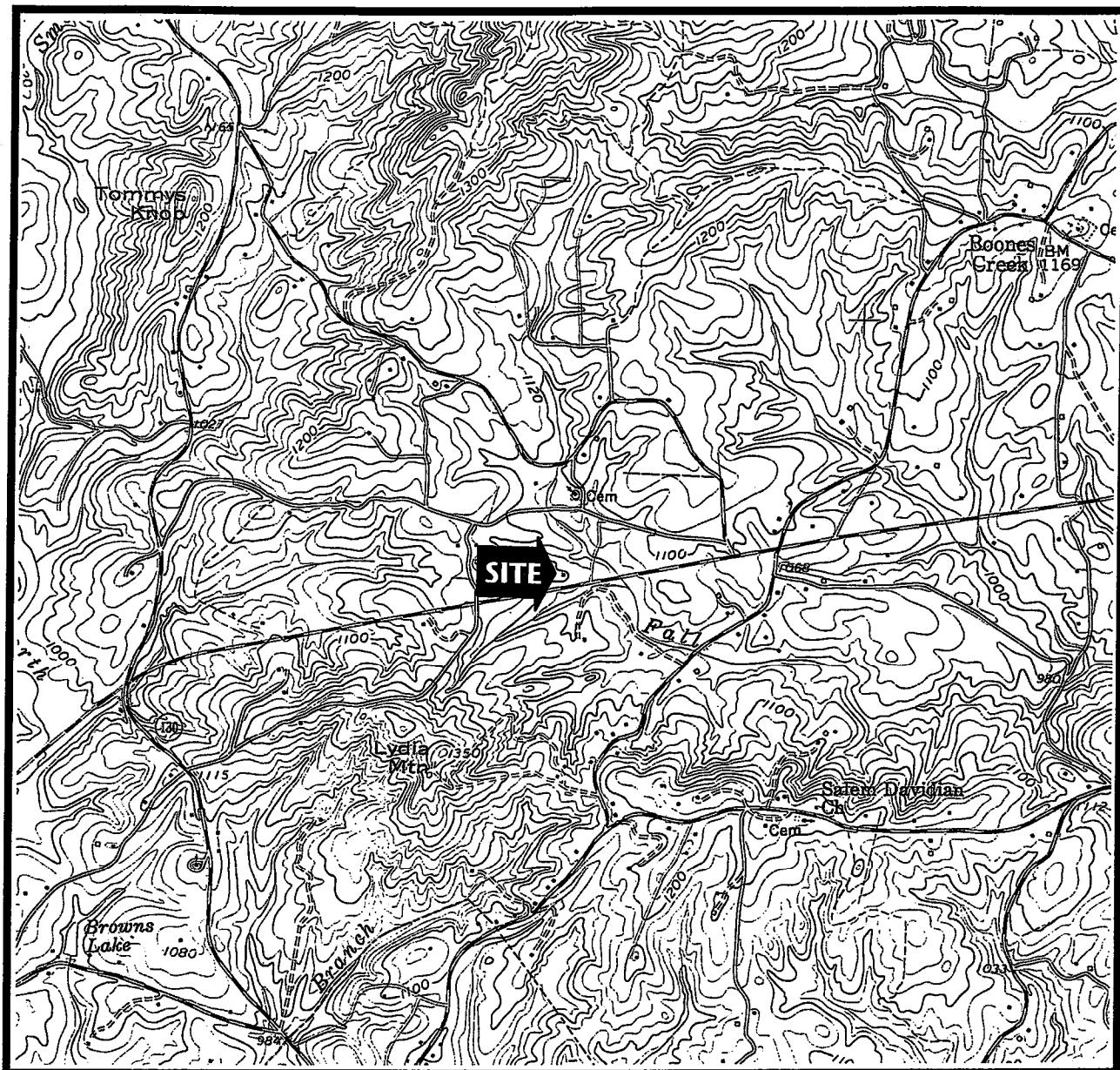
TABLE I
Groundwater Elevation Data
Highway 11 Grocery / Salem, South Carolina

Monitor Well Number	Gauging Date	Top of Casing Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Depth of Well (feet)	Water Table Elevation (feet)
MW-1	08/27/01	103.38	25.00	0	30	78.38
MW-2	08/27/01	104.85	26.41	0	35	78.44
MW-3	08/27/01	104.89	25.07	0	30	79.82
MW-4	08/27/01	99.90	24.72	0	35	75.18
MW-5	08/27/01	106.06	29.41	0	35	76.65
MW-6	08/27/01	100.00	21.97	0	35	78.03
MW-7	08/27/01	103.66	28.71	0	40	74.95
MW-8	08/27/01	86.51	21.08	0	30	65.43
MW-9	08/27/01	58.39	2.51	0	12	55.88
MW-10	08/27/01	93.78	20.43	0	24	73.35
MW-11	08/27/01	83.20	17.07	0	23	66.13
MW-12	08/27/01	58.69	3.56	0	12	55.13
DMW-1	08/27/01	103.27	25.03	0	45	78.24

Top of casing elevations are based on an assumed elevation.

TABLE II
Field Calibration Results
Highway 11 Grocery / Salem, South Carolina

Calibration Date	Field Instrument	Model Number	Serial Number	Calibration Standard	Instrument Reading
07/09/01	OVA-FID	128	41171	Methane (96 ppm)	96 ppm
07/10/01	OVA-FID	128	41171	Methane (96 ppm)	96 ppm
07/11/01	OVA-FID	128	41171	Methane (96 ppm)	96 ppm
07/12/01	OVA-FID	128	41171	Methane (96 ppm)	96 ppm
08/20/01	OVA-FID	128	41171	Methane (96 ppm)	96 ppm
08/23/01	OVA-FID	128	41171	Methane (96 ppm)	96 ppm



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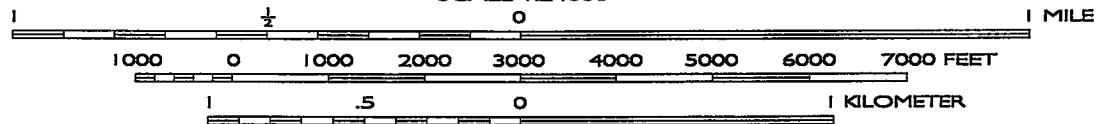
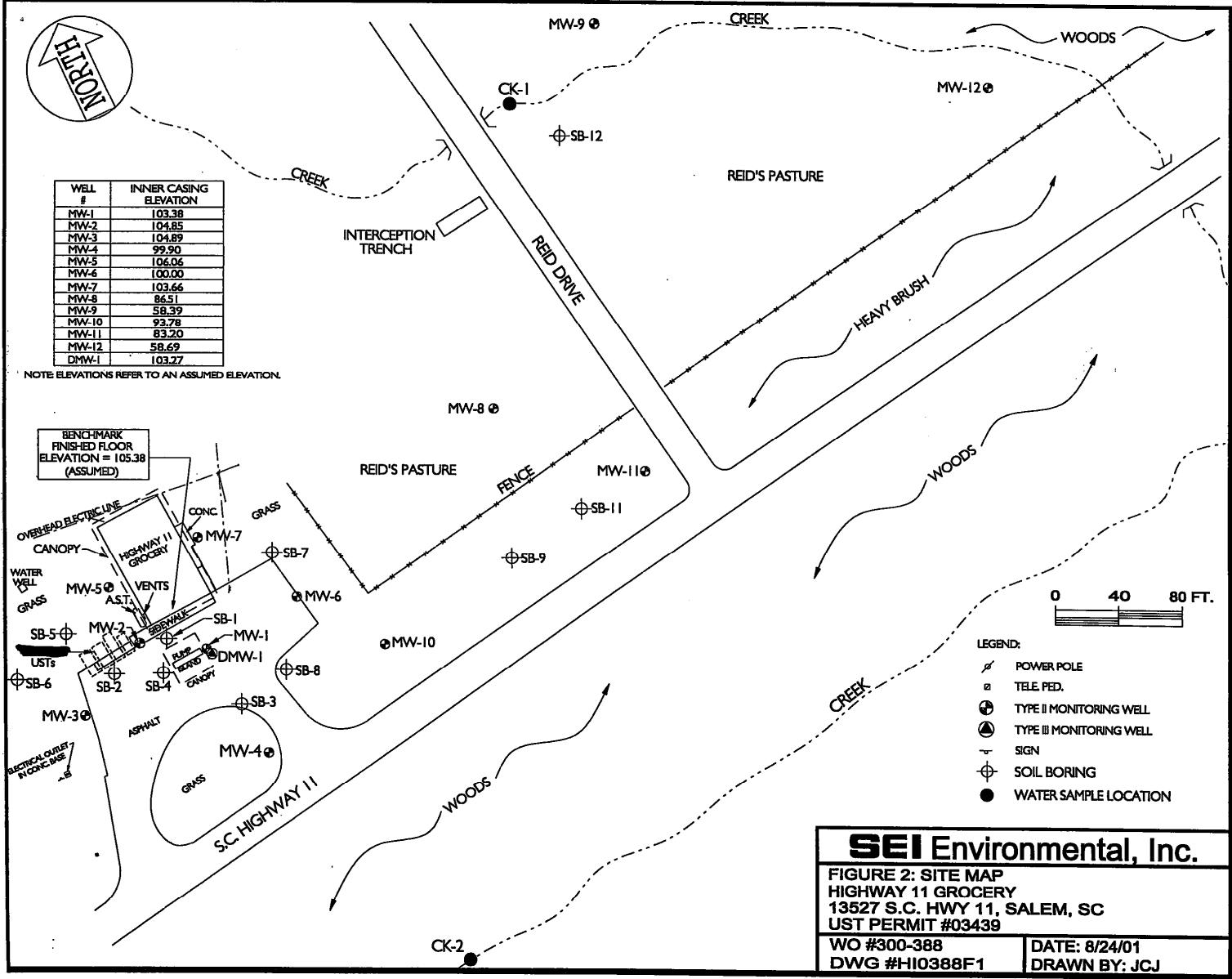
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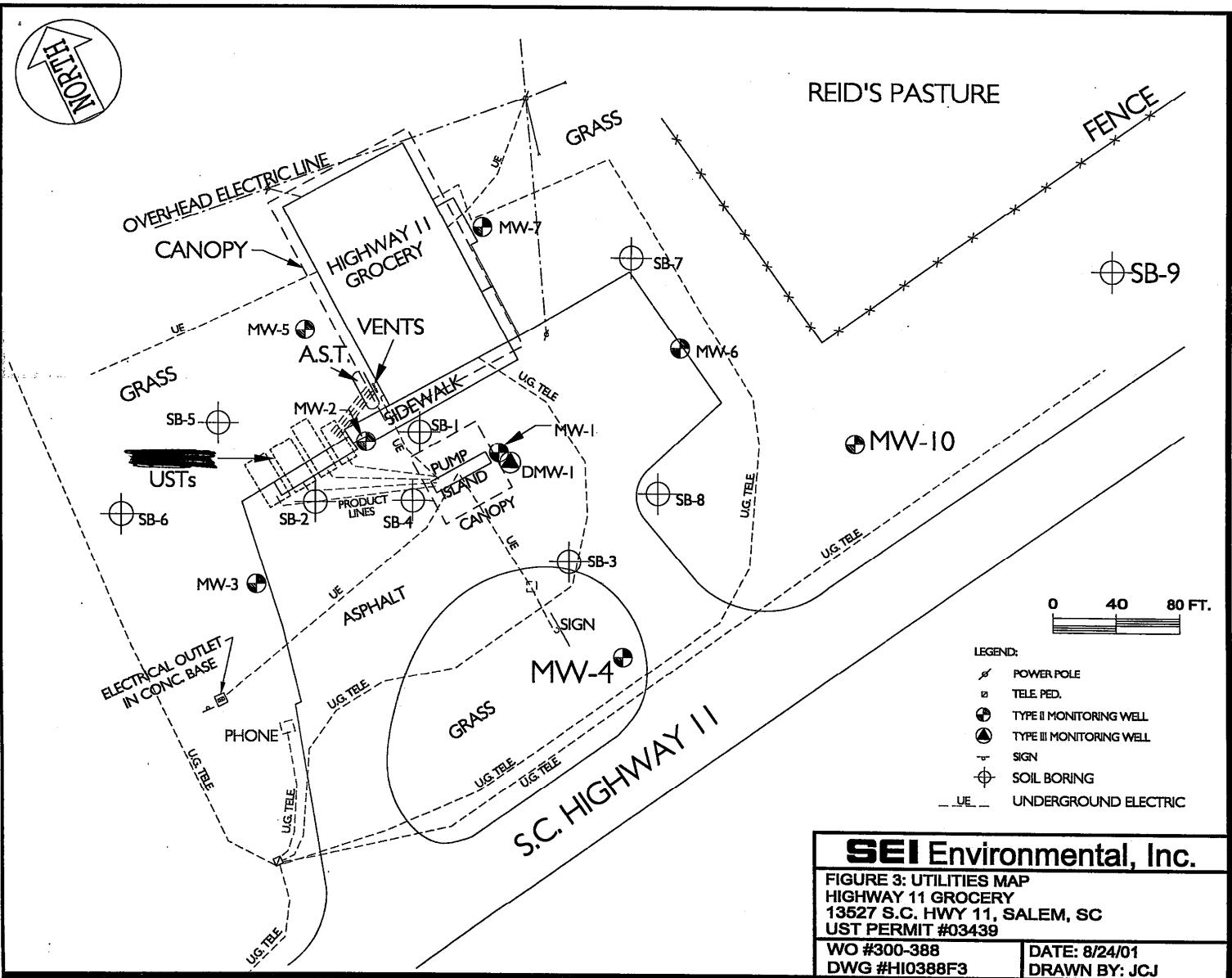
FIGURE 1: SITE LOCATION MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

W.O. #: 300-388
DWG #

DATE: 9/5/01
DRAWN BY: JC





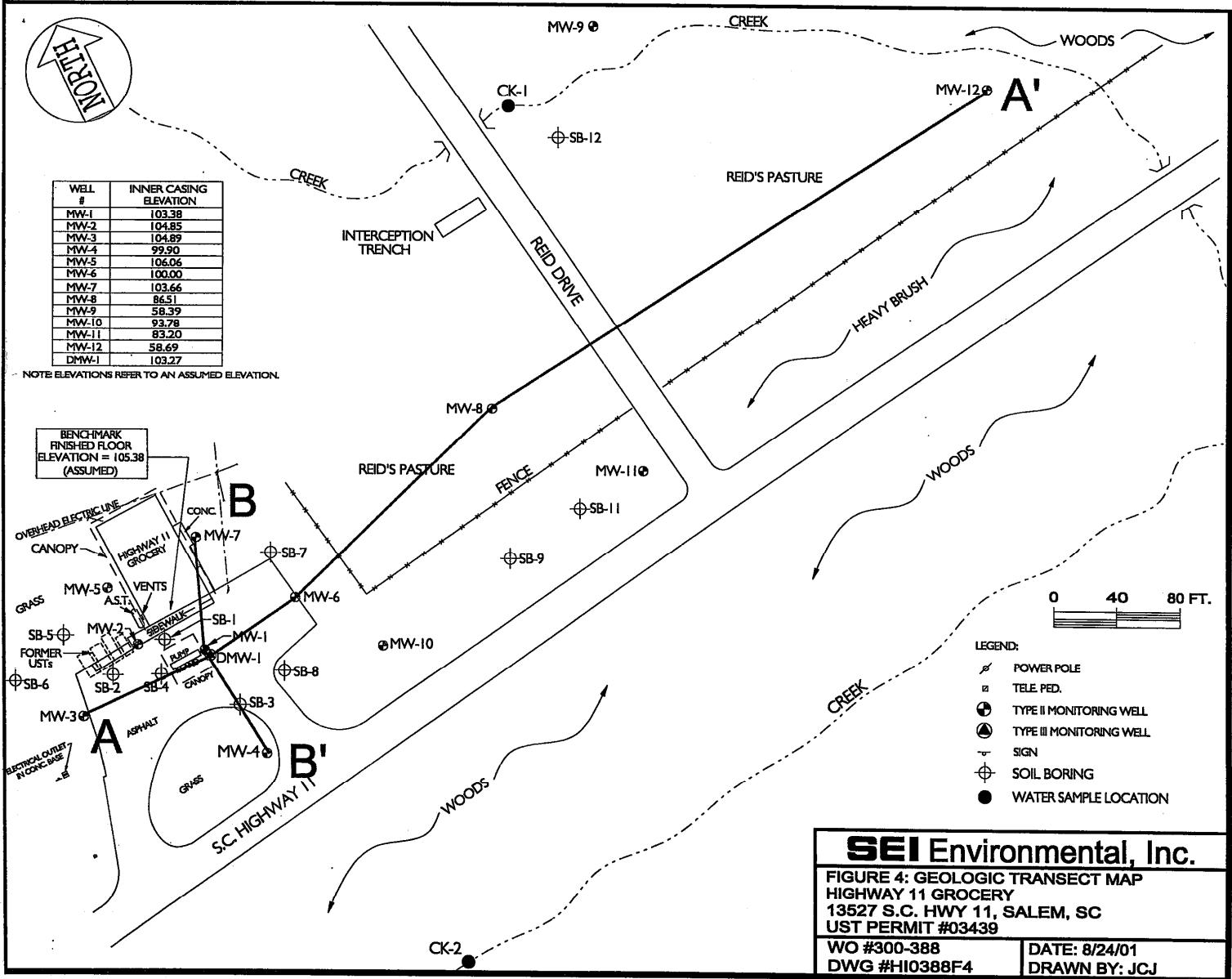


SEI Environmental, Inc.

FIGURE 3: UTILITIES MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03438

WO #300-388
DWG #H10388F3

DATE: 8/24/01
DRAWN BY: JCJ



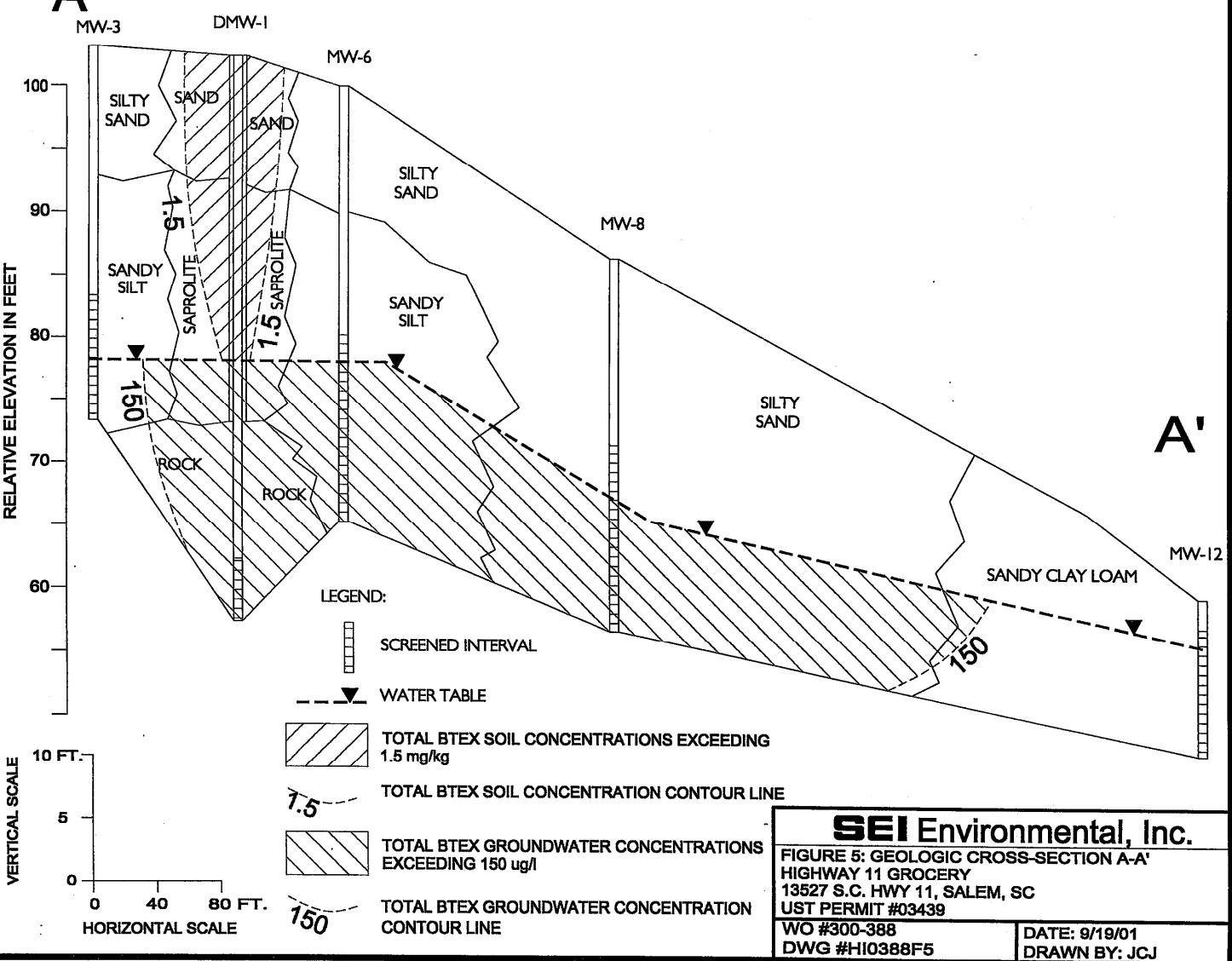
A**SEI Environmental, Inc.**

FIGURE 5: GEOLOGIC CROSS-SECTION A-A'
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

WO #300-388	DATE: 9/19/01
DWG #HII0388F5	DRAWN BY: JCJ

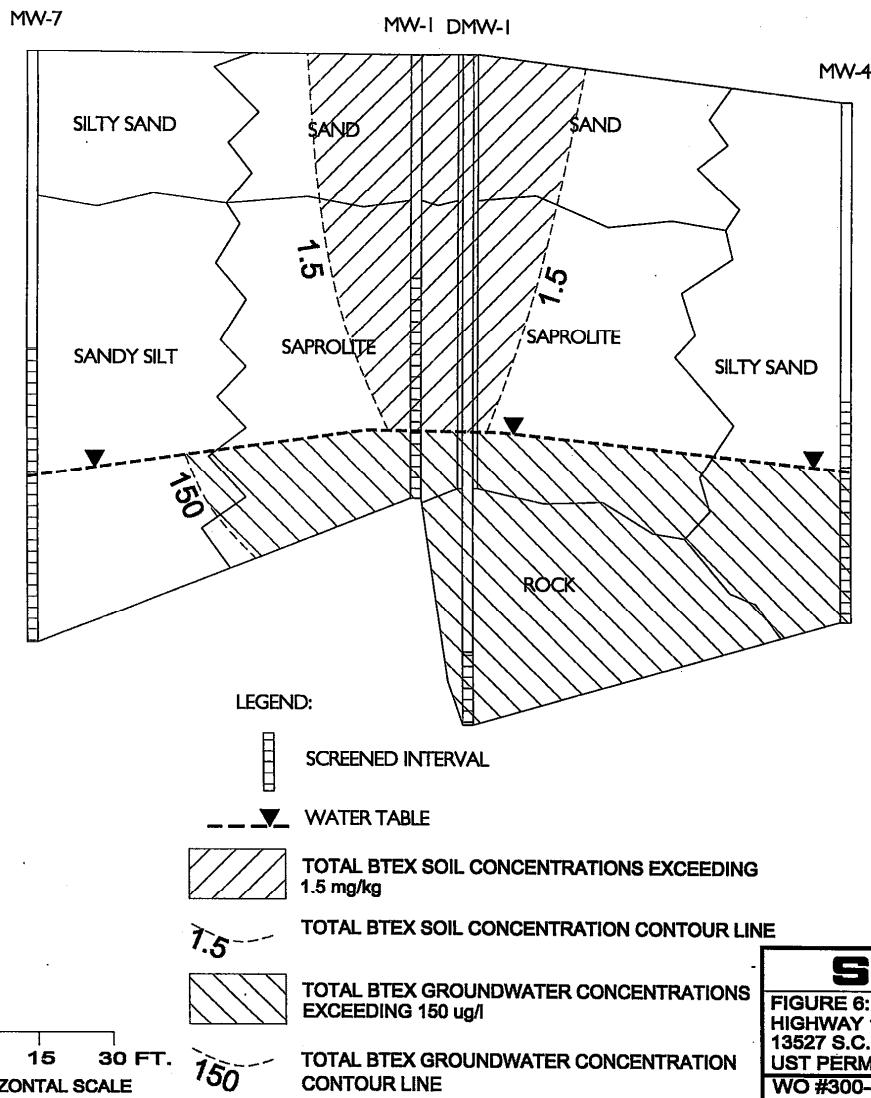
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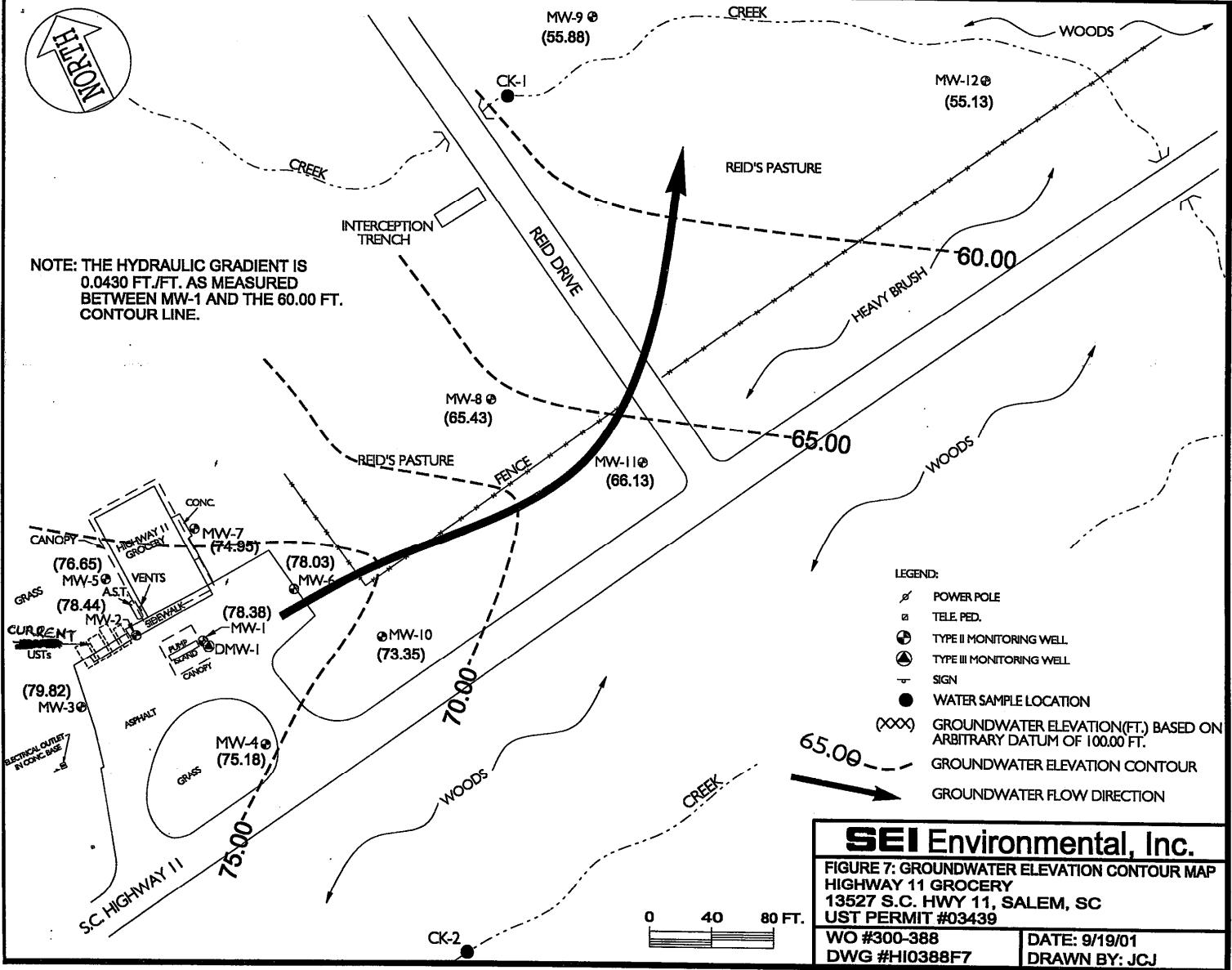
FIGURE 6: GEOLOGIC CROSS-SECTION B-B'
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

WO #300-388
DWG #HII0388F6

DATE: 9/19/01
DRAWN BY: JCJ



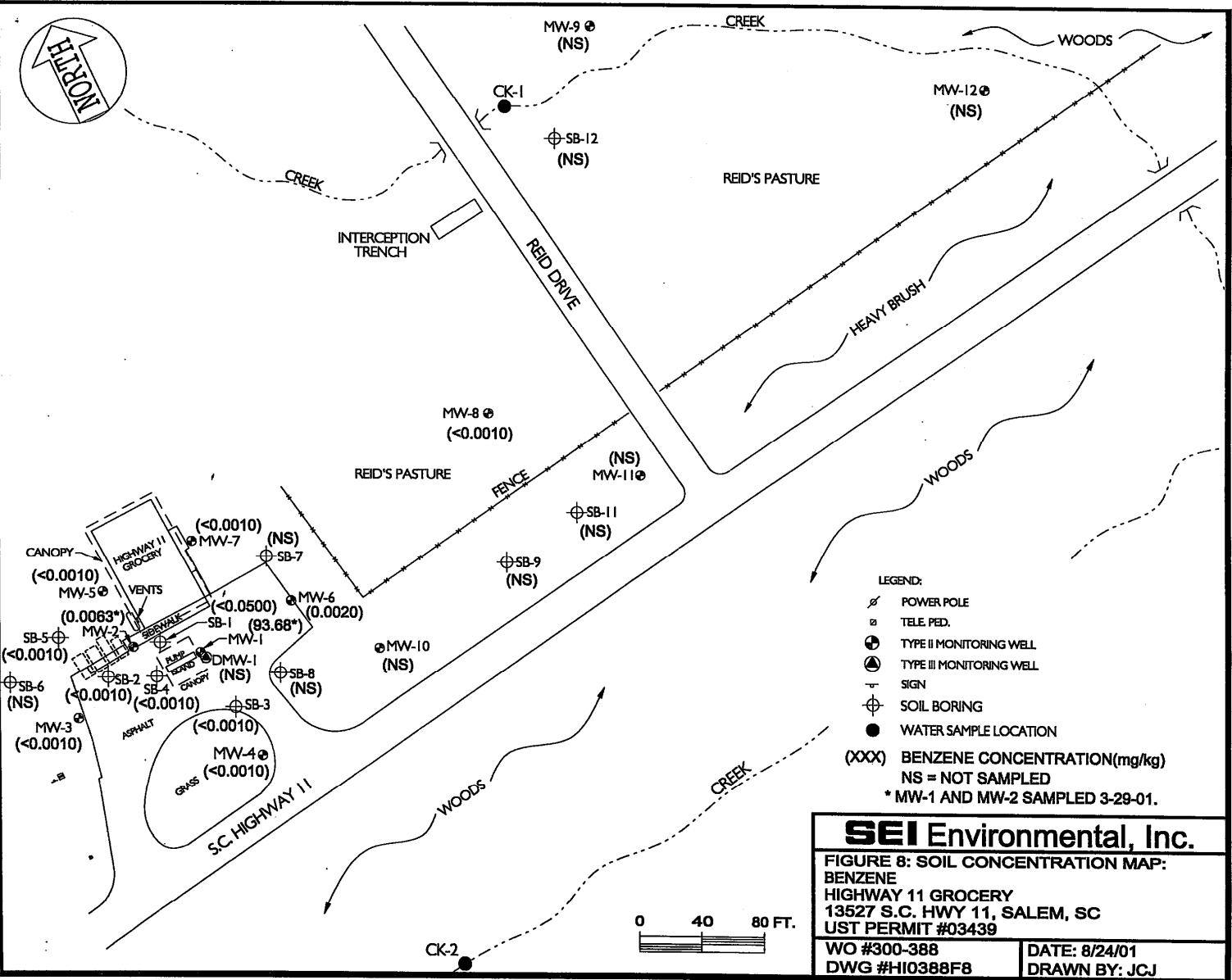
NOTE: THE HYDRAULIC GRADIENT IS 0.0430 FT./FT. AS MEASURED BETWEEN MW-1 AND THE 60.00 FT. CONTOUR LINE.

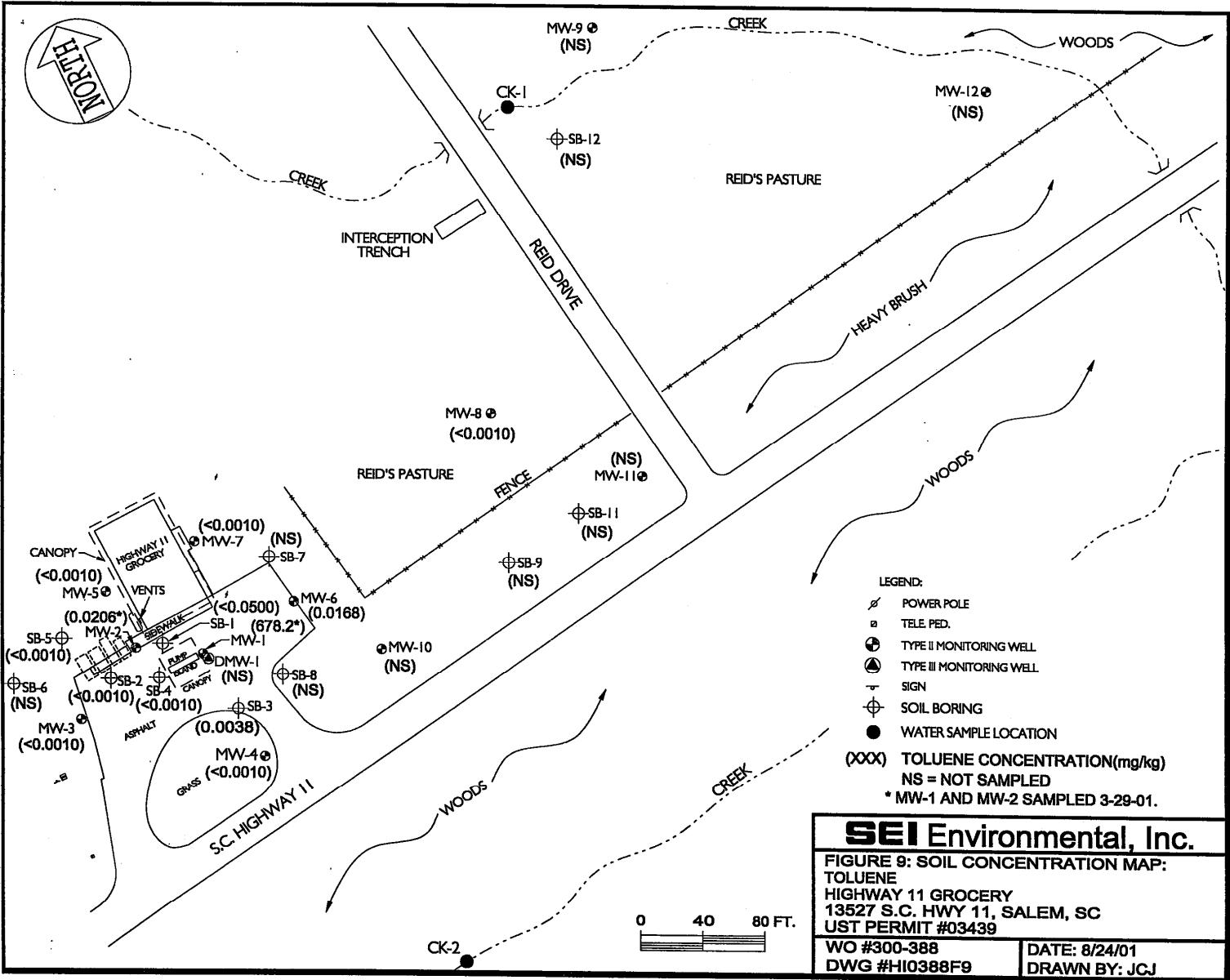


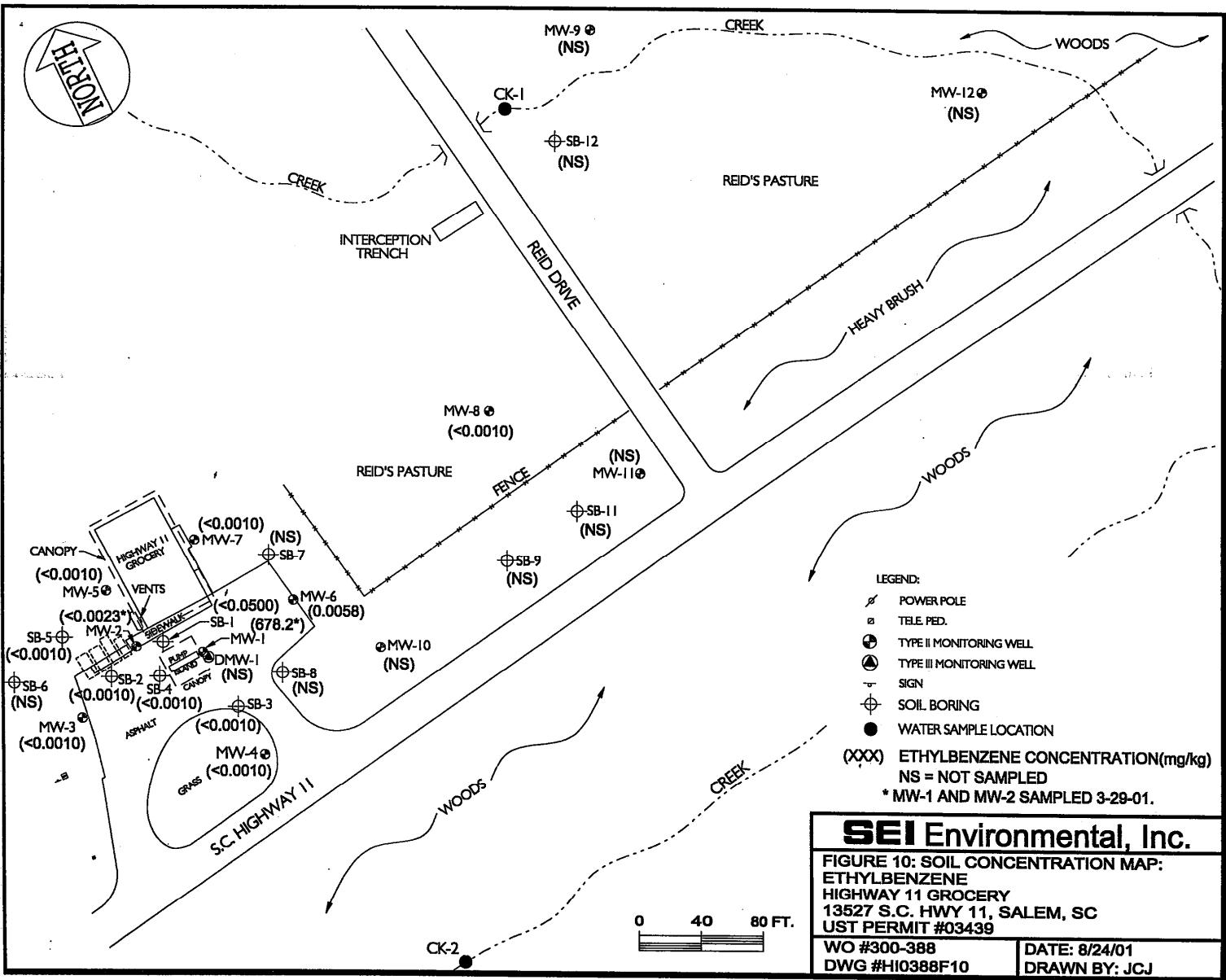
SEI Environmental, Inc.

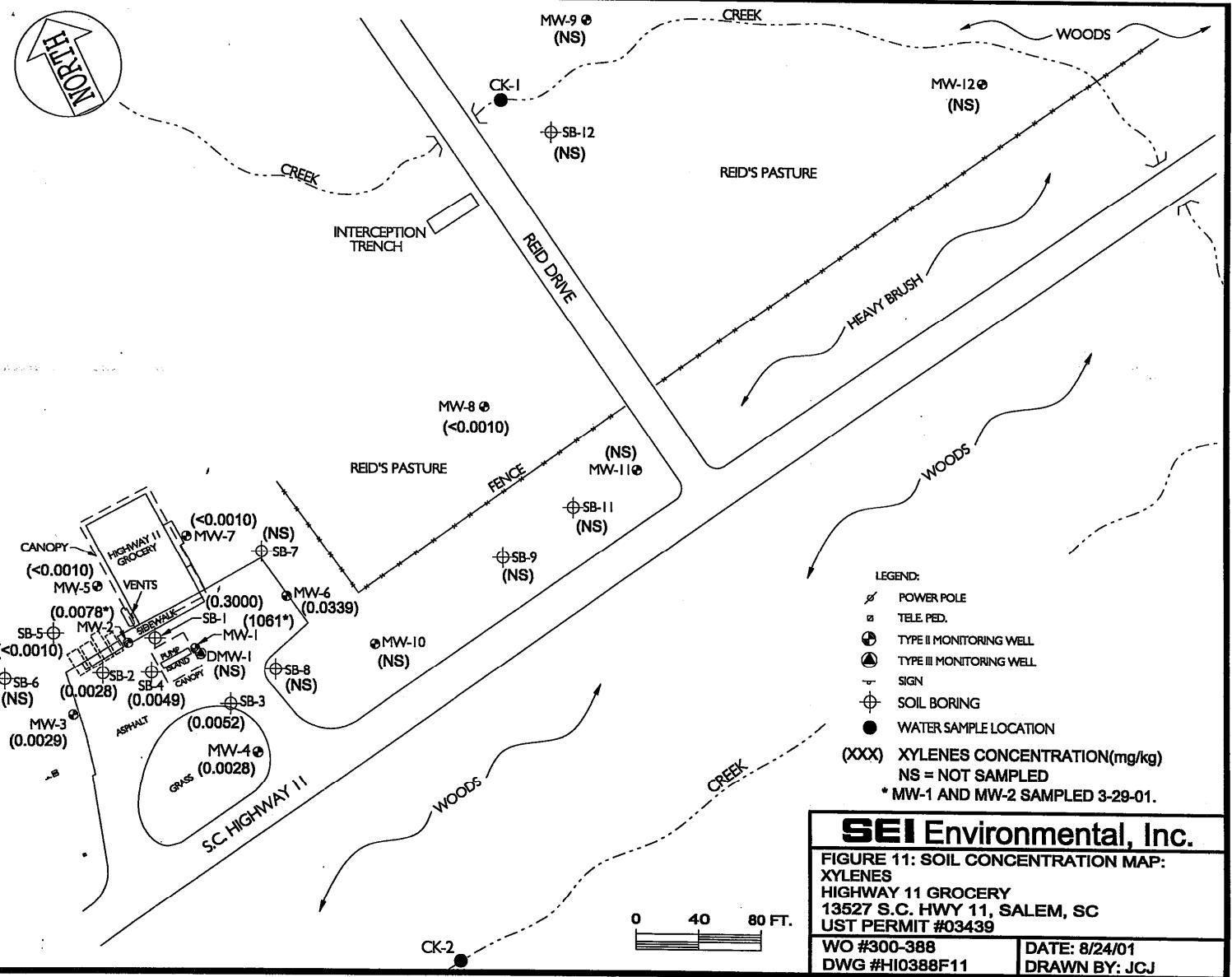
FIGURE 7: GROUNDWATER ELEVATION CONTOUR MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

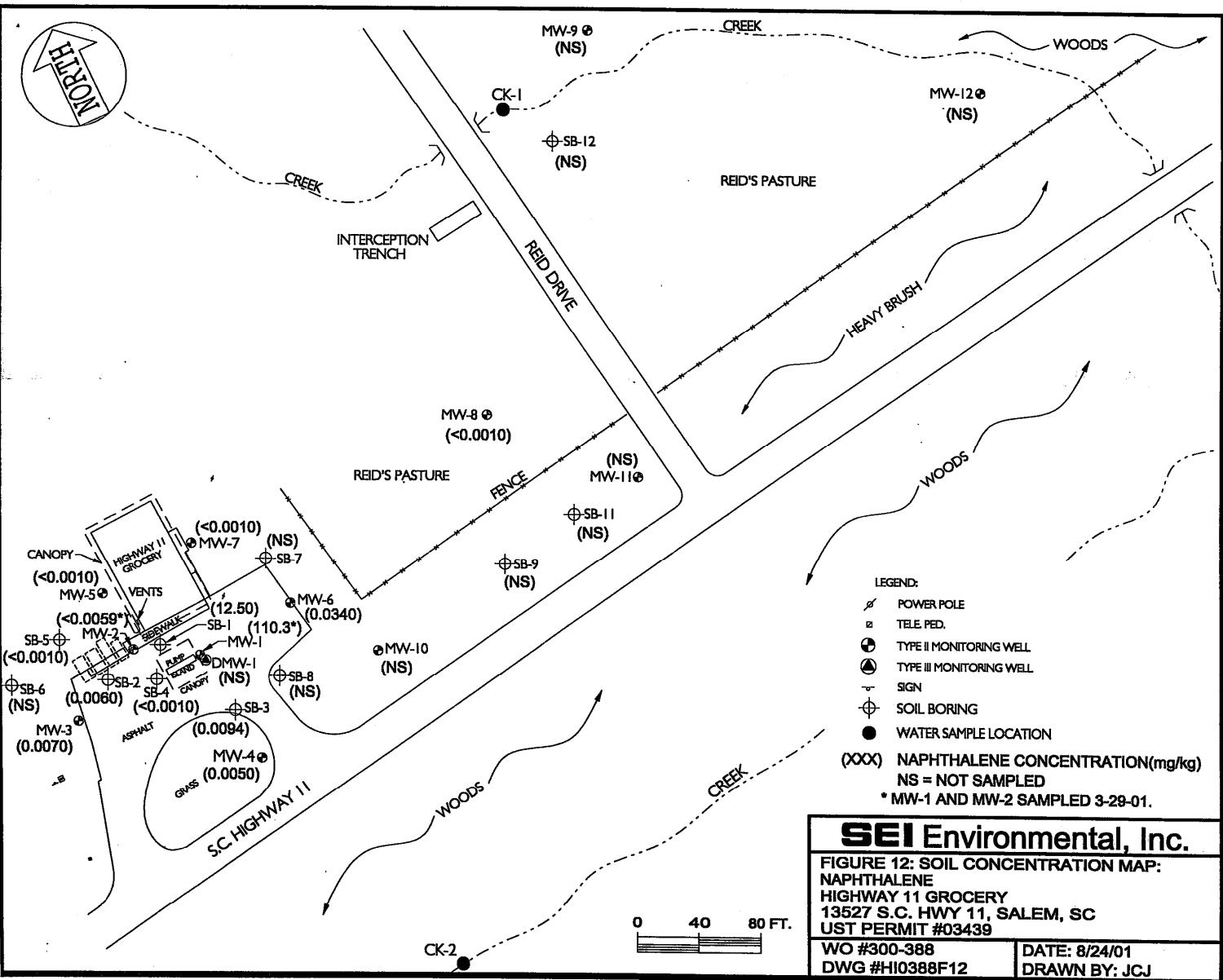
WO #300-388 DWG #HI0388F7	DATE: 9/19/01 DRAWN BY: JCJ
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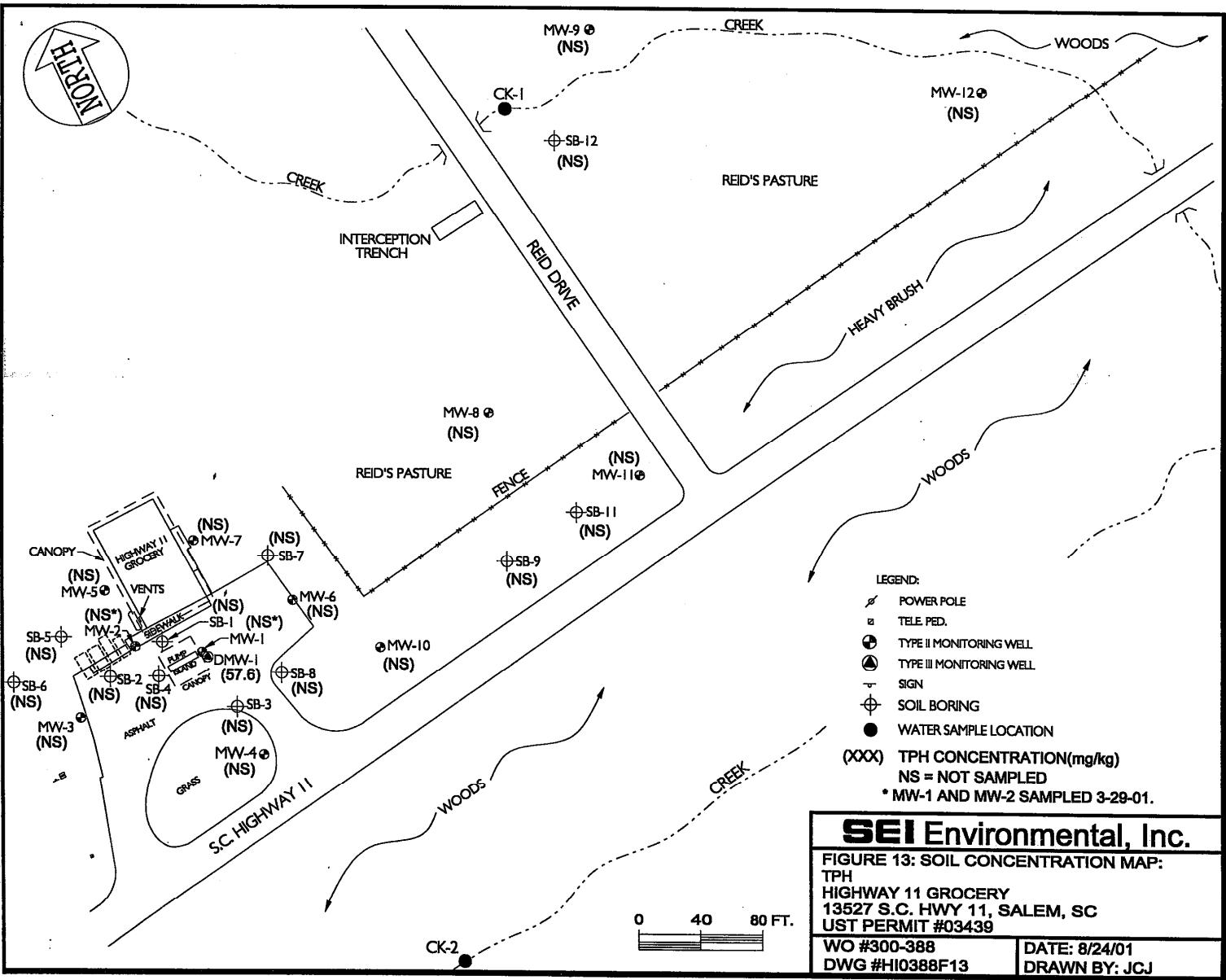


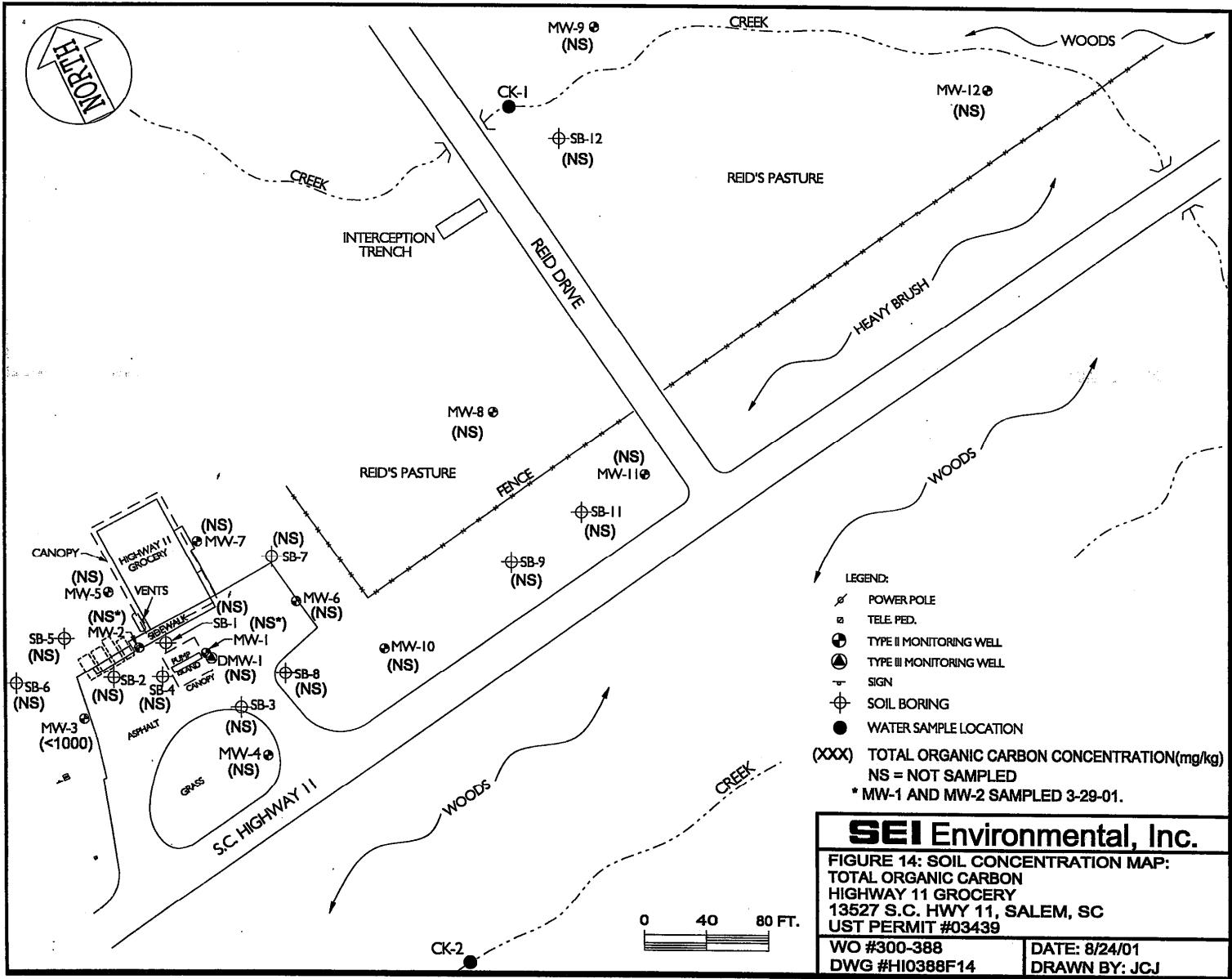


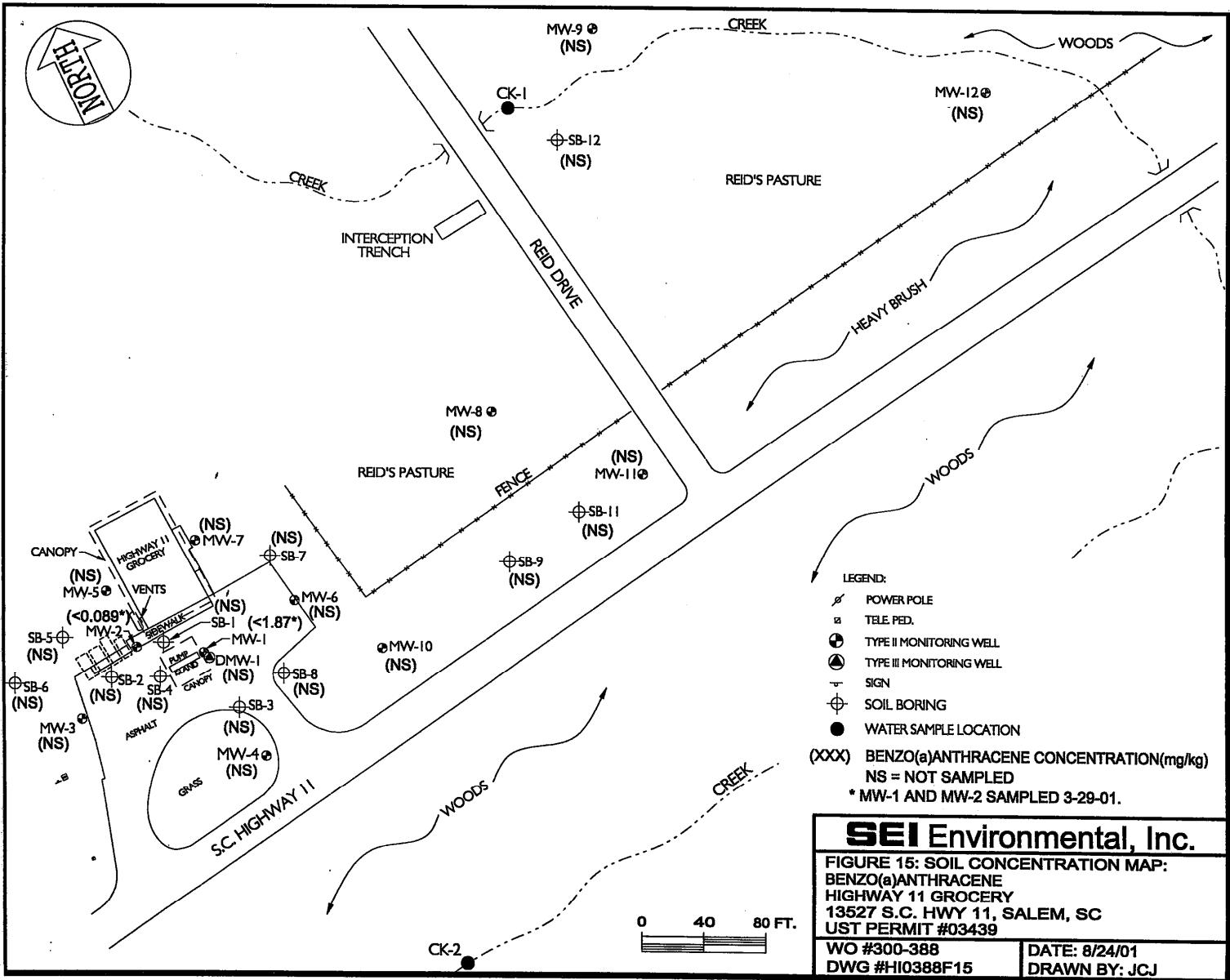


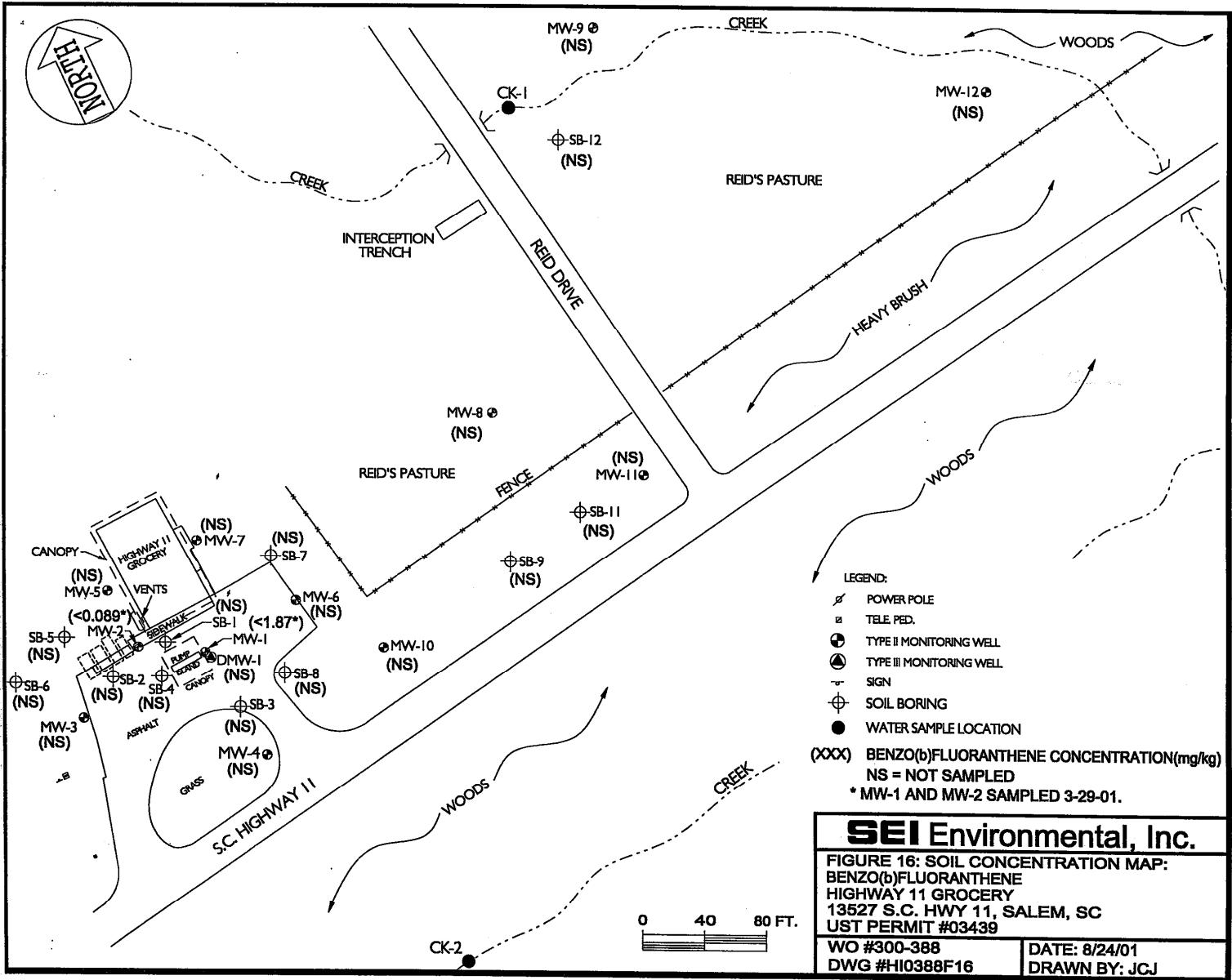


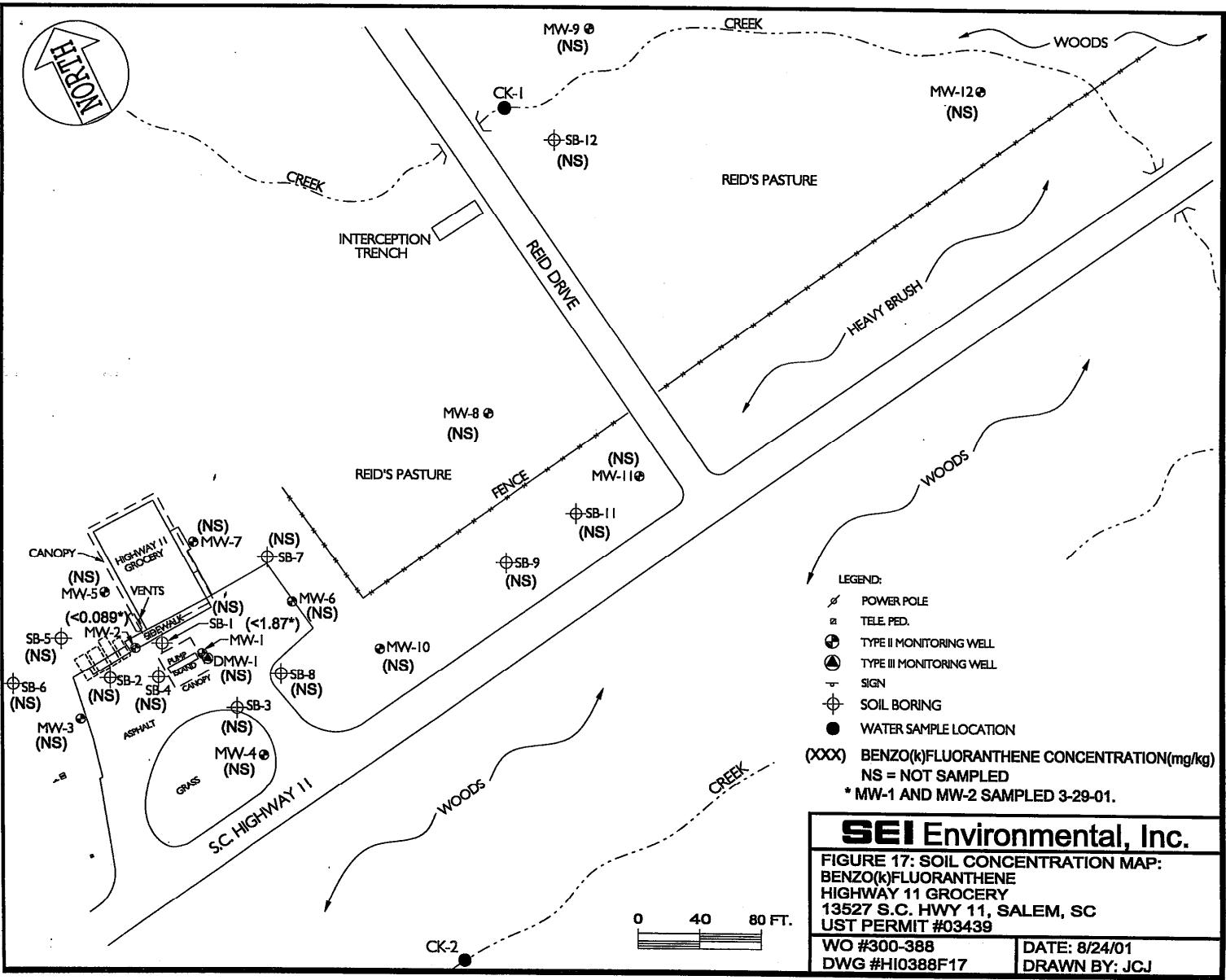


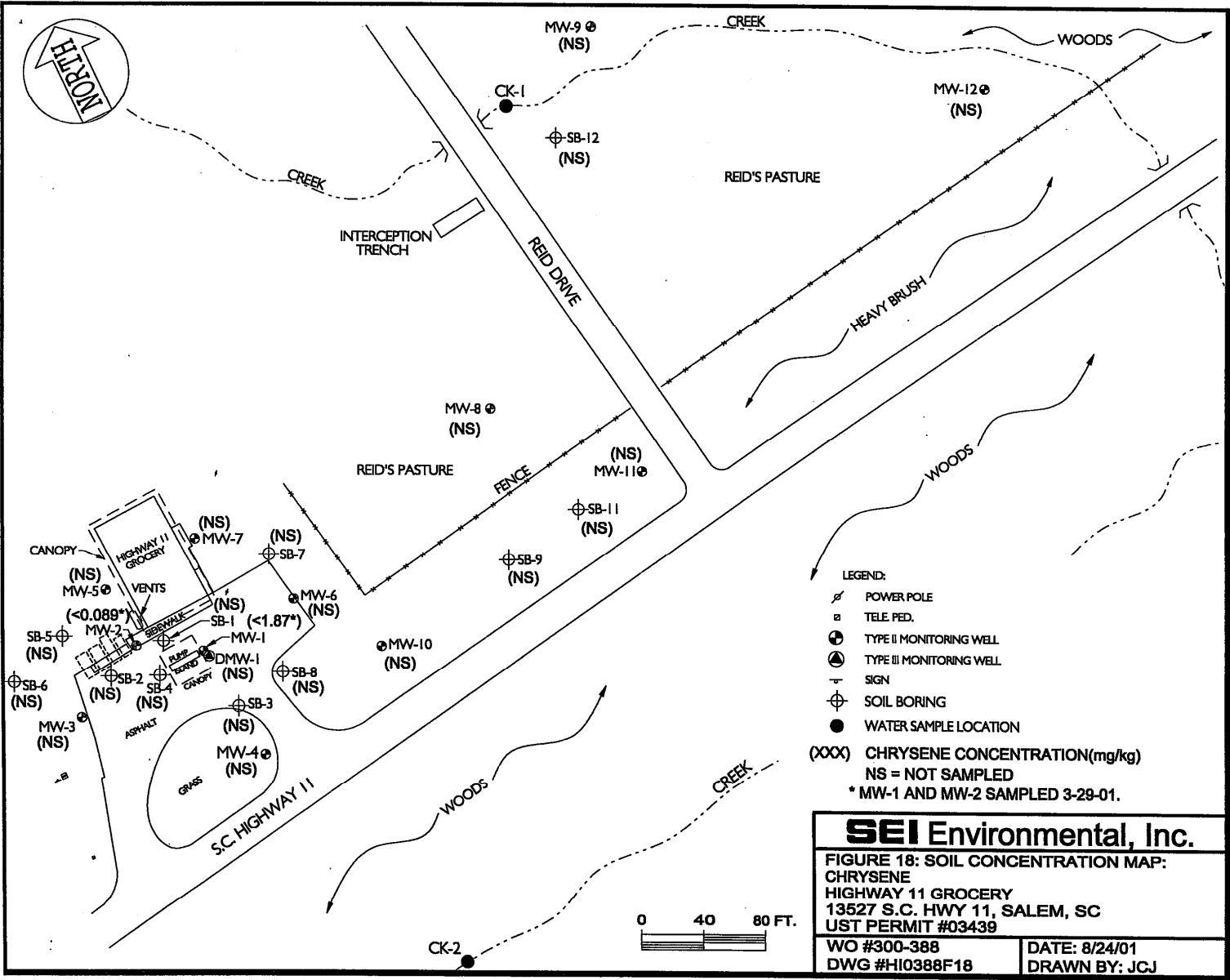


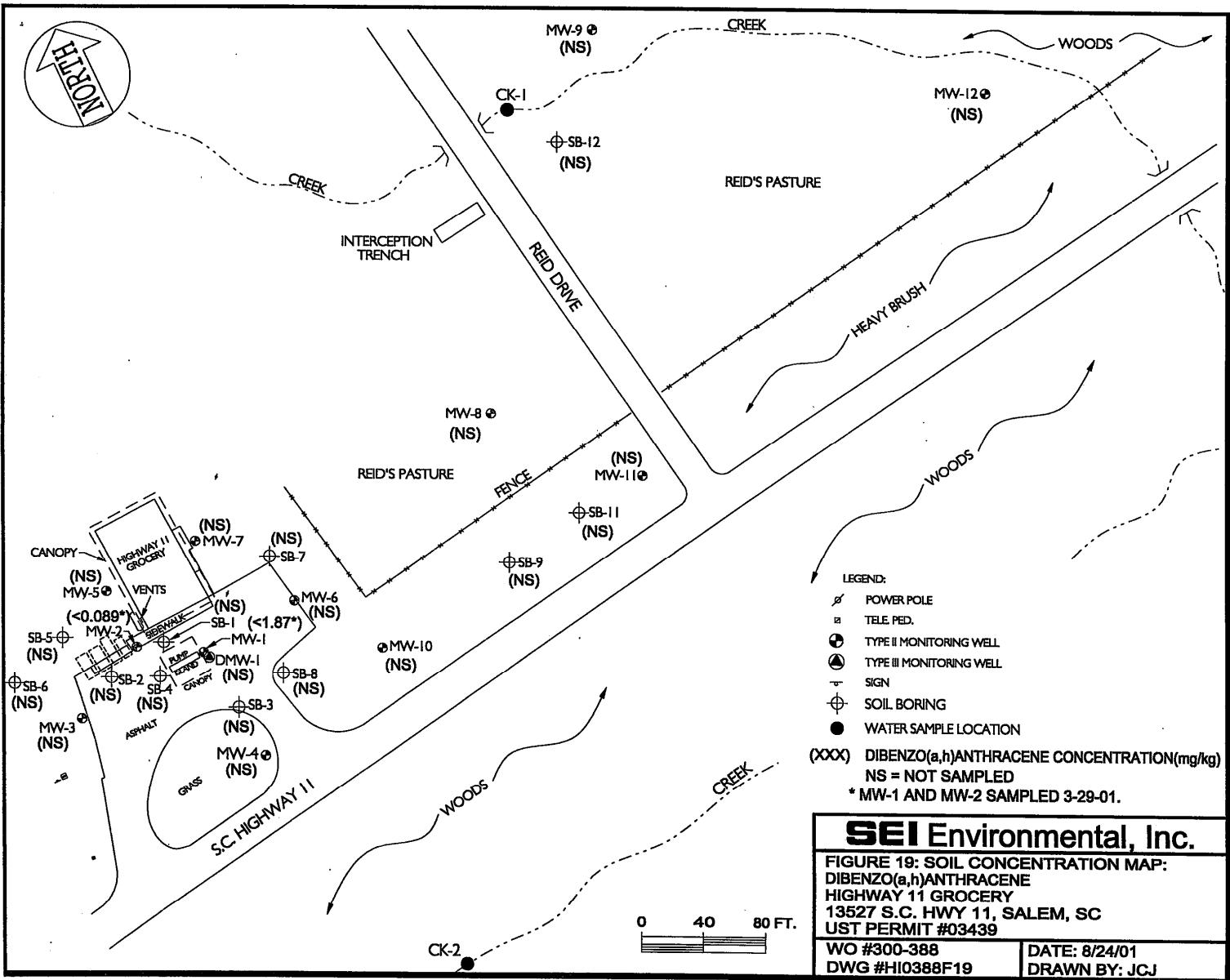


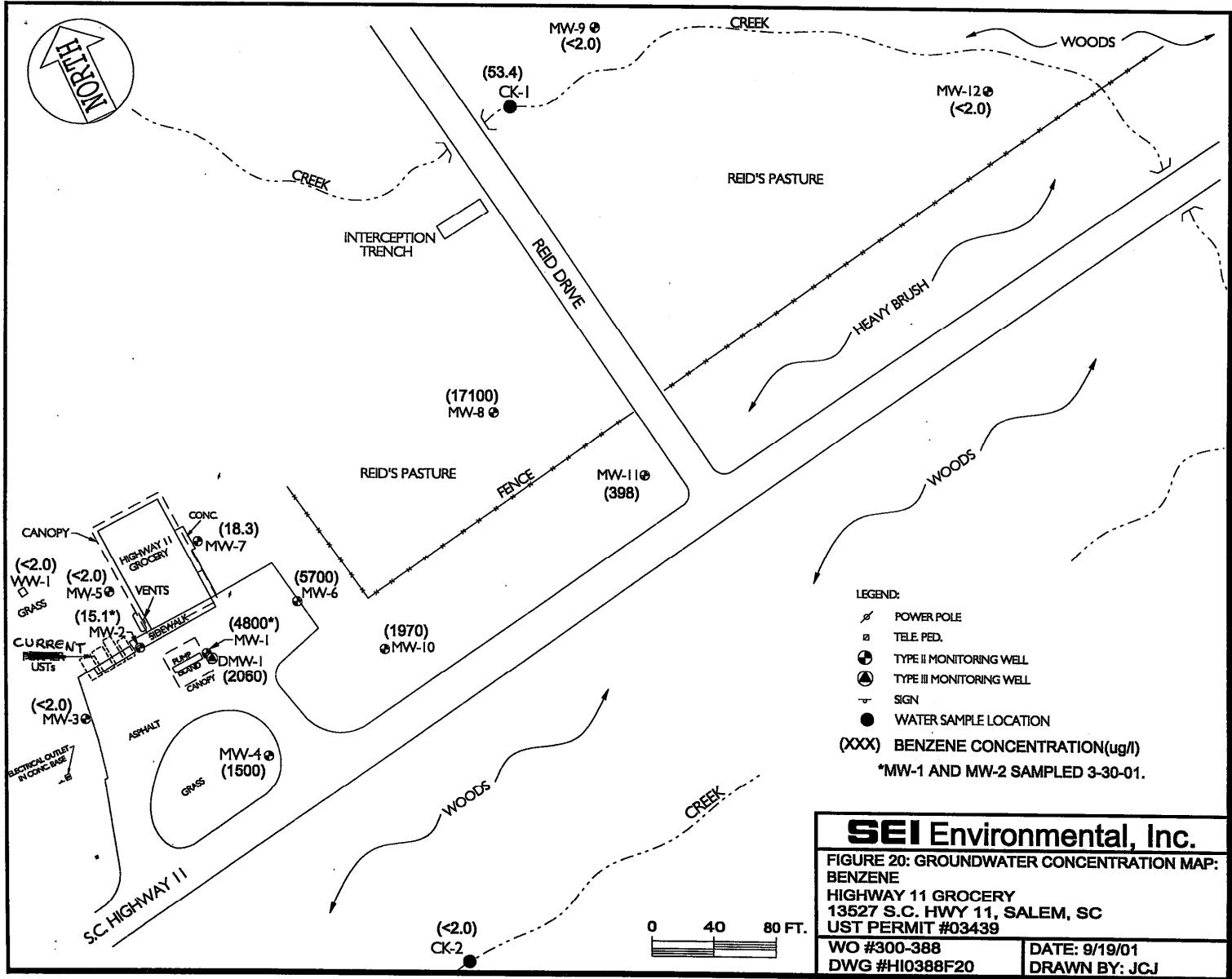


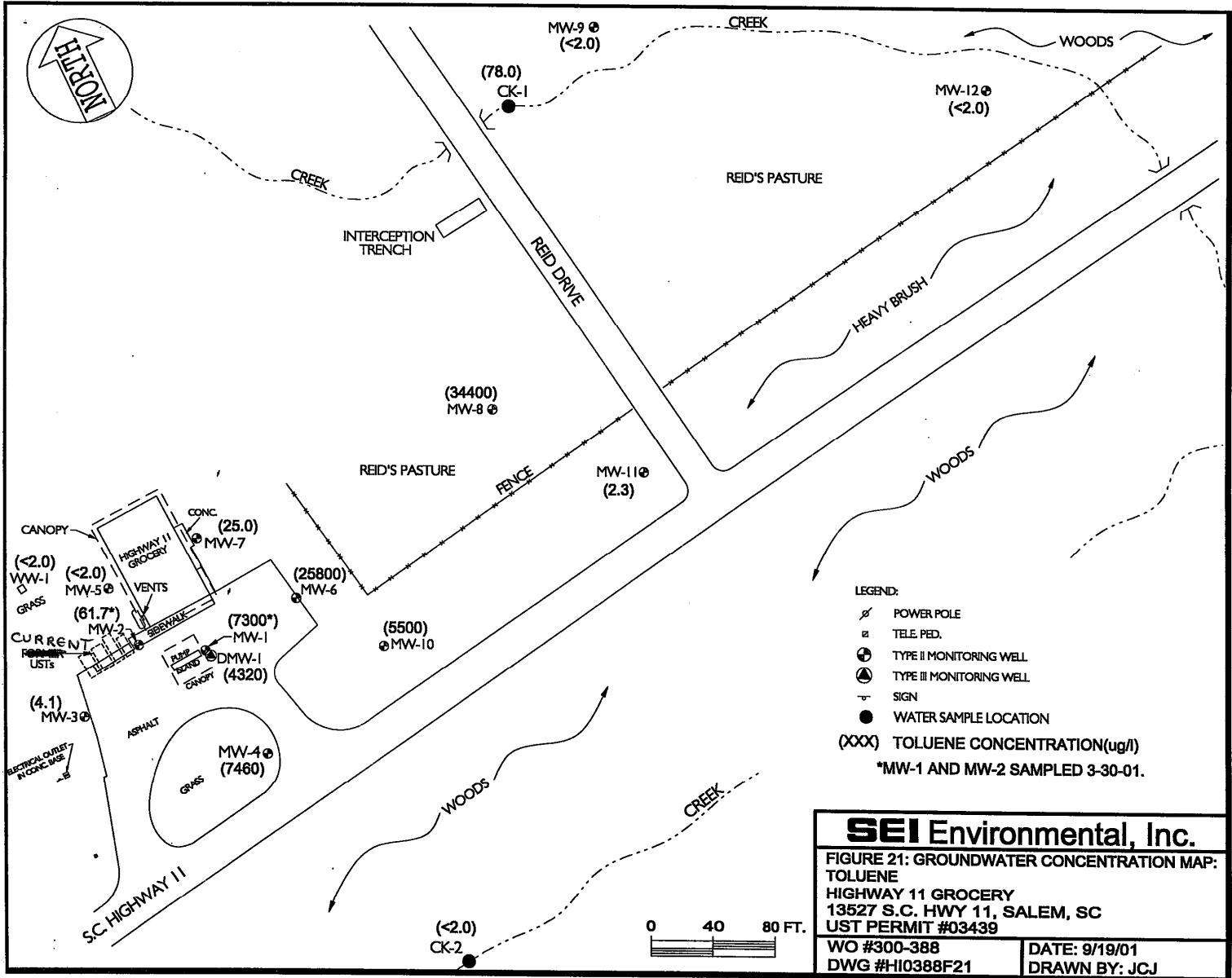


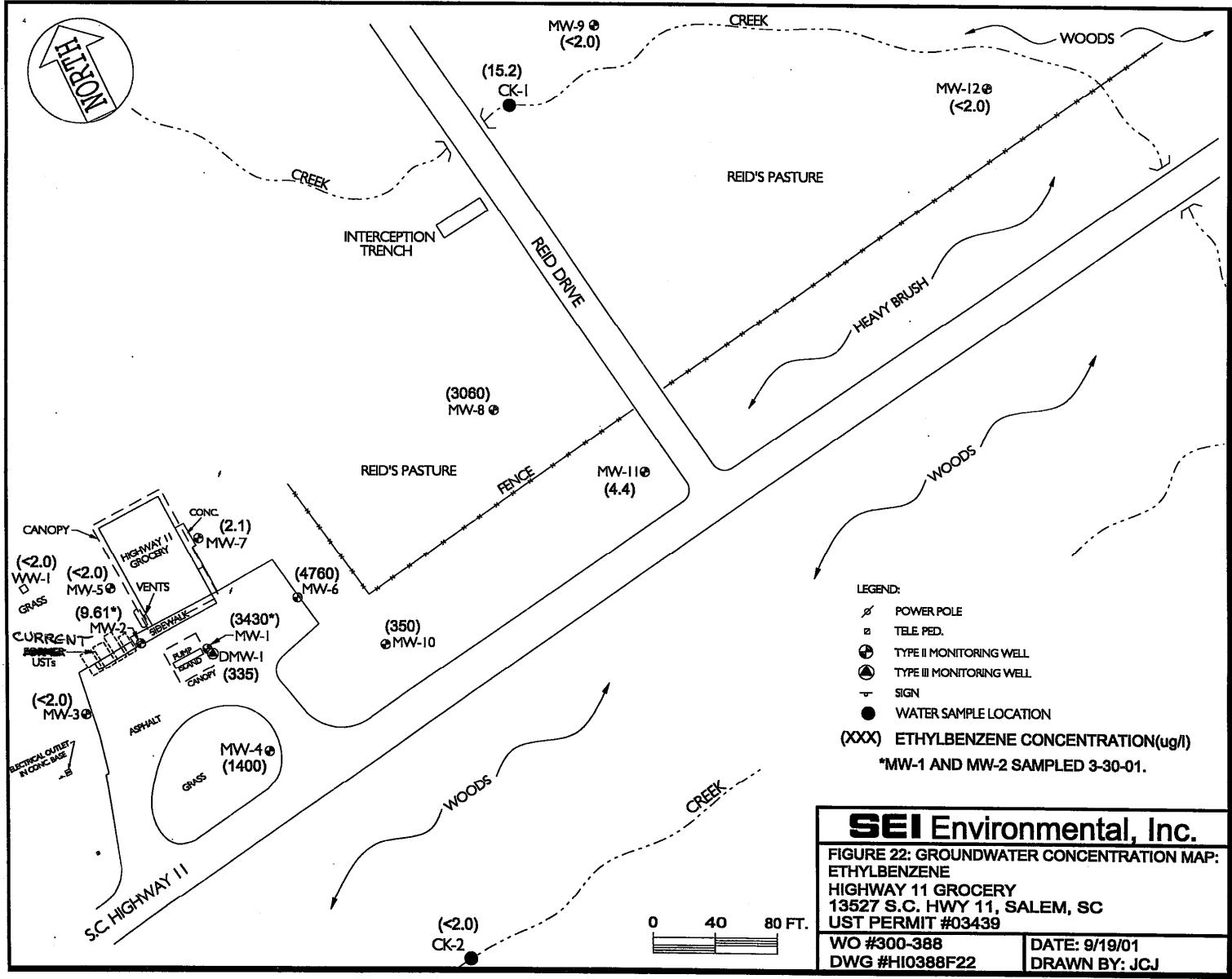


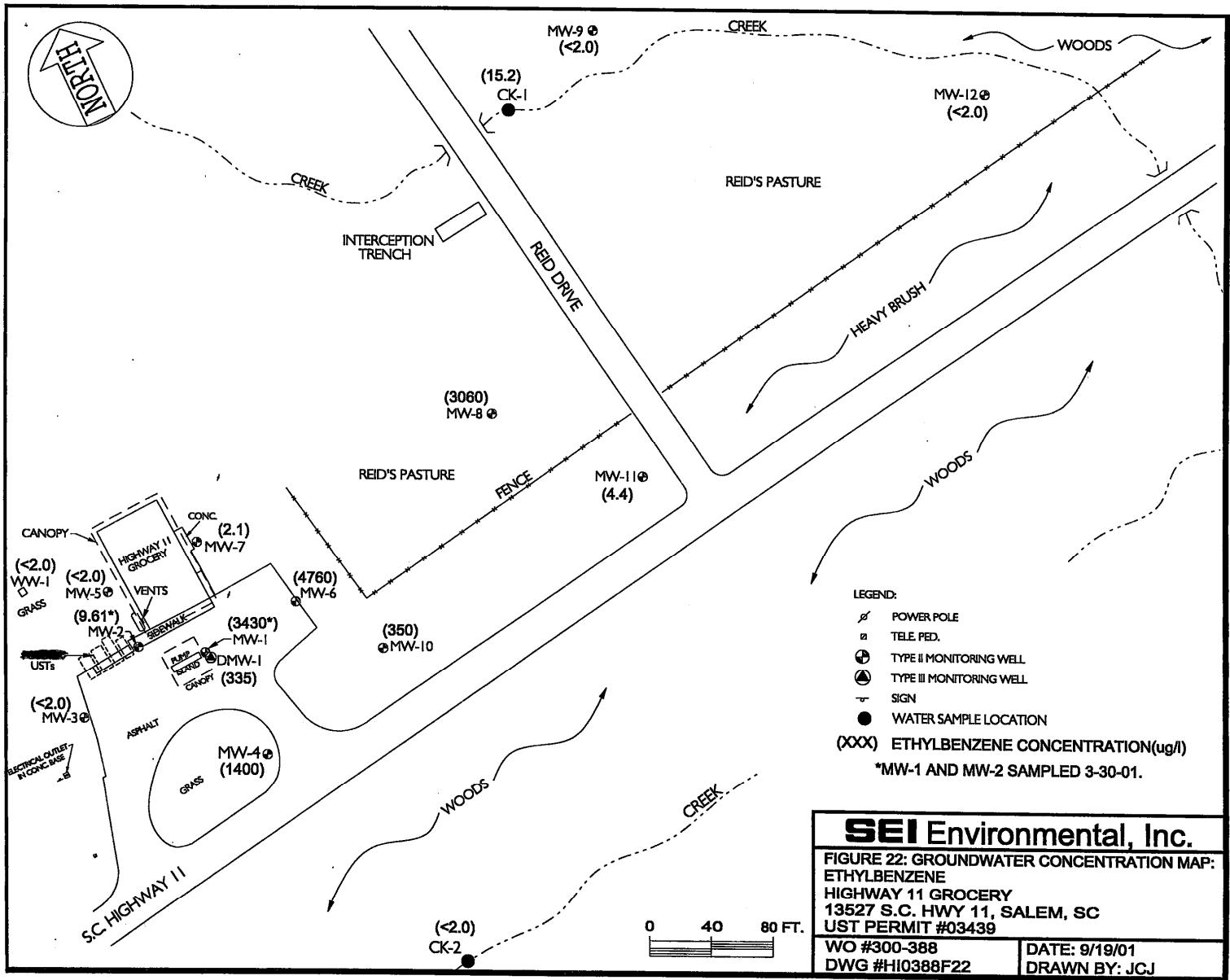


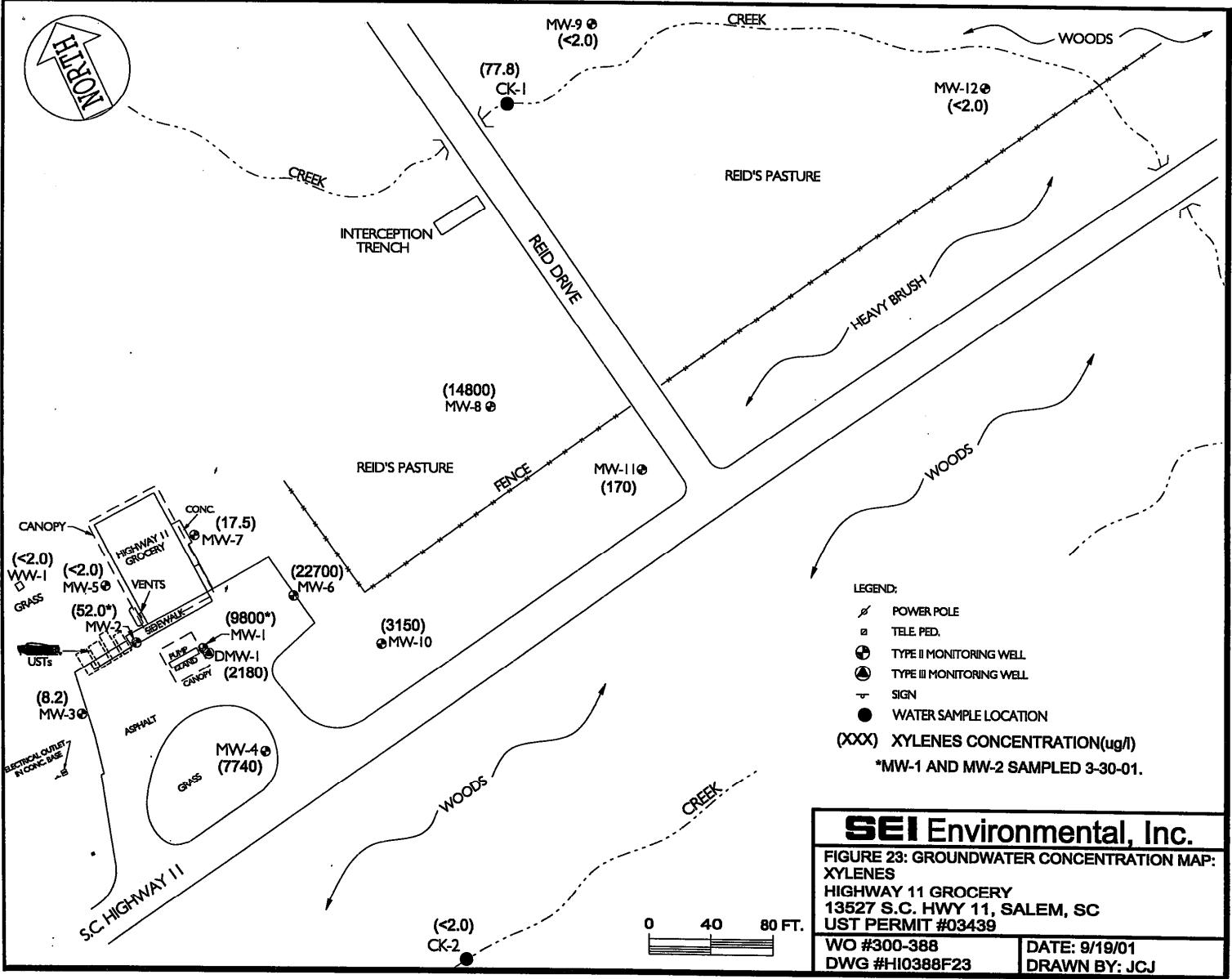


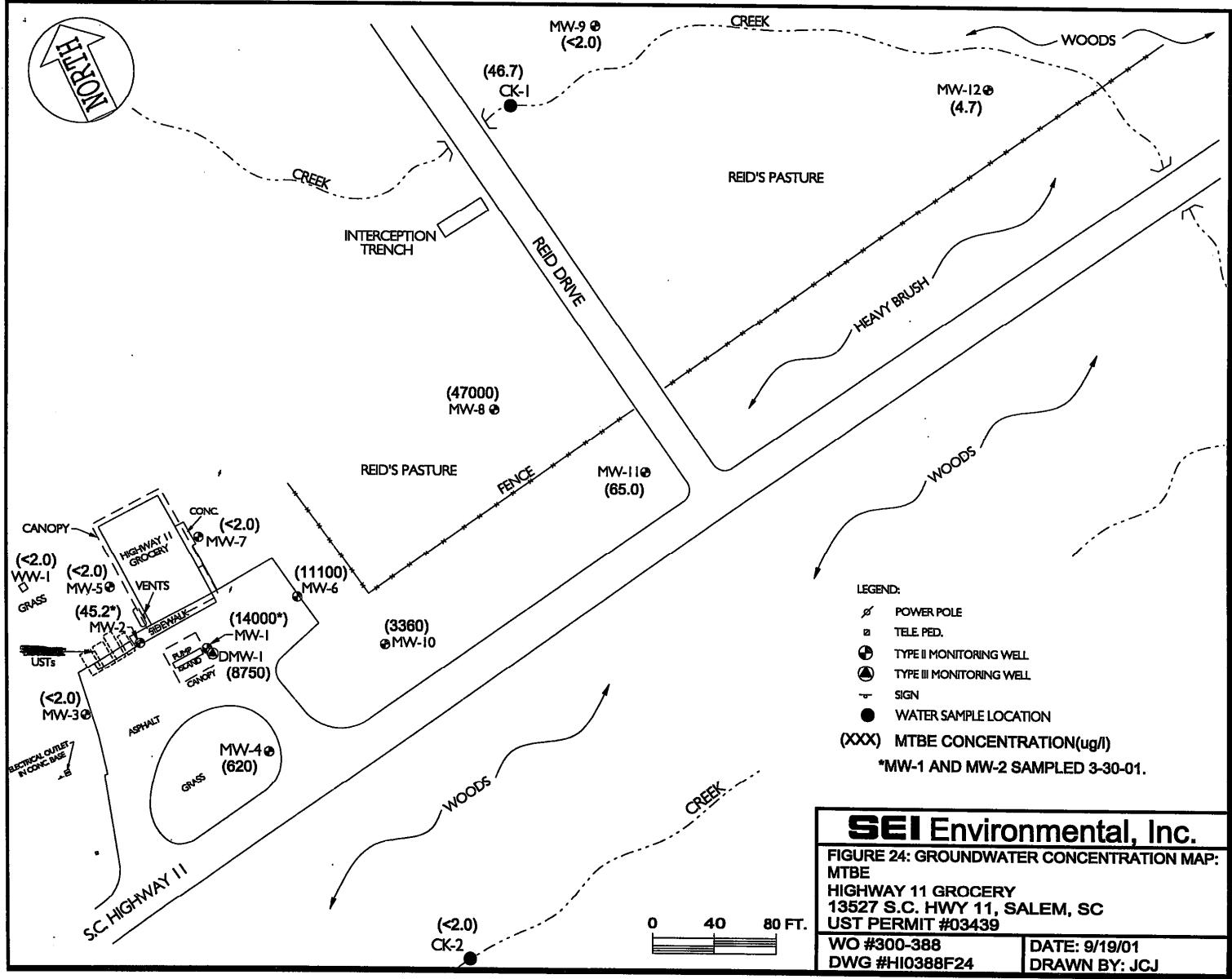


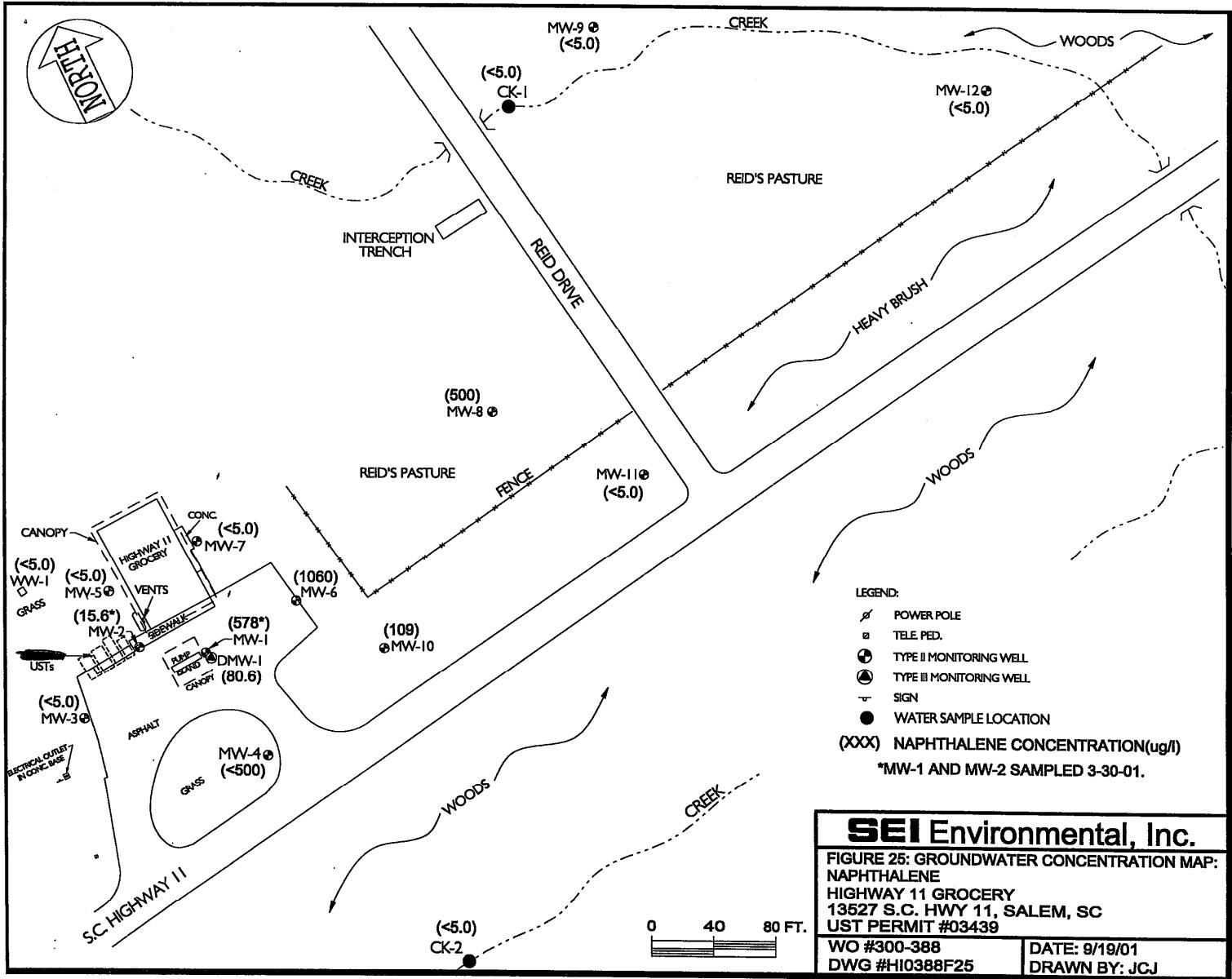








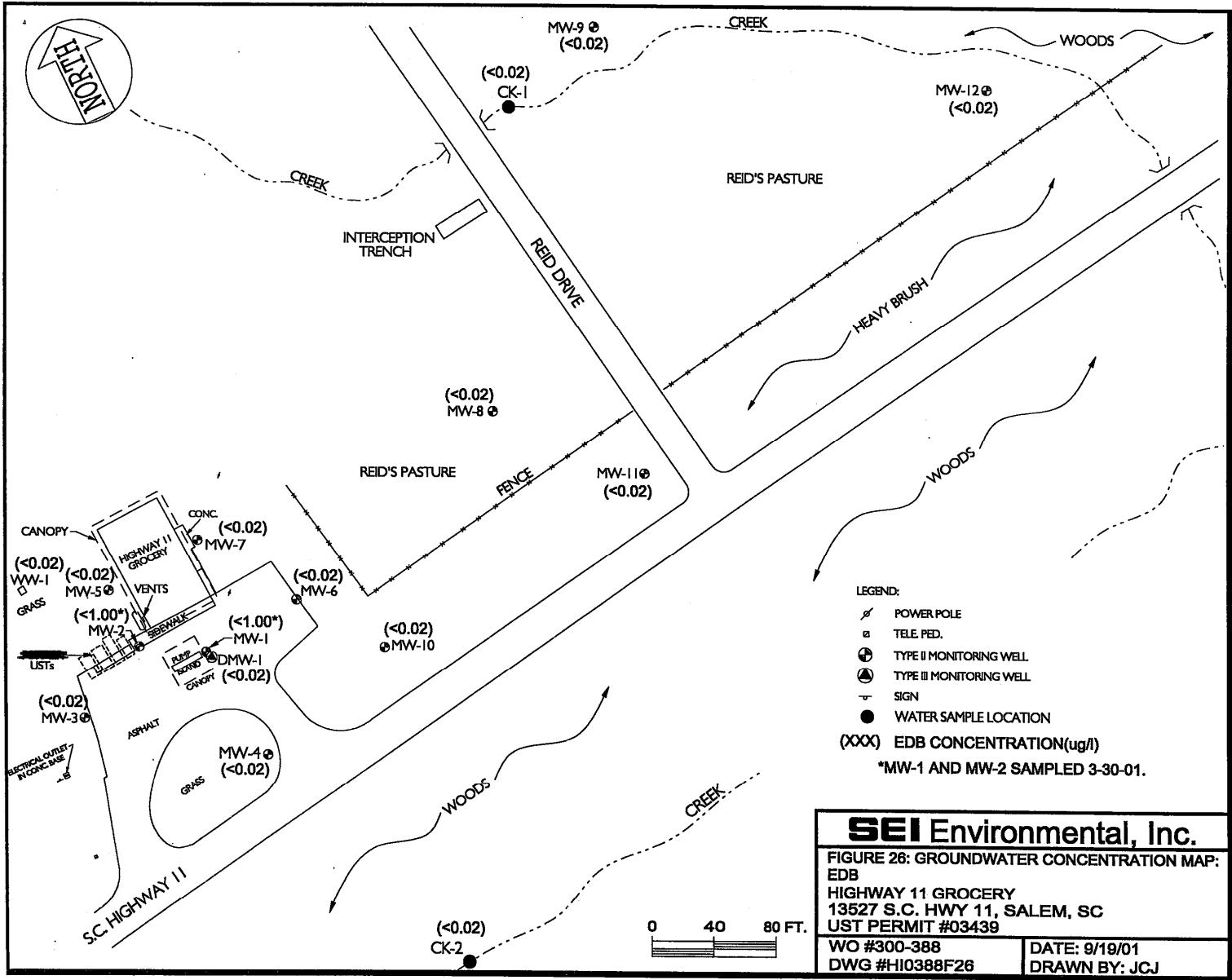


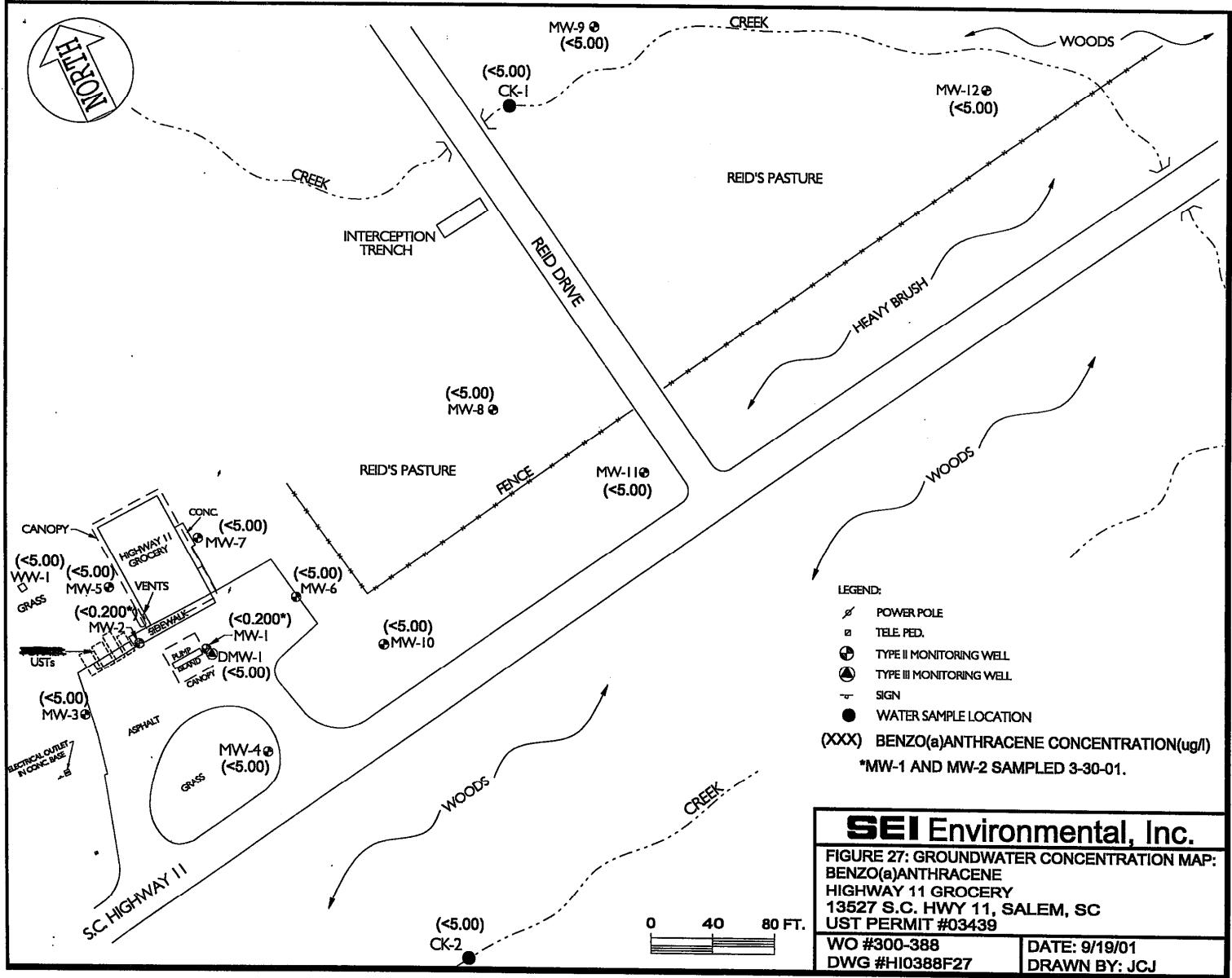


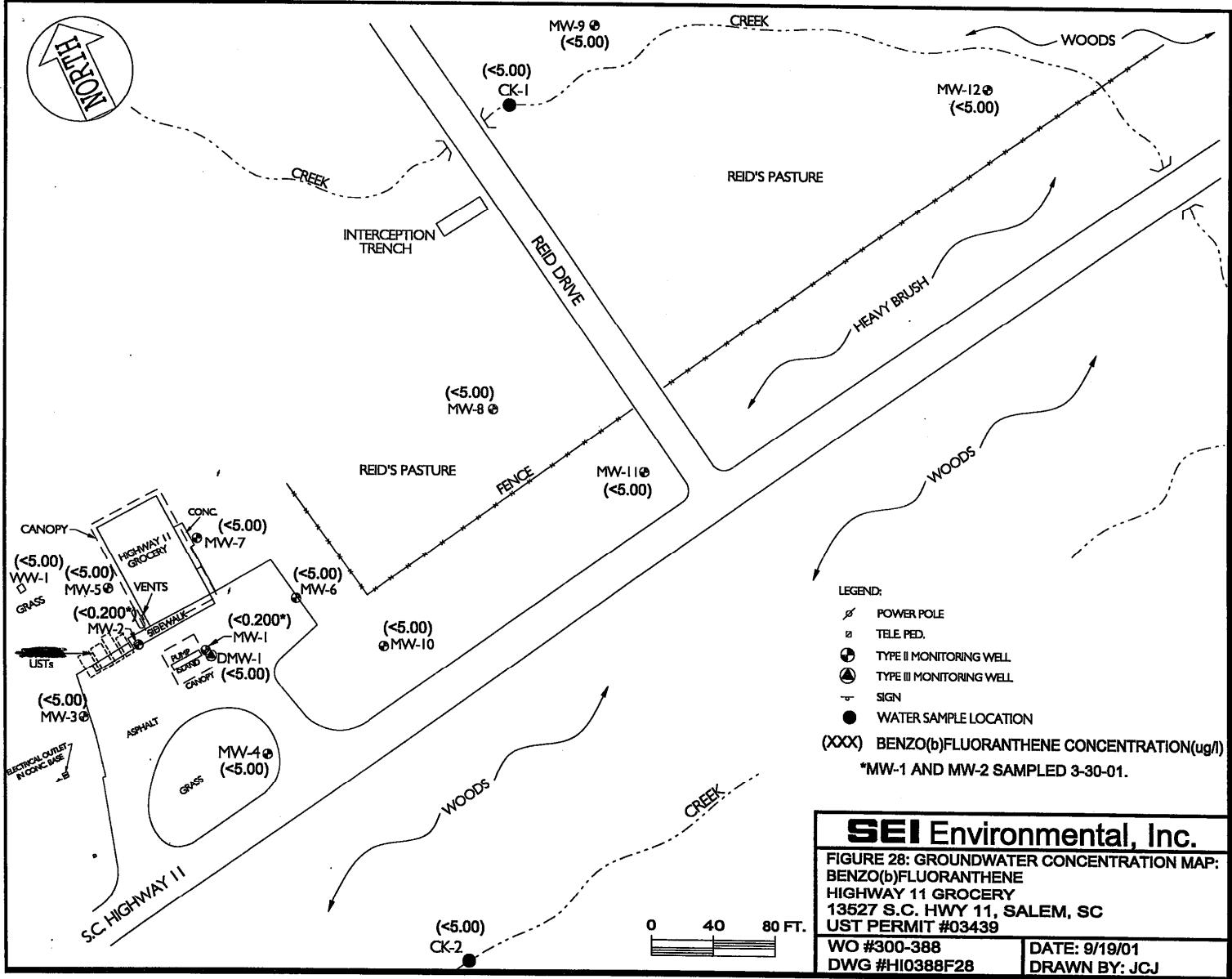
SEI Environmental, Inc.

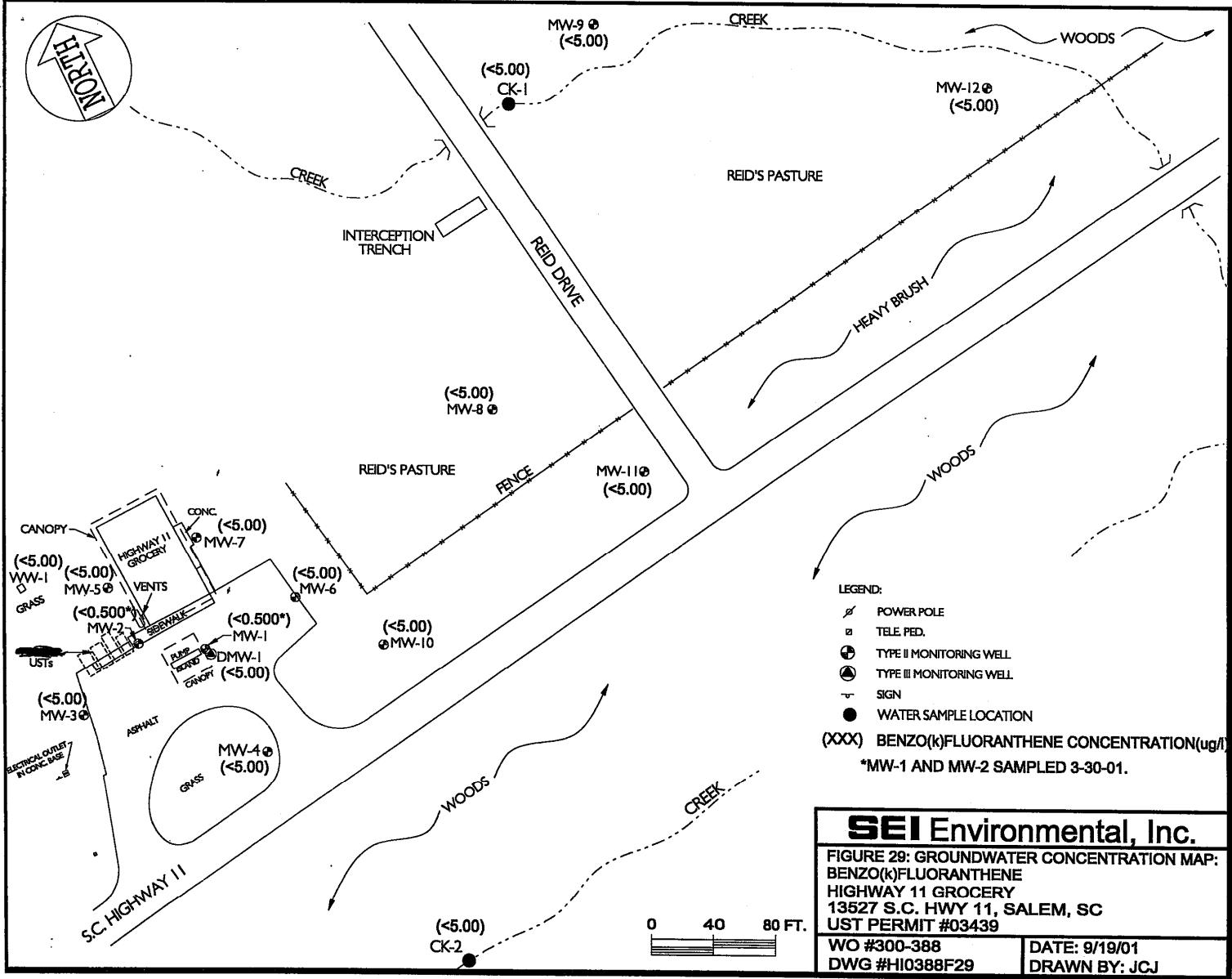
FIGURE 25: GROUNDWATER CONCENTRATION MAP:
NAPHTHALENE
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

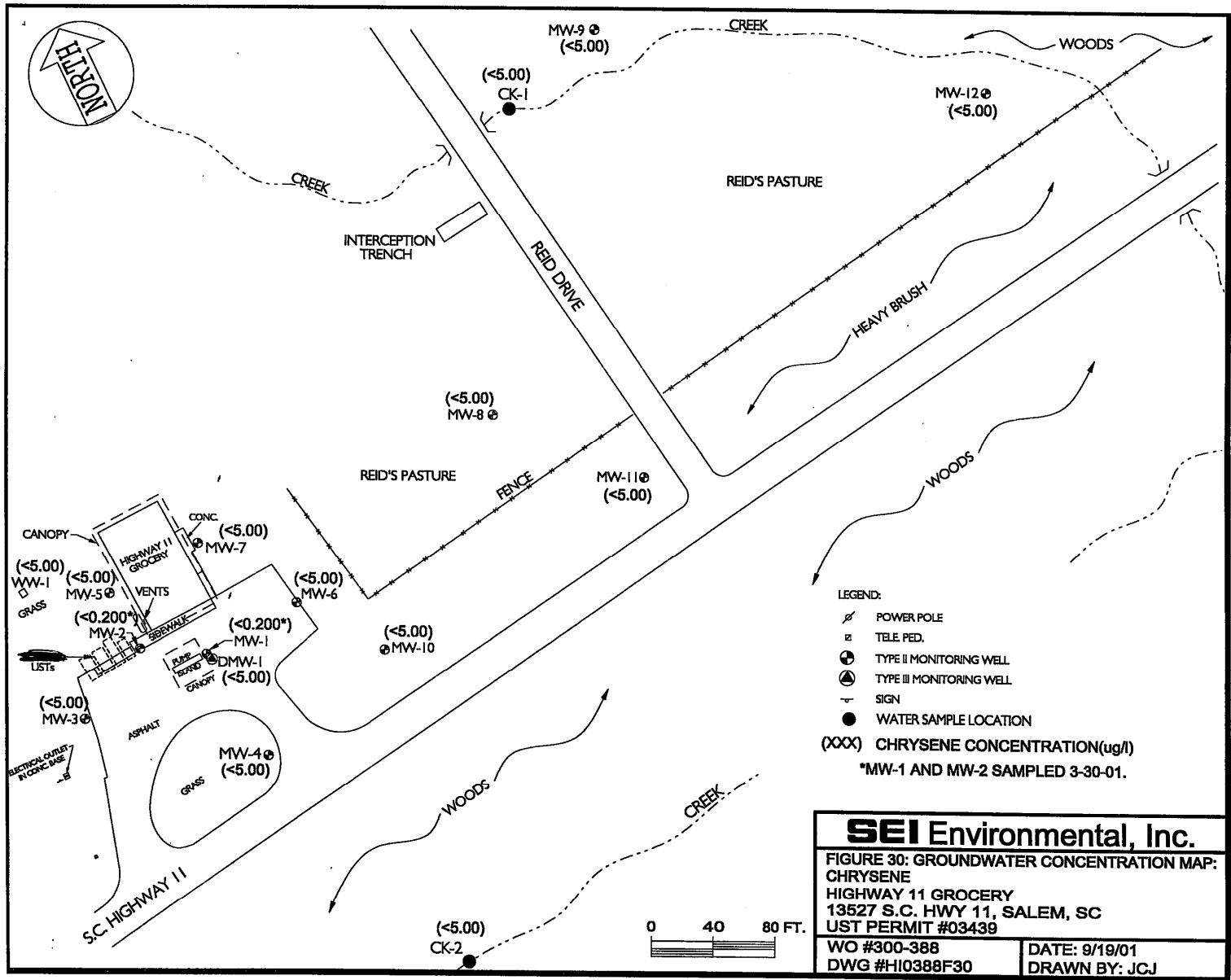
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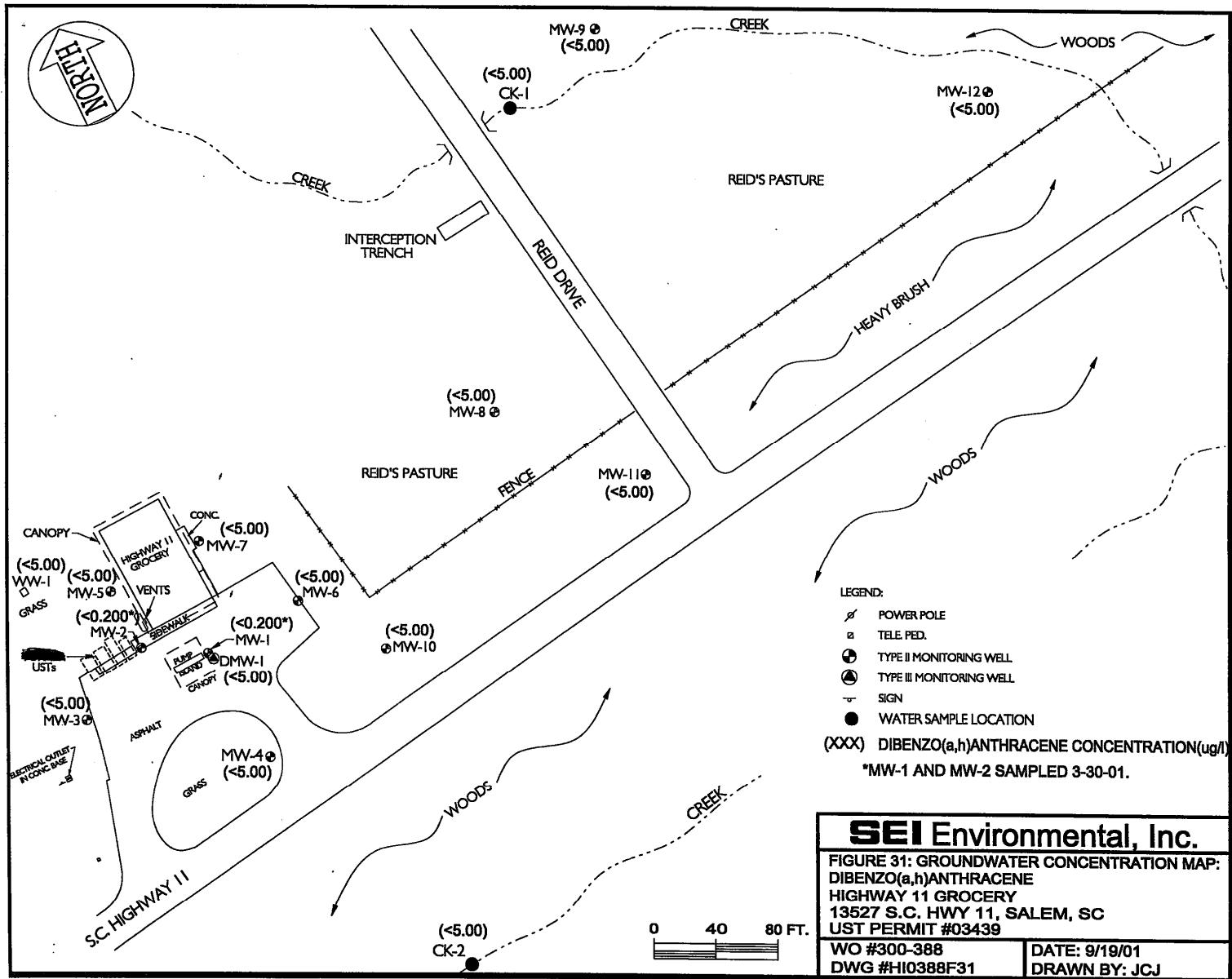


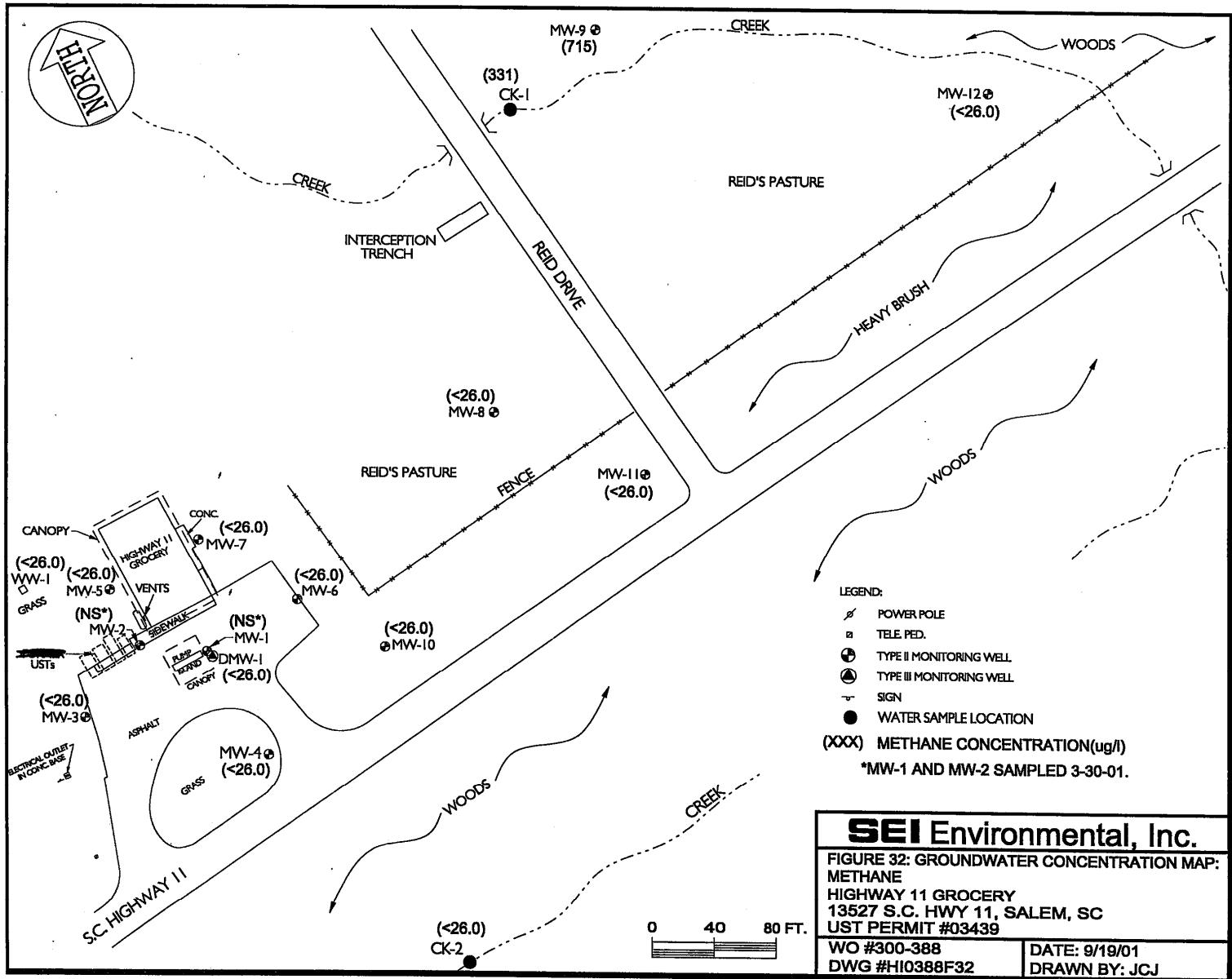


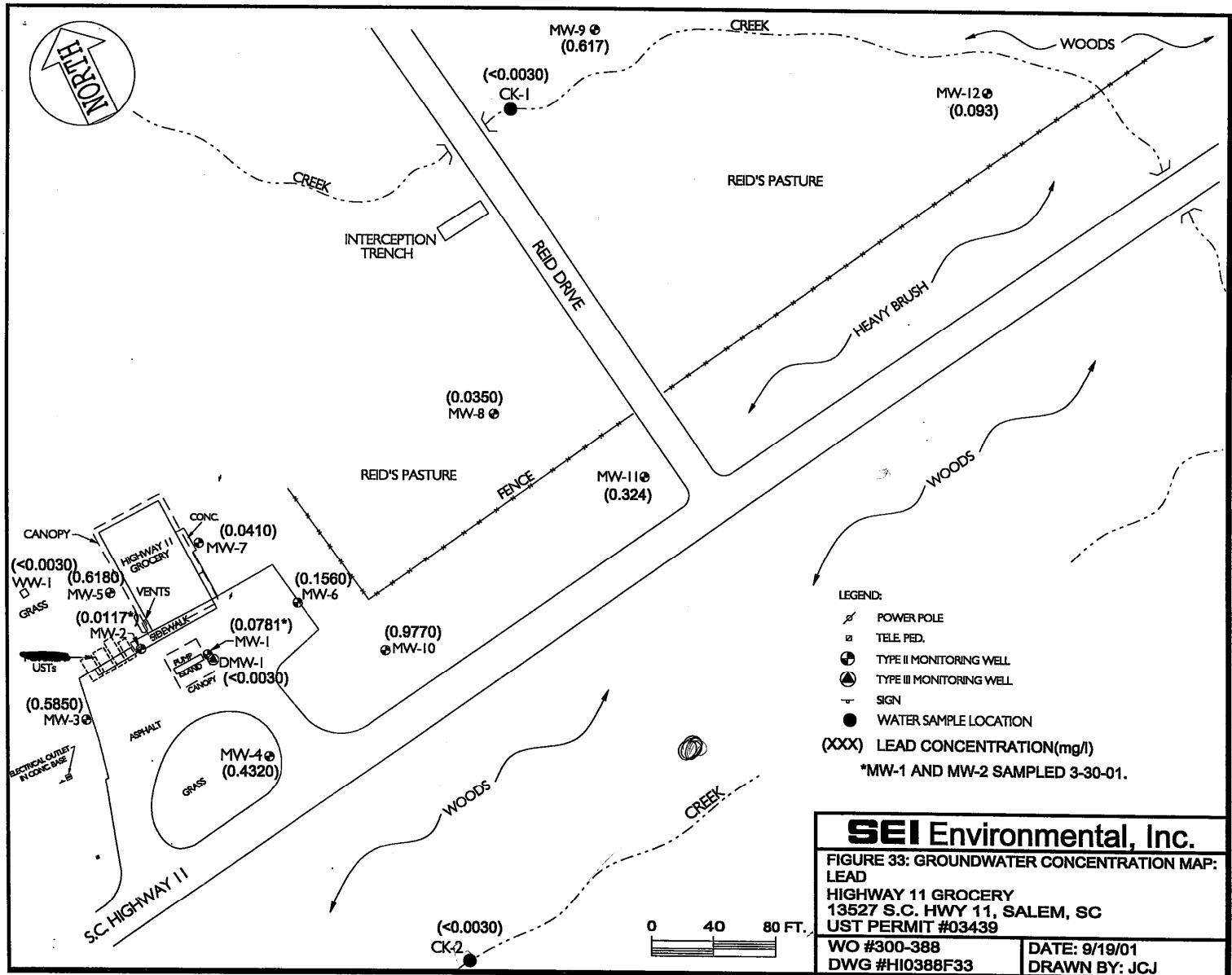


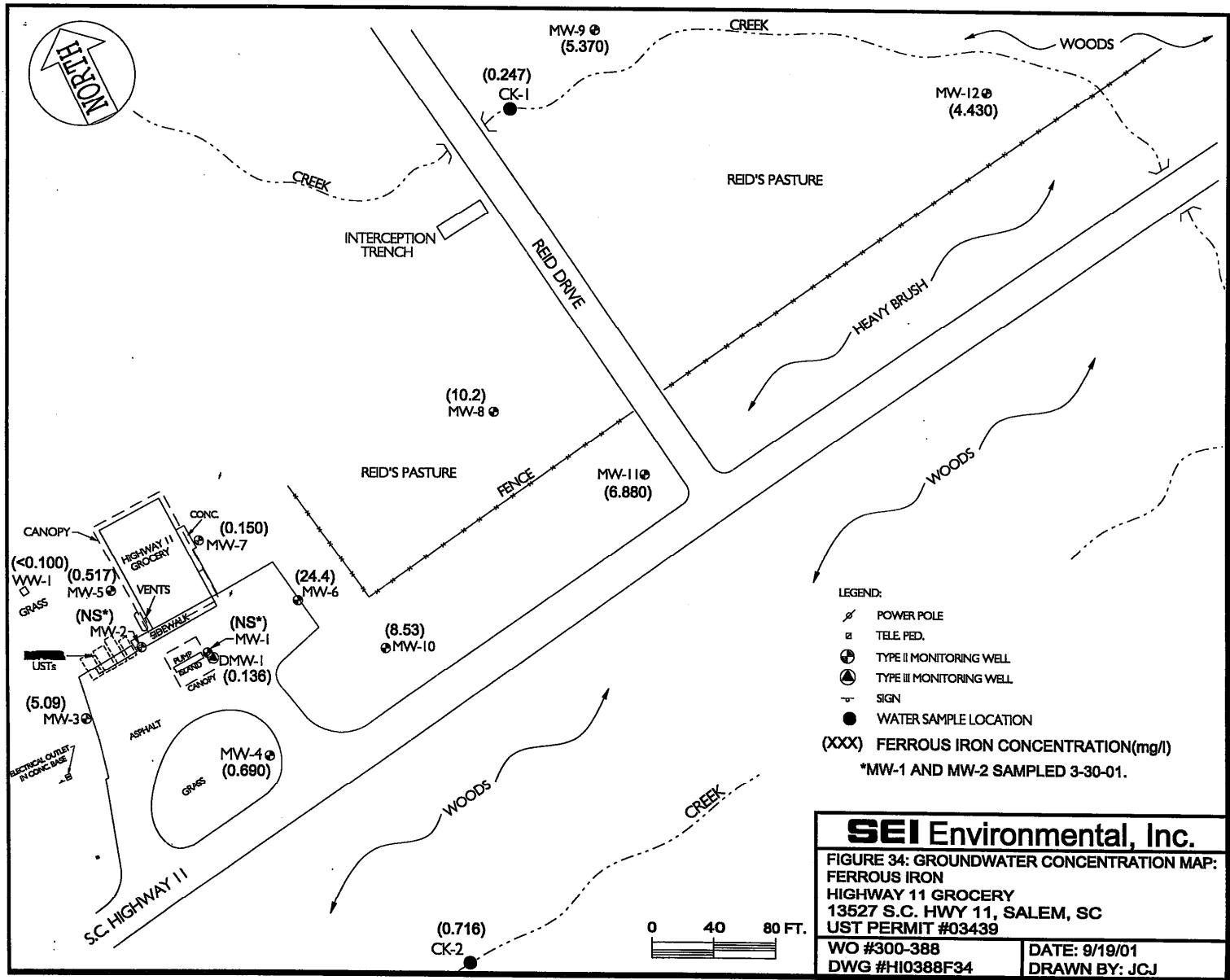


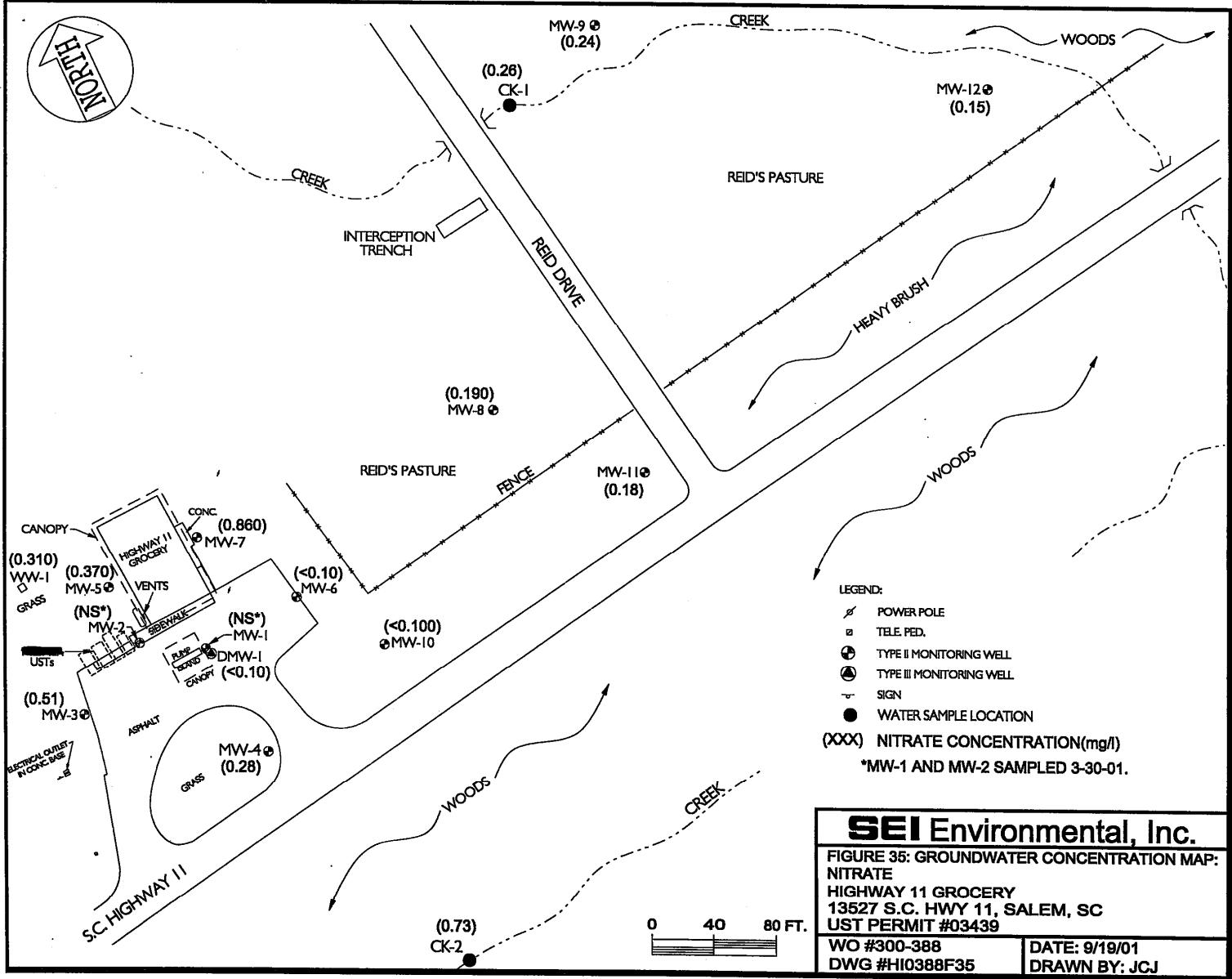


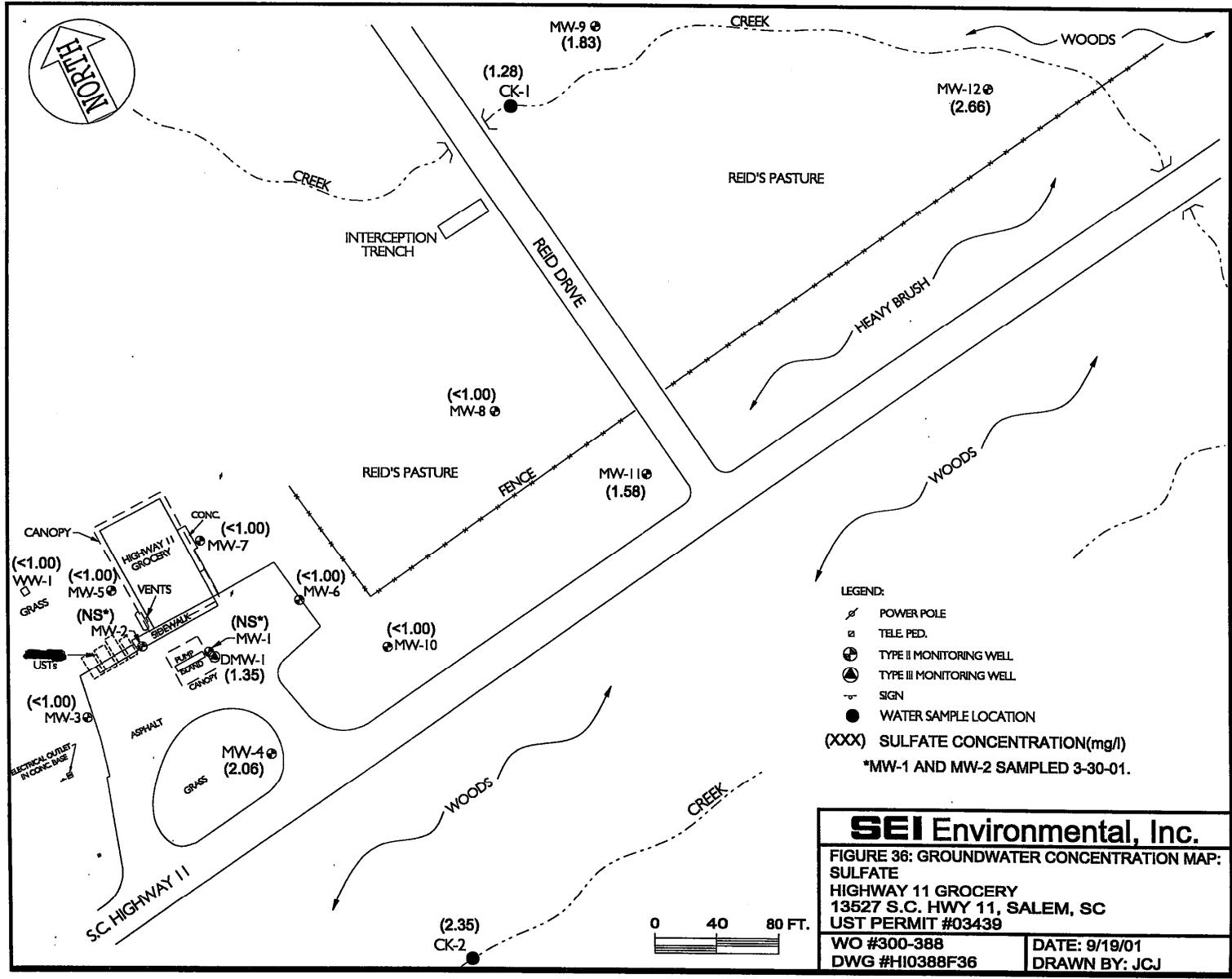












Borehole SB-1**Sampling Date: 07/09/01****Sample Depth: 2'-4'**

Split Spoon Interval (ft)	Field Screening Results (mg/kg)	Lithology (soil type, color, rocks/minerals present)	Soil Conditions (dry, moist, etc; petroleum odor)
0-2	1000+	Brown, soft, very fine grained sandy silt	Dry; strong petroleum odor
2-4	1000+	Brown, soft, very fine grained sandy silt	Dry; strong petroleum odor
4	Not Applicable	Refusal – Rock	Not Applicable

Borehole SB-2**Sampling Date: 07/09/01****Sample Depth: 2'-4'**

Split Spoon Interval (ft)	Field Screening Results (mg/kg)	Lithology (soil type, color, rocks/minerals present)	Soil Conditions (dry, moist, etc; petroleum odor)
0-2	7.0	Brown, soft, very fine to fine grained sandy silt	Dry; no petroleum odor
2-4	5.0	Brown, soft, very fine to fine grained sandy silt	Dry; no petroleum odor
4-6	4.0	Tan, soft, very fine grained sandy silt	Dry; no petroleum odor
6-8	4.0	Brown, soft, very fine to fine grained sandy silt	Dry; no petroleum odor
8-10	3.0	Brown, soft, very fine to fine grained sandy silt	Dry; no petroleum odor

Borehole SB-3**Sampling Date: 07/09/01****Sample Depth: 30'**

Split Spoon Interval (ft)	Field Screening Results (mg/kg)	Lithology (soil type, color, rocks/minerals present)	Soil Conditions (dry, moist, etc; petroleum odor)
5	70	Brown, soft, very fine grained sandy silt	Dry; no petroleum odor
10	330	Tan, soft, very fine grained sandy silt	Dry; slight petroleum odor
15	390	Brown, soft, very fine grained sandy silt	Dry; moderate petroleum odor
20	1000+	Brown, soft, very fine grained sandy silt	Dry; strong petroleum odor
25	1000+	Brown, soft, very fine grained sandy silt	Dry; strong petroleum odor
30	1000+	Brown, soft, very fine grained sandy silt	Dry; strong petroleum odor
32	1000+	Brown, soft, very fine grained sandy silt	Wet; strong petroleum odor

Borehole SB-4**Sampling Date: 07/09/01****Sample Depth: 2'-4'**

Split Spoon Interval (ft)	Field Screening Results (mg/kg)	Lithology (soil type, color, rocks/minerals present)	Soil Conditions (dry, moist, etc; petroleum odor)
0-2	1000+	Brown, soft, very fine to fine grained silty sand	Dry; strong petroleum odor
2-4	1000+	Brown, soft, very fine to fine grained silty sand	Dry; strong petroleum odor
4+	Not Applicable	Refusal – Rock	Not Applicable

Borehole SB-5**Sampling Date: 07/09/01****Sample Depth: 25'**

Split Spoon Interval (ft)	Field Screening Results (mg/kg)	Lithology (soil type, color, rocks/minerals present)	Soil Conditions (dry, moist, etc; petroleum odor)
5	0.0	Red, soft, very fine grained silty sand	Dry; no petroleum odor
10	47	Brown, soft, very fine grained silty sand	Dry; no petroleum odor
15	47	Brown, soft, very fine grained silty sand	Dry; no petroleum odor
20	51	Tan, soft, very fine grained silty sand	Dry; no petroleum odor
25	55	Tan, soft, very fine grained silty sand	Dry; no petroleum odor

Borehole SB-6**Sampling Date: 07/10/01****Sample Depth: Not Sampled**

Split Spoon Interval (ft)	Field Screening Results (mg/kg)	Lithology (soil type, color, rocks/minerals present)	Soil Conditions (dry, moist, etc; petroleum odor)
33	3.0	Brown, soft, very fine to medium grained silty sand	Wet; no petroleum odor

Borehole SB-7**Sampling Date: 07/11/01****Sample Depth: Not Sampled**

Split Spoon Interval (ft)	Field Screening Results (mg/kg)	Lithology (soil type, color, rocks/minerals present)	Soil Conditions (dry, moist, etc; petroleum odor)
35	120	Brown, soft, very fine to fine grained silty sand	Wet; slight petroleum odor

Borehole SB-8**Sampling Date: 07/11/01****Sample Depth: Not Sampled**

Split Spoon Interval (ft)	Field Screening Results (mg/kg)	Lithology (soil type, color, rocks/minerals present)	Soil Conditions (dry, moist, etc; petroleum odor)
35	1000+	Brown, soft, very fine to fine grained silty sand	Wet; strong petroleum odor

Borehole SB-9**Sampling Date: 08/20/01****Sample Depth: Not Sampled**

Split Spoon Interval (ft)	Field Screening Results (mg/kg)	Lithology (soil type, color, rocks/minerals present)	Soil Conditions (dry, moist, etc; petroleum odor)
5	Not Determined	Brownish-orange, soft, fine grained sandy clay loam	Dry; no petroleum odor
10	Not Determined	Brown, medium stiff, fine grained silty loam	Dry; no petroleum odor
15	Not Determined	Grayish-tan, soft, medium grained silty sand with mica	Dry; no petroleum odor
20	Not Determined	Grayish-tan, soft, medium grained silty sand with mica	Damp; no petroleum odor
24	72	Grayish-tan, soft, medium grained silty sand with mica	Wet; no petroleum odor

Borehole SB-11**Sampling Date: 08/20/01****Sample Depth: Not Sampled**

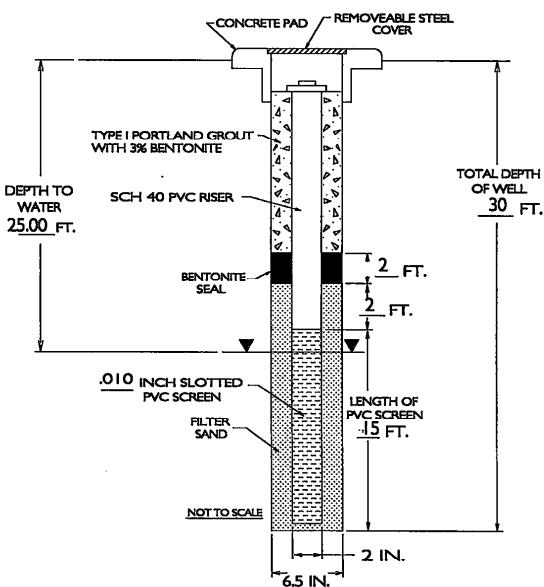
Split Spoon Interval (ft)	Field Screening Results (mg/kg)	Lithology (soil type, color, rocks/minerals present)	Soil Conditions (dry, moist, etc; petroleum odor)
5	Not Determined	Brownish-orange, soft, fine grained sandy clay loam	Dry; no petroleum odor
10	Not Determined	Brown, medium stiff, fine grained silty loam	Dry; no petroleum odor
15	Not Determined	Grayish-tan, soft, medium grained silty sand with mica	Dry; no petroleum odor
18	13.0	Grayish-tan, soft, fine to medium grained silty sand	Damp; no petroleum odor
18+	Not Applicable	Refusal – Rock	Not Applicable

Borehole SB-12**Sampling Date: 08/20/01****Sample Depth: Not Sampled**

Split Spoon Interval (ft)	Field Screening Results (mg/kg)	Lithology (soil type, color, rocks/minerals present)	Soil Conditions (dry, moist, etc; petroleum odor)
5	7.0	Brownish-gray, soft, medium grained silty loam	Dry; no petroleum odor
10	830	Gray, soft, fine grained rock flour	Dry; strong petroleum odor

Boring Log and Type II Well Construction Details

WELL IDENTIFICATION: MW-1 DATE DRILLED: 3/29/01
 STATE PERMIT #: 15115 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13529 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 103.38 LAND SURFACE ELEV.: N/D



DRILLING METHOD: 2-14" HOLLOW STEM AUGER

SAMPLING METHOD: SPLIT SPOON

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: .010"

COMMENTS:

TOP OF CASING ELEVATION REFERS TO AN ASSUMED ELEVATION.

NR = NO RESPONSE

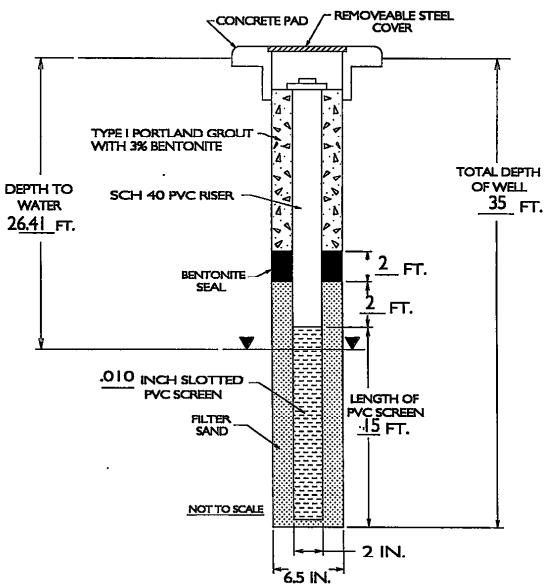
N/D = NOT DETERMINED

N/A = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOVERY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	13	SW	TAN, SOFT, MEDIUM-GRAINED SAND	
10	ND	ND	40	ML	GRAY, STIFF, MEDIUM-GRAINED SAPROLITE	
15	ND	ND	1000+	ML	GRAY, STIFF, MEDIUM-GRAINED SAPROLITE, STRONG PETRO ODOR	
20	ND	ND	1000+	ML	GRAY, STIFF, MEDIUM-GRAINED SAPROLITE, STRONG PETRO ODOR	
25	ND	ND	1000+	ML	GRAY, STIFF, MEDIUM-GRAINED SAPROLITE, STRONG PETRO ODOR	
30	ND	ND	ND	ND	REFUSAL- ROCK	
35						
40						

Boring Log and Type II Well Construction Details

WELL IDENTIFICATION: MW-2 DATE DRILLED: 3/29/01
 STATE PERMIT #: 15115 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13529 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 104.85 LAND SURFACE ELEV.: N/D



DRILLING METHOD: 2-14" HSA AND 5-7/8" AIR HAMMER

SAMPLING METHOD: SPLIT SPOON

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: .010"

COMMENTS:

TOP OF CASING ELEVATION REFERS TO AN ASSUMED ELEVATION.

NR = NO RESPONSE

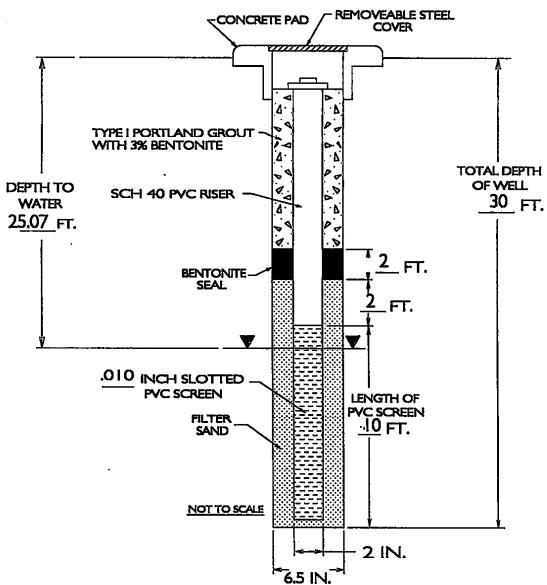
N/D = NOT DETERMINED

N/A = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOVERY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	10	ML	GRAY-TAN, STIFF, MEDIUM-GRAINED ROCK FLOUR	
10	ND	ND	ND	ND	ROCK	
15						
20						
25						
30						
35						
40						

Boring Log and Type II Well Construction Details

WELL IDENTIFICATION: MW-3 DATE DRILLED: 7/9/01
 STATE PERMIT #: 15115 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13529 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 104.89 LAND SURFACE ELEV.: N/D



DRILLING METHOD: 2-14" HOLLOW STEM AUGER

SAMPLING METHOD: SPLIT SPOON

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: 0.010"

COMMENTS:

TOP OF CASING ELEVATION REFERS TO AN ASSUMED ELEVATION.

NR = NO RESPONSE

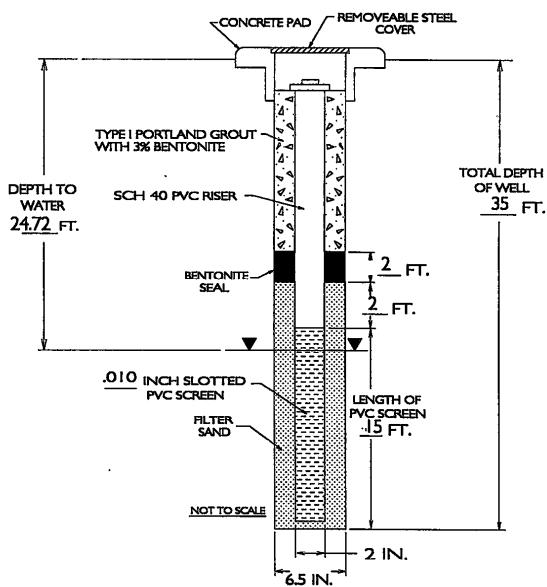
N/D = NOT DETERMINED

N/A = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOVERY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	0.0	SM	TAN, SOFT, FINE-GRAINED SILTY SAND	
10	ND	ND	1.0	ML	BROWN, SOFT, VERY FINE-GRAINED SANDY SILT	
15	ND	ND	0.0	SM	TAN, SOFT, FINE-GRAINED SILTY SAND	
20	ND	ND	5.0	SM	TAN, SOFT, FINE-GRAINED SILTY SAND	
25	ND	ND	17	SM	TAN, SOFT, FINE-GRAINED SILTY SAND	
30	ND	ND	16	SM	BROWN, SOFT, VERY FINE-GRAINED SILTY SAND; MOIST	
35						
40						

Boring Log and Type II Well Construction Details

WELL IDENTIFICATION: MW-4 DATE DRILLED: 7/10/01
 STATE PERMIT #: 15115 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13529 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 99.90 LAND SURFACE ELEV.: N/D



DRILLING METHOD: 2-14" HOLLOW STEM AUGER

SAMPLING METHOD: SPLIT SPOON

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: .0010"

COMMENTS:

TOP OF CASING ELEVATION REFERS TO AN ASSUMED ELEVATION.

NR = NO RESPONSE

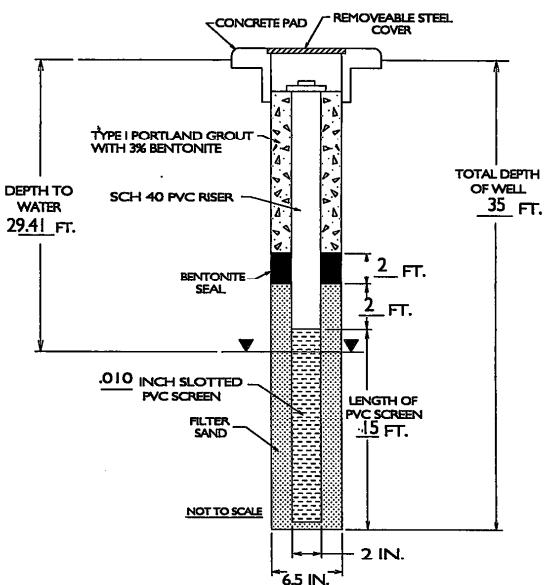
N/D = NOT DETERMINED

N/A = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOVERY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	4.0	SM	BROWN, SOFT, FINE-GRAINED SILTY SAND	
10	ND	ND	4.0	SM	RED, SOFT, VERY FINE-GRAINED SILTY SAND	
15	ND	ND	14	SM	TAN, SOFT, FINE-GRAINED SILTY SAND	
20	ND	ND	8.0	SM	TAN, SOFT, FINE-GRAINED SILTY SAND	
25	ND	ND	8.0	SM	TAN, SOFT, FINE-GRAINED SILTY SAND	
30	ND	ND	11	SM	BROWN, SOFT, FINE-GRAINED SILTY SAND; MOIST	
35	ND	ND	6.0	SM	BROWN, SOFT, FINE-GRAINED SILTY SAND; WET	
40						

Boring Log and Type II Well Construction Details

WELL IDENTIFICATION: MW-5 DATE DRILLED: 7/10/01
 STATE PERMIT #: 15115 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13529 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 106.06 LAND SURFACE ELEV.: N/D



DRILLING METHOD: 2-14" HOLLOW STEM AUGER

SAMPLING METHOD: SPLIT SPOON

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: 0.010"

COMMENTS:

TOP OF CASING ELEVATION REFERS TO AN ASSUMED ELEVATION.

NR = NO RESPONSE

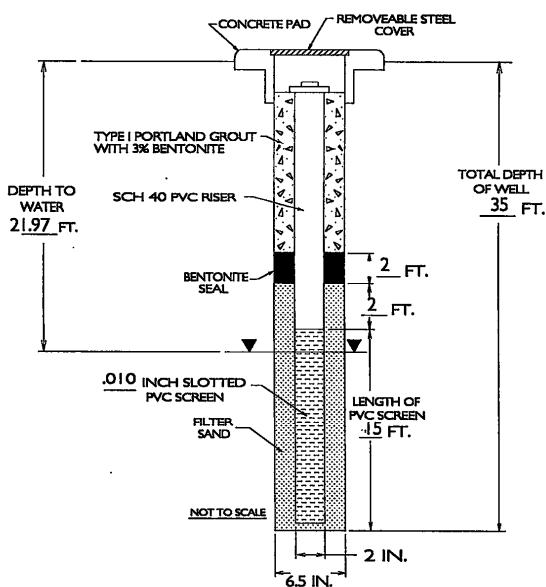
N/D = NOT DETERMINED

N/A = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOVERY	OVA (ppm)	UNIFID METHOD	DESCRIPTIVE LOG
5	ND	ND	1.0	SM	BROWN, SOFT, FINE-GRAINED SILTY SAND	
10	ND	ND	3.0	SM	RED, SOFT, VERY FINE-GRAINED SILTY SAND	
15	ND	ND	6.0	SM	TAN, SOFT, FINE-GRAINED SILTY SAND	
20	ND	ND	7.0	SM	TAN, SOFT, FINE-GRAINED SILTY SAND	
25	ND	ND	8.0	SM	TAN, SOFT, FINE-GRAINED SILTY SAND	
30	ND	ND	13	SM	BROWN, SOFT, FINE-GRAINED SILTY SAND; MOIST	
35	ND	ND	1.0	SM	BROWN, SOFT, FINE-GRAINED SILTY SAND; WET	
40						

Boring Log and Type II Well Construction Details

WELL IDENTIFICATION: MW-6 DATE DRILLED: 7/10/01
 STATE PERMIT #: 15115 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13529 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 100.00 LAND SURFACE ELEV.: N/D



DRILLING METHOD: 2-1/4" HOLLOW STEM AUGER

SAMPLING METHOD: SPLIT SPOON

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: 0.010"

COMMENTS:

TOP OF CASING ELEVATION REFERS TO AN ASSUMED ELEVATION.

NR = NO RESPONSE

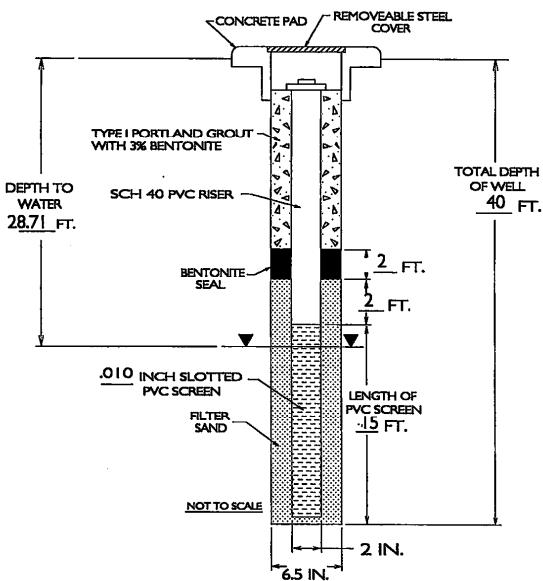
N/D = NOT DETERMINED

N/A = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	COHERENCY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	22	SM	BROWN-RED, SOFT, FINE-GRAINED SILTY SAND	
10	ND	ND	41	ML	TAN, SOFT, VERY FINE-GRAINED SANDY SILT	
15	ND	ND	11	ML	TAN, SOFT, VERY FINE-GRAINED SANDY SILT	
20	ND	ND	100	ML	BROWN, SOFT, VERY FINE-GRAINED SANDY SILT	
25	ND	ND	1000+	ML	BROWN, SOFT, VERY FINE-GRAINED SANDY SILT; STRONG PETRO ODOR	
30	ND	ND	1000+	ML	BROWN, SOFT, VERY FINE-GRAINED SANDY SILT; STRONG PETRO ODOR	
35	ND	ND	1000+	ML	BROWN, SOFT, VERY FINE-GRAINED SANDY SILT; STRONG PETRO ODOR	
40						

Boring Log and Type II Well Construction Details

WELL IDENTIFICATION: MW-7 DATE DRILLED: 7/11/01
 STATE PERMIT #: 15115 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13529 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 103.66 LAND SURFACE ELEV.: N/D

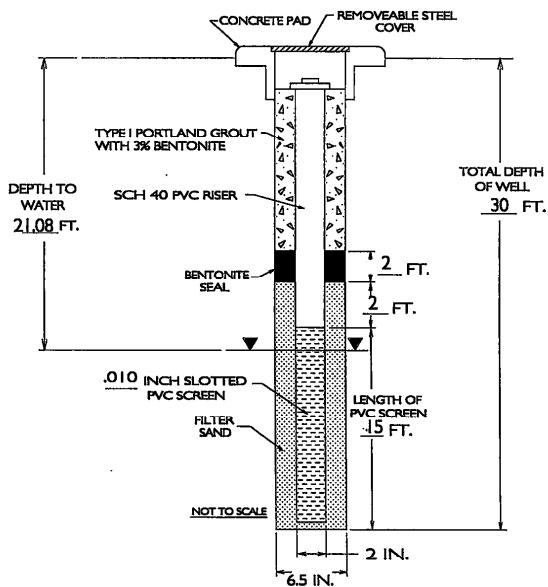


DRILLING METHOD: 2-1/4" HSA AND 5-7/8" AIR HAMMER
 SAMPLING METHOD: SPLIT SPOON
 GRAVEL PACK SIZE: 20/30 SILICA SAND
 SLOT SIZE: 0.010"
 COMMENTS:
 TOP OF CASING ELEVATION REFERS TO AN ASSUMED ELEVATION.
 NR = NO RESPONSE
 N/D = NOT DETERMINED
 N/A = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOVERY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	1.0	SM	BROWN-RED, SOFT, FINE-GRAINED SILTY SAND	
10	ND	ND	0.0	ML	TAN, SOFT, VERY FINE-GRAINED SANDY SILT	
15	ND	ND	9.0	ML	TAN, SOFT, VERY FINE-GRAINED SANDY SILT	
20	ND	ND	3.0	ML	BROWN, SOFT, VERY FINE-GRAINED SANDY SILT	
25	ND	ND	ND	ND	ROCK	
30	ND	ND	ND	ND	ROCK	
35	ND	ND	ND	ND	ROCK	
40	ND	ND	ND	ND	ROCK	

Boring Log and Type II Well Construction Details

WELL IDENTIFICATION: MW-8 DATE DRILLED: 7/12/01
 STATE PERMIT #: 15115 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13529 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 86.51 LAND SURFACE ELEV.: N/D



DRILLING METHOD: 2-1/4" HOLLOW STEM AUGER

SAMPLING METHOD: SPLIT SPOON

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: 0.010"

COMMENTS:

TOP OF CASING ELEVATION REFERS TO AN ASSUMED ELEVATION.

NR = NO RESPONSE

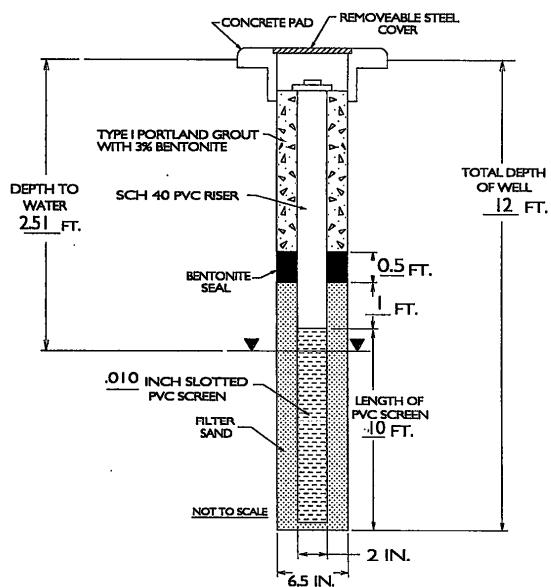
N/D = NOT DETERMINED

N/A = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOVERY	OVA (ppm)	UNIFRED METHOD	DESCRIPTIVE LOG
5	ND	ND	2.0	SM		RED, SOFT, VERY FINE-GRAINED SILTY SAND
10	ND	ND	3.0	SM		BROWN, SOFT, VERY FINE-GRAINED SILTY SAND
15	ND	ND	8.0	SM		BROWN, SOFT, VERY FINE-GRAINED SILTY SAND
20	ND	ND	600	SM		GRAY, SOFT, FINE-GRAINED SILTY SAND; STRONG PETRO ODOR
25	ND	ND	600	SM		GRAY, SOFT, FINE-GRAINED SILTY SAND; STRONG PETRO ODOR
30	ND	ND	200	SM		GRAY, SOFT, FINE-GRAINED SILTY SAND, WET; STRONG PETRO ODOR
35						
40						

Boring Log and Type II Well Construction Details

WELL IDENTIFICATION: MW-9 DATE DRILLED: 8/20/01
 STATE PERMIT #: 15115 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13529 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 58.39 LAND SURFACE ELEV.: N/D



DRILLING METHOD: 2-1/4" HOLLOW STEM AUGER

SAMPLING METHOD: SPLIT SPOON

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: .0010"

COMMENTS:

TOP OF CASING ELEVATION REFERS TO AN ASSUMED ELEVATION.

NR = NO RESPONSE

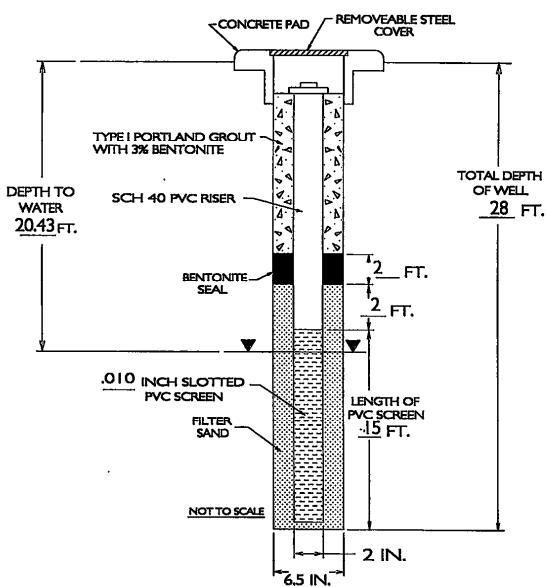
N/D = NOT DETERMINED

N/A = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOVERY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	ND	CL	BROWN, SOFT, FINE SANDY CLAY; WET	
10	ND	ND	8.0	CL	BROWN, SOFT, FINE SANDY CLAY; WET	
15						
20						
25						
30						
35						
40						

Boring Log and Type II Well Construction Details

WELL IDENTIFICATION: MW-10 DATE DRILLED: 7/11/01
 STATE PERMIT #: 15115 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13529 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 93.78 LAND SURFACE ELEV.: N/D



DRILLING METHOD: 2-1/4" HOLLOW STEM AUGER

SAMPLING METHOD: SPLIT SPOON

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: 0.010"

COMMENTS:

TOP OF CASING ELEVATION REFERS TO AN ASSUMED ELEVATION.

NR = NO RESPONSE

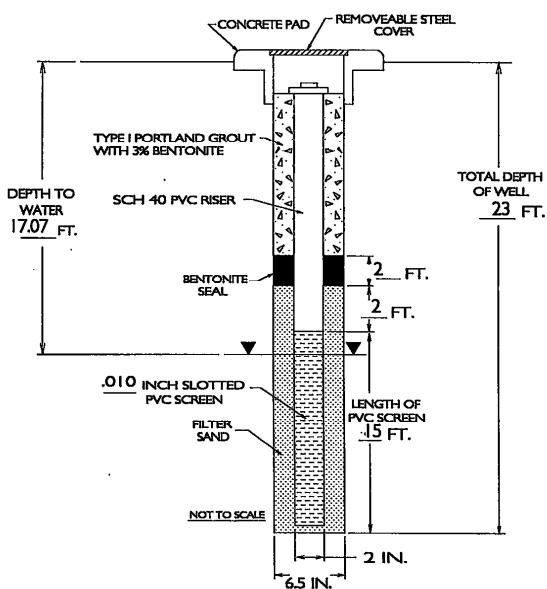
N/D = NOT DETERMINED

N/A = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOVERY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	1.0	SM	RED, SOFT, FINE-GRAINED SILTY SAND	
10	ND	ND	1.0	SM	BROWN, SOFT, VERY FINE-GRAINED SILTY SAND	
15	ND	ND	1.0	SM	BROWN, SOFT, VERY FINE-GRAINED SILTY SAND	
20	ND	ND	3.0	SM	BROWN, SOFT, VERY FINE-GRAINED SILTY SAND	
25	ND	ND	36	SM	BROWN, SOFT, VERY FINE-GRAINED SILTY SAND; MOIST	
30						
35						
40						

Boring Log and Type II Well Construction Details

WELL IDENTIFICATION: MW-11 DATE DRILLED: 8/23/01
 STATE PERMIT #: 15115 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13529 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 83.20 LAND SURFACE ELEV.: N/D



DRILLING METHOD: 2-1/4" HOLLOW STEM AUGER

SAMPLING METHOD: SPLIT SPOON

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: .010"

COMMENTS:

TOP OF CASING ELEVATION REFERS TO AN ASSUMED ELEVATION.

NR = NO RESPONSE

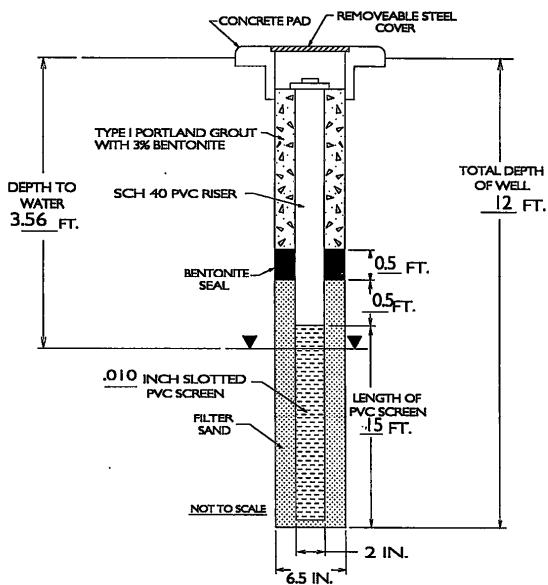
N/D = NOT DETERMINED

N/A = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOVERY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	ND	CL	ORANGE, SOFT, FINE-GRAINED SANDY CLAY LOAM	
10	ND	ND	ND	ML	TAN, SOFT, MEDIUM-GRAINED SILTY LOAM, MICA	
15	ND	ND	8.0	SM	GRAY-TAN, SOFT, FINE TO MEDIUM-GRAINED SILTY SAND, MICA	
18	ND	ND	ND	ND	ROCK	
20	ND	ND	4.0	CL	BROWN, SOFT, FINE-GRAINED CLAY LOAM; WET	
25						
30						
35						
40						

Boring Log and Type II Well Construction Details

WELL IDENTIFICATION: MW-12 DATE DRILLED: 9/23/01
 STATE PERMIT #: 15115 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13529 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 58.69 LAND SURFACE ELEV.: N/D



DRILLING METHOD: 2-1/4" HOLLOW STEM AUGER

SAMPLING METHOD: SPLIT SPOON

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: 0.010"

COMMENTS:

TOP OF CASING ELEVATION REFERS TO AN ASSUMED ELEVATION.

NR = NO RESPONSE

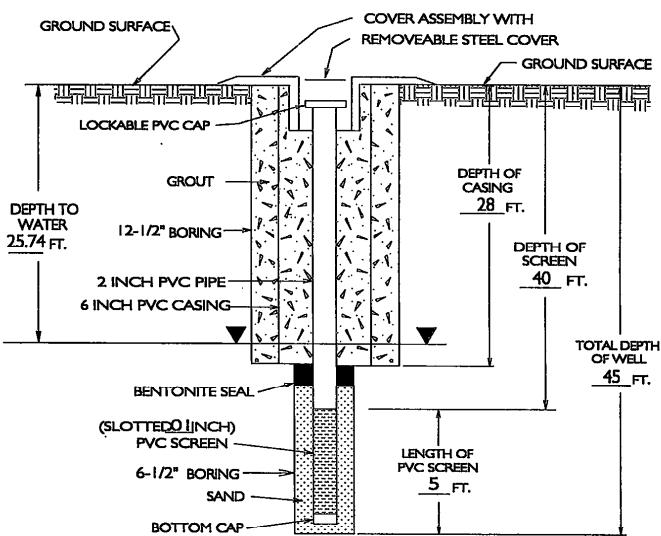
N/D = NOT DETERMINED

N/A = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOVERY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	0.0	CL	BROWN, SOFT, MEDIUM-GRAINED SANDY CLAY LOAM; MOIST	
10	ND	ND	0.0	CL	BROWN, SOFT, FINE-GRAINED SANDY CLAY LOAM; WET	
15						
20						
25						
30						
35						
40						

Boring Log and Type III Well Construction Details

WELL IDENTIFICATION: DMW-1 DATE DRILLED: 7/9/01 AND 7/11/01
STATE PERMIT #: 15115 WORK ORDER #: 300-388
PROJECT NAME: HIGHWAY 11 GROCERY
SITE ADDRESS: 13527 S.C. HWY 11, SALEM, SC
LATITUDE: N/D LONGITUDE: N/D
TOP OF CASING ELEV.: 103.27 LAND SURFACE ELEV.: N/D



DRILLING METHOD: 2-1/4" AND 8-1/4" HOLLOW STEM AUGER, AIR ROTARY

SAMPLING METHOD: SPLIT SPOON

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: 0.010"

COMMENTS:

TOP OF CASING ELEVATION IS REFERENCED TO AN ASSUMED ELEVATION

N/D= NOT DETERMINED

NA = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOV. ERY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	ND	SW	TAN, SOFT, MEDIUM-GRAINED SAND	
10	ND	ND	ND	ML	GRAY, STIFF, MEDIUM-GRAINED SAPROLITE	
15	ND	ND	ND	ML	GRAY, STIFF, MEDIUM-GRAINED SAPROLITE; STRONG PETRO ODOR	
20	ND	ND	ND	ML	GRAY, STIFF, MEDIUM-GRAINED SAPROLITE; STRONG PETRO ODOR	
25	ND	ND	ND	ML	GRAY, STIFF, MEDIUM-GRAINED SAPROLITE; STRONG PETRO ODOR	
	ND	ND	ND	ND	28-45' ROCK	
30						
35						

Soil Analytical Results									
Highway 11 Grocery / Salem, South Carolina									
Chemical of Concern	RBSL (mg/kg)	SB-1 (mg/kg)	SB-2 (mg/kg)	SB-3 (mg/kg)	SB-4 (mg/kg)	SB-5 (mg/kg)	MW-1* (mg/kg)	MW-2* (mg/kg)	MW-3 (mg/kg)
Benzene	0.007	<0.0500	<0.0010	<0.0010	<0.0010	<0.0010	93.68	0.0063	<0.0010
Toluene	1.450	<0.0500	<0.0010	0.0038	<0.0010	<0.0010	678.2	0.0206	<0.0010
Ethylbenzene	1.150	<0.0500	<0.0010	<0.0010	<0.0010	<0.0010	678.2	<0.0023	<0.0010
Xylenes	14.500	0.3000	0.0028	0.0052	0.0049	<0.0010	1061	0.0078	0.0029
Total BTEX	NA	<0.4500	<0.0058	<0.0110	<0.0079	<0.0040	2511.08	<0.0370	<0.0059
Naphthalene	0.036	12.50	0.0060	0.0094	<0.0010	<0.0010	110.3	<0.0059	0.0070
TPH	NA	NS	NS	NS	NS	NS	NS	NS	NS
Total Organic Carbon	NA	NS	NS	NS	NS	NS	NS	NS	<1000
Benzo(a)anthracene	0.066	NS	NS	NS	NS	NS	<1.87	<0.089	NS
Benzo(b)fluoranthene	0.066	NS	NS	NS	NS	NS	<1.87	<0.089	NS
Benzo(k)fluoranthene	0.066	NS	NS	NS	NS	NS	<1.87	<0.089	NS
Chrysene	0.066	NS	NS	NS	NS	NS	<1.87	<0.089	NS
Dibenzo(a,h)anthracene	0.066	NS	NS	NS	NS	NS	<1.87	<0.089	NS

RBSLs are those for sandy soil; NA = Not Applicable; NS = Not Sampled

*Sampled March 29, 2001, during the previous assessment activities

Soil Analytical Results (continued)							
Highway 11 Grocery / Salem, South Carolina							
Chemical of Concern	RBSL (mg/kg)	MW-4 (mg/kg)	MW-5 (mg/kg)	MW-6 (mg/kg)	MW-7 (mg/kg)	MW-8 (mg/kg)	DMW-1 (mg/kg)
Benzene	0.007	<0.0010	<0.0010	0.0020	<0.0010	<0.0010	NS
Toluene	1.450	<0.0010	<0.0010	0.0168	<0.0010	<0.0010	NS
Ethylbenzene	1.150	<0.0010	<0.0010	0.0058	<0.0010	<0.0010	NS
Xylenes	14.500	0.0028	<0.0010	0.0339	<0.0010	<0.0010	NS
Total BTEX	NA	<0.0058	<0.0040	0.0585	<0.0040	<0.0040	NA
Naphthalene	0.036	0.0050	<0.0010	0.0340	<0.0010	<0.0010	NS
TPH	NA	NS	NS	NS	NS	NS	57.6
Total Organic Carbon	NA	NS	NS	NS	NS	NS	NS
Benzo(a)anthracene	0.066	NS	NS	NS	NS	NS	NS
Benzo(b)fluoranthene	0.066	NS	NS	NS	NS	NS	NS
Benzo(k)fluoranthene	0.066	NS	NS	NS	NS	NS	NS
Chrysene	0.066	NS	NS	NS	NS	NS	NS
Dibenzo(a,h)anthracene	0.066	NS	NS	NS	NS	NS	NS

RBSLs are those for sandy soil; NA = Not Applicable; NS = Not Sampled

State Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Page ____ of ____

Date (mm/dd/yy): 7/16/01

Field Personnel:

J. WEGAN, J. MONGIAO

General Weather Conditions:

Ambient Air Temperature: _____ °C

pH Meter

serial no.

pH=4.0

pH=7.0

pH=10.0

Quality Assurance

Conductivity Meter

serial no.

standard

standard

standard

Chain of Custody

Relinquished by

Date/Time

Received by

Date/Time

Facility Name: HIGHWAY 11 Grocery

Site ID#: 300388

Monitoring Well # MW3

Well Diameter (D): 2" feet

Conversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 25.91 feet

Total Well Depth (TWD) 30 feet

Length of the water column (LWC = TWD - DGW) 4.09 feet

1 casing volume (CV = LWC X C) = _____ X _____ = 6.7 gals
3 casing volume 3 X CV = 2.01 gals (standard purge volume)

Total Volume of Water Purged Before Sampling 4.25 gals.

* If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)							
Specific Cond. ($\mu\text{mhos/cm}$)	5.00	4.89					12.35
Water Temperature ($^{\circ}\text{C}$)	.085	.021					4.29
Turbidity (subjective: clear, slightly cloudy, cloudy)	19.2	17.7					.019
Dissolved Oxygen	clear	cloudy					18.3
PID readings, if required	7.41	6.47					cloudy
Remarks: well not recharging							7.02

range _____ of _____

Virginia Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date/Day: 7/16/01

Personnel:

General Weather Conditions: J.WEYAND, ST.MONEGAN

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter
 serial no. _____
 pH=4.0 _____
 pH=7.0 _____
 pH=10.0 _____

Conductivity Meter
 serial no. _____
 standard _____
 standard _____
 standard _____

Chain of Custody

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Cumulative Volume Purged (gallons)
 Time (military)

pH (s.u.)

Specific Cond. ($\mu\text{mhos}/\text{cm}$)

Water Temperature ($^{\circ}\text{C}$)

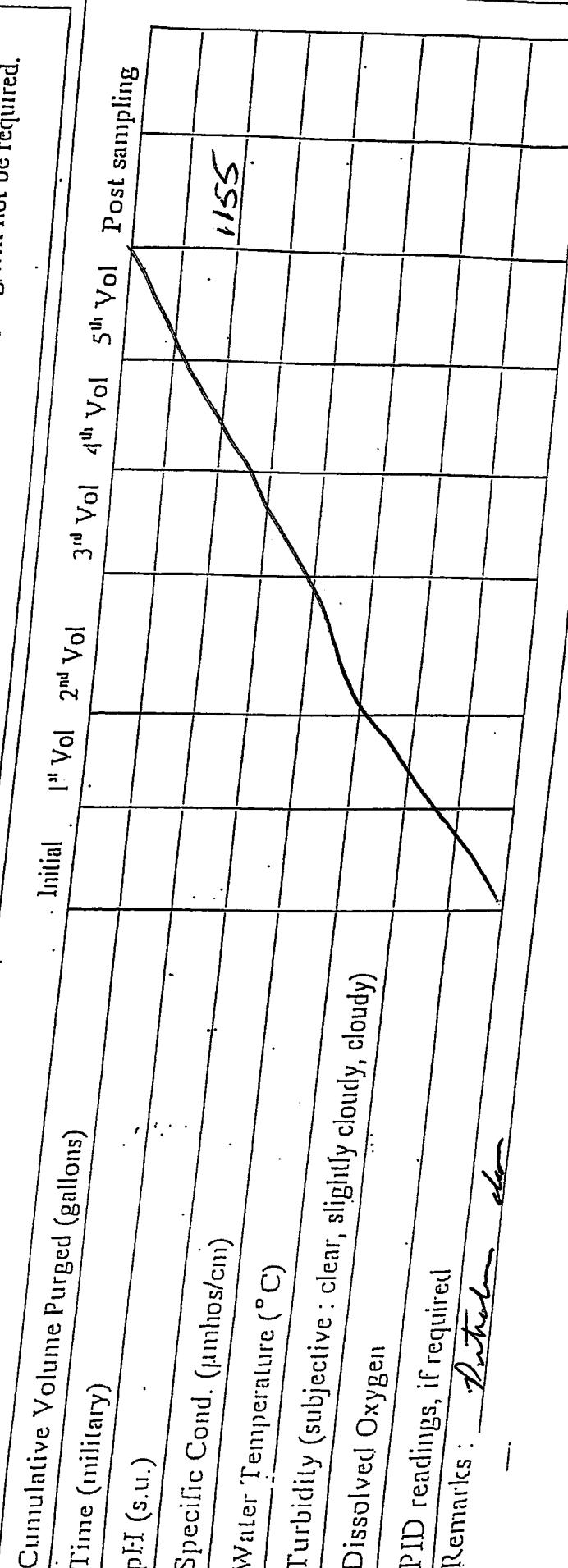
Turbidity (subjective: clear, slightly cloudy, cloudy)

Dissolved Oxygen

PID readings, if required

Remarks: Ducted air

Facility Name: <u>Highway 11 Grocery</u>	Monitoring Well #: <u>Mus4</u>
Site ID#: <u>300388</u>	Well Diameter (D): <u>2"</u> feet
Conversion factor (C): $3.14 \times (\text{D}/2)^2$ for a 2 inch well C = 0.163	* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) <u>24.08</u> feet	Total Well Depth (TWD) <u>35</u> feet
Length of the water column (LWC = TWD - DGW) <u>10.92</u> feet	I casing volume (CV = LWC X C) = $\frac{5.34}{3} \times \frac{X}{0.163} = 178$ gals
3 casing volume 3 X CV = <u>5.34</u> gals (standard purge volume)	Total Volume of Water Purged Before Sampling <u>5.34</u> gals.
* If free product is present over $\frac{1}{6}$ inch, sampling will not be required.	



Commonwealth Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Page ____ of ____

Date (mm/dd/yy): 7/16/01

Field Personnel:

J.WEYAND, J.MONSEHN

General Weather Conditions:

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter

serial no.

pH=4.0

pH=7.0

pH=10.0

Conductivity Meter

serial no.

standard

standard

standard

Chain of Custody

Relinquished by

Date/Time

Received by

Date/Time

Facility Name: Highway 11 Grocery

Site ID#: 300388

Monitoring Well # MWS

Well Diameter (D): 2" feet

Conversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

* Free Product Thickness:

Depth to Ground Water (DGW) 30.09 feet

Total Well Depth (TWD) 35 feet

Length of the water column (LWC = TWD - DGW) 4.91 feet

1 casing volume (CV = LWC X C) = _____ X _____ = .80 gals
3 casing volume 3 X CV = 2.40 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

* If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)							1316
Specific Cond. ($\mu\text{mhos/cm}$)		4.06	4.22	4.05	3.95		
Water Temperature ($^{\circ}\text{C}$)		.014	.018	.016	.015		3.83
Turbidity (subjective: clear, slightly cloudy, cloudy)		18.7	17.8	17.5	17.3		.016
Dissolved Oxygen		clear	cloudy	cloudy	cloudy		17.7
PID readings, if required		7.87	7.83	8.09	7.56		cloudy 7.69
Remarks:							

Commonwealth Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Page ___ of ___

Date (mm/dd/yy): 7/16/01

Field Personnel:

J. WEYAND, J. MONEGAN

General Weather Conditions:

Ambient Air Temperature: ____ °C

Quality Assurance

pH Meter

serial no.

pH=4.0

pH=7.0

pH=10.0

Conductivity Meter

serial no.

standard

standard

standard

Chain of Custody

Relinquished by

Date/Time

Received by

Date/Time

Facility Name: Highway 11 Grocery

Site ID#: 300388

Monitoring Well # MW6

Well Diameter (D): 2" feet

Conversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

* Free Product Thickness:

Depth to Ground Water (DGW) 22.79 feet

Total Well Depth (TWD) 35 feet

Length of the water column (LWC = TWD - DGW) 12.21 feet

1 casing volume (CV = LWC X C) = ____ X ____ = 1.99 gals

3 casing volume 3 X CV = 5.97 gals (standard purge volume)

Total Volume of Water Purged Before Sampling ____ gals.

* If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)							
Specific Cond. (μmhos/cm)							
Water Temperature (°C)							
Turbidity (subjective: clear, slightly cloudy, cloudy)							
Dissolved Oxygen							
PID readings, if required							
Remarks: <i>Rebaker rd</i>							

State of Minnesota Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 7/16/01
Field Personnel: J.WEYAND, J.MONEGAN
General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter
serial no. _____

pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

* Free Product Thickness:
Depth to Ground Water (DGW) _____ feet
Total Well Depth (TWD) _____ feet
Length of the water column (LWC = TWD - DGW) _____ feet

Chain of Custody

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

J.WEYAND

Facility Name: HIGHWAY 11 GROCERY
Site ID#: 300388

Well Diameter (D): 2" feet

Conversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

1 casing volume (CV = LWC X C) = $\frac{29.44}{40} \times .163 = 1.72$ gals
3 casing volume 3 CV = $\frac{5.14}{40} \times .652 = 1.72$ gals (standard purge volume)

Total Volume of Water Purged Before Sampling 5.16 gals.
* If free product is present over $\frac{1}{6}$ inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial Vol	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
pH (s.u.)							
Specific Cond. ($\mu\text{mhos}/\text{cm}$)	41.81	4.24	4.06	4.10			14.30
Water Temperature ($^{\circ}\text{C}$)	.039	.024	.025	.025			4.09
Turbidity (subjective: clear, slightly cloudy, cloudy)	19.9	18.4	18.4	18.3			.025
Dissolved Oxygen	4.07	4.49	4.17	4.16			18.49
PID readings, if required							
Remarks:							6.58

Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 01/27/01

Field Personnel: A.J. MONEGAN

General Weather Conditions: CLEAR, 10° T

Ambient Air Temperature: °C

pH Meter
serial no. _____
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Quality Assurance

Conductivity Meter
serial no. _____
standard _____
standard _____
standard _____

Chain of Custody

Relinquished by _____

Date/Time _____

Received by _____

Date/Time _____

Facility Name: HIGHWAY N GRO
Site ID#: 300388
Monitoring Well # MW9

Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 2.51 feet

Total Well Depth (TWD) 11.5 feet

Length of the water column (LWC = TWD - DGW) 8.99 feet

1 casing volume (CV = LWC X C) = X = 1.46 gals
3 casing volume 3 X CV = 4.38 gals (standard purge volume)

Total Volume of Water Purged Before Sampling gals.

* If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)							
Specific Cond. ($\mu\text{mhos/cm}$)	5.46	4.88	4.78	4.89			12.80
Water Temperature ($^{\circ}\text{C}$)	.089	.030	.031	.031			4.84
Turbidity (subjective: clear, slightly cloudy, cloudy)	28.7	21.8	22.8	22.2			.032
Dissolved Oxygen	clear	cloudy	cloudy	cloudy			7.23
PID readings, if required	5.46	3.23	2.12	2.07			cloudy 1.85
Remarks:							

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Page ___ of ___

1/16/01

J.WEYAND, J.MONEGAN

Other Conditions:

Ambient Air Temperature: ____ °C

Quality Assurance

pH Meter
serial no. _____
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Conductivity Meter
serial no. _____
standard _____
standard _____
standard _____

Chain of Custody

Relinquished by _____

Date/Time _____

Received by _____

Date/Time _____

Facility Name: Highway 11 Grocery
Site ID#: 300388

Monitoring Well # MW10

Well Diameter (D): 2" feet

Conversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 20.78 feet

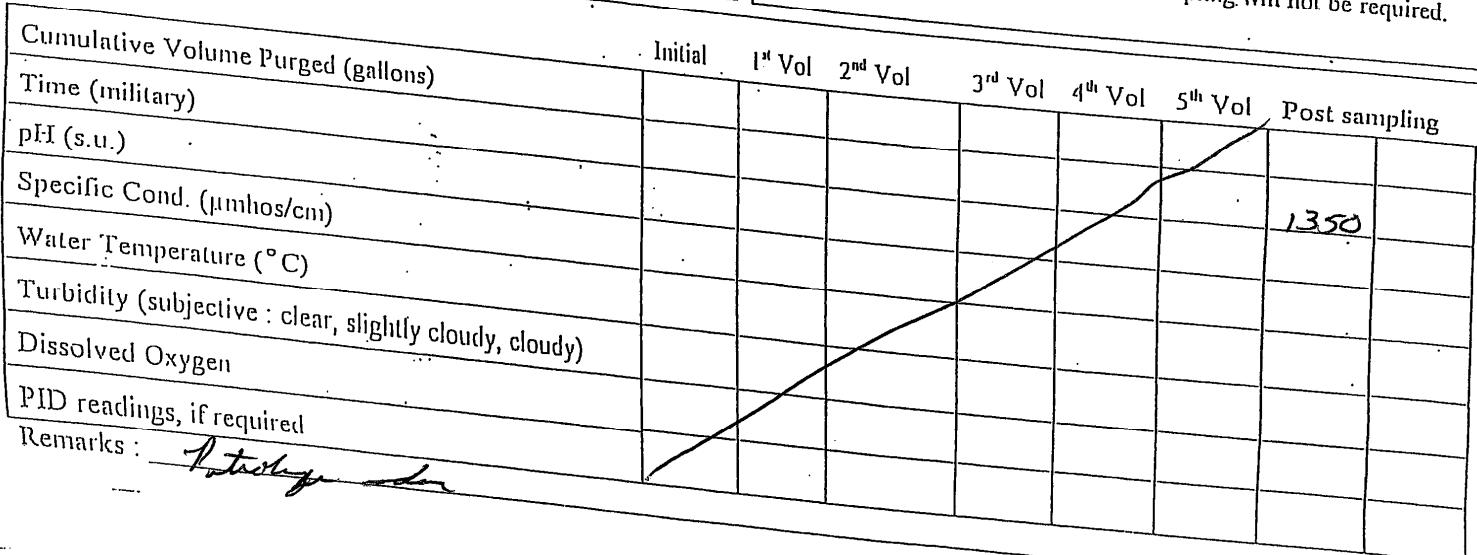
Total Well Depth (TWD) 28 feet

Length of the water column (LWC = TWD - DGW) 7.22 feet

1 casing volume (CV = LWC X C) = _____ X _____ = 1.18 gals
3 casing volume 3 X CV = 3.54 gals (standard purge volume)

Total Volume of Water Purged Before Sampling 3.54 gals.

* If free product is present over 1/8 inch, sampling will not be required.



Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 8/27/01

Field Personnel: J.MONEGAN

General Weather Conditions: CLEAN HOT

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter
serial no. _____
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Conductivity Meter
serial no. _____
standard _____
standard _____
standard _____

Chain of Custody

Relinquished by _____

Date/Time _____

Received by _____

Date/Time _____

Facility Name: HIGHWAY 61 GRC

Site ID#: 300388

Monitoring Well #: MW01

Well Diameter (D): 2" feet

Conversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 17.07 feet
Total Well Depth (TWD) 23.00 feet
Length of the water column (LWC = TWD - DGW) 5.93 feet

1 casing volume (CV = LWC X C) = _____ X _____ = .96 gals
3 casing volume 3 X CV = 2.88 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

* If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)							<u>1420</u>
Specific Cond. ($\mu\text{mhos/cm}$)	<u>526</u>	<u>5746</u>	<u>5.31</u>	<u>4726</u>			<u>492</u>
Water Temperature ($^{\circ}\text{C}$)	<u>1046</u>	<u>1031</u>	<u>1035</u>	<u>.032</u>			<u>1037</u>
Turbidity (subjective: clear, slightly cloudy, cloudy)	<u>20.8</u>	<u>19.1</u>	<u>12.8</u>	<u>17.4</u>			
Dissolved Oxygen	<u>CLEAR</u>	<u>CLOUDY</u>	<u>CLOUDY</u>	<u>CLOUDY</u>			<u>18.3</u>
PID readings, if required	<u>6.64</u>	<u>583</u>	<u>6.03</u>	<u>5.90</u>			<u>5229</u>
Remarks:							

Groundwater Analytical Results									
Highway 11 Grocery / Salem, South Carolina									
Chemical of Concern	RBSL ($\mu\text{g/l}$)	MW-1* ($\mu\text{g/l}$)	MW-2* ($\mu\text{g/l}$)	MW-3 ($\mu\text{g/l}$)	MW-4 ($\mu\text{g/l}$)	MW-5 ($\mu\text{g/l}$)	MW-6 ($\mu\text{g/l}$)	MW-7 ($\mu\text{g/l}$)	MW-8 ($\mu\text{g/l}$)
Free Product Thickness	NA	None	None	None	None	None	None	None	None
Benzene	5	4800	15.1	<2.0	1500	<2.0	5700	18.3	17100
Toluene	1000	7300	61.7	4.1	7460	<2.0	25800	25.0	34400
Ethylbenzene	700	3430	9.61	<2.0	1400	<2.0	4760	2.1	3060
Xylenes	10000	9800	52.0	8.2	7740	<2.0	22700	17.5	14800
Total BTEX	NA	25330	138.41	<16.3	18100	<8.0	58960	62.9	69360
MTBE	40	14000	45.2	<2.0	620	<2.0	11100	<2.0	47000
Naphthalene	25	578	15.6	<5.0	<500	<5.0	1060	<5.0	500
EDB	0.05	<1.00	<1.00	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Benzo(a)anthracene	10	<0.200	<0.200	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(b)fluoranthene	10	<0.200	<0.200	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(k)fluoranthene	10	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chrysene	10	<2.00	<2.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Dibenzo(a,h)anthracene	10	<0.200	<0.200	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methane	NA	NS	NS	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0

Bold concentrations represent those greater than the respective RBSL; NA = Not Applicable; NS = Not Sampled

*Sampled March 30, 2001, during the previous assessment activities

Groundwater Analytical Results (continued)

Highway 11 Grocery / Salem, South Carolina

Chemical of Concern	RBSL (mg/l)	MW-1* (mg/l)	MW-2* (mg/l)	MW-3 (mg/l)	MW-4 (mg/l)	MW-5 (mg/l)	MW-6 (mg/l)	MW-7 (mg/l)	MW-8 (mg/l)
Lead	0.015	0.0781	0.0117	0.5850	0.4320	0.6180	0.1560	0.0410	0.0350
Ferrous Iron	NA	NS	NS	5.09	0.690	0.517	24.4	0.150	10.2
Nitrate	NA	NS	NS	0.51	0.28	0.370	<0.10	0.860	0.190
Sulfate	NA	NS	NS	<1.00	2.06	<1.00	<1.00	<1.00	<1.00

Bold concentrations represent those greater than the respective RBSL; NA = Not Applicable; NS = Not Sampled

*Sampled March 30, 2001, during the previous assessment activities

Groundwater Analytical Results (continued)									
Highway 11 Grocery / Salem, South Carolina									
Chemical of Concern	RBSL ($\mu\text{g/l}$)	MW-9 ($\mu\text{g/l}$)	MW-10 ($\mu\text{g/l}$)	MW-11 ($\mu\text{g/l}$)	MW-12 ($\mu\text{g/l}$)	DMW-1 ($\mu\text{g/l}$)	CK-1 ($\mu\text{g/l}$)	CK-2 ($\mu\text{g/l}$)	WW-1 ($\mu\text{g/l}$)
Free Product Thickness	NA	None	None	None	None	None	NA	NA	NA
Benzene	5	<2.0	1970	398	<2.0	2060	53.4	<2.0	<2.0
Toluene	1000	<2.0	5500	2.3	<2.0	4320	78.0	<2.0	<2.0
Ethylbenzene	700	<2.0	350	4.4	<2.0	335	15.2	<2.0	<2.0
Xylenes	10000	<2.0	3150	170	<2.0	2180	77.8	<2.0	<2.0
Total BTEX	NA	<8.0	10970	574.7	<8.0	8895	224.4	<8.0	<8.0
MTBE	40	<2.0	3360	65.0	4.7	8750	46.7	<2.0	<2.0
Naphthalene	25	<5.0	109	<5.0	<5.0	80.6	<5.0	<5.0	<5.0
EDB	0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Benzo(a)anthracene	10	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(b)fluoranthene	10	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(k)fluoranthene	10	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chrysene	10	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Dibenzo(a,h)anthracene	10	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methane	NA	715	<26.0	<26.0	<26.0	<26.0	331	<26.0	<26.0

Bold concentrations represent those greater than the respective RBSL; NA = Not Applicable

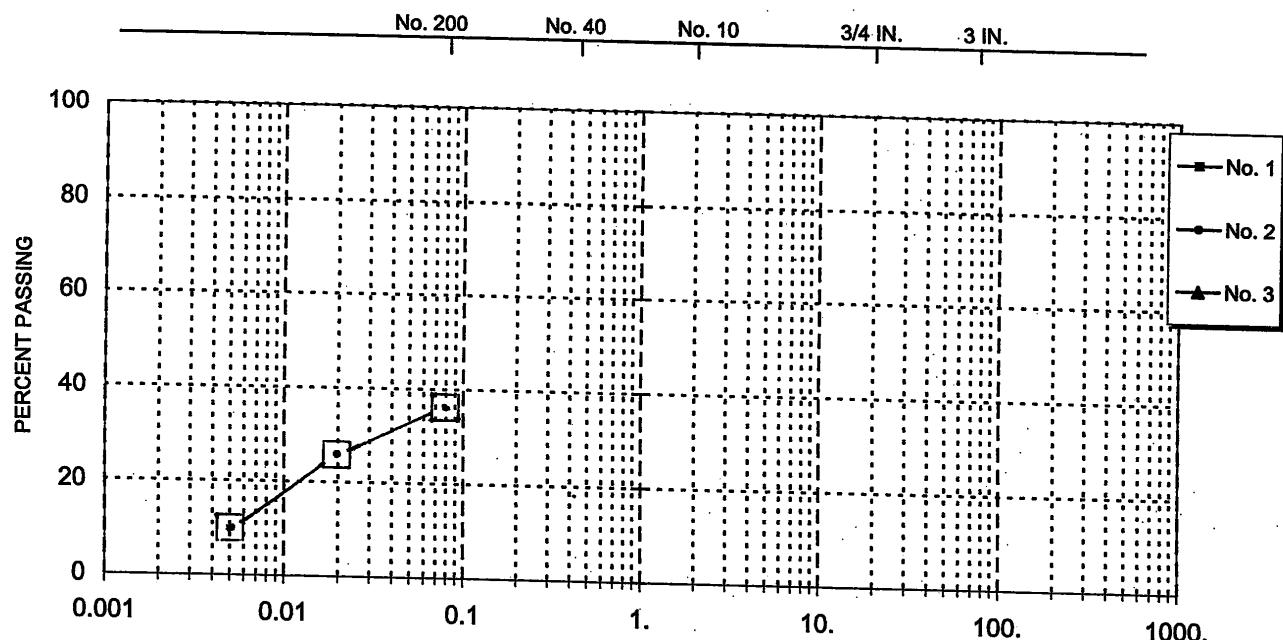
Groundwater Analytical Results (continued)

Highway 11 Grocery / Salem, South Carolina

Chemical of Concern	RBSL (mg/l)	MW-9 (mg/l)	MW-10 (mg/l)	MW-11 (mg/l)	MW-12 (mg/l)	DMW-1 (mg/l)	CK-1 (mg/l)	CK-2 (mg/l)	WW-1 (mg/l)
Lead	0.015	0.617	0.9770	0.324	0.093	<0.0030	<0.0030	<0.0030	<0.0030
Ferrous Iron	NA	5.370	8.53	6.880	4.430	0.136	0.247	0.716	<0.100
Nitrate	NA	0.24	<0.100	0.18	0.15	<0.10	0.26	0.73	0.310
Sulfate	NA	1.83	<1.00	1.58	2.66	1.35	1.28	2.35	<1.00

Bold concentrations represent those greater than the respective RBSL; NA = Not Applicable

U.S. STANDARD SIEVE SIZE



GRAIN SIZE IN MILLIMETERS

CLAY	SILT	SAND			GRAVEL		COBBLES
		Fine	Medium	Coarse	Fine	Coarse	

KEY	NO.	DEPTH	DESCRIPTION OF SOIL SAMPLE TESTED	CLASS.	<i>Schnabel</i> Schnabel Engineering Associates, Inc.
No. 1	DM 10 1		SAND = 63% SILT = 27% CLAY = 10%		
No. 2				GRADATION CURVES	
No. 3					<i>Hwy 11 Grocery</i> CONTRACT NO. 989073.97 DATE 7-24-01

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A97962
 Sample ID: SB1
 Sample Type: Soil
 Site ID:

Project: 300388
 Project Name: HWY 11 GROCERY
 Sampler: MARC L. MCFARLAND

Date Collected: 7/10/01
 Time Collected: 8:55
 Date Received: 7/14/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

VOLATILE ORGANICS

Benzene	ND	mg/kg	0.0500	0.0010	50	7/15/01	18:41	McCutcheon	8260B	1103
Ethylbenzene	ND	mg/kg	0.0500	0.0010	50	7/15/01	18:41	McCutcheon	8260B	1103
Naphthalene	12.50	mg/kg	0.5000	0.0010	500	7/15/01	18:41	McCutcheon	8260B	1103
Toluene	ND	mg/kg	0.0500	0.0010	50	7/15/01	18:41	McCutcheon	8260B	1103
Xylenes, Total	0.3000	mg/kg	0.0500	0.0010	50	7/15/01	18:41	McCutcheon	8260B	1103

GENERAL CHEMISTRY PARAMETERS

% Dry Weight	97.	%		1	7/18/01	9:02	B. Powell	CLP	1192
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ND - Not detected at the report limit.

 Sample Extraction Data

Parameter	Wt/Vol	Extracted	Extract Vol	Date	Time	Analyst	Method
-----	-----	-----	-----	-----	-----	-----	-----
Volatile Organics	4.9 g	5.0 ml	7/10/01	8:55	McCutcheon	5035	

Surrogate	% Recovery	Target Range
-----	-----	-----
VOA Surr 1,2-DCA-d4	97.	50. - 140.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A97962
Sample ID: SB1
Project: 300388
Page 2

Surrogate	% Recovery	Target Range
VOA Surr-Toluene d8	105.	75. - 141.
VOA Surr, 4-BFB	102.	69. - 131.
VOA Surr, DBFM	88.	76. - 136.

- Recovery outside Laboratory historical limits.

All results reported on a wet weight basis.

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

Report Approved By:

Report Date: 7/20/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A97963
 Sample ID: SB2
 Sample Type: Soil
 Site ID:

Project: 300388
 Project Name: HWY 11 GROCERY
 Sampler: MARC L. MCFARLAND

Date Collected: 7/10/01
 Time Collected: 9:15
 Date Received: 7/14/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	mg/kg	0.0010	0.0010	1	7/15/01	19:12	McCutcheon	8260B	1103
Ethylbenzene	ND	mg/kg	0.0010	0.0010	1	7/15/01	19:12	McCutcheon	8260B	1103
Naphthalene	0.0060	mg/kg	0.0010	0.0010	1	7/15/01	19:12	McCutcheon	8260B	1103
Toluene	ND	mg/kg	0.0010	0.0010	1	7/15/01	19:12	McCutcheon	8260B	1103
Xylenes, Total	0.0028	mg/kg	0.0010	0.0010	1	7/15/01	19:12	McCutcheon	8260B	1103
GENERAL CHEMISTRY PARAMETERS										
% Dry Weight	77.	%			1	7/18/01	9:02	B. Powell	CLP	1192

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol	Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	5.0 g	5.0 ml		7/10/01	9:15	McCutcheon	5035

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	128.	50. - 140.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A97963
Sample ID: SB2
Project: 300388
Page 2

Surrogate	% Recovery	Target Range
VOA Surr-Toluene d8	102.	75. - 141.
VOA Surr, 4-BFB	107.	69. - 131.
VOA Surr, DBFM	81.	76. - 136.

- Recovery outside Laboratory historical limits.

All results reported on a wet weight basis.

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Report Approved By:

Report Date: 7/20/01

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Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A97964
 Sample ID: SB3
 Sample Type: Soil
 Site ID:

Project: 300388
 Project Name: HWY 11 GROCERY
 Sampler: MARC L. MCFARLAND

Date Collected: 7/10/01
 Time Collected: 10:05
 Date Received: 7/14/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
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VOLATILE ORGANICS

Benzene	ND	mg/kg	0.0010	0.0010	1	7/15/01	19:44	McCutcheon	8260B	1103
Ethylbenzene	ND	mg/kg	0.0010	0.0010	1	7/15/01	19:44	McCutcheon	8260B	1103
Naphthalene	0.0094	mg/kg	0.0010	0.0010	1	7/15/01	19:44	McCutcheon	8260B	1103
Toluene	0.0038	mg/kg	0.0010	0.0010	1	7/15/01	19:44	McCutcheon	8260B	1103
Xylenes, Total	0.0052	mg/kg	0.0010	0.0010	1	7/15/01	19:44	McCutcheon	8260B	1103

GENERAL CHEMISTRY PARAMETERS

% Dry Weight	77.	%		1	7/18/01	9:02	B. Powell	CLP	1192
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ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	5.1 g	5.0 ml	7/10/01	10:05	McCutcheon	5035

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	112.	50. - 140.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A97964
Sample ID: SB3
Project: 300388
Page 2

Surrogate	% Recovery	Target Range
VOA Surr-Toluene d8	96.	75. - 141.
VOA Surr, 4-BFB	112.	69. - 131.
VOA Surr, DBFM	96.	76. - 136.

- Recovery outside Laboratory historical limits.

All results reported on a wet weight basis.

These results relate only to the items tested.
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permission of the laboratory.

Report Approved By: Gail A. Lage

Report Date: 7/20/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A97965
 Sample ID: SB4
 Sample Type: Soil
 Site ID:

Project: 300388
 Project Name: HWY 11 GROCERY
 Sampler: MARC L. MCFARLAND

Date Collected: 7/10/01
 Time Collected: 11:20
 Date Received: 7/14/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

VOLATILE ORGANICS

Benzene	ND	mg/kg	0.0010	0.0010	1	7/20/01	7:02	McCutcheon	8260B	1103
Ethylbenzene	ND	mg/kg	0.0010	0.0010	1	7/20/01	7:02	McCutcheon	8260B	1103
Naphthalene	ND	mg/kg	0.0010	0.0010	1	7/20/01	7:02	McCutcheon	8260B	1103
Toluene	ND	mg/kg	0.0010	0.0010	1	7/20/01	7:02	McCutcheon	8260B	1103
Xylenes, Total	0.0049	mg/kg	0.0010	0.0010	1	7/20/01	7:02	McCutcheon	8260B	1103

GENERAL CHEMISTRY PARAMETERS

% Dry Weight	95.	%		1	7/18/01	9:02	B. Powell	CLP	1192
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ND - Not detected at the report limit.

 Sample Extraction Data

Parameter	Wt/Vol	Extracted	Extract Vol	Date	Time	Analyst	Method
-----	-----	-----	-----	-----	-----	-----	-----
Volatile Organics	5.1 g	5.0 ml	7/10/01	11:20	McCutcheon	5035	

Surrogate	% Recovery	Target Range
-----	-----	-----

VOA Surr 1,2-DCA-d4	95.	50. - 140.
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Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A97965
Sample ID: SB4
Project: 300388
Page 2

Surrogate	% Recovery	Target Range
VOA Surr-Toluene d8	106.	75. - 141.
VOA Surr, 4-BFB	94.	69. - 131.
VOA Surr, DBFM	80.	76. - 136.

- Recovery outside Laboratory historical limits.

All results reported on a wet weight basis.

These results relate only to the items tested.
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permission of the laboratory.

Report Approved By: Gail A. Lage

Report Date: 7/20/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A97966
 Sample ID: SB5
 Sample Type: Soil
 Site ID:

Project: 300388
 Project Name: HWY 11 GROCERY
 Sampler: MARC L. MCFARLAND

Date Collected: 7/10/01
 Time Collected: 11:55
 Date Received: 7/14/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

VOLATILE ORGANICS

Benzene	ND	mg/kg	0.0010	0.0010	1	7/15/01	20:47	McCutcheon	8260B	1103
Ethylbenzene	ND	mg/kg	0.0010	0.0010	1	7/15/01	20:47	McCutcheon	8260B	1103
Naphthalene	ND	mg/kg	0.0010	0.0010	1	7/15/01	20:47	McCutcheon	8260B	1103
Toluene	ND	mg/kg	0.0010	0.0010	1	7/15/01	20:47	McCutcheon	8260B	1103
Xylenes, Total	ND	mg/kg	0.0010	0.0010	1	7/15/01	20:47	McCutcheon	8260B	1103

GENERAL CHEMISTRY PARAMETERS

% Dry Weight	78.	%		1	7/18/01	9:02	B. Powell	CLP	1192
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ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
-----	-----	-----	-----	-----	-----	-----
Volatile Organics	5.2 g	5.0 ml	7/10/01	11:55	McCutcheon	5035

Surrogate	% Recovery	Target Range
-----	-----	-----

VOA Surr 1,2-DCA-d4	120.	50. - 140.
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Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A97966
Sample ID: SB5
Project: 300388
Page 2

Surrogate	% Recovery	Target Range
VOA Surr-Toluene d8	108.	75. - 141.
VOA Surr, 4-BFB	96.	69. - 131.
VOA Surr, DBFM	89.	76. - 136.

- Recovery outside Laboratory historical limits.

All results reported on a wet weight basis.

These results relate only to the items tested.
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permission of the laboratory.

Report Approved By: Michael A. Lange

Report Date: 7/20/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
---------	-------	------------	--------	------------	----------	--------------	------------	--------------

****VOA PARAMETERS****

Benzene	mg/kg	< 0.0010	0.0570	0.0500	114	45. - 135.	1103	blank
Toluene	mg/kg	< 0.0010	0.0620	0.0500	124	32. - 139.	1103	blank

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
---------	-------	------------	-----------	-----	-------	------------

****VOA PARAMETERS****

Benzene	mg/kg	0.0570	0.0530	7.27	37.	1103
Toluene	mg/kg	0.0620	0.0520	17.54	40.	1103

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
---------	-------	------------	--------------	------------	--------------	------------

****VOA PARAMETERS****

Benzene	mg/kg	0.1000	0.1010	101	77 - 124	1103
Ethylbenzene	mg/kg	0.1000	0.1050	105	77 - 118	1103
Naphthalene	mg/kg	0.1000	0.0970	97	57 - 144	1103
Toluene	mg/kg	0.1000	0.1120	112	76 - 120	1103
Xylenes, Total	mg/kg	0.2000	0.2100	105	76 - 119	1103

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
---------	-------------	-------	------------	---------------	---------------

****VOA PARAMETERS****

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA

Project Number: 300388

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Benzene	< 0.0010	mg/kg	1103	7/16/01	15:14
Ethylbenzene	< 0.0010	mg/kg	1103	7/16/01	15:14
Naphthalene	< 0.0010	mg/kg	1103	7/16/01	15:14
Toluene	< 0.0010	mg/kg	1103	7/16/01	15:14
Xylenes, Total	< 0.0010	mg/kg	1103	7/16/01	15:14
VOA Surr 1,2-DCA-d4	104.	% Rec	1103	7/16/01	15:14
VOA Surr-Toluene d8	89.	% Rec	1103	7/16/01	15:14
VOA Surr, 4-BFB	90.	% Rec	1103	7/16/01	15:14

- Value outside Laboratory historical QC limits.

End of Report for Project 245425

TestAmerica[®] INCORPORATED

245425

FAX CHAIN

~~TO COLUMBIA~~

Client Name SEI Env. Inc. Client #: 8990

Client #: 8990

Address: 3021 McNaughten Dr. Ste. 9

City/State/Zip Code: Columbia, SC 29223

Project Manager: Beth Barton

Telephone Number: 788-2535 Fax 788-2399

Sampler Name: (Print Name) Mary L. McFarland

Sampler Signature:

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

Project Name: Hwy 11 Grocery

Project #: 300388

Site/Location ID: _____ State: SC

Report To: Bob Belton

Invoice To: _____

Quote #: _____

Analyze For:

Analyze

PO#:

Special instructions: FedEx# 82618433730

Relinquished By:	7-13-01	9:00	Received By:	K Moore	Date:	7/13/01	Time:	11:25
Relinquished By:	7/13/01	11:30	Received By:		Date:		Time:	
Relinquished By:			Received By:	PDRM/	Date:	7/14/01	Time:	9:10

TESTAMERICA, INC.-NASHVILLE

COOLER RECEIPT FORM

Client: 7A - Columbia BC# 245425
Cooler Received On: 7/14/01 And Opened On: 7/14/01 By: Paul Buckingham
P.B.B.
(Signature)

1. Temperature of Cooler when opened 1.0 Degrees Celsius
2. Were custody seals on outside of cooler?..... YES .. NO

 - a. If yes, how many, what kind and where: 1 front

3. Were custody seals on containers and intact?..... NO .. YES
4. Were the seals intact, signed, and dated correctly?..... YES .. NO
5. Were custody papers inside cooler?..... YES .. NO
6. Were custody papers properly filled out (ink,signed,etc)?..... YES .. NO
7. Did you sign the custody papers in the appropriate place?..... YES .. NO
8. What kind of packing material used? Bubblewrap Peanuts Vermiculite Other None
9. Was sufficient ice used (if appropriate)?..... YES .. NO
10. Did all bottles arrive in good condition(unbroken)?..... YES .. NO
11. Were all bottle labels complete (#,date,signed,pres,etc)?..... YES .. NO
12. Did all bottle labels and tags agree with custody papers?..... YES .. NO
13. Were correct bottles used for the analysis requested?..... YES .. NO
14. a. Were VOA vials received?..... YES .. NO
b. Was there any observable head space present in any VOA vial?..... NO .. YES
15. Was sufficient amount of sample sent in each bottle?..... YES .. NO
16. Were correct preservatives used?..... YES .. NO
17. Was residual chlorine present?..... NO .. YES NA
18. Corrective action taken, if necessary:

See attached for resolution

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A97976
 Sample ID: MW3
 Sample Type: Soil
 Site ID:

Project: 300388
 Project Name: HWY 11 GROCERY
 Sampler: MARC L. MCFARLAND

Date Collected: 7/ 9/01
 Time Collected: 16:00
 Date Received: 7/14/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	mg/kg	0.0010	0.0010	1	7/15/01	2:18	McCutcheon	8260B	1103
Ethylbenzene	ND	mg/kg	0.0010	0.0010	1	7/15/01	2:18	McCutcheon	8260B	1103
Naphthalene	0.0070	mg/kg	0.0010	0.0010	1	7/15/01	2:18	McCutcheon	8260B	1103
Toluene	ND	mg/kg	0.0010	0.0010	1	7/15/01	2:18	McCutcheon	8260B	1103
Xylenes, Total	0.0029	mg/kg	0.0010	0.0010	1	7/15/01	2:18	McCutcheon	8260B	1103
GENERAL CHEMISTRY PARAMETERS										
% Dry Weight	88.	%			1	7/18/01	9:11	B. Powell	CLP	1194
GENERAL CHEMISTRY PARAMETERS										
TOC	ND	mg/kg	1000	1000	1	7/18/01	16:45	N. Wilk	9060M	3382

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	4.9 g	5.0 ml	7/ 9/01	16:00	McCutcheon	5035

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A97976
Sample ID: MW3
Project: 300388
Page 2

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	120.	50. - 140.
VOA Surr-Toluene d8	109.	75. - 141.
VOA Surr, 4-BFB	94.	69. - 131.
VOA Surr, DBFM	89.	76. - 136.

- Recovery outside Laboratory historical limits.

All results reported on a wet weight basis.

These results relate only to the items tested.
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permission of the laboratory.

Report Approved By: Gail A. Lage

Report Date: 7/20/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A97977
 Sample ID: MW4
 Sample Type: Soil
 Site ID:

Project: 300388
 Project Name: HWY 11 GROCERY
 Sampler: MARC L. MCFARLAND

Date Collected: 7/10/01
 Time Collected: 10:30
 Date Received: 7/14/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	mg/kg	0.0010	0.0010	1	7/15/01	21:50	McCutcheon	8260B	1103
Ethylbenzene	ND	mg/kg	0.0010	0.0010	1	7/15/01	21:50	McCutcheon	8260B	1103
Naphthalene	0.0050	mg/kg	0.0010	0.0010	1	7/15/01	21:50	McCutcheon	8260B	1103
Toluene	ND	mg/kg	0.0010	0.0010	1	7/15/01	21:50	McCutcheon	8260B	1103
Xylenes, Total	0.0028	mg/kg	0.0010	0.0010	1	7/15/01	21:50	McCutcheon	8260B	1103

GENERAL CHEMISTRY PARAMETERS

% Dry Weight	88.	%		1	7/18/01	9:11	B. Powell	CLP	1194
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ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	4.3 g	5.0 ml	7/10/01	10:30	McCutcheon	5035

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	122.	50. - 140.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A97977
Sample ID: MW4
Project: 300388
Page 2

Surrogate	% Recovery	Target Range
VOA Surr-Toluene d8	108.	75. - 141.
VOA Surr, 4-BFB	100.	69. - 131.
VOA Surr, DBFM	94.	76. - 136.

- Recovery outside Laboratory historical limits.

All results reported on a wet weight basis.

These results relate only to the items tested.
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permission of the laboratory.

Report Approved By: Eric Adley

Report Date: 7/20/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A97978
 Sample ID: MW5
 Sample Type: Soil
 Site ID:

Project: 300388
 Project Name: HWY 11 GROCERY
 Sampler: MARC L. MCFARLAND

Date Collected: 7/10/01
 Time Collected: 13:55
 Date Received: 7/14/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

VOLATILE ORGANICS

Benzene	ND	mg/kg	0.0010	0.0010	1	7/15/01	22:21	McCutcheon	8260B	1103
Ethylbenzene	ND	mg/kg	0.0010	0.0010	1	7/15/01	22:21	McCutcheon	8260B	1103
Naphthalene	ND	mg/kg	0.0010	0.0010	1	7/15/01	22:21	McCutcheon	8260B	1103
Toluene	ND	mg/kg	0.0010	0.0010	1	7/15/01	22:21	McCutcheon	8260B	1103
Xylenes, Total	ND	mg/kg	0.0010	0.0010	1	7/15/01	22:21	McCutcheon	8260B	1103

GENERAL CHEMISTRY PARAMETERS

% Dry Weight	84.	%		1	7/18/01	9:11	B. Powell	CLP	1194
--------------	-----	---	--	---	---------	------	-----------	-----	------

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
-----	-----	-----	-----	-----	-----	-----
Volatile Organics	5.7 g	5.0 ml	7/10/01	13:55	McCutcheon	5035

Surrogate	% Recovery	Target Range
-----	-----	-----

VOA Surr 1,2-DCA-d4	122.	50. - 140.
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Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A97978
Sample ID: MW5
Project: 300388
Page 2

Surrogate	% Recovery	Target Range
VOA Surr-Toluene d8	107.	75. - 141.
VOA Surr, 4-BFB	95.	69. - 131.
VOA Surr, DBFM	100.	76. - 136.

- Recovery outside Laboratory historical limits.

All results reported on a wet weight basis.

These results relate only to the items tested.

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Report Approved By: Eric C. Adey

Report Date: 7/20/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A97979
 Sample ID: MW6
 Sample Type: Soil
 Site ID:

Project: 300388
 Project Name: HWY 11 GROCERY
 Sampler: MARC L. MCFARLAND

Date Collected: 7/10/01
 Time Collected: 15:30
 Date Received: 7/14/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	0.0020	mg/kg	0.0010	0.0010	1	7/15/01	22:53	McCutcheon	8260B	1103
Ethylbenzene	0.0058	mg/kg	0.0010	0.0010	1	7/15/01	22:53	McCutcheon	8260B	1103
Naphthalene	0.0340	mg/kg	0.0010	0.0010	1	7/15/01	22:53	McCutcheon	8260B	1103
Toluene	0.0168	mg/kg	0.0010	0.0010	1	7/15/01	22:53	McCutcheon	8260B	1103
Xylenes, Total	0.0339	mg/kg	0.0010	0.0010	1	7/15/01	22:53	McCutcheon	8260B	1103

GENERAL CHEMISTRY PARAMETERS

% Dry Weight	87.	%		1	7/18/01	9:11	B. Powell	CLP	1194
--------------	-----	---	--	---	---------	------	-----------	-----	------

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	5.2 g	5.0 ml	7/10/01	15:30	McCutcheon	5035

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	122.	50. - 140.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A97979
Sample ID: MW6
Project: 300388
Page 2

Surrogate	% Recovery	Target Range
VOA Surrogate-Toluene d8	109.	75. - 141.
VOA Surrogate, 4-BFB	99.	69. - 131.
VOA Surrogate, DBFM	112.	76. - 136.

- Recovery outside Laboratory historical limits.

All results reported on a wet weight basis.

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Report Approved By: Michael Dunn

Report Date: 7/20/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A97980
 Sample ID: MW7
 Sample Type: Soil
 Site ID:

Project: 300388
 Project Name: HWY 11 GROCERY
 Sampler: MARC L. MCFARLAND

Date Collected: 7/10/01
 Time Collected: 16:25
 Date Received: 7/14/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	mg/kg	0.0010	0.0010	1	7/15/01	23:24	McCutcheon	8260B	1103
Ethylbenzene	ND	mg/kg	0.0010	0.0010	1	7/15/01	23:24	McCutcheon	8260B	1103
Naphthalene	ND	mg/kg	0.0010	0.0010	1	7/15/01	23:24	McCutcheon	8260B	1103
Toluene	ND	mg/kg	0.0010	0.0010	1	7/15/01	23:24	McCutcheon	8260B	1103
Xylenes, Total	ND	mg/kg	0.0010	0.0010	1	7/15/01	23:24	McCutcheon	8260B	1103
GENERAL CHEMISTRY PARAMETERS										
% Dry Weight	82.	%			1	7/18/01	9:11	B. Powell	CLP	1194

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	5.8 g	5.0 ml	7/10/01	16:25	McCutcheon	5035

Surrogate	% Recovery	Target Range
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VOA Surr 1,2-DCA-d4	130.	50. - 140.
---------------------	------	------------

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A97980
Sample ID: MW7
Project: 300388
Page 2

Surrogate	% Recovery	Target Range
VOA Surr-Toluene d8	100.	75. - 141.
VOA Surr, 4-BFB	104.	69. - 131.
VOA Surr, DBFM	84.	76. - 136.

- Recovery outside Laboratory historical limits.

All results reported on a wet weight basis.

These results relate only to the items tested.
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permission of the laboratory.

Report Approved By: Gail A. Lage

Report Date: 7/20/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A97981
 Sample ID: MW8
 Sample Type: Soil
 Site ID:

Project: 300388
 Project Name: HWY 11 GROCERY
 Sampler: MARC L. MCFARLAND

Date Collected: 7/12/01
 Time Collected: 9:00
 Date Received: 7/14/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	mg/kg	0.0010	0.0010	1	7/20/01	9:40	McCutcheon	8260B	1103
Ethylbenzene	ND	mg/kg	0.0010	0.0010	1	7/20/01	9:40	McCutcheon	8260B	1103
Naphthalene	ND	mg/kg	0.0010	0.0010	1	7/20/01	9:40	McCutcheon	8260B	1103
Toluene	ND	mg/kg	0.0010	0.0010	1	7/20/01	9:40	McCutcheon	8260B	1103
Xylenes, Total	ND	mg/kg	0.0010	0.0010	1	7/20/01	9:40	McCutcheon	8260B	1103
GENERAL CHEMISTRY PARAMETERS										
% Dry Weight	86.	%			1	7/18/01	9:11	B. Powell	CLP	1194

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	5.6 g	5.0 ml	7/12/01	9:00	McCutcheon	5035

Surrogate	% Recovery	Target Range
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VOA Surr 1,2-DCA-d4	106.	50. - 140.
---------------------	------	------------

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A97981
Sample ID: MW8
Project: 300388
Page 2

Surrogate	% Recovery	Target Range
VOA Surr-Toluene d8	102.	75. - 141.
VOA Surr, 4-BFB	90.	69. - 131.
VOA Surr, DBFM	97.	76. - 136.

- Recovery outside Laboratory historical limits.

All results reported on a wet weight basis.

These results relate only to the items tested.
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permission of the laboratory.

Report Approved By: Gail A. Lage

Report Date: 7/20/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
BOB BOLTON
3021 MCNAUGHTON DR. STE 9
COLUMBIA, SC 29223

Lab Number: 01-A97982
Sample ID: DMW1
Sample Type: Soil
Site ID:

Project: 300388
Project Name: HWY 11 GROCERY
Sampler: MARC L. MCFARLAND

Date Collected: 7/ 9/01
Time Collected: 17:00
Date Received: 7/14/01
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

ORGANIC PARAMETERS

TPH (Diesel Range)	57.6	mg/kg	10.0	4.00	1	7/19/01	11:47	K.Phelps	8015B/3550 3519
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ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
-----	-----	-----	-----	-----	-----	-----
EPH/DRO	25.0 gm	1.0 ml	7/16/01		D.Yeager	3550

Surrogate	% Recovery	Target Range
-----	-----	-----

surr-o-Terphenyl 70. 50. - 150.

- Recovery outside Laboratory historical limits.

All results reported on a wet weight basis.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A97982
Sample ID: DMW1
Project: 300388
Page 2

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

Report Approved By: Gail Lage

Report Date: 7/20/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
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****UST ANALYSIS****

TPH (Diesel Range)	mg/kg	57.6	92.9	40.0	88	28. - 124.	3519	01-A97982
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Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
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****VOA PARAMETERS****

Benzene	mg/kg	< 0.0010	0.0570	0.0500	114	45. - 135.	1103	blank
Toluene	mg/kg	< 0.0010	0.0620	0.0500	124	32. - 139.	1103	blank

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
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****UST PARAMETERS****

TPH (Diesel Range)	mg/kg	92.9	90.0	3.17	44.	3519
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Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
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****VOA PARAMETERS****

Benzene	mg/kg	0.0570	0.0530	7.27	37.	1103
Toluene	mg/kg	0.0620	0.0520	17.54	40.	1103

Project QC continued . . .

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
TPH (Diesel Range)	mg/kg	40.0	32.4	81	53 - 119	3519

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Benzene	mg/kg	0.1000	0.1010	101	77 - 124	1103
Ethylbenzene	mg/kg	0.1000	0.1050	105	77 - 118	1103
Naphthalene	mg/kg	0.1000	0.0970	97	57 - 144	1103
Toluene	mg/kg	0.1000	0.1120	112	76 - 120	1103
Xylenes, Total	mg/kg	0.2000	0.2100	105	76 - 119	1103

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
TOC	mg/kg	12400	15200	123 #	80 - 120	3382

Duplicates

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch	Sample Dup'd
TOC	mg/kg	< 1000	< 1000	N/A	25.	3382	01-A98732

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

Blank Data

Analyte	Blank Value	Units	Q.C.	Batch	Analysis Date	Analysis Time
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Blank Data

Analyte	Blank Value	Units	Q.C.	Batch	Date Analyzed	Time Analyzed
---------	-------------	-------	------	-------	---------------	---------------

****UST PARAMETERS****

TPH (Diesel Range)	< 10.0	mg/kg	3519	7/18/01	20:32
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Blank Data

Analyte	Blank Value	Units	Q.C.	Batch	Date Analyzed	Time Analyzed
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****VOA PARAMETERS****

Benzene	< 0.0010	mg/kg	1103	7/16/01	15:14
Ethylbenzene	< 0.0010	mg/kg	1103	7/16/01	15:14
Naphthalene	< 0.0010	mg/kg	1103	7/16/01	15:14
Toluene	< 0.0010	mg/kg	1103	7/16/01	15:14
Xylenes, Total	< 0.0010	mg/kg	1103	7/16/01	15:14
VOA Surr 1,2-DCA-d4	104.	% Rec	1103	7/16/01	15:14
VOA Surr-Toluene d8	89.	% Rec	1103	7/16/01	15:14
VOA Surr, 4-BFB	90.	% Rec	1103	7/16/01	15:14

Blank Data

Analyte	Blank Value	Units	Q.C.	Batch	Date Analyzed	Time Analyzed
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****MISC PARAMETERS****

TOC	< 1000	mg/kg	3382	7/18/01	16:45
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PROJECT QUALITY CONTROL DATA
Project Number: 300388

- Value outside Laboratory historical QC limits.

End of Report for Project 245430

TESTAMERICA, INC.-NASHVILLE

COOLER RECEIPT FORM

Client: 7A - Columbia BC# 245430

Cooler Received On: 7/14/01 And Opened On: 7/14/01 By: Paul Buckingham
P.B.B.
(Signature)

1. Temperature of Cooler when opened 1.0 Degrees Celsius
2. Were custody seals on outside of cooler?..... YES...NO

 - a. If yes, how many, what kind and where: 1 front

3. Were custody seals on containers and intact?..... NO...YES
4. Were the seals intact, signed, and dated correctly?..... YES...NO
5. Were custody papers inside cooler?..... YES...NO
6. Were custody papers properly filled out (ink,signed,etc)?..... YES...NO
7. Did you sign the custody papers in the appropriate place?..... YES...NO
8. What kind of packing material used? Bubblewrap Peanuts Vermiculite Other None
9. Was sufficient ice used (if appropriate)?..... YES...NO
10. Did all bottles arrive in good condition(unbroken)?..... YES...NO
11. Were all bottle labels complete (#,date,signed,pres,etc)?..... YES...NO
12. Did all bottle labels and tags agree with custody papers?..... YES...NO
13. Were correct bottles used for the analysis requested?..... YES...NO
14. a. Were VOA vials received?..... YES...NO
b. Was there any observable head space present in any VOA vial?..... NO...YES NA
15. Was sufficient amount of sample sent in each bottle?..... YES...NO
16. Were correct preservatives used?..... YES...NO
17. Was residual chlorine present?..... NO...YES NA
18. Corrective action taken, if necessary:

See attached for resolution

TestAmerica INCORPORATED

Division/Laboratory Name: ~~TO COLUMBIA~~

245430 FAX CHAIN

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

Client Name SEI Environmental, Inc. Client #: 8990

Address: 3021 McNaughton Dr Ste. 9

City/State/Zip Code: Columbia, Sc 29223

Project Manager: Bob Bolton

Telephone Number: 788-2535

Sampler Name: (Print Name) Marc C. McFarland

Sampler Signature:

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A98273
 Sample ID: DMW1
 Sample Type: Water
 Site ID:

Project: 300388
 Project Name: HIGHWAY 11 GROCERY
 Sampler: JEFF WEYAND

Date Collected: 7/16/01
 Time Collected: 12:35
 Date Received: 7/17/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	69.0	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
Acenaphthene	ND	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
Anthracene	ND	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
Fluoranthene	ND	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
Fluorene	ND	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
Pyrene	ND	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
Benzo(a)anthracene	ND	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
Benzo(a)pyrene	ND	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
Benzo(b)fluoranthene	ND	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
Benzo(k)fluoranthene	ND	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
Chrysene	ND	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
Dibenzo(a,h)anthracene	ND	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
Acenaphthylene	ND	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
Benzo(g,h,i)perylene	ND	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
Phenanthrene	ND	ug/l	5.00	5.00	1	7/21/01	0:52	B.Davis	8270C	5221
VOLATILE ORGANICS										
Benzene	2060	ug/l	100.	2.0	50	7/21/01	10:54	N. Hurt	8260B	5582
Toluene	4320	ug/l	100.	2.0	50	7/21/01	10:54	N. Hurt	8260B	5582
Ethylbenzene	335.	ug/l	100.	2.0	50	7/21/01	10:54	N. Hurt	8260B	5582
Xylenes, Total	2180	ug/l	100.	2.0	50	7/21/01	10:54	N. Hurt	8260B	5582
Methyl-t-butyl ether	8750	ug/l	100.	2.0	50	7/21/01	10:54	N. Hurt	8260B	5582
Naphthalene	80.6	ug/l	5.0	5.0	1	7/18/01	4:02	N. Hurt	8260B	5579
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	7/18/01	6:00	Henderson	8011	2126

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98273
 Sample ID: DMW1
 Project: 300388
 Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
MISCELLANEOUS GC PARAMETERS										
Methane	ND	ug/l	26.0	26.0	1	7/18/01	16:23	K. Stewart	RSK175M	2114
METALS										
Ferrous Iron	0.136	mg/l	0.100	0.100	1	7/17/01	16:48	S. Duncan	3500D	2032
Lead	ND	mg/l	0.0030	0.1000	1	7/18/01	16:12	G.McCord	200.7	2539
MISCELLANEOUS CHEMISTRY										
Nitrate-N as N	ND	mg/l	0.10	0.10	1	7/17/01	15:45	G. Baun	9056	2029
Sulfate	1.35	mg/l	1.00	1.00	1	7/17/01	15:45	G. Baun	9056	2029

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
BNA's	990. ml	1.0 ml	7/19/01		D. Harris	3510/625

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	99.	68. - 143.
VOA Surr, Toluene d8	102.	78. - 127.
VOA Surr, 4-BFB	96.	73. - 127.
VOA Surr, DBFM	99.	76. - 135.
BNA Surr-Nitrobenzene-d5	104.	20. - 118.
BNA Surr-2-Fluorobiphenyl	98.	18. - 116.
BNA Surr-Terphenyl d14	36.	10. - 119.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98273
Sample ID: DMW1
Project: 300388
Page 3

- Recovery outside Laboratory historical limits.

Sample for Ferrous Iron analysis received outside method
prescribed holding time.

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

Report Approved By: air v we

Report Date: 7/23/01

Paul E. Lane, Jr., Lab Director

Gail A. Lage, Technical Serv.

Michael H. Dunn, M.S., Technical Director

Glenn L. Norton, Technical Serv.

Johnny A. Mitchell, Dir. Technical Serv.

Kelly S. Comstock, Technical Serv.

Eric S. Smith, Assistant Technical Director

Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A98274
 Sample ID: MW3
 Sample Type: Water
 Site ID:

Project: 300388
 Project Name: HIGHWAY 11 GROCERY
 Sampler: JEFF WEYAND

Date Collected: 7/16/01
 Time Collected: 12:35
 Date Received: 7/17/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
Acenaphthene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
Anthracene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
Fluoranthene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
Fluorene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
Pyrene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
Benzo(a)anthracene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
Benzo(a)pyrene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
Benzo(b)fluoranthene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
Benzo(k)fluoranthene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
Chrysene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
Dibenzo(a,h)anthracene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
Acenaphthylene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
Benzo(g,h,i)perylene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
Phenanthrene	ND	ug/l	5.00	5.00	1	7/21/01	1:31	B.Davis	8270C	5221
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	7/19/01	0:08	N. Hurt	8260B	5579
Toluene	4.1	ug/l	2.0	2.0	1	7/19/01	0:08	N. Hurt	8260B	5579
Ethylbenzene	ND	ug/l	2.0	2.0	1	7/19/01	0:08	N. Hurt	8260B	5579
Xylenes, Total	8.2	ug/l	2.0	2.0	1	7/19/01	0:08	N. Hurt	8260B	5579
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	7/19/01	0:08	N. Hurt	8260B	5579
Naphthalene	ND	ug/l	5.0	5.0	1	7/19/01	0:08	N. Hurt	8260B	5579
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	7/18/01	6:28	Henderson	8011	2126

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98274
 Sample ID: MW3
 Project: 300388
 Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>										
MISCELLANEOUS GC PARAMETERS										
<hr/>										
Methane	ND	ug/l	26.0	26.0	1	7/18/01	16:26	K. Stewart	RSK175M	2114
<hr/>										
METALS										
Ferrous Iron	5.09	mg/l	0.500	0.100	5	7/17/01	16:48	S. Duncan	3500D	2032
Lead	0.5850	mg/l	0.0030	0.1000	1	7/18/01	16:12	G.McCord	200.7	2539
<hr/>										
MISCELLANEOUS CHEMISTRY										
Nitrate-N as N	0.51	mg/l	0.10	0.10	1	7/17/01	15:45	G. Baun	9056	2029
Sulfate	ND	mg/l	1.00	1.00	1	7/17/01	15:45	G. Baun	9056	2029

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol	Extracted	Extract Vol	Date	Time	Analyst	Method
BNA's.	990. ml	1.0 ml		7/19/01		D. Harris	3510/625

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	96.	68. - 143.
VOA Surr, Toluene d8	94.	78. - 127.
VOA Surr, 4-BFB	89.	73. - 127.
VOA Surr, DBFM	94.	76. - 135.
BNA Surr-Nitrobenzene-d5	101.	20. - 118.
BNA Surr-2-Fluorobiphenyl	101.	18. - 116.
BNA Surr-Terphenyl d14	73.	10. - 119.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98274
Sample ID: MW3
Project: 300388
Page 3

- Recovery outside Laboratory historical limits.

Sample for Ferrous Iron analysis received outside method
prescribed holding time.

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

Report Approved By:

Report Date: 7/23/01

Paul E. Lane, Jr., Lab Director

Gail A. Lage, Technical Serv.

Michael H. Dunn, M.S., Technical Director

Glenn L. Norton, Technical Serv.

Johnny A. Mitchell, Dir. Technical Serv.

Kelly S. Comstock, Technical Serv.

Eric S. Smith, Assistant Technical Director

Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A98275
 Sample ID: MW4
 Sample Type: Water
 Site ID:

Project: 300388
 Project Name: HIGHWAY 11 GROCERY
 Sampler: JEFF WEYAND

Date Collected: 7/16/01
 Time Collected: 11:55
 Date Received: 7/17/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	175.	ug/l	25.0	5.00	5	7/21/01	15:00	B.Davis	8270C	5221
Acenaphthene	ND	ug/l	5.00	5.00	1	7/21/01	2:10	B.Davis	8270C	5221
Anthracene	ND	ug/l	5.00	5.00	1	7/21/01	2:10	B.Davis	8270C	5221
Fluoranthene	ND	ug/l	5.00	5.00	1	7/21/01	2:10	B.Davis	8270C	5221
Fluorene	ND	ug/l	5.00	5.00	1	7/21/01	2:10	B.Davis	8270C	5221
Pyrene	ND	ug/l	5.00	5.00	1	7/21/01	2:10	B.Davis	8270C	5221
Benzo(a)anthracene	ND	ug/l	5.00	5.00	1	7/21/01	2:10	B.Davis	8270C	5221
Benzo(a)pyrene	ND	ug/l	5.00	5.00	1	7/21/01	2:10	B.Davis	8270C	5221
Benzo(b)fluoranthene	ND	ug/l	5.00	5.00	1	7/21/01	2:10	B.Davis	8270C	5221
Benzo(k)fluoranthene	ND	ug/l	5.00	5.00	1	7/21/01	2:10	B.Davis	8270C	5221
Chrysene	ND	ug/l	5.00	5.00	1	7/21/01	2:10	B.Davis	8270C	5221
Dibenzo(a,h)anthracene	ND	ug/l	5.00	5.00	1	7/21/01	2:10	B.Davis	8270C	5221
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.00	5.00	1	7/21/01	2:10	B.Davis	8270C	5221
Acenaphthylene	ND	ug/l	5.00	5.00	1	7/21/01	2:10	B.Davis	8270C	5221
Benzo(g,h,i)perylene	ND	ug/l	5.00	5.00	1	7/21/01	2:10	B.Davis	8270C	5221
Phenanthrene	ND	ug/l	5.00	5.00	1	7/21/01	2:10	B.Davis	8270C	5221
VOLATILE ORGANICS										
Benzene	1500	ug/l	200.	2.0	100	7/19/01	2:35	N. Hurt	8260B	5579
Toluene	7460	ug/l	200.	2.0	100	7/19/01	2:35	N. Hurt	8260B	5579
Ethylbenzene	1400	ug/l	200.	2.0	100	7/19/01	2:35	N. Hurt	8260B	5579
Xylenes, Total	7740	ug/l	200.	2.0	100	7/19/01	2:35	N. Hurt	8260B	5579
Methyl-t-butyl ether	620.	ug/l	200.	2.0	100	7/19/01	2:35	N. Hurt	8260B	5579
Naphthalene	ND	ug/l	500.	5.0	100	7/19/01	2:35	N. Hurt	8260B	5579
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	7/18/01	6:56	Henderson	8011	2126

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98275
 Sample ID: MW4
 Project: 300388
 Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
MISCELLANEOUS GC PARAMETERS										
Methane	ND	ug/l	26.0	26.0	1	7/18/01	16:30	K. Stewart	RSK175M	2114
METALS										
Ferrous Iron	0.690	mg/l	0.100	0.100	1	7/17/01	16:48	S. Duncan	3500D	2032
Lead	0.4320	mg/l	0.0030	0.1000	1	7/18/01	16:12	G.McCord	200.7	2539
MISCELLANEOUS CHEMISTRY										
Nitrate-N as N	0.28	mg/l	0.10	0.10	1	7/17/01	15:45	G. Baun	9056	2029
Sulfate	2.06	mg/l	1.00	1.00	1	7/17/01	15:45	G. Baun	9056	2029

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
BNA's	980. ml	1.0 ml	7/19/01		D. Harris	3510/625

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	103.	68. - 143.
VOA Surr, Toluene d8	94.	78. - 127.
VOA Surr, 4-BFB	94.	73. - 127.
VOA Surr, DBFM	104.	76. - 135.
BNA Surr-Nitrobenzene-d5	89.	20. - 118.
BNA Surr-2-Fluorobiphenyl	86.	18. - 116.
BNA Surr-Terphenyl d14	29.	10. - 119.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98275
Sample ID: MW4
Project: 300388
Page 3

- Recovery outside Laboratory historical limits.

Sample for Ferrous Iron analysis received outside method
prescribed holding time.

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

Report Approved By: Eric S. Smith

Report Date: 7/23/01

Paul E. Lane, Jr., Lab Director

Gail A. Lage, Technical Serv.

Michael H. Dunn, M.S., Technical Director

Glenn L. Norton, Technical Serv.

Johnny A. Mitchell, Dir. Technical Serv.

Kelly S. Comstock, Technical Serv.

Eric S. Smith, Assistant Technical Director

Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A98276
 Sample ID: MW6
 Sample Type: Water
 Site ID:

Project: 300388
 Project Name: HIGHWAY 11 GROCERY
 Sampler: JEFF WEYAND

Date Collected: 7/16/01
 Time Collected: 13:10
 Date Received: 7/17/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	560.	ug/l	50.0	5.00	10	7/21/01	15:38	B.Davis	8270C	5221
Acenaphthene	ND	ug/l	5.00	5.00	1	7/21/01	2:49	B.Davis	8270C	5221
Anthracene	ND	ug/l	5.00	5.00	1	7/21/01	2:49	B.Davis	8270C	5221
Fluoranthene	ND	ug/l	5.00	5.00	1	7/21/01	2:49	B.Davis	8270C	5221
Fluorene	ND	ug/l	5.00	5.00	1	7/21/01	2:49	B.Davis	8270C	5221
Pyrene	ND	ug/l	5.00	5.00	1	7/21/01	2:49	B.Davis	8270C	5221
Benzo(a)anthracene	ND	ug/l	5.00	5.00	1	7/21/01	2:49	B.Davis	8270C	5221
Benzo(a)pyrene	ND	ug/l	5.00	5.00	1	7/21/01	2:49	B.Davis	8270C	5221
Benzo(b)fluoranthene	ND	ug/l	5.00	5.00	1	7/21/01	2:49	B.Davis	8270C	5221
Benzo(k)fluoranthene	ND	ug/l	5.00	5.00	1	7/21/01	2:49	B.Davis	8270C	5221
Chrysene	ND	ug/l	5.00	5.00	1	7/21/01	2:49	B.Davis	8270C	5221
Dibenzo(a,h)anthracene	ND	ug/l	5.00	5.00	1	7/21/01	2:49	B.Davis	8270C	5221
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.00	5.00	1	7/21/01	2:49	B.Davis	8270C	5221
Acenaphthylene	ND	ug/l	5.00	5.00	1	7/21/01	2:49	B.Davis	8270C	5221
Benzo(g,h,i)perylene	ND	ug/l	5.00	5.00	1	7/21/01	2:49	B.Davis	8270C	5221
Phenanthrene	ND	ug/l	5.00	5.00	1	7/21/01	2:49	B.Davis	8270C	5221
VOLATILE ORGANICS										
Benzene	5700	ug/l	200.	2.0	100	7/19/01	7:30	N. Hurt	8260B	5579
Toluene	25800	ug/l	2000	2.0	1000	7/20/01	2:50	N. Hurt	8260B	5582
Ethylbenzene	4760	ug/l	200.	2.0	100	7/19/01	7:30	N. Hurt	8260B	5579
Xylenes, Total	22700	ug/l	200.	2.0	100	7/19/01	7:30	N. Hurt	8260B	5579
Methyl-t-butyl ether	11100	ug/l	200.	2.0	100	7/19/01	7:30	N. Hurt	8260B	5579
Naphthalene	1060	ug/l	500.	5.0	100	7/19/01	7:30	N. Hurt	8260B	5579
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	7/18/01	7:24	Henderson	8011	2126

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98276
 Sample ID: MW6
 Project: 300388
 Page 2

Analyte	Result	Units	Report	Quan	Dil	Analysis	Analysis	Analyst	Method	Batch
			Limit	Limit	Factor	Date	Time			
MISCELLANEOUS GC PARAMETERS										
Methane	ND	ug/l	26.0	26.0	1	7/18/01	16:33	K. Stewart	RSK175M	2114
METALS										
Ferrous Iron	24.4	mg/l	1.00	0.100	10	7/17/01	16:48	S. Duncan	3500D	2032
Lead	0.1560	mg/l	0.0030	0.1000	1	7/18/01	16:12	G.McCord	200.7	2539
MISCELLANEOUS CHEMISTRY										
Nitrate-N as N	ND	mg/l	0.10	0.10	1	7/17/01	15:45	G. Baun	9056	2029
Sulfate	ND	mg/l	1.00	1.00	1	7/17/01	15:45	G. Baun	9056	2029

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol					
	Extracted	Extract Vol	Date	Time	Analyst	Method
BNA's	940. ml	1.0 ml	7/19/01		D. Harris	3510/625

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	98.	68. - 143.
VOA Surr, Toluene d8	103.	78. - 127.
VOA Surr, 4-BFB	98.	73. - 127.
VOA Surr, DBFM	99.	76. - 135.
BNA Surr-Nitrobenzene-d5	133. #	20. - 118.
BNA Surr-2-Fluorobiphenyl	102.	18. - 116.
BNA Surr-Terphenyl d14	45.	10. - 119.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98276
Sample ID: MW6
Project: 300388
Page 3

- Recovery outside Laboratory historical limits.

Sample for Ferrous Iron analysis received outside method
prescribed holding time.

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

Report Approved By: as requested

Report Date: 7/23/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
BOB BOLTON
3021 MCNAUGHTON DR. STE 9
COLUMBIA, SC 29223

Lab Number: 01-A98277
Sample ID: TRIP BLANK
Sample Type: Water
Site ID:

Project: 300388
Project Name: HIGHWAY 11 GROCERY
Sampler: JEFF WEYAND

Date Collected:
Time Collected:
Date Received: 7/17/01
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	7/19/01	6:54	N. Hurt	8260B	5579
Toluene	ND	ug/l	2.0	2.0	1	7/19/01	6:54	N. Hurt	8260B	5579
Ethylbenzene	ND	ug/l	2.0	2.0	1	7/19/01	6:54	N. Hurt	8260B	5579
Xylenes, Total	ND	ug/l	2.0	2.0	1	7/19/01	6:54	N. Hurt	8260B	5579

ND - Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	103.	68. - 143.
VOA Surr, Toluene d8	96.	78. - 127.
VOA Surr, 4-BFB	92.	73. - 127.
VOA Surr, DBFM	99.	76. - 135.

- Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98277
Sample ID: TRIP BLANK
Project: 300388
Page 2

These results relate only to the items tested.
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permission of the laboratory.

Report Approved By: Eric S. Smith

Report Date: 7/23/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
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Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
UST ANALYSIS								
Acenaphthene	mg/l	< 0.00100	0.0420	0.0500	84	30. - 109.	5221	BLANK
Pyrene	mg/l	< 0.00100	0.0480	0.0500	96	26. - 102.	5221	BLANK

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
VOA PARAMETERS								
Benzene	mg/l	< 0.00060	0.04540	0.05000	91	68. - 136.	5579	blank
Toluene	mg/l	< 0.00050	0.05210	0.05000	104	68. - 135.	5579	blank
VOA Surr, 1,2-DCA, d4	% Rec				96	68. - 143.	5579	
VOA Surr, Toluene d8	% Rec				95	78. - 127.	5579	
VOA Surr, 4-BFB	% Rec				96	73. - 127.	5579	
VOA Surr, DBFM	% Rec				92	76. - 135.	5579	
BNA Surr-Nitrobenzene-d5	% Rec				84	20. - 118.	5221	
BNA Surr-2-Fluorobiphenyl	% Rec				82	18. - 116.	5221	
BNA Surr-Terphenyl d14	% Rec				93	10. - 119.	5221	

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
METALS								

Lead	mg/l	< 0.0030	0.0510	0.0500	102	80 - 120	2539	Duplicate
------	------	----------	--------	--------	-----	----------	------	-----------

Project QC continued . . .

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
MISC PARAMETERS								
Nitrate-N as N	mg/l	< 0.10	2.39	2.50	96	80 - 120	2029	01-A98297
Sulfate	mg/l	1.47	16.0	15.0	97	80 - 120	2029	01-A98297
Ethylene Dibromide	mg/l	< 0.00002	0.00031	0.00029	107	60 - 140	2126	blank
Methane	mg/L	0.113	1.40	1.33	97	60 - 140	2114	01-A98297
Methane	mg/L	0.113	1.40	1.33	97	60 - 140	2114	01-A98297

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
UST PARAMETERS						
Acenaphthene	mg/l	0.0420	0.0340	21.05	39.	5221
Pyrene	mg/l	0.0480	0.0390	20.69	37.	5221

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
VOA PARAMETERS						
Benzene	mg/l	0.04540	0.04260	6.36	20.	5579
Toluene	mg/l	0.05210	0.04340	18.22	22.	5579
VOA Surr, 1,2-DCA, d4	% Rec		101.			5579
VOA Surr, Toluene d8	% Rec		96.			5579
VOA Surr, 4-BFB	% Rec		96.			5579
VOA Surr, DBFM	% Rec		93.			5579

Project QC continued . . .

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

BNA Surr-Nitrobenzene-d5	% Rec	71.	5221
BNA Surr-2-Fluorobiphenyl	% Rec	69.	5221
BNA Surr-Terphenyl d14	% Rec	78.	5221

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
METALS						
Lead	mg/l	0.0510	0.0490	4.00	20	2539

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
MISC PARAMETERS						
Ethylene Dibromide	mg/l	0.00031	0.00030	3.28	20	2126
Methane	mg/L	1.40	1.40	0.00	20	2114

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
MISC PARAMETERS						
Nitrate-N as N	mg/l	2.39	2.39	0.00	20	2029
Sulfate	mg/l	16.0	16.0	0.00	20	2029

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
UST PARAMETERS						
Naphthalene	mg/l	0.0500	0.0390	78	34 - 112	5221
Acenaphthene	mg/l	0.0500	0.0390	78	35 - 116	5221
Anthracene	mg/l	0.0500	0.0400	80	42 - 112	5221

Project QC continued . . .

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Fluoranthene	mg/l	0.0500	0.0400	80	41 - 119	5221
Fluorene	mg/l	0.0500	0.0400	80	38 - 117	5221
Pyrene	mg/l	0.0500	0.0450	90	36 - 121	5221
Benzo(a)anthracene	mg/l	0.0500	0.0410	82	38 - 121	5221
Benzo(a)pyrene	mg/l	0.0500	0.0410	82	38 - 126	5221
Benzo(b)fluoranthene	mg/l	0.0500	0.0400	80	30 - 122	5221
Benzo(k)fluoranthene	mg/l	0.0500	0.0420	84	37 - 133	5221
Chrysene	mg/l	0.0500	0.0430	86	38 - 122	5221
Dibenzo(a,h)anthracene	mg/l	0.0500	0.0320	64	20 - 140	5221
Indeno(1,2,3-cd)pyrene	mg/l	0.0500	0.0310	62	19 - 136	5221
Acenaphthylene	mg/l	0.0500	0.0390	78	38 - 115	5221
Benzo(g,h,i)perylene	mg/l	0.0500	0.0350	70	14 - 150	5221
Phenanthrene	mg/l	0.0500	0.0390	78	40 - 116	5221

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
VOA PARAMETERS						
Benzene	mg/l	0.05000	0.04520	90	74 - 123	5579
Benzene	mg/l	0.05000	0.04520	90	74 - 123	5582
Ethylbenzene	mg/l	0.05000	0.04930	99	80 - 121	5579
Ethylbenzene	mg/l	0.05000	0.04930	99	80 - 121	5582
Naphthalene	mg/l	0.0500	0.0455	91	48 - 164	5579
Toluene	mg/l	0.05000	0.04430	89	74 - 125	5579
Toluene	mg/l	0.05000	0.04430	89	74 - 125	5582
Xylenes, Total	mg/l	0.1500	0.1411	94	80 - 122	5579
Xylenes, Total	mg/l	0.1500	0.1411	94	80 - 122	5582
Methyl-t-butyl ether	mg/l	0.0500	0.0472	94	68 - 127	5579
Methyl-t-butyl ether	mg/l	0.0500	0.0472	94	68 - 127	5582
Methane	mg/L	1.33	1.20	90	82 - 121	2114
VOA Surr, 1,2-DCA, d4	% Rec			82	82 - 121	5579
VOA Surr, 1,2-DCA, d4	% Rec			82	82 - 121	5582

Project QC continued . . .

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
VOA Surr, Toluene d8	% Rec			88	82 - 121	5579
VOA Surr, Toluene d8	% Rec			88	82 - 121	5582
VOA Surr, 4-BFB	% Rec			94	82 - 121	5579
VOA Surr, 4-BFB	% Rec			94	82 - 121	5582
VOA Surr, DBFM	% Rec			91	82 - 121	5579
VOA Surr, DBFM	% Rec			91	82 - 121	5582
BNA Surr-Nitrobenzene-d5	% Rec			80	82 - 121	5221
BNA Surr-2-Fluorobiphenyl	% Rec			77	82 - 121	5221
BNA Surr-Terphenyl d14	% Rec			87	82 - 121	5221

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
METALS						
Lead	mg/l	0.0500	0.0460	92	85 - 115	2539

Continuing Calibration Verification

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
METALS						

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
MISC PARAMETERS						
Methane	mg/L	1.33	1.20	90	82 - 121	2114

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
MISC PARAMETERS						
Nitrate-N as N	mg/l	2.50	2.45	98	90 - 110	2029
Sulfate	mg/l	15.0	14.5	97	90 - 110	2029

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
UST PARAMETERS					
Naphthalene	< 0.00100	mg/l	5221	7/20/01	18:19
Acenaphthene	< 0.00100	mg/l	5221	7/20/01	18:19
Anthracene	< 0.00100	mg/l	5221	7/20/01	18:19
Fluoranthene	< 0.00100	mg/l	5221	7/20/01	18:19
Fluorene	< 0.00100	mg/l	5221	7/20/01	18:19
Pyrene	< 0.00100	mg/l	5221	7/20/01	18:19
Benzo(a)anthracene	< 0.00100	mg/l	5221	7/20/01	18:19
Benzo(a)pyrene	< 0.00100	mg/l	5221	7/20/01	18:19
Benzo(b)fluoranthene	< 0.00100	mg/l	5221	7/20/01	18:19
Benzo(k)fluoranthene	< 0.00100	mg/l	5221	7/20/01	18:19
Chrysene	< 0.00100	mg/l	5221	7/20/01	18:19
Dibenzo(a,h)anthracene	< 0.00200	mg/l	5221	7/20/01	18:19
Indeno(1,2,3-cd)pyrene	< 0.00200	mg/l	5221	7/20/01	18:19
Acenaphthylene	< 0.00100	mg/l	5221	7/20/01	18:19
Benzo(g,h,i)perylene	< 0.00200	mg/l	5221	7/20/01	18:19
Phenanthrene	< 0.00100	mg/l	5221	7/20/01	18:19

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
VOA PARAMETERS					

TestAmerica

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PROJECT QUALITY CONTROL DATA
Project Number: 300388

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Benzene	< 0.00060	mg/l	5579	7/18/01	0:21
Benzene	< 0.00060	mg/l	5582	7/18/01	0:21
Ethylbenzene	< 0.00070	mg/l	5579	7/18/01	0:21
Ethylbenzene	< 0.00070	mg/l	5582	7/18/01	0:21
Naphthalene	< 0.0006	mg/l	5579	7/18/01	0:21
Toluene	< 0.00050	mg/l	5579	7/18/01	0:21
Toluene	< 0.00050	mg/l	5582	7/18/01	0:21
Xylenes, Total	< 0.00080	mg/l	5579	7/18/01	0:21
Xylenes, Total	< 0.00080	mg/l	5582	7/18/01	0:21
Methyl-t-butyl ether	< 0.0003	mg/l	5579	7/18/01	0:21
Methyl-t-butyl ether	< 0.0003	mg/l	5582	7/18/01	0:21
VOA Surr, 1,2-DCA, d4	102.	% Rec	5579	7/18/01	0:21
VOA Surr, 1,2-DCA, d4	102.	% Rec	5582	7/18/01	0:21
VOA Surr, Toluene d8	97.	% Rec	5579	7/18/01	0:21
VOA Surr, Toluene d8	97.	% Rec	5582	7/18/01	0:21
VOA Surr, 4-BFB	97.	% Rec	5579	7/18/01	0:21
VOA Surr, 4-BFB	97.	% Rec	5582	7/18/01	0:21
VOA Surr, DBFM	96.	% Rec	5579	7/18/01	0:21
VOA Surr, DBFM	96.	% Rec	5582	7/18/01	0:21
BNA Surr-Nitrobenzene-d5	84.	% Rec	5221	7/20/01	18:19
BNA Surr-2-Fluorobiphenyl	80.	% Rec	5221	7/20/01	18:19
BNA Surr-Terphenyl d14	95.	% Rec	5221	7/20/01	18:19

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
METALS					
Lead	< 0.0030	mg/l	2539	7/18/01	16:12

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA

Project Number: 300388

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
-----	-----	-----	-----	-----	-----

MISC PARAMETERS

Nitrate-N as N	< 0.10	mg/l	2029	7/17/01	15:45
Sulfate	< 1.00	mg/l	2029	7/17/01	15:45

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
-----	-----	-----	-----	-----	-----

MISC PARAMETERS

Ethylene Dibromide	< 0.00002	mg/l	2126	7/18/01	1:21
Methane	< 0.026	mg/L	2114	7/18/01	15:21

- Value outside Laboratory historical QC limits.

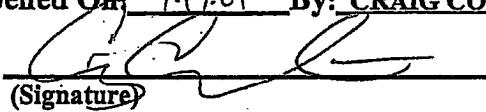
End of Report for Project 245508

TestAmerica

INCORPORATED
COOLER RECEIPT FORM

Client: SEI Environmental BC# 245508

Cooler Received On: 7.17.01 And Opened On: 7.17.01 By: CRAIG COTHRON


(Signature)

1. Temperature of Cooler when opened 3.0 DEGREES C
2. Were custody seals on outside of cooler and intact?.....YES NO

 - a. If yes, what kind and where: _____
 - b. Were the signature and date correct?.....YES NO

3. Were custody seals on containers intact?.....YES NO
4. Were custody papers inside cooler?.....YES NO
5. Were custody papers properly filled out (ink, signed, etc)?.....YES NO
6. Did you sign the custody papers in the appropriate place?.....YES NO
7. What kind of packing material used? Bubblewrap Peanuts Other None
8. Was sufficient ice used (if appropriate)?.....YES NO
9. Did all bottles arrive in good condition(unbroken)?.....YES NO
10. Were all bottle labels complete (#, date, signed, pres, etc)?.....YES NO
11. Did all bottle labels and tags agree with custody papers?.....YES NO
12. Were correct bottles used for the analysis requested?.....YES NO
13. If present, was any observable voa headspace present?.....YES NO
14. If present, were VOA vials checked for absence of air bubbles and noted if found?... YES NO
15. Was sufficient amount of sample sent in each bottle?.....YES NO
16. Were correct preservatives used?.....YES NO
17. Was residual chlorine present (if appropriate)?.....YES NO
18. Corrective action taken, if necessary:
 - a. Name of person contacted: SEE ATTACHED FOR RESOLUTION
 - b. Date: _____

TestAmerica INCORPORATED

Division/Laboratory Name:

**FAX CHAIN
TO COLUMBIA**

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

Client Name SEI ENVIRONMENTAL INC Client #: 8990
Address: 3021 MC NAULTON DR SUITE 9
City/State/Zip Code: COLUMBIA, SC 29223
Project Manager: BOB BOLTON
Telephone Number: (803) 788-2535 Fax (803) 788-2399
Sampler Name: (Print Name) JEFF WEYAND, PTOHS MONSEKAN
Sampler Signature: Jeff Weyand

Project Name: Higgerty Grocery

Project #: 300388

Site/Location ID: _____ State: SC
Report To: SAME
Invoice To: _____
Quote #: _____ PO#: _____

Special Instructions: ~~X~~ - TB - BEX ONLY

Relinquished By: <i>JGJ</i>	Date: 7/14/01	Time: 1500	Received By:	Date:	Time:	Custody Seal: Y N N/A
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Serial Number by TestAmerica: Y N
Relinquished By:	Date:	Time:	Received By: <i>CDL</i>	Date: 7-17-01	Time: GEC	Method of Shipment:

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A98242
 Sample ID: MW 7
 Sample Type: Water
 Site ID:

Project: 300388
 Project Name: HIGHWAY 11 GROCERY
 Sampler: J.WEYAND/J.MONEGHAN

Date Collected: 7/16/01
 Time Collected: 14:30
 Date Received: 7/17/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
Acenaphthene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
Anthracene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
Fluoranthene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
Fluorene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
Pyrene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
Benzo(a)anthracene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
Benzo(a)pyrene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
Benzo(b)fluoranthene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
Benzo(k)fluoranthene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
Chrysene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
Dibenz(a,h)anthracene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
Acenaphthylene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
Benzo(g,h,i)perylene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
Phenanthrene	ND	ug/l	5.00	5.00	1	7/20/01	21:36	B.Davis	8270C	5221
VOLATILE ORGANICS										
Benzene	18.3	ug/l	2.0	2.0	1	7/18/01	0:58	N. Hurt	8260B	5579
Toluene	25.0	ug/l	2.0	2.0	1	7/18/01	0:58	N. Hurt	8260B	5579
Ethylbenzene	2.1	ug/l	2.0	2.0	1	7/18/01	0:58	N. Hurt	8260B	5579
Xylenes, Total	17.5	ug/l	2.0	2.0	1	7/18/01	0:58	N. Hurt	8260B	5579
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	7/18/01	0:58	N. Hurt	8260B	5579
Naphthalene	ND	ug/l	5.0	5.0	1	7/18/01	0:58	N. Hurt	8260B	5579
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	7/18/01	3:41	Henderson	8011	2126

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98242
 Sample ID: MW 7
 Project: 300388
 Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
MISCELLANEOUS GC PARAMETERS										
Methane	ND	ug/l	26.0	26.0	1	7/18/01	15:56	K. Stewart	RSK175M	2114
METALS										
Ferrous Iron	0.150	mg/l	0.100	0.100	1	7/17/01	16:48	S. Duncan	3500D	2032
Lead	0.0410	mg/l	0.0030	0.1000	1	7/18/01	16:12	G.McCord	200.7	2539
MISCELLANEOUS CHEMISTRY										
Nitrate-N as N	0.860	mg/l	0.100	0.100	1	7/17/01	20:23	A.Bamarni	353.2	2028
Sulfate	ND	mg/l	1.00	1.00	1	7/17/01	15:45	G. Baun	9056	2029

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
BNA's	1000 ml	1.0 ml	7/19/01		D. Harris	3510/625

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	99.	68. - 143.
VOA Surr, Toluene d8	93.	78. - 127.
VOA Surr, 4-BFB	98.	73. - 127.
VOA Surr, DBFM	92.	76. - 135.
BNA Surr-Nitrobenzene-d5	100.	20. - 118.
BNA Surr-2-Fluorobiphenyl	98.	18. - 116.
BNA Surr-Terphenyl d14	87.	10. - 119.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98242
Sample ID: MW 7
Project: 300388
Page 3

- Recovery outside Laboratory historical limits.

Sample for Ferrous Iron analysis received outside method
prescribed holding time.

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

Report Approved By: Mike M. Neel Report Date: 7/21/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A98243
 Sample ID: WW 1
 Sample Type: Water
 Site ID:

Project: 300388
 Project Name: HIGHWAY 11 GROCERY
 Sampler: J.WEYAND/J.MONEGAN

Date Collected: 7/16/01
 Time Collected: 14:20
 Date Received: 7/17/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
Acenaphthene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
Anthracene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
Fluoranthene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
Fluorene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
Pyrene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
Benzo(a)anthracene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
Benzo(a)pyrene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
Benzo(b)fluoranthene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
Benzo(k)fluoranthene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
Chrysene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
Dibenzo(a,h)anthracene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
Acenaphthylene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
Benzo(g,h,i)perylene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
Phenanthrene	ND	ug/l	5.00	5.00	1	7/20/01	22:15	B.Davis	8270C	5221
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	7/18/01	1:35	N. Hurt	8260B	5579
Toluene	ND	ug/l	2.0	2.0	1	7/18/01	1:35	N. Hurt	8260B	5579
Ethylbenzene	ND	ug/l	2.0	2.0	1	7/18/01	1:35	N. Hurt	8260B	5579
Xylenes, Total	ND	ug/l	2.0	2.0	1	7/18/01	1:35	N. Hurt	8260B	5579
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	7/18/01	1:35	N. Hurt	8260B	5579
Naphthalene	ND	ug/l	5.0	5.0	1	7/18/01	1:35	N. Hurt	8260B	5579
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	7/18/01	4:08	Henderson	8011	2126

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98243
 Sample ID: WW 1
 Project: 300388
 Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
MISCELLANEOUS GC PARAMETERS										
Methane	ND	ug/l	26.0	26.0	1	7/18/01	16:03	K. Stewart	RSK175M	2114
METALS										
Ferrous Iron	ND	mg/l	0.100	0.100	1	7/17/01	16:48	S. Duncan	3500D	2032
Lead	ND	mg/l	0.0030	0.1000	1	7/18/01	16:12	G.McCord	200.7	2539
MISCELLANEOUS CHEMISTRY										
Nitrate-N as N	0.310	mg/l	0.100	0.100	1	7/17/01	20:25	A.Bamarni	353.2	2028
Sulfate	ND	mg/l	1.00	1.00	1	7/17/01	15:45	G. Baun	9056	2029

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
BNA's	1000 ml	1.0 ml	7/19/01		D. Harris	3510/625

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	100.	68. - 143.
VOA Surr, Toluene d8	94.	78. - 127.
VOA Surr, 4-BFB	99.	73. - 127.
VOA Surr, DBFM	92.	76. - 135.
BNA Surr-Nitrobenzene-d5	97.	20. - 118.
BNA Surr-2-Fluorobiphenyl	90.	18. - 116.
BNA Surr-Terphenyl d14	92.	10. - 119.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98243
Sample ID: WW 1
Project: 300388
Page 3

- Recovery outside Laboratory historical limits.

Sample for Ferrous Iron analysis received outside method
prescribed holding time.

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

Report Approved By: Paul E. Lane

Report Date: 7/21/01

Paul E. Lane, Jr., Lab Director

Gail A. Lage, Technical Serv.

Michael H. Dunn, M.S., Technical Director

Glenn L. Norton, Technical Serv.

Johnny A. Mitchell, Dir. Technical Serv.

Kelly S. Comstock, Technical Serv.

Eric S. Smith, Assistant Technical Director

Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A98244
 Sample ID: MW 8
 Sample Type: Water
 Site ID:

Project: 300388
 Project Name: HIGHWAY 11 GROCERY
 Sampler: J.WEYAND/J.MONEGHAN

Date Collected: 7/16/01
 Time Collected: 14:00
 Date Received: 7/17/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	390.	ug/l	50.0	5.00	10	7/21/01	14:23	B.Davis	8270C	5221
Acenaphthene	ND	ug/l	5.00	5.00	1	7/20/01	22:55	B.Davis	8270C	5221
Anthracene	ND	ug/l	5.00	5.00	1	7/20/01	22:55	B.Davis	8270C	5221
Fluoranthene	ND	ug/l	5.00	5.00	1	7/20/01	22:55	B.Davis	8270C	5221
Fluorene	ND	ug/l	5.00	5.00	1	7/20/01	22:55	B.Davis	8270C	5221
Pyrene	ND	ug/l	5.00	5.00	1	7/20/01	22:55	B.Davis	8270C	5221
Benzo(a)anthracene	ND	ug/l	5.00	5.00	1	7/20/01	22:55	B.Davis	8270C	5221
Benzo(a)pyrene	ND	ug/l	5.00	5.00	1	7/20/01	22:55	B.Davis	8270C	5221
Benzo(b)fluoranthene	ND	ug/l	5.00	5.00	1	7/20/01	22:55	B.Davis	8270C	5221
Benzo(k)fluoranthene	ND	ug/l	5.00	5.00	1	7/20/01	22:55	B.Davis	8270C	5221
Chrysene	ND	ug/l	5.00	5.00	1	7/20/01	22:55	B.Davis	8270C	5221
Dibenzo(a,h)anthracene	ND	ug/l	5.00	5.00	1	7/20/01	22:55	B.Davis	8270C	5221
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.00	5.00	1	7/20/01	22:55	B.Davis	8270C	5221
Acenaphthylene	ND	ug/l	5.00	5.00	1	7/20/01	22:55	B.Davis	8270C	5221
Benzo(g,h,i)perylene	ND	ug/l	5.00	5.00	1	7/20/01	22:55	B.Davis	8270C	5221
Phenanthrene	ND	ug/l	5.00	5.00	1	7/20/01	22:55	B.Davis	8270C	5221
VOLATILE ORGANICS										
Benzene	17100	ug/l	200.	2.0	100	7/19/01	0:45	N. Hurt	8260B	5579
Toluene	34400	ug/l	2000	2.0	1000	7/20/01	2:13	N. Hurt	8260B	5582
Ethylbenzene	3060	ug/l	200.	2.0	100	7/19/01	0:45	N. Hurt	8260B	5579
Xylenes, Total	14800	ug/l	200.	2.0	100	7/19/01	0:45	N. Hurt	8260B	5579
Methyl-t-butyl ether	47000	ug/l	2000	2.0	1000	7/20/01	2:13	N. Hurt	8260B	5582
Naphthalene	500.	ug/l	500.	5.0	100	7/19/01	0:45	N. Hurt	8260B	5579
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	7/18/01	4:36	Henderson	8011	2126

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98244
 Sample ID: MW 8
 Project: 300388
 Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
MISCELLANEOUS GC PARAMETERS										
Methane	ND	ug/l	26.0	26.0	1	7/18/01	16:06	K. Stewart	RSK175M	2114
METALS										
Ferrous Iron	10.2	mg/l	0.500	0.100	5	7/17/01	16:48	S. Duncan	3500D	2032
Lead	0.0350	mg/l	0.0030	0.1000	1	7/18/01	16:12	G.McCord	200.7	2539
MISCELLANEOUS CHEMISTRY										
Nitrate-N as N	0.190	mg/l	0.100	0.100	1	7/17/01	20:25	A.Bamarni	353.2	2028
Sulfate	ND	mg/l	1.00	1.00	1	7/17/01	15:45	G. Baum	9056	2029

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
BNA's	960. ml	1.0 ml	7/19/01		D. Harris	3510/625

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	98.	68. - 143.
VOA Surr, Toluene d8	103.	78. - 127.
VOA Surr, 4-BFB	101.	73. - 127.
VOA Surr, DBFM	97.	76. - 135.
BNA Surr-Nitrobenzene-d5	126. #	20. - 118.
BNA Surr-2-Fluorobiphenyl	90.	18. - 116.
BNA Surr-Terphenyl d14	38.	10. - 119.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98244
Sample ID: MW 8
Project: 300388
Page 3

- Recovery outside Laboratory historical limits.

Sample for Ferrous Iron analysis received outside method
prescribed holding time.

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

Report Approved By: and two

Report Date: 7/21/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A98245
 Sample ID: MW 10
 Sample Type: Water
 Site ID:

Project: 300388
 Project Name: HIGHWAY 11 GROCERY
 Sampler: J.WEYAND/J.MONEGHAN

Date Collected: 7/16/01
 Time Collected: 13:50
 Date Received: 7/17/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	35.0	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
Acenaphthene	ND	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
Anthracene	ND	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
Fluoranthene	ND	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
Fluorene	ND	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
Pyrene	ND	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
Benzo(a)anthracene	ND	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
Benzo(a)pyrene	ND	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
Benzo(b)fluoranthene	ND	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
Benzo(k)fluoranthene	ND	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
Chrysene	ND	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
Dibenzo(a,h)anthracene	ND	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
Acenaphthylene	ND	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
Benzo(g,h,i)perylene	ND	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
Phenanthrene	ND	ug/l	5.00	5.00	1	7/20/01	23:34	B.Davis	8270C	5221
VOLATILE ORGANICS										
Benzene	1970	ug/l	200.	2.0	100	7/19/01	1:22	N. Hurt	8260B	5582
Toluene	5500	ug/l	200.	2.0	100	7/19/01	1:22	N. Hurt	8260B	5582
Ethylbenzene	350.	ug/l	200.	2.0	100	7/19/01	1:22	N. Hurt	8260B	5582
Xylenes, Total	3150	ug/l	200.	2.0	100	7/19/01	1:22	N. Hurt	8260B	5582
Methyl-t-butyl ether	3360	ug/l	200.	2.0	100	7/19/01	1:22	N. Hurt	8260B	5582
Naphthalene	109.	ug/l	5.0	5.0	1	7/18/01	2:48	N. Hurt	8260B	5579
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	7/18/01	5:04	Henderson	8011	2126

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98245
 Sample ID: MW 10
 Project: 300388
 Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>										
MISCELLANEOUS GC PARAMETERS										
Methane	ND	ug/l	26.0	26.0	1	7/18/01	16:10	K. Stewart	RSK175M	2114
<hr/>										
METALS										
Ferrous Iron	8.53	mg/l	0.500	0.100	5	7/17/01	16:48	S. Duncan	3500D	2032
Lead	0.9770	mg/l	0.0030	0.1000	1	7/18/01	16:12	G.McCord	200.7	2539
<hr/>										
MISCELLANEOUS CHEMISTRY										
Nitrate-N as N	ND	mg/l	0.100	0.100	1	7/17/01	20:27	A.Bamarni	353.2	2028
Sulfate	ND	mg/l	1.00	1.00	1	7/17/01	15:45	G. Baun	9056	2029

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol					
	Extracted	Extract Vol	Date	Time	Analyst	Method
BNA's	980. ml	1.0 ml	7/19/01		D. Harris	3510/625

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	94.	68. - 143.
VOA Surr, Toluene d8	93.	78. - 127.
VOA Surr, 4-BFB	95.	73. - 127.
VOA Surr, DBFM	95.	76. - 135.
BNA Surr-Nitrobenzene-d5	84.	20. - 118.
BNA Surr-2-Fluorobiphenyl	80.	18. - 116.
BNA Surr-Terphenyl d14	43.	10. - 119.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98245
Sample ID: MW 10
Project: 300388
Page 3

- Recovery outside Laboratory historical limits.

Sample for Ferrous Iron analysis received outside method
prescribed holding time.

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

Report Approved By: all + all

Report Date: 7/21/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A98246
 Sample ID: MW 5
 Sample Type: Water
 Site ID:

Project: 300388
 Project Name: HIGHWAY 11 GROCERY
 Sampler: J.WEYAND/J.MONEGHAN

Date Collected: 7/16/01
 Time Collected: 13:15
 Date Received: 7/17/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis	8270C	5221
Acenaphthene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis	8270C	5221
Anthracene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis	8270C	5221
Fluoranthene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis	8270C	5221
Fluorene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis	8270C	5221
Pyrene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis	8270C	5221
Benzo(a)anthracene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis	8270C	5221
Benzo(a)pyrene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis*	8270C	5221
Benzo(b)fluoranthene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis	8270C	5221
Benzo(k)fluoranthene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis	8270C	5221
Chrysene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis	8270C	5221
Dibenzo(a,h)anthracene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis	8270C	5221
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis	8270C	5221
Acenaphthylene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis	8270C	5221
Benzo(g,h,i)perylene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis	8270C	5221
Phenanthrene	ND	ug/l	5.00	5.00	1	7/21/01	0:13	B.Davis	8270C	5221
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	7/18/01	3:25	N. Hurt	8260B	5579
Toluene	ND	ug/l	2.0	2.0	1	7/18/01	3:25	N. Hurt	8260B	5579
Ethylbenzene	ND	ug/l	2.0	2.0	1	7/18/01	3:25	N. Hurt	8260B	5579
Xylenes, Total	ND	ug/l	2.0	2.0	1	7/18/01	3:25	N. Hurt	8260B	5579
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	7/18/01	3:25	N. Hurt	8260B	5579
Naphthalene	ND	ug/l	5.0	5.0	1	7/18/01	3:25	N. Hurt	8260B	5579
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	7/18/01	5:32	Henderson	8011	2126

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98246
 Sample ID: MW 5
 Project: 300388
 Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
MISCELLANEOUS GC PARAMETERS										
Methane	ND	ug/l	26.0	26.0	1	7/18/01	16:20	K. Stewart	RSK175M	2114
METALS										
Ferrous Iron	0.517	mg/l	0.100	0.100	1	7/17/01	16:48	S. Duncan	3500D	2032
Lead	0.6180	mg/l	0.0030	0.1000	1	7/18/01	16:12	G.McCord	200.7	2539
MISCELLANEOUS CHEMISTRY										
Nitrate-N as N	0.370	mg/l	0.100	0.100	1	7/17/01	20:28	A.Bamarni	353.2	2028
Sulfate	ND	mg/l	1.00	1.00	1	7/17/01	15:45	G. Baun	9056	2029

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
BNA's	980. ml	1.0 ml	7/19/01		D. Harris	3510/625

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	96.	68. - 143.
VOA Surr, Toluene d8	94.	78. - 127.
VOA Surr, 4-BFB	96.	73. - 127.
VOA Surr, DBFM	92.	76. - 135.
BNA Surr-Nitrobenzene-d5	112.	20. - 118.
BNA Surr-2-Fluorobiphenyl	110.	18. - 116.
BNA Surr-Terphenyl d14	81.	10. - 119.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98246
Sample ID: MW 5
Project: 300388
Page 3

- Recovery outside Laboratory historical limits.

Sample for Ferrous Iron analysis received outside method
prescribed holding time.

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permission of the laboratory.

Report Approved By: ane - mle Report Date: 7/21/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
BOB BOLTON
3021 MCNAUGHTON DR. STE 9
COLUMBIA, SC 29223

Lab Number: 01-A98247
Sample ID: TB
Sample Type: Water
Site ID:

Project: 300388
Project Name: HIGHWAY 11 GROCERY
Sampler: J.WEYAND/J.MONEGHAN

Date Collected: 7/16/01
Time Collected:
Date Received: 7/17/01
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	7/19/01	6:17	N. Hurt	8260B	5579
Toluene	ND	ug/l	2.0	2.0	1	7/19/01	6:17	N. Hurt	8260B	5579
Ethylbenzene	ND	ug/l	2.0	2.0	1	7/19/01	6:17	N. Hurt	8260B	5579
Xylenes, Total	ND	ug/l	2.0	2.0	1	7/19/01	6:17	N. Hurt	8260B	5579

ND - Not detected at the report limit.

Surrogate	% Recovery	Target Range
VOA Surr, 1,2-DCA, d4	103.	68. - 143.
VOA Surr, Toluene d8	99.	78. - 127.
VOA Surr, 4-BFB	93.	73. - 127.
VOA Surr, DBFM	104.	76. - 135.

- Recovery outside Laboratory historical limits.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A98247
Sample ID: TB
Project: 300388
Page 2

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permission of the laboratory.

Report Approved By: Eric A. New Report Date: 7/21/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

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Glenn L. Norton, Technical Serv.
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Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
UST ANALYSIS								
Acenaphthene	mg/l	< 0.00100	0.0420	0.0500	84	30. - 109.	5221	BLANK
Pyrene	mg/l	< 0.00100	0.0480	0.0500	96	26. - 102.	5221	BLANK

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
VOA PARAMETERS								
Benzene	mg/l	< 0.00060	0.04540	0.05000	91	68. - 136.	5579	blank
Toluene	mg/l	< 0.00050	0.05210	0.05000	104	68. - 135.	5579	blank
VOA Surr, 1,2-DCA, d4	% Rec				96	68. - 143.	5579	
VOA Surr, Toluene d8	% Rec				95	78. - 127.	5579	
VOA Surr, 4-BFB	% Rec				96	73. - 127.	5579	
VOA Surr, DBFM	% Rec				92	76. - 135.	5579	
BNA Surr-Nitrobenzene-d5	% Rec				84	20. - 118.	5221	
BNA Surr-2-Fluorobiphenyl	% Rec				82	18. - 116.	5221	
BNA Surr-Terphenyl d14	% Rec				93	10. - 119.	5221	

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
---------	-------	------------	--------	------------	----------	--------------	------------	--------------

****METALS****

Lead	mg/l	< 0.0030	0.0510	0.0500	102	80 - 120	2539	Duplicate
------	------	----------	--------	--------	-----	----------	------	-----------

Project QC continued . . .

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
MISC PARAMETERS								
Nitrate-N as N	mg/l	0.860	8.96	7.50	108	80 - 120	2028	01-A98242
Nitrate-N as N	mg/l	0.860	8.90	7.50	107	80 - 120	2028	01-A98242
Sulfate	mg/l	1.47	16.0	15.0	97	80 - 120	2029	01-A98297
Ethylene Dibromide	mg/l	< 0.00002	0.00031	0.00029	107	60 - 140	2126	blank
Methane	mg/L	0.113	1.40	1.33	97	60 - 140	2114	01-A98297
Methane	mg/L	0.113	1.40	1.33	97	60 - 140	2114	01-A98297

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
UST PARAMETERS						
Acenaphthene	mg/l	0.0420	0.0340	21.05	39.	5221
Pyrene	mg/l	0.0480	0.0390	20.69	37.	5221

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
VOA PARAMETERS						
Benzene	mg/l	0.04540	0.04260	6.36	20.	5579
Toluene	mg/l	0.05210	0.04340	18.22	22.	5579
VOA Surr, 1,2-DCA, d4	% Rec		101.			5579
VOA Surr, Toluene d8	% Rec		96.			5579
VOA Surr, 4-BFB	% Rec		96.			5579
VOA Surr, DBFM	% Rec		93.			5579

Project QC continued . . .

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INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

BNA Surr-Nitrobenzene-d5	% Rec	71.	5221
BNA Surr-2-Fluorobiphenyl	% Rec	69.	5221
BNA Surr-Terphenyl d14	% Rec	78.	5221

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
METALS						
Lead	mg/l	0.0510	0.0490	4.00	20	2539

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
MISC PARAMETERS						
Ethylene Dibromide	mg/l	0.00031	0.00030	3.28	20	2126
Methane	mg/L	1.40	1.40	0.00	20	2114

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
MISC PARAMETERS						
Nitrate-N as N	mg/l	8.96	8.90	0.67	20	2028
Sulfate	mg/l	16.0	16.0	0.00	20	2029

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
UST PARAMETERS						
Naphthalene	mg/l	0.0500	0.0390	78	34 - 112	5221
Acenaphthene	mg/l	0.0500	0.0390	78	35 - 116	5221
Anthracene	mg/l	0.0500	0.0400	80	42 - 112	5221

Project QC continued . . .

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Fluoranthene	mg/l	0.0500	0.0400	80	41 - 119	5221
Fluorene	mg/l	0.0500	0.0400	80	38 - 117	5221
Pyrene	mg/l	0.0500	0.0450	90	36 - 121	5221
Benzo(a)anthracene	mg/l	0.0500	0.0410	82	38 - 121	5221
Benzo(a)pyrene	mg/l	0.0500	0.0410	82	38 - 126	5221
Benzo(b)fluoranthene	mg/l	0.0500	0.0400	80	30 - 122	5221
Benzo(k)fluoranthene	mg/l	0.0500	0.0420	84	37 - 133	5221
Chrysene	mg/l	0.0500	0.0430	86	38 - 122	5221
Dibenzo(a,h)anthracene	mg/l	0.0500	0.0320	64	20 - 140	5221
Indeno(1,2,3-cd)pyrene	mg/l	0.0500	0.0310	62	19 - 136	5221
Acenaphthylene	mg/l	0.0500	0.0390	78	38 - 115	5221
Benzo(g,h,i)perylene	mg/l	0.0500	0.0350	70	14 - 150	5221
Phenanthrene	mg/l	0.0500	0.0390	78	40 - 116	5221

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
VOA PARAMETERS						
Benzene	mg/l	0.05000	0.04520	90	74 - 123	5579
Benzene	mg/l	0.05000	0.04520	90	74 - 123	5582
Ethylbenzene	mg/l	0.05000	0.04930	99	80 - 121	5579
Ethylbenzene	mg/l	0.05000	0.04930	99	80 - 121	5582
Naphthalene	mg/l	0.0500	0.0455	91	48 - 164	5579
Toluene	mg/l	0.05000	0.04430	89	74 - 125	5579
Toluene	mg/l	0.05000	0.04430	89	74 - 125	5582
Xylenes, Total	mg/l	0.1500	0.1411	94	80 - 122	5579
Xylenes, Total	mg/l	0.1500	0.1411	94	80 - 122	5582
Methyl-t-butyl ether	mg/l	0.0500	0.0472	94	68 - 127	5579
Methyl-t-butyl ether	mg/l	0.0500	0.0472	94	68 - 127	5582
Methane	mg/L	1.33	1.20	90	82 - 121	2114
VOA Surr, 1,2-DCA, d4	% Rec			82	82 - 121	5579
VOA Surr, 1,2-DCA, d4	% Rec			82	82 - 121	5582

Project QC continued . . .

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PROJECT QUALITY CONTROL DATA
Project Number: 300388

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
VOA Surr, Toluene d8	% Rec			88	82 - 121	5579
VOA Surr, Toluene d8	% Rec			88	82 - 121	5582
VOA Surr, 4-BFB	% Rec			94	82 - 121	5579
VOA Surr, 4-BFB	% Rec			94	82 - 121	5582
VOA Surr, DBFM	% Rec			91	82 - 121	5579
VOA Surr, DBFM	% Rec			91	82 - 121	5582
BNA Surr-Nitrobenzene-d5	% Rec			80	82 - 121	5221
BNA Surr-2-Fluorobiphenyl	% Rec			77	82 - 121	5221
BNA Surr-Terphenyl d14	% Rec			87	82 - 121	5221

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
METALS						
Lead	mg/l	0.0500	0.0460	92	85 - 115	2539

Continuing Calibration Verification

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
METALS						

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
MISC PARAMETERS						
Methane	mg/L	1.33	1.20	90	82 - 121	2114

TestAmerica

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PROJECT QUALITY CONTROL DATA
Project Number: 300388

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
MISC PARAMETERS						
Nitrate-N as N	mg/l	5.50	5.70	104	90 - 110	2028
Sulfate	mg/l	15.0	14.5	97	90 - 110	2029

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
UST PARAMETERS					
Naphthalene	< 0.00100	mg/l	5221	7/20/01	18:19
Acenaphthene	< 0.00100	mg/l	5221	7/20/01	18:19
Anthracene	< 0.00100	mg/l	5221	7/20/01	18:19
Fluoranthene	< 0.00100	mg/l	5221	7/20/01	18:19
Fluorene	< 0.00100	mg/l	5221	7/20/01	18:19
Pyrene	< 0.00100	mg/l	5221	7/20/01	18:19
Benzo(a)anthracene	< 0.00100	mg/l	5221	7/20/01	18:19
Benzo(a)pyrene	< 0.00100	mg/l	5221	7/20/01	18:19
Benzo(b)fluoranthene	< 0.00100	mg/l	5221	7/20/01	18:19
Benzo(k)fluoranthene	< 0.00100	mg/l	5221	7/20/01	18:19
Chrysene	< 0.00100	mg/l	5221	7/20/01	18:19
Dibenzo(a,h)anthracene	< 0.00200	mg/l	5221	7/20/01	18:19
Indeno(1,2,3-cd)pyrene	< 0.00200	mg/l	5221	7/20/01	18:19
Acenaphthylene	< 0.00100	mg/l	5221	7/20/01	18:19
Benzo(g,h,i)perylene	< 0.00200	mg/l	5221	7/20/01	18:19
Phenanthrene	< 0.00100	mg/l	5221	7/20/01	18:19

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
VOA PARAMETERS					

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PROJECT QUALITY CONTROL DATA
Project Number: 300388

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Benzene	< 0.00060	mg/l	5579	7/18/01	0:21
Benzene	< 0.00060	mg/l	5582	7/18/01	0:21
Ethylbenzene	< 0.00070	mg/l	5579	7/18/01	0:21
Ethylbenzene	< 0.00070	mg/l	5582	7/18/01	0:21
Naphthalene	< 0.0006	mg/l	5579	7/18/01	0:21
Toluene	< 0.00050	mg/l	5579	7/18/01	0:21
Toluene	< 0.00050	mg/l	5582	7/18/01	0:21
Xylenes, Total	< 0.00080	mg/l	5579	7/18/01	0:21
Xylenes, Total	< 0.00080	mg/l	5582	7/18/01	0:21
Methyl-t-butyl ether	< 0.0003	mg/l	5579	7/18/01	0:21
Methyl-t-butyl ether	< 0.0003	mg/l	5582	7/18/01	0:21
VOA Surr, 1,2-DCA, d4	102.	% Rec	5579	7/18/01	0:21
VOA Surr, 1,2-DCA, d4	102.	% Rec	5582	7/18/01	0:21
VOA Surr, Toluene d8	97.	% Rec	5579	7/18/01	0:21
VOA Surr, Toluene d8	97.	% Rec	5582	7/18/01	0:21
VOA Surr, 4-BFB	97.	% Rec	5579	7/18/01	0:21
VOA Surr, 4-BFB	97.	% Rec	5582	7/18/01	0:21
VOA Surr, DBFM	96.	% Rec	5579	7/18/01	0:21
VOA Surr, DBFM	96.	% Rec	5582	7/18/01	0:21
BNA Surr-Nitrobenzene-d5	84.	% Rec	5221	7/20/01	18:19
BNA Surr-2-Fluorobiphenyl	80.	% Rec	5221	7/20/01	18:19
BNA Surr-Terphenyl d14	95.	% Rec	5221	7/20/01	18:19

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
METALS					
Lead	< 0.0030	mg/l	2539	7/18/01	16:12

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PROJECT QUALITY CONTROL DATA

Project Number: 300388

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
-----	-----	-----	-----	-----	-----

MISC PARAMETERS

Nitrate-N as N	< 0.100	mg/l	2028	7/17/01	20:20
Sulfate	< 1.00	mg/l	2029	7/17/01	15:45

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
-----	-----	-----	-----	-----	-----

MISC PARAMETERS

Ethylene Dibromide	< 0.00002	mg/l	2126	7/18/01	1:21
Methane	< 0.026	mg/L	2114	7/18/01	15:21

- Value outside Laboratory historical QC limits.

End of Report for Project 245498

TEST AMERICA, INC.-NASHVILLE
COOLER RECEIPT FORM

Client: SEI Env.

BC# 245498

Cooler Received On: 7/17/01 And Opened On: 7/17/01 By: Mike McBride

Mike McBride
(Signature)

1. Temperature of Cooler when opened 2° Degrees Celsius
2. Were custody seals on outside of cooler and intact?.....YES NO

 - a. If yes, what kind and where: () FRONT/BACK/SIDE
 - b. Were the signature and date correct?.....YES NO
 - c. Were custody seals on containers and intact?.....YES NO

3. Were custody papers inside cooler?.....YES NO
4. Were custody papers properly filled out (ink, signed, etc)?.....YES NO
5. Did you sign the custody papers in the appropriate place?.....YES NO
6. What kind of packing material used? BUBBLEWRAP PEANUTS VERMICULITE OTHER
7. Was sufficient ice used (if appropriate)?.....YES NO
8. Did all bottles arrive in good condition (unbroken)?.....YES NO
9. Were all bottle labels complete (#, date, signed, pres, etc)?.....YES NO
10. Did all bottle labels and tags agree with custody papers?.....YES NO
11. Were correct bottles used for the analysis requested?.....YES NO
12. Were VOA vials present?.....YES NO
 - a. If so were air bubbles present?.....YES NO
13. Was sufficient amount of sample sent in each bottle?.....YES NO
14. Were correct preservatives used?.....YES NO
15. Was residual chlorine present?.....NO YES
16. Corrective action taken, if necessary:
 - a. Name of person contacted: _____
 - b. Date: _____

TestAmerica
INCORPORATED

Division/Laboratory Name:

FAX CHAIN TO COLUMBIA

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

Client Name SE7 ENVIRONMENTAL INC Client #: 8990

Address: 3021 McNAULTON DR SUITE 9

City/State/Zip Code: COLUMBIA, SC 29223

Project Manager: BOB BOLTON

Telephone Number: (803) 788-2535 Fax: (803) 788-2399

Sampler Name: (Print Name) JEFF WEYAND, JEFF MONEGAN

Sampler Signature: Jeff Weyand Jeff Monegan

245418

TAT Standard
Rush (surcharges may apply)

Date Needed: 7/24/01

Fax Results: Y NO

SAMPLE ID

MWST

Date Sampled

Time Sampled

G = Grab, C = Composite

Field Filtered

SL - Sludge DW - Drinking Water

GW - Groundwater S - Solid

WW - Wastewater Specify Other

HNO₃

HCl

NaOH

H₂SO₄

Methanol

Name

Other (Specify)

BTX, HAPKUMATE

PAN - 8270C

LEAD - 200.7

EDTA - 8011

2 - RATE (SULFATE)

3 - STOIC

2 - TANDEM IN

1 - MECHANICAL

ASK 125

Analyze For:

QC Deliverables
None
Level 2
(Batch QC)
Level 3
Level 4
Other: _____

REMARKS

01-A 98242

43

44

45

46

98247

Special Instructions:

* TB - BTX ONLY

Relinquished By: Jeff Date: 7/14/01 Time: 1500

Received By: _____

LABORATORY COMMENTS

Initial Temp: _____

Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____

Relinquished By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____

Custody Seal: N/A N/A

Bottles Shipped by TestAmerica:

Method Used: _____

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A120261
 Sample ID: MW9
 Sample Type: Water
 Site ID:

Project: 300388
 Project Name: HIGHWAY 11 GROC. AMOCO
 Sampler: JOHN MONEGHAN

Date Collected: 8/27/01
 Time Collected: 12:20
 Date Received: 8/28/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
Acenaphthene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
Anthracene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
Fluoranthene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
Fluorene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
Pyrene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
Benzo(a)anthracene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
Benzo(a)pyrene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
Benzo(b)fluoranthene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
Benzo(k)fluoranthene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
Chrysene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
Dibenzo(a,h)anthracene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
Acenaphthylene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
Benzo(g,h,i)perylene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
Phenanthrene	ND	ug/l	5.00	5.00	1	9/ 4/01	1:33	LMcDaniel	8270C	2880
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	8/31/01	6:49	J.Haley	8260B	2248
Toluene	ND	ug/l	2.0	2.0	1	8/31/01	6:49	J.Haley	8260B	2248
Ethylbenzene	ND	ug/l	2.0	2.0	1	8/31/01	6:49	J.Haley	8260B	2248
Xylenes, Total	ND	ug/l	2.0	2.0	1	8/31/01	6:49	J.Haley	8260B	2248
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	8/31/01	6:49	J.Haley	8260B	2248
Naphthalene	ND	ug/l	5.0	5.0	1	8/31/01	6:49	J.Haley	8260B	2248
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	9/ 2/01	20:00	Henderson	8011	2973

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A120261
 Sample ID: MW9
 Project: 300388
 Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
MISCELLANEOUS GC PARAMETERS										
Methane	715.	ug/l	26.0	26.0	1	8/29/01	10:35	K. Stewart	RSK175M	546
METALS										
Ferrous Iron	5370	ug/L	200.	100.	2	8/28/01	18:52	S. Duncan	3500D	9857
Lead	617.	ug/L	3.00	3.00	1	8/29/01	15:42	G.McCord	6010B	257
MISCELLANEOUS CHEMISTRY										
Nitrate-N as N	0.24	mg/l	0.10	0.10	1	8/28/01	15:50	S. Overton	9056	9854
Sulfate	1.83	mg/l	1.00	1.00	1	8/28/01	15:50	S. Overton	9056	9854

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
BNA's	980. ml	1.0 ml	8/29/01		D.Yeager	3510/625

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	110.	68. - 143.
VOA Surr Toluene-d8	114.	78. - 127.
VOA Surr, 4-BFB	91.	73. - 127.
VOA Surr, DBFM	126.	76. - 135.
BNA Surr-Nitrobenzene-d5	64.	20. - 118.
BNA Surr-2-Fluorobiphenyl	52.	18. - 116.
BNA Surr-Terphenyl-d14	25.	10. - 119.
BNA Surr-Phenol-d5	10.	10. - 69.
BNA Surr-2-Fluorophenol	16.	10. - 148.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A120261
Sample ID: MW9
Project: 300388
Page 3

Surrogate	% Recovery	Target Range
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BNA Surr-2,4,6-Tribromophenol 35. 17. - 155.

= Recovery outside Laboratory historical or method prescribed limits.

Sample for Ferrous Iron analysis received outside method
prescribed holding time.

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

Report Approved By: Gail A. Lage

Report Date: 9/ 5/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A120262
 Sample ID: MW11
 Sample Type: Water
 Site ID:

Project: 300388

Date Collected: 8/27/01
 Time Collected: 14:10
 Date Received: 8/28/01
 Time Received: 9:00

Project Name: HIGHWAY 11 GROC. AMOCO
 Sampler: JOHN MONEGHAN

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
Acenaphthene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
Anthracene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
Fluoranthene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
Fluorene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
Pyrene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
Benzo(a)anthracene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
Benzo(a)pyrene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
Benzo(b)fluoranthene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
Benzo(k)fluoranthene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
Chrysene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
Dibenzo(a,h)anthracene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
Acenaphthylene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
Benzo(g,h,i)perylene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
Phenanthrene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:09	LMcDaniel	8270C	2880
VOLATILE ORGANICS										
Benzene	398.	ug/l	10.0	2.0	5	8/31/01	11:26	J.Haley	8260B	2283
Toluene	2.3	ug/l	2.0	2.0	1	8/31/01	7:19	J.Haley	8260B	2248
Ethylbenzene	4.4	ug/l	2.0	2.0	1	8/31/01	7:19	J.Haley	8260B	2248
Xylenes, Total	170.	ug/l	2.0	2.0	1	8/31/01	7:19	J.Haley	8260B	2248
Methyl-t-butyl ether	65.0	ug/l	2.0	2.0	1	8/31/01	7:19	J.Haley	8260B	2248
Naphthalene	ND	ug/l	5.0	5.0	1	8/31/01	7:19	J.Haley	8260B	2248
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	9/ 2/01	20:27	Henderson	8011	2973

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A120262
 Sample ID: MW11
 Project: 300388
 Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
MISCELLANEOUS GC PARAMETERS										
Methane	ND	ug/l	26.0	26.0	1	8/29/01	10:39	K. Stewart	RSK175M	546
METALS										
Ferrous Iron	6880	ug/L	200.	100.	2	8/28/01	18:52	S. Duncan	3500D	9857
Lead	324.	ug/L	3.00	3.00	1	8/29/01	15:42	G.McCord	6010B	257
MISCELLANEOUS CHEMISTRY										
Nitrate-N as N	0.18	mg/l	0.10	0.10	1	8/28/01	15:50	S. Overton	9056	9854
Sulfate	1.58	mg/l	1.00	1.00	1	8/28/01	15:50	S. Overton	9056	9854

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
BNA's	980. ml	1.0 ml	8/29/01		D.Yeager	3510/625

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	109.	68. - 143.
VOA Surr Toluene-d8	121.	78. - 127.
VOA Surr, 4-BFB	90.	73. - 127.
VOA Surr, DBFM	123.	76. - 135.
BNA Surr-Nitrobenzene-d5	69.	20. - 118.
BNA Surr-2-Fluorobiphenyl	57.	18. - 116.
BNA Surr-Terphenyl-d14	26.	10. - 119.
BNA Surr-Phenol-d5	12.	10. - 69.
BNA Surr-2-Fluorophenol	21.	10. - 148.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A120262
Sample ID: MW11
Project: 300388
Page 3

Surrogate	% Recovery	Target Range
BNA Surr-2,4,6-Tribromophenol	64.	17. - 155.

BNA Surr-2,4,6-Tribromophenol 64. 17. - 155.

= Recovery outside Laboratory historical or method prescribed limits.

Sample for Ferrous Iron analysis received outside method
prescribed holding time.

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

Report Approved By: Eric S. Smith

Report Date: 9/ 5/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.



ANALYTICAL REPORT

SEI 8990
BOB BOLTON
3021 MCNAUGHTON DR. STE 9
COLUMBIA, SC 29223

Lab Number: 01-A120263
Sample ID: MW12
Sample Type: Water
Site ID:

Project: 300388
Project Name: HIGHWAY 11 GROC. AMOCO
Sampler: JOHN MONEGHAN

Date Collected: 8/27/01
Time Collected: 13:00
Date Received: 8/28/01
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
Acenaphthene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
Anthracene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
Fluoranthene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
Fluorene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
Pyrene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
Benzo(a)anthracene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
Benzo(a)pyrene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
Benzo(b)fluoranthene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
Benzo(k)fluoranthene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
Chrysene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
Dibenzo(a,h)anthracene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
Acenaphthylene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
Benzo(g,h,i)perylene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
Phenanthrene	ND	ug/l	5.00	5.00	1	9/ 4/01	2:45	LMcDaniel	8270C	2880
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	8/31/01	7:49	J.Haley	8260B	2248
Toluene	ND	ug/l	2.0	2.0	1	8/31/01	7:49	J.Haley	8260B	2248
Ethylbenzene	ND	ug/l	2.0	2.0	1	8/31/01	7:49	J.Haley	8260B	2248
Xylenes, Total	ND	ug/l	2.0	2.0	1	8/31/01	7:49	J.Haley	8260B	2248
Methyl-t-butyl ether	4.7	ug/l	2.0	2.0	1	8/31/01	7:49	J.Haley	8260B	2248
Naphthalene	ND	ug/l	5.0	5.0	1	8/31/01	7:49	J.Haley	8260B	2248
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	9/ 2/01	21:23	Henderson	8011	2973

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A120263
 Sample ID: MW12
 Project: 300388
 Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>										
MISCELLANEOUS GC PARAMETERS										
Methane	ND	ug/l	26.0	26.0	1	8/29/01	10:44	K. Stewart	RSK175M	546
<hr/>										
METALS										
Ferrous Iron	4430	ug/L	200.	100.	2	8/28/01	18:52	S. Duncan	3500D	9857
Lead	93.0	ug/L	3.00	3.00	1	8/29/01	15:42	G.McCord	6010B	257
<hr/>										
MISCELLANEOUS CHEMISTRY										
Nitrate-N as N	0.15	mg/l	0.10	0.10	1	8/28/01	15:50	S. Overton	9056	9854
Sulfate	2.66	mg/l	1.00	1.00	1	8/28/01	15:50	S. Overton	9056	9854

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
BNA's	960. ml	1.0 ml	8/29/01		D.Yeager	3510/625

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	109.	68. - 143.
VOA Surr Toluene-d8	109.	78. - 127.
VOA Surr, 4-BFB	93.	73. - 127.
VOA Surr, DBFM	127.	76. - 135.
BNA Surr-Nitrobenzene-d5	71.	20. - 118.
BNA Surr-2-Fluorobiphenyl	61.	18. - 116.
BNA Surr-Terphenyl-d14	22.	10. - 119.
BNA Surr-Phenol-d5	12.	10. - 69.
BNA Surr-2-Fluorophenol	21.	10. - 148.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A120263
Sample ID: MW12
Project: 300388
Page 3

Surrogate	% Recovery	Target Range
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BNA Surrogate-2,4,6-Tribromophenol	53.	17. - 155.
------------------------------------	-----	------------

- Recovery outside Laboratory historical or method prescribed limits.

Sample for Ferrous Iron analysis received outside method
prescribed holding time.

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

Report Approved By: Michael Dunn

Report Date: 9/ 5/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.



ANALYTICAL REPORT

SEI 8990
BOB BOLTON
3021 MCNAUGHTON DR. STE 9
COLUMBIA, SC 29223

Lab Number: 01-A120264
Sample ID: CK-1
Sample Type: Water
Site ID:

Project: 300388
Project Name: HIGHWAY 11 GROC. AMOCO
Sampler: JOHN MONEGHAN

Date Collected: 8/27/01
Time Collected: 12:35
Date Received: 8/28/01
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
Acenaphthene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
Anthracene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
Fluoranthene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
Fluorene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
Pyrene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
Benzo(a)anthracene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
Benzo(a)pyrene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
Benzo(b)fluoranthene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
Benzo(k)fluoranthene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
Chrysene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
Dibenzo(a,h)anthracene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
Acenaphthylene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
Benzo(g,h,i)perylene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
Phenanthrene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:21	LMcDaniel	8270C	2880
VOLATILE ORGANICS										
Benzene	53.4	ug/l	2.0	2.0	1	8/30/01	19:20	J.Haley	8260B	2248
Toluene	78.0	ug/l	2.0	2.0	1	8/30/01	19:20	J.Haley	8260B	2248
Ethylbenzene	15.2	ug/l	2.0	2.0	1	8/30/01	19:20	J.Haley	8260B	2248
Xylenes, Total	77.8	ug/l	2.0	2.0	1	8/30/01	19:20	J.Haley	8260B	2248
Methyl-t-butyl ether	46.7	ug/l	2.0	2.0	1	8/30/01	19:20	J.Haley	8260B	2248
Naphthalene	ND	ug/l	5.0	5.0	1	8/30/01	19:20	J.Haley	8260B	2248
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	9/ 2/01	21:50	Henderson	8011	2973

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A120264
 Sample ID: CK-1
 Project: 300388
 Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
MISCELLANEOUS GC PARAMETERS										
Methane	331.	ug/l	26.0	26.0	1	8/29/01	10:52	K. Stewart	RSK175M	546
METALS										
Ferrous Iron	247.	ug/L	100.	100.	1	8/28/01	18:52	S. Duncan	3500D	9857
Lead	ND	ug/L	3.00	3.00	1	8/29/01	15:42	G.McCord	6010B	257
MISCELLANEOUS CHEMISTRY										
Nitrate-N as N	0.26	mg/l	0.10	0.10	1	8/28/01	15:50	S. Overton	9056	9854
Sulfate	1.28	mg/l	1.00	1.00	1	8/28/01	15:50	S. Overton	9056	9854

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
BNA's	1000 ml	1.0 ml	8/29/01		D.Yeager	3510/625

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	106.	68. - 143.
VOA Surr Toluene-d8	112.	78. - 127.
VOA Surr, 4-BFB	97.	73. - 127.
VOA Surr, DBFM	119.	76. - 135.
BNA Surr-Nitrobenzene-d5	72.	20. - 118.
BNA Surr-2-Fluorobiphenyl	60.	18. - 116.
BNA Surr-Terphenyl-d14	42.	10. - 119.
BNA Surr-Phenol-d5	12.	10. - 69.
BNA Surr-2-Fluorophenol	24.	10. - 148.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A120264
Sample ID: CK-1
Project: 300388
Page 3

Surrogate	% Recovery	Target Range
BNA Surr-2,4,6-Tribromophenol	60.	17. - 155.

= Recovery outside Laboratory historical or method prescribed limits.

Sample for Ferrous Iron analysis received outside method
prescribed holding time.

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

Report Approved By: Michael Dunn

Report Date: 9/ 5/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A120265
 Sample ID: CK-2
 Sample Type: Water
 Site ID:

Project: 300388

Date Collected: 8/27/01
 Time Collected: 14:45
 Date Received: 8/28/01
 Time Received: 9:00

Project Name: HIGHWAY 11 GROC. AMOCO
 Sampler: JOHN MONEGHAN

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
Acenaphthene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
Anthracene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
Fluoranthene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
Fluorene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
Pyrene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
Benzo(a)anthracene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
Benzo(a)pyrene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
Benzo(b)fluoranthene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
Benzo(k)fluoranthene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
Chrysene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
Dibenzo(a,h)anthracene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
Acenaphthylene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
Benzo(g,h,i)perylene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
Phenanthrene	ND	ug/l	5.00	5.00	1	9/ 4/01	3:57	LMcDaniel	8270C	2880
VOLATILE ORGANICS										
Benzene	ND	ug/l	2.0	2.0	1	8/30/01	19:50	J.Haley	8260B	2248
Toluene	ND	ug/l	2.0	2.0	1	8/30/01	19:50	J.Haley	8260B	2248
Ethylbenzene	ND	ug/l	2.0	2.0	1	8/30/01	19:50	J.Haley	8260B	2248
Xylenes, Total	ND	ug/l	2.0	2.0	1	8/30/01	19:50	J.Haley	8260B	2248
Methyl-t-butyl ether	ND	ug/l	2.0	2.0	1	8/30/01	19:50	J.Haley	8260B	2248
Naphthalene	ND	ug/l	5.0	5.0	1	8/30/01	19:50	J.Haley	8260B	2248
Ethylene Dibromide	ND	ug/l	0.02	0.02	1	9/ 2/01	22:18	Henderson	8011	2973

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A120265
 Sample ID: CK-2
 Project: 300388
 Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
MISCELLANEOUS GC PARAMETERS										
Methane	ND	ug/l	26.0	26.0	1	8/29/01	11:05	K. Stewart	RSK175M	546
METALS										
Ferrous Iron	716.	ug/L	100.	100.	1	8/28/01	18:52	S. Duncan	3500D	9857
Lead	ND	ug/L	3.00	3.00	1	8/29/01	15:42	G.McCord	6010B	257
MISCELLANEOUS CHEMISTRY										
Nitrate-N as N	0.73	mg/l	0.10	0.10	1	8/28/01	15:50	S. Overton	9056	9854
Sulfate	2.35	mg/l	1.00	1.00	1	8/28/01	15:50	S. Overton	9056	9854

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
BNA's	990. ml	1.0 ml	8/29/01		D.Yeager	3510/625

Surrogate	% Recovery	Target Range
VOA Surr 1,2-DCA-d4	107.	68. - 143.
VOA Surr Toluene-d8	108.	78. - 127.
VOA Surr, 4-BFB	93.	73. - 127.
VOA Surr, DBFM	119.	76. - 135.
BNA Surr-Nitrobenzene-d5	87.	20. - 118.
BNA Surr-2-Fluorobiphenyl	75.	18. - 116.
BNA Surr-Terphenyl-d14	39.	10. - 119.
BNA Surr-Phenol-d5	15.	10. - 69.
BNA Surr-2-Fluorophenol	30.	10. - 148.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A120265
Sample ID: CK-2
Project: 300388
Page 3

Surrogate	% Recovery	Target Range
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BNA Surr-2,4,6-Tribromophenol	78.	17. - 155.
-------------------------------	-----	------------

- Recovery outside Laboratory historical or method prescribed limits.

Sample for Ferrous Iron analysis received outside method prescribed holding time.

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

Report Approved By: Michael Dunn

Report Date: 9/ 5/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

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PROJECT QUALITY CONTROL DATA
Project Number: 300388

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
UST ANALYSIS								
Acenaphthene	mg/l	< 0.00100	0.0520	0.0500	104	30. - 109.	2880	BLANK
Pyrene	mg/l	< 0.00100	0.0520	0.0500	104#	26. - 102.	2880	BLANK

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
VOA PARAMETERS								

Benzene	mg/l	< 0.00200	0.05580	0.05000	112	68. - 136.	2248	01-A120316
Toluene	mg/l	< 0.00200	0.05550	0.05000	111	68. - 135.	2248	01-A120316
VOA Surr 1,2-DCA-d4	% Rec				108	68. - 143.	2248	
VOA Surr Toluene-d8	% Rec				110	78. - 127.	2248	
VOA Surr, 4-BFB	% Rec				111	73. - 127.	2248	
VOA Surr, DBFM	% Rec				121	76. - 135.	2248	
BNA Surr-Nitrobenzene-d5	% Rec				110	20. - 118.	2880	
BNA Surr-2-Fluorobiphenyl	% Rec				99	18. - 116.	2880	
BNA Surr-Terphenyl-d14	% Rec				98	10. - 119.	2880	
BNA Surr-Phenol-d5	% Rec				115	10. - 69.	2880	
BNA Surr-2-Fluorophenol	% Rec				98	10. - 148.	2880	
BNA Surr-2,4,6-Tribromopheno% Rec					114	17. - 155.	2880	

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
METALS								
Lead	mg/l	< 0.0030	0.0530	0.0500	106	80 - 120	257	Duplicate

Project QC continued . . .

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
MISC PARAMETERS								
Nitrate-N as N	mg/l	0.24	2.31	2.50	83	80 - 120	9854	01-A120261
Sulfate	mg/l	1.83	14.7	15.0	86	80 - 120	9854	01-A120261
Ethylene Dibromide	mg/l	< 0.00002	0.00030	0.00029	103	40 - 140	2973	blank

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
UST PARAMETERS						
Acenaphthene	mg/l	0.0520	0.0570	9.17	39.	2880
Pyrene	mg/l	0.0520	0.0560	7.41	37.	2880

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
VOA PARAMETERS						
Benzene	mg/l	0.05580	0.05610	0.54	20.	2248
Toluene	mg/l	0.05550	0.05480	1.27	22.	2248
VOA Surr 1,2-DCA-d4	% Rec		111.			2248
VOA Surr Toluene-d8	% Rec		110.			2248
VOA Surr, 4-BFB	% Rec		111.			2248
VOA Surr, DBFM	% Rec		121.			2248
BNA Surr-Nitrobenzene-d5	% Rec		124.			2880
BNA Surr-2-Fluorobiphenyl	% Rec		115.			2880
BNA Surr-Terphenyl-d14	% Rec		110.			2880
BNA Surr-Phenol-d5	% Rec		128.			2880
BNA Surr-2-Fluorophenol	% Rec		112.			2880
BNA Surr-2,4,6-Tribromophenol	% Rec		130.			2880

Project QC continued . . .

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Lead	mg/l	0.0530	0.0560	5.50	20	257

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Ethylene Dibromide	mg/l	0.00030	0.00030	0.00	50	2973
Methane	mg/L	1.40	1.20	15.38	50	546

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Nitrate-N as N	mg/l	2.31	2.43	5.06	20	9854
Sulfate	mg/l	14.7	15.3	4.00	20	9854

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Naphthalene	mg/l	0.0500	0.0530	106	34 - 112	2880
Acenaphthene	mg/l	0.0500	0.0550	110	35 - 116	2880
Anthracene	mg/l	0.0500	0.0550	110	42 - 112	2880
Fluoranthene	mg/l	0.0500	0.0560	112	41 - 119	2880
Fluorene	mg/l	0.0500	0.0550	110	38 - 117	2880
Pyrene	mg/l	0.0500	0.0570	114	36 - 121	2880

Project QC continued . . .

TestAmerica

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PROJECT QUALITY CONTROL DATA
Project Number: 300388

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Benzo(a)anthracene	mg/l	0.0500	0.0580	116	38 - 121	2880
Benzo(a)pyrene	mg/l	0.0500	0.0580	116	38 - 126	2880
Benzo(b)fluoranthene	mg/l	0.0500	0.0630	126 #	30 - 122	2880
Benzo(k)fluoranthene	mg/l	0.0500	0.0570	114	37 - 133	2880
Chrysene	mg/l	0.0500	0.0570	114	38 - 122	2880
Dibenzo(a,h)anthracene	mg/l	0.0500	0.0610	122	20 - 140	2880
Indeno(1,2,3-cd)pyrene	mg/l	0.0500	0.0510	102	19 - 136	2880
Acenaphthylene	mg/l	0.0500	0.0530	106	38 - 115	2880
Benzo(g,h,i)perylene	mg/l	0.0500	0.0570	114	14 - 150	2880
Phenanthrene	mg/l	0.0500	0.0570	114	40 - 116	2880

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch

****VOA PARAMETERS****

Benzene	mg/l	0.05000	0.05390	108	74 - 123	2248
Benzene	mg/l	0.05000	0.05780	116	74 - 123	2283
Ethylbenzene	mg/l	0.05000	0.05350	107	80 - 121	2248
Naphthalene	mg/l	0.0500	0.0538	108	48 - 164	2248
Toluene	mg/l	0.05000	0.05440	109	74 - 125	2248
Xylenes, Total	mg/l	0.1500	0.1681	112	80 - 122	2248
Methyl-t-butyl ether	mg/l	0.0500	0.0445	89	68 - 127	2248
Methane	mg/L	1.33	1.40	105	82 - 121	546
VOA Surr 1,2-DCA-d4	% Rec			102	82 - 121	2248
VOA Surr 1,2-DCA-d4	% Rec			108	82 - 121	2283
VOA Surr Toluene-d8	% Rec			108	82 - 121	2248
VOA Surr Toluene-d8	% Rec			111	82 - 121	2283
VOA Surr, 4-BFB	% Rec			113	82 - 121	2248
VOA Surr, 4-BFB	% Rec			114	82 - 121	2283
VOA Surr, DBFM	% Rec			111	82 - 121	2248
VOA Surr, DBFM	% Rec			118	82 - 121	2283

Project QC continued . . .

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PROJECT QUALITY CONTROL DATA
Project Number: 300388

BNA Surr-Nitrobenzene-d5	% Rec	106	82 - 121	2880
BNA Surr-2-Fluorobiphenyl	% Rec	105	82 - 121	2880
BNA Surr-Terphenyl-d14	% Rec	113	82 - 121	2880
BNA Surr-Phenol-d5	% Rec	115	82 - 121	2880
BNA Surr-2-Fluorophenol	% Rec	117	82 - 121	2880
BNA Surr-2,4,6-Tribromophenol	% Rec	142	82 - 121	2880

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
METALS						
Lead	mg/l	0.0500	0.0540	108	80 - 120	257

Continuing Calibration Verification

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
METALS						

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
MISC PARAMETERS						
Methane	mg/L	1.33	1.40	105	82 - 121	546

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----
MISC PARAMETERS						
Nitrate-N as N	mg/l	2.50	2.39	96	90 - 110	9854
Sulfate	mg/l	15.0	14.9	99	90 - 110	9854

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PROJECT QUALITY CONTROL DATA
Project Number: 300388

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
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****UST PARAMETERS****

Naphthalene	< 0.00100	mg/l	2880	9/ 3/01	21:21
Acenaphthene	< 0.00100	mg/l	2880	9/ 3/01	21:21
Anthracene	< 0.00100	mg/l	2880	9/ 3/01	21:21
Fluoranthene	< 0.00100	mg/l	2880	9/ 3/01	21:21
Fluorene	< 0.00100	mg/l	2880	9/ 3/01	21:21
Pyrene	< 0.00100	mg/l	2880	9/ 3/01	21:21
Benzo(a)anthracene	< 0.00100	mg/l	2880	9/ 3/01	21:21
Benzo(a)pyrene	< 0.00100	mg/l	2880	9/ 3/01	21:21
Benzo(b)fluoranthene	< 0.00100	mg/l	2880	9/ 3/01	21:21
Benzo(k)fluoranthene	< 0.00100	mg/l	2880	9/ 3/01	21:21
Chrysene	< 0.00100	mg/l	2880	9/ 3/01	21:21
Dibenzo(a,h)anthracene	< 0.00200	mg/l	2880	9/ 3/01	21:21
Indeno(1,2,3-cd)pyrene	< 0.00200	mg/l	2880	9/ 3/01	21:21
Acenaphthylene	< 0.00100	mg/l	2880	9/ 3/01	21:21
Benzo(g,h,i)perylene	< 0.00200	mg/l	2880	9/ 3/01	21:21
Phenanthrene	< 0.00100	mg/l	2880	9/ 3/01	21:21

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
---------	-------------	-------	------------	---------------	---------------

****VOA PARAMETERS****

Benzene	< 0.00060	mg/l	2248	8/30/01	3:19
Benzene	< 0.00060	mg/l	2283	8/31/01	3:20
Ethylbenzene	< 0.00070	mg/l	2248	8/30/01	3:19
Naphthalene	< 0.0006	mg/l	2248	8/30/01	3:19
Toluene	< 0.00050	mg/l	2248	8/30/01	3:19
Xylenes, Total	< 0.00080	mg/l	2248	8/30/01	3:19
Methyl-t-butyl ether	< 0.0003	mg/l	2248	8/30/01	3:19

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number: 300388

VOA Surr 1,2-DCA-d4	103.	% Rec	2248	8/30/01	3:19
VOA Surr 1,2-DCA-d4	106.	% Rec	2283	8/31/01	3:20
VOA Surr Toluene-d8	108.	% Rec	2248	8/30/01	3:19
VOA Surr Toluene-d8	110.	% Rec	2283	8/31/01	3:20
VOA Surr, 4-BFB	95.	% Rec	2248	8/30/01	3:19
VOA Surr, 4-BFB	88.	% Rec	2283	8/31/01	3:20
VOA Surr, DBFM	112.	% Rec	2248	8/30/01	3:19
VOA Surr, DBFM	118.	% Rec	2283	8/31/01	3:20
BNA Surr-Nitrobenzene-d5	119.	% Rec	2880	9/ 3/01	21:21
BNA Surr-2-Fluorobiphenyl	110.	% Rec	2880	9/ 3/01	21:21
BNA Surr-Terphenyl-d14	116.	% Rec	2880	9/ 3/01	21:21
BNA Surr-Phenol-d5	134.	% Rec	2880	9/ 3/01	21:21
BNA Surr-2-Fluorophenol	123.	% Rec	2880	9/ 3/01	21:21
BNA Surr-2,4,6-Tribromophenol	114.	% Rec	2880	9/ 3/01	21:21

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
---------	-------------	-------	------------	---------------	---------------

****MISC PARAMETERS****

Nitrate-N as N	< 0.10	mg/l	9854	8/28/01	15:50
Sulfate	< 1.00	mg/l	9854	8/28/01	15:50

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
---------	-------------	-------	------------	---------------	---------------

****MISC PARAMETERS****

Ethylene Dibromide	< 0.00002	mg/l	2973	9/ 2/01	16:18
Methane	< 0.026	mg/L	546	8/29/01	9:49

- Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 250757

TestAmerica

INCORPORATED
COOLER RECEIPT FORM

Client: SEI Environmental BC# 250757

Cooler Received On: 8-28-01 And Opened On: 8-28-01 By: CRAIG COTHRON


(Signature)

1. Temperature of Cooler when opened 4.0 DEGREES C
2. Were custody seals on outside of cooler and intact?.....YES NO
a. If yes, what kind and where: _____
- b. Were the signature and date correct?.....YES NO
3. Were custody seals on containers intact?.....YES NO
4. Were custody papers inside cooler?.....YES NO
5. Were custody papers properly filled out (ink, signed, etc)?.....YES NO
6. Did you sign the custody papers in the appropriate place?.....YES NO
7. What kind of packing material used? Bubblewrap Peanuts Other None
8. Was sufficient ice used (if appropriate)?.....YES NO
9. Did all bottles arrive in good condition (unbroken)?.....YES NO
10. Were all bottle labels complete (#, date, signed, pres, etc)?.....YES NO
11. Did all bottle labels and tags agree with custody papers?.....YES NO
12. Were correct bottles used for the analysis requested?.....YES NO
13. If present, was any observable VOA headspace present?.....YES NO
14. If present, were VOA vials checked for absence of air bubbles and noted if found?....YES NO
15. Was sufficient amount of sample sent in each bottle?.....YES NO
16. Were correct preservatives used?.....YES NO
17. Was residual chlorine present (if appropriate)?.....YES NO
18. Corrective action taken, if necessary:
 - a. Name of person contacted: SEE ATTACHED FOR RESOLUTION
 - b. Date: _____

TestAmerica INCORPORATED

Division/Laboratory Name: TO COLUMBIA

FAX CHAIN

TO COLUMBIA

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

Client Name: SEI ENVIRONMENTAL INC Client #: 8990
Address: 3021 McNAGHTON RD SUITE 9.
City/State/Zip Code: COLUMBIA, SC 29223
Project Manager: BOB BOYTON
Telephone Number: (803) 788-2335 Fax: (803) 788-2399
ler Name: (Print Name) JEFF MONIGHTON
Sampler Signature: [Signature]

Project Name:	HIGHWAY 11 Grade (AMoco)		
Project #:	<u>300308</u>		
Site/Location ID:	_____	State:	_____
Report To:	_____		
Invoice To:	_____		
Quote #:	PO#:		

Special Instructions:

<i>DR Morgan</i>	8/27/01	1700	Received By:	Date:	Time:	Re-Lab Test(s): <input checked="" type="checkbox"/> Y <input type="checkbox"/> N N/A
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Screen Suppression by TestAmerica: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Method of Shipment:

Utility	On-site or Distance / Direction from site	Depth to Utility
Water	On-site	2 to 4 feet
Electric	On-site	2 to 4 feet
Telephone	On-site and along SC Highway 11	2 to 3 feet

Description of Receptor	Distance / Direction from site
Water Well, identified as WW-1	On-site
Water Well	Approximately 500 feet northeast of site
Fall Creek	Approximately 300 feet northeast of site
Tributary to Fall Creek	Approximately 150 feet south of site

A. CURRENT LAND USE - Identify any potential receptors or human exposure pathways (e.g. basements, contaminated soils from UST closures, etc.) within a 1000-foot radius for current land use. Complete the table below. Additional sheets may be attached if necessary.

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	<u>No</u>	Odors not detected	
	Explosion Hazard	Yes	<u>No</u>	Odors not detected	
Ground Water	Ingestion	<u>Yes</u>	No	One water well (WW-1) is located approximately 150 feet northwest of Monitor Well MW-1.	Laboratory results failed to detect petroleum hydrocarbons in this well.
	Dermal Contact	<u>Yes</u>	No		
	Volatile Inhalation	<u>Yes</u>	No		
Surface Water	Ingestion	<u>Yes</u>	No	Fall Creek is located approximately 300 feet northeast of the site.	Laboratory results detected petroleum hydrocarbons in Fall Creek
	Dermal Contact	<u>Yes</u>	No		
	Volatile Inhalation	<u>Yes</u>	No		
Surficial Soil	Ingestion	Yes	<u>No</u>	The surface is not completely paved with asphalt and/or concrete; however, no surface staining of soils is evident.	
	Dermal Contact	Yes	<u>No</u>		
	Volatile Inhalation	Yes	<u>No</u>		
	Leaching to Ground-Water	Yes	<u>No</u>		
Subsurface Soil	Ingestion	Yes	<u>No</u>	The surface is not completely paved with asphalt and/or concrete; however, no surface staining of soils is evident.	
	Dermal Contact	Yes	<u>No</u>		
	Volatile Inhalation	Yes	<u>No</u>		
	Leaching to Ground-Water	<u>Yes</u>	No		

B. FUTURE LAND USE - Identify any potential receptors or human exposure pathways (e.g. basements, contaminated soils from UST closures, etc.) within a 1000-foot radius for current land use. Complete the table below. Additional sheets may be attached if necessary.

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	<u>No</u>	Odors not detected	
	Explosion Hazard	Yes	<u>No</u>	Odors not detected	
Ground Water	Ingestion	<u>Yes</u>	No	One water well (WW-1) is located approximately 150 feet northwest of Monitor Well MW-1.	Laboratory results failed to detect petroleum hydrocarbons in this well.
	Dermal Contact	<u>Yes</u>	No		
	Volatile Inhalation	<u>Yes</u>	No		
Surface Water	Ingestion	<u>Yes</u>	No	Fall Creek is located approximately 300 feet northeast of the site.	Laboratory results detected petroleum hydrocarbons in Fall Creek
	Dermal Contact	<u>Yes</u>	No		
	Volatile Inhalation	<u>Yes</u>	No		
Surficial Soil	Ingestion	Yes	<u>No</u>	The surface is not completely paved with asphalt and/or concrete; however, no surface staining of soils is evident.	
	Dermal Contact	Yes	<u>No</u>		
	Volatile Inhalation	Yes	<u>No</u>		
	Leaching to Ground-Water	Yes	<u>No</u>		
Subsurface Soil	Ingestion	Yes	<u>No</u>	The surface is not paved with asphalt and/or concrete; however, no surface staining of soils is evident.	
	Dermal Contact	Yes	<u>No</u>		
	Volatile Inhalation	Yes	<u>No</u>		
	Leaching to Ground-Water	<u>Yes</u>	No		

Leachability Input Parameters

**South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management**

Site Data

Facility Name: Highway 11 Grocery Site ID # 03439

Input Parameters

Percent Sand in soil	<u>63</u>	%	5% < sand < 70%	
Percent Clay in soil	<u>10</u>	%	5% < clay < 60%	
DAF	<u>8</u>			
Worst Case Soil Analyses	Benzene Toluene Ethylbenzene Xylenes Naphthalene Other CoC	<u>93.68</u> <u>678.2</u> <u>678.2</u> <u>1061</u> <u>110.3</u> <u> </u>	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	C _s C _s C _s C _s C _s C _s

Figure

Natural organic carbon content	<u><1000</u>	mg/Kg	f _{oc}
TPH	<u>57.6</u>	mg/Kg	TPH
Porosity	<u>0.48</u>	decimal %	ϕ
Residual water content	<u>0.04</u>	decimal %	W _r
Bulk density of soil	<u>1.45</u>	g/cc	B _d
Soil hydraulic conductivity	<u>1.4 x 10⁻³</u>	cm/sec	K _r
Average annual recharge	<u>25</u>	cm	H _w
Wetting front suction (negative number)	<u>-10</u>	cm	H _r
Distance from highest soil contamination to water table	<u>152</u>	cm	L
Groundwater SSTL (or RBSL if appropriate)	_____	mg/L	C _{Gwsstl}

List possible human exposure pathways from soil:

Leachability Results and Conclusions

South Carolina Department of Health and Environmental Control Bureau of Underground Storage Tank Management

Site Data

Facility Name: Highway 11 Grocery Site ID # 03439
 Chemical of Concern (Benzene, Naphthalene, etc.): Benzene

(Please use a separate form for each Chemical of Concern that exceeds the RBSL in soil.)

Chemical Specific Data

Biodegradation half-life period	<u>16</u>	days	$t_{1/2}$	Refer to
Soil/water partitioning coefficient	<u>81</u>	mg/L	K_{oc}	Table
Henry's law constant	<u>0.226</u>		H'	C2

Results

			Equation Set	Step
Total organic carbon content	<u>0.001</u>	decimal %	f_{cs}	I
Air filled porosity	<u>0.440</u>	decimal %	f	I
Infiltration time	<u>29388.062</u>	seconds	t	II
Velocity of water	<u>5354.362</u>	ft/yr	V_w	II
Soil/water distribution coefficient	<u>0.081</u>	mL/g	K_d	III
CoC percolation rate	<u>4302.618</u>	ft/yr	V_c	III
Time to reach groundwater	<u>0.423</u>	days	T_c	IV
Concentration to protect groundwater	<u>0.005</u>	mg/L	C_p	IV
Site specific target level	<u>0.003</u>	mg/Kg	C_{Sstl}	V

Conclusions

Does concentration of CoC in soil exceed SSTL? Yes No _____

Risk of human exposure due to contaminated soil Yes _____ No

Leachability Results and Conclusions

South Carolina Department of Health and Environmental Control Bureau of Underground Storage Tank Management

Site Data

Facility Name: Highway 11 Grocery Site ID # 034/39
 Chemical of Concern (Benzene, Naphthalene, etc.): Toluene

(Please use a separate form for each Chemical of Concern that exceeds the RBSL in soil.)

Chemical Specific Data

Biodegradation half-life period	<u>22</u>	days	$t_{1/2}$	Refer to
Soil/water partitioning coefficient	<u>133</u>	mg/L	K_{oc}	Table
Henry's law constant	<u>0.301</u>		H'	C2

Results

			Equation Set	Step
Total organic carbon content	<u>0.001</u>	decimal %	f_{cs}	I
Air filled porosity	<u>0.440</u>	decimal %	f	I
Infiltration time	<u>29388.062</u>	seconds	t	II
Velocity of water	<u>5354.362</u>	ft/yr	V_w	II
Soil/water distribution coefficient	<u>0.133</u>	mL/g	K_d	III
CoC percolation rate	<u>3820.808</u>	ft/yr	V_c	III
Time to reach groundwater	<u>0.476</u>	days	T_c	IV
Concentration to protect groundwater	<u>1.015</u>	mg/L	C_p	IV
Site specific target level	<u>1.115</u>	mg/Kg	C_{Sstl}	V

Conclusions

Does concentration of CoC in soil exceed SSTL? Yes No _____

Risk of human exposure due to contaminated soil Yes _____ No

Leachability Results and Conclusions

South Carolina Department of Health and Environmental Control Bureau of Underground Storage Tank Management

Site Data

Facility Name: Highway 11 Grocery Site ID #: 03439
 Chemical of Concern (Benzene, Naphthalene, etc.): Ethylbenzene

(Please use a separate form for each Chemical of Concern that exceeds the RBSL in soil.)

Chemical Specific Data

Biodegradation half-life period	<u>10</u>	days	$t_{1/2}$	Refer to
Soil/water partitioning coefficient	<u>176</u>	mg/L	K_{oc}	Table
Henry's law constant	<u>0.280</u>		H'	C2

Results

			Equation Set	Step
Total organic carbon content	<u>0.001</u>	decimal %	f_{oc}	I
Air filled porosity	<u>0.440</u>	decimal %	f	I
Infiltration time	<u>29388.062</u>	seconds	t	II
Velocity of water	<u>5354.362</u>	ft/yr	V_w	II
Soil/water distribution coefficient	<u>0.176</u>	mL/g	K_d	III
CoC percolation rate	<u>3496.989</u>	ft/yr	V_c	III
Time to reach groundwater	<u>0.521</u>	days	T_c	IV
Concentration to protect groundwater	<u>0.726</u>	mg/L	C_p	IV
Site specific target level	<u>1.055</u>	mg/Kg	C_{Sstl}	V

Conclusions

Does concentration of CoC in soil exceed SSTL? Yes No _____

Risk of human exposure due to contaminated soil Yes _____ No

Leachability Results and Conclusions

South Carolina Department of Health and Environmental Control Bureau of Underground Storage Tank Management

Site Data

Facility Name: Highway 11 Grocery Site ID # 03439
 Chemical of Concern (Benzene, Naphthalene, etc.): Xylenes

(Please use a separate form for each Chemical of Concern that exceeds the RBSL in soil.)

Chemical Specific Data

Biodegradation half-life period	<u>28</u>	days	$t_{1/2}$	Refer to
Soil/water partitioning coefficient	<u>639</u>	mg/L	K_{oc}	Table
Henry's law constant	<u>0.278</u>		H'	C2

Results

			Equation Set	Step
Total organic carbon content	<u>0.001</u>	decimal %	f_{oc}	I
Air filled porosity	<u>0.440</u>	decimal %	f	I
Infiltration time	<u>29388.062</u>	seconds	t	II
Velocity of water	<u>5354.362</u>	ft/yr	V_w	II
Soil/water distribution coefficient	<u>0.638</u>	mL/g	K_d	III
CoC percolation rate	<u>1828.437</u>	ft/yr	V_c	III
Time to reach groundwater	<u>0.996</u>	days	T_c	IV
Concentration to protect groundwater	<u>10.250</u>	mg/L	C_p	IV
Site specific target level	<u>54.095</u>	mg/Kg	C_{Sstl}	V

Conclusions

Does concentration of CoC in soil exceed SSTL? Yes No

Risk of human exposure due to contaminated soil Yes No

Leachability Results and Conclusions

South Carolina Department of Health and Environmental Control Bureau of Underground Storage Tank Management

Site Data

Facility Name: Highway 11 Grocery Site ID # 03439
 Chemical of Concern (Benzene, Naphthalene, etc.): Naphthalene

(Please use a separate form for each Chemical of Concern that exceeds the RBSL in soil.)

Chemical Specific Data

Biodegradation half-life period	<u>48</u>	days	$t_{1/2}$	Refer to
Soil/water partitioning coefficient	<u>1543</u>	mg/L	K_{oc}	Table
Henry's law constant	<u>0.002</u>		H'	C2

Results

			Equation Set	Step
Total organic carbon content	<u>0.001</u>	decimal %	f_{cs}	I
Air filled porosity	<u>0.440</u>	decimal %	f	I
Infiltration time	<u>29388.062</u>	seconds	t	II
Velocity of water	<u>5354.362</u>	ft/yr	V_w	II
Soil/water distribution coefficient	<u>1.541</u>	mL/g	K_d	III
CoC percolation rate	<u>946.588</u>	ft/yr	V_c	III
Time to reach groundwater	<u>1.923</u>	days	T_c	IV
Concentration to protect groundwater	<u>0.026</u>	mg/L	C_p	IV
Site specific target level	<u>0.328</u>	mg/Kg	C_{SSTL}	V

Conclusions

Does concentration of CoC in soil exceed SSTL? Yes No

Risk of human exposure due to contaminated soil Yes No



Summary of Slug Test
Division of Underground Storage Tank Management

Site Data

UST Permit #: 03439 County: Oconee

Facility Name: Highway 11 Grocery

Slug Data

See Appendix _____ 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

Initial Rise/Drawdown in Well (feet)

Radius of Well Casing (feet)

Effective Radius of Well (feet)

Static Saturated Aquifer Thickness (feet)

Length of Well Screen (feet)

Static Height of Water Column in Well (ft)

MW-3	MW-6	DMW-1
0.75	2.77	1.07
0.083	0.083	0.083
0.271	0.271	0.25
4.09	12.46	19.24
10	15	5
4.09	12.46	19.24

Calculations

See Appendix _____ Table _____ Figure _____ for calculations (complete as appropriate).

The method for aquifer calculations was Bouwer - Rice (i.e. Bouwer-Rice, Cooper, etc.).

Calculated values by well were as follows:

Slug Test Conducted in Well(s) Number

Hydraulic Conductivity FT/DAY

MW-3	MW-6	DMW-1
0.171	0.410	9.36

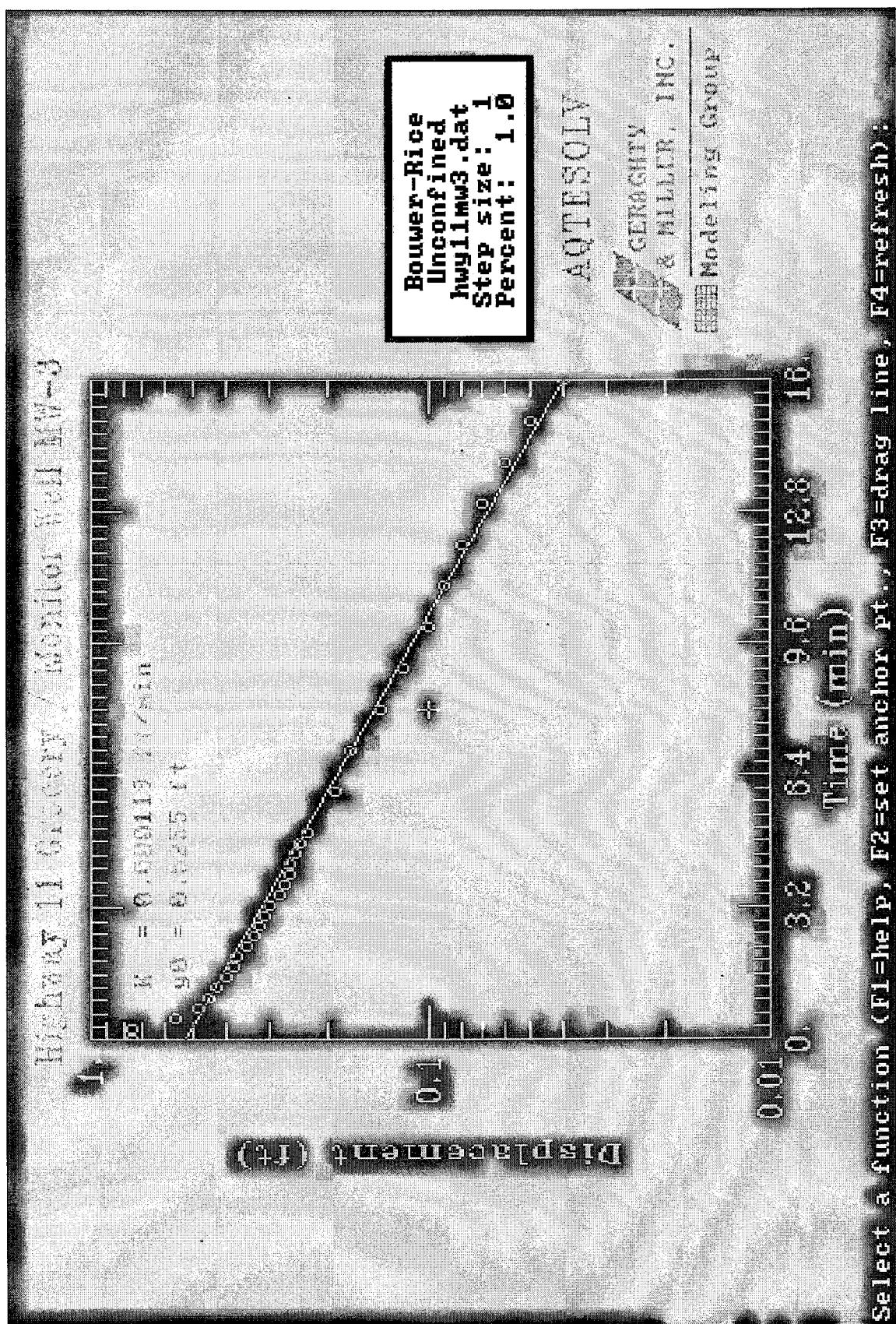
Thickness of the aquifer used to calculate hydraulic conductivity was 8.28 (AVG) feet.

The aquifer is _____ confined _____ semi-confined water table (check as appropriate).

The estimated seepage velocity is 13.03 FT/YR feet per year based on

a hydraulic conductivity of 106.03 FT/YR, a hydraulic gradient of 0.0430 FT/FT, and

a porosity of 35 percent for Sandy loam soil (list type i.e., silty sand, clay, etc).



Select a function (F1=help, F2=set anchor pt., F3=drag line, F4=refresh):

A Q T E S O L V

A Program for

Automatic Estimation of Aquifer Coefficients

From Aquifer Test Data

By:

Glenn M. Duffield
and
James O. Rumbaugh, III

Geraghty & Miller Modeling Group
1895 Preston White Drive, Suite 301
Reston, VA 22091

(703) 476 - 0335

A Q T E S O L V is a user-friendly program designed to analyze data from aquifer tests automatically. Aquifer coefficients for a variety of aquifer test conditions can be estimated by A Q T E S O L V , including the following:

- o confined aquifers, unconfined aquifers, and leaky aquifers
 - o pumping tests, injection tests, recovery tests, and slug tests

Features :

- o Interactive, menu-driven program design
 - o Nonlinear least-squares estimation of aquifer coefficients
 - o Statistical analysis of results
 - o Complete graphical display of results

A Q T E S O L V R E S U L T S
Version 1.10

09/21/01

11:34:48

TEST DESCRIPTION

Data set..... hwy11mw3.dat
Data set title.... Highway 11 Grocery / Monitor Well MW-3

Knowns and Constants:

No. of data points.....	31
Radius of well casing.....	0.083
Radius of well.....	0.271
Aquifer saturated thickness.....	4.09
Well screen length.....	10
Static height of water in well.....	4.09
Log(Re/Rw)	2.152
A, B, C.....	0.000, 0.000, 2.193

ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

RESULTS FROM STATISTICAL CURVE MATCHING

STATISTICAL MATCH PARAMETER ESTIMATES

	Estimate	Std. Error
K =	1.5063E-004 +/-	1.0578E-005
v0 =	5.9823E-001 +/-	2.2411E-002

ANALYSIS OF MODEL: RESIDUALS

```
residual = calculated - observed  
weighted residual = residual * weight
```

Weighted Residual Statistics:

Number of residuals..... 31
Number of estimated parameters.... 2
Degrees of freedom..... 29
Residual mean..... 0.004791
Residual standard deviation..... 0.04167
Residual variance..... 0.001736

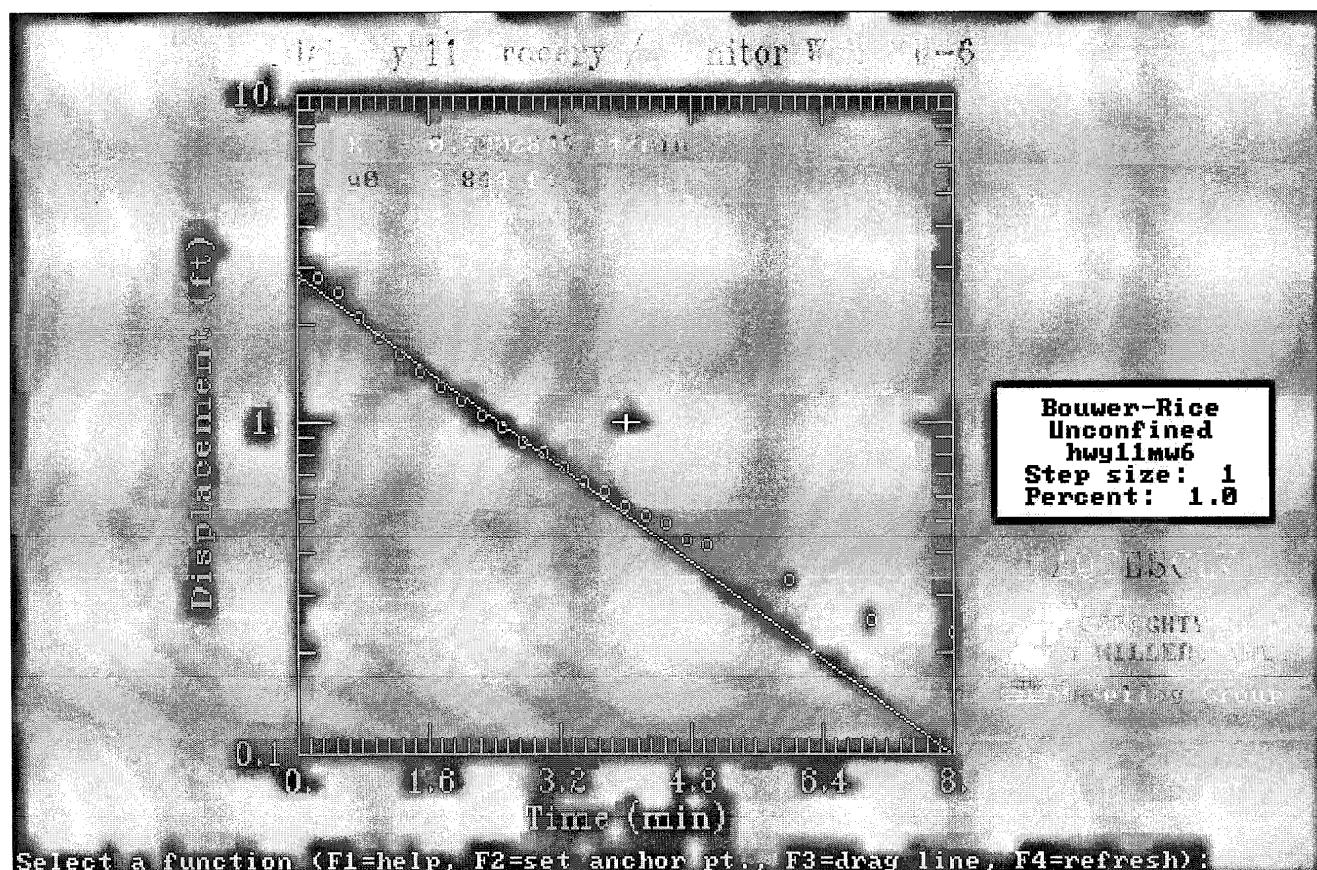
Model Residuals:

Time	Observed	Calculated	Residual	Weight
0.25	0.75	0.5686	0.1814	1
0.5	0.56	0.54043	0.019568	1
0.75	0.48	0.51366	-0.033662	1
1	0.45	0.48822	-0.038217	1
1.25	0.43	0.46403	-0.034033	1
1.5	0.4	0.44105	-0.041046	1
1.75	0.38	0.4192	-0.039199	1
2	0.37	0.39843	-0.028433	1
2.25	0.35	0.3787	-0.028696	1
2.5	0.33	0.35994	-0.029937	1
2.75	0.32	0.34211	-0.022108	1
3	0.31	0.32516	-0.015161	1
3.25	0.3	0.30905	-0.0090537	1
3.5	0.28	0.29374	-0.013744	1
3.75	0.27	0.27919	-0.0091935	1
4	0.26	0.26536	-0.0053634	1
4.25	0.26	0.25222	0.0077816	1
4.5	0.25	0.23972	0.010276	1
4.75	0.24	0.22785	0.01215	1
5	0.23	0.21656	0.013437	1
6	0.19	0.17674	0.013263	1
7	0.17	0.14423	0.025765	1
8	0.14	0.11771	0.02229	1
9	0.12	0.096063	0.023937	1
10	0.1	0.078397	0.021603	1
11	0.09	0.063979	0.026021	1
12	0.08	0.052214	0.027786	1
13	0.07	0.042611	0.027389	1
14	0.06	0.034775	0.025225	1
15	0.05	0.02838	0.02162	1
16	0.04	0.023161	0.016839	1

RESULTS FROM VISUAL CURVE MATCHING

VISUAL MATCH PARAMETER ESTIMATES

	Estimate
K =	1.5063E-004
y0 =	5.9823E-001



A Q T E S O L V

A Program for

Automatic Estimation of Aquifer Coefficients

From Aquifer Test Data

By:

Glenn M. Duffield
and
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- confined aquifers, unconfined aquifers, and leaky aquifers
 - pumping tests, injection tests, recovery tests, and slug tests

Features:

- o Interactive, menu-driven program design
 - o Nonlinear least-squares estimation of aquifer coefficients
 - o Statistical analysis of results
 - o Complete graphical display of results

A Q T E S O L V R E S U L T S
Version 1.10

09/21/01

11:40:42

TEST DESCRIPTION

Data set..... hwv11mw6

Data set title..... Highway 11 Grocery / Monitor Well MW-6

Knowns and Constants:

No. of data points.....	23
Radius of well casing.....	0.083
Radius of well.....	0.271
Aquifer saturated thickness.....	12.46
Well screen length.....	15
Static height of water in well.....	12.46
Log(Re/Rw)	2.955
A, B, C.....	0.000, 0.000, 2.827

ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

RESULTS FROM STATISTICAL CURVE MATCHING

STATISTICAL MATCH PARAMETER ESTIMATES

	Estimate	Std. Error
K =	3.0990E-004 +/-	8.9046E-006
v0 =	3.0168E+000 +/-	5.5787E-002

ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual * weight

Weighted Residual Statistics:

Number of residuals..... 16
Number of estimated parameters.... 2
Degrees of freedom..... 14
Residual mean..... 0.006339
Residual standard deviation..... 0.06661
Residual variance..... 0.004437

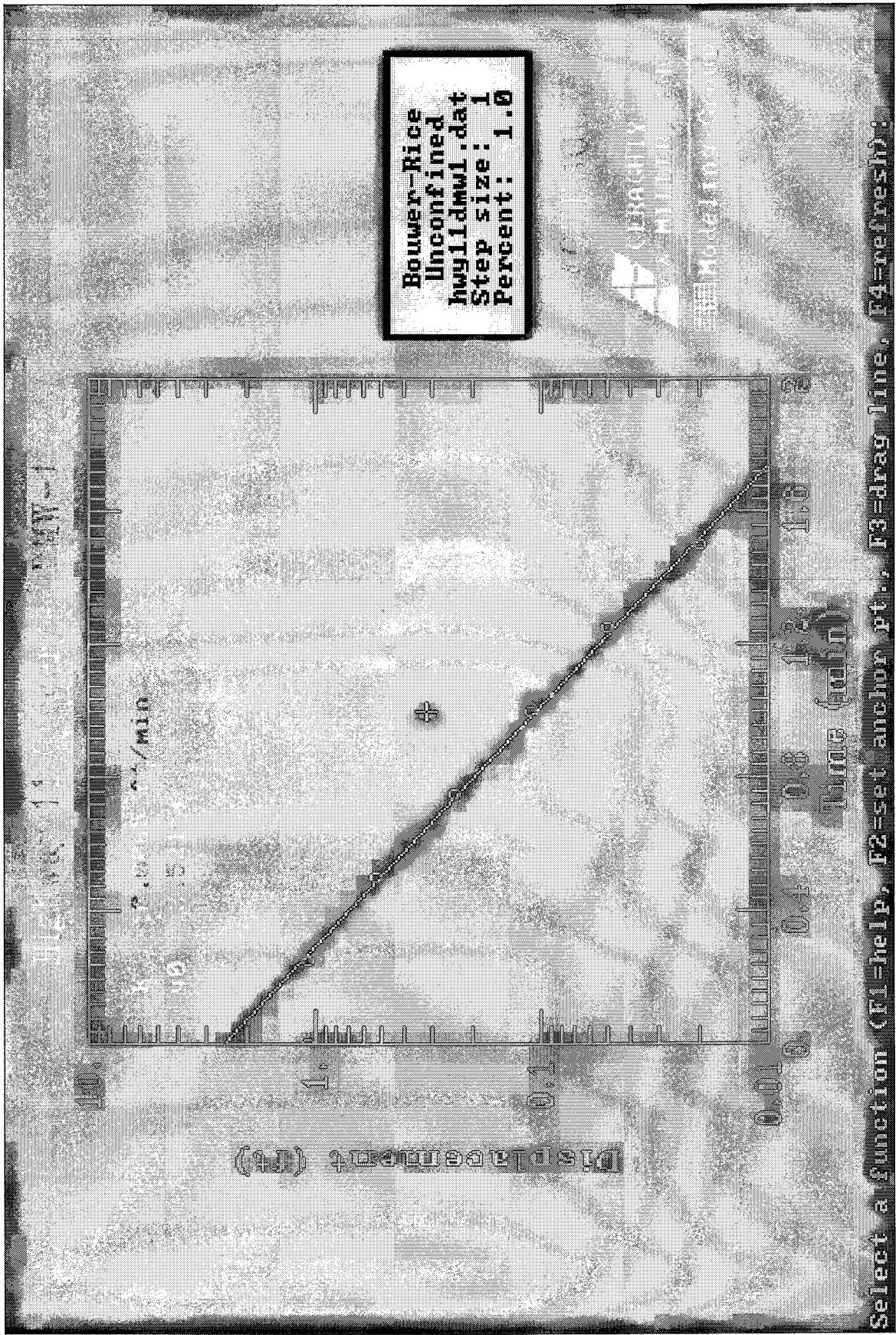
Model Residuals:

Time	Observed	Calculated	Residual	Weight
0.25	2.77	2.6913	0.078717	1
0.5	2.5	2.4009	0.099107	1
0.75	2.1	2.1418	-0.041836	1
1	1.83	1.9107	-0.080732	1
1.25	1.63	1.7046	-0.074563	1
1.5	1.44	1.5206	-0.080641	1
1.75	1.29	1.3566	-0.066563	1
2	1.17	1.2102	-0.04019	1
2.25	1.06	1.0796	-0.01961	1
2.5	0.97	0.96312	0.0068802	1
2.75	0.88	0.8592	0.020801	1
3	0.81	0.76649	0.043509	1
3.25	0.74	0.68379	0.056213	1
3.5	0.66	0.61001	0.049994	1
3.75	0.62	0.54419	0.075814	1
4	0.56	0.48547	0.074532	1

RESULTS FROM VISUAL CURVE MATCHING

VISUAL MATCH PARAMETER ESTIMATES

	Estimate
K =	3.0990E-004
v0 =	3.0168E+000



A Q T E S O L V

A Program for
Automatic Estimation of Aquifer Coefficients
From Aquifer Test Data

By:

Glenn M. Duffield
and
James O. Rumbaugh, III

Geraghty & Miller Modeling Group
1895 Preston White Drive, Suite 301
Reston, VA 22091

(703) 476 - 0335

A Q T E S O L V is a user-friendly program designed to analyze data from aquifer tests automatically. Aquifer coefficients for a variety of aquifer test conditions can be estimated by A Q T E S O L V , including the following:

- o confined aquifers, unconfined aquifers, and leaky aquifers
 - o pumping tests, injection tests, recovery tests, and slug tests

Features:

- o Interactive, menu-driven program design
 - o Nonlinear least-squares estimation of aquifer coefficients
 - o Statistical analysis of results
 - o Complete graphical display of results

A Q T E S O L V R E S U L T S
Version 1.10

09/21/01

11:44:19

TEST DESCRIPTION

Data set..... hwy11dmw1
Data set title.... Highway 11 Grocery / DMW-1

Knowns and Constants:

No. of data points.....	6
Radius of well casing.....	0.083
Radius of well.....	0.25
Aquifer saturated thickness.....	19.26
Well screen length.....	5
Static height of water in well.....	19.26
Log(Re/Rw)	2.974
A, B, C.....	0.000, 0.000, 1.661

ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

RESULTS FROM STATISTICAL CURVE MATCHING

STATISTICAL MATCH PARAMETER ESTIMATES

	Estimate	Std. Error
K =	6.0406E-003 +/-	1.1772E-004
y0 =	2.2461E+000 +/-	4.5954E-002

ANALYSIS OF MODEL: RESIDUALS

```
residual = calculated - observed  
weighted residual = residual * weight
```

Weighted Residual Statistics:

```

Number of residuals..... 6
Number of estimated parameters.... 2
Degrees of freedom..... 4
Residual mean..... -0.002706
Residual standard deviation..... 0.01067
Residual variance..... 0.0001139

```

Model Residuals:

Time	Observed	Calculated	Residual	Weight
0.25	1.07	1.0748	-0.0047693	1
0.5	0.53	0.51429	0.015707	1
0.75	0.24	0.2461	-0.0060964	1
1	0.11	0.11776	-0.0077606	1
1.25	0.05	0.05635	-0.0063502	1
1.5	0.02	0.026964	-0.0069644	1

RESULTS FROM VISUAL CURVE MATCHING

VISUAL MATCH PARAMETER ESTIMATES

	Estimate
K =	6.0406E-003
y0 =	2.2461E+000

BIOSCREEN Natural Attenuation Decision Support System
Version 1.3
Air Force Center for Environmental Excellence

1. HYDROGEOLOGY

Seepage Velocity*	<input type="text" value="13.0"/> (ft/yr)
or	<input type="text"/> (cm/sec)
Hydraulic Conductivity	<input type="text"/> (ft/ft)
Hydraulic Gradient	<input type="text"/> (ft/ft)
Porosity	<input type="text" value="0.35"/> (r)

2. DISPERSION

Longitudinal Dispersivity*	<input type="text" value="19.5"/> (ft)
Transverse Dispersivity*	<input type="text" value="2.0"/> (ft)
Vertical Dispersivity*	<input type="text" value="0.0"/> (ft)
or	
Estimated Plume Length	<input type="text" value="600"/> (ft)

3. ADSORPTION

Retardation Factor*	<input type="text" value="1.3"/> (r)
or	<input type="text"/> (r)
Soil Bulk Density	<input type="text" value="1.45"/> (kg/m ³)
Partition Coefficient	<input type="text" value="81"/> (L/kg)
Fraction Organic Carbon	<input type="text" value="9.99E-04"/> (r)

4. BIODEGRADATION

1st Order Decay Coeff*	<input type="text" value="3.5E-1"/> (per yr)
or	<input type="text"/> (r)
Solute Half-Life	<input type="text" value="2.00"/> (year)
or Instantaneous Reaction Model	
Delta Oxygen*	<input type="text" value="5.8"/> (mg/L)
Delta Nitrate*	<input type="text" value="0.41"/> (mg/L)
Observed Ferrous Iron*	<input type="text" value="24.4"/> (mg/L)
Delta Sulfate*	<input type="text" value="0"/> (mg/L)
Observed Methane*	<input type="text" value="0"/> (mg/L)

5. GENERAL

Modeled Area Length*	<input type="text" value="750"/> (ft)
Modeled Area Width*	<input type="text" value="280"/> (ft)
Simulation Time*	<input type="text" value="1"/> (yr)

6. SOURCE DATA

Source Thickness in Sat Zone*	<input type="text" value="10"/> (ft)
Source Zones:	
Width* (ft)	Conc. (mg/L)*
0	0
80	1.5
120	5.7
80	1.5
0	0

Data Input Instructions:

1. Enter value directly, or calculate by filling in grey cells below. (To restore formulas, hit button below).
2. Variable* - Data used directly in model.
3. Value calculated by model.
4. (Don't enter any data).

Highway 11 Grocery Benzene Run Name

Vertical Plane Source: Look at Plume Cross-Section and Input Concentrations & Widths

View of Plume Looking Down

Observed Centerline Concentrations at Monitoring Wells

If No Data Leave Blank or Enter "0"

RUN ARRAY

CENTERLINE

View Output

Help

Recalculate This Sheet

Paste Example Dataset

Restore Formulas for Vs, Dispersivities, R, lambda, other

8. CHOOSE TYPE OF OUTPUT TO SEE:

Figure 1a: BIOSCREEN Input Screen

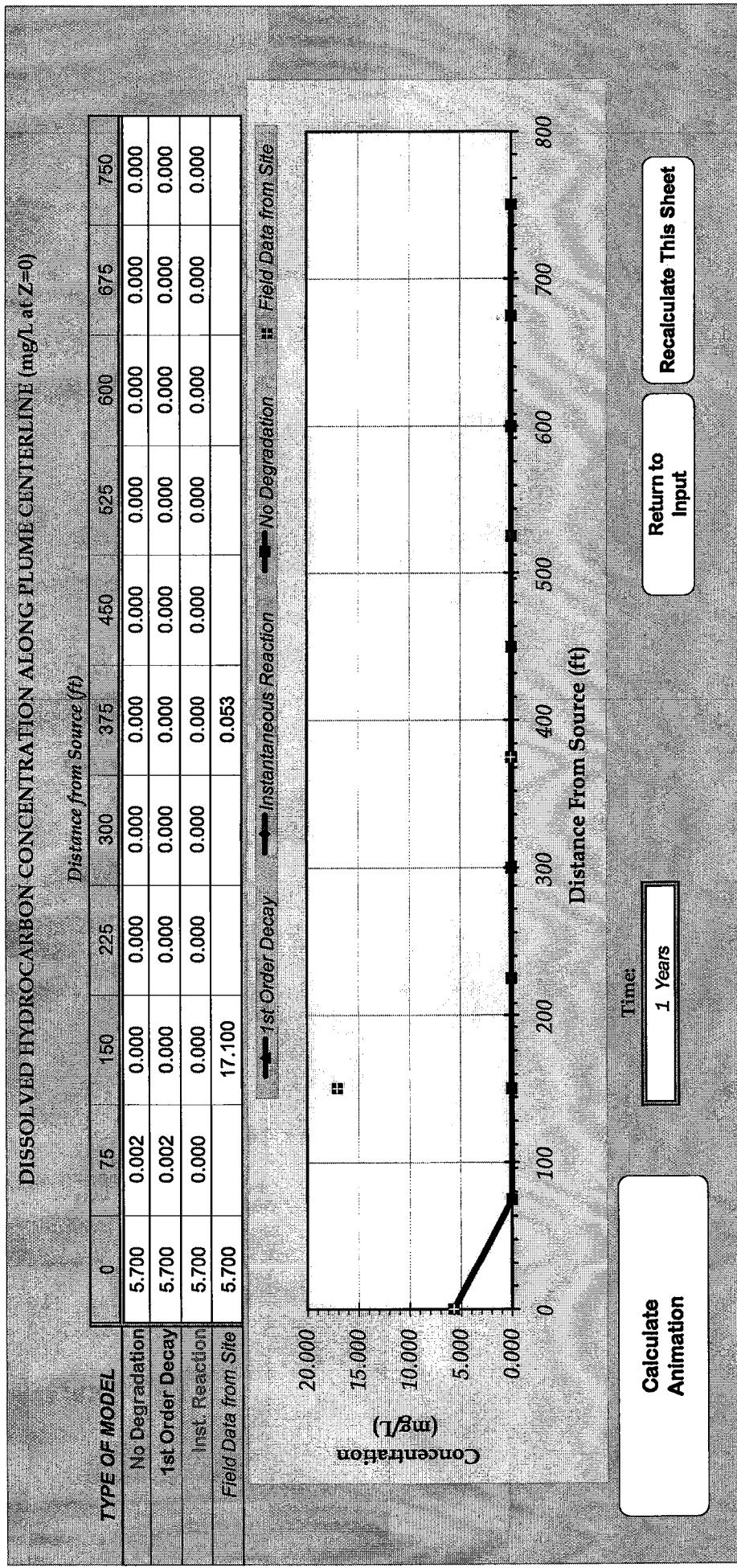


Figure 1b: Centerline Output

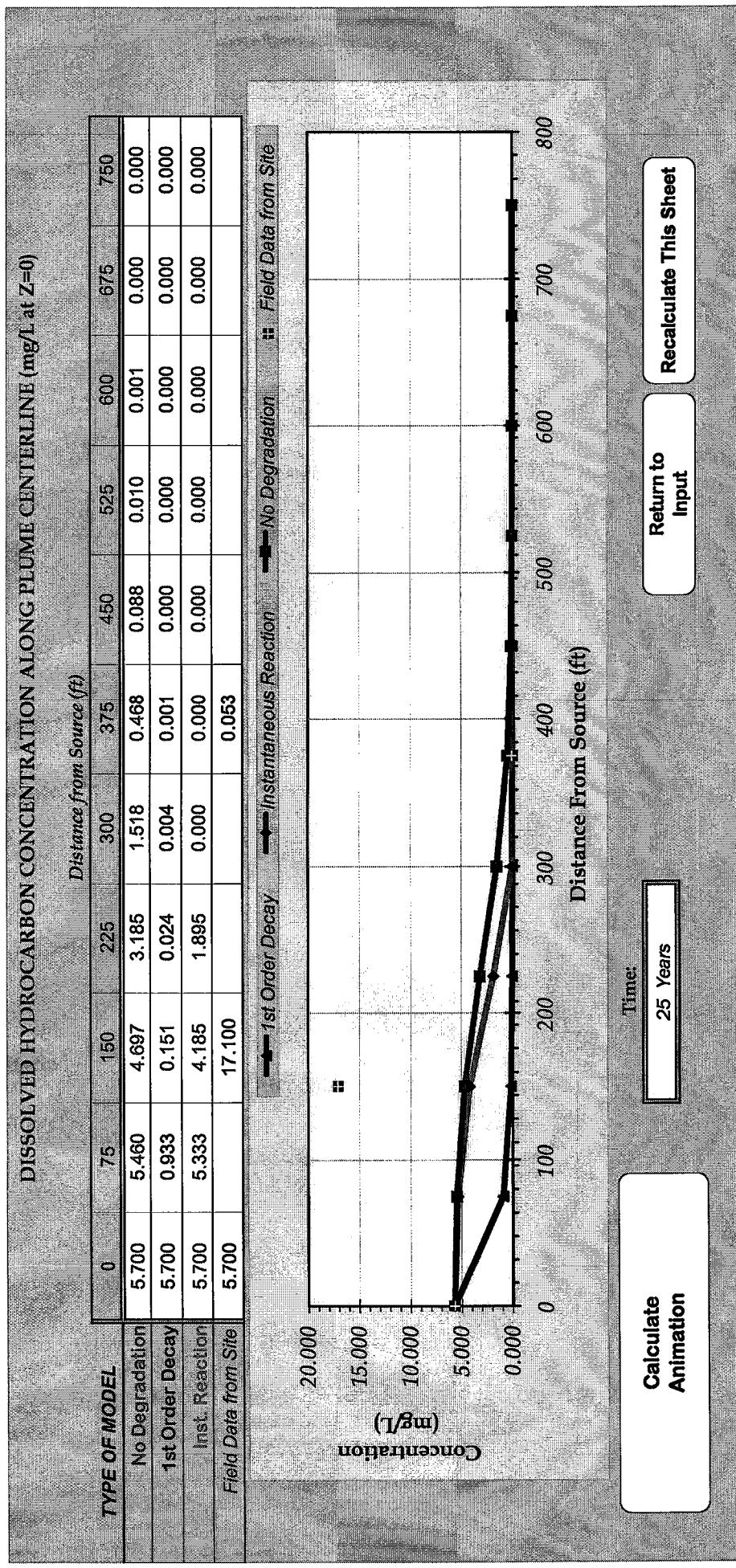


Figure 1c: Centerline Output

BIOSCREEN Natural Attenuation Decision Support System

Version 1.3
Air Force Center for Environmental Excellence

1. HYDROGEOLGY	V_s <input type="text" value="13.0"/> \downarrow or \uparrow	K <input type="text" value="0.35"/> \downarrow or \uparrow	2. DISPERSION Longitudinal Dispersivity* α_x <input type="text" value="19.5"/> \downarrow or \uparrow	α_y <input type="text" value="2.0"/> \downarrow or \uparrow	α_z <input type="text" value="0.0"/> \downarrow or \uparrow	L_p <input type="text" value="600"/> \downarrow or \uparrow
3. ADSORPTION Retardation Factor* R <input type="text" value="1.6"/> \downarrow or \uparrow	m_{lo} <input type="text" value="1.45"/> \downarrow or \uparrow	K_{oc} <input type="text" value="133"/> \downarrow or \uparrow	f_{OC} <input type="text" value="9.99E-04"/> \downarrow or \uparrow	4. BIODEGRADATION 1st Order Decay Coeff* λ_{biode} <input type="text" value="9.0E+0"/> \downarrow or \uparrow	t_{half} <input type="text" value="0.08"/> \downarrow or \uparrow	
5. GENERAL Modeled Area Length* <input type="text" value="750"/> \downarrow or \uparrow	6. SOURCE DATA Source Thickness in Sat.Zone* <input type="text" value="10"/> \downarrow or \uparrow	7. FIELD DATA FOR COMPARISON Concentration (mg/L) Dist. from Source (ft) <input type="text" value="25.8"/> \downarrow or \uparrow	8. CHOOSE TYPE OF OUTPUT TO SEE: <input type="checkbox"/> RUN ARRAY <input type="checkbox"/> CENTERLINE <input type="checkbox"/> View Output			
9. INPUT INSTRUCTIONS: Run Name: <input type="text" value="Highway 11 Grocery Töölöne"/>	10. Vertical Plane Source: Look at Plume Cross-Section and Input Concentrations & Widths 	11. View of Plume Looking Down 	12. Recalculate This Sheet			
13. Observed Centerline Concentrations at Monitoring Wells <input type="text" value="25.8"/> \downarrow or \uparrow	14. Paste Example Dataset	15. Restore Formulas for Vs, Dispersivities, R, lambda, other	16. Help			

Figure 2a: BIOSCREEN Input Screen

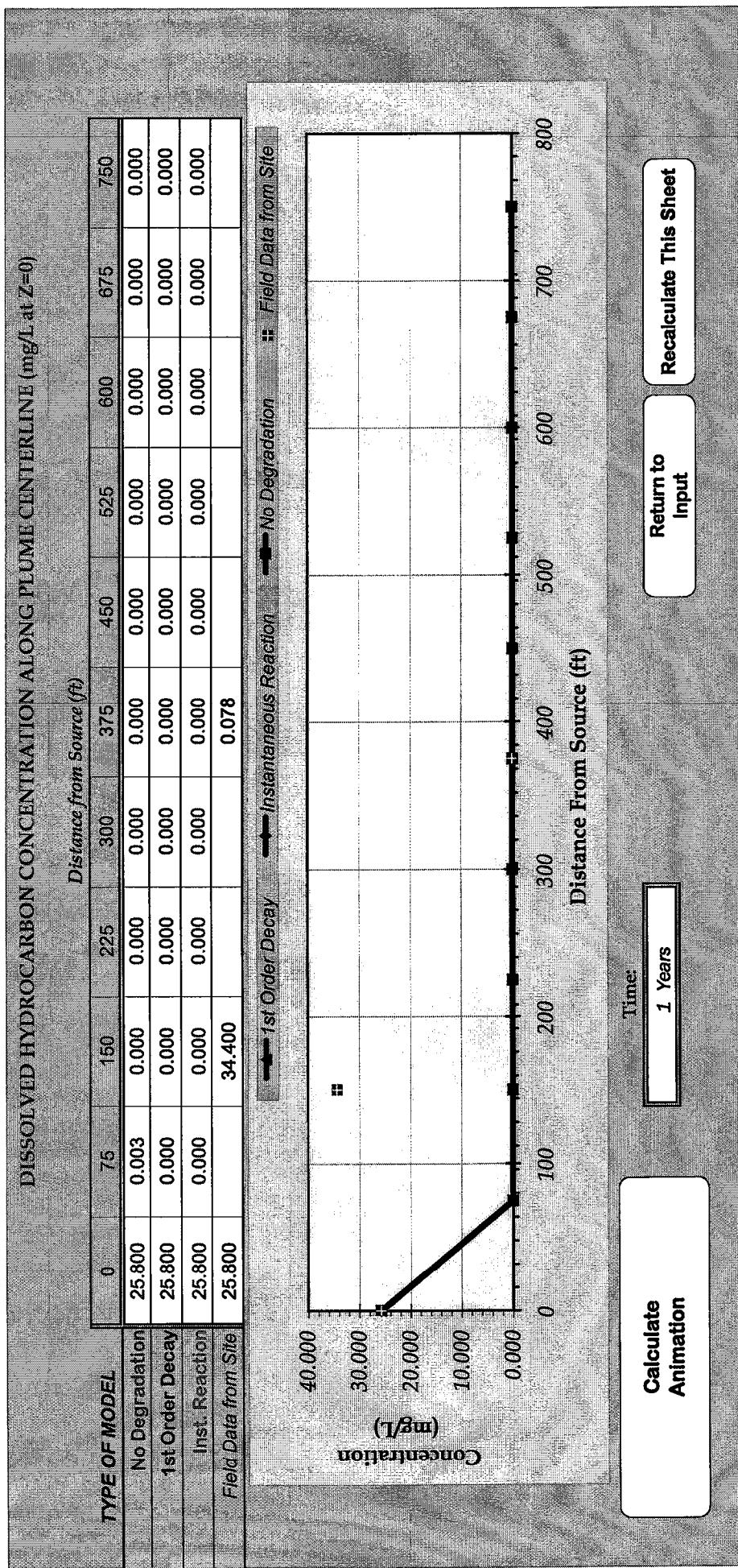


Figure 2b: Centaurine Output

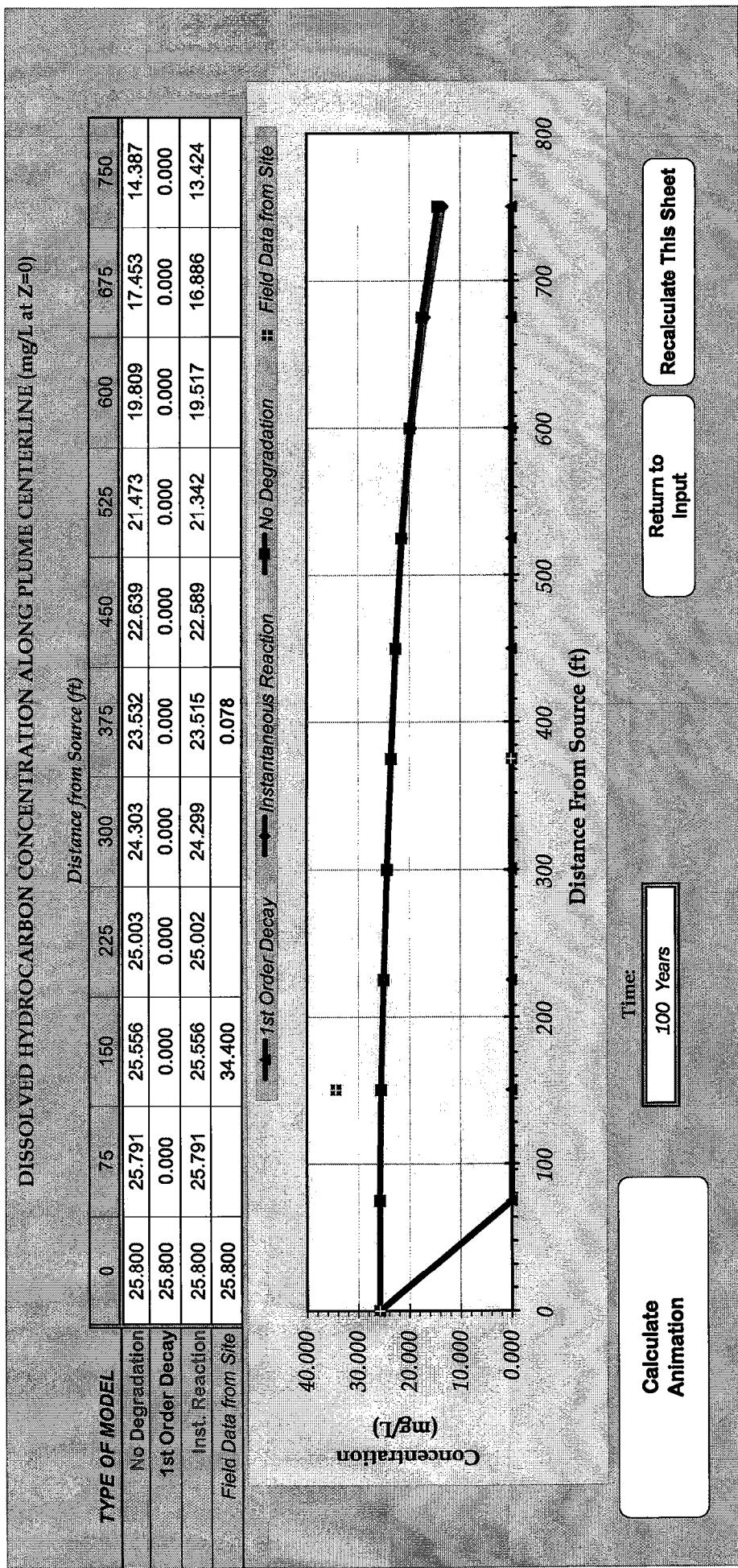


Figure 2c: Centrifuge Output

BIOSCREEN Natural Attenuation Decision Support System

Version 1.3
Air Force Center for Environmental Excellence

1. HYDROGEOLOGY		2. DISPERSION		3. ADSORPTION		4. BIODEGRADATION		5. GENERAL		6. SOURCE DATA		7. FIELD DATA FOR COMPARISON		
Seepage Velocity*	<input type="text" value="13.0"/> (ft/y)	Longitudinal Dispervity*	<input type="text" value="19.5"/> (ft)	Retardation Factor*	<input type="text" value="1.7"/> (-)	1st Order Decay Coeff*	<input type="text" value="1.1E+0"/> (per yr)	Modelled Area Length*	<input type="text" value="750"/> (ft)	Source Zones:	Width (ft)	Conc. (mg/L)*	Concentration (mg/L)	Dist. from Source (ft)
or	<input type="checkbox"/>	Transverse Dispervity*	<input type="text" value="2.0"/> (ft)	or	<input type="text" value="1.45"/> (-)	Solute Half-life	<input type="text" value="1.1E+0"/> (year)	Modelled Area Width*	<input type="text" value="280"/> (ft)		0	0	4.76	0
Hydraulic Conductivity	<input type="text" value="K"/> (cm/sec)	Vertical Dispervity*	<input type="text" value="0.0"/> (ft)	or	<input type="text" value="1.45"/> (-)	Soluble Mass	<input type="text" value="1.1E+0"/> (yr)	Simulation Time*	<input type="text" value="1"/> (yr)	In NAPL/Soil	80	1.4	4.76	75
Hydraulic Gradient	<input type="text" value="i"/> (ft/ft)	Estimated Plume Length	<input type="text" value="600"/> (ft)		<input type="text" value="1.76"/> (-)	Infinite	<input type="text" value="1.1E+0"/> (yr)				120	0	1.4	150
Porosity	<input type="text" value="n"/> (-)	R	<input type="text" value="9.99E-04"/> (-)	Koc	<input type="text" value="4.76"/> (kg/kg)						80	0	0	300
		t-half	<input type="text" value="0.63"/> (year)	fec	<input type="text" value="4.76"/> (kg/kg)						0			.015
		or												375
		Solute Half-Life												450
		or Instantaneous Reaction Model												525
		Delta Oxygen*												600
		Delta Nitrate*												675
		Observed Ferrous Iron*												750
		Delta Sulfate*												
		Observed Methane*												

Data Input Instructions:

- 1. Enter value directly... or
- 2. Calculate by filling in grey cells below. (To restore formulas, hit button below).
- 3. Variable* - Data used directly in model.
- 4. Value calculated by model.
- 5. (Don't enter any data).

Highway 11 Grocery Ethylbenzene Run Name

Vertical Plane Source: Look at Plume Cross-Section and Input Concentrations & Widths

View of Plume Looking Down

Observed Concentrations at Monitoring Wells
If No Data Leave Blank or Enter "0"

Help

Recalculate This Sheet

Paste Example Dataset

Restore Formulas for Vs. Dispersivities, R, lambda, other

RUN ARRAY

CENTERLINE

View Output

Figure 3a: BIOSCREEN Input Screen

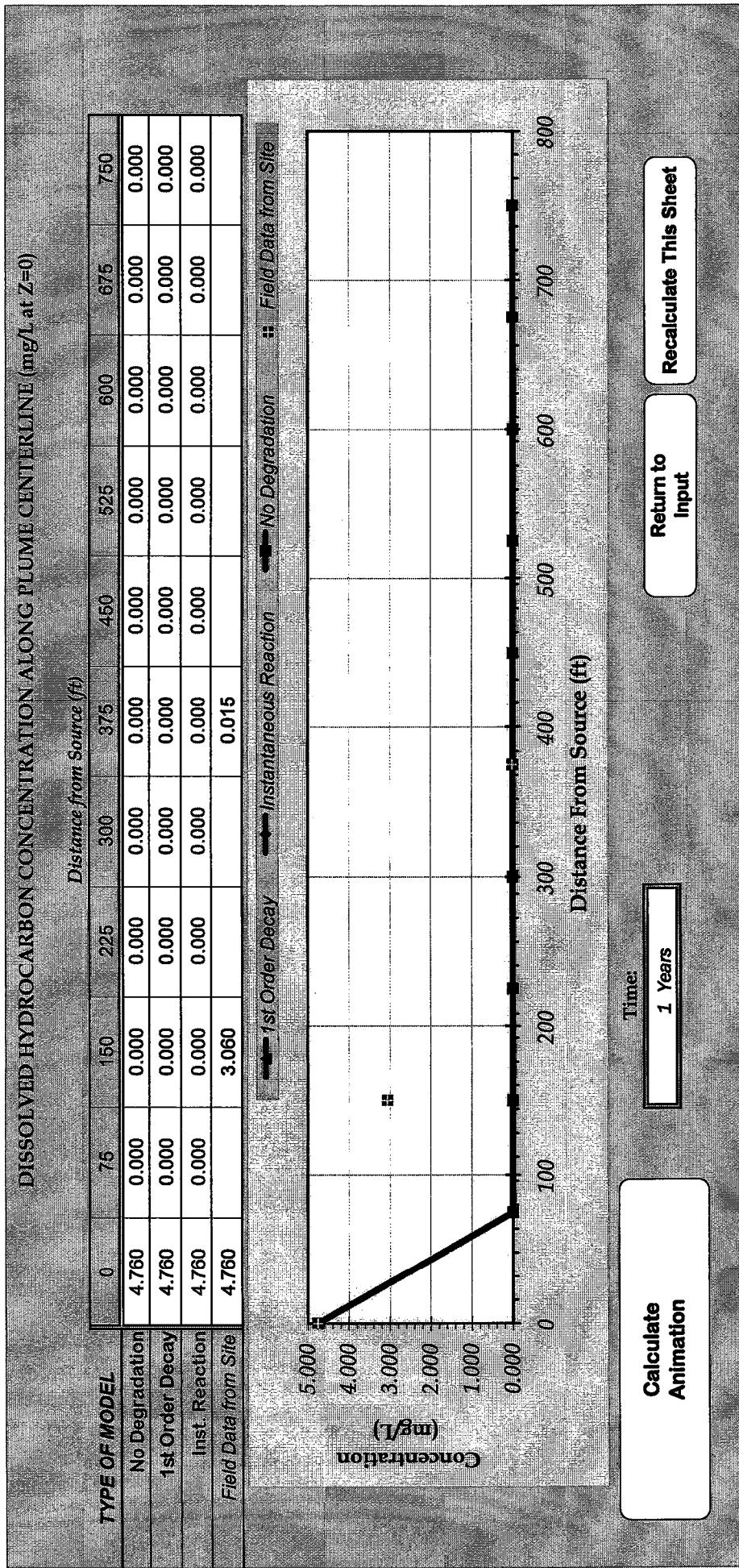


Figure 3b: Centerline Output

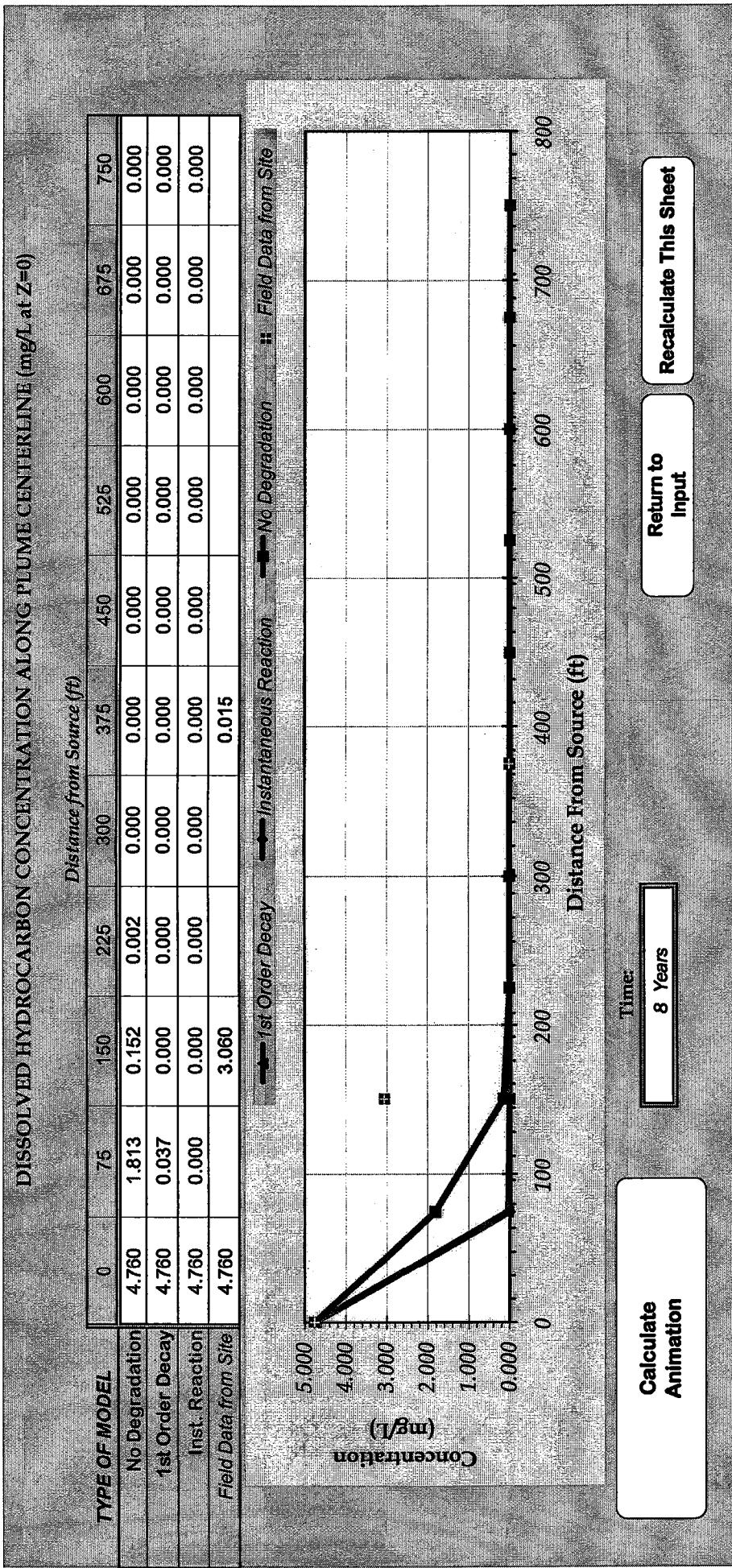


Figure 3c: Centerline Output

BIOSCREEN Natural Attenuation Decision Support System
Air Force Center for Environmental Excellence

Version 1.3

1. HYDROGEOLOGY

Seepage Velocity*	Vs	13.0	(ft/yr)
or			
Hydraulic Conductivity	K		(cm/sec)
Hydraulic Gradient	i		(ft/ft)
Porosity	n	0.35	(-)

2. DISPERSION

Longitudinal Dispersivity*	alpha x	19.5	(ft)
Transverse Dispersivity*	alpha y	2.0	(ft)
Vertical Dispersivity*	alpha z	0.0	(ft)
or			
Estimated Plume Length	Lp	600	(ft)

3. ADSORPTION

Retardation Factor*	R	3.6	(-)
or			
Soil Bulk Density	rho	1.45	(kg/l)
Partition Coefficient	Koc	639	(L/kg)
FractionOrganicCarbon	foc	9.99E-04	(-)

4. BIODEGRADATION

1st Order Decay Coeff*	lambda	4.5E+0	(per yr)
or			
Solute Half-Life	t-half	0.15	(year)
or Instantaneous Reaction Model			
Delta Oxygen*	DO	5.8	(mg/L)
Delta Nitrate*	NO3	0.41	(mg/L)
Observed Ferrous Iron*	Fe2+	24.4	(mg/L)
Delta Sulfate*	SO4	0	(mg/L)
Observed Methane*	CH4	0	(mg/L)

5. GENERAL

Modeled Area Length*	L	750	(ft)
Modeled Area Width*	W	280	(ft)
Simulation Time*	T	1	(yr)

6. SOURCE DATA

Source Thickness in Sat.Zone*	10	(ft)
Source Zones:		
Width* (ft)	Conc. (mg/L)*	
0	0	
80	7.74	
120	22.7	
80	7.74	
0	0	

Source Decay (see Help):
 SourceHalfife* Infinite (yr)
 Soluble Mass ↑ nr
 In NAPL, Soil Infinite (Kg)

7. FIELD DATA FOR COMPARISON

Concentration (mg/L)	22.7	14.8	.078								
Dist. from Source (ft)	0	75	150	225	300	375	450	525	600	675	750

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE	RUN ARRAY	Help	Recalculate This Sheet
View Output	View Output	Paste Example Dataset	
Restore Formulas for Vs, Dispersivities, R, lambda, other			

Figure 4a: BIOSCREEN Input Screen

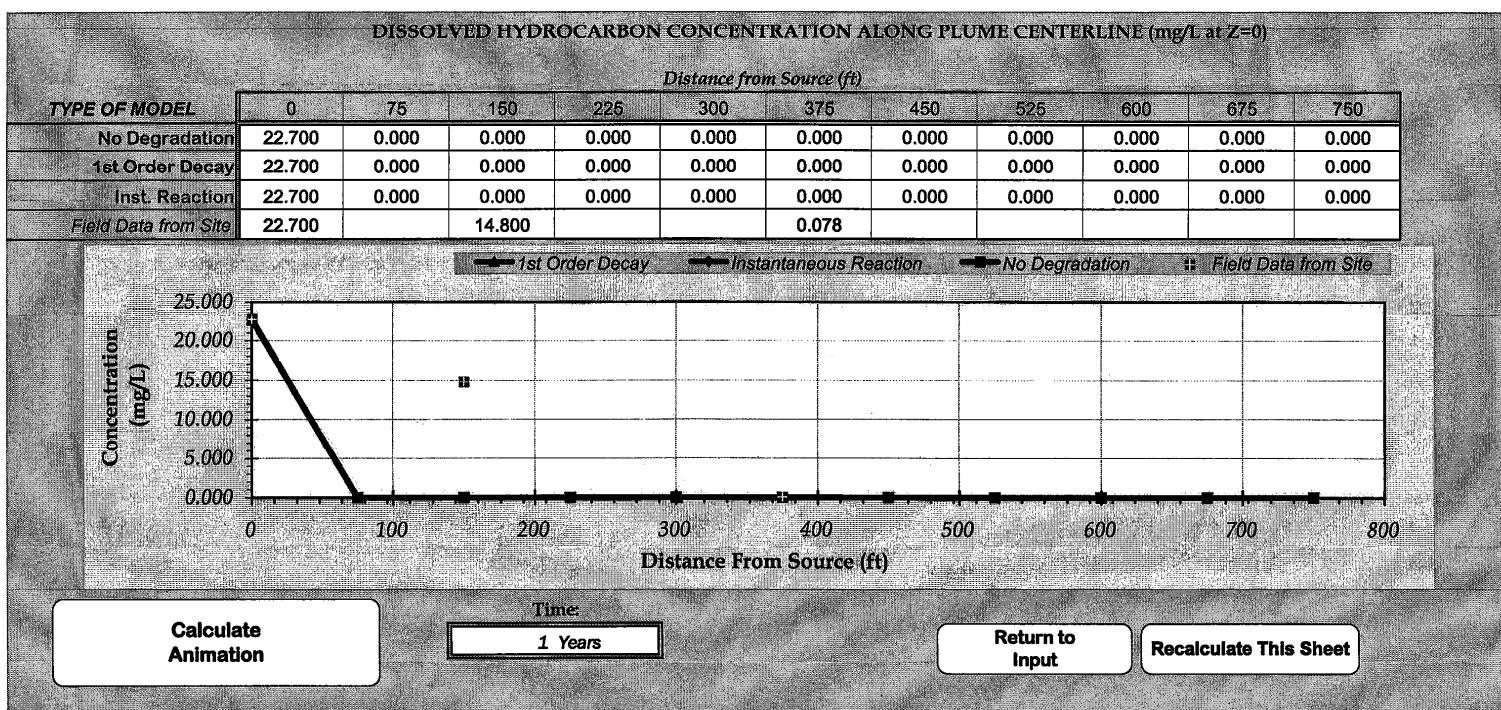


Figure 4b: Centerline Output

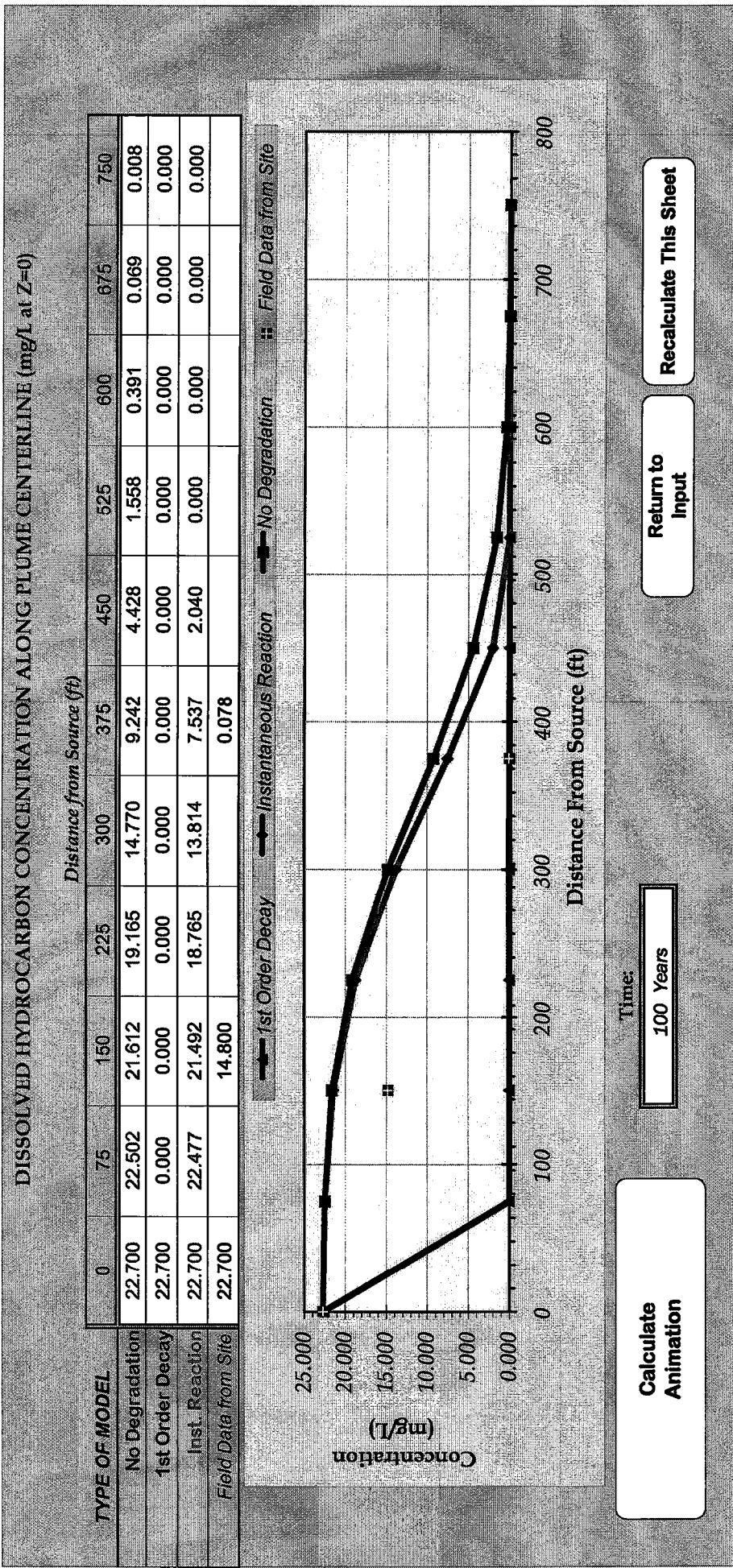


Figure 4c: Centerline Output

BIOSCREEN Natural Attenuation Decision Support System							
Air Force Center for Environmental Excellence							
1. HYDROGEOLOGY							
Seepage Velocity*	V _s	<input type="text" value="13.0"/> (ft/yr)	<input checked="" type="checkbox"/> or	<input type="text" value="115"/> (cm/sec)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hydraulic Conductivity	K	<input type="text" value="2.0"/> (cm/sec)	<input type="checkbox"/>	<input type="text" value="0.02"/> (ft/ft)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hydraulic Gradient	i	<input type="text" value="0.35"/> (-)	<input type="checkbox"/>	<input type="text" value="20"/> Value calculated by model, (Don't enter any data).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Porosity	n	<input type="text" value="0.35"/> (-)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. DISPERSION							
Longitudinal Dispersivity*	alpha_x	<input type="text" value="19.5"/> (ft)	<input type="checkbox"/>	<input type="text" value="115"/> 1. Enter value directly....or			
Transverse Dispersivity*	alpha_y	<input type="text" value="2.0"/> (ft)	<input type="checkbox"/> or	<input type="checkbox"/> 2. Calculate by filling in grey			
Vertical Dispersivity*	alpha_z	<input type="text" value="0.0"/> (ft)	<input type="checkbox"/>	<input type="checkbox"/> cells below. (To restore			
or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> formulas, hit button below).				
Estimated Plume Length	L _p	<input type="text" value="600"/> (ft)	<input type="checkbox"/>	<input type="checkbox"/> Data used directly in model,			
3. ADSORPTION							
Retardation Factor*	R	<input type="text" value="7.4"/> (-)	<input type="checkbox"/>	<input type="checkbox"/> 20	<input type="checkbox"/> Value calculated by model,		
or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (Don't enter any data).				
Soil Bulk Density	r _{so}	<input type="text" value="1.45"/> (kg/l)	<input type="checkbox"/>	<input type="checkbox"/>			
Partition Coefficient	K _{oc}	<input type="text" value="1543"/> (L/kg)	<input type="checkbox"/>	<input type="checkbox"/>			
Fraction Organic Carbon	f _{oc}	<input type="text" value="9.99E-04"/> (-)	<input type="checkbox"/>	<input type="checkbox"/>			
4. BIODEGRADATION							
1st Order Decay Coeff*	lambda	<input type="text" value="9.8E-1"/> (per yr)	<input type="checkbox"/>	<input type="checkbox"/>			
or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Solute Half-Life	t-half	<input type="text" value="0.71"/> (year)	<input type="checkbox"/>	<input type="checkbox"/>			
or Instantaneous Reaction Model	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Delta Oxygen*	DO	<input type="text" value="5.8"/> (mg/L)	<input type="checkbox"/>	<input type="checkbox"/>			
Delta Nitrate*	NO ₃	<input type="text" value="0.41"/> (mg/L)	<input type="checkbox"/>	<input type="checkbox"/>			
Observed Ferrous Iron*	Fe ²⁺	<input type="text" value="24.4"/> (mg/L)	<input type="checkbox"/>	<input type="checkbox"/>			
Delta Sulfate*	SO ₄	<input type="text" value="0"/> (mg/L)	<input type="checkbox"/>	<input type="checkbox"/>			
Observed Methane*	CH ₄	<input type="text" value="0"/> (mg/L)	<input type="checkbox"/>	<input type="checkbox"/>			
5. GENERAL							
Modeled Area Length*	L	<input type="text" value="750"/> (ft)	<input type="checkbox"/>	<input type="checkbox"/>			
Modeled Area Width*	W	<input type="text" value="280"/> (ft)	<input type="checkbox"/>	<input type="checkbox"/>			
Simulation Time*	T	<input type="text" value="1"/> (yr)	<input type="checkbox"/>	<input type="checkbox"/>			
6. SOURCE DATA							
Source Thickness in Sat Zone*	Z	<input type="text" value="10"/> (ft)	<input type="checkbox"/>	<input type="checkbox"/>			
Source Zones:							
Width* (ft)	Conc. (mg/L)*						
0	0						
80	0.499						
120	1.06						
80	0.499						
0	0						
Vertical Plane Source: Look at Plume Cross-Section and Input Concentrations & Widths for Zones 1, 2, and 3.							
Source Decay (see Help):							
Source-Halflife*	Infinite	(yr)	<input type="checkbox"/>	<input type="checkbox"/>			
Soluble Mass	<input type="checkbox"/>	<input type="checkbox"/>					
In NAPL, Soil	Infinite	(Kg)	<input type="checkbox"/>	<input type="checkbox"/>			
View of Plume Looking Down							
Observed Centerline Concentrations at Monitoring Wells If No Data Leave Blank or Enter "0"							
7. FIELD DATA FOR COMPARISON							
Concentration (mg/L)	1.06	.5	.005				
Dist. from Source (ft)	0	75	150	225	300	375	450
8. CHOOSE TYPE OF OUTPUT TO SEE:							
RUN CENTERLINE				RUN ARRAY			
View Output				View Output			
Help				Recalculate This Sheet			
Paste Example Dataset				Restore Formulas for Vs, Dispersivities, R, lambda, other			

Figure 5a: BIOSCREEN Input Screen

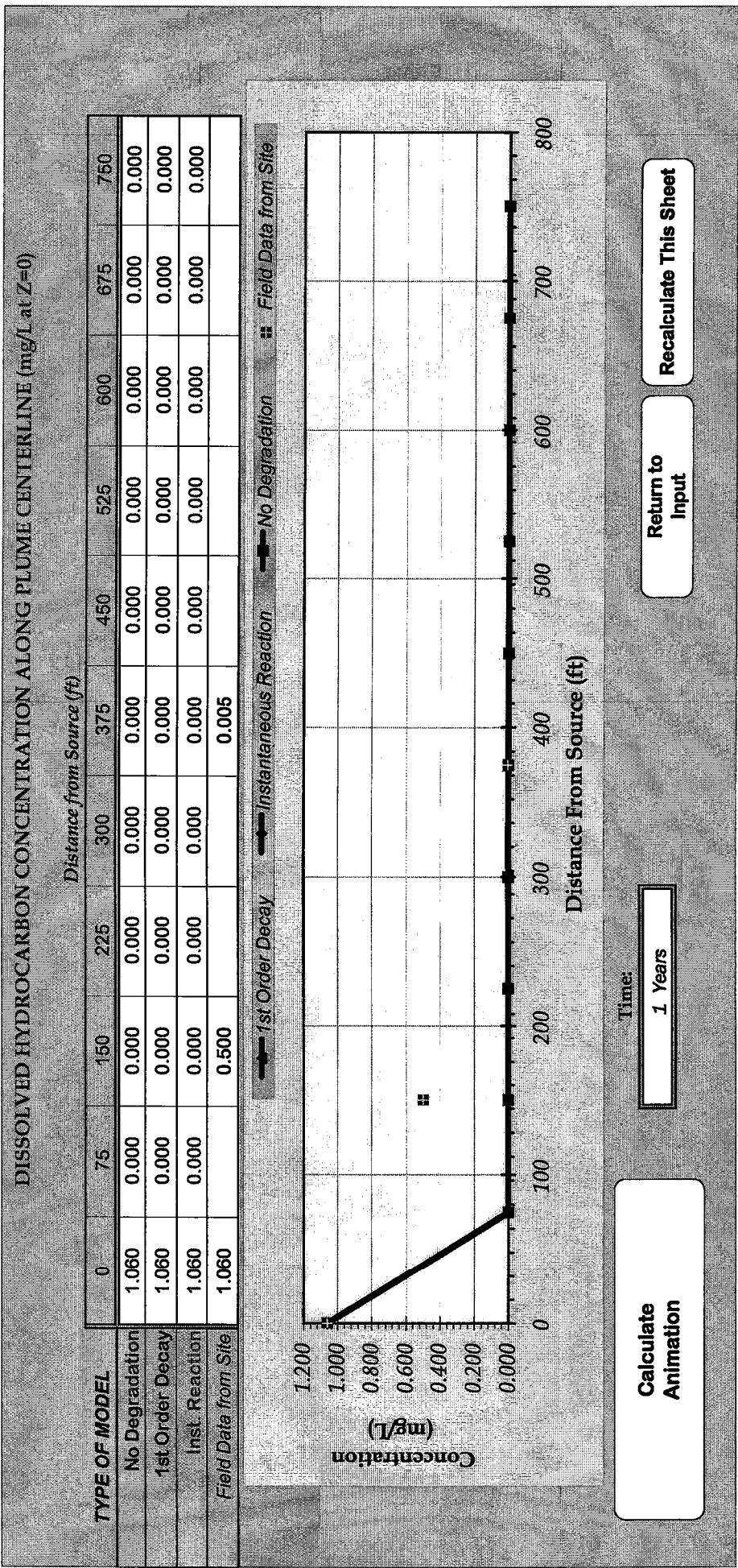


Figure 5b: Centerline Output

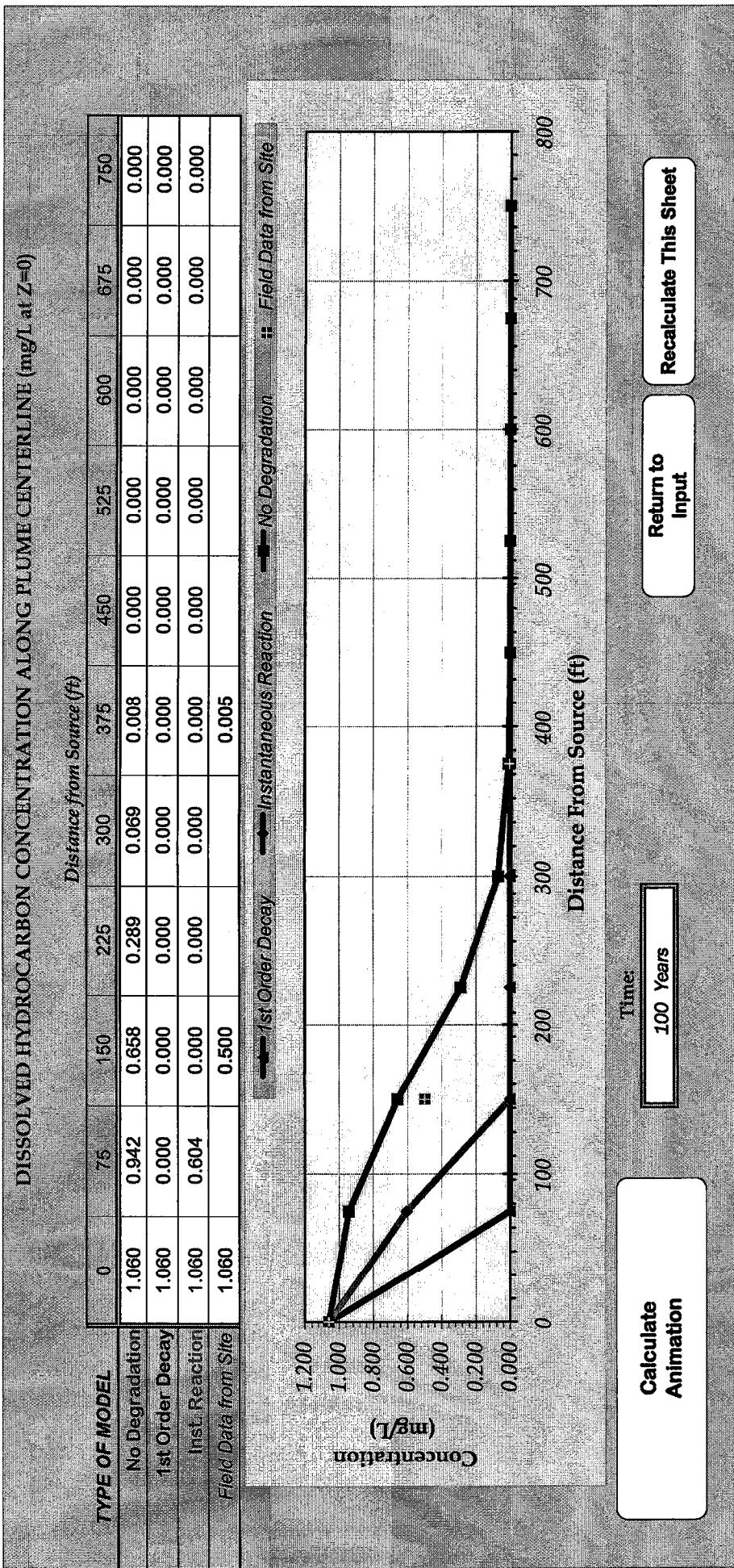


Figure 5c: Centerline Output

**MATERIAL
MANIFEST**

JBR Environmental Services
P. O. Box 4098
Spartanburg, SC 29305

Manifest Document No.

D-0720514

Page

1 of 1

Job No.

D-0720514

Emergency Phone Number: (864) 583-2717**GENERATOR INFORMATION**

Name:

SEI

US EPA ID No.

Street Address

13521 Hwy 11
Salem, SC

Mailing Address

3821 McNaughton Dr.
Ste. 9
Columbia, SC 29223

Phone No.

803 788-2535

Contact

Bob Bolton

DESCRIPTION OF MATERIALS

HM	USDOT Proper Shipping Name (Complete All Items for Hazardous Materials)	Hazard Class	UN/N A ID No.	Packing Group	Containers		Total Quantity	Unit Wt./Vol.
					Qty	Type		
a.	Non-regulated Solid non	1/1A	N/A	N/A	15	DM	12	
b.	Non-regulated Liquid, non	1/1A	N/A	N/A	1	DM		
c.								

ADDITIONAL INFORMATION

ERG No.

JBR Profile Codes

FACILITY USE

- a. Soil
b. Water
c.

510-0020 APPROVED FOR DISPOSAL

GENERATOR CERTIFICATION

This is to certify that the above-described materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. I further certify that none of the materials described above are a hazardous waste as defined by EPA 40 CFR Part 261 or any applicable state law, and unless specifically identified above, the materials contain less than 1,000 ppm total halogens and do not contain quantifiable levels (2 ppm) of PCBs as defined by EPA 40 CFR Parts 279 and 761.

Printed/Typed Name

Steven M Smith

Signature

St M Smith

Mo/Day/Yr.

7-23-01

TRANSPORTER INFORMATION

Transporter JBR Environmental Services

I hereby acknowledge receipt of the above-described materials for transport from the generator site listed above.

Address 210 Alice Street
Spartanburg, SC 29303

Signature *Permaire Wicht* Shipment Date 7/23/01

Transporter or
EPA ID No. SCR000004358

I hereby acknowledge that the above-described materials were received from the generator site and were transported to the facility listed below.

Phone 864-583-2717

Signature *Permaire Wicht* Delivery Date 7/23/01

Facility JBR Environmental Services

I hereby acknowledge receipt of the materials covered by this manifest except for any discrepancy noted below.

Address 210 Alice Street
Spartanburg, SC 29303

Signature *Mark A Schlecht* Receipt Date 7/23/01

Facility or
EPA ID No. SCR000004358

Differences 纠正方法 Handling Methods

Phone 864-583-2717

Signature *MM 3219*

Contact Rex Russell

Please print or type legibly. If 2 pages are required, complete information on second page.

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest
Document No.
GK40002. Page 1
of

08-24-01

3. Generator's Name and Mailing Address

SEI ENVIRONMENTAL, INC
3021 MCNAUGHTON DR. SUITE 9
COLUMBIA, SC 29223

4. Generator's Phone ()

5. Transporter 1 Company Name

SEI ENVIRONMENTAL, INC

6. US EPA ID Number

A. Transporter's Phone
803-788-2535

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
PO BOX 1384
SUMTER, SC 29151

10. US EPA ID Number

C. Facility's Phone

800-800-6840

11. Waste Shipping Name and Description

12. Containers

No.

Type

13. Total
Quantity14. Unit
Wt/Vola. NON HAZARDOUS PETROLEUM CONTAMINATED WATER
CROFT'S BP

01DR

b. NON HAZARDOUS PETROLEUM CONTAMINATED WATER
PANTRY #558

01DR

c. NON HAZARDOUS PETROLEUM CONTAMINATED SOIL
Frank's Car Wash

01DR

d. NON HAZARDOUS PETROLEUM CONTAMINATED SOIL
HWY 11 GROCERY

01DR

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

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

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

S. Collier

S. Collier

18 24 01

ORIGINAL - RETURN TO GENERATOR



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 1 Drum
Hwy 11 Grocery

Contaminant NonHazardous Petroleum
Contaminanted Soil

This is to certify 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 S. Sallier Date 08/24/01

**NON-HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest
Document No.

2. Page 1
of

09-04-01

3. Generator's Name and Mailing Address	GK4013			
4. Generator's Phone ()	3021 MCNAUGHTON DR SUITE 9 COLUMBIA, SC 29223			
5. Transporter 1 Company Name	6. US EPA ID Number	A. Transporter's Phone		
7. SEI ENVIRONMENTAL, INC	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 PO BOX 1384 SUMTER, SC 29151				
11. Waste Shipping Name and Description	8002800006840	13. Total Quantity	14. Unit Wt/Vol	
a. NON HAZARDOUS PETROLEUM CONTAMINATED WATER WACO PROPERTY GREELEYVILLE, SC	01DR	.	.	.
b. NON HAZARDOUS PETROLEUM CONTAMINATED WATER AMOCO STATION SALEM, SC	01DR	.	.	.
c.	.	.	.	.
d. NON HAZARDOUS PETROLEUM CONTAMINATED SPEED DRY PANTRY 849 COLUMBIA, SC	01DR	.	.	.
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
--------------------	-----------	-------	-----	------

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
--------------------	-----------	-------	-----	------

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
--------------------	-----------	-------	-----	------



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 1 Drum

Amoco Station
Salem, SC

Contaminant NonHazardous Petroleum
Contaminanted Water

This is to certify the above ~~soil~~^{water} 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. Salem

Date 09/05/01



3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800.377.2826
803.788.2535
Fax 788.2399

29-Tech

RECEIVED

JAN 11 2002

Under
Tank Program

January 8, 2002

Mr. Konstantine Akhvlediani, Hydrogeologist
SCDHEC - UST Program
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201

RE: Tier II Assessment Report Addendum
Highway 11 Grocery
UST Permit #03439
Oconee County

Dear Mr. Akhvlediani:

Attached is the Tier II Assessment Report Addendum for Highway 11 Grocery. I have included the previously submitted boom maintenance invoice as part of the current assessment invoice as you requested. Should you have any questions or require additional information, please contact me at 788-2535.

Sincerely,
SEI Environmental, Inc.

Robert G. Bolton, Jr.
Project Manager

Attachment

cc: Mr. Steve Smith, Highway 11 Grocery



TIER II ASSESSMENT REPORT ADDENDUM

Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
Oconee County
UST Permit #03439

PREPARED FOR:

Mr. Steve Smith
Highway 11 Grocery
180 Shallowford Road
Salem, South Carolina

PREPARED BY:

SEI Environmental, Inc.
3021 McNaughton Drive, Suite 9
Columbia, South Carolina 29223
(803) 788-2535

A handwritten signature in black ink, appearing to read "Robert G. Bolton, Jr."
Robert G. Bolton, Jr.
Project Manager
A handwritten signature in black ink, appearing to read "Frederick P. Lyke, P.G."
Frederick P. Lyke, P.G. #1055

January 8, 2002

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APPENDIX B	Groundwater Sampling Field Measurements
APPENDIX C	Groundwater Laboratory Analytical Results and Chain-of-Custody
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1.0 INTRODUCTION

Mr. Steve Smith contracted SEI Environmental, Inc. (SEI) to conduct a Tier II Assessment Addendum at the Highway 11 Grocery facility located at 13527 South Carolina Highway 11 near Salem, South Carolina. A site location map is presented as Figure 1. The assessment activities were approved by SCDHEC in correspondence to Mr. Smith dated November 16, 2001. A site location map is presented as Figure 1.

2.0 METHODOLOGY

2.1 Monitor Well Installation

Environmental Construction Services (ECS) personnel, using a truck mounted CME-75 drill rig, installed one (1) Type II groundwater monitor well (identified as MW-14) and two (2) Type III groundwater monitor wells (identified as DMW-2 and DMW-3) on December 4-6, 2001. ECS personnel, using a decontaminated hand auger, installed one (1) Type II groundwater monitor well (identified as MW-13) on December 4, 2001. Monitor Wells MW-13 and MW-14 were installed to approximate depths of 12 feet below ground surface (bgs) and 10 feet bgs, respectively. Monitor Wells DMW-2 and DMW-3 were installed to approximate depth of 75 feet bgs and 85 feet bgs, respectively. Specifically, Monitor Well MW-13 was installed in the hydraulically lateral direction from Monitor Well MW-1. Monitor Well MW-14 was installed adjacent to Fall Creek in the hydraulically down-gradient direction from Monitor Well MW-1. Monitor Well DMW-2 was installed adjacent to Monitor Well MW-8, and Monitor Well DMW-3 was installed adjacent to Monitor Wells MW-1 and DMW-1. Soil samples were not obtained for laboratory analysis during the installation of the monitor wells; however, soil samples were collected for lithologic descriptions during all monitor well installations. Monitor well locations are depicted in Figure 2.

The monitor wells are constructed of 2-inch diameter, Schedule 40, flush threaded PVC well casing with factory slotted (0.01-inch opening) Schedule 40 PVC well screen attached. Each Type II monitor well is constructed with the top of the well screen above the water table to allow for detection of potential free-phase liquid hydrocarbon. A uniformly graded silica filter pack was installed in the annular space from total depth to approximately 1.0 foot above the top of the screen and followed by approximately 0.5 feet of bentonite pellets, which were hydrated. The remainder of the boring was grouted to land surface. Monitor Wells MW-14, DMW-2, and DMW-3 were completed with a water tight, locking PVC cap, protected by a flush finished concrete pad with a 9-inch diameter steel, traffic rated manhole with a bolt down cover. Monitor Well MW-13 was completed with a water tight, locking PVC cap, protected by a three foot above-grade steel manway with a lockable lid. Following installations, each monitor well was developed with a clean, centrifugal pump to remove any fine materials that may impede the flow of groundwater into the well. Monitor Wells DMW-2 and DMW-3 were similarly constructed with the exception of a six-inch diameter outer casing set on top of rock at a depth of 45 feet bgs and 17 feet bgs, respectively. Air rotary techniques were used to drill through the outer casing and complete DMW-2 (from approximately 45 to 75 feet bgs) the following day. Air rotary techniques were used to drill through the outer casing of DMW-3 and complete it from approximately 17 to 85 feet bgs the following day. Monitor well construction details and lithologic descriptions are presented in Appendix A.

2.2 Site Hydrogeology

During the December 11, 2001, gauging event, approximately 0.25 feet and 0.54 feet of liquid phase hydrocarbons (LPH) were detected at Monitor Wells MW-1 and MW-8, respectively. Groundwater flow direction is toward the east and northeast with a hydraulic gradient of 0.0365 feet per foot as measured between Monitor Wells MW-1 and MW-14. Groundwater measurements are summarized in Table I, and a groundwater elevation contour map is depicted in Figure 3.

2.3 Soil Organic Vapor Measurements

Soil organic vapor concentration measurements were performed on saturated soil samples obtained during monitor well installations with a Foxboro™ Model 128 OVA-FID. The OVA-FID was compared with a known standard (i.e. methane at 96 ppm) each day before it was used. Each soil sample was placed in a new, resealable, plastic bag and allowed to volatilize for a minimum of fifteen minutes. The OVA-FID probe was then inserted into the headspace of the bag, and the highest organic vapor reading observed was recorded for each sample. Organic vapor concentrations are recorded on the lithologic and monitor well construction logs.

2.4 Groundwater Sampling and Analysis

During the current assessment activities, SEI personnel obtained groundwater samples from Monitor Wells MW-1 through MW-14, DMW-1, DMW-2, and DMW-3. In addition, a groundwater sample was collected from the potable water well (identified as WW-1) located at the subject property. A surface water sample was collected from Fall Creek (identified as CK-1) located hydraulically down-gradient from the site. A new, disposable, polyethylene bailer was used for the collection of the water samples from the monitor wells. Each sample was obtained after pH and temperature values had equilibrated unless petroleum odor was emanating from the well. If petroleum odors were observed in the monitor well, the groundwater sample was obtained after three well volumes were purged. All purge water was drummed for proper disposal at a permitted treatment facility. Field measurements are presented in Appendix B. New, disposable, latex gloves were used to maintain sample integrity during the sampling process. The groundwater samples were placed in laboratory supplied containers, placed on ice, and shipped via FedEx to TestAmerica Inc. in Nashville, Tennessee for proper analysis. Proper preservation methods and chain-of-custody procedures were followed throughout the sampling process. The samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene by EPA method 8260B; and lead by EPA

method 6010B. In addition, the samples were analyzed for nitrate by EPA method 353.2; sulfate by EPA method 9056; and ferrous iron by EPA method 3500D. Only Monitor Wells MW-1, MW-6, MW-8, DMW-1, and DMW-2 were analyzed for methane by EPA method RSK175M, as these wells are located at the source and hydraulically down-gradient from the source area.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Groundwater Results

Groundwater analytical results for the samples collected during the current assessment activities detected the presence of benzene concentrations at all sample locations except MW-3, MW-5, MW-9, MW-12, MW-13, and WW-1. Toluene concentrations were detected at all sample locations except MW-5, MW-9, MW-12, MW-13, and WW-1. Ethylbenzene concentrations were detected at all sample locations except MW-2, MW-3, MW-5, MW-9, MW-12, MW-13, DMW-2, and WW-1. Xylenes concentrations were detected at all sample locations except MW-3, MW-5, MW-9, MW-12, MW-13, DMW-2, and WW-1. MTBE concentrations were detected at sample locations except MW-2, MW-3, MW-5, MW-7, MW-9, MW-13, and WW-1. Naphthalene concentrations were detected at Samples MW-4, MW-8, MW-10, MW-11, MW-14, DMW-1, DMW-3, and CK-1. It is probable that naphthalene concentrations exist at Samples MW-1 and MW-6, but a high dilution factor caused the results to be below detection limits. Methane concentrations were not detected at any sampled locations. Lead concentrations were detected at all sample locations except DMW-1, CK-1, and WW-1. Ferrous iron concentrations were detected at all sample locations except MW-2, MW-5, MW-7, and WW-1. Nitrate concentrations were detected at all sample locations except MW-1, MW-10, MW-11, MW-14, and DMW-1. Sulfate concentrations were detected at all sample locations except MW-2, MW-3, MW-5 through MW-8, MW-11, and WW-1.

Benzene concentrations were detected greater than its RBSL of 5 µg/l at Samples MW-1, MW-2, MW-4, MW-6, MW-7, MW-8, MW-10, MW-11, MW-14, DMW-1, DMW-3, and CK-1.

Toluene concentrations were detected greater than its RBSL of 1000 µg/l at Samples MW-1, MW-4, MW-6, MW-8, MW-10, MW-14, DMW-1, and DMW-2. Ethylbenzene concentrations were detected greater than its RBSL of 700 µg/l at Samples MW-1, MW-4, MW-6, MW-8, MW-10, MW-14, and DMW-3. Xylenes concentrations were detected greater than its RBSL of 10000 µg/l at Samples MW-1, MW-6, MW-8, MW-14, and DMW-3. MTBE concentrations were detected greater than its RBSL of 40 µg/l at Samples MW-1, MW-4, MW-6, MW-8, MW-10, MW-11, MW-14, DMW-1, and DMW-3. Naphthalene concentrations were detected greater than its RBSL of 25 µg/l at Samples MW-4, MW-8, MW-10, MW-11, MW-14, DMW-1, and DMW-3. It is probable that naphthalene concentrations exist greater than its RBSL at Samples MW-1 and MW-6, but a high dilution factor caused the results to be below detection limits. Lead concentrations were detected greater than its RBSL of 15 µg/l at all sample locations except MW-7, MW-9, DMW-1, DMW-3, CK-1, and WW-1. Groundwater analytical results are presented in Table II, and groundwater concentrations are depicted in Figures 4 through 6. Historical groundwater analytical results are presented in Table III. Laboratory analyses and chain-of-custody are presented in Appendix C.

4.0 CONCLUSIONS AND RECOMMENDATIONS

- Groundwater flow at the site is in a northeastern direction with a hydraulic gradient of 0.0365 feet per foot as measured between Monitor Wells MW-1 and MW-14.
- Approximately 0.25 feet and 0.54 feet of liquid phase hydrocarbons were detected at Monitor Wells MW-1 and MW-8 during the December 11, 2001, gauging event.
- The onsite potable water well, identified as WW-1, was sampled as part of the current assessment activities. Laboratory analytical results failed to detect petroleum hydrocarbons in this well.

- Surface water samples were collected from Fall Creek (identified as CK-1) located hydraulically down-gradient from the site. Laboratory analytical results detected BTEX, MTBE, and naphthalene concentrations at Sample CK-1.
- SEI personnel continue to monitor the absorbent booms that have been placed in the interception trench and on Fall Creek directly down-gradient from the site. These booms are replaced on a monthly basis or as needed to prevent the migration of a petroleum sheen from traveling down Fall Creek.
- Total BTEX concentrations have increased at Samples MW-1, MW-2, MW-7, MW-8, MW-10, MW-11, and DMW-1 since the previous sampling activities. However, total BTEX concentrations have decreased or remained below detection limits at the remaining sample locations for the same period. MTBE concentrations have increased at Samples MW-1, MW-4, MW-8, MW-11, MW-12, and DMW-1 since the previous sampling activities. However, MTBE concentrations have decreased or remained below detection limits at the remaining sample locations for the same period. Naphthalene concentrations have increased at Samples MW-8, MW-10, MW-11, DMW-1, and CK-1 since the previous sampling activities. However, naphthalene concentrations have decreased or remained below detection limits at the remaining sample locations for the same period. Comparisons for naphthalene could not be made for Monitor Wells MW-1, MW-4, and MW-6 due to high dilution factors at these locations.
- Petroleum hydrocarbons in the groundwater have not been vertically delineated with the installation of Monitor Well DMW-3 in the source area.
- Petroleum hydrocarbons in the groundwater have been vertically delineated in the hydraulically down-gradient area with the installation of Monitor Well DMW-2.
- Petroleum hydrocarbons in the groundwater have been horizontally delineated in the direction of Monitor Well MW-4 with the installation of Monitor Well MW-13.

Analytical results for Monitor Well DMW-3 indicate that vertical delineation has not occurred with the installation of this well in the source area. Based on groundwater elevation data, there

exists a downward hydraulic gradient between Monitor Well MW-1 and DMW-3. SEI recommends the installation of a third telescoping well in the source area. Construction of this well would include the installation of an outer casing to a depth of 90 feet to 100 feet with a total well depth of 125 feet to 150 feet.

5.0 REPORT LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the current UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

REFERENCES

Aucott, Walter R. and Gary K. Speiran, 1985, *Geohydrology and Water Quality of the Coastal Plain Aquifers of South Carolina*, Proceedings of Symposium on Groundwater and Environmental Hydrogeology in South Carolina October 1 & 2, 1985. SCDHEC 153p.

Freeze, R. Allen and J. A. Cherry, 1979, *Ground Water*, Prentice-Hall, Englewood Cliffs, New Jersey.

SCDHEC, May 15, 2001, *Risk-Based Corrective Action for Petroleum Releases*, Columbia, South Carolina.

SEI Environmental, Inc., September 25, 2001, Tier II Assessment Report – Highway 11 Grocery, Columbia, South Carolina.

TABLE I
Groundwater Elevation Data
Highway 11 Grocery / Salem, South Carolina

Monitor Well Number	Gauging Date	Top of Casing Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Depth of Well (feet)	Water Table Elevation (feet)
MW-1	12/11/01	103.38	26.05*	0.25	30	77.33
MW-2	12/11/01	104.85	27.84	0	35	77.01
MW-3	12/11/01	104.89	26.57	0	30	78.32
MW-4	12/11/01	99.90	24.74	0	35	75.16
MW-5	12/11/01	106.06	30.58	0	35	75.48
MW-6	12/11/01	100.00	23.37	0	35	76.63
MW-7	12/11/01	103.66	29.97	0	40	73.69
MW-8	12/11/01	86.51	21.90*	0.54	30	64.61
MW-9	12/11/01	58.39	2.06	0	12	56.33
MW-10	12/11/01	93.78	21.45	0	24	72.33
MW-11	12/11/01	83.20	18.20	0	23	65.00
MW-12	12/11/01	58.69	3.07	0	12	55.62
MW-13	12/11/01	77.72	6.08	0	12	71.64
MW-14	12/11/01	59.19	2.39	0	10	56.80
DMW-1	12/11/01	103.27	26.35	0	45	76.92
DMW-2	12/11/01	86.21	18.65	0	75	67.56
DMW-3	12/11/01	103.36	43.43	0	85	59.93

Top of casing elevations are based on an assumed elevation.

* Adjusted depth to water = depth to water - [(LPH thickness) x 0.78)]

TABLE II
Groundwater Analytical Results
Highway 11 Grocery / Salem, South Carolina

Chemical of Concern	RBSL ($\mu\text{g/l}$)	MW-1 ($\mu\text{g/l}$)	MW-2 ($\mu\text{g/l}$)	MW-3 ($\mu\text{g/l}$)	MW-4 ($\mu\text{g/l}$)	MW-5 ($\mu\text{g/l}$)	MW-6 ($\mu\text{g/l}$)	MW-7 ($\mu\text{g/l}$)	MW-8 ($\mu\text{g/l}$)	MW-9 ($\mu\text{g/l}$)	MW-10 ($\mu\text{g/l}$)
Free Product Thickness	NA	0.25'	None	None	None	None	None	None	0.54'	None	None
Benzene	5	23100	28.4	<1.0	1730	<1.0	6950	62.9	21100	<1.0	2540
Toluene	1000	58800	18.6	1.9	3840	<1.0	27300	74.5	57600	<1.0	7130
Ethylbenzene	700	5050	<1.0	<1.0	865	<1.0	3300	1.8	4870	<1.0	966
Xylenes	10000	26000	16.1	<1.0	4600	<1.0	17200	21.4	25400	<1.0	4440
Total BTEX	NA	112950	<64.1	<4.9	11035	<4.0	54750	160.6	108970	<4.0	15076
MTBE	40	118000	<5.0	<5.0	925	<5.0	7350	<5.0	49000	<5.0	3210
Naphthalene	25	<2500	<5.0	<5.0	250	<5.0	<2500	<5.0	980	<5.0	199
Methane	NA	<26.0	NS	NS	NS	NS	<26.0	NS	<26.0	NS	NS
Lead	15	267	69.0	251	539	1070	378	15.0	22.0	8.00	87.0
Ferrous Iron	NA	6350	<100	2880	1270	<100	11700	<100	3670	604	2070
Nitrate	NA	<0.100*	0.630*	0.440*	0.220*	0.330*	0.250*	0.710*	3.00*	0.130*	<0.100*
Sulfate	NA	49.2*	<1.00*	<1.00*	1.50*	<1.00*	<1.00*	<1.00*	<1.00*	1.95*	1.17*

Bold concentrations represent those greater than the respective RBSL; NA = Not Applicable; NS = Not Sampled

*denotes results in mg/l

TABLE II (continued)
Groundwater Analytical Results
Highway 11 Grocery / Salem, South Carolina

Chemical of Concern	RBSL ($\mu\text{g/l}$)	MW-11 ($\mu\text{g/l}$)	MW-12 ($\mu\text{g/l}$)	MW-13 ($\mu\text{g/l}$)	MW-14 ($\mu\text{g/l}$)	DMW-1 ($\mu\text{g/l}$)	DMW-2 ($\mu\text{g/l}$)	DMW-3 ($\mu\text{g/l}$)	CK-1 ($\mu\text{g/l}$)	WW-1 ($\mu\text{g/l}$)
Free Product Thickness	NA	None	None	None	None	None	None	None	NA	NA
Benzene	5	1120	<1.0	<1.0	4220	3530	1.8	5620	11.3	<1.0
Toluene	1000	32.0	<1.0	<1.0	13700	7000	1.1	29600	18.6	<1.0
Ethylbenzene	700	178	<1.0	<1.0	2180	625	<1.0	3380	4.7	<1.0
Xylenes	10000	970	<1.0	<1.0	11400	3420	<1.0	14300	25.6	<1.0
Total BTEX	NA	2300.0	<4.0	<4.0	31500	14575	<4.9	52900	60.2	<4.0
MTBE	40	272	9.3	<5.0	9560	16400	30.7	8410	17.7	<5.0
Naphthalene	25	70.0	<5.0	<5.0	453	132	<5.0	795	5.9	<5.0
Methane	NA	NS	NS	NS	NS	<26.0	<26.0	NS	NS	NS
Lead	15	89.0	52.0	114	43.0	<3.00	499	11.0	<3.00	<3.00
Ferrous Iron	NA	12300	674	135	21400	1120	42200	328	166	<100
Nitrate	NA	<0.100*	0.170*	0.390*	<0.100*	<0.100*	0.420*	1.75*	0.110*	0.250*
Sulfate	NA	<1.00*	2.90*	2.57*	1.20*	1.45*	16.1*	30.2*	1.43*	<1.00*

Bold concentrations represent those greater than the respective RBSL; NA = Not Applicable; NS = Not Sampled

*denotes results in mg/l

TABLE III
Historical Groundwater Analytical Results, dated July & August 2001
Highway 11 Grocery / Salem, South Carolina

Chemical of Concern	RBSL ($\mu\text{g/l}$)	MW-1* ($\mu\text{g/l}$)	MW-2* ($\mu\text{g/l}$)	MW-3 ($\mu\text{g/l}$)	MW-4 ($\mu\text{g/l}$)	MW-5 ($\mu\text{g/l}$)	MW-6 ($\mu\text{g/l}$)	MW-7 ($\mu\text{g/l}$)	MW-8 ($\mu\text{g/l}$)
Free Product Thickness	NA	None	None	None	None	None	None	None	None
Benzene	5	4800	15.1	<2.0	1500	<2.0	5700	18.3	17100
Toluene	1000	7300	61.7	4.1	7460	<2.0	25800	25.0	34400
Ethylbenzene	700	3430	9.61	<2.0	1400	<2.0	4760	2.1	3060
Xylenes	10000	9800	52.0	8.2	7740	<2.0	22700	17.5	14800
Total BTEX	NA	25330	138.41	<16.3	18100	<8.0	58960	62.9	69360
MTBE	40	14000	45.2	<2.0	620	<2.0	11100	<2.0	47000
Naphthalene	25	578	15.6	<5.0	<500	<5.0	1060	<5.0	500
EDB	0.05	<1.00	<1.00	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Benzo(a)anthracene	10	<0.200	<0.200	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(b)fluoranthene	10	<0.200	<0.200	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(k)fluoranthene	10	<0.500	<0.500	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chrysene	10	<2.00	<2.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Dibenzo(a,h)anthracene	10	<0.200	<0.200	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methane	NA	NS	NS	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0

Bold concentrations represent those greater than the respective RBSL; NA = Not Applicable; NS = Not Sampled

*Sampled March 30, 2001

TABLE III (continued)

Historical Groundwater Analytical Results, dated July & August 2001
Highway 11 Grocery / Salem, South Carolina

Chemical of Concern	RBSL (mg/l)	MW-1* (mg/l)	MW-2* (mg/l)	MW-3 (mg/l)	MW-4 (mg/l)	MW-5 (mg/l)	MW-6 (mg/l)	MW-7 (mg/l)	MW-8 (mg/l)
Lead	0.015	0.0781	0.0117	0.5850	0.4320	0.6180	0.1560	0.0410	0.0350
Ferrous Iron	NA	NS	NS	5.09	0.690	0.517	24.4	0.150	10.2
Nitrate	NA	NS	NS	0.51	0.28	0.370	<0.10	0.860	0.190
Sulfate	NA	NS	NS	<1.00	2.06	<1.00	<1.00	<1.00	<1.00

Bold concentrations represent those greater than the respective RBSL; NA = Not Applicable; NS = Not Sampled

*Sampled March 30, 2001

TABLE III (continued)
Historical Groundwater Analytical Results, dated July & August 2001
Highway 11 Grocery / Salem, South Carolina

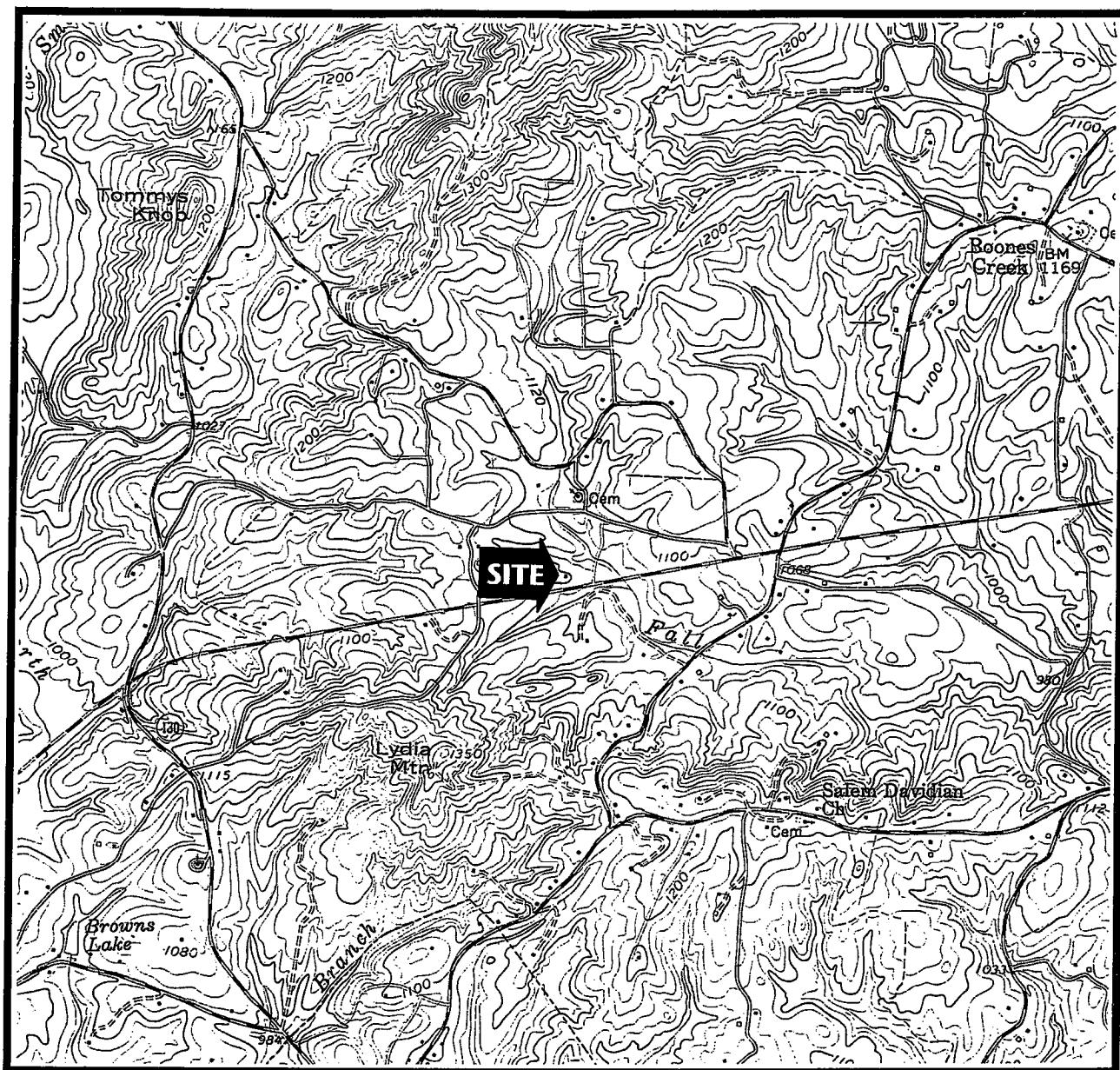
Chemical of Concern	RBSL ($\mu\text{g/l}$)	MW-9 ($\mu\text{g/l}$)	MW-10 ($\mu\text{g/l}$)	MW-11 ($\mu\text{g/l}$)	MW-12 ($\mu\text{g/l}$)	DMW-1 ($\mu\text{g/l}$)	CK-1 ($\mu\text{g/l}$)	CK-2 ($\mu\text{g/l}$)	WW-1 ($\mu\text{g/l}$)
Free Product Thickness	NA	None	None	None	None	None	NA	NA	NA
Benzene	5	<2.0	1970	398	<2.0	2060	53.4	<2.0	<2.0
Toluene	1000	<2.0	5500	2.3	<2.0	4320	78.0	<2.0	<2.0
Ethylbenzene	700	<2.0	350	4.4	<2.0	335	15.2	<2.0	<2.0
Xylenes	10000	<2.0	3150	170	<2.0	2180	77.8	<2.0	<2.0
Total BTEX	NA	<8.0	10970	574.7	<8.0	8895	224.4	<8.0	<8.0
MTBE	40	<2.0	3360	65.0	4.7	8750	46.7	<2.0	<2.0
Naphthalene	25	<5.0	109	<5.0	<5.0	80.6	<5.0	<5.0	<5.0
EDB	0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Benzo(a)anthracene	10	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(b)fluoranthene	10	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Benzo(k)fluoranthene	10	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Chrysene	10	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Dibenzo(a,h)anthracene	10	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methane	NA	715	<26.0	<26.0	<26.0	<26.0	331	<26.0	<26.0

Bold concentrations represent those greater than the respective RBSL; NA = Not Applicable

TABLE III (continued)
Historical Groundwater Analytical Results, dated July & August 2001
Highway 11 Grocery / Salem, South Carolina

Chemical of Concern	RBSL (mg/l)	MW-9 (mg/l)	MW-10 (mg/l)	MW-11 (mg/l)	MW-12 (mg/l)	DMW-1 (mg/l)	CK-1 (mg/l)	CK-2 (mg/l)	WW-1 (mg/l)
Lead	0.015	0.617	0.9770	0.324	0.093	<0.0030	<0.0030	<0.0030	<0.0030
Ferrous Iron	NA	5.370	8.53	6.880	4.430	0.136	0.247	0.716	<0.100
Nitrate	NA	0.24	<0.100	0.18	0.15	<0.10	0.26	0.73	0.310
Sulfate	NA	1.83	<1.00	1.58	2.66	1.35	1.28	2.35	<1.00

Bold concentrations represent those greater than the respective RBSL; NA = Not Applicable



SCALE 1:24000

1 ½ 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

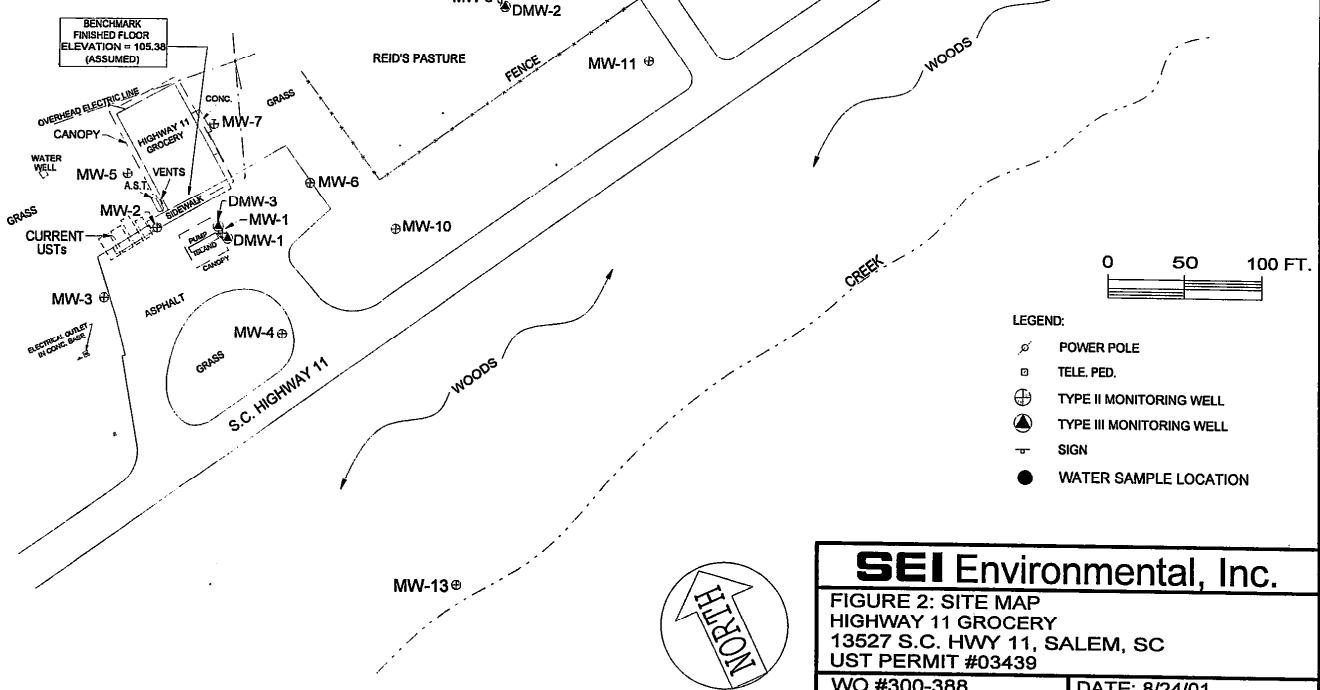
W.O. #: 300-388
DWG #

DATE: 9/5/01
DRAWN BY: JC



WELL #	INNER CASING ELEVATION
MW-1	103.98
MW-2	104.85
MW-3	104.89
MW-4	99.80
MW-5	106.06
MW-6	100.00
MW-7	103.66
MW-8	86.51
MW-9	58.39
MW-10	93.78
MW-11	83.20
MW-12	58.68
MW-13	77.72
MW-14	59.19
DMW-1	103.27
DMW-2	86.21
DMW-3	103.36

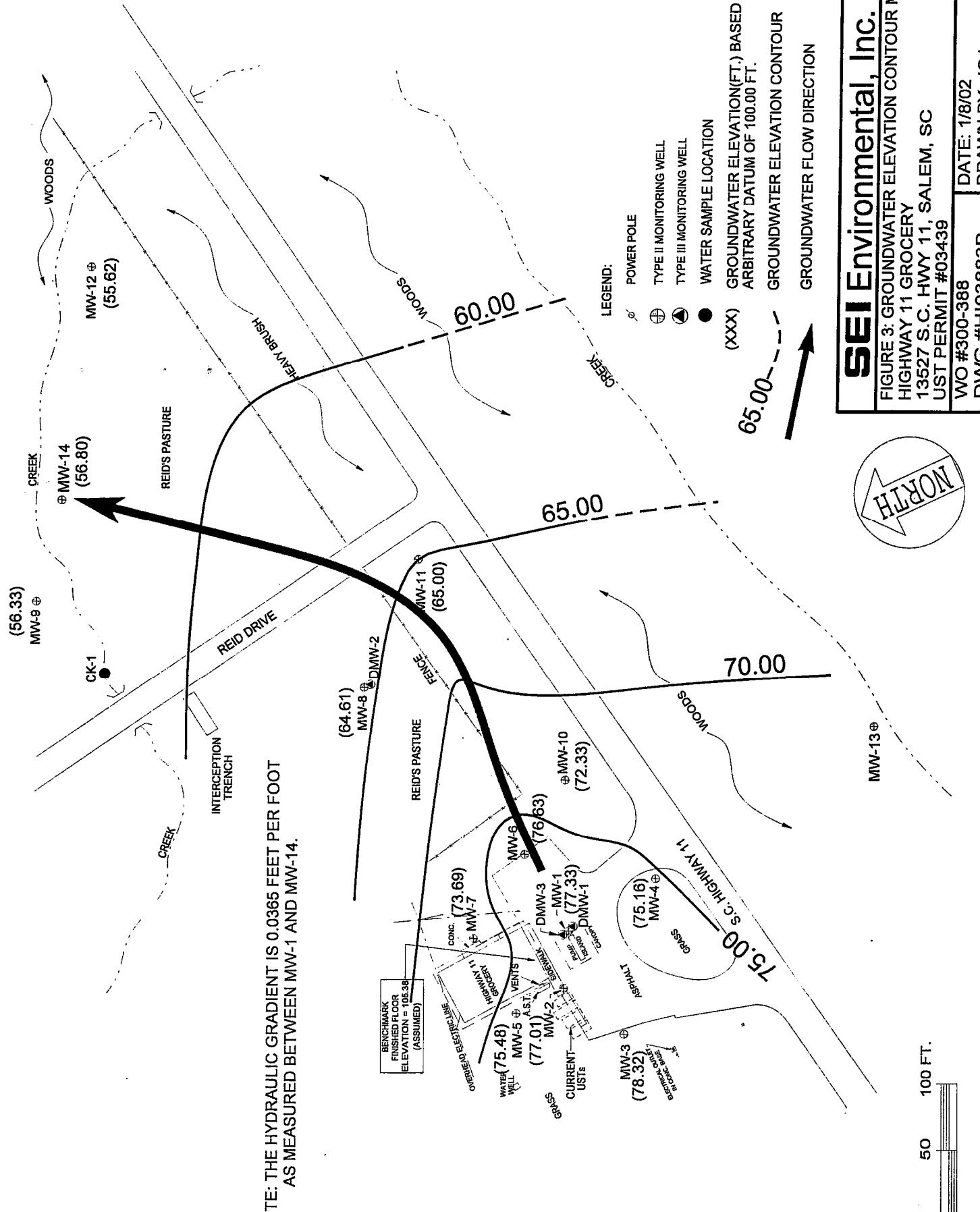
NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.

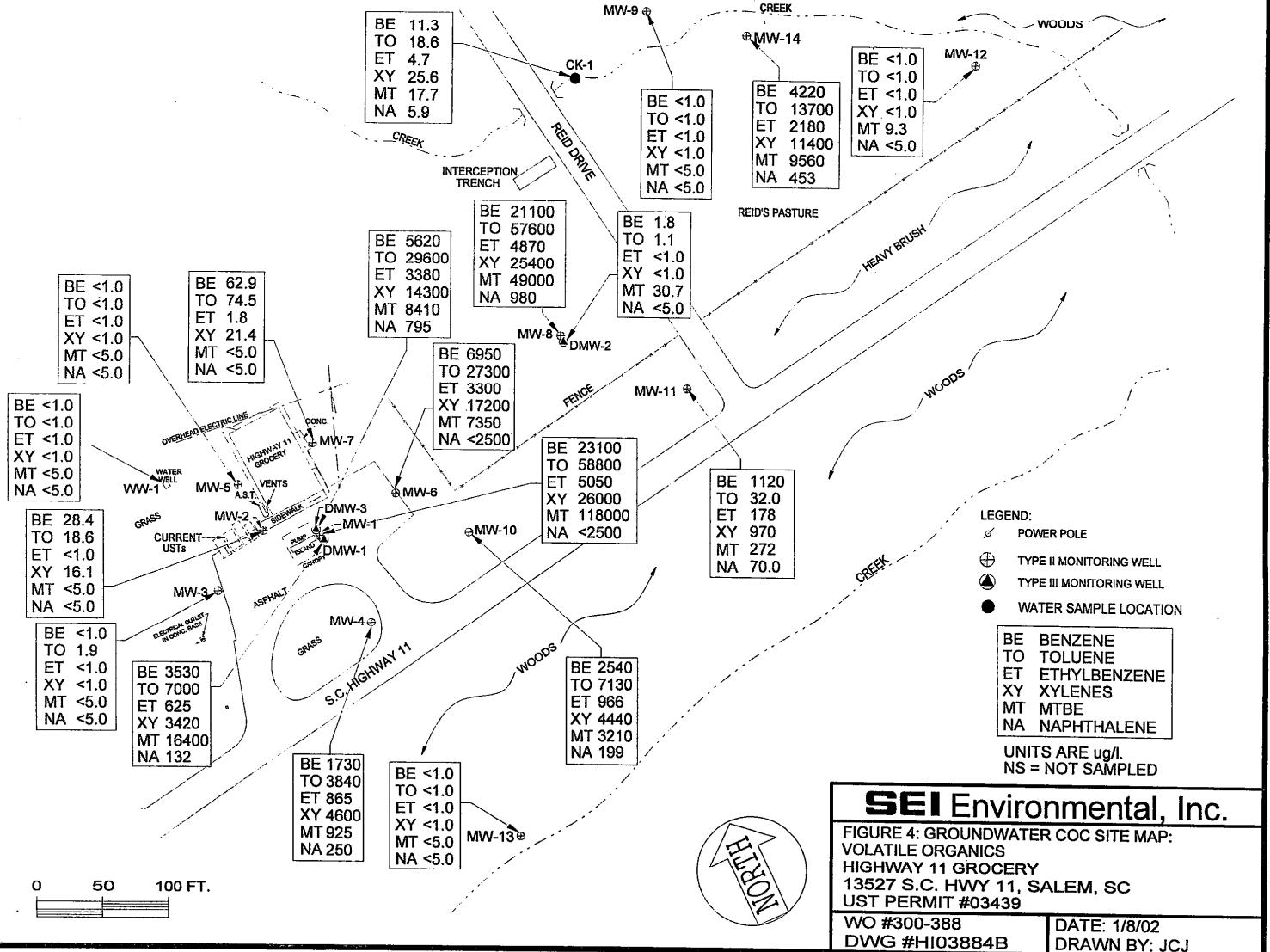


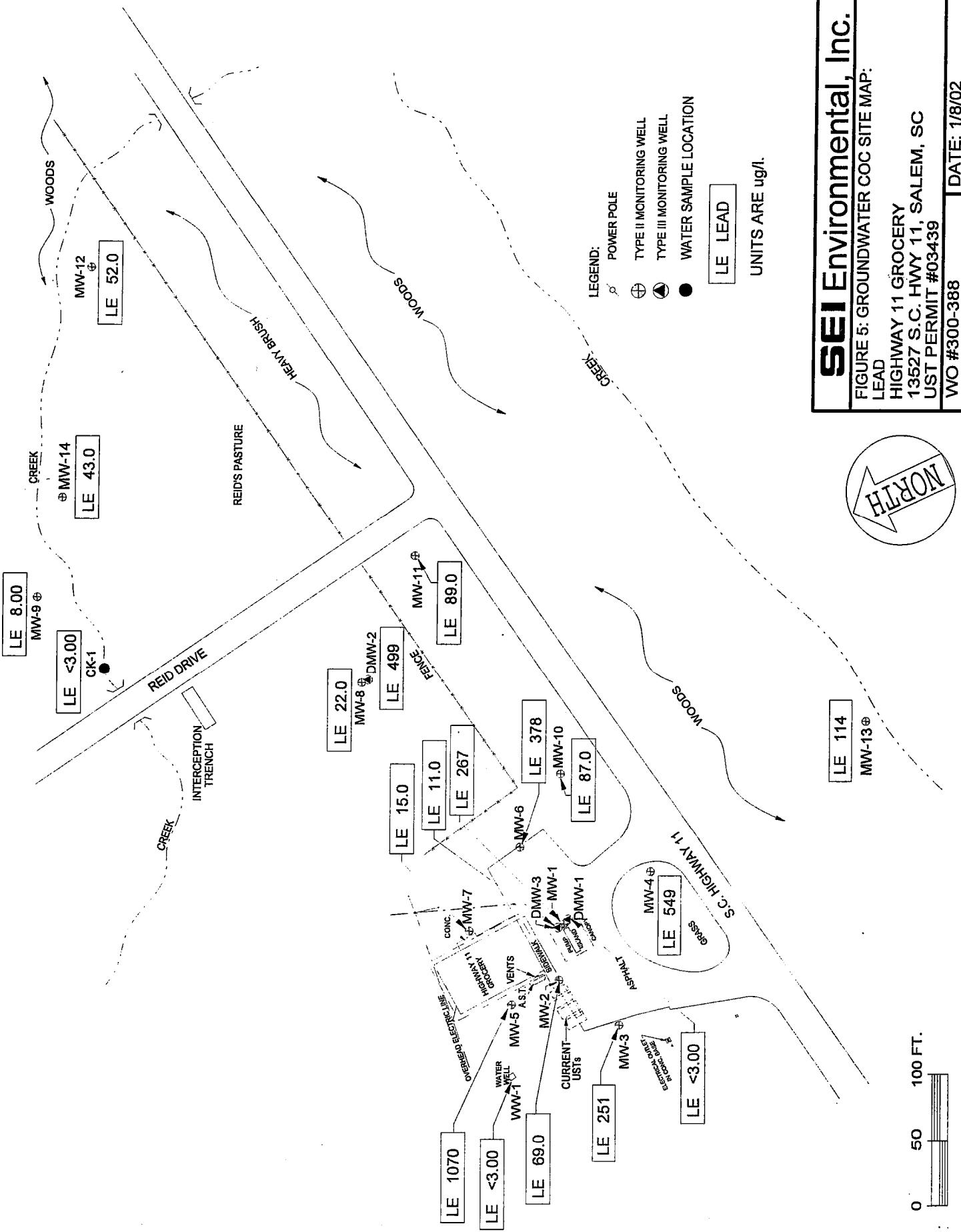
SEI Environmental, Inc.

FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

WO #300-388 DWG #H10388F1	DATE: 8/24/01 DRAWN BY: JCJ
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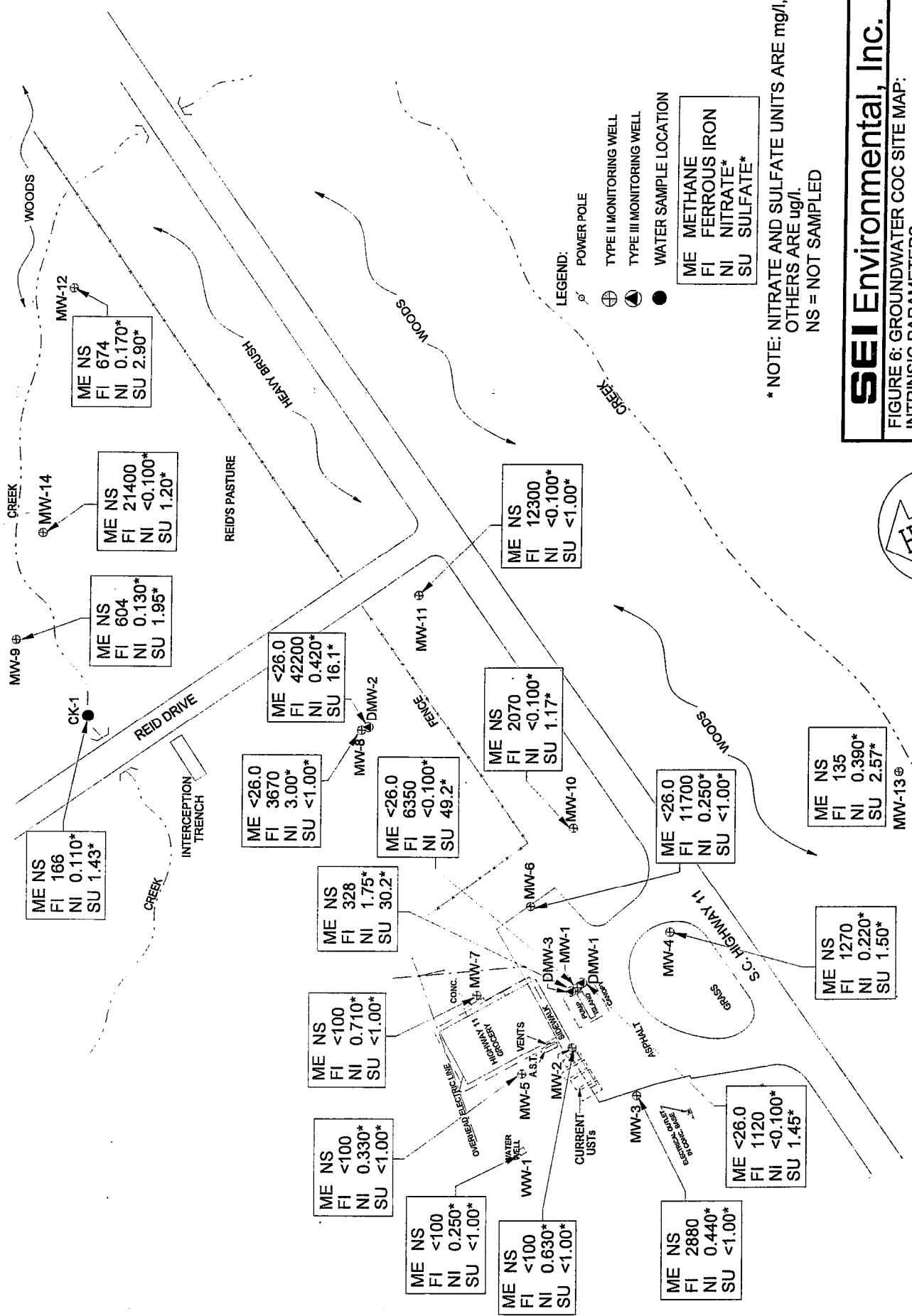




SEI Environmental, Inc.

FIGURE 5: GROUNDWATER COC SITE MAP:
LEAD
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439
WO #300-388
DATE: 1/8/02
DWG #H03885B





CLIQUE & COLQUINTA WATER CO., INC.

FIGURE 6: GROUNDWATER COC SITE MAP:

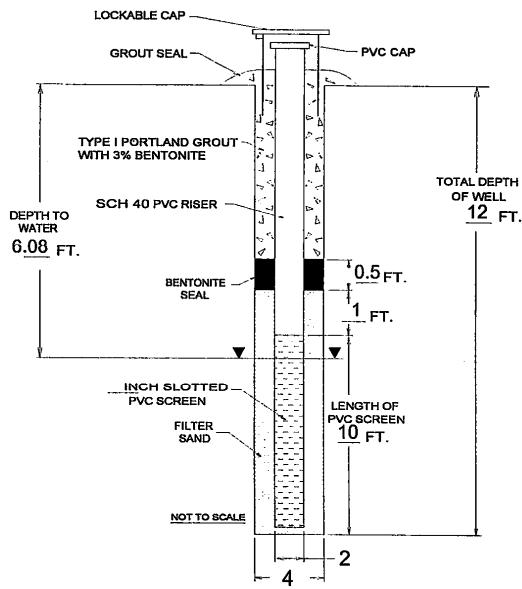
INTRINSIC PARAMETERS
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

WO #300-388 DATE: 1/8/02
DWG #H0103886B DRAWN BY: JCJ

APPENDIX A
Monitor Well Construction Logs

Boring Log and Type II Well Construction Details

WELL IDENTIFICATION: MW-13 DATE DRILLED: 12/4/01
 STATE PERMIT #: 03439 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13527 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 77.72 LAND SURFACE ELEV.: N/D



DRILLING METHOD: HAND AUGER
 SAMPLING METHOD: GRAB
 GRAVEL PACK SIZE: 20/30 SILICA SAND
 SLOT SIZE: 0.010 INCH
 COMMENTS:
 N/D = NOT DETERMINED
 T.O.C. ELEVATION IS REFERENCED TO AN ASSUMED
 ELEVATION.
 THIS IS AN ABOVE GRADE MONITOR WELL.

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOV. ERY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	0.0	SP	GRAY, SOFT, VERY FINE-GRAINED SAND, WET	
10	ND	ND	0.0	SP	GRAY, SOFT, VERY FINE-GRAINED SAND, WET	
15						
20						
25						
30						
35						
40						



Water Well Record

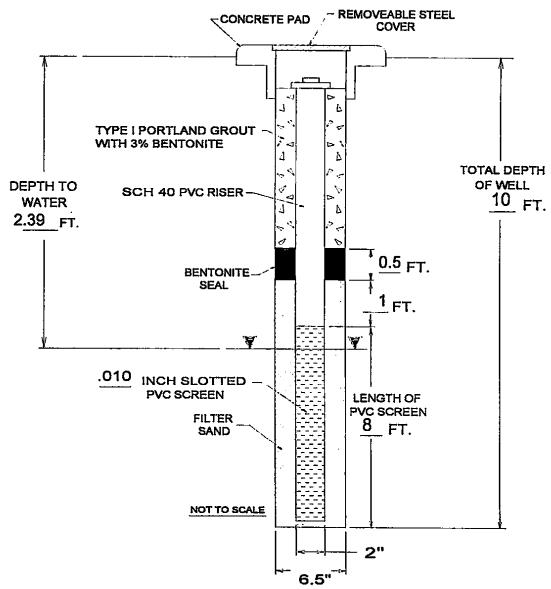
Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708: (803) 898-4300

1. WELL OWNER INFORMATION: Name: Hwy 11 Grocery (last) (first) Address: 180 Shallowford Rd. City: Salem State: NC Zip: 27674 Telephone: Work: Home:			6. PERMIT NUMBER:		
2. LOCATION OF WELL: Name: Hwy 11 Grocery Street Address: 13537 Sc. Hwy 11 City: Salem Zip: COUNTY: Oconee Latitude: Longitude:			7. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Irrigation <input type="checkbox"/> Process <input type="checkbox"/> Test Well <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement		
3. SYSTEM NAME: SYSTEM NUMBER:			8. WELL DEPTH (completed) Date Started: 12-4-01 ____ ft. Date Completed:		
4. CUTTING SAMPLES: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Geophysical Logs: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No			9. <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Other Hand Auger		
Formation Description			10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 8" Height: Above/Below Surface _____ ft. Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized +3' in. to ft. depth in. to ft. depth		
			Weight _____ lb./ft. Drive Shoe? <input type="checkbox"/> Yes <input type="checkbox"/> No		
			11. SCREEN Type: PVC Diam.: 8" Slot/Gauge: .010 Length: 10' Set Between: 2 ft. and 12 ft. NOTE: MULTIPLE SCREENS ft. and ft. Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No USE SECOND SHEET		
			12. STATIC WATER LEVEL 3 ft. below land surface after 24 hours.		
			13. PUMPING LEVEL Below Land Surface. ft. after hrs. Pumping G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input type="checkbox"/> No Yield:		
			14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Please enclose lab results.		
			15. ARTIFICIAL FILTER (filter pack), <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from ft. to 12 ft. Effective size 21/23 Uniformity Coefficient Silica sand		
			16. WELL GROUTED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input type="checkbox"/> Sand Cement <input type="checkbox"/> Concrete <input type="checkbox"/> Other Depth: From 0 ft. to 6 ft.		
			17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction Type well disinfected <input type="checkbox"/> Yes Type: upon completion <input type="checkbox"/> No Amount:		
			18. PUMP: Date installed: Not installed Mfr. Name: Model No.: A.H.P. Volts Length of drop pipe ft. Capacity gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal		
			19. WELL DRILLER: Chris Bonder CERT. NO.: 1333 Address: E.C.S. Inc. PO Box 703 Matthews NC 28106 Telephone No.: 704-819-0888		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)			20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.		
5. REMARKS: MW-13 Bentonite seal from 6'-1'			Signed: Chris Bonder Date: 12-7-01 Authorized Representative		

Boring Log and Type II Well Construction Details

WELL IDENTIFICATION: MW-14 DATE DRILLED: 12/4/01
 STATE PERMIT #: 03439 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13527 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 59.19 LAND SURFACE ELEV.: N/D



DRILLING METHOD: 2-1/4" HOLLOW STEM AUGER

SAMPLING METHOD: SPLIT SPOON

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: 0.010 INCH

COMMENTS:

N/D = NOT DETERMINED

T.O.C. ELEVATION IS REFERENCED TO AN ASSUMED ELEVATION.

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOVERY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	ND	1000+	SP	GRAY, SOFT, VERY FINE-GRAINED SAND, WET; STRONG PETROLEUM ODOR
10	ND	ND	ND			ROCK
15						
20						
25						
30						
35						
40						



Water Well Record

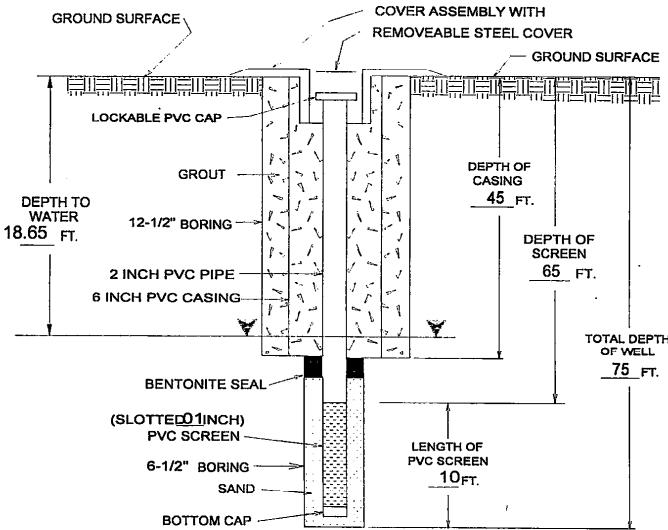
Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION: Name: Hwy 11 Grocery (last) (first) Address: 180 Shallowford Rd City: Salem State: SC Zip: 29676 Telephone: Work: Home:		6. PERMIT NUMBER: 7. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement		
2. LOCATION OF WELL: Name: Hwy 11 Grocery Street Address: 13527 Sc. Hwy 11 City: Salem Zip: COUNTY: Oconee Latitude: Longitude:		8. WELL DEPTH (completed) Date Started: 12-4-01 _____ ft. Date Completed: 9. <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Other HSA		
3. SYSTEM NAME: SYSTEM NUMBER:		10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 2" Height: Above/Below Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized Surface _____ ft. <input type="checkbox"/> Steel <input type="checkbox"/> Other Weight _____ lb./ft. In. to 2" ft. depth In. to _____ ft. depth		
4. CUTTING SAMPLES: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Geophysical Logs: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No		11. SCREEN Type: PVC Diam.: 2" Slot/Gauge: 010 Length: 8' Set Between: 2" ft. and 10" ft. NOTE: MULTIPLE SCREENS _____ ft. and _____ ft. Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No		
12. STATIC WATER LEVEL 24' ft. below land surface after 24 hours		13. PUMPING LEVEL Below Land Surface: ft. after hrs. Pumping G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input type="checkbox"/> No Yield:		
14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Please enclose lab results.		15. ARTIFICIAL FILTER (filter pack) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from _____ ft. to 10' ft. Effective size 20/30 Uniformity Coefficient Silica Sand		
16. WELL GROUTED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Neat Cement <input type="checkbox"/> Sand Cement <input type="checkbox"/> Concrete <input type="checkbox"/> Other _____ Depth: From _____ ft. to 6' ft.		17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. direction Type well disinfected <input type="checkbox"/> Yes Type: _____ upon completion <input type="checkbox"/> No Amount: _____		
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		18. PUMP: Date installed: _____ Not installed <input type="checkbox"/> Mfr. Name: _____ Model No: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal		
19. WELL DRILLER: Chris Bender CERT. NO.: 1333 Address: E.C.S. Inc. P.O. Box 703 Matthews NC 28106		Telephone No.: 704-849-0888		
20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.				
Signed: <u>Chris Bender</u> Date: 12-7-01 Authorized Representative				

Boring Log and Type III Well Construction Details

WELL IDENTIFICATION: DMW-2 DATE DRILLED: 12/5/01-12/6/01
 STATE PERMIT #: 03439 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13527 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 86.21 LAND SURFACE ELEV.: N/D



DRILLING METHOD: 8-1/4" HOLLOW STEM AUGER, AIR HAMMER

SAMPLING METHOD: SPLIT SPOON

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: 0.010"

COMMENTS:

TOP OF CASING ELEVATION IS REFERENCED TO AN ASSUMED ELEVATION.

N/D = NOT DETERMINED

NA = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOV. ERY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	2.0	SM	RED, SOFT, VERY FINE-GRAINED SILTY SAND	
10	ND	ND	3.0	SM	RED, SOFT, VERY FINE-GRAINED SILTY SAND	
15	ND	ND	8.0	SM	RED, SOFT, VERY FINE-GRAINED SILTY SAND	
20	ND	ND	600	SM	GRAY, SOFT, FINE-GRAINED SILTY SAND, WET; STRONG PETROLEUM ODOR	
25	ND	ND	600	SM	GRAY, SOFT, FINE-GRAINED SILTY SAND, WET; STRONG PETROLEUM ODOR	
30	ND	ND	200	SM	GRAY, SOFT, FINE-GRAINED SILTY SAND, WET; STRONG PETROLEUM ODOR	
35	ND	ND	ND	SM	GRAY, SOFT, FINE-GRAINED SILTY SAND, WET; STRONG PETROLEUM ODOR	
40	ND	ND	ND	CL	BROWN, SOFT, FINE-GRAINED SANDY CLAY, WET; SLIGHT PETROLEUM ODOR	
45	ND	ND	ND		45-75' ROCK	
50						



Water Well Record

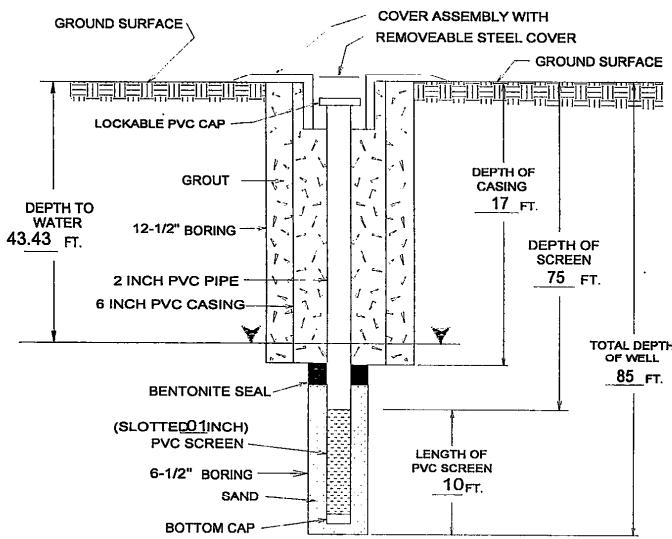
Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION: Name: Hwy 11 Grocery (last) (first) Address: 190 Shallowford Rd. City: Salem State: SC Zip: 29670 Telephone: Work: Home:		6. PERMIT NUMBER: 7. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement	
2. LOCATION OF WELL: Name: Hwy 11 Grocery Street Address: 13527 SC Hwy 11 City: Salem Zip: COUNTY: Oconee Latitude: Longitude:		8. WELL DEPTH (completed) Date Started: 12-5-01 _____ ft. Date Completed: 12-6-01 9. <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Other HSA	
3. SYSTEM NAME: SYSTEM NUMBER:		10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 6" - 2" Height: Above/Below _____ Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized <input type="checkbox"/> Steel <input type="checkbox"/> Other 6" in. to 45 ft. depth 6" in. to 65 ft. depth	
4. CUTTING SAMPLES: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Geophysical Logs: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No		11. SCREEN Type: PVC Diam.: 2" <p style="margin-left: 20px;">Slot/Gauge: 0.10 Length: 10'</p> <p style="margin-left: 20px;">Set Between: 65 ft. and 75 ft. NOTE: MULTIPLE SCREENS ft. and _____ ft. USE SECOND SHEET</p> <p style="margin-left: 20px;">Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No</p>	
12. STATIC WATER LEVEL 67 ft. below land surface after 24 hours		13. PUMPING LEVEL Below Land Surface. ft. after _____ hrs. Pumping _____ G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input type="checkbox"/> No Yield: _____	
14. WATER QUALITY Chemical Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i> Please enclose lab results.		15. ARTIFICIAL FILTER (filter pack) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from 65 ft. to 75 ft. Effective size 20/30 Uniformity Coefficient 51/ka sand	
16. WELL GROUTED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input type="checkbox"/> Sand Cement <input type="checkbox"/> Concrete <input type="checkbox"/> Other Depth: From _____ ft. to 65 ft.		17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction Type well disinfected <input type="checkbox"/> Yes Type: _____ upon completion <input type="checkbox"/> No Amount: _____	
18. PUMP: Date installed: _____ Not installed <input type="checkbox"/> Mfr. Name: _____ Model No: _____ A.H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal		19. WELL DRILLER: Chris Bender CERT. NO.: 1333 Address: E.C.S. Inc. P.O. Box 703 Matthews NC 28105 Telephone No.: 704-849-0880	
20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.		Signed: <i>Chris Bender</i> Date: 12-7-01 Authorized Representative	
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		5. REMARKS: DMW-2 <i>Bentonite Seal from Col-Car</i>	

Boring Log and Type III Well Construction Details

WELL IDENTIFICATION: DMW-3 DATE DRILLED: 12/3/01-12/4/01
 STATE PERMIT #: 03439 WORK ORDER #: 300-388
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13527 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 103.36 LAND SURFACE ELEV.: N/D



DRILLING METHOD: 8-1/4" HOLLOW STEM AUGER, AIR HAMMER
 SAMPLING METHOD: SPLIT SPOON
 GRAVEL PACK SIZE: 20/30 SILICA SAND
 SLOT SIZE: 0.010"
 COMMENTS:
 TOP OF CASING ELEVATION IS REFERENCED TO AN ASSUMED ELEVATION.
 N/D= NOT DETERMINED
 NA = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOV. RY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	ND	SW	TAN, SOFT, MEDIUM-GRAINED SAND	
10	ND	ND	ND	ML	GRAY, STIFF, MEDIUM-GRAINED SAPROLITE	
15	ND	ND	ND	ML	GRAY, STIFF, MEDIUM-GRAINED SAPROLITE, STRONG PETROLEUM ODOR	
17	ND	ND	ND		17-85' ROCK	
20						
25						
30						
35						
40						
45						
50						



Water Well Record

Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION: Name: Hwy 11 Grocery (last) (first) Address: 180 Shallowford Rd. City: Salem State: SC Zip: 29670 Telephone: Work: Home:		6. PERMIT NUMBER: 7. USE: <input type="checkbox"/> Residential <input type="checkbox"/> Public Supply <input type="checkbox"/> Process <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Emergency <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/> Replacement	
2. LOCATION OF WELL: Name: Hwy 11 Grocery Street Address: 13527 S.C. Hwy 11 City: Salem Zip: COUNTY: Oconee Latitude: Longitude:		8. WELL DEPTH (completed) Date Started: 12-3-01 85 ft. Date Completed: 12-4-01 9. <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Other HSA	
3. SYSTEM NAME: SYSTEM NUMBER:		10. CASING: <input type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 2 3/8" Diam.: 2 1/2" Height: Above/Below Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized Surface _____ ft. <input type="checkbox"/> Steel <input type="checkbox"/> Other Weight _____ lb./ft. 0 in. to 7 ft. depth 0 in. to 7 ft. depth	
4. CUTTING SAMPLES: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Geophysical Logs: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No		11. SCREEN PVC Type: <input checked="" type="checkbox"/> PVC Diam.: 2 1/2" Diam.: 2 1/2" Slot/Gauge: .010 Length: 10' Set Between: 17 ft. and 85 ft. NOTE: MULTIPLE SCREENS _____ ft. and _____ ft. USE SECOND SHEET Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No	
12. STATIC WATER LEVEL 39 ft. below land surface after 24 hours		13. PUMPING LEVEL Below Land Surface. ft. after _____ hrs. Pumping _____ G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input type="checkbox"/> No Yield:	
14. WATER QUALITY M/A Chemical Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Please enclose lab results.		15. ARTIFICIAL FILTER (filter pack) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from 73 ft. to 85 ft. Effective size 20/30 Uniformity Coefficient 5/10-5/10	
16. WELL GROUTED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No M/A Neat Cement <input type="checkbox"/> Sand Cement <input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Other Depth: From 0 ft. to 71 ft.		17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction M/A Type well disinfected <input type="checkbox"/> Yes Type: _____ upon completion <input type="checkbox"/> No Amount: _____	
18. PUMP: Date installed: _____ Not installed <input type="checkbox"/> Mfr. Name: _____ Model No: _____ H.P. _____ Volts. _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal		19. WELL DRILLER: Chris Konder CERT. NO.: 1393 Address: E.C.S. Inc. P.O. Box 703 Matthews NC 28106 Telephone No.: 704-849-0888	
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.	
5. REMARKS: DMW-3 Bentonite seal from 71-73'		Signed: <u>Chris Konder</u> Date: 12-7-01 Authorized Representative	

APPENDIX B
Groundwater Sampling Field Measurements

Field Data Information Sheet for Ground-Water Sampling
South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 12/11/01Field Personnel: J. WHEYARD, R. CATE, J. MONEGAN

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter

serial no. _____
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Conductivity Meter

serial no. _____
standard _____
standard _____
standard _____Chain of Custody

Relinquished by _____

Date/Time _____

Received by _____

Date/Time _____

Facility Name: Hwy 11 GroSite ID#: 300388Monitoring Well # MW1Well Diameter (D): 2" feetConversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well $C = 0.163$
for a 4 inch well $C = 0.652$ * Free Product Thickness: .25 feet
Depth to Ground Water (DGW) 26.24 feet
Total Well Depth (TWD) 30 feet
Length of the water column (LWC = TWD - DGW) 3.76 feet1 casing volume (CV = LWC X C) = X = .61 gals
3 casing volume 3 X CV = 1.83 gals (standard purge volume)Total Volume of Water Purged Before Sampling .5 gals.* If free product is present over $\frac{1}{8}$ inch, sampling will not be required.

	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Cumulative Volume Purged (gallons)							
Time (military)							
pH (s.u.)							
Specific Cond. ($\mu\text{mhos/cm}$)							
Water Temperature ($^{\circ}\text{C}$)							
Turbidity (subjective : clear, slightly cloudy, cloudy)							
Dissolved Oxygen							
PID readings, if required							
Remarks : <u>Free product present in well, well not recharging</u>							

Field Data Information Sheet for Ground-Water Sampling
South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 12/11/01Field Personnel: J. LUEYAND, R. CATE, J. MONEGAN

General Weather Conditions:

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter

serial no.

pH=4.0

pH=7.0

pH=10.0

Conductivity Meter

serial no.

standard

standard

standard

Chain of Custody

Relinquished by

Date/Time

Received by

Date/Time

Facility Name: Hwy 11 GroSite ID#: 300388Monitoring Well # MW2Well Diameter (D): 2" feetConversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 27.84 feetTotal Well Depth (TWD) 35 feetLength of the water column (LWC = TWD - DGW) 7.16 feet1 casing volume (CV = LWC X C) = _____ X _____ = 1.17 gals3 casing volume 3' X CV = 3.51 gals (standard purge volume)Total Volume of Water Purged Before Sampling 2.80 gals.

* If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)							
Specific Cond. ($\mu\text{mhos/cm}$)							
Water Temperature ($^{\circ}\text{C}$)							
Turbidity (subjective: clear, slightly cloudy, cloudy)							
Dissolved Oxygen							
PID readings, if required							
Remarks: <u>WELL DRY</u>							

Field Data Information Sheet for Ground-Water Sampling
South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 12/11/01Field Personnel: J. WETANP, R. CATE, J. MONEGAN

General Weather Conditions:

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter

serial no.

pH=4.0

pH=7.0

pH=10.0

Conductivity Meter

serial no.

standard

standard

standard

Chain of Custody

Relinquished by

Date/Time

Received by

Date/Time

Facility Name: Hwy 11 GroSite ID#: 300388Monitoring Well # MW3Well Diameter (D): 2" feetConversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 26.57 feetTotal Well Depth (TWD) 30 feetLength of the water column (LWC = TWD - DGW) 3.43 feet

1 casing volume (CV = LWC X C) = _____ X _____

3 casing volume $3 \times CV = 1.68$ gals (standard purge volume)Total Volume of Water Purged Before Sampling .50 gals.

* If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)							
Specific Cond. ($\mu\text{mhos/cm}$)		4.94					1200
Water Temperature ($^{\circ}\text{C}$)			.035				4.71
Turbidity (subjective: clear, slightly cloudy, cloudy)				17.0			.019
Dissolved Oxygen				cloudy			17.2
PID readings, if required				6.28			cloudy
Remarks: <u>WENT ONLY</u>							6.68

Field Data Information Sheet for Ground-Water Sampling
South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 12/11/01Field Personnel: J. WETAND, R. CATE, J. MONEGAN

General Weather Conditions:

Ambient Air Temperature: _____ °C

Quality AssurancepH Meter
serial no.

pH=4.0

pH=7.0

pH=10.0

Conductivity Meter

serial no.

standard

standard

standard

Chain of Custody

Relinquished by

Date/Time

Received by

Date/Time

Facility Name: Hwy 11 Gro
Site ID#: 300388Monitoring Well # MW4Well Diameter (D): 2" feetConversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 24.74 feetTotal Well Depth (TWD) 35 feetLength of the water column (LWC = TWD - DGW) 10.24 feet1 casing volume (CV = LWC X C) = _____ X _____ = 1.67 gals
3 casing volume 3 X CV = 5.01 gals (standard purge volume)Total Volume of Water Purged Before Sampling 5.01 gals.

* If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)							
Specific Cond. ($\mu\text{mhos/cm}$)							
Water Temperature ($^{\circ}\text{C}$)							
Turbidity (subjective: clear, slightly cloudy, cloudy)							
Dissolved Oxygen							
PID readings, if required							
Remarks: <u>Rustless odor detected</u>							

Field Data Information Sheet for Ground-Water Sampling
South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 12/11/01Field Personnel: J. LUEYAND, P. CATE, J. MONEGAN

General Weather Conditions:

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter
serial no. _____
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Conductivity Meter
serial no. _____
standard _____
standard _____
standard _____

Chain of Custody

Relinquished by _____

Date/Time _____

Received by _____

Date/Time _____

Facility Name: Hwy 11 GroSite ID#: 300388Monitoring Well # MW 5Well Diameter (D): 2" feetConversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

* Free Product Thickness: _____ feet
 Depth to Ground Water (DGW) 30.58 feet
 Total Well Depth (TWD) 35 feet
 Length of the water column (LWC = TWD - DGW) 4.42 feet

1 casing volume (CV = LWC X C) = _____ X _____ = .72 gals
 3 casing volume 3 X CV = 2.16 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

* If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)							
Specific Cond. ($\mu\text{mhos/cm}$)	<u>4.49</u>	<u>4.37</u>	<u>4.33</u>				<u>12.15</u>
Water Temperature ($^{\circ}\text{C}$)	<u>.017</u>	<u>.017</u>	<u>.017</u>				
Turbidity (subjective: clear, slightly cloudy, cloudy)	<u>16.9</u>	<u>16.9</u>	<u>16.8</u>				
Dissolved Oxygen	<u>cloudy</u>	<u>cloudy</u>	<u>cloudy</u>				
PID readings, if required	<u>6.84</u>	<u>7.53</u>	<u>7.30</u>				
Remarks:							

Field Data Information Sheet for Ground-Water Sampling

South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Page ____

Date (mm/dd/yy): 12/11/01
 Field Personnel: J.WEYAND, R.CATE, T.MUNCEYHARD
 General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter
 serial no. _____
 pH=4.0 _____
 pH=7.0 _____
 pH=10.0 _____
 standard _____
 standard _____

Chain of Custody

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Conversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
 * Free Product Thickness: _____ feet
 Depth to Ground Water (DGW) _____ feet
 Total Well Depth (TWD) _____ feet
 Length of the water column (LWC = TWD - DGW) _____ feet

I casing volume (CV = LWC X C) = _____
 3 casing volume $3 \times CV = 5.70 \times 0.163 = 0.90$ gals
 Total Volume of Water Purged Before Sampling _____ gals.

* If free product is present over $\frac{1}{8}$ inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)							
Specific Cond. (μmhos/cm)							
Water Temperature (°C)							
Turbidity (subjective : clear, slightly cloudy, cloudy)							
Dissolved Oxygen							
PID readings, if required							
Remarks:							

Field Data Information Sheet for Ground-Water Sampling
South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 12/11/01Field Personnel: J. LUCYARD, R. CATE, J. MONEGAN

General Weather Conditions:

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter

serial no.

pH=4.0

pH=7.0

pH=10.0

Conductivity Meter

serial no.

standard

standard

standard

Chain of Custody

Relinquished by

Date/Time

Received by

Date/Time

Facility Name: Hwy 11 GroSite ID#: 300388Monitoring Well #: MW1Well Diameter (D): 2" feetConversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 29.97 feetTotal Well Depth (TWD) 40 feetLength of the water column (LWC = TWD - DGW) 10.03 feet1 casing volume (CV = LWC X C) = _____ X _____ = 1.63 gals
3 casing volume 3 X CV = 4.89 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

* If free product is present over 1/6 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)							
Specific Cond. ($\mu\text{mhos/cm}$)							
Water Temperature ($^{\circ}\text{C}$)							
Turbidity (subjective: clear, slightly cloudy, cloudy)							
Dissolved Oxygen							
PID readings, if required							
Remarks :							

1305

Field Data Information Sheet for Ground-Water Sampling
South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 12/11/01Field Personnel: J. WEAVER, R. CATE, J. MONEGAN

General Weather Conditions:

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter

serial no.

pH=4.0

pH=7.0

pH=10.0

Conductivity Meter

serial no.

standard

standard

standard

Chain of Custody

Relinquished by _____

Date/Time _____

Received by _____

Date/Time _____

Facility Name: Hwy 11 GroSite ID#: 300388Monitoring Well # MW-8Well Diameter (D): 2" feetConversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652* Free Product Thickness: 21.78 feetDepth to Ground Water (DGW) 22.32 feetTotal Well Depth (TWD) 30 feetLength of the water column (LWC = TWD - DGW) 7.68 feet

1 casing volume (CV = LWC X C) = _____ X _____

3 casing volume 3 X CV = 3.75 gals (standard purge volume)Total Volume of Water Purged Before Sampling 1.25 gals.

* If free product is present over ½ inch, sampling will not be required.

Cumulative Volume Purged (gallons)

	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
--	---------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------

Time (military)

pH (s.u.)

Specific Cond. ($\mu\text{mos}/\text{cm}$)Water Temperature ($^{\circ}\text{C}$)

Turbidity (subjective: clear, slightly cloudy, cloudy)

Dissolved Oxygen

PID readings, if required

Remarks: free product

11:55

Field Data Information Sheet for Ground-Water Sampling
South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 12/11/01Field Personnel: J. LUEYAND, R. CATE, J. MONEGAN

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter

serial no. _____
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Conductivity Meter

serial no. _____
standard _____
standard _____
standard _____Chain of Custody

Relinquished by _____

Date/Time _____

Received by _____

Date/Time _____

Facility Name: Hwy 11 GroSite ID#: 300368Monitoring Well # MW9Well Diameter (D): 2" feetConversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 2.06 feetTotal Well Depth (TWD) 11.5 feetLength of the water column (LWC = TWD - DGW) 9.44 feet1 casing volume (CV = LWC X C) = _____ X _____ = 1.54 gals
3 casing volume 3 X CV = 4.62 gals (standard purge volume)Total Volume of Water Purged Before Sampling 5: gals.

* If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)	<u>14.47</u>	<u>14.41</u>	<u>14.52</u>	<u>14.56</u>			<u>1500</u>
Specific Cond. ($\mu\text{mhos/cm}$)	<u>5.37</u>	<u>5.23</u>	<u>5.07</u>	<u>5.02</u>			<u>5.13</u>
Water Temperature ($^{\circ}\text{C}$)	<u>.029</u>	<u>.029</u>	<u>.030</u>	<u>.030</u>			<u>.031</u>
Turbidity (subjective : clear, slightly cloudy, cloudy)	<u>14.3</u>	<u>14.2</u>	<u>14.0</u>	<u>14.0</u>			<u>13.9</u>
Dissolved Oxygen	<u>Clear</u>	<u>Cloudy</u>	<u>Cloudy</u>	<u>Cloudy</u>			<u>Cloudy</u>
PID readings, if required	<u>6.92</u>	<u>5.52</u>	<u>4.23</u>	<u>3.57</u>			<u>3.10</u>
Remarks :							

Field Data Information Sheet for Ground-Water Sampling
South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 12/11/01
 Field Personnel: J. WETLAND, R. CATE, J. MONEGAN
 General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter
 serial no. _____
 pH=4.0 _____
 pH=7.0 _____
 pH=10.0 _____

Conductivity Meter
 serial no. _____
 standard _____
 standard _____
 standard _____

Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time
-----------------	-----------	-------------	-----------

Facility Name: Hwy 11 Gro
 Site ID#: 300388

Monitoring Well # MW10

Well Diameter (D): 2" feet

Conversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
 for a 4 inch well C = 0.652

* Free Product Thickness: _____ feet
 Depth to Ground Water (DGW) 21.45 feet
 Total Well Depth (TWD) 24 feet
 Length of the water column (LWC = TWD - DGW) 2.55 feet

1 casing volume (CV = LWC X C) = _____ X _____ = .42 gals
 3 casing volume 3 X CV = 1.26 gals (standard purge volume)

Total Volume of Water Purged Before Sampling 1.26 gals.
 * If free product is present over ½ inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)							
Specific Cond. ($\mu\text{mhos/cm}$)							
Water Temperature ($^{\circ}\text{C}$)							
Turbidity (subjective : clear, slightly cloudy, cloudy)							
Dissolved Oxygen							
PID readings, if required							
Remarks : <u>Pthalogen odor detected</u>							

Field Data Information Sheet for Ground-Water Sampling
 South Carolina Department of Health and Environmental Control
 Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 12/11/01

Field Personnel: J. WEAVER, E. CATE, T. MUNSON

General Weather Conditions:

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter
 serial no. _____
 pH=4.0 _____
 pH=7.0 _____
 pH=10.0 _____

Conductivity Meter

serial no. _____
 standard _____
 standard _____
 standard _____

Well Diameter (D): 2" feet
 Conversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
 for a 4 inch well C = 0.652
 Depth to Ground Water (D GW) _____ feet
 Total Well Depth (TWD) 3.07 feet
 Length of the water column (LWC = TWD - D GW) 1.2 feet
 Casing volume (CV = LWC X C) = $\frac{4}{3} \pi r^2 h$ = $\frac{\pi}{4} \times 1.2^2 \times 3.07 = 1.44$ gals
 Total Volume of Water Purged Before Sampling 5.0 gals

* If free product is present over $\frac{1}{6}$ inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial Vol	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)	14:10	14:12	14:15	14:17			14:20
Specific Cond. ($\mu\text{hos/cm}$)	5.40	4.94	4.76	4.76			4.85
Water Temperature (°C)	.031	.031	.033	.031			.033
Turbidity (subjective : clear, slightly cloudy, cloudy)	13.7	13.4	13.3	13.1			13.0
Dissolved Oxygen	0.88	1.42	1.90	2.80			3.55
PID readings, if required							
Remarks :							

Field Data Information Sheet for Ground-Water Sampling
South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 12/11/01Field Personnel: J. WEYAND, R. CATE, J. MONEGAN

General Weather Conditions:

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter

serial no.

pH=4.0

pH=7.0

pH=10.0

Conductivity Meter

serial no.

standard

standard

standard

Chain of Custody

Relinquished by

Date/Time

Received by

Date/Time

Facility Name: Hwy 11 GroSite ID#: 300388Monitoring Well #: MW14Well Diameter (D): 2" feetConversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 2.39 feetTotal Well Depth (TWD) 10 feetLength of the water column (LWC = TWD - DGW) 7.61 feet1 casing volume (CV = LWC X C) = _____ X _____ = 1.24 gals
3 casing volume 3 X CV = 3.72 gals (standard purge volume)Total Volume of Water Purged Before Sampling 4.0 gals.

* If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)	<u>13:42</u>	<u>13:46</u>	<u>13:48</u>	<u>13:50</u>			<u>13:55</u>
Specific Cond. ($\mu\text{mhos}/\text{cm}$)	<u>6.58</u>	<u>5.85</u>	<u>5.74</u>	<u>5.71</u>			<u>5.75</u>
Water Temperature ($^{\circ}\text{C}$)	<u>.148</u>	<u>.139</u>	<u>.138</u>	<u>.137</u>			<u>.135</u>
Turbidity (subjective: clear, slightly cloudy, cloudy)	<u>15.4</u>	<u>15.5</u>	<u>15.7</u>	<u>15.7</u>			<u>15.7</u>
Dissolved Oxygen	<u>0.40</u>	<u>.65</u>	<u>.85</u>	<u>.98</u>			<u>Cloudy</u>
PID readings, if required							<u>1.04</u>
Remarks :							

Field Data Information Sheet for Ground-Water Sampling
South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 12/11/01Field Personnel: J. WETLAND, R. CATE, J. MONEGAN

General Weather Conditions:

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter
serial no. _____
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Conductivity Meter
serial no. _____
standard _____
standard _____
standard _____

Chain of Custody

Relinquished by _____

Date/Time _____

Received by _____

Date/Time _____

Facility Name: Hwy 11 Gro
Site ID#: 300388Monitoring Well # DMW1Well Diameter (D): 2" feetConversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 26.35 feet
Total Well Depth (TWD) 45 feetLength of the water column (LWC = TWD - DGW) 18.65 feet1 casing volume (CV = LWC X C) = _____ X _____ = 3.04 gals
3 casing volume 3 X CV = 9.12 gals (standard purge volume)Total Volume of Water Purged Before Sampling 9.12 gals.

* If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)							
Specific Cond. ($\mu\text{mhos/cm}$)							
Water Temperature ($^{\circ}\text{C}$)							
Turbidity (subjective: clear, slightly cloudy, cloudy)							
Dissolved Oxygen							
PID readings, if required							
Remarks: <u>Petroleum odor detected</u>							

Field Data Information Sheet for Ground-Water Sampling
South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 12/11/01Field Personnel: J. LUEYAND, R. CATE, J. MONEGAN

General Weather Conditions:

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter

serial no.

pH=4.0

pH=7.0

pH=10.0

Conductivity Meter

serial no.

standard

standard

standard

Chain of Custody

Relinquished by

Date/Time

Received by

Date/Time

Facility Name: Hwy 11 Gro

Site ID#: 300388Monitoring Well #: DW#2Well Diameter (D): 2" feetConversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 18.65 feetTotal Well Depth (TWD) .75 feetLength of the water column (LWC = TWD - DGW) .5435 feet1 casing volume (CV = LWC X C) = _____ X _____ = 9.19 gals3 casing volume 3 X CV = 27.57 gals (standard purge volume)Total Volume of Water Purged Before Sampling 24 gals.

* If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)	12:25	12:40	13:05				13:20
Specific Cond. ($\mu\text{mhos/cm}$)	10.44	10.02	10.32				8.53
Water Temperature ($^{\circ}\text{C}$)	.427	.231	.287				.182
Turbidity (subjective: clear, slightly cloudy, cloudy)	18.2	16.1	16.0				15.6
Dissolved Oxygen	Cloudy	Cloudy	Cloudy				Cloudy
PID readings, if required	5.45	4.91	4.60				7.63
Remarks :							

Field Data Information Sheet for Ground-Water Sampling
South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 12/11/01Field Personnel: J. WEYAND, R. CATE, T. MONEGAN

General Weather Conditions:

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter
serial no. _____
pH=4.0 _____
pH=7.0 _____
pH=10.0 _____

Conductivity Meter
serial no. _____
standard _____
standard _____
standard _____

Chain of Custody

Relinquished by _____

Date/Time _____

Received by _____

Date/Time _____

Facility Name: Hwy 11 Gro
Site ID#: 300388Monitoring Well #: MW3Well Diameter (D): 2" feetConversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
for a 4 inch well C = 0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 43.43 feetTotal Well Depth (TWD) 85 feetLength of the water column (LWC = TWD - DGW) 41.57 feet1 casing volume (CV = LWC X C) = _____ X _____ = 4.78 gals
3 casing volume 3 X CV = 20.34 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

* If free product is present over $\frac{1}{8}$ inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Time (military)							
pH (s.u.)							
Specific Cond. ($\mu\text{mhos}/\text{cm}$)							
Water Temperature ($^{\circ}\text{C}$)							
Turbidity (subjective: clear, slightly cloudy, cloudy)							
Dissolved Oxygen							
PID readings, if required							
Remarks :							

APPENDIX C

Groundwater Laboratory Analytical Results and Chain-of-Custody



Division/Laboratory Name:

26946

FAX CHAIN TO COLUMBIA

Client Name SEI ENVIRONMENTAL INC Client #: 8990

Address: 3021 MENAUGHTON RD SUITE 9

City/State/Zip Code: COLUMBIA, SC 29223

Project Manager: BOB BOLTON

Telephone Number: (803)788-2535

Sampler Name: (Print Name) RYAN CATE, JEFF WEYAND, JOHN MONEGAN

Sampler Signature: Ryan Cate, Jeff Weyand, John Monegan

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

Project Name: HIGHWAY 11 ALOC

Project #: 300388

Site/Location ID: _____ State: _____

Report To: _____

Invoice To: _____

Quote #: _____ PO #: _____

TAT	Standard	Rush (surcharges may apply)	Date Needed: <u>12/18/01</u>	Fax Results: Y <input checked="" type="radio"/> N <input type="radio"/>	Data Sampled	Time Sampled	Matrix	Preservation & # of Containers					Analyze For:	QC Deliverables																
								G = Grab, C = Composite	Field Filtered	SL - Sludge	DW - Drinking Water	GW - Groundwater			S - Soil/Solid	Specify Other	HNO ₃	HCl	NaOH	H ₂ SO ₄	Methanol	None	Other (Specify)							
1	MW10	<u>12/11/01</u>	<u>1340</u>	G	GW														None											
2	MW11		<u>1320</u>																Level 2 (Batch QC)											
3	MW12		<u>1420</u>																Level 3											
4	MW13		<u>1530</u>																Level 4											
5	MW14		<u>1355</u>																Other: _____											
6	DMW1		<u>1230</u>																REMARKS											
7	DMW2		<u>1320</u>															<u>179273</u>												
8	DMW3		<u>1140</u>															74												
9	WW1		<u>1350</u>															75												
10	CKL		<u>1530</u>															76												
Special Instructions:																														
														LABORATORY COMMENTS: RECEIVED TESTED BY: <u>M. Beal</u>					REC LAB TESTED BY: <u>J. C.</u>											
														Custody Seals: Y N N/A					Custody Seals: Y N N/A											
														Bottles Supplied by TestAmerica: Y N					Bottles Supplied by TestAmerica: Y N											
														Method of Shipment: _____					Method of Shipment: _____											

Relinquished By: <u>Jeff Weyand</u>	Date: <u>12/11/01</u>	Time: <u>1600</u>	Received By: <u>M. Beal</u>	Date: <u>12/12/01</u>	Time: <u>9:00</u>
Relinquished By: _____	Date: _____	Time: _____	Received By: _____	Date: _____	Time: _____
Relinquished By: _____	Date: _____	Time: _____	Received By: _____	Date: _____	Time: _____

TestAmerica

INCORPORATED

Division/Laboratory Name: **ID COLUMBIA**

263931

FAX CHAIN

TO COLUMBIA

Client Name SEI ENVIRONMENTAL INC Client #: 8990
Address: 3021 MENAUGHTON RD SUITE 9
City/State/Zip Code: COLUMBIA, SC 29223
Project Manager: Bob Bolton
Telephone Number: (803) 788-2535 Fax (803) 788-2349
Sampler Name: (Print Name) John Monestan, JEFF WEVAND, RYAN CATE
Sampler Signature: J. Monestan, J. Wevand, R. Cate

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

Project Name: HIGHWAY 11 Grade

Project #: 360388

Site/Location ID: _____ **State:** _____

Report To: _____

Invoice To:

Quote #: _____

PO#:

TAT <input checked="" type="checkbox"/> Standard Rush (surcharges may apply)				Matrix		Preservation & # of Containers		Analyze For:		QC Deliverables											
Date Needed: <u>12/18/01</u>										<input type="checkbox"/> None <input type="checkbox"/> Level 2 <input type="checkbox"/> (Batch QC) <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/> Other: _____											
Fax Results: Y <u>N</u>																					
SAMPLE ID		Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	SL - Sludge DW - Drinking Water GW - Groundwater S - Soil/Solid WW - Wastewater Specity Other	HNO ₃	HCl	NaOH	H ₂ SO ₄	Methanol	Name	Other (Specify)	B2C6O ₈	B2C6O ₈ , NaOH, H ₂ SO ₄	LEAD	Nitrate / Sulfate	Ferrous Iron	REMARKS		
MW1		<u>12/11/01</u>	<u>145</u>	G		GW													179235		
MW2			<u>1235</u>																39		
MW3			<u>1200</u>																40		
MW4			<u>1255</u>																41		
MW5			<u>1215</u>																42		
MW6			<u>1335</u>																43		
MW7			<u>1305</u>																44		
MW8			<u>1155</u>																45		
MW9		<u>12</u>	<u>1500</u>	<u>V</u>	<u>V</u>														179241		
Special Instructions:																					

Special Instructions:

Relinquished By: <i>Jeff</i>	Date: 12/11/01	Time: 1600	Received By: <i>M. Bely</i>	Date: 12/11/01	Time: 4:00	Rec Lab Temp: 73
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Custody Seal: <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Carrier Supplied by: FedEx America <input checked="" type="checkbox"/> N/A <input type="checkbox"/>

TestAmerica
INCORPORATED

Division/Laboratory Name:

**FAX CHAIN
TO COLUMBIA**

2003-
265654 Client Name SEI ENVIRONMENTAL INC Client #: 8990
Address: 3021 MCNAUGHTON RD SUITE 9
City/State/Zip Code: COLUMBIA, SC 29223
Project Manager: Bob Bolton
Telephone Number: (803) 788-2535 Fax: (803) 788-2349
Sampler Name: (Print Name) JOHN MCGEEHAN, JEFF WEYAND, RYAN CATE
Sampler Signature: John McGeehan, Jeff Weyand, Ryan Cate

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

Project Name: HIGHWAY #1 Groc.

Project #: 300388

Site/Location ID: _____ State: _____

Report To: _____

Invoice To: _____

Quote #: _____ PO #: _____

TAT	Standard	Rush (surcharges may apply)	Date Needed: <u>12/18/01</u>	Fax Results: Y <u>N</u>	SAMPLE ID	Matrix	Preservation & # of Containers										Analyze For:	QC Deliverables			
							Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	SL - Sludge	DW - Drinking Water	S - Soil/Solid	WW - Wastewater	Other	HNO ₃			HCl	NaOH	H ₂ SO ₄	MeOH	Name	Other (Specify)
MW1	<u>12/11/01</u>	<u>1145</u>	G	GW																01-A186615-1	<u>7/23/01</u>
MW2		<u>1235</u>																			<u>81</u>
MW3		<u>1200</u>																			<u>80</u>
MW4		<u>1255</u>																			<u>41</u>
MW5		<u>1215</u>																			<u>42</u>
MW6		<u>1335</u>																			<u>43</u>
MW7		<u>1305</u>																			<u>44</u>
MW8		<u>1155</u>																			<u>45</u>
MW9		<u>1500</u>																			<u>46</u>

See attached

Special Instructions:

LABORATORY COMMENTS									
RECEIVED FROM: <u>Jeff</u> DATE: <u>12/11/01</u> TIME: <u>1600</u>									
RECEIVED BY: <u>M. BULL</u>					DATE: <u>12/12/01</u> TIME: <u>9:00</u>				
Quality Scale:	Y	N	N/A	Re-Lab Test:	Y	N	N/A		
Hold as Submitted by TestAmerica:	Y	N		Inter-laboratory Comparison:	Y	N			
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Received By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Received By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Received By:	Date:	Time:	Received By:

TestAmerica
INCORPORATED

Division/Laboratory Name:

2/20/01

**FAX CHAIN
TO COLUMBIA**

Client Name: SEI ENVIRONMENTAL INC Client #: 8990
 Address: 3021 MENAUGHTON RD SUITE 9
 City/State/Zip Code: COLUMBIA, SC 29223
 Project Manager: BOB BOLTON
 Telephone Number: (803)788-2535 Fax: (803)788-2399
 Sampler Name: (Print Name) Ryan Cate, Jeffrey Mand, John Monaghan
 Sampler Signature: Ryan Cate, Jeffrey Mand

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

Project Name: HIGHWAY 11 GLOC
 Project #: 300388
 Site/Location ID: _____ State: _____
 Report To: _____
 Invoice To: _____
 Quote #: _____ PO #: _____

TAT	Preservation & # of Containers										Analyze For:	QC Deliverables			
	Standard	Rush (surcharges may apply)	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix	DW - Drinking Water	SL - Sludge	GW - Groundwater			S - Soil/Solid	WW - Wastewater	Specified Other
Date Needed: <u>12/18/01</u>						HNO ₃	HCl	NaOH	H ₂ SO ₄	Methanol	None	Other (Specify)	8260B, 8260C, NaOH, HCl, H ₂ SO ₄ , Methanol	See attached	None
Fax Results: Y (N)															Level 2 (Batch QC)
SAMPLE ID															Level 3
MW10	12/11/01	1340	G	G	GW										Level 4
MW11		1320													Other:
MW12		1420													
MW13		1530													
MW14		1355													
DMW1		1230													
DMW2		1320													
DMW3		1140													
WW1		1350													
CK1		1330													
Special Instructions:															
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TestAmerica

INCORPORATED

FAX ~~~~ FAX ~~~~ FAX

FROM: KAREN MOORE
 CHRIS COMPTON

(803) 865-5500 PHONE
(803) 865-5503 FAX

COMPANY: TEST AMERICA

TO: JENNIFER H

FAX NUMBER:

OF PAGES INCLUDING COVER SHEET 1

DATE: 12/21/01

COMMENTS: SEI WOULD LIKE TO TEST FOR METHANE

FOR THE FOLLOWING WELLS:

MW-1 (01-A179238)

MW-6 (01-A179243)

MW-8 (01-A179245)

DMW-1 (01-A179278)

DMW-2 (01-A179279) > 263946

Bret
VOAS

JOB NAME: HIWAY 11 GROVEY

TRACKING # 263931

APPENDIX D
Disposal Manifest

**NON-HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest
Document No.
GK42152. Page 1
of

3. Generator's Name and Mailing Address

HWY 11 GROCERY
13527 SC HWY 11
SALEM, 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 TANK¹⁰ SERVICES
PO BOX 1384
SUMTER, SC 29151

9. Designated Facility Name and Site Address

C. Facility's Phone

800-800-6840

11. Waste Shipping Name and Description

12. Containers
No. Type

a. NON HAZARDOUS PETROLEUM CONTAMINATED SOIL

10DR *50*
TAI
DR

b. NON HAZARDOUS PETROLEUM CONTAMINATED WATER

02DR *5*
TAI
DR

c.

.

d.

.

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

XPT ENVIRONMENTAL
3021 MCNAUGHTON DRIVE
COLUMBIA, SC 29223 **SUITE 9**

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

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



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 10 Drums
Hwy 11 Grocery
Salem, SC

Contaminant NonHazardous Petroleum
Contaminated Soil

This is to certify 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 S. Conner

Date 12/14/01



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 2 Drums
Hwy 11 Grocery
Salem, SC

Contaminant NonHazardous Petroleum
Contaminated Water

This is to certify the above ~~soil~~^{water} 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. Sillen Date 12/14/01



RECEIVED

JUN 26 2002

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

**Underground Storage
Tank Program**

30-Tech

June 26, 2002

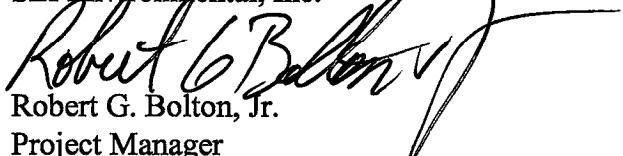
Mr. Konstantine Akhvlediani, Hydrogeologist
SCDHEC – UST Program
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201

RE: Groundwater Assessment Report
Highway 11 Grocery
UST Permit #03439
Oconee County

Dear Mr. Akhvlediani:

Attached is the Groundwater Assessment Report for Highway 11 Grocery. Should you have any questions or require additional information, please contact me at 788-2535.

Sincerely,
SEI Environmental, Inc.


Robert G. Bolton, Jr.
Project Manager

Attachment

cc: Mr. Steve Smith, Highway 11 Grocery



GROUNDWATER ASSESSMENT REPORT

Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
Ocnee County
UST Permit #03439

PREPARED FOR:

Mr. Steve Smith
Highway 11 Grocery
180 Shallowford Road
Salem, South Carolina

PREPARED BY:

SEI Environmental, Inc.
3021 McNaughton Drive, Suite 9
Columbia, South Carolina 29223
(803) 788-2535

A handwritten signature in black ink, appearing to read "Robert G. Bolton, Jr.", written over a horizontal line.

Robert G. Bolton, Jr.
Project Manager

A handwritten signature in black ink, appearing to read "Frederick P. Lyke", written over a horizontal line.

Frederick P. Lyke, O.G. #1055

June 26, 2002

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1.0 INTRODUCTION

Mr. Steve Smith contracted SEI Environmental, Inc. (SEI) to conduct groundwater assessment activities at the Highway 11 Grocery facility located at 13527 South Carolina Highway 11 near Salem, South Carolina. A site location map is presented as Figure 1. The assessment activities were approved by SCDHEC in correspondence to Mr. Smith dated March 21, 2002. A site location map is presented as Figure 1.

2.0 METHODOLOGY

2.1 Monitor Well Installation

Environmental Construction Services (ECS) personnel, using a truck mounted CME-75 drill rig, installed one (1) Type III groundwater monitor wells (identified as DMW-4) on May 6-7, 2002. ECS personnel, using a decontaminated hand auger, installed one (1) Type II groundwater monitor well (identified as MW-15) on May 6, 2002. Monitor Well DMW-4 was installed to an approximate depth of 60 feet below ground surface (bgs), and Monitor Well MW-15 was installed to an approximate depth of 9 feet bgs. Specifically, Monitor Well DMW-4 was installed adjacent to Monitor Well DMW-1. Monitor Well MW-15 was installed across Highway 11 from the site and adjacent to a tributary to Fall Creek. Soil samples were not obtained for laboratory analysis during the installation of the monitor wells; however, soil samples were collected for lithologic descriptions during all monitor well installations. Monitor well locations are depicted in Figure 2.

The monitor wells are constructed of 2-inch diameter, Schedule 40, flush threaded PVC well casing with factory slotted (0.01-inch opening) Schedule 40 PVC well screen attached. The Type II monitor well is constructed with the top of the well screen above the water table to allow for detection of potential free-phase liquid hydrocarbon. A uniformly graded silica filter pack was installed in the annular space from total depth to approximately 2.0 feet above the top of the

screen and followed by approximately 1.0 foot of bentonite pellets, which were hydrated. The remainder of the boring was grouted to land surface. Monitor Well MW-15 was completed with a water tight, locking PVC cap, protected by a three foot above-grade steel manway with a lockable lid. Following installations, each monitor well was developed with a clean, centrifugal pump to remove any fine materials that may impede the flow of groundwater into the well. Monitor Well DMW-4 was similarly constructed with the exception of a six-inch diameter outer casing set in rock at a depth of 50 feet bgs. Air rotary techniques were used to drill through the outer casing of DMW-4 and complete it from approximately 50 to 60 feet bgs the following day. Monitor Well DMW-4 was completed with a water tight, locking PVC cap, protected by a flush finished concrete pad with a 9-inch diameter steel, traffic rated manhole with a bolt down cover. Monitor well construction details and lithologic descriptions are presented in Appendix A.

2.2 Monitor Well Abandonment

On May 6, 2002, ECS personnel properly abandoned Monitor Well DMW-3, which was previously installed to an approximate depth of 85 feet below ground surface. A copy of the monitor well abandonment record is presented in Appendix B.

2.3 Boom Maintenance

SEI personnel mobilized to the site March 13, 2002, April 25, 2002, May 7, 2002, and June 10, 2002, for boom maintenance activities on the interception trench and Fall Creek. During the March and May visits, SEI personnel removed the booms and placed them in 55-gallon drums. These drums were later transported to G & K Tank Services in Sumter, South Carolina for proper disposal. During the April and June visits, SEI personnel inspected the booms and turned them over. The disposal manifests are presented in Appendix E along with the manifests for the soil and water generated during the current assessment activities.

2.4 Site Hydrogeology

During the May 8, 2002, gauging event, approximately 0.04 feet and 0.06 feet of liquid phase hydrocarbons (LPH) were detected at Monitor Wells MW-1 and MW-8, respectively.

Groundwater flow direction is toward the east and northeast with a hydraulic gradient of 0.0359 feet per foot, as measured between Monitor Wells MW-1 and MW-12. Groundwater measurements are summarized in Table I, and a groundwater elevation contour map is depicted in Figure 3.

2.5 Soil Organic Vapor Measurements

Soil organic vapor concentration measurements were performed on saturated soil samples obtained during monitor well installations with a Foxboro™ Model 128 OVA-FID. The OVA-FID was compared with a known standard (i.e. methane at 96 ppm) each day before it was used. Each soil sample was placed in a new, resealable, plastic bag and allowed to volatilize for a minimum of fifteen minutes. The OVA-FID probe was then inserted into the headspace of the bag, and the highest organic vapor reading observed was recorded for each sample. Organic vapor concentrations are recorded on the lithologic and monitor well construction logs.

2.6 Groundwater Sampling and Analysis

During the current assessment activities, SEI personnel obtained groundwater samples from Monitor Wells MW-2 through MW-7, MW-9 through MW-15, DMW-1, DMW-2, and DMW-4. Groundwater samples were not collected from Monitor Wells MW-1 and MW-8 due to the presence of LPH at these locations. In addition, a groundwater sample was collected from the potable water well (identified as WW-1) located at the subject property. A surface water sample (identified as CK-1) was collected from Fall Creek located hydraulically down-gradient from the site, and another surface water sample (identified as CK-2) was collected from a tributary to Fall

Creek located across Highway 11 from the site. On June 10, 2002, SEI personnel resampled Monitor Well MW-15 to verify concentrations detected during the May 8, 2002, sampling activities. A new, disposable, polyethylene bailer was used for the collection of the water samples from the monitor wells. Each sample was obtained after pH and temperature values had equilibrated unless petroleum odor was emanating from the well. If petroleum odors were observed in the monitor well, the groundwater sample was obtained after three well volumes were purged. All purge water was drummed for proper disposal at a permitted treatment facility. Field measurements are presented in Appendix C. New, disposable, latex gloves were used to maintain sample integrity during the sampling process. The groundwater samples were placed in laboratory supplied containers, placed on ice, and shipped via FedEx to TestAmerica Inc. in Nashville, Tennessee for proper analysis. Proper preservation methods and chain-of-custody procedures were followed throughout the sampling process. The samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tert-butyl-ether (MTBE), and naphthalene by EPA method 8260B. In addition, all samples except CK-2 were analyzed for nitrate by EPA method 353.2; sulfate by EPA method 9056; and ferrous iron by EPA method 3500D. Only Monitor Wells MW-6, MW-10, and DMW-1 were analyzed for methane by EPA method RSK175M and ferrous iron by EPA method 3500D, as these wells are located at the source and hydraulically down-gradient from the source area.

3.0 LABORATORY ANALYTICAL RESULTS

3.1 Groundwater Results

Groundwater analytical results for the samples collected during the current assessment activities detected the presence of benzene concentrations at Samples MW-2, MW-4, MW-6, MW-7, MW-10, MW-14, DMW-1, and CK-1. Toluene concentrations were detected at Samples MW-2, MW-4, MW-6, MW-7, MW-10, MW-14, MW-15, DMW-1, and CK-1. Ethylbenzene concentrations were detected at Samples MW-4, MW-6, MW-10, MW-14, MW-15, and CK-1.

Xylenes concentrations were detected at Samples MW-2, MW-4, MW-6, MW-7, MW-10, MW-14, MW-15, and CK-1. It is probable that ethylbenzene and xylenes concentrations exist at Monitor Well DMW-1, but a high dilution factor caused the results to be below detection limits. MTBE concentrations were detected at Samples MW-4, MW-6, MW-7, MW-10, MW-11, MW-12, MW-14, DMW-1, and CK-1. Naphthalene concentrations were detected at Sample MW-10. It is probable that naphthalene concentrations exist at Samples MW-4, MW-6, MW-14, and DMW-1, but a high dilution factor caused the results to be below detection limits. Methane concentrations were not detected at any sampled locations. Ferrous iron concentrations were detected at Monitor Wells MW-6, MW-10, and DMW-1. Nitrate concentrations were detected at all sample locations except MW-4, MW-10, MW-14, MW-15, and DMW-1. Sulfate concentrations were detected at Samples MW-4, MW-10, MW-12, MW-14, MW-15, DMW-1, DMW-2, DMW-4, and CK-1.

Benzene concentrations were detected greater than its risk based screening level (RBSL) of 5 µg/l at Samples MW-2, MW-4, MW-6, MW-7, MW-10, MW-14, DMW-1, and CK-1. Toluene concentrations were detected greater than its RBSL of 1000 µg/l at Samples MW-4, MW-6, and MW-14. Ethylbenzene and xylenes concentrations were detected greater than their respective RBSLs of 700 µg/l and 10000 µg/l at Sample MW-14. MTBE concentrations were detected greater than its RBSL of 40 µg/l at Samples MW-4, MW-6, MW-10, MW-14, and DMW-1. Naphthalene concentrations were not detected greater than its RBSL of 25 µg/l at any sample locations. However, it is probable that naphthalene concentrations exist greater than its RBSL at Samples MW-4, MW-6, MW-14, and DMW-1, but high dilution factors caused the results to be below detection limits. Groundwater analytical results are presented in Table II, and groundwater concentrations are depicted in Figures 4 and 5. Historical groundwater analytical results are presented in Table III. Laboratory analyses and chain-of-custody are presented in Appendix D.

Laboratory analytical results for the May 8, 2002, sampling event for Monitor Well MW-15 detected benzene concentrations of 20.3 µg/l, toluene concentrations of 170 µg/l, ethylbenzene concentrations of 27.1 µg/l, and xylenes concentrations of 91.0 µg/l. MTBE and naphthalene concentrations were not detected greater than their respective detection limits. Due to benzene concentrations existing greater than its RBSL of 5 µg/l, SEI personnel resampled this well on June 10, 2002. Laboratory results for this resampling event did not detect benzene, MTBE, or naphthalene concentrations greater than their respective detection limits. However, toluene concentrations of 3.9 µg/l, ethylbenzene concentrations of 3.9 µg/l, and xylenes concentrations of 14.4 µg/l were detected at Monitor Well MW-15.

4.0 CONCLUSIONS

- Groundwater flow at the site is in a northeastern direction with a hydraulic gradient of 0.0359 feet per foot, as measured between Monitor Wells MW-1 and MW-12.
- Approximately 0.04 feet and 0.06 feet of liquid phase hydrocarbons were detected at Monitor Wells MW-1 and MW-8 during the May 8, 2002, gauging event.
- The onsite potable water well, identified as WW-1, was sampled as part of the current assessment activities. Laboratory analytical results failed to detect petroleum hydrocarbons in this well.
- Surface water samples were collected from Fall Creek (identified as CK-1) and its tributary (identified as CK-2) located hydraulically down-gradient from the site. Laboratory analytical results detected BTEX and MTBE concentrations at Sample CK-1; however, laboratory analytical results failed to detect petroleum hydrocarbons at Sample CK-2.
- SEI personnel continue to monitor the absorbent booms that have been placed in the interception trench and on Fall Creek directly down-gradient from the site. These booms are replaced on a monthly basis or as needed to prevent the migration of a petroleum sheen from traveling down Fall Creek.

- Total BTEX concentrations have increased at Samples MW-14 and CK-1 since the previous sampling activities. However, total BTEX concentrations have decreased or remained below detection limits at the remaining sample locations for the same period. MTBE concentrations have increased at Samples MW-7 and CK-1 since the previous sampling activities. However, MTBE concentrations have decreased or remained below detection limits at the remaining sample locations for the same period. Naphthalene concentrations have decreased or remained below detection limits for all sample locations since the previous sampling event. Comparisons for naphthalene could not be made for Monitor Wells MW-4, MW-6, MW-14, and DMW-1 due to high dilution factors at these locations.
- Monitor Well DMW-3 was properly abandoned during the current assessment activities.
- Petroleum hydrocarbons in the groundwater have been vertically delineated in the source area with the installation of Monitor Well DMW-4.
- Petroleum hydrocarbons in the groundwater have been horizontally delineated in the direction of Monitor Well MW-10 with the installation of Monitor Well MW-15.

5.0 REPORT LIMITATIONS

This investigation is intended to be a non-biased assessment of on-site environmental conditions proximate to the location of the current UST system. Subsurface investigative methodologies are in accordance with all applicable state and federal regulatory requirements. The information presented in this report is based upon site-specific observations, generally accepted geological practices, and analytical results for environmental samples collected at the time of the field investigation. All data is believed to represent subsurface conditions at the facility, however, data may not be completely representative of all subsurface conditions.

REFERENCES

Aucott, Walter R. and Gary K. Speiran, 1985, *Geohydrology and Water Quality of the Coastal Plain Aquifers of South Carolina*, Proceedings of Symposium on Groundwater and Environmental Hydrogeology in South Carolina October 1 & 2, 1985. SCDHEC 153p.

Freeze, R. Allen and J. A. Cherry, 1979, *Ground Water*, Prentice-Hall, Englewood Cliffs, New Jersey.

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SEI Environmental, Inc., September 25, 2001, *Tier II Assessment Report – Highway 11 Grocery*, Columbia, South Carolina.

SEI Environmental, Inc., January 8, 2002, *Tier II Assessment Addendum Report – Highway 11 Grocery*, Columbia, South Carolina.

TABLE I
Groundwater Elevation Data
Highway 11 Grocery / Salem, South Carolina

Monitor Well Number	Gauging Date	Top of Casing Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Depth of Well (feet)	Water Table Elevation (feet)
MW-1	05/08/02	103.38	24.67*	0.04	30	78.71
MW-2	05/08/02	104.85	26.08	0	35	78.77
MW-3	05/08/02	104.89	24.78	0	30	80.11
MW-4	05/08/02	99.90	23.38	0	35	76.52
MW-5	05/08/02	106.06	28.82	0	35	77.24
MW-6	05/08/02	100.00	21.66	0	35	78.34
MW-7	05/08/02	103.66	28.12	0	40	75.54
MW-8	05/08/02	86.51	21.00*	0.06	30	65.51
MW-9	05/08/02	58.39	2.47	0	12	55.92
MW-10	05/08/02	93.78	20.04	0	24	73.74
MW-11	05/08/02	83.20	16.86	0	23	66.34
MW-12	05/08/02	58.69	3.12	0	12	55.57
MW-13	05/08/02	77.72	6.52	0	12	71.20
MW-14	05/08/02	59.19	2.14	0	10	57.05
MW-15	05/08/02	71.52	10.61	0	9	60.91
DMW-1	05/08/02	103.27	24.68	0	45	78.59
DMW-2	05/08/02	86.21	17.22	0	75	68.99
DMW-4	05/08/02	103.22	25.08	0	60	78.14

Top of casing elevations are based on an assumed elevation.

* Adjusted depth to water = depth to water - [(LPH thickness) x 0.78)]

TABLE II
Groundwater Analytical Results
Highway 11 Grocery / Salem, South Carolina

Chemical of Concern	RBSL ($\mu\text{g/l}$)	MW-1 ($\mu\text{g/l}$)	MW-2 ($\mu\text{g/l}$)	MW-3 ($\mu\text{g/l}$)	MW-4 ($\mu\text{g/l}$)	MW-5 ($\mu\text{g/l}$)	MW-6 ($\mu\text{g/l}$)	MW-7 ($\mu\text{g/l}$)	MW-8 ($\mu\text{g/l}$)	MW-9 ($\mu\text{g/l}$)	MW-10 ($\mu\text{g/l}$)	MW-11 ($\mu\text{g/l}$)
Free Product Thickness	NA	0.04'	None	None	None	None	None	None	0.06'	None	None	None
Benzene	5	NS	13.1	<1.0	1500	<1.0	1780	34.3	NS	<1.0	115	<1.0
Toluene	1000	NS	8.4	<1.0	5320	<1.0	4950	19.9	NS	<1.0	185	<1.0
Ethylbenzene	700	NS	<1.0	<1.0	620	<1.0	490	<1.0	NS	<1.0	68.1	<1.0
Xylenes	10000	NS	5.0	<1.0	3360	<1.0	2880	7.8	NS	<1.0	328	<1.0
Total BTEX	NA	NA	<27.5	<4.0	10800	<4.0	10100	<63.0	NA	<4.0	696.1	<4.0
MTBE	40	NS	<5.0	<5.0	810	<5.0	6350	6.5	NS	<5.0	85.5	5.4
Naphthalene	25	NS	<5.0	<5.0	<500	<5.0	<500	<5.0	NS	<5.0	8.6	<5.0
Methane	NA	NS	NS	NS	NS	NS	<26	NS	NS	NS	<26	NS
Ferrous Iron	NA	NS	NS	NS	NS	NS	7520	NS	NS	NS	4260	NS
Nitrate	NA	NS	1.44*	0.490*	<0.100*	0.330*	0.130*	0.610*	NS	0.170*	<0.100*	0.100*
Sulfate	NA	NS	<1.00*	<1.00*	1.20*	<1.00*	<1.00*	<1.00*	NS	<1.00*	8.51*	<1.00*

Bold concentrations represent those greater than the respective RBSL; NA = Not Applicable; NS = Not Sampled

*denotes results in mg/l

TABLE II (continued)
Groundwater Analytical Results
Highway 11 Grocery / Salem, South Carolina

Chemical of Concern	RBSL ($\mu\text{g/l}$)	MW-12 ($\mu\text{g/l}$)	MW-13 ($\mu\text{g/l}$)	MW-14 ($\mu\text{g/l}$)	MW-15 ($\mu\text{g/l}$)	DMW-1 ($\mu\text{g/l}$)	DMW-2 ($\mu\text{g/l}$)	DMW-4 ($\mu\text{g/l}$)	CK-1 ($\mu\text{g/l}$)	CK-2 ($\mu\text{g/l}$)	WW-1 ($\mu\text{g/l}$)
Free Product Thickness	NA	None	None	None	None	None	None	None	NA	NA	NA
Benzene	5	<1.0	<1.0	3780	<2.0	215	<1.0	<1.0	24.6	<1.0	<2.0
Toluene	1000	<1.0	<1.0	13800	3.9	430	<1.0	1.1	26.5	<1.0	<2.0
Ethylbenzene	700	<1.0	<1.0	27000	3.9	<50.0	<1.0	<1.0	8.0	<1.0	<2.0
Xylenes	10000	<1.0	<1.0	14700	14.4	<50.0	<1.0	<1.0	41.8	<1.0	<2.0
Total BTEX	NA	<4.0	<4.0	59280	<24.2	<745	<4.0	<4.1	100.9	<4.0	<8.0
MTBE	40	5.6	<5.0	7010	<2.0	1780	<5.0	<5.0	36.1	<5.0	<2.0
Naphthalene	25	<5.0	<5.0	<500	<5.0	<250	<5.0	<5.0	<5.0	<5.0	<5.0
Methane	NA	NS	NS	NS	NS	<26	NS	NS	NS	NS	NS
Ferrous Iron	NA	NS	NS	NS	NS	160	NS	NS	NS	NS	NS
Nitrate	NA	0.270*	0.770*	<0.100*	<0.100*	<0.100*	0.220*	0.810*	0.220*	NS	0.250*
Sulfate	NA	1.75*	<1.00*	1.11*	3.58*	4.21*	3.63*	13.4*	1.30*	NS	<1.00*

Bold concentrations represent those greater than the respective RBSL; NA = Not Applicable; NS = Not Sampled

*denotes results in mg/l

TABLE III
Historical Groundwater Analytical Results, dated December 2001
Highway 11 Grocery / Salem, South Carolina

Chemical of Concern	RBSL ($\mu\text{g/l}$)	MW-1 ($\mu\text{g/l}$)	MW-2 ($\mu\text{g/l}$)	MW-3 ($\mu\text{g/l}$)	MW-4 ($\mu\text{g/l}$)	MW-5 ($\mu\text{g/l}$)	MW-6 ($\mu\text{g/l}$)	MW-7 ($\mu\text{g/l}$)	MW-8 ($\mu\text{g/l}$)	MW-9 ($\mu\text{g/l}$)	MW-10 ($\mu\text{g/l}$)
Free Product Thickness	NA	0.25'	None	None	None	None	None	None	0.54'	None	None
Benzene	5	23100	28.4	<1.0	1730	<1.0	6950	62.9	21100	<1.0	2540
Toluene	1000	58800	18.6	1.9	3840	<1.0	27300	74.5	57600	<1.0	7130
Ethylbenzene	700	5050	<1.0	<1.0	865	<1.0	3300	1.8	4870	<1.0	966
Xylenes	10000	26000	16.1	<1.0	4600	<1.0	17200	21.4	25400	<1.0	4440
Total BTEX	NA	112950	<64.1	<4.9	11035	<4.0	54750	160.6	108970	<4.0	15076
MTBE	40	118000	<5.0	<5.0	925	<5.0	7350	<5.0	49000	<5.0	3210
Naphthalene	25	<2500	<5.0	<5.0	250	<5.0	<2500	<5.0	980	<5.0	199
Methane	NA	<26.0	NS	NS	NS	NS	<26.0	NS	<26.0	NS	NS
Lead	15	267	69.0	251	539	1070	378	15.0	22.0	8.00	87.0
Ferrous Iron	NA	6350	<100	2880	1270	<100	11700	<100	3670	604	2070
Nitrate	NA	<0.100*	0.630*	0.440*	0.220*	0.330*	0.250*	0.710*	3.00*	0.130*	<0.100*
Sulfate	NA	49.2*	<1.00*	<1.00*	1.50*	<1.00*	<1.00*	<1.00*	<1.00*	1.95*	1.17*

Bold concentrations represent those greater than the respective RBSL; NA = Not Applicable; NS = Not Sampled

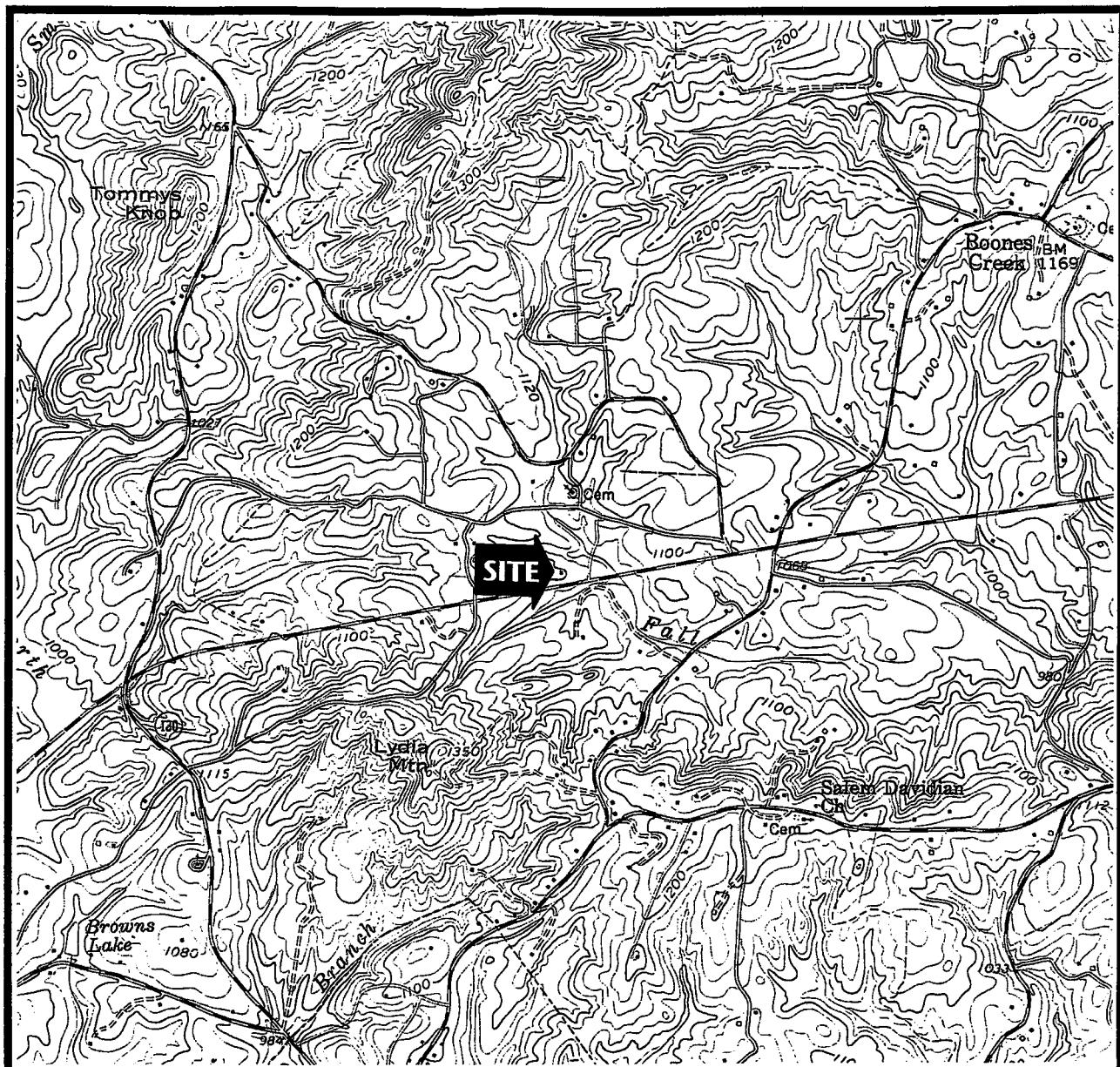
*denotes results in mg/l

TABLE III (continued)
Historical Groundwater Analytical Results, dated December 2001
Highway 11 Grocery / Salem, South Carolina

Chemical of Concern	RBSL ($\mu\text{g/l}$)	MW-11 ($\mu\text{g/l}$)	MW-12 ($\mu\text{g/l}$)	MW-13 ($\mu\text{g/l}$)	MW-14 ($\mu\text{g/l}$)	DMW-1 ($\mu\text{g/l}$)	DMW-2 ($\mu\text{g/l}$)	DMW-3 ($\mu\text{g/l}$)	CK-1 ($\mu\text{g/l}$)	WW-1 ($\mu\text{g/l}$)
Free Product Thickness	NA	None	None	None	None	None	None	None	NA	NA
Benzene	5	1120	<1.0	<1.0	4220	3530	1.8	5620	11.3	<1.0
Toluene	1000	32.0	<1.0	<1.0	13700	7000	1.1	29600	18.6	<1.0
Ethylbenzene	700	178	<1.0	<1.0	2180	625	<1.0	3380	4.7	<1.0
Xylenes	10000	970	<1.0	<1.0	11400	3420	<1.0	14300	25.6	<1.0
Total BTEX	NA	2300.0	<4.0	<4.0	31500	14575	<4.9	52900	60.2	<4.0
MTBE	40	272	9.3	<5.0	9560	16400	30.7	8410	17.7	<5.0
Naphthalene	25	70.0	<5.0	<5.0	453	132	<5.0	795	5.9	<5.0
Methane	NA	NS	NS	NS	NS	<26.0	<26.0	NS	NS	NS
Lead	15	89.0	52.0	114	43.0	<3.00	499	11.0	<3.00	<3.00
Ferrous Iron	NA	12300	674	135	21400	1120	42200	328	166	<100
Nitrate	NA	<0.100*	0.170*	0.390*	<0.100*	<0.100*	0.420*	1.75*	0.110*	0.250*
Sulfate	NA	<1.00*	2.90*	2.57*	1.20*	1.45*	16.1*	30.2*	1.43*	<1.00*

Bold concentrations represent those greater than the respective RBSL; NA = Not Applicable; NS = Not Sampled

*denotes results in mg/l



SCALE 1:24000

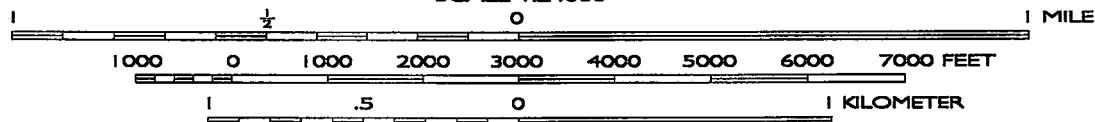
**SEI Environmental, Inc.**

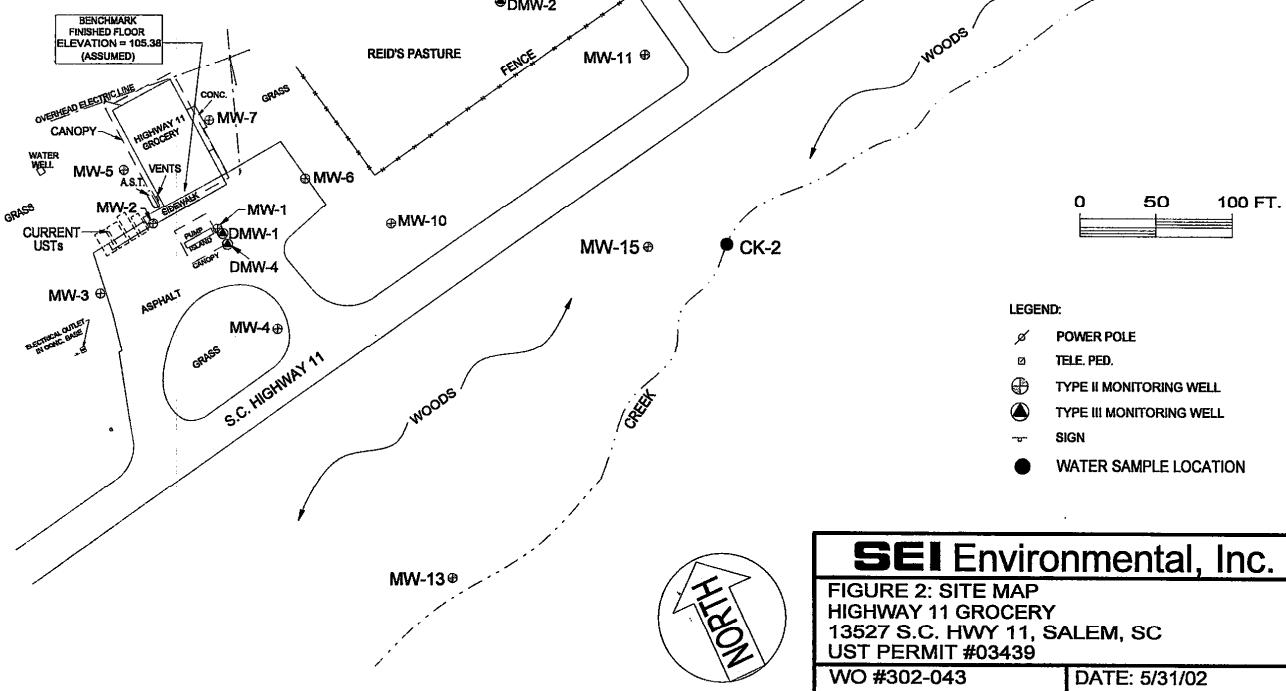
FIGURE 1: SITE LOCATION MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

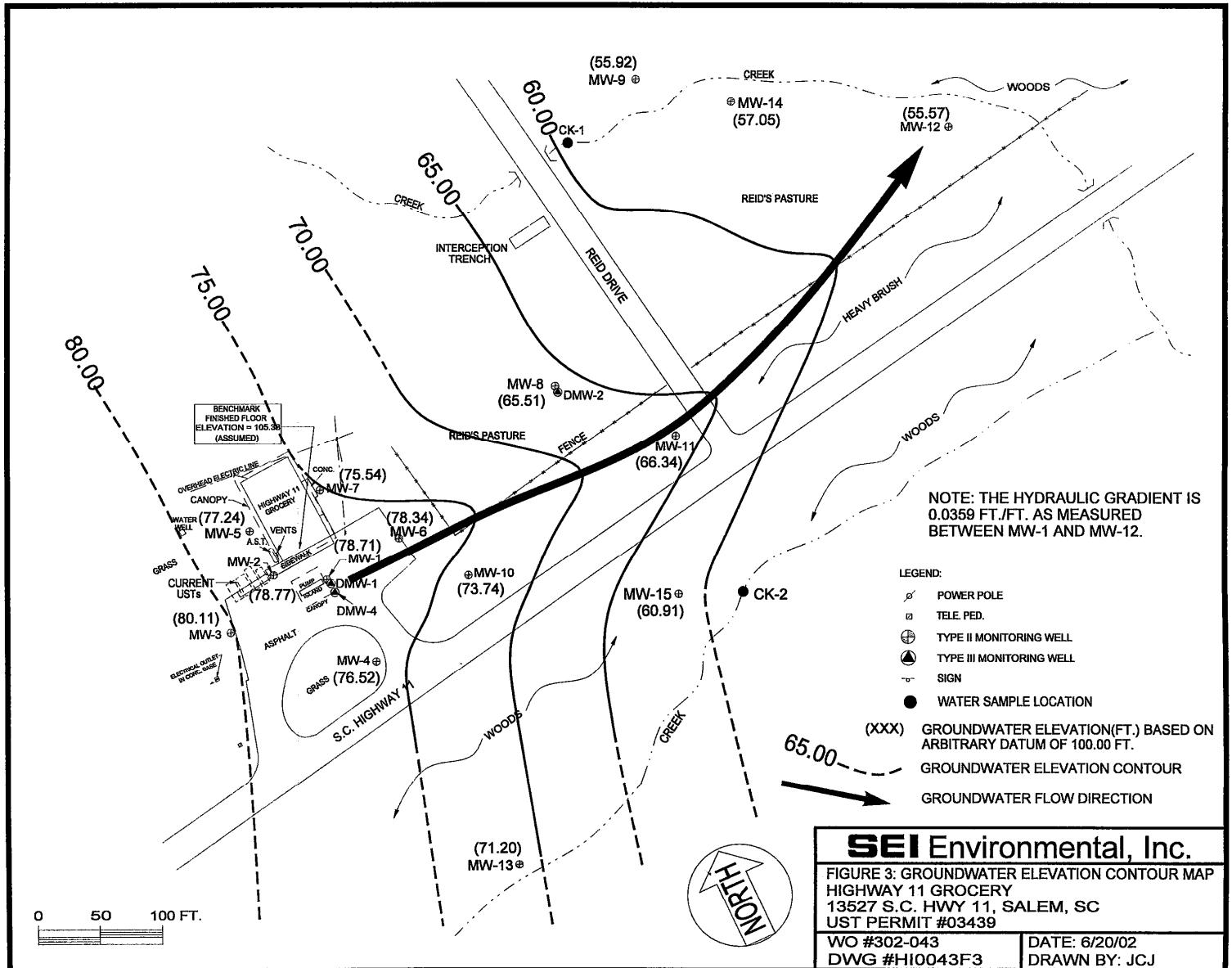
W.O. #: 300-388
DWG #

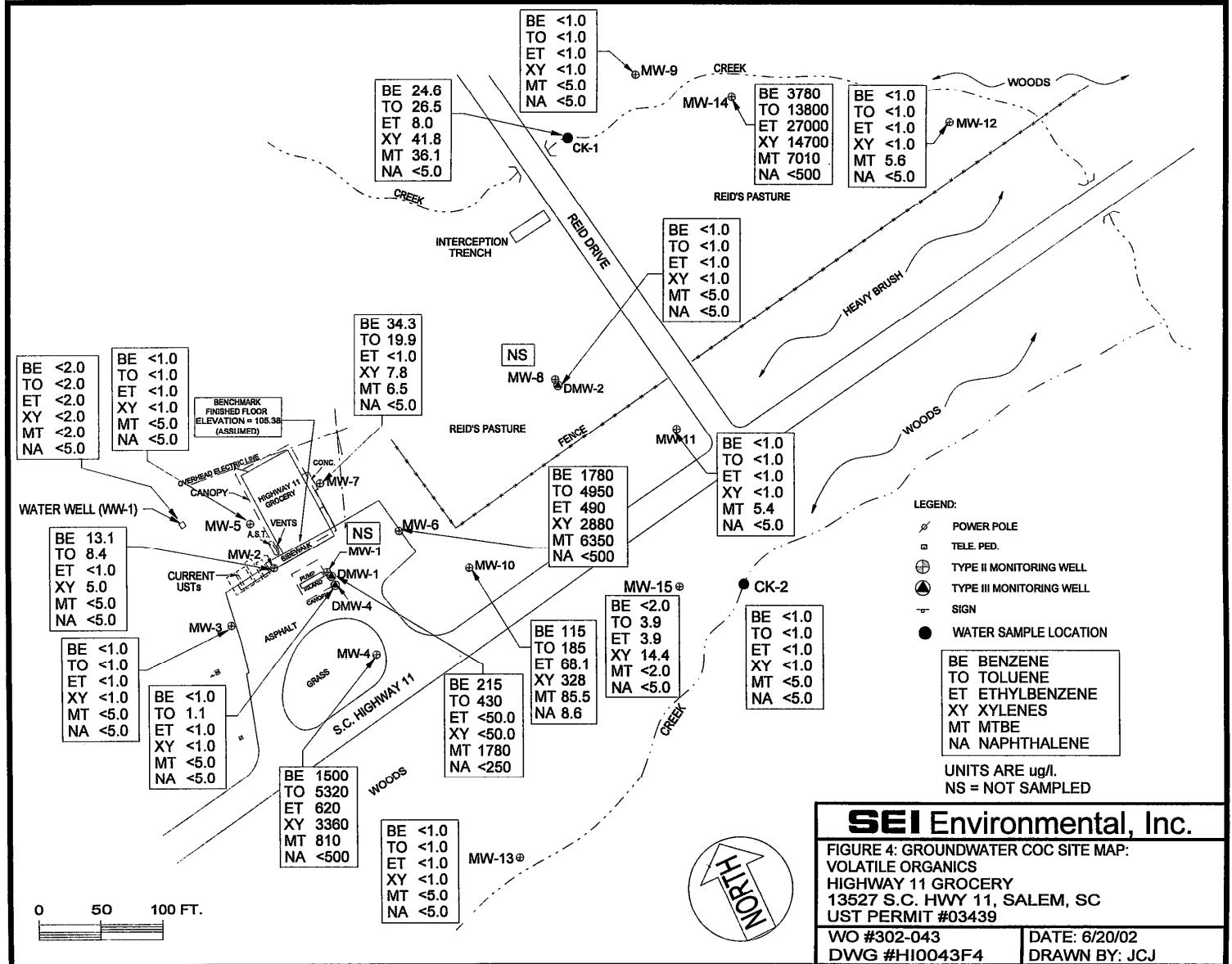
DATE: 9/5/01
DRAWN BY: JC

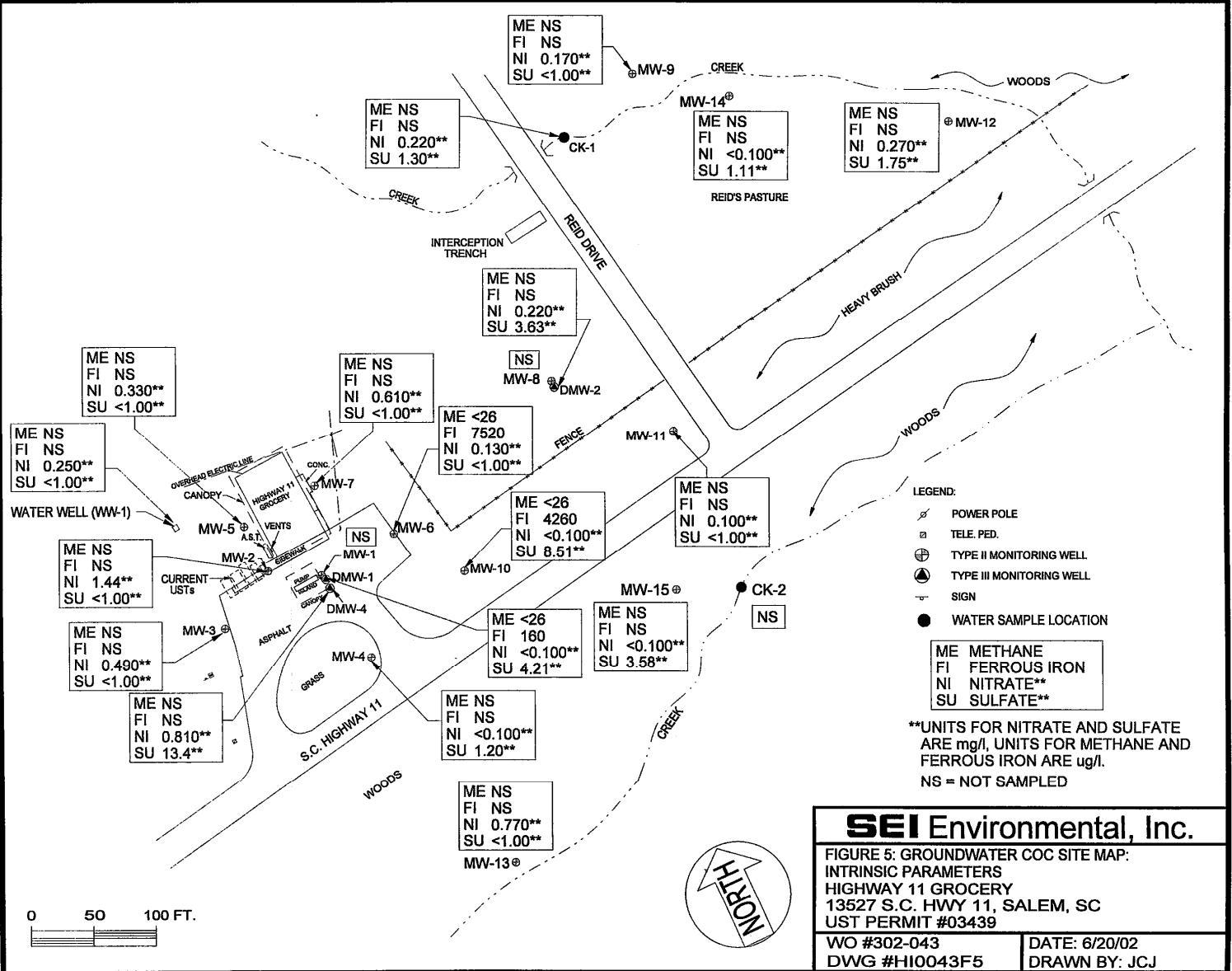
WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.89
MW-4	98.90
MW-5	106.06
MW-6	100.00
MW-7	103.88
MW-8	88.51
MW-9	58.39
MW-10	83.79
MW-11	83.20
MW-12	58.69
MW-13	77.91
MW-14	59.19
MW-15	71.52
DMW-1	103.27
DMW-2	88.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.





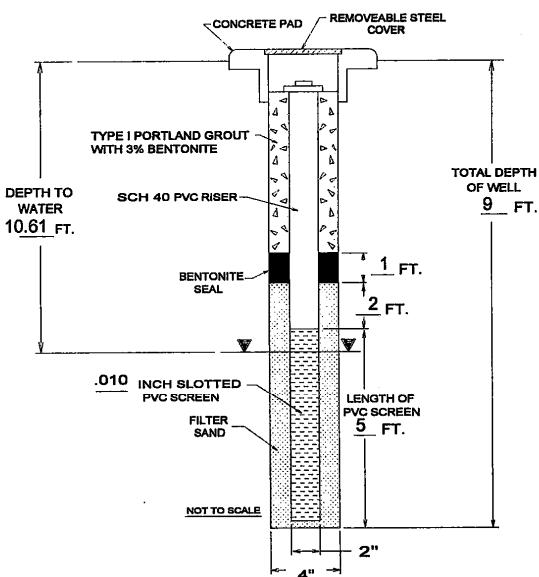




APPENDIX A
Monitor Well Construction Logs

Boring Log and Type II Well Construction Details

WELL IDENTIFICATION: MW-15 DATE DRILLED: 5/6/02
 STATE PERMIT #: 03439 WORK ORDER #: 302-043
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13527 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 71.52 LAND SURFACE ELEV.: N/D



DRILLING METHOD: HAND AUGER

SAMPLING METHOD: GRAB

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: 0.010 INCH

COMMENTS:

TOP OF CASING ELEVATION IS REFERENCED TO AN ASSUMED ELEVATION.

N/D = NOT DETERMINED

NA = NOT APPLICABLE

NOTE: THIS IS AN ABOVE GRADE MONITOR WELL.

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOV. ERY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	0.0	SP	GRAY, SOFT, VERY FINE TO MEDIUM-GRAINED SAND; DAMP	
10	ND	ND	NA	NA	ROCK	
15						
20						
25						
30						
35						
40						



Water Well Record

Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:

Name: Hwy 11 Grocery
(last) (first)
Address: 180 Shallowford Rd.
City: Salem State: SC Zip: 29676

Telephone: Work: Home:

2. LOCATION OF WELL:

Name: Hwy 11 Grocery
Street Address: 13527 SC Hwy 11

City: Salem Zip:
COUNTY: Oconee

Latitude: Longitude:

3. SYSTEM NAME: SYSTEM NUMBER:

4. CUTTING SAMPLES: Yes No

Geophysical Logs: Yes (please enclose) No

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
Brown S1	9	9
Rock	9	9

11. SCREEN Type: PVC Diam: 2
Slot/Gauge: 0.10 Length: 5
Set Between: 4 ft. and 6 ft. NOTE: MULTIPLE SCREENS
Sieve Analysis: Yes (please enclose) No USE SECOND SHEET

12. STATIC WATER LEVEL 6 ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface: ft. after hrs. Pumping GPM
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 9
Effective size: 0.13 Uniformity Coefficient: 1.5-1. Sand

16. WELL GROUTED? Yes No
 Neat Cement Sand Cement Concrete Other
Depth: From: ft. to ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type well disinfected: Yes Type: _____
upon completion: No 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: Chris Bonder CERT. NO. L333
Address: E.C.S. Inc. P.O. Box 703
Matthews NC 28105

Telephone No.: 104-849-0888

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: *Chris Bonder* Date: 5/8/02
Authorized Representative

*Indicate Water Bearing Zones

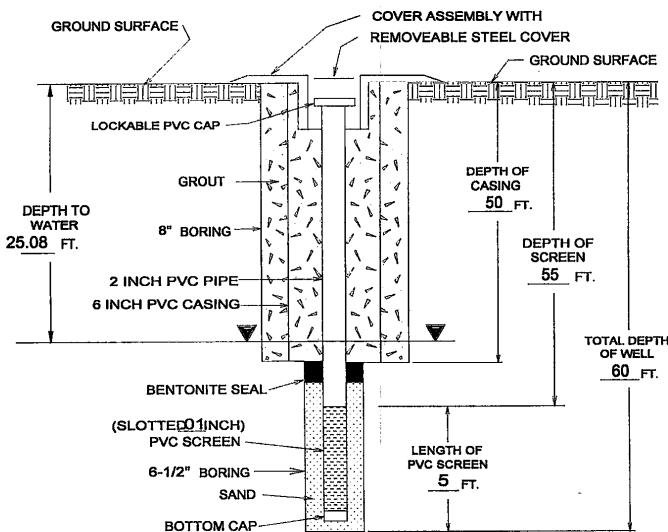
(Use a 2nd sheet if needed)

5. REMARKS: MW-15

Bentonite seal from 1'-2'

Boring Log and Type III Well Construction Details

WELL IDENTIFICATION: DMW-4 DATE DRILLED: 5/6/02-5/7/02
 STATE PERMIT #: 03439 WORK ORDER #: 302-043
 PROJECT NAME: HIGHWAY 11 GROCERY
 SITE ADDRESS: 13527 S.C. HWY 11, SALEM, SC
 LATITUDE: N/D LONGITUDE: N/D
 TOP OF CASING ELEV.: 103.22 LAND SURFACE ELEV.: N/D



DRILLING METHOD: AIR ROTARY

SAMPLING METHOD: GRAB

GRAVEL PACK SIZE: 20/30 SILICA SAND

SLOT SIZE: 0.010"

COMMENTS:

TOP OF CASING ELEVATION IS REFERENCED TO AN ASSUMED ELEVATION.

N/D= NOT DETERMINED

NA = NOT APPLICABLE

DEPTH	SAMPLE NUMBER	BLOW COUNT	RECOV. ERY	OVA (ppm)	UNIFIED METHOD	DESCRIPTIVE LOG
5	ND	ND	ND	SW		TAN, SOFT, MEDIUM-GRAINED SAND
10	ND	ND	ND	ML		GRAY, STIFF, MEDIUM-GRAINED SAPROLITE
15	ND	ND	ND	ML		GRAY, STIFF, MEDIUM-GRAINED SAPROLITE, STRONG PETROLEUM ODOR
20	ND	ND	ND	ML		GRAY, STIFF, MEDIUM-GRAINED SAPROLITE, STRONG PETROLEUM ODOR
25	ND	ND	ND	ML		GRAY, STIFF, MEDIUM-GRAINED SAPROLITE, STRONG PETROLEUM ODOR
30	ND	ND	ND	NA		ROCK
35	ND	ND	ND	NA		ROCK
40	ND	ND	ND	NA		ROCK
45	ND	ND	ND	NA		ROCK
50	ND	ND	ND	NA		ROCK
55	ND	ND	ND	NA		ROCK
60	ND	ND	ND	NA		ROCK
65						



Water Well Record

Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708 (803) 898-4300

PROMOTE PROTECT PROSPER			
1. WELL OWNER INFORMATION:			
Name: Hwy 11 Grocery (last)		(first)	
Address: 110 Shallowford Rd.			
City: Salem	State: NC	Zip: 27670	
Telephone: Work:		Home:	
2. LOCATION OF WELL:			
Name: Hwy 11 Grocery Street Address: 13527 SC Hwy 11			
City: Salem		Zip: 27670	
County: Orange			
Latitude:		Longitude:	
3. SYSTEM NAME: SYSTEM NUMBER:			
4. CUTTING SAMPLES: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Geophysical Logs: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No			
Formation Description:	Thickness of Stratum:	Depth to Bottom of Stratum:	
Bentonite	35	35	
Bentonite	15	50	
Weathersed Limestone	10	60	
*Indicate Water Bearing Zones: (Use a 2nd sheet if needed)			
5. REMARKS: DMW-24			
Bentonite Seal from 51'-53'			
6. PERMIT NUMBER:			
7. USE:			
<input type="checkbox"/> Residential		<input type="checkbox"/> Public Supply	
<input type="checkbox"/> Irrigation		<input type="checkbox"/> Air Conditioning	
<input type="checkbox"/> Test Well		<input checked="" type="checkbox"/> Monitor Well	
8. WELL DEPTH (completed): Date Started: 5-6-02			
60 ft.		Date Completed: 5-7-02	
9. <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored			
<input type="checkbox"/> Dug <input checked="" type="checkbox"/> Air Rotary <input type="checkbox"/> Driven			
<input type="checkbox"/> Cable tool <input type="checkbox"/> Other			
10. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded			
Diam.: 2"	Length: 60 ft.		Height: Above/Below Surface
Type: PVC	Diam.: 2"		ft.
<input type="checkbox"/> Steel	<input type="checkbox"/> Galvanized		
<input type="checkbox"/> Other			
2"	In. to	50 ft. depth	Weight: 100 lb./ft.
2"	In. to	60 ft. depth	Drive Shoe? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
11. SCREEN:			
Type: PVC	Diam.: 2"	Length: 5 ft.	
Slot/Gauge: 0.10	Set Between: 55 ft. and 100 ft.		NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No			
12. STATIC WATER LEVEL: 53 ft. below land surface after 24 hours			
13. PUMPING LEVEL Below Land Surface:			
ft. after hrs. Pumping G.P.M.			
Pumping Test: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No			
Yields:			
14. WATER QUALITY:			
Chemical Analysis: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Bacterial Analysis: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Please enclose lab results.			
15. ARTIFICIAL FILTER (filter pack): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Installed from: 51 ft. to: 60 ft.		Effective size: 0.100 Uniformity Coefficient: Silica Sand	
16. WELL GROUTED?: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
<input checked="" type="checkbox"/> Near Cement <input type="checkbox"/> Sand Cement <input type="checkbox"/> Concrete <input type="checkbox"/> Other			
Depth: From: 0 ft. to: 51 ft.			
17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction			
Type well disinfected <input type="checkbox"/> Yes Type _____			
upon completion <input type="checkbox"/> No Amount _____			
18. PUMP: Date installed: Not installed <input type="checkbox"/>			
Mr. Name: Model No. _____			
H.P. Volts Length of drop pipe ft. Capacity gpm			
TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine			
<input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal			
19. WELL DRILLER: Chris Bender CERT NO. 1333			
Address: ECS Inc P.O. Box 705 Matthews NC 28105			
Telephone No.: 704-849-0888			
20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.			
Signed: <u>Chris Bender</u> Date: 5-13-02 Authorized Representative			

APPENDIX B
Monitor Well Abandonment Record



Water Well Record

Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708, (803) 898-4300

1. WELL OWNER INFORMATION:

Name: Hwy 11 Grocery
(last) (first)

Address: 180 Shallowford Rd

City: Salem State: SC Zip: 29676

Telephone: Work: Home:

2. LOCATION OF WELL:

Name: Hwy 11 Grocery
Street Address: 13527 SC Hwy 11

City: Salem Zip:

County: Oconee

Latitude: _____ Longitude: _____

3. SYSTEM NAME: SYSTEM NUMBER:

4. CUTTING SAMPLES: Yes NoGeophysical Logs: Yes (please enclose) No

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum

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Formation Description	Thickness of Stratum	Depth to Bottom of Stratum

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum

6. PERMIT NUMBER:

7. USE:

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

8. WELL DEPTH (completed):

85 ft. Date Started: 5-6-02

Date Completed: 5-6-02

 Mud Rotary Jetted Bored Dug Air Rotary Driven Cable tool Other10. CASING: Threaded Welded

Diam: _____ Height: Above/Below Surface _____ ft.

Type: PVC Galvanized Weight: _____ lb./ft. Steel Other Drive Shoe? Yes No

In. to ft. depth In. to ft. depth

11. SCREEN:

Type: _____ Diam: _____ Length: _____

Slot/Gauge: _____ Set Between: _____ ft. and _____ ft.

Slave Analysis: Yes (please enclose) No

12. STATIC WATER LEVEL: 60 ft. below land surface after 24 hours

13. PUMPING LEVEL: Below Land Surface. ft. after hrs. Pumping GPM

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. Uniformity Coefficient: _____

Effective size: _____

16. WELL GROUTED? Yes No Neat Cement Sand Cement Concrete Other

Depth: From _____ ft. to _____ ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ direction

Type well disinfected: Yes Type: _____upon completion: Yes Amount: _____

18. PUMP: Date installed: _____ Not installed L.I.

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: Chris Bonds CERT NO. 7333

Address: ESS INC. P.O. Box 102

Matthews, NC 28106 Telephone No. 704-844-0882

20. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: *Chris Bonds* Authorized Representative Date: 5-13-02

Trimmie will Grout from bottom to top

APPENDIX C
Groundwater Sampling Field Measurements

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>5-7-02</u>		
Field Personnel:	<u>Marc McFarland</u>		
General Weather Conditions:	<u>Sunny - Hot</u>		
Ambient Air Temperature:	_____ °C		
<u>Quality Assurance</u>			
pH Meter	Conductivity Meter		
serial no.	serial no.		
pH=4.0	standard		
pH=7.0	standard		
pH=10.0	standard		
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Grocery</u>		
Site ID#:	<u>302043</u>	Monitoring Well #	<u>mw1</u>
Water Supply Well	Public	—	Private
Monitoring Well Diameter (D):	<u>2"</u> feet		
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	<u>.04</u> feet		
Depth to Ground Water (DGW)	<u>24.70</u> feet		
Total Well Depth (TWD)	<u>30</u> feet		
Length of the water column (LWC=TWD-DGW)	<u>5.3</u> feet		
1 casing volume (CV=LWC X C)=	<u>1.63</u>	=	<u>0.86</u> gals
3 casing volume (3 X CV)=	<u>2.6</u>	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos/cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks:	<u>Free Product</u>						

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program
Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>05/08/02</u>		
Field Personnel:	<u>J.WEYAND, J.MONEGHIN</u>		
General Weather Conditions:	<u>CLEAN, WARM</u>		
Ambient Air Temperature:	_____ °C		
<u>Quality Assurance</u>			
pH Meter serial no.	Conductivity Meter serial no.		
pH=4.0	standard		
pH=7.0	standard		
pH=10.0	standard		
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Groc</u>		
Site ID#:	<u>302043</u>	Monitoring Well #	<u>MW3</u>
Water Supply Well	Public	Private	
Monitoring Well Diameter (D): <u>2 "</u> feet			
Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 for a 4 inch well C=0.652			
* Free Product Thickness: _____ feet			
Depth to Ground Water (DGW) <u>24.78</u> feet			
Total Well Depth (TWD) <u>30.0</u> feet			
Length of the water column (LWC=TWD-DGW) <u>5.22</u> feet			
1 casing volume (CV=LWC X C)= _____ X _____ = <u>.85</u> gals			
3 casing volume (3 X CV)= <u>2.55</u> gals (standard purge volume)			
Total Volume of Water Purged Before Sampling <u>2.0</u> gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>125.5</u>
pH (s.u.)	<u>8.30</u>	<u>6.56</u>	<u>5.32</u>				<u>4.80</u>
Specific Conductivity ($\mu\text{mhos/cm}$)	<u>.028</u>	<u>.024</u>	<u>.021</u>				<u>.019</u>
Water Temperature (°C)	<u>18.9</u>	<u>18.5</u>	<u>17.0</u>				<u>17.7</u>
Dissolved Oxygen	<u>6.87</u>	<u>5.97</u>	<u>6.24</u>				<u>6.82</u>
PID readings, if required							
Remarks:	<u>BAKED ON SLOW RECHARGE</u>						

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>5-7-02</u>		
Field Personnel:	<u>M</u>		
General Weather Conditions:	<u>S a</u>		
Ambient Air Temperature:	____ °C		
<u>Quality Assurance</u>			
pH Meter serial no.	Conductivity Meter serial no.		
pH=4.0	standard		
pH=7.0	standard		
pH=10.0	standard		
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Groc.</u>		
Site ID#:	<u>302043</u>	Monitoring Well #	<u>MW4</u>
Water Supply Well	Public	<input checked="" type="checkbox"/>	Private
Monitoring Well Diameter (D):	<u>2'</u> feet		
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	<u>23.38</u> feet		
Total Well Depth (TWD)	<u>85</u> feet		
Length of the water column (LWC=TWD-DGW)	<u>11.62</u> feet		
1 casing volume (CV=LWC X C)=	<u>.163 = 1.89</u> gals		
3 casing volume (3 X CV)=	<u>5.68</u> gals (standard purge volume)		
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos/cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks:	<u>odor</u>						

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>05/08/02</u>		
Field Personnel:	<u>J. WEYAND, J. MONEGHIN</u>		
General Weather Conditions:	<u>CLEAN, WARM</u>		
Ambient Air Temperature:			*C
<u>Quality Assurance</u>			
pH Meter	Conductivity Meter		
serial no.	serial no.		
pH = 4.0	standard		
pH = 7.0	standard		
pH = 10.0	standard		
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name: HWY 11 GROC
Site ID#: 302043 Monitoring Well # MWS
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2' feet
Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652
* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 28.82 feet
Total Well Depth (TWD) 35.0 feet
Length of the water column (LWC=TWD-DGW) 6.18 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 1.01 gals
3 casing volume (3 X CV)= 3.03 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1220
pH (s.u.)	4.91	4.49	4.34	4.15			4.12
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	.015	.016	.016	.015			.015
Water Temperature (°C)	18.7	18.4	17.9	17.8			19.1
Dissolved Oxygen	7.52	7.13	7.18	7.35			7.23
PID readings, if required							

Remarks: _____

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>5-7-02</u>		
Field Personnel:	<u>SAW</u>		
General Weather Conditions:	<u>S a w</u>		
Ambient Air Temperature:	_____ °C		
<u>Quality Assurance</u>			
pH Meter	Conductivity Meter		
serial no.	serial no.		
pH=4.0	standard		
pH=7.0	standard		
pH=10.0	standard		
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Groc.</u>		
Site ID#:	<u>302043</u>	Monitoring Well #	<u>mw6</u>
Water Supply Well	Public	<input checked="" type="checkbox"/>	Private
Monitoring Well Diameter (D):	<u>2"</u> feet		
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	<u>21.66</u> feet		
Total Well Depth (TWD)	<u>35</u> feet		
Length of the water column (LWC=TWD-DGW)	<u>13.34</u> feet		
1 casing volume (CV=LWC X C)=	<u>X .163</u>	<u>= 2.17</u> gals	
3 casing volume (3 X CV)=	<u>6.52</u>	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos/cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks:	<u>odor</u>						

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>05/08/02</u>		
Field Personnel:	<u>J.WEYAND, J.MONEGAN</u>		
General Weather Conditions:	<u>CLEAN, WARM</u>		
Ambient Air Temperature:	<u> </u>	°C	
Quality Assurance			
PH Meter	Conductivity Meter		
serial no.	serial no.		
pH=4.0	standard	<u> </u>	
pH=7.0	standard	<u> </u>	
pH=10.0	standard	<u> </u>	
Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Groc</u>	
Site ID#:	<u>302043</u>	Monitoring Well # <u>MW7</u>
Water Supply Well	Public	Private
Monitoring Well Diameter (D): <u>2"</u> feet		
Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	<u> </u> feet	
Depth to Ground Water (DGW)	<u>28.12</u> feet	
Total Well Depth (TWD)	<u>40.0</u> feet	
Length of the water column (LWC=TWD-DGW)	<u>11.88</u> feet	
1 casing volume (CV=LWC X C)=	<u> </u>	= <u>1.94</u> gals
3 casing volume (3 X CV)=	<u>5.82</u>	gals (standard purge volume)
Total Volume of Water Purged Before Sampling <u>5.82</u> gals.		
*If free product is present over 1/8 inch, sampling will not be required.		

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1245</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks:	<hr/> <hr/>						

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	5-7-02		
Field Personnel:	<i>S a m e</i>		
General Weather Conditions:	S a w		
Ambient Air Temperature:	• C		
<u>Quality Assurance</u>			
pH Meter serial no.	Conductivity Meter serial no.		
pH=4.0	standard		
pH=7.0	standard		
pH=10.0	standard		
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	Hwy 11 Groc		
Site ID#:	302043	Monitoring Well #	mw8
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	2'	feet	
Conversion Factor (C):	3.14 x (D/2) ²	for a 2 inch well C=0.163 for a 4 inch well C=0.652	
* Free Product Thickness:	.06	feet	
Depth to Ground Water (DGW)	21.05	feet	
Total Well Depth (TWD)	30	feet	
Length of the water column (LWC=TWD-DGW)	8.95	feet	
1 casing volume (CV=LWC X C)=	<u>163</u>	gals	
3 casing volume (3 X CV)=	<u>488</u>	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity (μ mhos/cm)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks:	<i>odor</i>						

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	5-7-02		
Field Personnel:	e		
General Weather Conditions:	S a w		
Ambient Air Temperature:	°C		
<u>Quality Assurance</u>			
pH Meter	Conductivity Meter		
serial no.	serial no.		
pH=4.0	standard		
pH=7.0	standard		
pH=10.0	standard		
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	Hwy 11 Gmc.		
Site ID#:	302043	Monitoring Well #	MW10
Water Supply Well	Public	<input checked="" type="checkbox"/>	Private
Monitoring Well Diameter (D):	2'		
Conversion Factor (C):	3.14 x (D/2) ²	for a 2 inch well C=0.163 for a 4 inch well C=0.652	
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	20.04 feet		
Total Well Depth (TWD)	24 feet		
Length of the water column (LWC=TWD-DGW)	3.96 feet		
1 casing volume (CV=LWC X C)=	X 0.65 = 0.65 gals		
3 casing volume (3 X CV)=	1.95 gals (standard purge volume)		
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos/cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks:	odor						

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	5-7-02		
Field Personnel:	<i>S. a. m.</i>		
General Weather Conditions:	Sunny		
Ambient Air Temperature:	°C		
<u>Quality Assurance</u>			
pH Meter	Conductivity Meter		
serial no.	serial no.		
pH=4.0	standard		
pH=7.0	standard		
pH=10.0	standard		
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<i>Hwy 11 Area</i>		
Site ID#:	<i>302043</i>	Monitoring Well #	<i>rnw 11</i>
Water Supply Well	Public	<input checked="" type="checkbox"/>	Private
Monitoring Well Diameter (D):	<i>2"</i>	feet	
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	<i>16-86</i> feet		
Total Well Depth (TWD)	<i>23</i> feet		
Length of the water column (LWC=TWD-DGW)	<i>6.14</i> feet		
1 casing volume (CV=LWC X C)=	<i>X 16.3</i>	<i>= 1.0</i> gals	
3 casing volume (3 X CV)=	<i>3.0</i>	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks: <i>odor</i>							

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Facility Name:	<u>HWY 11 Groc</u>		
Site ID#:	<u>302043</u>	Monitoring Well #	<u>MW12</u>
Water Supply Well	Public	Private	
Monitoring Well Diameter (D): <u>2"</u> feet			
Conversion Factor (C): $3.14 \times (D/2)^2$		for a 2 inch well C=0.163	
		for a 4 inch well C=0.652	
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	<u>3.12</u> feet		
Total Well Depth (TWD)	<u>12.0</u> feet		
Length of the water column (LWC=TWD-DGW)	<u>8.88</u> feet		
1 casing volume (CV=LWC X C)=	<u> </u> X <u> </u> = <u>1.45</u> gals		
3 casing volume (3 X CV)=	<u>4.35</u> gals (standard purge volume)		
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1405
pH (s.u.)	6.80	5.41	4.87	4.52			4.42
Specific Conductivity ($\mu\text{mhos/cm}$)	.674	.025	.025	.024			.024
Water Temperature (°C)	18.0	15.6	15.2	14.8			16.0
Dissolved Oxygen	1.73	2.40	3.02	3.56			4.81
PID readings, if required							

Remarks: _____

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>05/08/02</u>		
Field Personnel:	<u>J. WEYAND, J. MONEGHAN</u>		
General Weather Conditions:	<u>CLEAN, WARM</u>		
Ambient Air Temperature:	_____ °C		
<u>Quality Assurance</u>			
pH Meter	Conductivity Meter		
serial no.	serial no.		
pH=4.0	_____	standard	_____
pH=7.0	_____	standard	_____
pH=10.0	_____	standard	_____
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Groc</u>		
Site ID#:	<u>302043</u>	Monitoring Well #	<u>MW13</u>
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	<u>2"</u>	feet	
Conversion Factor (C):	$3.14 \times (D/2)^2$	for a 2 inch well C=0.163	
		for a 4 inch well C=0.652	
* Free Product Thickness:			
Depth to Ground Water (DGW)	<u>6.52</u>	feet	
Total Well Depth (TWD)	<u>12.0</u>	feet	
Length of the water column (LWC=TWD-DGW)	<u>5.48</u>	feet	
1 casing volume (CV=LWC X C)=	<u>.89</u>	gals	
3 casing volume (3 X CV)=	<u>2.67</u>	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1245
pH (s.u.)	5.35	5.36	5.14	4.93			4.81
Specific Conductivity ($\mu\text{mhos/cm}$)	.038	.037	.037	.035			.038
Water Temperature (°C)	15.9	14.9	14.5	14.5			15.1
Dissolved Oxygen	8.11	8.35	7.57	6.72			7.05
PID readings, if required							

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1320
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos/cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: Patches older, well saturated - insufficient colour

Field Data Information Sheet for Ground-Water Sampling
South Carolina Department of Health and Environmental Control
Bureau of Underground Storage Tank Management

Date (mm/dd/yy): 6/10/02
 Field Personnel: H. Surles
 General Weather Conditions: Clear
 Ambient Air Temperature: 90 °C

Quality Assurance

pH Meter serial no. _____	Conductivity Meter serial no. _____
pH=4.0	standard _____
pH=7.0	standard _____
pH=10.0	standard _____

Facility Name: Amoco Hwy 11
 Site ID#: 300188 Monitoring Well # MW-15

Well Diameter (D): 2 1/2 feet

Conversion factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C = 0.163
 for a 4 inch well C = 0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 8 feet

Total Well Depth (TWD) 9 feet

Length of the water column (LWC = TWD - DGW) _____ feet

1 casing volume (CV = LWC X C) = _____ X _____ = _____ gals
 3 casing volume 3 X CV = _____ gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

* If free product is present over $\frac{1}{8}$ inch, sampling will not be required.

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Chain of Custody

	Initial	1 st Vol	2 nd Vol	3 rd Vol	4 th Vol	5 th Vol	Post sampling
Cumulative Volume Purged (gallons)							
Time (military)							
pH (s.u.)							
Specific Cond. ($\mu\text{mhos/cm}$)							
Water Temperature (°C)							
Turbidity (subjective: clear, slightly cloudy, cloudy)							
Dissolved Oxygen							
PID readings, if required							
Remarks: <u>Petroleum odor smell in Creek 1, 2, 3 & across the Rd by MW-15</u>							

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>05/08/02</u>		
Field Personnel:	<u>J.WEYAND, J.MONEGAN</u>		
General Weather Conditions:	<u>CLEAN, WARM</u>		
Ambient Air Temperature:	<u> </u> °C		
<u>Quality Assurance</u>			
pH Meter serial no.	Conductivity Meter serial no.		
pH=4.0	standard		
pH=7.0	standard		
pH=10.0	standard		
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Groc</u>		
Site ID#:	<u>302043</u>	Monitoring Well #	<u>Dmw2</u>
Water Supply Well	Public	Private	<u> </u>
Monitoring Well Diameter (D):	<u>2"</u>	feet	<u> </u>
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163		
	for a 4 inch well C=0.652		
* Free Product Thickness:	<u> </u> feet		
Depth to Ground Water (DGW)	<u>17.22</u>	feet	
Total Well Depth (TWD)	<u>75.0</u>	feet	
Length of the water column (LWC=TWD-DGW)	<u>57.78</u>	feet	
1 casing volume (CV=LWC X C)=	<u> </u> X <u> </u> = <u>9.42</u> gals		
3 casing volume (3 X CV)=	<u>28.26</u> gals (standard purge volume)		
Total Volume of Water Purged Before Sampling	<u>14.0</u> gals.		
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1345</u>
pH (s.u.)	<u>6.71</u>	<u>7.87</u>					<u>7.44</u>
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	<u>160</u>	<u>1126</u>					<u>.095</u>
Water Temperature (°C)	<u>19.0</u>	<u>17.9</u>					<u>17.8</u>
Dissolved Oxygen	<u>2.74</u>	<u>6.78</u>					<u>6.11</u>
PID readings, if required							

Remarks: BAILED OUT

Page ____ of ____

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>05/08/02</u>		
Field Personnel:	<u>T.WEYAND, J.MONEGAN</u>		
General Weather Conditions:	<u>CLEAN, WARM</u>		
Ambient Air Temperature:	_____ °C		
<u>Quality Assurance</u>			
PH Meter	Conductivity Meter		
serial no.	serial no.		
pH=4.0	standard		
pH=7.0	standard		
pH=10.0	standard		
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>HWY 11 GROC</u>	
Site ID#:	<u>302043</u>	Monitoring Well # <u>Dm7w4</u>
Water Supply Well	Public	Private
Monitoring Well Diameter (D):	<u>2"</u> feet	
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652	
* Free Product Thickness:	feet	
Depth to Ground Water (DGW)	<u>25.08</u> feet	
Total Well Depth (TWD)	<u>60.0</u> feet	
Length of the water column (LWC=TWD-DGW)	<u>34.92</u> feet	
1 casing volume (CV=LWC X C)=	X	= <u>5.69</u> gals
3 casing volume (3 X CV)=	<u>17.07</u>	gals (standard purge volume)
Total Volume of Water Purged Before Sampling _____ gals.		
*If free product is present over 1/8 inch, sampling will not be required.		

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>11:35</u>
pH (s.u.)	<u>10.06</u>	<u>10.67</u>	<u>10.15</u>	<u>9.62</u>			<u>9.50</u>
Specific Conductivity ($\mu\text{mhos/cm}$)	<u>.375</u>	<u>.537</u>	<u>.358</u>	<u>.194</u>			<u>.181</u>
Water Temperature (°C)	<u>27.5</u>	<u>21.2</u>	<u>20.7</u>	<u>19.7</u>			<u>19.6</u>
Dissolved Oxygen	<u>6.45</u>	<u>6.49</u>	<u>6.32</u>	<u>7.43</u>			<u>7.80</u>
PID readings, if required							
Remarks:							

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>05/08/02</u>		
Field Personnel:	<u>J.WEYAND, J.MONEGAN</u>		
General Weather Conditions:	<u>CLEAN, WARM</u>		
Ambient Air Temperature:	_____ °C		
Quality Assurance			
pH Meter	Conductivity Meter		
serial no.	serial no.		
pH=4.0	standard	_____	
pH=7.0	standard	_____	
pH=10.0	standard	_____	
Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Groc</u>	
Site ID#:	<u>302043</u>	Monitoring Well # <u>CK-2</u>
Water Supply Well	Public	Private
Monitoring Well Diameter (D): _____ feet		
Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	_____ feet	
Depth to Ground Water (DGW)	_____ feet	
Total Well Depth (TWD)	_____ feet	
Length of the water column (LWC=TWD-DGW)	_____ feet	
1 casing volume (CV=LWC X C)=	_____ X	_____ = _____ gals
3 casing volume (3 X CV)=	_____ gals (standard purge volume)	
Total Volume of Water Purged Before Sampling _____ gals.		
*If free product is present over 1/8 inch, sampling will not be required.		

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1330</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks:							

APPENDIX D
Groundwater Laboratory Analytical Results and Chain-of-Custody

TestAmerica
INCORPORATED

Division/Laboratory Name: TO COLUMBIA

283442 Client Name SEI Env. Inc. Client #: 8990
 74325-74331 Address: 3021 McNaughton Dr Ste 7
 City/State/Zip Code: Columbia SC 29223
 Project Manager: Bob Bolton
 Telephone Number: 803 788 2535 Fax: 803 788 2399
 Sampler Name: (Print Name) Marc L. M. Ferlito
 Sampler Signature: [Signature]

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

Project Name: Hwy 11 Grocery
 Project #: 3020613
 Site/Location ID: _____ State: SC
 Report To: Bob Bolton
 Invoice To: _____
 Quote #: _____ PO #: _____

TAT Standard Rush (surcharges may apply)	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix	Preservation & # of Containers	Analyze For:						QC Deliverables None Level 2 (Batch QC) Level 3 Level 4 Other: _____					
							Sl - Sludge	DW - Drinking Water	S - Soil/Solid	Specify Other	HNO ₃	HCl	NaOH	H ₂ SO ₄	Methanol	Name	Other (Specify)	
mw4	5-14-02	1015	G	GW			X	X	X									74325
mw6		1145																326
mw10		1035																327
mw11		1050																328
mw14		1120																329
CK1		1105																330
WW1	▼	1200	Y														▼ 331	
REMARKS																		

Special Instructions:

Special Pricing !!!

Relinquished By: <u>5-14-02</u>	Date: <u>5-14-02</u>	Time: <u>1100</u>	Received By: _____	Date: _____	Time: _____
Relinquished By: _____	Date: _____	Time: _____	Received By: _____	Date: _____	Time: _____
Relinquished By: _____	Date: _____	Time: _____	Received By: <u>CJ</u>	Date: <u>7/8</u>	Time: <u>9:10</u>

LABORATORY COMMENTS:	Initial Lab Temp: _____
Rec Lab Temp: _____	
Custody Seals: Y N N/A	
Materials Supplied by TestAmerica: Y N	
Method of Shipment: _____	

**FAX CHAIN
TO COLUMBIA**

TestAmerica
INCORPORATED

Division/Laboratory Name:

Client Name SEI ENVIRONMENTAL INC Client #: 8990

Address: 3021 MENAUGHTON RD SUITE 9

City/State/Zip Code: COLUMBIA, SC 29223

Project Manager: BOB BOLTON

Telephone Number: (803) 788-2535 Fax: (803) 788-2399

Sampler Name: (Print Name) JEFF WEYAND, JOHN MANEGHAN

Sampler Signature: Jeff Weyand John Maneghan

283708

TAT	Standard	Rush (surcharges may apply)	Date Needed: <u>5/15/02</u>	Fax Results: Y N	SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix	Preservation & # of Containers	Analyze For:						QC Deliverables	
												BTEX (C ₂ -C ₈)	NAPK (C ₁ -C ₈)	ND (C ₉ -C ₁₆)	NITRATE (Sulfate)	FERROUS (C ₃ -C ₉)	TERPENE		
					DMW1	5/8/02	1215	G		GW			X	X	X	X			None
					MW2		1145						X	X					Level 2 (Batch QC)
					MW3		1155												Level 3
					MW5		1230												Level 4
					MW7		1245												Other:
					MW9		1420												
					MW12		1405												
					MW13		1245												
					MW15		1320												
					DMW2		1345												

Special Instructions:

SPECIAL PRICING

Relinquished By: <u>Jeff Weyand</u>	Date: <u>5/8/02</u>	Time: <u>1500</u>	Received By:	Date:	Time:	LABORATORY COMMENTS: INIT LAB TESTS:		
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Ref Lab Temp:		
Relinquished By:	Date:	Time:	Received By: <u>John M</u>	Date: <u>5/9/02</u>	Time: <u>0900</u>	Custom Seal: Y N WA Bottles Supplied by TestAmerica: Y N Method of Shipment:		

TestAmerica
INCORPORATED

Division/Laboratory Name: 11 COLUMBIA

1803 865-5503

2 of 2

Client Name SEI ENVIRONMENTAL Client #: 8990
 Address: 3021 MCNAUGHTON DR STE 9
 City/State/Zip Code: COLUMBIA SC 29223
 Project Manager: BOB BOLTON
 Telephone Number: (803) 788-2535 Fax: (803) 788-2399
 Sampler Name: (Print Name) JEFF WEYAND John Monahan
 Sampler Signature: Jeff Weyand John Monahan

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

Project Name: Hwy 11 Groc
 Project #: 302043
 Site/Location ID: 03439 State: SC
 Report To: _____
 Invoice To: _____
 Quote #: _____ PO#: _____

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix	Preservation & # of Containers	Analyze For:										QC Deliverables					
							Sl - Sludge	DW - Drinking Water	S - Soil/Solid	GW - Groundwater	MW - Wastewater	Specify Other	HNO ₃	HCl	NaOH	H ₂ SO ₄		Mercuric	Name	Other (Specify)	NITRATE / SULFATE	AMMONIUM / NITRATE	CHLORIDE / SULFATE	POLYCHLORINATED	PHOSPHATE / SULFATE
DMW4	5/8/02	1135	G	GW									X	X								75282
CK 2.	11	1330	11										X	X								S 83
TEST BLANK																						75284
Special Instructions: CK2 - no cont. req'd for nitrate/sulfate analysis. @ 5-9-02																				LABORATORY COMMENTS:		
																				Int'l Lab Temp:		
																				Ref. Lab Temp:		
Relinquished By: <u>Jeff Weyand</u>	Date: <u>5/8/02</u>	Time: <u>1500</u>	Received By: _____				Date: _____	Time: _____	Custody Seals: Y N N/A													
Relinquished By: _____	Date: _____	Time: _____	Received By: _____				Date: _____	Time: _____	Bottles Supplied by TestAmerica: Y N													
Relinquished By: _____	Date: _____	Time: _____	Received By: <u>Jeff Weyand</u>				Date: <u>5-9-02</u>	Time: <u>0900</u>	Method of Shipment: _____													

TestAmerica

INCORPORATED

Division/Laboratory Name:

INCORPORATED 768637 96293	Client Name: <u>SEI</u>	Client #: <u>3990</u>
	Address: <u>3021 McRae Highway Drive Suite 9</u>	
	<u>Columbia S.C. 29223</u>	
	Project Manager: <u>Bob Bottom</u>	
	Telephone Number: <u>803-788-2555</u>	Fax: <u>803-788-2394</u>
	Sampler Name: (Print Name) <u>Henry D. Darby</u>	
	Sampler Signature: <u>Henry O. Darby</u>	

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

Project Name: Hwy 11 Amoco
Project #: 200774 300488 30 2043
Site/Location ID: Hwy 11 Sables State: _____
Report To: Bob Bolton
Invoice To: _____
Quote #: _____ PO#: _____

Special Instructions: FedEx# 828105707014

Relinquished By: <i>Henry D. Sacks</i>	Date: <i>6/11/02</i>	Time: <i>1645</i>	Received By: <i>John Doe</i>	Date: <i>6/11/02</i>	Time: <i>915</i>	Rec List Item: <input checked="" type="checkbox"/>
Relinquished By: <i>J. Moore</i>	Date: <i>6/11/02</i>	Time: <i>1645</i>	Received By: <i>John Doe</i>	Date: <i>6/11/02</i>	Time: <i>915</i>	Custody Seals: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
Relinquished By: <i>J. Moore</i>	Date: <i>6/11/02</i>	Time: <i>1645</i>	Received By: <i>John Doe</i>	Date: <i>6/11/02</i>	Time: <i>915</i>	Bottles Supplied by Total America: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Relinquished By: <i>J. Moore</i>	Date: <i>6/11/02</i>	Time: <i>1645</i>	Received By: <i>John Doe</i>	Date: <i>6/11/02</i>	Time: <i>915</i>	Method of Shipment: <input type="checkbox"/>

APPENDIX E
Disposal Manifest

Please print or type
Form designed for use onelite (12 pitch) typewriter

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No. GR4448	2. Page 1 of	03-14-02
GENERATOR	3. Generator's Name and Mailing Address SET ENVIRONMENTAL, INC. 2021 MCNAUGHTON DR SUITE 9 COLUMBIA, SC 29223	5. Transporter 1 Company Name SET ENVIRONMENTAL, INC.	6. US EPA ID Number	A. Transporter's Phone 803-788-2535	
	4. Generator's Phone ()	7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone	
	9. Designated Facility Name and Site Address G & K TANK SERV INC PO BOX 1384 SUMTER, SC 29151	10. US EPA ID Number	C. Facility's Phone 800-800-6840		
	11. Waste Shipping Name and Description a. NON HAZARDOUS PETROLEUM CONTAMINATED BOOMS HWY 11 GROCERY SALEM, SC	12. Containers No. 02DR	13. Total Quantity	14. Unit Wt/Vol	
	b. 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	.....
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name Mark L. McFarland	Signature	Month	Day	Year	13 14 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. Collier	Signature	Month	Day	Year	103 14 02



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 2 Drums
Hwy 11 Grocery
Salem, SC

Contaminant NonHazardous Petroleum
Contaminanted Booms

This is to certify 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 S. Collier Date 03/14/02

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	05-08-02	
3. Generator's Name and Mailing Address		SET ENVIRONMENTAL, INC 3621 MCNAUGHTON DR, SUITE 9 COLUMBIA, SC 29223				
4. Generator's Phone ()						
5. Transporter 1 Company Name		6. US EPA ID Number	A. Transporter 1 Phone			
7. Transporter 2 Company Name		8. US EPA ID Number	B. Transporter's Phone			
9. Designated Facility Name and Site Address		G & K TANK & SERV LINES PO BOX 1384 SUMTER, SC 29151	US EPA ID Number	C. Facility's Phone		
				800-800-6840		
11. Waste Shipping Name and Description				12. Containers No.	13. Total Quantity	14. Unit Wt/Vol
a. NON HAZARDOUS PETROLEUM CONTAMINATED BOOMS HWY 11 GROCERY SALEM, SC				01DR		
b. NON HAZARDOUS PETROLEUM CONTAMINATED WATER HWY 11 GROCERY SALEM, SC				01DR		
c.				01DR		
d. NON HAZARDOUS PETROLEUM CONTAMINATED WATER PANTRY 589 MAULDIN, SC				01DR		
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
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month	Day	Year
Marc L. McFarland				15	8	02
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month	Day	Year
S. Soltner				.	.	.
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
S. Soltner				05	08	02

ORIGINAL - RETURN TO GENERATOR



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 1 Drum
Hwy 11 Grocery
Salem, SC

Contaminant NonHazardous Petroleum
Comtaminanted Water

This is to cerify the above ~~soil~~^{water} 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. Sallay Date 05/08/02



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 1 Drum
Hwy 11 Grocery
Salem, SC

Contaminant NonHazardous Petroleum
Contaminanted Booms

This is to certify the above ~~soil~~^{booms} 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. Sallie Date 05/08/02

**MATERIAL
MANIFEST**

JBR Environmental Services
P. O. Box 4098
Spartanburg, SC 29305

Manifest Document No.

D-0514381

Page 1 of 1

Job No.

D-0514381

Emergency Phone Number: (864) 583-2717**GENERATOR INFORMATION**

Name: SEI Environmental	US EPA ID No.
-------------------------	---------------

Street Address 13527 Hwy. 11 Salem, SC	Mailing Address 3001 NE Naughton Dr. Ste. 9 Columbia, SC 29223	Phone No. (803) 788-2535
		Contact Bob Bolton

DESCRIPTION OF MATERIALS

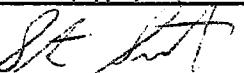
HM	USDOT Proper Shipping Name (Complete All Items for Hazardous Materials)	Hazard Class	UN/N A ID No.	Packing Group	Containers		Total Quantity	Unit Wt./Vol.
					Qty	Type		
a.	Non-regulated solid, nos				5	DM		
b.	Non-regulated liquid, nos				2	DM		
c.								

ADDITIONAL INFORMATION

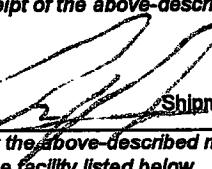
	ERG No.	JBR Profile Code	Facility Use
a. Soil		2-1000-03	Planned for remediation
b. Water sample		2-0000-04	Planned for remediation
c.			

GENERATORS CERTIFICATION

This is to certify that the above-described materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. I further certify that none of the materials described above are a hazardous waste as defined by EPA 40 CFR Part 261 or any applicable state law, and unless specifically identified above, the materials contain less than 1,000 ppm total halogens and do not contain quantifiable levels (2 ppm) of PCBs as defined by EPA 40 CFR Parts 279 and 761.

Printed/Typed Name Steve Smith	Signature 	Mo./Day/Yr. 5/14/02
-----------------------------------	--	------------------------

TRANSPORTER INFORMATION

Transporter JBR Environmental Services	I hereby acknowledge receipt of the above-described materials for transport from the generator site listed above.		
Address 210 Alice Street Spartanburg, SC 29303	Signature 	Shipment Date	5/14/02
Transporter or EPA ID No. SCR000004358	Unit No.	I hereby acknowledge that the above-described materials were received from the generator site and were transported to the facility listed below.	
Phone 864-583-2717	Signature 	Delivery Date	5/14/02

FACILITY INFORMATION

Facility JBR Environmental Services	I hereby acknowledge receipt of the materials covered by this manifest except for any discrepancy noted below.		
Address 210 Alice Street Spartanburg, SC 29303	Signature 	Receipt Date	5/14/02
Facility or EPA ID No. SCR000004358	Discrepancies a.	Routing Codes b.	Handling Methods c.
Phone 864-583-2717	d.	e.	f.
Contact Rex Russell	g.	h.	i.

Original - Facility Retain

COPY 2 - Return to Generator

COPY 3 - Transporter Retain

COPY 4 - Generator Retain

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

October 29, 2003

RECEIVED

OCT 31 2003

UNDERGROUND STORAGE
TANK PROGRAM

Konstantine Akhvlediani
Project Manager / Hydrogeologist
SCDHEC
2600 Bull Street
Columbia, SC 29201-1708

Re: Summary of Corrective Action and Gauging Results
September & October 2003
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #: 03439

31-TEN

Dear Mr. Akhvlediani:

SEI Environmental, Inc. (SEI) submits the following summary of the corrective action and gauging results for the months of September & October 2003. Attached, Appendix A, are a topographic map depicting the location of the site and Figure 2, a site map illustrating the location of the monitoring wells.

September 4, 2003, SEI personnel conducted free product extraction from two (2) monitoring wells, MW-1, and MW-8 at the above referenced facility. The two (2) monitoring wells, MW-1 and MW-8, were extracted on because MW-1 was observed to have 0.15 feet of product and MW-8 was observed to have 0.13feet of product. 260.24 gallons of petroleum-impacted water were generated during the extraction and were later disposed at G & K Tank Services, Inc; located in Sumter, South Carolina on September 5, 2003. Attached in Appendix B is a copy of the Non Hazardous Waste Manifest and Certificate of Disposal. Appendix C is a copy of the field screening data obtained from the free product extraction

September 15, 2003 SEI personnel were at the above referenced facility and conducted gauging of eighteen (18) monitoring wells. The findings of the gauging event were that MW-1, and MW-8 were found to have presence of free phased product. Free product was observed in MW-1, at a depth of 0.04 feet and MW-8, at a depth of 0.15 feet, a total

thickness of 0.19 feet. The remaining sixteen (16) monitoring wells were found not to have the presence of free product. Attached in Appendix D are Table 1, which summarizes the September 15, 2003 gauging activities and Table 2, which summarizes the September 15, 2003 depth of free product. One (1) absorbent was placed in each monitoring well, MW-1 & MW-8, for removal of the remaining free phased free product.

October 2, 2003 SEI personnel were at the above referenced facility and conducted gauging of eighteen (18) monitoring wells. The findings of the gauging event were that MW-1, and MW-8 were found to have presence of free phased product. Free product was observed in MW-1, at a depth of 0.13 feet and MW-8, at a depth of 0.20 feet, a total thickness of 0.33 feet. The remaining sixteen (16) monitoring wells were found not to have the presence of free product. Attached in Appendix E are Table 3, which summarizes the October 2, 2003 gauging activities and Table 4, which summarizes the October 2, 2003 depth of free product. SEI personnel removed the absorbents in MW-1 & MW-8 and then removed the product via a bailer, with a total accumulation of one drum of petroleum-impacted water. The drum of petroleum-impacted water with the absorbents was transported off site to be transported to a disposal facility.

October 3, 2003, SEI personnel transported the drum of petroleum-impacted water was taken to G & K Disposal facility, located in Sumter South Carolina. Attached in Appendix F are copies of the Non-Hazardous Waste Manifest and Certificate Disposal.

October 14, 2003, SEI personnel conducted free product extraction from four (4) monitoring wells, MW-1, MW-8, DMW-1, and DMW-2 at the above referenced facility. 198.0 gallons of petroleum-impacted water were generated during the extraction and were later disposed at G & K Tank Services, Inc; located in Sumter, South Carolina on October 15, 2003. Attached in Appendix G is a copy of the Non- Hazardous Waste Manifest and Certificate of Disposal. Appendix H is a copy of the field screening data obtained from the free product extraction.

October 23, 2003 SEI personnel were at the above referenced facility and conducted gauging of eighteen (18) monitoring wells. The findings of the gauging event were that MW-1, and MW-8 were found to have presence of free phased product. Free product was observed in MW-1, at a depth of 0.21 feet and MW-8, at a depth of 0.02 feet, a total thickness of 0.23 feet. The remaining sixteen (16) monitoring wells were found not to have the presence of free product. SEI personnel removed the product via a bailer, with a total accumulation of one drum of petroleum-impacted water. The drum of petroleum-impacted water was transported off site to be transported to a disposal facility. Attached in Appendix I is Table 5, summarizing the October 22, 2003 gauging activities and Table 6, summary of the October 22, 2003 free product thickness.

October 24, 2003, SEI personnel transported the drum of petroleum-impacted water was taken to G & K Disposal facility, located in Sumter South Carolina. Attached in Appendix J are copies of the Non-Hazardous Waste Manifest and Certificate Disposal.



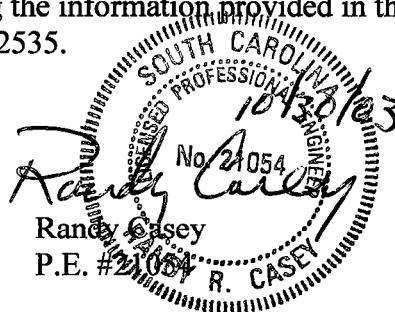
Environmental, Inc.

SEI has scheduled the next site visit in November 2003, which will include the extraction and disposal of petroleum-impacted water. A subsequent report will be submitted, which will summarize the extraction and disposal of the petroleum-impacted water and subsequent gauging of the monitoring wells. If no free product is observed in the monitoring wells, SEI will conduct gauging, field screening, purging and collection of samples and submit a

If you have any questions and / or comments, concerning the information provided in this document, please contact John Paul Bekish at (803) 788-2535.

Sincerely,

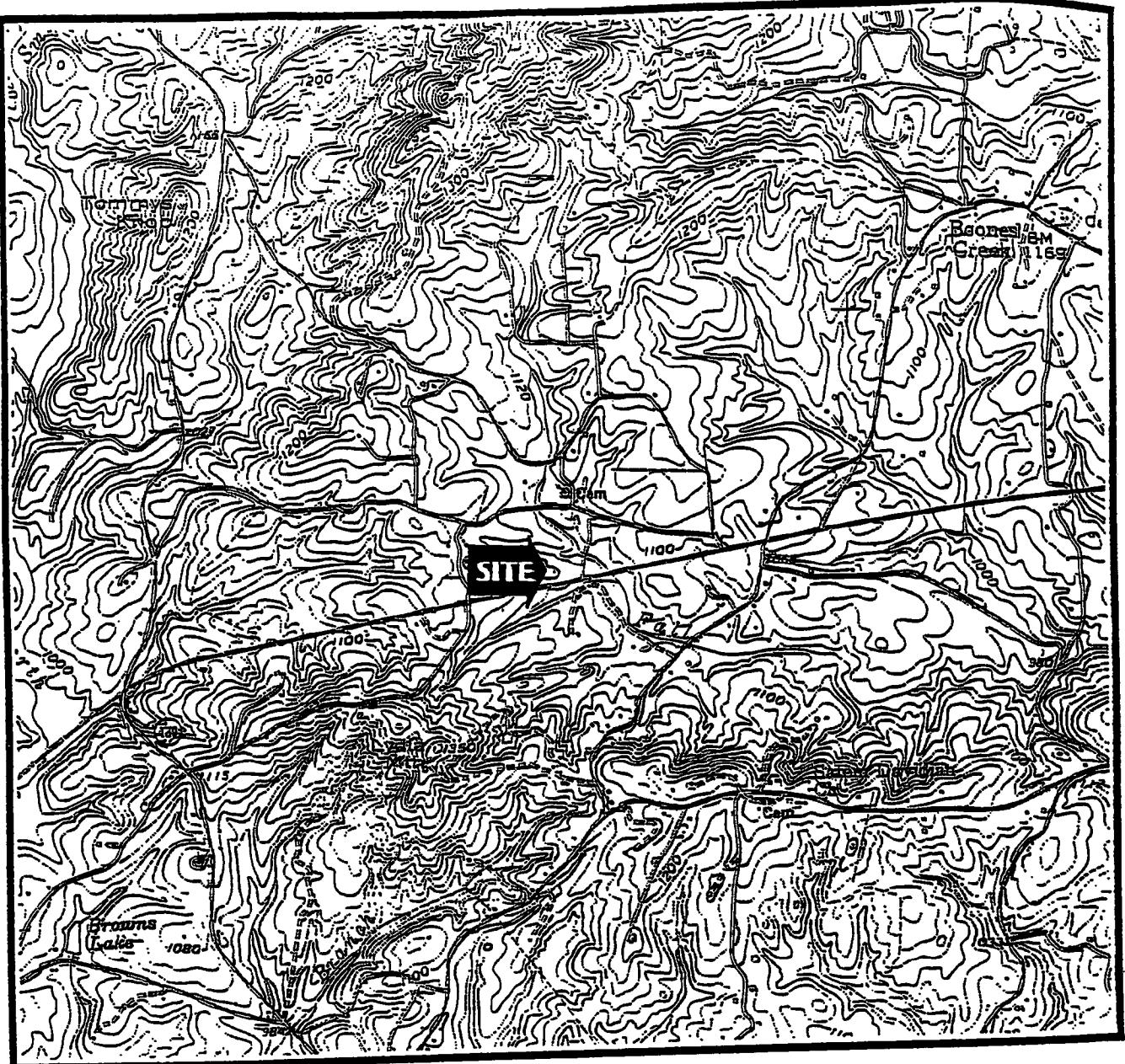
John Paul Bekish
Branch Manager
SEI- Columbia Office



Attachment(s)

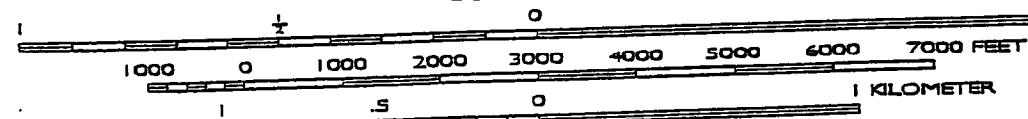
cc: Highway 11 Grocery – Property Owner
SEI Project Files

Appendix A
Figure 1 - Topographic Map
&
Figure 2 - Site Map



SCALE 1:24000

1 MILE



SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

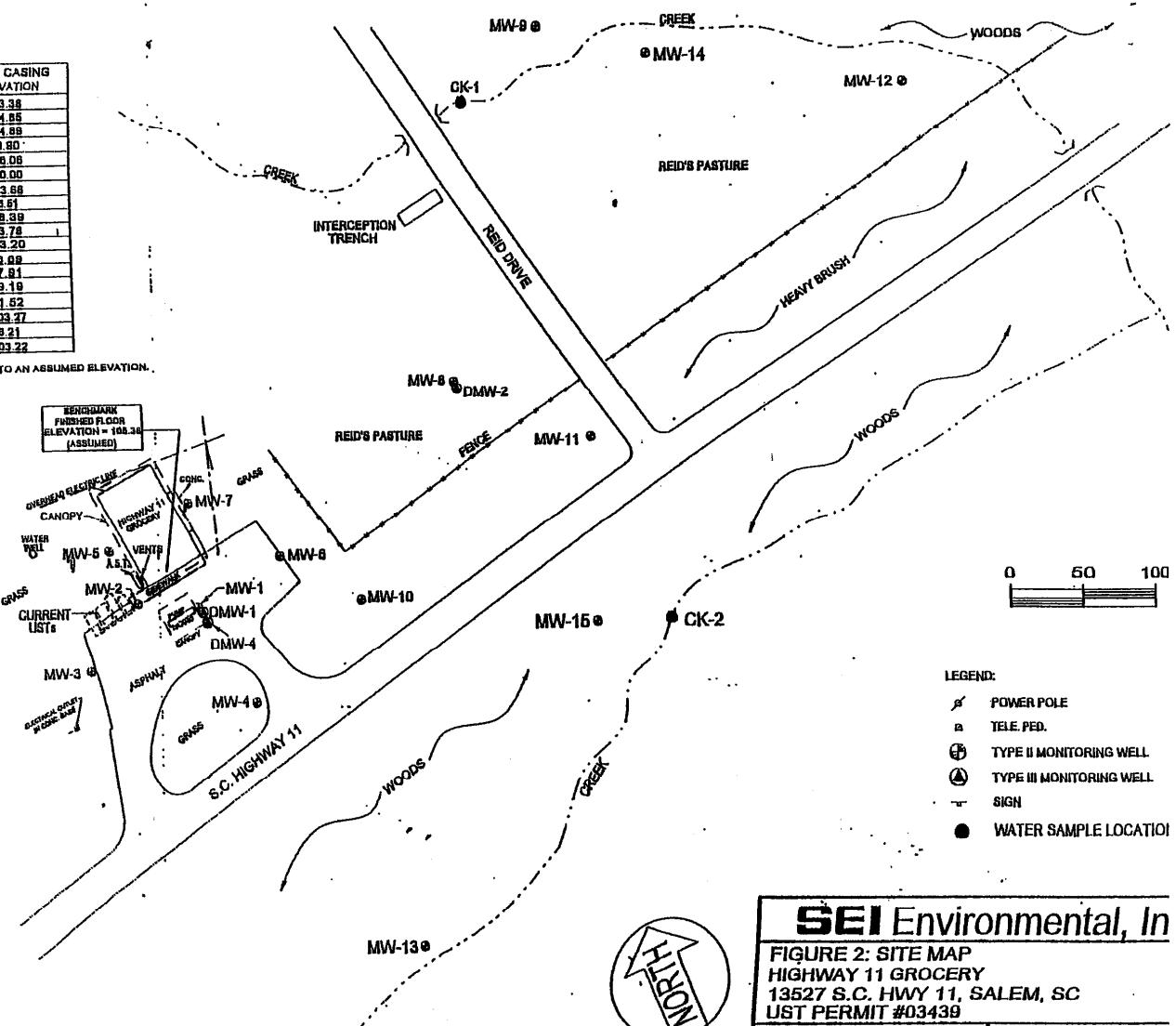
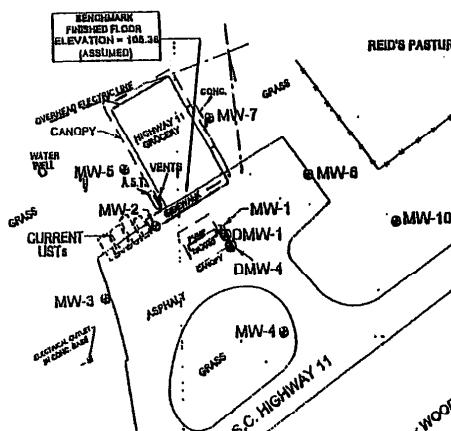
W.O. #: 300-388
DWG #

DATE: 9/5/01
DRAWN BY: IC



WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.88
MW-4	99.80
MW-5	108.08
MW-6	100.00
MW-7	103.68
MW-8	88.51
MW-9	88.39
MW-10	83.78
MW-11	83.20
MW-12	88.89
MW-13	77.81
MW-14	88.19
MW-15	71.52
DMW-1	103.27
DMW-2	88.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.



SEI Environmental, Inc.

FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

Appendix B
September 5, 2003 Non Hazardous Waste Manifest
&
Certificate of Disposal

(Type or print in ink (12 point) typewriter.)

**NON-HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest
Document No.
SK5916

2. Page 1
of

09/05/03

3. Generator's Name and Mailing Address

SEI ENVIRONMENTAL, INC.
3021 MCNAUGHTON DR. SUITE 9
COLUMBIA, SC 29223

4. Generator's Phone ()

5. Transporter 1 Company Name

SEI ENVIRONMENTAL, INC.

6. US EPA ID Number

A. Transporter's Phone
803-788-2535

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
PO BOX 1384
SUMTER, SC 29151
987573557

10. US EPA ID Number

C. Facility's Phone

800-800-6840

11. Waste Shipping Name and Description

a. NON HAZARDOUS PETROLEUM CONTAMINATED WATER
HWY 11 GROCERY SALE, SC

12. Containers
No. Type
13. Total
Quantity
14. Unit
Wt/Vol

260.21 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

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

JEFF WEYAND

9 5 03

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

S. Schell

19 5 03



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 260.24 gallons
Hwy 11 Grocery
Salem, SC

Contaminant NonHazardous Petroleum
Contaminanted Water

This is to certify the above ~~soil~~^{water} 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. D. May Date 09/05/03

Appendix C
September 4, 2003 Summary of Field Screening Data

Vacuum Truck Work Sheet

Site name: Highway 11 Gex.
Location #302162

Location

Total Hours Vac Event: 3 ($m\omega_1 + m\omega_2$)

Date: 9/4/03

Points: $m\omega_1 + m\omega_2$

Appendix D

Table 1 - Summary of September 15, 2003 Gauging Activities

&

Table 2 - Summary of September 15, 2003 Depth of Free Product

Table 1
Summary of Free Product Gauging on September 15, 2003
Highway 11
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID	Date	Depth to Water (Feet)	Depth to Free Product (Feet)	Total Volume Free Product (Feet)
MW-1	9/15/2003	23.78	23.74	0.04
MW-2	9/15/2003	24.73	0.00	0.00
MW-3	9/15/2003	23.23	0.00	0.00
MW-4	9/15/2003	22.90	0.00	0.00
MW-5	9/15/2003	27.40	0.00	0.00
MW-6	9/15/2003	20.63	0.00	0.00
MW-7	9/15/2003	26.83	0.00	0.00
MW-8	9/15/2003	21.17	21.02	0.15
MW-9	9/15/2003	2.42	0.00	0.00
MW-10	9/15/2003	16.53	0.00	0.00
MW-11	9/15/2003	16.21	0.00	0.00
MW-12	9/15/2003	3.19	0.00	0.00
MW-13	9/15/2003	6.62	0.00	0.00
MW-14	9/15/2003	2.03	0.00	0.00
MW-15	9/15/2003	11.02	0.00	0.00
DMW-1	9/15/2003	23.61	0.00	0.00
DMW-2	9/15/2003	15.75	0.00	0.00
DMW-4	9/15/2003	23.88	0.00	0.00

Table 2
Free Product Thickness Reduction September 25, 2003
Highway 11
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit # 03439

Monitor Well	Free Product Thickness Feet
MW-1	0.04
MW-8	0.15
Total Target Thickness (Feet)	0.00
Total Initial Thickness Above Target (Feet)	0.19

Appendix E

Table 3 – Summary of October 2, 2003 Gauging Activities

&

Table 4 - Summary of October 2, 2003 Depth of Free Product

Table 3
Summary of Free Product Gauging on October 2, 2003
Highway 11
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID	Date	Depth to Water (Feet)	Depth of Well (Feet)	Depth to Free Product (Feet)	Total Volume Free Product (Feet)
MW-1	10/2/2003	24.32	30.00	24.19	0.13
MW-2	10/2/2003	25.56	35.00	0.00	0.00
MW-3	10/2/2003	23.87	30.00	0.00	0.00
MW-4	10/2/2003	23.32	35.00	0.00	0.00
MW-5	10/2/2003	27.92	35.00	0.00	0.00
MW-6	10/2/2003	21.34	35.00	0.00	0.00
MW-7	10/2/2003	27.69	40.00	0.00	0.00
MW-8	10/2/2003	20.44	30.00	20.24	0.20
MW-9	10/2/2003	2.16	12.00	0.00	0.00
MW-10	10/2/2003	20.19	24.00	0.00	0.00
MW-11	10/2/2003	17.58	23.00	0.00	0.00
MW-12	10/2/2003	2.97	12.00	0.00	0.00
MW-13	10/2/2003	7.51	12.00	0.00	0.00
MW-14	10/2/2003	1.58	10.00	0.00	0.00
MW-15	10/2/2003	11.88	N/A	0.00	0.00
DMW-1	10/2/2003	24.11	45.00	0.00	0.00
DMW-2	10/2/2003	17.11	75.00	0.00	0.00
DMW-4	10/2/2003	24.39	60.00	0.00	0.00

Notes: N/A = Not Applicable

Table 4
Free Product Thickness Reduction October 2, 2003
Highway 11
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit # 03439

Monitor Well	Free Product Thickness Feet
MW-1	0.13
MW-8	0.20
Total Target Thickness (Feet)	0.00
Total Initial Thickness Above Target (Feet)	0.33

Appendix F
October 3, 2003 Non-Hazardous Waste Manifest
&
Certificate Disposal

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No. .....BK6009	2. Page 1 of	10/03/03	
3. Generator's Name and Mailing Address SEI ENVIRONMENTAL, INC 3021 MCNAUGHTON DR, SUITE 9 COLUMBIA, SC 29223						
4. Generator's Phone ()						
5. Transporter 1 Company Name SEI ENVIRONMENTAL, INC		6. US EPA ID Number	A. Transporter's Phone 803-788-2535			
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 PO BOX 1384 SUMTER, SC 29151		10. US EPA ID Number 987573557	C. Facility's Phone 800-800-6840			
11. Waste Shipping Name and Description a. NON HAZARDOUS PETROLEUM CONTAMINATED WATER PANTRY #273 MYRTLE BEACH, SC			12. Containers No. 050M	13. Total Quantity	14. Unit Wt/Vol	
b. NON HAZARDOUS PETROLEUM CONTAMINATED WATER PANTRY #3140 LITTLE RIVER, SC			010M	.....	.....
c.			.....	.....	.....
d. NON HAZARDOUS PETROLEUM CONTAMINATED WATER HWY 11 GROCERY SALEM, SC			010M	.....	.....
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
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name John Monahan		Signature John Monahan		Month 10	Day 03	Year 03
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 10	Day 03	Year 03



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 1 Drum
Hwy 11 Grocery
Salem, SC

Contaminant NonHazardous Petroleum
Contaminanted Water

This is to certify the above ^{water} 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 S. Schaefer Date 10/03/03

Appendix G
October 15, 2003 Non Hazardous Waste Manifest
&
Certificate of Disposal

**NON-HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest
Document No.
GK6.039

2. Page 1

10/15/03

3. Generator's Name and Mailing Address

SEI ENVIRONMENTAL, INC
3021 MCNAUGHTON DR, INC
COLUMBIA, SC 29223 SUITE 9

4. Generator's Phone ()

SEI ENVIRONMENTAL, INC

6. US EPA ID Number

A. Transporter's Phone
803-708-2535

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

G & K TANK SERVICE
PO BOX 1384 US EPA ID Number

SUMTER, SC 29151

987573557

C. Facility's Phone

800-800-6840

11. Waste Shipping Name and Description

a. **NON HAZARDOUS PETROLEUM CONTAMINATED WATER**
HWY 11 GROCERY SALE, SC

12. Containers

No.

Type

13. Total Quantity

14. Unit Wt/Vol

198.
gals

b.

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

. . .

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

10/15/03

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

10/15/03



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 198.0 gallons
Hwy 11 Grocery
Salem, SC

Contaminant NonHazardous Petroleum
Contaminated Water

This is to certify the above ~~soil~~^{water} 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. Schuyler Date 10/15/03

Appendix H
October 14, 2003 Copy of the Field Screening Data

~~Vacuum Truck Work Sheet~~

Site name:

Location Hwy 11 Grocery Salem, S.C.

Total Hours Vac Event:

Date: 10-14-03

Points:

	Before	After
DMW-1	24.26	
DMW-2	17.55	

Appendix I

Table 5 – Summary of October 22, 2003 Gauging Activities

&

Table 6 - Summary of the October 22, 2003 Free Product Thickness

Table 5
 Summary of Free Product Gauging on October 23, 2003
 Highway 11
 13527 South Carolina Highway 11
 Salem, South Carolina
 UST Permit #03439

Sample ID	Date	Depth to Water (Feet)	Depth of Well (Feet)	Depth to Free Product (Feet)	Total Volume Free Product (Feet)
MW-1	10/23/2003	24.72	30.00	24.51	0.21
MW-2	10/23/2003	25.71	35.00	0.00	0.00
MW-3	10/23/2003	24.23	30.00	0.00	0.00
MW-4	10/23/2003	23.69	35.00	0.00	0.00
MW-5	10/23/2003	28.40	35.00	0.00	0.00
MW-6	10/23/2003	21.74	35.00	0.00	0.00
MW-7	10/23/2003	28.10	40.00	0.00	0.00
MW-8	10/23/2003	21.54	30.00	21.52	0.02
MW-9	10/23/2003	2.42	12.00	0.00	0.00
MW-10	10/23/2003	20.51	24.00	0.00	0.00
MW-11	10/23/2003	17.83	23.00	0.00	0.00
MW-12	10/23/2003	3.50	12.00	0.00	0.00
MW-13	10/23/2003	6.78	12.00	0.00	0.00
MW-14	10/23/2003	2.67	10.00	0.00	0.00
MW-15	10/23/2003	11.07	N/A	0.00	0.00
DMW-1	10/23/2003	24.50	45.00	0.00	0.00
DMW-2	10/23/2003	17.63	75.00	0.00	0.00
DMW-4	10/23/2003	24.95	60.00	0.00	0.00

Notes: N/A = Not Applicable

Table 6
Free Product Thickness Reduction October 23, 2003
Highway 11
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit # 03439

Monitor Well	Free Product Thickness Feet
MW-1	0.21
MW-8	0.02
Total Target Thickness (Feet)	0.00
Total Initial Thickness Above Target (Feet)	0.23

Appendix J

October 24, 2003 Non-Hazardous Waste Manifest and Certificate Disposal

**NON-HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest
Document No.
GK6081

2. Page 1
of

10/24/03

3. Generator's Name and Mailing Address

SEI ENVIRONMENTAL, INC
3021 MCNAUGHTON DR, SUITE 9
COLUMBIA, SC 29223

4. Generator's Phone ()

5. Transporter 1 Company Name
SEI ENVIRONMENTAL, INC

6. US EPA ID Number

A. Transporter's Phone
803-788-2535

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

G & K TAN¹⁰ SERVICES
PO BOX 1384
SUMTER, SC 29151
987573557

US EPA ID Number

C. Facility's Phone

800-800-6840

11. Waste Shipping Name and Description

12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
-----------------------	------	--------------------------	-----------------------

a. NON HAZARDOUS PETROLEUM CONTAMINATED WATER
MORRIS MINI MART DENMARK, SC

01DM
.....

b. NON HAZARDOUS PETROLEUM CONTAMINATED WATER
HOTSPOT #2995 SPARTANBURG, SC

01DM
.....

c. NON HAZARDOUS PETROLEUM CONTAMINATED WATER
Hwy 11 Grocery Salem, SC

01DM
.....

d. NO HAZARDOUS PETROLEUM CONTAMINATED WATER
MAINTENANCE DEPT OF ROCKHILL, SC

01DM
.....

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
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17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name Van Chisholm	Signature Van Chisholm	Month	Day	Year
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18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
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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. Soller	Signature S. Soller	Month	Day	Year
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Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-4593 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 1 Drum
Hwy 11 Grocery
Salem, SC

Contaminant NonHazardous Petroleum
Contaminated Water

This is to certify the above ~~soil~~^{water} 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. Schrey

Date 10/24/03

SEI

Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800.377.2826
803.788.2535
Fax 788.2399

RECEIVED

DEC 14 2001

Underground Storage
Tank Program

December 10, 2001

Mr. Konstantine Akhvlediani, Hydrogeologist
SCDHEC - UST Program
Bureau of Land And Waste Management
2600 Bull Street
Columbia, South Carolina 29201

~~32-Tech~~

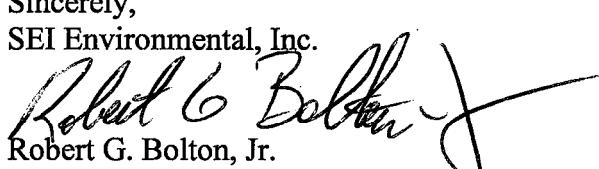
RE: Boom Replacement
Highway 11 Grocery
13527 North SC Highway 11
Salem, South Carolina
Oconee County
UST Permit #03439

Dear Mr. Akhvlediani:

Attached is a table indicating dates and activities associated with absorbent boom maintenance on Fall Creek, which is topographically down-gradient from Highway 11 Grocery. Approximately 0.66 tons of booms were properly disposed on June 21, 2001 at Richland County Landfill, Inc. in Elgin, South Carolina. Also, two 55-gallon drums of booms were properly disposed on October 21, 2001, at G & K Tank Services in Sumter, South Carolina. A copy of the disposal manifests are attached in Appendix A. A copy of the SCDHEC invoice with supporting documentation is presented in Appendix B.

Should you have any questions or require additional information, please contact Fred Lyke or me at 788-2535.

Sincerely,
SEI Environmental, Inc.


Robert G. Bolton, Jr.
Project Manager

Enclosure

cc: Mr. Steve Smith, Highway 11 Grocery



Environmental, Inc.

Boom Maintenance
Highway 11 Grocery/Salem, South Carolina

Date	Activities
03/27/01	No replacement – turned booms over
04/02/01	Replaced 2 booms
04/10/01	Replaced 2 booms
04/16/01	Replaced 2 booms and added 4 booms to other areas of the creek
04/23/01	No replacement – turned booms over
04/30/01	Replaced 7 booms
05/21/01	No replacement – turned booms over
06/06/01	Added 3 booms to newly constructed interception trench and replaced 5 booms
06/27/01	No replacement – turned booms over
07/16/01	No replacement – turned booms over
08/03/01	Replaced 3 booms
09/13/01	No replacement – turned booms over
10/22/01	Replaced 4 booms
11/19/01	No replacement – turned booms over

Note: The 06/05/01 was not counted as a mobilization as SEI personnel were on-site for the interception trench construction.



APPENDIX A

Disposal Manifests

W**SPECIAL WASTE MANIFEST****RICHLAND LANDFILL**
A WASTE MANAGEMENT COMPANY

WASTE ID # RC 0106014

1047 Highway Church Road
Elgin, SC 29045
(803) 788-3054
(803) 736-0995 Fax

APPROVAL EXPIRATION DATE:

JUNE 14, 2002

GENERATOR OF WASTE:	HIGHWAY 11 GROCERY	
CUSTOMER ACCOUNT:	SEI ENVIRONMENTAL, INC. 820 - 158	
LOCATION OF WASTE :	SALEM, SOUTH CAROLINA	
PHONE #	803 788-2535	CONTACT <u>BRITT RANSOM</u>
FAX #	803 788-2399	
GENERATOR'S SIGNATURE	DATE:	

TRANSPORTER OF WASTE	SEI ENVIRONMENTAL INC.	
DATE:	6-21-01	TRUCK NO. ONE TON
DRIVER'S SIGNATURE		

***** TO BE COMPLETED BY RICHLAND LANDFILL *****		
DISPOSAL SITE:	RICHLAND LANDFILL, INC. - ELGIN SC	
DESCRIPTION OF WASTE	BOOMS, RESIDUAL (Five Drums, Unloaded)	
TICKET NO.#	311682	TONNAGE <u>612</u>
RECEIVED BY	<u>SX</u>	

Please print or type
Information designed for use on site (12 point type preferred)

**NON-HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA ID No.
.....

Manifest
Document No.
G&K 4117

2. Page 1
of

3. Generator's Name and Mailing Address SEI Environmental 3021 McNaugeton Drive Columbia, SC					
4. Generator's Phone ()		6. US EPA ID Number		A. Transporter's Phone 803-494-4593	
5. Transporter 1 Company Name G&K Tank Service		8. US EPA ID Number		B. Transporter's Phone	
7. Transporter 2 Company Name		10. US EPA ID Number		C. Facility's Phone 803-494-4593	
9. Designated Facility Name and Site Address G&K Tank Services Hwy 76/378 West Sumter, SC 29150					
11. Waste Shipping Name and Description a. NonHazardous Petroleum Contaminanted Pads Highway 11 Grocery				12. Containers No. 2	13. Total Quantity
b.				.....	.....
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
-----------------------------	-----------	-------	-----	------

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name Henry O. Selle	Signature	Month	Day	Year
---	-----------	-------	-----	------

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
-----------------------------	-----------	-------	-----	------

19. Discrepancy Indication Space

Printed/Typed Name	Signature	Month	Day	Year
-----------------------------	-----------	-------	-----	------

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. Collier	Signature	Month	Day	Year
---	-----------	-------	-----	------



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 2 Drums
Hwy 11 Grocery

Contaminant NonHazardous Petroleum
Contaminanted Absorbent Pads

This is to certify the above ~~soil~~^{pads} 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. Silver Date 10/25/01



APPENDIX B

SCDHEC Invoice

ASSESSMENT COMPONENT INVOICE

SOUTH CAROLINA

Department of Health and Environmental Control (DHEC)

Division of Underground Storage Tank Management

ASSESSMENT COMPONENT INVOICE

*****See back of form for instructions.*****

FACILITY ID # 03439 COUNTY Oconee
 FACILITY NAME Highway 11 Grocery
 STREET ADDRESS 13527 South Carolina Highway 11, Salem, South Carolina
 INVOICE # 43092 Cost Proposal # 15116
 For work performed during (specify time period) March 2001 to November 2001

I certify, under penalty of law, 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, and any other information I may be aware of, I believe that the submitted information is true, accurate, and complete. I further agree, in accordance with any DHEC demand letter, to promptly repay any overpayment received.

**Please fill out both the Contractor and Owner/Operator Sections (original signatures). Also, indicate the Payee by placing a check in the box next to the Contractor or Owner/Operator. **

 CONTRACTOR

Fred Lyke	56-1903158		
Name (Type or Print)	Federal Tax ID or Social Security Number, if Payee		
SEI Environmental, Inc.	803-788-2535		
Company	Phone Number		
3021 McNaughton Drive, Suite 9	Columbia	SC	29223
Address	City	State	Zip Code
<i>Fred Lyke</i>	Branch Manager		
Signature (please use non-black ink), if Payee	Title	Date Signed	

 OWNER OR OPERATOR

Steve Smith			
Name (Type or Print)	Federal Tax ID or Social Security Number, if Payee		
Highway 11 Grocery	864-944-0494		
Company	Phone Number		
180 Shallowford Road	Salem	SC	29676
Address	City	State	Zip Code
<i>Steve Smith</i>	Branch Manager		
Signature (please use non-black ink)	Title	Date Signed	

If payment is to be sent to an address other than above, please indicate below:

Name of Individual or Company (please print)	Federal Tax ID or Social Security Number		
--	--	--	--

Address (please print)	City	State	Zip Code
------------------------	------	-------	----------

Invoice Amount:	\$ <u>4,552.85</u>	SCDHEC USE ONLY \$ _____ + \$ _____ = \$ _____
Less Submitted/Paid	- \$ <u>0.00</u>	
Well Drilling Costs:		

Total Amount Requested:	\$ <u>4,552.85</u>	SCDHEC USE ONLY \$ _____ + \$ _____ = \$ _____
-------------------------	--------------------	---

Amount Requested is for Assessment activities as Defined in the SCDHEC Letter

ASSESSMENT COMPONENT COST AGREEMENT

SOUTH CAROLINA

Department of Health and Environmental Control

Bureau of Underground Storage Tank Management

State Underground Petroleum Environmental Response Bank Account

Site Name	Highway 11 Grocery			
Site ID #	03439	CP#	15516	
ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1. Plan Preparation*	1	x	\$100.00	\$ 0.00
2. Receptor Survey*		x	\$500.00	\$ 0.00
3. Comprehensive Survey		x	\$1,000.00	\$ 0.00
4. Mob/Demob (List component #).				
A. Equipment		x	\$500.00	\$ 0.00
B. Personnel	18	x	\$250.00	\$ 3,250.00
5. Soil Borings (hand auger)*		feet x	\$14.00	\$ 0.00
6. Soil Borings (drilled) and Field Screening*		(includes collection and quantification)		
		feet x	\$17.00	\$ 0.00
7. Soil Leachability Model		x	\$200.00	\$ 0.00
8. Abandonment*		feet x	\$4.00	\$ 0.00
9. Well Installation*		(includes drilling costs)		
A. Water Table (hand auger)		feet x	\$20.00	\$ 0.00
B. Water Table (drilled)		feet x	\$38.00	\$ 0.00
C. Telescoping		feet x	\$58.00	\$ 0.00
D. Rock Drilling		feet x	\$58.00	\$ 0.00
10. Sample Collection*				
Water or Vapor		samples x	\$55.00	\$ 0.00
11. Analyses-Groundwater		(See RA Guidance for site specific analyses)		
A. BTEX+Naphth.+MTBE		samples x	\$100.00	\$ 0.00
B. BTEX+Naphth.+MTBE+ Trimethylbenzene		samples x	\$135.00	\$ 0.00
C. PAH's		samples x	\$120.00	\$ 0.00
D. Lead		samples x	\$20.00	\$ 0.00
E. EDB		samples x	\$55.00	\$ 0.00
F. 8 RCRA Metals		samples x	\$140.00	\$ 0.00
G. TPH (9070)		samples x	\$55.00	\$ 0.00
H. pH		samples x	\$10.00	\$ 0.00
I. BOD		samples x	\$40.00	\$ 0.00
J. Nitrate		samples x	\$20.00	\$ 0.00
K. Sulfate		samples x	\$20.00	\$ 0.00
L. Ferrous Iron		samples x	\$20.00	\$ 0.00

Continue on back of page

ASSESSMENT COMPONENT COST AGREEMENT

11. Analyses-Soil						
M. BTEX + Naph.		samples	x	\$100.00	\$	\$0.00
N. PAH's		samples	x	\$120.00	\$	\$0.00
O. 8 RCRA Metals		samples	x	\$150.00	\$	\$0.00
P. TPH (9071)		samples	x	\$60.00	\$	\$0.00
Q. TPH (3550)		samples	x	\$65.00	\$	\$0.00
R. Grain size / hydrometer		samples	x	\$63.00	\$	\$0.00
S. Total Organic Carbon		samples	x	\$35.00	\$	\$0.00
12. Aquifer Characterization*						
A. Pumping Test		hours	x	\$120.00	\$	\$0.00
B. Slug test		tests	x	\$150.00	\$	\$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		\$300.00	\$	\$0.00
B. Tier II		x		\$500.00	\$	\$0.00
16. Subsequent Survey*		x		\$260.00	\$	\$0.00
17. Disposal*						
A. Wastewater						
1. Purging/Sampling		drums	x	\$90.00	\$	\$0.00
2. Pumping test		gallons	x	\$0.60	\$	\$0.00
B. Free Product		drums	x	\$110.00	\$	\$0.00
C. Soil (Treatment/Disposal)	0.66	tons	x	\$50.00	\$	\$33.00
		drums	x	\$50.00	\$	\$0.00
18. Miscellaneous* (receipts required)						
G & K Tank (Boom Disposal)	2	x		\$55.00	\$	\$110.00
Case of 4 - 5" x 10' Booms (Eon)	4	x		\$95.00	\$	\$380.00
Case of 5 - 4" x 10' Booms (Eon)	2	x		\$93.00	\$	\$186.00
		x			\$	\$0.00
19. Report/Project Management and Coordination	0.15	x		\$3,959.00	\$	\$593.85
20. Total					\$	\$4,552.85

NEWACCP97-98/03(1997)

*The appropriate mobilization cost can be added to complete these tasks, as necessary.

WM
RICHLAND COUNTY
LANDFILL, INC.
TNT SANDS, INC.
A WASTE MANAGEMENT COMPANY
1047 Highway Church Rd.
Elgin, SC 29045
(803) 788-3054 • (803) 736-0995 Fax

X26
Date: 06/21/2001 (MANUAL) 10:57 AM
TIME IN: 10:56 TIME OUT: 10:56 Ticket: 311682
320-158
SEI ENVIRONMENTAL, INC
3021 HAUGHTON DRIVE
SUITE 9
COLUMBIA SC 29223

Driver: _____ Truck: ONE

Description	Quantity
CONTAMINATED SOIL	.66 TON
Generators: SEI SEI ENVIRONMENTAL INC.	
Approval: RC 0106014 300MS, RESIDUAL	
Sources: 39-PICKENS Types: SOIL District: IN	
GWW 12000 TW 10630	
FUEL SURCHARGE-020	

Signature

Jerry V. Surrles

INVOICE
0003175

G & K Tank Services, Inc.

PO Box 1384
Sumter, SC 29151
(803) 494-4593

INVOICE DATE:

SOLD TO:

SEI ENVIRONMENTAL
3021 MCNAUGHTON DRIVE
SUITE 9
COLUMBIA,, SC 29223-3021

Oct 26, 2001

CUSTOMER ID	PURCHASE ORDER	PAYMENT TERMS	PAGE
SPA002		Net 30 Days	1
QUANTITY	ITEM NUMBER	DESCRIPTION	UNIT PRICE
1.00	55 GAL W	CONTAMINATED WATER-DRUMS FROM GREENVILLE GAS GARDNER	55.00
2.00	55 GAL S	CONTAMINATED PADS-DRUMS FROM HWY 11 GROCERY	55.00
1.00	55 GAL W	CONTAMINATED WATER-DRUMS FROM AMOCO 32	55.00
1.00	55 GAL W	CONTAMINATED WATER-DRUMS FROM PANTRY #607	55.00
1.00	55 GAL W	CONTAMINATED WATER-DRUMS FROM CONTAMINATED SOIL-DRUMS FROM PANTRY 822	55.00
2.00	55 GAL S	CONTAMINATED SOIL-DRUMS FROM PANTRY 822	55.00

OK Bolton
\$110.00
\$165.00
300-447
OK/JJR

\$55.00
OK/JRK
300-424

\$55.00
OK/JRK
300-473

\$55.00
OK/JRK
398-171

ENTR'D
NOV - 2001

VENDOR # <u>GKTANKSVC</u>	PAY DATE <u>11/25/01</u>
PROJ. #	TASK #
ACCT. # <u>514.01</u>	AMT <u>440.00</u>
APPROVAL	
DESC. <u>Disposal</u>	TOTAL
	\$440.00

EON

Products, Inc.

P.O. Box 390246
 Snellville, GA 30039
 Phone 770-978-9971
 Fax: 770-978-8661

Invoice

Invoice Number:
 5097

Invoice Date:
 Nov 7, 2001

Page:
 1

RECEIVED NOV 14 2001

Sold To:
 SEI Environmental
 3021 McNaughton
 Suite 9
 Columbia, SC 29223

Ship To:
 SEI
 3021 McNaughton
 Suite 9
 Columbia, SC 29223

Customer ID	Customer PO		Payment Terms		
SEI Env-Columbia	Bob Bolton		Net 30 Days		
Sales Rep ID	Shipping Method		Ship Date	Due Date	
Bradley Varhol	UPS Ground		11/5/01	12/7/01	
Quantity	Item	Description	Backorder	Unit Price	Extension
2.00	30031	Booms, 4" x 10 ft. cs of 5 ea.		93.00	186.00
2.00	30032	Booms, 5" x 10 ft. cs of 4 ea.		95.00	190.00

ENTERED NOV 16 2001

VENDOR #	EEONPRDA	DATE	KDS
PP	300388	TASK#	
ACCT.	541.0	AMT	397.31
APPROVAL	OK	BOLTON	
DESC	Supplies		

Thank You for using EON Products!!!

Sales Order: 4028.

Check No:

Subtotal	376.00
Sales Tax	21.31
Shipping & Handling	21.31
Total Invoice Amount	397.31
Payment Received	0.00
TOTAL	397.31

EON
Products, Inc.P.O. Box 390246
Snellville, GA 30039Phone 770-978-9971
Fax: 770-978-8661

RECEIVED BY:

InvoiceInvoice Number:
4347Invoice Date:
May 11, 2001

Page:

1

Sold To:SEI Environmental
3021 McNaughton
Suite 9
Columbia, SC 29223**Ship To:**SEI
3021 McNaughton
Suite 9
Columbia, SC 29223

Customer ID	Customer PO	Payment Terms			
SEI Env-Columbia	Verbal per Bob	Net 30 Days			
Sales Rep ID	Shipping Method	Ship Date	Due Date		
Bradley Varhol	UPS Ground	5/10/01	6/10/01		
Quantity	Item	Description	Backorder	Unit Price	Extension
1.00		Case of 4- 4"x10' Booms		80.00	80.00
2.00		Case of 4- 5"x10' Booms		95.00	190.00
		<i>Eonprod</i>	DATE 6/10/01		
		PC 300388 ASK#			
		ACCT. # 541.0 300.25			
		APPROVAL			
		DESC Supplies			
<i>OK Bolton</i>					
<i>300388</i>					

Thank You for using EON Products!!!

Sales Order: 3322

Check No:

Subtotal	270.00
Sales Tax	
Freight	30.25
Total Invoice Amount	300.25
Payment Received	0.00
TOTAL	<i>300.25</i>



3021 McNaughton Drive

Suite 9

Columbia, SC 29223

800-377-2826

803-788-2535

Fax 803-788-2399

December 29, 2003

Konstantine Akhvlediani

Hydrogeologist

SCDHEC

2600 Bull Street

Columbia, SC 29201-1708

Re: Summary of Initial Sampling

Highway 11 Grocery

13527 North Hwy 11

Salem, South Carolina

UST Permit #03439

33' TWT

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JAN 13 2004

UNDERGROUND STORAGE
TANK PROGRAM

Dear Mr. Akhvlediani:

SEI Environmental, Inc. (SEI) submits the following summary of the gauging and sampling of the monitoring wells at the above referenced facility on December 180, 2003. Attached in Appendix A are Figure 1, a topographic map depicting the location of the site and Figure 2, a site map illustrating the location of the monitoring wells. Attached in Appendix B is a copy of the November 6, 2002, South Carolina Department of Health and Environmental Control (SCDHEC) directive letter.

December 18, 2003 SEI personnel were on site to gauge the monitoring wells and collect representative groundwater samples. Eighteen (18) monitoring wells were gauged. Free product, in the form of a sheen, was observed in monitoring well MW-8. Attached in Appendix C are Table 1, which summarizes the December 18, 2003 gauging observations and Table 2, which summarizes the historical gauging observations. Attached in Appendix D is Figure 3, a potentiometric map based upon the December 18, 2003 gauging observations. Upon completion of gauging the wells, all eighteen (18) wells were purged and field screened. Please note that ten (10) monitoring well(s), MW-1, MW-2, MW-4 – MW-8, MW-10, MW-14 and MW-15 were not field screened because of the observation of strong petroleum odors emanating from the wells and in the case of MW-8 the presence of petroleum sheen. Attached in Appendix E is Table 3, which summarizes the December 18, 2003 field screening information and copies of the SCDHEC Field Data Information Sheet(s) for Ground Water Sampling. Upon completion of purging and field screening a representative sample was collected from twenty sample point(s), eighteen (18) from the monitoring wells and two (2) from the adjacent creek. After collection of the representative samples, they were labeled and placed on ice in a cooler in preparation for shipment for laboratory analysis. The samples were submitted to Environmental Science Laboratory in Nashville, Tennessee for analysis for Benzene, Toluene, Ethylbenzene, Xylene (BTEX) by EPA method 8260B, Methyl Tert-butyl Ether (MTBE) by EPA method 8260B, and Naphthalene by EPA method 8260B. Attached in Appendix F are Table 4, which summarizes the laboratory analytical results and copies of the laboratory analytical results. Attached in Appendix G is



Environmental, Inc.

Figure 4, a CoC map based on the December 18, 2003 laboratory analytical data. Two (2) drums of petroleum-impacted water were generated from the purging of the monitoring well(s).

December 19, 2003, the two (2) drums of petroleum-impacted water, generated from the December 18, 2003 purging of the monitoring wells, were transported to G & K Tank Services, Inc.; located in Sumter, South Carolina for disposal. Attached in Appendix H are copies of the Non-Hazardous Waste Manifest and Certificate for Disposal.

The evaluation of the corrective action activities effectiveness consists of comparing the December 18, 2003 laboratory analytical data against the May 7, 2002 laboratory data and determining the percent of total concentration reduction. The percent of total concentration reduction is calculated by using the following formula:

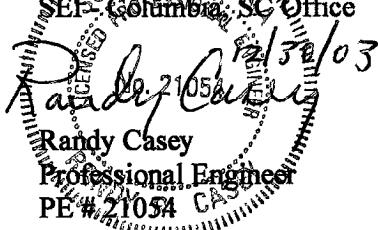
$$\text{Percent of Total Concentration Reduction} = ((\text{Initial Mass Above SSTL}) - (\text{Current Mass Above SSTL})) * (100) / (\text{Initial Mass Above SSTL})$$

The calculation for the December 18, 2003 Percent of Total Concentration Reduction was found to be 99.14%. Attached in Appendix I is Table 5, which illustrates the system's effectiveness analysis.

Based upon the December 18, 2003 field observation(s) and laboratory analytical results, SEI submits that corrective action will continue and that the next round of sampling will occur in March 2004. SEI requests the presence of a representative from SCDHEC for collection of split samples.

If you have questions and / or comments concerning the information contained within this report, please contact John Paul Bekish at (803) 788-2535.

Sincerely,


John Paul Bekish
Operations Manager
SEI - Columbia, SC Office

Randy Casey
Professional Engineer
PE # 21054 CAS

Attachment(s)

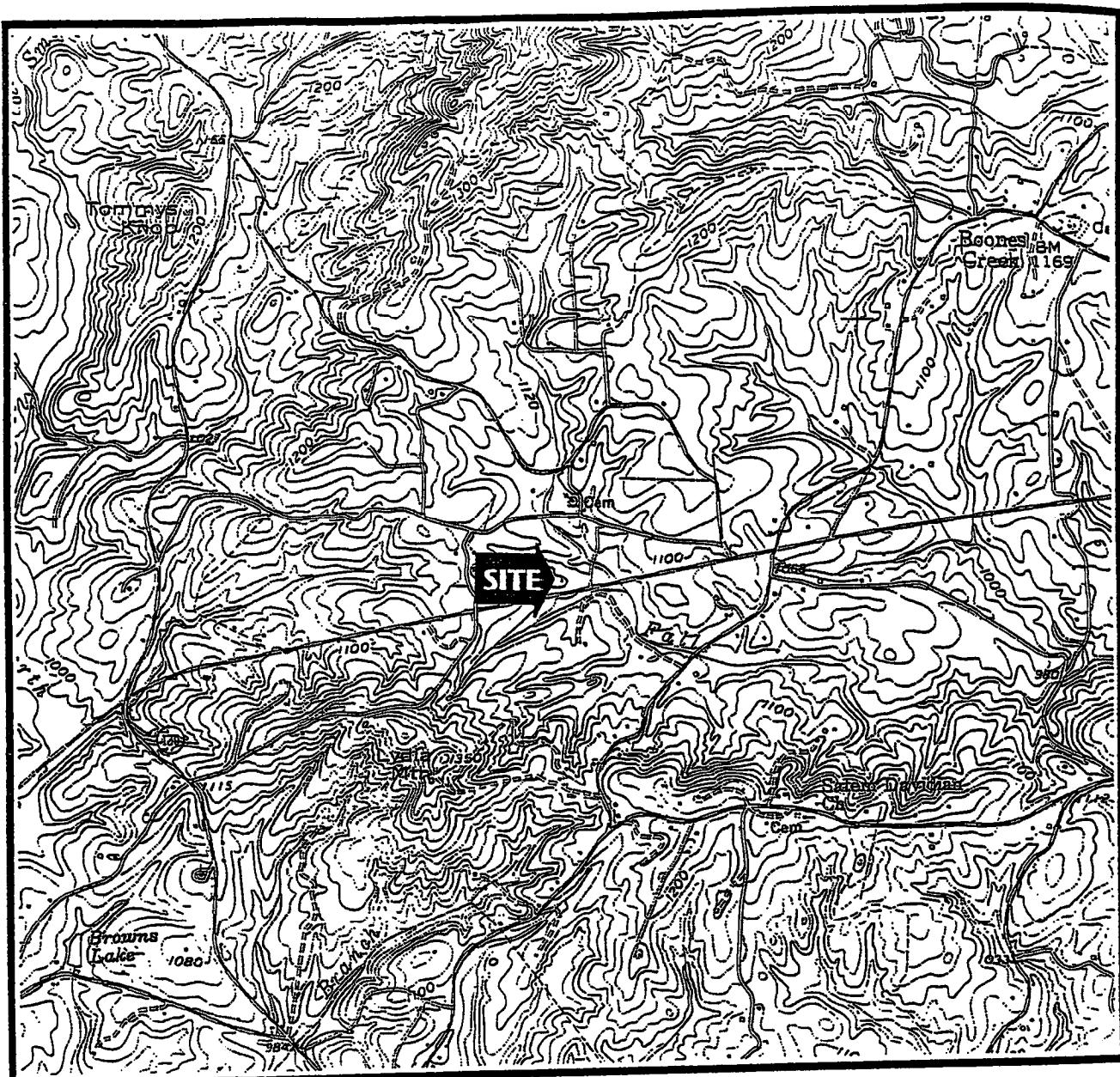
CC: Steve Smith – Property Owner – 180 Schallow Ford Road, Salem, South Carolina 29676
SEI Project Files

Appendix A
Figure 1 – Topographic Map
&
Figure 2 – Site Map

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JAN 13 2004

UNDERGROUND STORAGE
TANK PROGRAM



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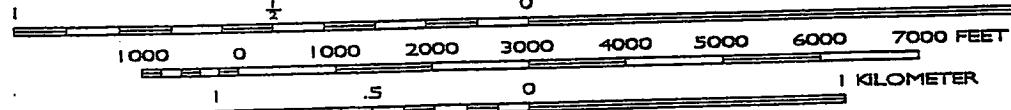
**SEI Environmental, Inc.**

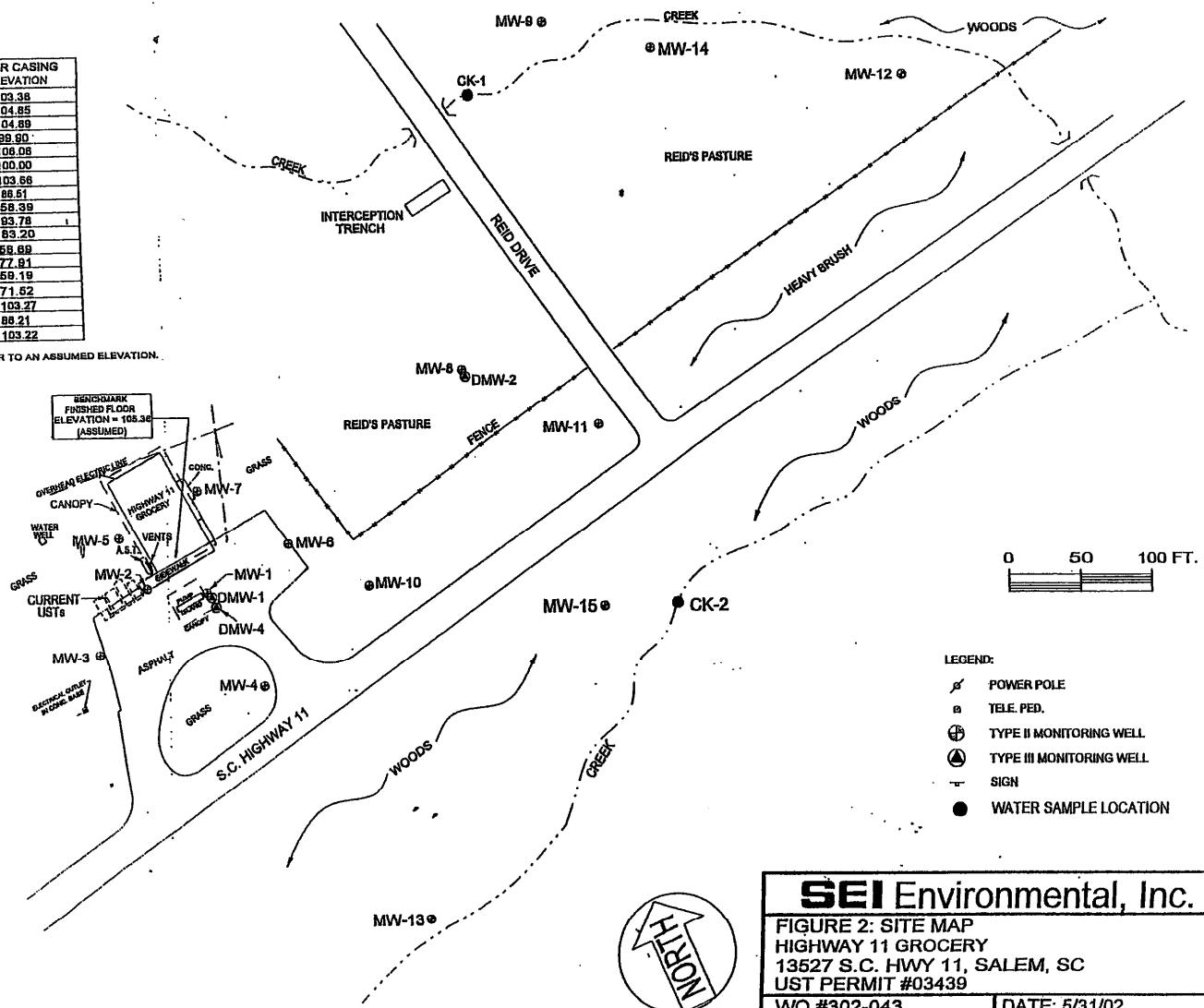
FIGURE 1: SITE LOCATION MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

W.O. #: 300-388
DWG #

DATE: 9/5/01
DRAWN BY: JC

WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.65
MW-3	104.69
MW-4	99.80
MW-5	108.06
MW-6	100.00
MW-7	103.66
MW-8	58.61
MW-9	58.39
MW-10	93.78
MW-11	83.20
MW-12	58.68
MW-13	77.91
MW-14	58.19
MW-15	71.62
DNW-1	103.27
DNW-2	88.21
DNW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.



SEI Environmental, Inc.

**FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439**

WO #302-043 DATE: 5/31/02
DWG #HI0388F1 DRAWN BY: JCJ

Appendix B
November 6, 2002 SCDHEC Directive Letter

Appendix C

Table 1 – Summary of December 18, 2003 Gauging Results
&
Table 2 – Summary of Historical Gauging Results

Table 1
Summary of Gauging Results - December 18, 2003
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID	Gauging Date	Diameter Well (Inches)	Depth to Water (Feet)	LPH Thickness (Feet)	Depth of Well (Feet)	Well Head Elevation (Feet)	Groundwater Elevation (Feet)
MW-1	12/18/2003	2.00	24.06	0.00	28.00	103.38	79.32
MW-2	12/18/2003	2.00	25.38	0.00	35.00	104.85	79.47
MW-3	12/18/2003	2.00	23.93	0.00	30.00	104.89	80.96
MW-4	12/18/2003	2.00	22.95	0.00	35.00	99.90	76.95
MW-5	12/18/2003	2.00	28.40	0.00	35.00	106.06	77.66
MW-6	12/18/2003	2.00	21.00	0.00	32.60	100.00	79.00
MW-7	12/18/2003	2.00	27.71	0.00	40.00	103.66	75.95
MW-8	12/18/2003	2.00	20.82	0.00	30.00	86.51	65.69
MW-9	12/18/2003	2.00	2.20	0.00	11.00	58.39	56.19
MW-10	12/18/2003	2.00	19.83	0.00	24.00	93.78	73.95
MW-11	12/18/2003	2.00	16.40	0.00	23.00	83.20	66.80
MW-12	12/18/2003	2.00	2.60	0.00	12.00	58.69	56.09
MW-13	12/18/2003	2.00	6.24	0.00	13.00	77.72	71.48
MW-14	12/18/2003	2.00	1.98	0.00	10.00	59.19	57.21
MW-15	12/18/2003	2.00	10.20	0.00	12.00	71.52	61.32
DMW-1	12/18/2003	2.00	24.00	0.00	45.00	103.27	79.27
DMW-2	12/18/2003	2.00	16.88	0.00	75.00	86.21	69.33
DMW-4	12/18/2003	2.00	24.45	0.00	61.00	103.22	78.77

Notes: N/A = Not Applicable
MW-8 was Observed to have a Sheen of Free Product Present

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Table 2
Summary of Historical Gauging Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID	Gauging Date	Diameter Well (Inches)	Depth to Water (Feet)	LPH Thickness (Feet)	Depth of Well (Feet)	Well Head Elevation (Feet)	Groundwater Elevation (Feet)
MW-1	12/18/2003	2.00	24.06	0.00	28.00	103.38	79.32
	10/23/2003		24.72	0.21			78.50
	10/2/2003		24.32	0.13			78.96
	9/15/2003		23.78	0.04			79.57
	7/30/2003		22.89	0.08			80.43
	7/1/2003		23.28	0.24			79.91
	5/8/2002		24.67	0.04			78.68
MW-2	12/18/2003	2.00	25.38	0.00	35.00	104.85	79.47
	10/23/2003		25.71	0.00			79.14
	10/2/2003		25.56	0.00			79.29
	9/15/2003		24.73	0.00			80.12
	7/30/2003		23.78	0.00			81.07
	7/1/2003		24.08	0.00			80.77
	5/8/2002		26.08	0.00			78.77
MW-3	12/18/2003	2.00	23.93	0.00	30.00	104.86	80.93
	10/23/2003		24.23	0.00			80.63
	10/2/2003		23.87	0.00			80.99
	9/15/2003		23.23	0.00			81.63
	7/30/2003		22.21	0.00			82.65
	7/1/2003		22.51	0.00			82.35
	5/8/2002		24.78	0.00			80.08

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目錄

一、序言

二、研究方法

三、研究結果

四、研究討論

本研究旨在探討中國古代文學中「隱」與「顯」兩種文學表現形式的關係。研究方法上，我們採用了文本分析、對比研究和理論探討等多種方法。研究結果顯示，「隱」與「顯」兩種表現形式在中國古代文學中都有廣泛的應用，並在不同文學體裁和歷史時期中發揮了不同的作用。理論探討部分，我們進一步闡明了「隱」與「顯」兩種表現形式之間的複雜關係，並提出了對未來研究的建議。

Table 2 - Continued
Summary of Historical Gauging Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID	Gauging Date	Diameter Well (Inches)	Depth to Water (Feet)	LPH Thickness (Feet)	Depth of Well (Feet)	Well Head Elevation (Feet)	Groundwater Elevation (Feet)
MW-4	12/18/2003	2.00	22.95	0.00	35.00	99.90	76.95
	10/23/2003		23.69	0.00			76.21
	10/2/2003		23.32	0.00			76.58
	9/15/2003		22.90	0.00			77.00
	7/30/2003		22.09	0.00			77.81
	7/1/2003		22.10	0.00			77.80
	5/8/2002		23.38	0.00			76.52
MW-5	12/18/2003	2.00	28.40	0.00	35.00	106.06	77.66
	10/23/2003		28.40	0.00			77.66
	10/2/2003		27.92	0.00			78.14
	9/15/2003		27.40	0.00			78.66
	7/30/2003		26.53	0.00			79.53
	7/1/2003		26.82	0.00			79.24
	5/8/2002		28.82	0.00			77.24
MW-6	12/18/2003	2.00	21.00	0.00	32.60	100.00	79.00
	10/23/2003		21.74	0.00			78.26
	10/2/2003		21.34	0.00			78.66
	9/15/2003		20.63	0.00			79.37
	7/30/2003		19.88	0.00			80.12
	7/1/2003		19.77	0.00			80.23
	5/8/2002		21.66	0.00			78.34

ANSWER
TO THE
QUESTION,
WHAT IS
THE
MEANING
OF
THE
WORD
"LAW".

QUESTION	ANSWER
What is the meaning of the word "Law"?	The word "Law" has several meanings, depending on the context in which it is used. In its most general sense, "Law" refers to a set of rules or principles that govern a particular society, state, or organization. These rules are typically created by a government or other authority and are intended to regulate behavior and maintain order. In a more specific context, "Law" can refer to a particular branch of knowledge or study, such as criminal law or constitutional law. It can also refer to a person who is trained in the study of law and is authorized to practice it, such as a lawyer or judge. Additionally, "Law" can be used as a noun to refer to a specific statute or legal document, such as the Constitution or a particular piece of legislation.
What is the difference between "Law" and "Custom"?	"Law" and "Custom" are two related concepts, but they have distinct differences. "Law" is a formal system of rules and regulations that are established by a government or other authority and are enforced through legal processes. These rules are typically written down in a code or statute and are intended to provide a clear and predictable framework for behavior. In contrast, "Custom" refers to a set of unwritten rules and practices that are followed by a community or society over time. Customs are often passed down through oral tradition and may not have a formal, written basis. While customs can be influential in shaping behavior, they do not have the same level of legal force or formality as laws.
What is the difference between "Law" and "Morality"?	"Law" and "Morality" are two related concepts, but they have distinct differences. "Law" is a formal system of rules and regulations that are established by a government or other authority and are enforced through legal processes. These rules are typically written down in a code or statute and are intended to provide a clear and predictable framework for behavior. In contrast, "Morality" refers to a set of principles or values that are considered to be right or wrong, good or bad, by a particular culture or society. Morality is often based on religious or philosophical beliefs and may not have a formal, written basis. While morality can influence behavior, it does not have the same level of legal force or formality as law.
What is the difference between "Law" and "Ethics"?	"Law" and "Ethics" are two related concepts, but they have distinct differences. "Law" is a formal system of rules and regulations that are established by a government or other authority and are enforced through legal processes. These rules are typically written down in a code or statute and are intended to provide a clear and predictable framework for behavior. In contrast, "Ethics" refers to a set of principles or values that are considered to be right or wrong, good or bad, by a particular culture or society. Ethics is often based on religious or philosophical beliefs and may not have a formal, written basis. While ethics can influence behavior, it does not have the same level of legal force or formality as law.

Table 2 - Continued
Summary of Historical Gauging Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID	Gauging Date	Diameter Well (Inches)	Depth to Water (Feet)	LPH Thickness (Feet)	Depth of Well (Feet)	Well Head Elevation (Feet)	Groundwater Elevation (Feet)
MW-7	12/18/2003	2.00	27.71	0.00	40.00	103.66	75.95
	10/23/2003		28.10	0.00			75.56
	10/2/2003		27.69	0.00			75.97
	9/15/2003		26.83	0.00			76.83
	7/30/2003		26.22	0.00			77.44
	7/1/2003		26.55	0.00			77.11
	5/8/2002		28.12	0.00			75.54
MW-8	12/18/2003	2.00	20.82	0.00	30.00	86.51	65.69
	10/23/2003		21.54	0.02			64.97
	10/2/2003		20.44	0.20			66.05
	9/15/2003		21.17	0.15			65.33
	7/30/2003		20.46	0.20			66.03
	7/1/2003		20.96	0.60			65.50
	5/8/2002		21.00	0.06			65.51
MW-9	12/18/2003	2.00	2.20	0.00	11.00	58.39	56.19
	10/23/2003		2.42	0.00			55.97
	10/2/2003		2.16	0.00			56.23
	9/15/2003		2.42	0.00			55.97
	7/30/2003		2.26	0.00			56.13
	7/1/2003		2.30	0.00			56.09
	5/8/2002		2.47	0.00			55.92

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Table 2 - Continued
Summary of Historical Gauging Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID	Gauging Date	Diameter Well (Inches)	Depth to Water (Feet)	LPH Thickness (Feet)	Depth of Well (Feet)	Well Head Elevation (Feet)	Groundwater Elevation (Feet)
MW-10	12/18/2003	2.00	19.83	0.00	24.00	93.78	73.95
	10/23/2003		20.51	0.00			73.27
	10/2/2003		20.19	0.00			73.59
	9/15/2003		16.53	0.00			77.25
	7/30/2003		18.95	0.00			74.83
	7/1/2003		16.20	0.00			77.58
	5/8/2002		20.04	0.00			73.74
	12/18/2003		16.40	0.00			66.80
MW-11	10/23/2003	2.00	17.83	0.00	23.00	83.20	65.37
	10/2/2003		17.58	0.00			65.62
	9/15/2003		16.21	0.00			66.99
	7/30/2003		15.92	0.00			67.28
	7/1/2003		15.93	0.00			67.27
	5/8/2002		16.86	0.00			66.34
	12/18/2003		2.60	0.00			56.09
MW-12	10/23/2003	2.00	3.50	0.00	12.00	58.69	55.19
	10/2/2003		2.97	0.00			55.72
	9/15/2003		3.19	0.00			55.50
	7/30/2003		3.02	0.00			55.67
	7/1/2003		3.10	0.00			55.59
	5/8/2002		3.12	0.00			55.57

Table 2 - Continued
Summary of Historical Gauging Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID	Gauging Date	Diameter Well (Inches)	Depth to Water (Feet)	LPH Thickness (Feet)	Depth of Well (Feet)	Well Head Elevation (Feet)	Groundwater Elevation (Feet)
MW-13	12/18/2003	2.00	6.24	0.00	13.00	77.72	71.48
	10/23/2003		6.78	0.00			70.94
	10/2/2003		7.51	0.00			70.21
	9/15/2003		6.62	0.00			71.10
	7/30/2003		6.28	0.00			71.44
	7/1/2003		6.44	0.00			71.28
	5/8/2002		6.52	0.00			71.20
	12/18/2003		1.98	0.00			57.21
MW-14	10/23/2003	2.00	2.67	0.00	10.00	59.19	56.52
	10/2/2003		1.58	0.00			57.61
	9/15/2003		2.03	0.00			57.16
	7/30/2003		1.77	0.00			57.42
	7/1/2003		1.92	0.00			57.27
	5/8/2002		2.14	0.00			57.05
	12/18/2003		10.20	0.00	12.00	71.52	61.32
	10/23/2003		11.07	0.00			60.45
MW-15	10/2/2003	2.00	11.88	0.00			59.64
	9/15/2003		11.02	0.00			60.50
	7/30/2003		10.67	0.00			60.85
	7/1/2003		10.83	0.00			60.69
	5/8/2002		10.61	0.00			60.91

Category	Sub-Categories	Definition	Example
1. General Information	1.1 Personal Data	Name, Address, Date of Birth, Social Security Number	Jane Doe, 123 Main St, Anytown, USA, 1985-01-01, 123-45-6789
1. General Information	1.2 Financial Data	Bank Account Number, Credit Card Number, Social Security Number	1234567890, 1234567890123456, 123-45-6789
1. General Information	1.3 Biometric Data	Fingerprint, Facial Recognition, DNA Profile	1234567890, Jane Doe's Face, Jane Doe's DNA
2. Behavioral Data	2.1 Web Browsing History	URLs Visited, Search Queries, Browsing Time	www.google.com, search for "Jane Doe", 10:00 AM - 12:00 PM
2. Behavioral Data	2.2 Location History	GPS Coordinates, IP Address, Geolocation Data	40.7128° N, 74.0060° W, 192.168.1.1, New York City
2. Behavioral Data	2.3 Device Usage	App Activity, Screen Time, Device ID	Facebook App, 2 hours daily, A1234567890
3. Sensory Data	3.1 Visual Data	Image Recognition, Facial Detection, Optical Character Recognition	Identify objects in image, Detect faces in video, Read text from document
3. Sensory Data	3.2 Auditory Data	Speech Recognition, Voice Analysis, Sound Detection	Transcribe speech, Analyze tone, Detect sound levels
3. Sensory Data	3.3 Tactile Data	Pressure Sensors, Temperature Sensors, Motion Sensors	Measure pressure, Detect temperature, Track motion
4. Physical Data	4.1 Health Data	Medical Record, Health Status, Vital Signs	Diagnosis, Blood Pressure, Heart Rate
4. Physical Data	4.2 Environmental Data	Temperature, Humidity, Light Levels	18°C, 45%, Bright
4. Physical Data	4.3 Object Properties	Color, Shape, Size, Material	Red, Square, Large, Plastic
5. Social Data	5.1 Relationship Status	Marital Status, Family Structure, Social Network	Married, 2 children, Facebook Friends
5. Social Data	5.2 Communication Patterns	Text Message History, Call Log, Social Media Activity	Text messages to spouse, Calls to children, Facebook posts
5. Social Data	5.3 Group Affiliation	Religious Groups, Political Parties, Professional Associations	Christian, Democrat, Engineers Association

Table 2 - Continued
Summary of Historical Gauging Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID	Gauging Date	Diameter Well (Inches)	Depth to Water (Feet)	LPH Thickness (Feet)	Depth of Well (Feet)	Well Head Elevation (Feet)	Groundwater Elevation (Feet)
DMW-1	12/18/2003	2.00	24.00	0.00	45.00	103.27	79.27
	10/23/2003		24.50	0.00			78.77
	10/2/2003		24.11	0.00			79.16
	9/15/2003		23.61	0.00			79.66
	7/30/2003		22.72	0.00			80.55
	7/1/2003		22.97	0.00			80.30
	5/8/2002		24.68	0.00			78.59
DMW-2	12/18/2003	2.00	16.80	0.00	75.00	86.21	69.41
	10/23/2003		17.63	0.00			68.58
	10/2/2003		17.11	0.00			69.10
	9/15/2003		15.75	0.00			70.46
	7/30/2003		16.49	0.00			69.72
	7/1/2003		16.44	0.00			69.77
	5/8/2002		17.22	0.00			68.99
DMW-4	12/18/2003	2.00	24.45	0.00	61.00	103.22	78.77
	10/23/2003		24.95	0.00			78.27
	10/2/2003		24.39	0.00			78.83
	9/15/2003		23.88	0.00			79.34
	7/30/2003		23.18	0.00			80.04
	7/1/2003		23.32	0.00			79.90
	5/8/2002		25.08	0.00			78.14

Notes: N/A = Not Applicable
Adjusted Depth to Water = Depth to Water - (LPH Thickness * 0.78)

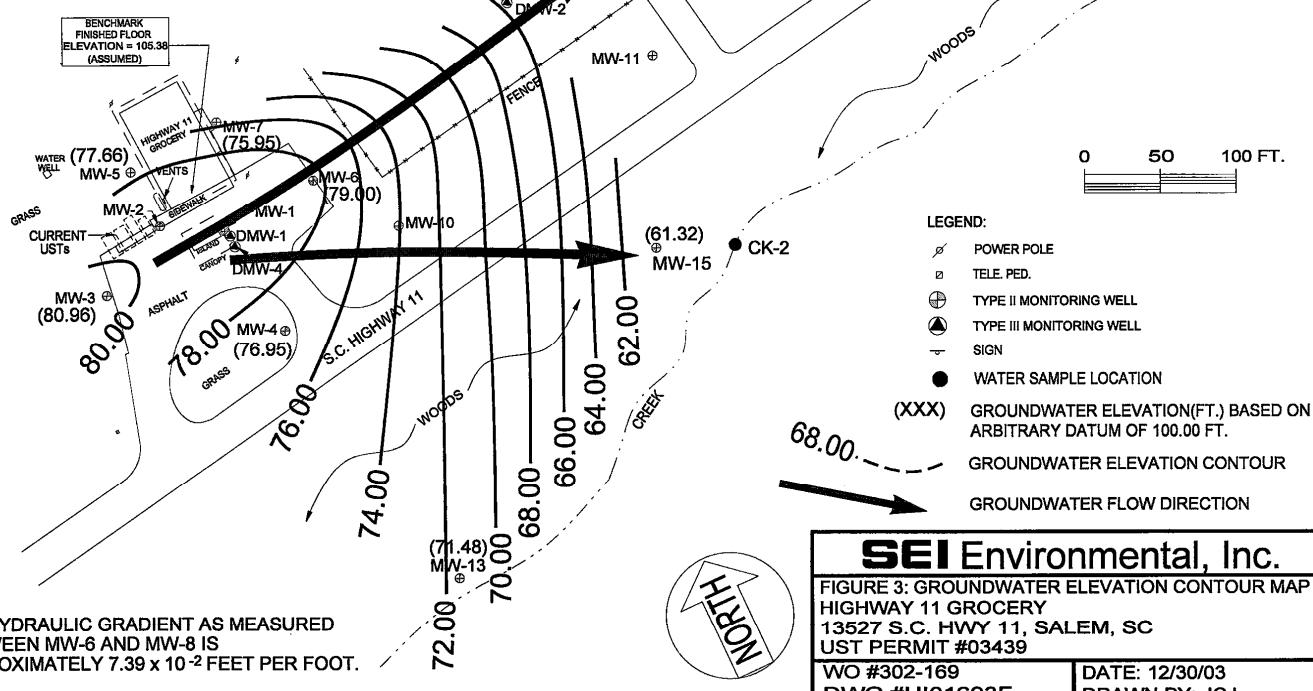
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Appendix D

**Figure 3 - Potentiometric Map Based on the December 18, 2003 Gauging
Observations**

WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.89
MW-4	99.90
MW-5	106.06
MW-6	100.00
MW-7	103.66
MW-8	86.51
MW-9	58.39
MW-10	93.78
MW-11	83.20
MW-12	58.69
MW-13	77.91
MW-14	59.19
MW-15	71.52
DMW-1	103.27
DMW-2	86.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.



Appendix E

Table 3 – Summary Field Screening Observation(s)
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SCDHEC Field Data Information Sheet for Ground Water Sampling

Table 3
Summary of Field Observations - December 16, 2003
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID	Frequency	Depth to Groundwater (Feet)	Total Well Depth (Feet)	Depth of Free Product (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temperature (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-1	Initial	24.06	28.00	N/A	N/A	N/A	N/A	N/A	5.70	Strong Petro. Odors
MW-2	Initial	25.38	35.00	N/A	N/A	N/A	N/A	N/A	4.70	Strong Petro. Odors
MW-3	Initial	23.92	30.00	N/A	4.67	0.075	16.90	8.00		Full Recharge
	1st Volume				4.62	0.022	17.00	7.41	2.90	
	2nd Volume				4.56	0.017	17.00	7.62	2.90	
	3rd Volume				4.54	0.016	16.90	7.81	2.90	
	Post				4.56	0.014	16.90	8.01		
MW-4	Initial	22.95	35.00	N/A	N/A	N/A	N/A	N/A	5.80	Strong Petro. Odors
MW-5	Initial	28.40	35.00	N/A	N/A	N/A	N/A	N/A	6.60	Strong Petro. Odors
MW-6	Initial	21.00	32.60	N/A	N/A	N/A	N/A	N/A	5.60	Strong Petro. Odors
MW-7	Initial	27.71	40.00	N/A	N/A	N/A	N/A	N/A	6.00	Strong Petro. Odors
MW-8	Initial	20.82	30.00	Sheen	N/A	N/A	N/A	N/A	6.00	Sheen Present
MW-9	Initial	2.20	11.00	N/A	4.87	0.026	12.50	6.92		Full Recharge
	1st Volume				4.83	0.026	13.00	6.67	1.40	
	2nd Volume				5.07	0.026	13.10	7.06	1.40	
	3rd Volume				5.27	0.029	13.20	7.27	1.50	
	Post				5.27	0.031	12.30	6.94		
MW-10	Initial	19.83	24.00	N/A	N/A	N/A	N/A	N/A	2.00	Strong Petro. Odors
MW-11	Initial	16.40	23.00	N/A	4.50	0.012	16.10	6.13		Dry After 2 Gallons
	1st Volume				4.55	0.012	16.70	6.75	1.00	
	2nd Volume				4.71	0.015	16.50	7.42	1.00	

Category	Sub-Categories	Item Description	Quantity	Unit	Unit Price	Total Price
Electronics	Smartphones	iPhone 12 Pro Max	10	Units	\$1,000	\$10,000
Electronics	Laptops	MacBook Pro M1	5	Units	\$1,500	\$7,500
Electronics	Tablets	iPad Pro 12.9"	3	Units	\$800	\$2,400
Electronics	Accessories	Apple Watch Series 7	20	Units	\$300	\$6,000
Electronics	Peripherals	Logitech G903 Wireless Mouse	15	Units	\$50	\$750
Electronics	Peripherals	SteelSeries Rival 650	10	Units	\$60	\$600
Electronics	Peripherals	Razer DeathAdder V2	8	Units	\$70	\$560
Electronics	Peripherals	SteelSeries QcK Edge	12	Units	\$80	\$960
Electronics	Peripherals	Logitech G Pro X	10	Units	\$90	\$900
Electronics	Peripherals	SteelSeries Apex 7	5	Units	\$100	\$500
Electronics	Peripherals	Logitech G403	8	Units	\$120	\$960
Electronics	Peripherals	SteelSeries Rival 3	12	Units	\$140	\$1,680
Electronics	Peripherals	Logitech G304	10	Units	\$160	\$1,600
Electronics	Peripherals	SteelSeries Rival 100	15	Units	\$180	\$2,700
Electronics	Peripherals	Logitech G102	20	Units	\$200	\$4,000
Electronics	Peripherals	SteelSeries Rival 100	10	Units	\$220	\$2,200
Electronics	Peripherals	Logitech G203	15	Units	\$240	\$3,600
Electronics	Peripherals	SteelSeries Rival 100	12	Units	\$260	\$3,120
Electronics	Peripherals	Logitech G302	18	Units	\$280	\$5,040
Electronics	Peripherals	SteelSeries Rival 100	14	Units	\$300	\$4,200
Electronics	Peripherals	Logitech G402	12	Units	\$320	\$3,840
Electronics	Peripherals	SteelSeries Rival 100	16	Units	\$340	\$5,440
Electronics	Peripherals	Logitech G101	25	Units	\$360	\$9,000
Electronics	Peripherals	SteelSeries Rival 100	18	Units	\$380	\$6,840
Electronics	Peripherals	Logitech G202	22	Units	\$400	\$8,800
Electronics	Peripherals	SteelSeries Rival 100	20	Units	\$420	\$8,400
Electronics	Peripherals	Logitech G301	28	Units	\$440	\$12,320
Electronics	Peripherals	SteelSeries Rival 100	24	Units	\$460	\$10,880
Electronics	Peripherals	Logitech G401	30	Units	\$480	\$14,400
Electronics	Peripherals	SteelSeries Rival 100	26	Units	\$500	\$13,000
Electronics	Peripherals	Logitech G502	35	Units	\$520	\$18,200
Electronics	Peripherals	SteelSeries Rival 100	30	Units	\$540	\$16,200
Electronics	Peripherals	Logitech G602	32	Units	\$560	\$17,920
Electronics	Peripherals	SteelSeries Rival 100	34	Units	\$580	\$19,720
Electronics	Peripherals	Logitech G702	38	Units	\$600	\$22,800
Electronics	Peripherals	SteelSeries Rival 100	36	Units	\$620	\$22,320
Electronics	Peripherals	Logitech G802	40	Units	\$640	\$25,600
Electronics	Peripherals	SteelSeries Rival 100	38	Units	\$660	\$25,440
Electronics	Peripherals	Logitech G902	42	Units	\$680	\$28,560
Electronics	Peripherals	SteelSeries Rival 100	40	Units	\$700	\$28,000
Electronics	Peripherals	Logitech G104	45	Units	\$720	\$31,600
Electronics	Peripherals	SteelSeries Rival 100	42	Units	\$740	\$31,680
Electronics	Peripherals	Logitech G204	48	Units	\$760	\$35,840
Electronics	Peripherals	SteelSeries Rival 100	44	Units	\$780	\$33,680
Electronics	Peripherals	Logitech G304	50	Units	\$800	\$40,000
Electronics	Peripherals	SteelSeries Rival 100	46	Units	\$820	\$37,440
Electronics	Peripherals	Logitech G404	52	Units	\$840	\$43,680
Electronics	Peripherals	SteelSeries Rival 100	48	Units	\$860	\$41,440
Electronics	Peripherals	Logitech G504	55	Units	\$880	\$49,600
Electronics	Peripherals	SteelSeries Rival 100	50	Units	\$900	\$45,000
Electronics	Peripherals	Logitech G604	58	Units	\$920	\$52,960
Electronics	Peripherals	SteelSeries Rival 100	52	Units	\$940	\$48,880
Electronics	Peripherals	Logitech G704	60	Units	\$960	\$57,600
Electronics	Peripherals	SteelSeries Rival 100	54	Units	\$980	\$52,920
Electronics	Peripherals	Logitech G804	62	Units	\$1,000	\$62,000
Electronics	Peripherals	SteelSeries Rival 100	56	Units	\$1,020	\$56,160
Electronics	Peripherals	Logitech G904	65	Units	\$1,040	\$67,600
Electronics	Peripherals	SteelSeries Rival 100	58	Units	\$1,060	\$61,880
Electronics	Peripherals	Logitech G105	68	Units	\$1,080	\$73,760
Electronics	Peripherals	SteelSeries Rival 100	60	Units	\$1,100	\$66,000
Electronics	Peripherals	Logitech G205	70	Units	\$1,120	\$75,200
Electronics	Peripherals	SteelSeries Rival 100	62	Units	\$1,140	\$67,640
Electronics	Peripherals	Logitech G305	72	Units	\$1,160	\$80,160
Electronics	Peripherals	SteelSeries Rival 100	64	Units	\$1,180	\$72,320
Electronics	Peripherals	Logitech G405	75	Units	\$1,200	\$87,000
Electronics	Peripherals	SteelSeries Rival 100	66	Units	\$1,220	\$75,920
Electronics	Peripherals	Logitech G505	78	Units	\$1,240	\$94,560
Electronics	Peripherals	SteelSeries Rival 100	68	Units	\$1,260	\$81,120
Electronics	Peripherals	Logitech G605	80	Units	\$1,280	\$100,800
Electronics	Peripherals	SteelSeries Rival 100	70	Units	\$1,300	\$91,000
Electronics	Peripherals	Logitech G705	82	Units	\$1,320	\$106,400
Electronics	Peripherals	SteelSeries Rival 100	72	Units	\$1,340	\$93,680
Electronics	Peripherals	Logitech G805	85	Units	\$1,360	\$113,200
Electronics	Peripherals	SteelSeries Rival 100	74	Units	\$1,380	\$100,960
Electronics	Peripherals	Logitech G905	88	Units	\$1,400	\$120,800
Electronics	Peripherals	SteelSeries Rival 100	76	Units	\$1,420	108,960
Electronics	Peripherals	Logitech G106	90	Units	\$1,440	127,200
Electronics	Peripherals	SteelSeries Rival 100	78	Units	\$1,460	115,520
Electronics	Peripherals	Logitech G206	92	Units	\$1,480	133,600
Electronics	Peripherals	SteelSeries Rival 100	80	Units	\$1,500	121,800
Electronics	Peripherals	Logitech G306	95	Units	\$1,520	140,800
Electronics	Peripherals	SteelSeries Rival 100	82	Units	\$1,540	129,280
Electronics	Peripherals	Logitech G406	98	Units	\$1,560	147,600
Electronics	Peripherals	SteelSeries Rival 100	84	Units	\$1,580	135,680
Electronics	Peripherals	Logitech G506	100	Units	\$1,600	154,400
Electronics	Peripherals	SteelSeries Rival 100	86	Units	\$1,620	142,960
Electronics	Peripherals	Logitech G606	102	Units	\$1,640	161,200
Electronics	Peripherals	SteelSeries Rival 100	88	Units	\$1,660	149,440
Electronics	Peripherals	Logitech G706	105	Units	\$1,680	168,000
Electronics	Peripherals	SteelSeries Rival 100	90	Units	\$1,700	156,000
Electronics	Peripherals	Logitech G806	108	Units	\$1,720	175,520
Electronics	Peripherals	SteelSeries Rival 100	92	Units	\$1,740	163,680
Electronics	Peripherals	Logitech G906	110	Units	\$1,760	182,400
Electronics	Peripherals	SteelSeries Rival 100	94	Units	\$1,780	170,720
Electronics	Peripherals	Logitech G107	112	Units	\$1,800	191,200
Electronics	Peripherals	SteelSeries Rival 100	96	Units	\$1,820	178,880
Electronics	Peripherals	Logitech G207	115	Units	\$1,840	198,800
Electronics	Peripherals	SteelSeries Rival 100	98	Units	\$1,860	186,240
Electronics	Peripherals	Logitech G307	118	Units	\$1,880	205,600
Electronics	Peripherals	SteelSeries Rival 100	100	Units	\$1,900	193,200
Electronics	Peripherals	Logitech G407	120	Units	\$1,920	212,400
Electronics	Peripherals	SteelSeries Rival 100	102	Units	\$1,940	199,680
Electronics	Peripherals	Logitech G507	122	Units	\$1,960	220,800
Electronics	Peripherals	SteelSeries Rival 100	104	Units	\$1,980	207,360
Electronics	Peripherals	Logitech G607	125	Units	\$2,000	228,000
Electronics	Peripherals	SteelSeries Rival 100	106	Units	\$2,020	214,920
Electronics	Peripherals	Logitech G707	128	Units	\$2,040	235,200
Electronics	Peripherals	SteelSeries Rival 100	108	Units	\$2,060	222,720
Electronics	Peripherals	Logitech G807	130	Units	\$2,080	242,400
Electronics	Peripherals	SteelSeries Rival 100	110	Units	\$2,100	230,200
Electronics	Peripherals	Logitech G907	132	Units	\$2,120	249,600
Electronics	Peripherals	SteelSeries Rival 100	112	Units	\$2,140	237,360
Electronics	Peripherals	Logitech G108	135	Units	\$2,160	256,800
Electronics	Peripherals	SteelSeries Rival 100	114	Units	\$2,180	244,720
Electronics	Peripherals	Logitech G208	138	Units	\$2,200	264,000
Electronics	Peripherals	SteelSeries Rival 100	116	Units	\$2,220	252,480
Electronics	Peripherals	Logitech G308	140	Units	\$2,240	271,200
Electronics	Peripherals	SteelSeries Rival 100	118	Units	\$2,260	259,920
Electronics	Peripherals	Logitech G408	142	Units	\$2,280	278,400
Electronics	Peripherals	SteelSeries Rival 100	120	Units	\$2,300	267,200
Electronics	Peripherals	Logitech G508	145	Units	\$2,320	285,600
Electronics	Peripherals	SteelSeries Rival 100	122	Units	\$2,340	273,440
Electronics	Peripherals	Logitech G608	148	Units	\$2,360	292,800
Electronics	Peripherals	SteelSeries Rival 100	124	Units	\$2,380	280,560
Electronics	Peripherals	Logitech G708	150	Units	\$2,400	300,000
Electronics	Peripherals	SteelSeries Rival 100	126	Units	\$2,420	287,280
Electronics	Peripherals	Logitech G808	152	Units	\$2,440	307,600
Electronics	Peripherals	SteelSeries Rival 100	128	Units	\$2,460	294,960
Electronics	Peripherals	Logitech G908	155	Units	\$2,480	315,200
Electronics	Peripherals	SteelSeries Rival 100	130	Units	\$2,500	302,400
Electronics	Peripherals	Logitech G109	158	Units	\$2,520	322,400
Electronics	Peripherals	SteelSeries Rival 100	132	Units	\$2,540	310,320
Electronics	Peripherals	Logitech G209	160	Units	\$2,560	330,400
Electronics	Peripherals	SteelSeries Rival 100	134	Units	\$2,580	317,760
Electronics	Peripherals	Logitech G309	162	Units	\$2,600	337,600
Electronics	Peripherals	SteelSeries Rival 100	136	Units	\$2,620	325,120
Electronics	Peripherals	Logitech G409	165	Units	\$2,640	345,200
Electronics	Peripherals	SteelSeries Rival 100	138	Units	\$2,660	332,480
Electronics	Peripherals	Logitech G509	168	Units	\$2,680	352,800
Electronics	Peripherals	SteelSeries Rival 100	140	Units	\$2,700	340,000
Electronics	Peripherals	Logitech G609	170	Units	\$2,720	360,400
Electronics	Peripherals	SteelSeries Rival 100	142	Units	\$2,740	347,680
Electronics	Peripherals	Logitech G709	172	Units	\$2,760	368,000
Electronics	Peripherals	SteelSeries Rival 100	144	Units	\$2,780	355,360
Electronics	Peripherals	Logitech G809	175	Units	\$2,800	375,600
Electronics	Peripherals	SteelSeries Rival 100	146	Units	\$2,820	362,960
Electronics	Peripherals	Logitech G909	178	Units	\$2,840	383,200
Electronics	Peripherals	SteelSeries Rival 100	148	Units	\$2,860	370,720
Electronics	Peripherals	Logitech G110	180	Units	\$2,880	390,400
Electronics	Peripherals	SteelSeries Rival 100	150	Units	\$2,900	378,000
Electronics	Peripherals	Logitech G210	182	Units	\$2,920	397,600
Electronics	Peripherals	SteelSeries Rival 100	152	Units	\$2,940	384,960
Electronics	Peripherals	Logitech G310	185	Units	\$2,960	405,200
Electronics	Peripherals	SteelSeries Rival 100	154	Units	\$2,980	392,480
Electronics	Peripherals	Logitech G410	188	Units	\$3,000	412,800
Electronics	Peripherals	SteelSeries Rival 100	156	Units	\$3,020	399,680
Electronics	Peripherals	Logitech G510	190	Units	\$3,040	420,800
Electronics	Peripherals	SteelSeries Rival 100	158	Units	\$3,060	407,760
Electronics	Peripherals	Logitech G610	192	Units	\$3,080	428,400
Electronics	Peripherals	SteelSeries Rival 100	160	Units	\$3,100	415,200
Electronics	Peripherals	Logitech G710	195	Units	\$3,120	436,000
Electronics	Peripherals	SteelSeries Rival 100	162	Units	\$3,140	422,960
Electronics	Peripherals	Logitech G810	198	Units	\$3,160	443,600
Electronics	Peripherals	SteelSeries Rival 100	164	Units	\$3,180	429,920
Electronics	Peripherals	Logitech G910	200	Units	\$3,200	451,200
Electronics	Peripherals	SteelSeries Rival 100	166	Units	\$3,220	447,360
Electronics	Peripherals	Logitech G111	202	Units	\$3,240	458,400
Electronics	Peripherals	SteelSeries Rival 100	168	Units	\$3,260	445,720
Electronics	Peripherals	Logitech G211	205	Units	\$3,280	466,400
Electronics	Peripherals	SteelSeries Rival 100	170	Units	\$3,300	453,600
Electronics	Peripherals	Logitech G311	208	Units	\$3,320	473,200
Electronics	Peripherals	SteelSeries Rival 100	172	Units	\$3,340	460,960
Electronics	Peripherals	Logitech G411	210	Units	\$3,36	

Table 3
Summary of Field Observations - December 16, 2003
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID	Frequency	Depth to Groundwater (Feet)	Total Well Depth (Feet)	Depth of Free Product (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temperature (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-12	Initial	2.60	12.00	N/A	4.92	0.027	10.90	5.84		Full Recharge
	1st Volume				4.81	0.025	12.00	4.85	1.50	
	2nd Volume				4.78	0.023	12.20	4.96	1.50	
	3rd Volume				4.80	0.021	12.40	5.19	1.50	
	Post				4.83	0.022	12.10	5.83		
MW-13	Initial	6.24	13.00	N/A	5.19	0.043	12.50	7.60		Full Recharge
	1st Volume				5.17	0.039	12.80	7.41	1.10	
	2nd Volume				5.06	0.035	12.30	7.15	1.10	
	3rd Volume				4.95	0.035	12.70	7.34	1.10	
	Post				5.12	0.044	13.20	7.45		
MW-14	Initial	1.98	10.00	N/A	N/A	N/A	N/A	N/A	3.90	Strong Petro. Odors
MW-15	Initial	10.20	12.00	N/A	4.59	0.014	13.60	8.95	0.88	Strong Petro. Odors
DMW-1	Initial	24.00	45.00	N/A	4.74	0.030	17.10	7.22		Full Recharge
	1st Volume				5.34	0.032	16.30	5.98	3.40	
	2nd Volume				5.31	0.032	16.90	6.81	3.40	
	3rd Volume				5.29	0.031	17.20	7.51	3.40	
	Post				5.31	0.031	16.80	7.77		
DMW-2	Initial	16.88	75.00	N/A	6.23	0.095	14.40	4.32		Full Recharge
	1st Volume				6.51	0.096	14.20	3.62	9.40	
	2nd Volume				6.59	0.084	13.90	6.51	9.40	
	3rd Volume				6.59	0.060	15.20	8.58	9.60	
	Post				6.48	0.054	14.70	8.70		

Table 3
Summary of Field Observations - December 16, 2003
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID	Frequency	Depth to Groundwater (Feet)	Total Well Depth (Feet)	Depth of Free Product (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temperature (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
DMW-4	Initial	24.45	61.00	N/A	5.52	0.037	16.60	13.27		Full Recharge
	1st Volume				5.47	0.034	16.00	12.99	5.90	
	2nd Volume				5.51	0.034	15.80	12.80	5.90	
	3rd Volume				5.47	0.034	16.60	12.16	6.00	
	Post				5.55	0.037	16.70	12.39		

Notes: N/A = Not Applicable

MW-8 was Observed to have a Sheen of Free Product

MW-1, MW-2, MW-4, MW-6, MW-7, MW-10, MW-14 & MW-15 had Strong Petro. Odors, which Resulted in No Field Screening

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

job # 3e2169

Date (mm/dd/yy): 12.18.03
 Field Personnel: V. Chisholm
 General Weather Conditions: sunny

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter serial no. <u>1854</u>	Conductivity Meter serial no. <u>1854</u>
pH=4.0 <u>4.002 PH@25°C</u>	standard <u>4.49 mS/cm</u>
pH=7.0 <u></u>	standard <u></u>
pH=10.0 <u></u>	standard <u></u>

*AUTO CAL SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE INC FOR HORIBA
Chain of Custody*

Relinquished by Date/Time Received by Date/Time

Facility Name: hwy 11 groceries
 Site ID#: 03439 Monitoring Well # 1
 Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
 for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
 Depth to Ground Water (DGW) 24.06 feet
 Total Well Depth (TWD) 28.00 feet
 Length of the water column (LWC=TWD-DGW) 3.94 feet

1 casing volume (CV=LWC X C)= _____ X _____ = _____ gals
 3 casing volume (3 X CV)= 1.9 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1320</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: hot well

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Job #302169

Date (mm/dd/yy): 12.18.03
Field Personnel: V. Chishola
General Weather Conditions: sunny

Ambient Air Temperature: °C

Quality Assurance

pH Meter	Conductivity Meter
serial no.	1854
pH=4.0	<u>40.002 pH@25°C</u>
pH=7.0	<u>4.49 mS/cm</u>
pH=10.0	standard

**AUTO CAL SOLUTION PROVIDED BY PINE
ENVIRONMENTAL SERVICE INC FOR HORIBA**
Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time
------------------------	------------------	--------------------	------------------

Facility Name: hwy 11 groceries
Site ID#: 03439 Monitoring Well # 2
Water Supply Well Public Private

Monitoring Well Diameter (D): 12 feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 25.38 feet

Total Well Depth (TWD) 35.00 feet

1 casing volume (CV=LWC X C)= _____ X _____ = _____ gals

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1335
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: hot well

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 12.18.03
Field Personnel: V. Chisholm
General Weather Conditions: sunny

Ambient Air Temperature:

Quality Assurance

pH Meter	Conductivity Meter
serial no.	1854
pH=4.0	5.002 mS/cm
pH=7.0	4.49 mS/cm
pH=10.0	standard

AUTO CAL SOLUTION PROVIDER BY PINE
ENVIRONMENTAL SERVICE INC FOR HORIBA
Chain of Custody

Relinquished by _____ **Date/Time** _____ **Received by** _____ **Date/Time** _____

Facility Name: hwy 11 groceries
Site ID#: 03439 Monitoring Well # 3
Water Supply Well Public Private

Monitoring Well Diameter (D): 2 feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.653

* Free Product Thickness: feet

Depth to Ground Water (DGW) 23.92 feet

Total Well Depth (TWD) 30.83 feet
Length of the section 30.83 TWD DGS# 4 G 3

$$\text{1 casing volume (CV=LWC X C)} = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \text{gals}$$

Total Volume of Water Purged Before Sampling 303

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1510
pH (s.u.)	4.67	4.62	4.56	4.54			4.56
Specific Conductivity ($\mu\text{mhos/cm}$)	1675	.022	.017	.016			.014
Water Temperature (°C)	16.9	17.0	17.0	16.9			16.9
Dissolved Oxygen	8.00	7.41	7.62	7.81			8.01
PID readings, if required							

Remarks:

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

job # 302169

Date (mm/dd/yy): 12.18.03
Field Personnel: V. Chisholm
General Weather Conditions: sunny

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no. <u>1854</u>	serial no. <u>1854</u>
pH=4.0 <u>70.002 PH@25°C</u>	standard <u>4.49 mS/cm</u>
pH=7.0	standard
pH=10.0	standard

*Auto Cal Solution PROVIDED BY PINE ENVIRONMENTAL SERVICE INC FOR HONIBA
Chain of Custody*

Relinquished by Date/Time Received by Date/Time

Facility Name: hwy 11 grocery
Site ID#: 03439 Monitoring Well # 4
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 22.95 feet
Total Well Depth (TWD) 35.00 feet
Length of the water column (LWC=TWD-DGW) 12.05 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 1.9 gals
3 casing volume (3 X CV)= 5.8 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1415</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{hos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: hot well

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

jcb #302169

Date (mm/dd/yy):	<u>12.18.03</u>		
Field Personnel:	<u>V. Chisholm</u>		
General Weather Conditions:	<u>sunny</u>		
Ambient Air Temperature:	<u> </u> °C		
Quality Assurance			
pH Meter	Conductivity Meter		
serial no. <u>1854</u>	serial no. <u>1854</u>		
pH=4.0 <u>50.002 PH@25°C</u>	standard <u>4.49 mS/cm</u>		
pH=7.0 <u> </u>	standard <u> </u>		
pH=10.0 <u> </u>	standard <u> </u>		
<i>AUTO CAL SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE INC FOR FLORIDA Chain of Custody</i>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>hwy 11 grocery</u>					
Site ID#:	<u>03439</u>	Monitoring Well #	<u>5</u>			
Water Supply Well	Public	Private	<u> </u>			
Monitoring Well Diameter (D):	<u>2"</u>	feet	<u> </u>			
Conversion Factor (C):	$3.14 \times (D/2)^2$	for a 2 inch well C=0.163				
		for a 4 inch well C=0.652				
* Free Product Thickness:	<u> </u> feet					
Depth to Ground Water (DGW)	<u>28.40</u>	feet	<u> </u>			
Total Well Depth (TWD)	<u>35.00</u>	feet	<u> </u>			
Length of the water column (LWC=TWD-DGW)	<u>6.6</u>	feet	<u> </u>			
1 casing volume (CV=LWC X C)=	<u> </u>	X	<u> </u>	=	<u> </u>	gals
3 casing volume (3 X CV)=	<u>3.2</u>	gals (standard purge volume)				
Total Volume of Water Purged Before Sampling _____ gals.						
*If free product is present over 1/8 inch, sampling will not be required.						

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1350</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: hot well smelly

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Job #302169

Date (mm/dd/yy): 12.18.03
Field Personnel: V. Chishola
General Weather Conditions: sunny

Ambient Air Temperature: °C

Quality Assurance

pH Meter	Conductivity Meter
serial no.	1854
pH=4.0	<u>±0.002 pH @ 25°C</u>
pH=7.0	
pH=10.0	

**AUTO CAL SOLUTION PROVIDED BY PINE
ENVIRONMENTAL SERVICE INC FOR HORIBA**
Chain of Custody

Relinquished by _____ **Date/Time** _____ **Received by** _____ **Date/Time** _____

Facility Name: hwy 11 grocery

Site ID#: 03439 Monitoring Well # 6

Water Supply Well **Public** **Private**

Monitoring Well Diameter (D): 2 feet

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 21.00 feet

Total Well Depth (TWD) 32.60 feet

1 casing volume (CV=LWC X C)= _____ X _____ = _____ gals

Total Volume of Water Purged Before Sampling _____
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1440
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: hot well

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Job # 302169

Date (mm/dd/yy): 12.18.03
Field Personnel: V. Chisholm
General Weather Conditions: sunny

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no. 1854	serial no. 1854
pH=4.0 70.002 pH@25°C	standard 4.49 mS/cm
pH=7.0	standard
pH=10.0	standard

Auto Cal Solution Provider by Pine Environmental Service Inc. for Horiba
Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Hwy 11 grocery
Site ID#: 03439 Monitoring Well # 7
Water Supply Well Public Private

Monitoring Well Diameter (D): 2 feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 27.71 feet

Total Well Depth (TWD) 40.00 feet

Length of the water column (LWC=TWD-DGW) 12.29 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 2.0 gals

3 casing volume (3 X CV)= 10.0 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1500
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: hot well

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 12.18.03
Field Personnel: V. Chisholm
General Weather Conditions: sunny

Ambient Air Temperature:

Quality Assurance

pH Meter	Conductivity Meter
serial no.	1854
pH=4.0	<u>+0.002 pH @ 25°C</u>
pH=7.0	
pH=10.0	

AUTO CAD SOLUTION PROVIDED BY PINE
ENVIRONMENTAL SERVICE INC FOR HORIBA
Chain of Custody

Relinquished by _____ **Date/Time** _____ **Received by** _____ **Date/Time** _____

Facility Name:	<u>hwy 11 groceries</u>		
Site ID#:	<u>03439</u>	Monitoring Well #	<u>8</u>
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	<u>2'</u>	feet	
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163		
	for a 4 inch well C=0.652		
* Free Product Thickness:	<u>20.84 sheen</u>	feet	
Depth to Ground Water (DGW)	<u>20.82</u>	feet	
Total Well Depth (TWD)		feet	
Length of the water column (LWC=TWD-DGW)		feet	
1 casing volume (CV=LWC X C) = _____ X _____ = _____ gals			
3 casing volume (3 X CV) = _____ gals (standard purge volume)			
Total Volume of Water Purged Before Sampling	_____ gals.		
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1200
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: hot well ~~sheen~~ of product

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 12.18.03
Field Personnel: V. Chisholm
General Weather Conditions: sunny

Ambient Air Temperature: °C

Quality Assurance

pH Meter	Conductivity Meter
serial no.	1854
pH=4.0	$\pm 0.002 \text{ pH} @ 25^\circ\text{C}$
pH=7.0	4.49 mS/cm
pH=10.0	standard

AUTO CAD SOLUTION PROVIDED BY PINE
ENVIRONMENTAL SERVICE INC FOR HORIBA
Chain of Custody

Relinquished by _____ **Date/Time** _____ **Received by** _____ **Date/Time** _____

Facility Name: hwy 11 grocery
Site ID#: 03439 Monitoring Well # a
Water Supply Well Public Private

Water Supply Well	Public	Private
-------------------	--------	---------

Water Supply Well	Public	Private
-------------------	--------	---------

Monitoring Well Diameter (D): 2 feet

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 2.20 feet

Total Well Depth (TWD) 11, 0 feet
Length of the section 6 HUNDRED FEET 0 0 0

Length of the water column (LWC=TWD-DGW) 8.8 feet

$$1 \text{ casing volume (CV=LWC X C)} = \underline{\quad} \times \underline{\quad} = \underline{1.4} \text{ gals}$$

3 casing volume (3 X CV) = 4.3 gals (standard purge volume)

Total Volume of Water Purged Before Sampling **gals**

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1700
pH (s.u.)	4.87	4.83	5.07	5.27			5.27
Specific Conductivity ($\mu\text{mhos/cm}$)	.026	.026	.026	.029			.031
Water Temperature (°C)	12.5	13.0	13.1	13.2			12.3
Dissolved Oxygen	6.92	6.67	7.06	7.27			6.94
PID readings, if required							

Remarks:

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

job # 302169

Date (mm/dd/yy): 12.18.03
Field Personnel: V. Chisholm
General Weather Conditions: sunny

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter
serial no. 1854
pH=4.0 4.00 PH@25°C
pH=7.0 _____
pH=10.0 _____
Conductivity Meter
serial no. 1854
standard 4.49 mS/cm
standard _____
standard _____

ALTO CAL SOLUTION PROVIDED BY PINE
ENVIRONMENTAL SERVICE INC FOR HOMIBA
Chain of Custody

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Facility Name: hwy 11 grocery
Site ID#: 03439 Monitoring Well # 10
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 19.83 feet
Total Well Depth (TWD) 24.00 feet
Length of the water column (LWC=TWD-DGW) 4.17 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 6.7 gals
3 casing volume (3 X CV)= 20 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1425</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: hot well

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

job # 302169

Date (mm/dd/yy):	12.18.03		
Field Personnel:	V. Chisholm		
General Weather Conditions:	sunny		
Ambient Air Temperature:	_____ °C		
Quality Assurance			
pH Meter serial no.	1854		
pH=4.0	4.00 PH @ 25°C		
pH=7.0	standard		
pH=10.0	standard		
AUTO CAL SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE INC FOR HANIBA Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	hwy 11 grocery		
Site ID#:	03439	Monitoring Well #	11
Water Supply Well	Public	Private	_____
Monitoring Well Diameter (D):	2	feet	_____
Conversion Factor (C):	$3.14 \times (D/2)^2$	for a 2 inch well C=0.163	
		for a 4 inch well C=0.652	
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	16.40		
Total Well Depth (TWD)	23.0		
Length of the water column (LWC=TWD-DGW)	6.6		
1 casing volume (CV=LWC X C)=	X	= 1.0	gals
3 casing volume (3 X CV)=	3.2	gals (standard purge volume)	_____
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1645
pH (s.u.)	4.50	4.55	4.71				
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	.012	.012	.015				
Water Temperature (°C)	16.1	16.7	16.5				
Dissolved Oxygen	6.13	6.75	7.42				
PID readings, if required							

Remarks: dry after 2 gallons

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Job #302169

Date (mm/dd/yy):	<u>12.18.03</u>	
Field Personnel:	<u>V. Chisholm</u>	
General Weather Conditions:	<u>Sunny</u>	
Ambient Air Temperature:	<u> </u>	°C
<u>Quality Assurance</u>		
pH Meter	Conductivity Meter	
serial no.	<u>1854</u>	
pH=4.0	<u>F0.002 PH@25°C</u>	
pH=7.0	<u>standard</u>	<u>4.49 mS/cm</u>
pH=10.0	<u>standard</u>	<u> </u>
<small>AUTO CAL SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE INC FOR HORIBA Chain of Custody</small>		
Relinquished by	Date/Time	Received by

Facility Name:	<u>hwy 11 grocery</u>	
Site ID#:	<u>03439</u>	Monitoring Well # <u>12</u>
Water Supply Well	Public	Private
Monitoring Well Diameter (D):	<u>2</u>	feet
Conversion Factor (C):	$3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652
* Free Product Thickness:	<u> </u> feet	
Depth to Ground Water (DGW)	<u>2.60</u> feet	
Total Well Depth (TWD)	<u>12.00</u> feet	
Length of the water column (LWC=TWD-DGW)	<u>9.4</u> feet	
1 casing volume (CV=LWC X C)=	<u> </u> X <u> </u>	= <u>1.5</u> gals
3 casing volume (3 X CV)=	<u>4.5</u> gals (standard purge volume)	
Total Volume of Water Purged Before Sampling <u> </u> gals.		
*If free product is present over 1/8 inch, sampling will not be required.		

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1715</u>
pH (s.u.)	<u>4.92</u>	<u>4.81</u>	<u>4.78</u>	<u>4.80</u>			<u>4.83</u>
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	<u>0.27</u>	<u>0.25</u>	<u>0.23</u>	<u>0.21</u>			<u>0.22</u>
Water Temperature (°C)	<u>10.9</u>	<u>12.0</u>	<u>12.2</u>	<u>12.4</u>			<u>12.1</u>
Dissolved Oxygen	<u>5.84</u>	<u>4.85</u>	<u>4.96</u>	<u>5.19</u>			<u>5.83</u>
PID readings, if required							

Remarks: _____

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

job # 302169

Date (mm/dd/yy):	12.18.03
Field Personnel:	V. Chisholm
General Weather Conditions:	sunny
Ambient Air Temperature:	_____ °C
<u>Quality Assurance</u>	
pH Meter serial no.	1854
pH=4.0	<u>FO.002 PH@25°C</u>
pH=7.0	standard
pH=10.0	standard
AUTO CAL SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE INC FOR HORIBA Chain of Custody	
Relinquished by	Date/Time
Received by	Date/Time

Facility Name:	hwy 11 grocery		
Site ID#:	03439	Monitoring Well #	13
Water Supply Well	Public	Private	_____
Monitoring Well Diameter (D):	2"	feet	_____
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163		
	for a 4 inch well C=0.652		
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	6.24		
Total Well Depth (TWD)	13.0		
Length of the water column (LWC=TWD-DGW)	6.76		
1 casing volume (CV=LWC X C)= _____ X _____ = 1.1 gals			
3 casing volume (3 X CV)= 3.3 gals (standard purge volume)			
Total Volume of Water Purged Before Sampling	gals.		
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1520
pH (s.u.)	5.19	5.17	5.06	4.95			5.12
Specific Conductivity ($\mu\text{mhos/cm}$)	,043	,039	,035	,035			,041
Water Temperature (°C)	12.5	12.8	12.3	12.7			13.2
Dissolved Oxygen	7.60	7.41	7.15	7.34			7.45
PID readings, if required							

Remarks: _____

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Job # 302169

Date (mm/dd/yy):	12.18.03		
Field Personnel:	V. Chisholm		
General Weather Conditions:	sunny		
Ambient Air Temperature:	_____ °C		
Quality Assurance			
pH Meter	Conductivity Meter		
serial no.	1854		
pH=4.0	standard 4.49 mS/cm		
pH=7.0	standard		
pH=10.0	standard		
AUTO CAL SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE INC FOR HORIBA Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	hwy 11 grocery		
Site ID#:	03439	Monitoring Well #	14
Water Supply Well	Public	Private	_____
Monitoring Well Diameter (D):	2'	feet	_____
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163		
	for a 4 inch well C=0.652		
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	1.98	feet	
Total Well Depth (TWD)	10.0	feet	
Length of the water column (LWC=TWD-DGW)	8.02	feet	
1 casing volume (CV=LWC X C)= _____ X _____ = 1.3 gals			
3 casing volume (3 X CV)= 3.9 gals (standard purge volume)			
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							17:30
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks:	hot well						

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Job # 302169

Date (mm/dd/yy): 12.18.03
Field Personnel: V. Chisholm
General Weather Conditions: sunny

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter
serial no. 1854
pH=4.0 4.000 PH@25°C
pH=7.0 _____
pH=10.0 _____
Conductivity Meter
serial no. 1854
standard 4.49 mS/cm
standard _____
standard _____

AUTO CAL SOLUTION PROVIDED BY PINE
ENVIRONMENTAL SERVICE INC FOR HORIBA
Chain of Custody

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Facility Name: hwy 11 grocery
Site ID#: 03439 Monitoring Well # 15
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 10.20 feet
Total Well Depth (TWD) 12.00 feet
Length of the water column (LWC=TWD-DGW) 1.80 feet

1 casing volume (CV=LWC X C)= _____ X _____ = .29 gals
3 casing volume (3 X CV)= .88 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1520</u>
pH (s.u.)	<u>4.57</u>						
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	<u>.014</u>						
Water Temperature (°C)	<u>13.6</u>						
Dissolved Oxygen	<u>8.95</u>						
PID readings, if required							

Remarks: went dry after 1 and 1/2 gallons

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

job # 302169

Date (mm/dd/yy):	<u>12.18.03</u>		
Field Personnel:	<u>V. Chisholm</u>		
General Weather Conditions:	<u>sunny</u>		
Ambient Air Temperature:	<u> °C</u>		
Quality Assurance			
pH Meter serial no.	<u>1854</u>	Conductivity Meter serial no.	<u>1854</u>
pH=4.0	<u>70.002 PH@25°C</u>	standard	<u>4.49 mS/cm</u>
pH=7.0	<u> </u>	standard	<u> </u>
pH=10.0	<u> </u>	standard	<u> </u>
<small>AUTO CAL SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE INC FOR HORIBA Chain of Custody</small>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>hwy 11 grocery</u>		
Site ID#:	<u>03439</u>	Monitoring Well #	<u>DW-1</u>
Water Supply Well	<input checked="" type="checkbox"/> Public	<input type="checkbox"/> Private	<input type="checkbox"/>
Monitoring Well Diameter (D):	<u>2"</u>	feet	
Conversion Factor (C):	$3.14 \times (D/2)^2$	for a 2 inch well C=0.163	
		for a 4 inch well C=0.652	
* Free Product Thickness:	<u> </u> feet		
Depth to Ground Water (DGW)	<u>24.00</u> feet		
Total Well Depth (TWD)	<u>45.00</u> feet		
Length of the water column (LWC=TWD-DGW)	<u>21.0</u> feet		
1 casing volume (CV=LWC X C)=	<u> </u> X <u> </u>	= <u>3.4</u>	gals
3 casing volume (3 X CV)=	<u>10.2</u>	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1600</u>
pH (s.u.)	<u>4.74</u>	<u>5.34</u>	<u>5.31</u>	<u>5.29</u>			<u>5.31</u>
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	<u>1030</u>	<u>.032</u>	<u>.032</u>	<u>.031</u>			<u>.031</u>
Water Temperature (°C)	<u>17.1</u>	<u>16.3</u>	<u>16.9</u>	<u>17.2</u>			<u>16.8</u>
Dissolved Oxygen	<u>7.22</u>	<u>5.98</u>	<u>6.81</u>	<u>7.51</u>			<u>7.77</u>
PID readings, if required							

Remarks: _____

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

job # 302169

Date (mm/dd/yy): 12.18.03
Field Personnel: V. Chisholm
General Weather Conditions: sunny

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter
serial no. 1854
pH=4.0 ~~70.00 PH@25°C~~
pH=7.0 _____
pH=10.0 _____
Conductivity Meter
serial no. 1854
standard 4.49 mS/cm
standard _____
standard _____

AUTO CAL SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE INC FOR HOMESTA
Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Hwy 11 grocery
Site ID#: 03439 Monitoring Well # Dw.2
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2 feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 16.88 feet
Total Well Depth (TWD) 75.00 feet
Length of the water column (LWC=TWD-DGW) 58.12 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 9.4 gals
3 casing volume (3 X CV)= 28.4 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							0900
pH (s.u.)	6.23	6.51	6.59	6.59			6.48
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	.095	.096	.084	.060			.054
Water Temperature (°C)	14.1	14.2	13.9	15.2			14.7
Dissolved Oxygen	7.32	2.62	6.57	8.58			8.70
PID readings, if required							

Remarks: _____

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Job # 302169

Date (mm/dd/yy): 12.18.03
Field Personnel: V. Chisholm
General Weather Conditions: sunny

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no. <u>1854</u>	serial no. <u>1854</u>
pH=4.0 <u>70.002 PH@25°C</u>	standard <u>4.49 mS/cm</u>
pH=7.0	standard
pH=10.0	standard

*AUTO CAL SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE INC FOR MONIBA
Chain of Custody*

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Facility Name: hwy 11 grocery
Site ID#: 03439 Monitoring Well # D6,4

Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 24.45 feet

Total Well Depth (TWD) 61.00 feet

Length of the water column (LWC=TWD-DGW) 36.55 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 5.4 gals

3 casing volume (3 X CV)= 17.8 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1630</u>
pH (s.u.)	<u>5.52</u>	<u>5.47</u>	<u>5.51</u>	<u>5.47</u>			<u>5.55</u>
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	<u>.037</u>	<u>.034</u>	<u>.034</u>	<u>.034</u>			<u>.037</u>
Water Temperature (°C)	<u>16.6</u>	<u>16.0</u>	<u>15.8</u>	<u>16.6</u>			<u>16.7</u>
Dissolved Oxygen	<u>13.27</u>	<u>12.91</u>	<u>12.80</u>	<u>12.16</u>			<u>12.39</u>
PID readings, if required							

Remarks: _____

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 12.18.03
Field Personnel: V. Chisholm
General Weather Conditions: sunny

Ambient Air Temperature: °C

Quality Assurance

pH Meter	Conductivity Meter
serial no.	1854
pH=4.0	40.002 mS/cm @ 25°C
pH=7.0	4.49 mS/cm
pH=10.0	standard

AUTO CAL SOLUTION PROVIDED BY PINE
ENVIRONMENTAL SERVICE INC FOR HORIBA
Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time
------------------------	------------------	--------------------	------------------

Facility Name:	<u>hwy 11 groceries</u>		
Site ID#:	<u>03439</u>	Monitoring Well #	<u>CK-1</u>
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	<u>7'</u>	feet	
Conversion Factor (C): $3.14 \times (D/2)^2$		for a 2 inch well C=0.163	
		for a 4 inch well C=0.652	
* Free Product Thickness:		feet	
Depth to Ground Water (DGW)		feet	
Total Well Depth (TWD)		feet	
Length of the water column (LWC=TWD-DGW)		feet	
1 casing volume (CV=LWC X C)=	X	=	gals
3 casing volume (3 X CV)=	gals	(standard purge volume)	
Total Volume of Water Purged Before Sampling		gals.	
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1735
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: Sample taken on East side of Reid Drive at base of opening

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Job # 302169

Date (mm/dd/yy): 12.18.03
Field Personnel: V. Chisholm
General Weather Conditions: sunny

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter
serial no. 1854
pH=4.0 4.000 PH@25°C
pH=7.0 standard
pH=10.0 standard

Conductivity Meter
serial no. 1854
standard 4.49 mS/cm
standard standard

ALTO CAL SOLUTION PROVIDED BY PINE
ENVIRONMENTAL SERVICE INC FOR HOMIBA
Chain of Custody

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Facility Name: hwy 11 grocery
Site ID#: 03439 Monitoring Well #: CK-2
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 40 feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) _____ feet

Total Well Depth (TWD) _____ feet

Length of the water column (LWC=TWD-DGW) _____ feet

1 casing volume (CV=LWC X C)= _____ X _____ = _____ gals

3 casing volume (3 X CV)= _____ gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1535</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: Sample taken near MW-15 South of hwy 11

Appendix E

Table 4, Summary of December 18, 2003 Laboratory Analytical Results
&
Copies of the Laboratory Analytical Results

Table 4
Summary of Laboratory Analytical Results
December 18, 2003
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Naphthalene (ppb)
MW-1	2,200.00	6,200.00	910.00	5,800.00	16,000.00	2,500.00
MW-2	2.20	5.00	1.00	3.00	1.00	5.00
MW-3	1.00	5.00	1.00	3.00	1.00	5.00
MW-4	1,100.00	2,400.00	230.00	1,900.00	1,200.00	250.00
MW-5	2.30	5.00	1.00	3.20	1.30	5.00
MW-6	5,100.00	14,000.00	1,700.00	11,000.00	19,000.00	2,500.00
MW-7	41.00	20.00	1.00	3.00	1.00	5.00
MW-8	10,000.00	27,000.00	3,300.00	18,000.00	14,000.00	2,500.00
MW-9	1.00	5.00	1.00	3.00	1.00	5.00
MW-10	89.00	280.00	74.00	480.00	91.00	25.00
MW-11	1.00	5.00	1.00	3.00	1.00	5.00
MW-12	1.00	5.00	1.00	3.00	1.00	5.00
MW-13	1.00	5.00	1.00	3.00	1.00	5.00
MW-14	3,300.00	11,000.00	2,000.00	11,000.00	4,100.00	500.00
MW-15	1.00	5.00	1.00	3.00	1.00	5.00
DMW-1	1.50	5.00	1.00	4.20	140.00	5.00
DMW-2	1.00	5.00	1.00	3.00	1.00	5.00
DMW-4	1.00	5.00	1.00	3.00	1.00	5.00
CK-1	11.00	18.00	4.10	20.00	9.00	5.00
CK-2	1.00	5.00	1.00	3.00	1.00	5.00

Notes: Samples with Values At Below Detection Limit are Reported at Highest Detection Limit
MW-8 was Observed to have the Presence of a Sheen of Free Product

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

December 26, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

ESC Sample # : L139059-01

Date Received : December 22, 2003
Description : Hwy 11 Grocery

Site ID : 03439

Sample ID : MW-1

Project # : 302-169

Collected By : V Chisholm
Collection Date : 12/18/03 13:20

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	2200	500	ug/l	8260B	12/23/03	500
Toluene	6200	2500	ug/l	8260B	12/23/03	500
Ethylbenzene	910	500	ug/l	8260B	12/23/03	500
Total Xylenes	5800	1500	ug/l	8260B	12/23/03	500
Methyl tert-butyl ether	16000	500	ug/l	8260B	12/23/03	500
Naphthalene	BDL	2500	ug/l	8260B	12/23/03	500
Surrogate Recovery						
Toluene-d8	98.		% Rec.	8260B	12/23/03	500
Dibromofluoromethane	110		% Rec.	8260B	12/23/03	500
4-Bromofluorobenzene	96.		% Rec.	8260B	12/23/03	500

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

December 26, 2003

Date Received : December 22, 2003
Description : Hwy 11 Grocery
Sample ID : MW-2
Collected By : V Chisholm
Collection Date : 12/18/03 13:35

ESC Sample # : L139059-02
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	2.2	1.0	ug/l	8260B	12/23/03	1
Toluene	BDL	5.0	ug/l	8260B	12/23/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	12/23/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	12/23/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	12/23/03	1
Naphthalene	BDL	5.0	ug/l	8260B	12/23/03	1
Surrogate Recovery						
Toluene-d8	97.		% Rec.	8260B	12/23/03	1
Dibromofluoromethane	110		% Rec.	8260B	12/23/03	1
4-Bromofluorobenzene	92.		% Rec.	8260B	12/23/03	1

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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Est. 1970

REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

December 26, 2003

Date Received : December 22, 2003
Description : Hwy 11 Grocery

ESC Sample # : L139059-03

Sample ID : MW-3

Site ID : 03439

Collected By : V Chisholm
Collection Date : 12/18/03 15:10

Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	12/23/03	1
Toluene	BDL	5.0	ug/l	8260B	12/23/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	12/23/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	12/23/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	12/23/03	1
Naphthalene	BDL	5.0	ug/l	8260B	12/23/03	1
Surrogate Recovery						
Toluene-d8	97.		% Rec.	8260B	12/23/03	1
Dibromofluoromethane	110		% Rec.	8260B	12/23/03	1
4-Bromofluorobenzene	92.		% Rec.	8260B	12/23/03	1

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

The reported analytical results relate only to the sample submitted.

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

December 26, 2003

Date Received : December 22, 2003
Description : Hwy 11 Grocery
Sample ID : MW-4
Collected By : V Chisholm
Collection Date : 12/18/03 14:15

ESC Sample # : L139059-04

Site ID : 03439

Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	1100	50.	ug/l	8260B	12/23/03	50
Toluene	2400	250	ug/l	8260B	12/23/03	50
Ethylbenzene	230	50.	ug/l	8260B	12/23/03	50
Total Xylenes	1900	150	ug/l	8260B	12/23/03	50
Methyl tert-butyl ether	1200	50.	ug/l	8260B	12/23/03	50
Naphthalene	BDL	250	ug/l	8260B	12/23/03	50
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	12/23/03	50
Dibromofluoromethane	110		% Rec.	8260B	12/23/03	50
4-Bromofluorobenzene	110		% Rec.	8260B	12/23/03	50

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

December 26, 2003

Date Received : December 22, 2003
Description : Hwy 11 Grocery
Sample ID : MW-5
Collected By : V Chisholm
Collection Date : 12/18/03 13:50

ESC Sample # : L139059-05
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	2.3	1.0	ug/l	8260B	12/23/03	1
Toluene	BDL	5.0	ug/l	8260B	12/23/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	12/23/03	1
Total Xylenes	3.2	3.0	ug/l	8260B	12/23/03	1
Methyl tert-butyl ether	1.3	1.0	ug/l	8260B	12/23/03	1
Naphthalene	BDL	5.0	ug/l	8260B	12/23/03	1
Surrogate Recovery						
Toluene-d8	98.		% Rec.	8260B	12/23/03	1
Dibromofluoromethane	110		% Rec.	8260B	12/23/03	1
4-Bromofluorobenzene	96.		% Rec.	8260B	12/23/03	1

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

December 26, 2003

Date Received : December 22, 2003
Description : Hwy 11 Grocery
Sample ID : MW-6
Collected By : V Chisholm
Collection Date : 12/18/03 14:40

ESC Sample # : L139059-06

Site ID : 03439

Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	5100	500	ug/l	8260B	12/23/03	500
Toluene	14000	2500	ug/l	8260B	12/23/03	500
Ethylbenzene	1700	500	ug/l	8260B	12/23/03	500
Total Xylenes	11000	1500	ug/l	8260B	12/23/03	500
Methyl tert-butyl ether	19000	500	ug/l	8260B	12/23/03	500
Naphthalene	BDL	2500	ug/l	8260B	12/23/03	500
Surrogate Recovery						
Toluene-d8	98.		% Rec.	8260B	12/23/03	500
Dibromofluoromethane	100		% Rec.	8260B	12/23/03	500
4-Bromofluorobenzene	92.		% Rec.	8260B	12/23/03	500

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

December 26, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

ESC Sample # : L139059-07

Date Received : December 22, 2003
Description : Hwy 11 Grocery

Site ID : 03439

Sample ID : MW-7

Project # : 302-169

Collected By : V Chisholm
Collection Date : 12/18/03 15:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	41.	1.0	ug/l	8260B	12/23/03	1
Toluene	20.	5.0	ug/l	8260B	12/23/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	12/23/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	12/23/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	12/23/03	1
Naphthalene	BDL	5.0	ug/l	8260B	12/23/03	1
Surrogate Recovery						
Toluene-d8	94.		% Rec.	8260B	12/23/03	1
Dibromofluoromethane	110		% Rec.	8260B	12/23/03	1
4-Bromofluorobenzene	93.		% Rec.	8260B	12/23/03	1

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

December 26, 2003

ESC Sample # : L139059-08

Date Received : December 22, 2003

Site ID : 03439

Description : Hwy 11 Grocery

Project # : 302-169

Sample ID : MW-8

Collected By : V Chisholm
Collection Date : 12/18/03 12:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	10000	500	ug/l	8260B	12/23/03	500
Toluene	27000	2500	ug/l	8260B	12/23/03	500
Ethylbenzene	3300	500	ug/l	8260B	12/23/03	500
Total Xylenes	18000	1500	ug/l	8260B	12/23/03	500
Methyl tert-butyl ether	14000	500	ug/l	8260B	12/23/03	500
Naphthalene	BDL	2500	ug/l	8260B	12/23/03	500
Surrogate Recovery						
Toluene-d8	98.		% Rec.	8260B	12/23/03	500
Dibromofluoromethane	100		% Rec.	8260B	12/23/03	500
4-Bromofluorobenzene	94.		% Rec.	8260B	12/23/03	500

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

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REPORT OF ANALYSIS

December 26, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

ESC Sample # : L139059-09

Date Received : December 22, 2003

Site ID : 03439

Description : Hwy 11 Grocery

Project # : 302-169

Sample ID : MW-9

Collected By : V Chisholm
Collection Date : 12/18/03 17:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	12/23/03	1
Toluene	BDL	5.0	ug/l	8260B	12/23/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	12/23/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	12/23/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	12/23/03	1
Naphthalene	BDL	5.0	ug/l	8260B	12/23/03	1
Surrogate Recovery						
Toluene-d8	96.		% Rec.	8260B	12/23/03	1
Dibromofluoromethane	110		% Rec.	8260B	12/23/03	1
4-Bromofluorobenzene	93.		% Rec.	8260B	12/23/03	1

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

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REPORT OF ANALYSIS

December 26, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

ESC Sample # : L139059-10

Date Received : December 22, 2003

Site ID : 03439

Description : Hwy 11 Grocery

Project # : 302-169

Sample ID : MW-10

Collected By : V Chisholm
Collection Date : 12/18/03 14:25

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	89.	5.0	ug/l	8260B	12/23/03	5
Toluene	280	25.	ug/l	8260B	12/23/03	5
Ethylbenzene	74.	5.0	ug/l	8260B	12/23/03	5
Total Xylenes	480	15.	ug/l	8260B	12/23/03	5
Methyl tert-butyl ether	91.	5.0	ug/l	8260B	12/23/03	5
Naphthalene	BDL	25.	ug/l	8260B	12/23/03	5
Surrogate Recovery						
Toluene-d8	98.		% Rec.	8260B	12/23/03	5
Dibromofluoromethane	100		% Rec.	8260B	12/23/03	5
4-Bromofluorobenzene	110		% Rec.	8260B	12/23/03	5

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DM21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

December 26, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

ESC Sample # : L139059-11

Date Received : December 22, 2003
Description : Hwy 11 Grocery

Site ID : 03439

Sample ID : MW-11

Project # : 302-169

Collected By : V Chisholm
Collection Date : 12/18/03 16:45

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	12/23/03	1
Toluene	BDL	5.0	ug/l	8260B	12/23/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	12/23/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	12/23/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	12/23/03	1
Naphthalene	BDL	5.0	ug/l	8260B	12/23/03	1
Surrogate Recovery						
Toluene-d8	97.		% Rec.	8260B	12/23/03	1
Dibromofluoromethane	110		% Rec.	8260B	12/23/03	1
4-Bromofluorobenzene	95.		% Rec.	8260B	12/23/03	1

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
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REPORT OF ANALYSIS

December 26, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

ESC Sample # : L139059-12

Date Received : December 22, 2003

Site ID : 03439

Description : Hwy 11 Grocery

Project # : 302-169

Sample ID : MW-12

Collected By : V Chisholm
Collection Date : 12/18/03 17:15

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	12/22/03	1
Toluene	BDL	5.0	ug/l	8260B	12/22/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	12/22/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	12/22/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	12/22/03	1
Naphthalene	BDL	5.0	ug/l	8260B	12/22/03	1
Surrogate Recovery						
Toluene-d8	99.		% Rec.	8260B	12/22/03	1
Dibromofluoromethane	100		% Rec.	8260B	12/22/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	12/22/03	1

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

December 26, 2003

Date Received : December 22, 2003
Description : Hwy 11 Grocery

ESC Sample # : L139059-13

Sample ID : MW-13

Site ID : 03439

Collected By : V Chisholm
Collection Date : 12/18/03 15:30

Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	12/22/03	1
Toluene	BDL	5.0	ug/l	8260B	12/22/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	12/22/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	12/22/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	12/22/03	1
Naphthalene	BDL	5.0	ug/l	8260B	12/22/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	12/22/03	1
Dibromofluoromethane	100		% Rec.	8260B	12/22/03	1
4-Bromofluorobenzene	99.		% Rec.	8260B	12/22/03	1

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

December 26, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

ESC Sample # : L139059-14

Date Received : December 22, 2003
Description : Hwy 11 Grocery

Site ID : 03439

Sample ID : MW-14

Project # : 302-169

Collected By : V Chisholm
Collection Date : 12/18/03 17:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	3300	100	ug/l	8260B	12/23/03	100
Toluene	11000	500	ug/l	8260B	12/23/03	100
Ethylbenzene	2000	100	ug/l	8260B	12/23/03	100
Total Xylenes	11000	300	ug/l	8260B	12/23/03	100
Methyl tert-butyl ether	4100	100	ug/l	8260B	12/23/03	100
Naphthalene	BDL	500	ug/l	8260B	12/23/03	100
Surrogate Recovery						
Toluene-d8	99.		% Rec.	8260B	12/23/03	100
Dibromofluoromethane	100		% Rec.	8260B	12/23/03	100
4-Bromofluorobenzene	100		% Rec.	8260B	12/23/03	100

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

December 26, 2003

Date Received : December 22, 2003
Description : Hwy 11 Grocery
Sample ID : MW-15
Collected By : V Chisholm
Collection Date : 12/18/03 15:20

ESC Sample # : L139059-15

Site ID : 03439

Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	12/23/03	1
Toluene	BDL	5.0	ug/l	8260B	12/23/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	12/23/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	12/23/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	12/23/03	1
Naphthalene	BDL	5.0	ug/l	8260B	12/23/03	1
Surrogate Recovery						
Toluene-d8	98.		% Rec.	8260B	12/23/03	1
Dibromofluoromethane	100		% Rec.	8260B	12/23/03	1
4-Bromofluorobenzene	99.		% Rec.	8260B	12/23/03	1

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
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Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

December 26, 2003

Date Received : December 22, 2003
Description : Hwy 11 Grocery
Sample ID : DW-1
Collected By : V Chisholm
Collection Date : 12/18/03 16:00

ESC Sample # : L139059-16
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	1.5	1.0	ug/l	8260B	12/23/03	1
Toluene	BDL	5.0	ug/l	8260B	12/23/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	12/23/03	1
Total Xylenes	4.2	3.0	ug/l	8260B	12/23/03	1
Methyl tert-butyl ether	140	1.0	ug/l	8260B	12/23/03	1
Naphthalene	BDL	5.0	ug/l	8260B	12/23/03	1
Surrogate Recovery						
Toluene-d8	99.		% Rec.	8260B	12/23/03	1
Dibromofluoromethane	100		% Rec.	8260B	12/23/03	1
4-Bromofluorobenzene	97.		% Rec.	8260B	12/23/03	1

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 12/26/03 16:40 Printed: 12/26/03 16:41



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REPORT OF ANALYSIS

December 26, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

ESC Sample # : L139059-17

Date Received : December 22, 2003

Site ID : 03439

Description : Hwy 11 Grocery

Project # : 302-169

Sample ID : DW-2

Collected By : V Chisholm
Collection Date : 12/19/03 09:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	12/23/03	1
Toluene	BDL	5.0	ug/l	8260B	12/23/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	12/23/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	12/23/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	12/23/03	1
Naphthalene	BDL	5.0	ug/l	8260B	12/23/03	1
Surrogate Recovery						
Toluene-d8	97.		% Rec.	8260B	12/23/03	1
Dibromofluoromethane	93.		% Rec.	8260B	12/23/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	12/23/03	1

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

December 26, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

ESC Sample # : L139059-18

Date Received : December 22, 2003
Description : Hwy 11 Grocery

Site ID : 03439

Sample ID : DW-4

Project # : 302-169

Collected By : V Chisholm
Collection Date : 12/18/03 16:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	12/23/03	1
Toluene	BDL	5.0	ug/l	8260B	12/23/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	12/23/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	12/23/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	12/23/03	1
Naphthalene	BDL	5.0	ug/l	8260B	12/23/03	1
Surrogate Recovery						
Toluene-d8	97.		% Rec.	8260B	12/23/03	1
Dibromofluoromethane	97.		% Rec.	8260B	12/23/03	1
4-Bromofluorobenzene	98.		% Rec.	8260B	12/23/03	1

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

December 26, 2003

Date Received : December 22, 2003
Description : Hwy 11 Grocery

ESC Sample # : L139059-19

Sample ID : CK-1

Site ID : 03439

Collected By : V Chisholm
Collection Date : 12/18/03 17:35

Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	11.	1.0	ug/l	8260B	12/23/03	1
Toluene	18.	5.0	ug/l	8260B	12/23/03	1
Ethylbenzene	4.1	1.0	ug/l	8260B	12/23/03	1
Total Xylenes	20.	3.0	ug/l	8260B	12/23/03	1
Methyl tert-butyl ether	9.0	1.0	ug/l	8260B	12/23/03	1
Naphthalene	BDL	5.0	ug/l	8260B	12/23/03	1
Surrogate Recovery						
Toluene-d8	99.		% Rec.	8260B	12/23/03	1
Dibromofluoromethane	98.		% Rec.	8260B	12/23/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	12/23/03	1

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

December 26, 2003

Date Received : December 22, 2003
Description : Hwy 11 Grocery
Sample ID : CK-2
Collected By : V Chisholm
Collection Date : 12/18/03 15:35

ESC Sample # : L139059-20
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	12/23/03	1
Toluene	BDL	5.0	ug/l	8260B	12/23/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	12/23/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	12/23/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	12/23/03	1
Naphthalene	BDL	5.0	ug/l	8260B	12/23/03	1
Surrogate Recovery						
Toluene-d8	99.		% Rec.	8260B	12/23/03	1
Dibromofluoromethane	100		% Rec.	8260B	12/23/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	12/23/03	1

Kevin Summar, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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Attachment A
List of Analytes with QC Qualifiers

Sample #	Analyte	Qualifier
L139059-12	Methyl tert-butyl ether	J4
L139059-13	Methyl tert-butyl ether	J4
L139059-17	Methyl tert-butyl ether	J4
L139059-18	Methyl tert-butyl ether	J4
L139059-19	Methyl tert-butyl ether	J4
L139059-20	Methyl tert-butyl ether	J4

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning																					
J4	<p>The associated batch QC was outside the established quality control range for accuracy.</p> <p style="text-align: center;">Qualifier Report Information</p> <p>ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).</p> <p style="text-align: center;">Definitions</p> <p>Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.</p> <p>Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.</p> <p>Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.</p> <p style="text-align: center;">Control Limits</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">2-Fluorophenol</td> <td style="width: 15%;">31-119</td> <td style="width: 20%;">Nitrobenzene-d5</td> <td style="width: 15%;">43-118</td> <td style="width: 20%;">Dibromfluoromethane</td> <td style="width: 15%;">79-126</td> <td style="width: 15%;">83-119</td> </tr> <tr> <td>Phenol-d5</td> <td>12-134</td> <td>2-Fluorobiphenyl</td> <td>45-128</td> <td>Toluene-d8</td> <td>81-114</td> <td>82-116</td> </tr> <tr> <td>2,4,6-Tribromophenol</td> <td>51-141</td> <td>Terphenyl-d14</td> <td>43-137</td> <td>4-Bromofluorobenzene</td> <td>65-129</td> <td>72-126</td> </tr> </table> <p>TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.</p>	2-Fluorophenol	31-119	Nitrobenzene-d5	43-118	Dibromfluoromethane	79-126	83-119	Phenol-d5	12-134	2-Fluorobiphenyl	45-128	Toluene-d8	81-114	82-116	2,4,6-Tribromophenol	51-141	Terphenyl-d14	43-137	4-Bromofluorobenzene	65-129	72-126
2-Fluorophenol	31-119	Nitrobenzene-d5	43-118	Dibromfluoromethane	79-126	83-119																
Phenol-d5	12-134	2-Fluorobiphenyl	45-128	Toluene-d8	81-114	82-116																
2,4,6-Tribromophenol	51-141	Terphenyl-d14	43-137	4-Bromofluorobenzene	65-129	72-126																

Summary of Remarks For Samples Printed
12/26/03 at 16:41:14

TSR Signing Reports: 641
R4 - Required TAT

Sample: L139059-01 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-02 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-03 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-04 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-05 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-06 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-07 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-08 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-09 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-10 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-11 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-12 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-13 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-14 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-15 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-16 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-17 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-18 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-19 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40
Sample: L139059-20 Account: SEICSC Received: 12/22/03 10:00 Due Date: 12/26/03 00:00 RPT Date: 12/26/03 16:40

Company Name/Address: SEI Environmental - Columbia, SC 3021 McNaughton Drive, Suite 9 Columbia, SC 29223		Alternate billing information:		Analysis/Container/Preservative		Chain of Custody Page ____ of ____
Report to: Paul Bekish		Email to:				Prepared by:
Project Description: Hwy 11 Grocery		City/State Collected: Salem, SC				 ENVIRONMENTAL SCIENCE CORP.
Phone: (803) 788-2535 FAX: (803) 788-2399		Client Project #: 302169		ESC Key:		12065 Lebanon Road Mt. Juliet, TN 37122
Collected by: V. Chisholm		Site/Facility ID#: 043		P.O.#:		Phone (615) 758-5858 Phone (800) 767-5859 FAX (615) 758-5859
Collected by (Signature): Van Chisholm		<input checked="" type="checkbox"/> Rush? (Lab MUST Be Notified) Same Day.....200% Next Day.....100% Two Day.....50%		Date Results Needed: 12-26-03 Email? No Yes FAX? No Yes	No. of Cntrs	CoCode SEICSC (lab use only) Template/Prelogin Shipped Via:
Packed on Ice N Y						Remarks/Contaminant Sample # (lab only)
Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	
MW-1	Grab	GW		12/18/03	1320	2 X
-2					1335	
-3					1510	
-4					1415	
-5					1350	
-6					1440	
-7					1500	
-8					1200	
-9					1700	

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier	Condition: (lab use only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: _____ Bottles Received: _____	
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: _____ Time: _____	pH Checked: _____ NCF: _____

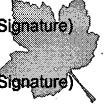
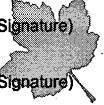
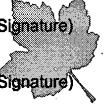
Company Name/Address: SEI Environmental - Columbia, SC 3021 McNaughton Drive. Suite 9 Columbia, SC 29223		Alternate billing information:			Analysis/Container/Preservative			Chain of Custody Page ____ of ____		
Report to: <i>Paul Bekish</i>		Email to:						Prepared by:		
Project Description: <i>hwy 11 grocery</i>		City/State Collected <i>Salem, S.C.</i>						ENVIRONMENTAL SCIENCE CORP.		
Phone: (803) 788-2535 FAX: (803) 788-2399		Client Project #: <i>302169</i>			ESC Key:			12065 Lebanon Road Mt. Juliet, TN 37122		
Collected by: <i>V. Chisholm</i>		Site/Facility ID#: <i>03439</i>			P.O. #:			Phone (615) 758-5858 Phone (800) 767-5859 FAX (615) 758-5859		
Collected by (signature): <i>V. Chisholm</i>		<input checked="" type="checkbox"/> Rush? (Lab MUST Be Notified)		Date Results Needed: <i>12-26-03</i>	No. of Cntrs	<i>Bitter + NAP II, MTEC</i>			CoCode SEICSC (lab use only) Template/Prellogin	
Packed on Ice N <i>(Y)</i>		<input type="checkbox"/> Same Day.....200% <input type="checkbox"/> Next Day.....100% <input type="checkbox"/> Two Day.....50%		Email? <i>No</i> Yes FAX? <i>No</i> Yes					Shipped Via:	
Sample ID	Comp/Grab	Matrix*	Depth	Date <i>12-18-03</i>	Time <i>1425</i>	2	x		Remarks/Contaminant	Sample # (lab only)
<i>MW-10</i>	<i>Grub</i>	<i>GW</i>								
<i>-11</i>					<i>1645</i>					
<i>-12</i>					<i>1715</i>					
<i>-13</i>					<i>1530</i>					
<i>-14</i>					<i>1730</i>					
<i>-15</i>					<i>1520</i>					
<i>DW-1</i>					<i>1600</i>					
<i>-2</i>				<i>12-19-03</i>	<i>0900</i>					
<i>-4</i>				<i>12-18-03</i>	<i>1630</i>		v			

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature) 	Date:	Time:	Received by: (Signature) 	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>		Condition:	(lab use only)
Relinquished by: (Signature) 	Date:	Time:	Received by: (Signature) 	Temp: _____ Bottles Received: _____			
Relinquished by: (Signature) 	Date:	Time:	Received for lab by: (Signature) 	Date: _____	Time: _____	pH Checked: _____	NCF: _____

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other Creek

pH _____ Temp _____

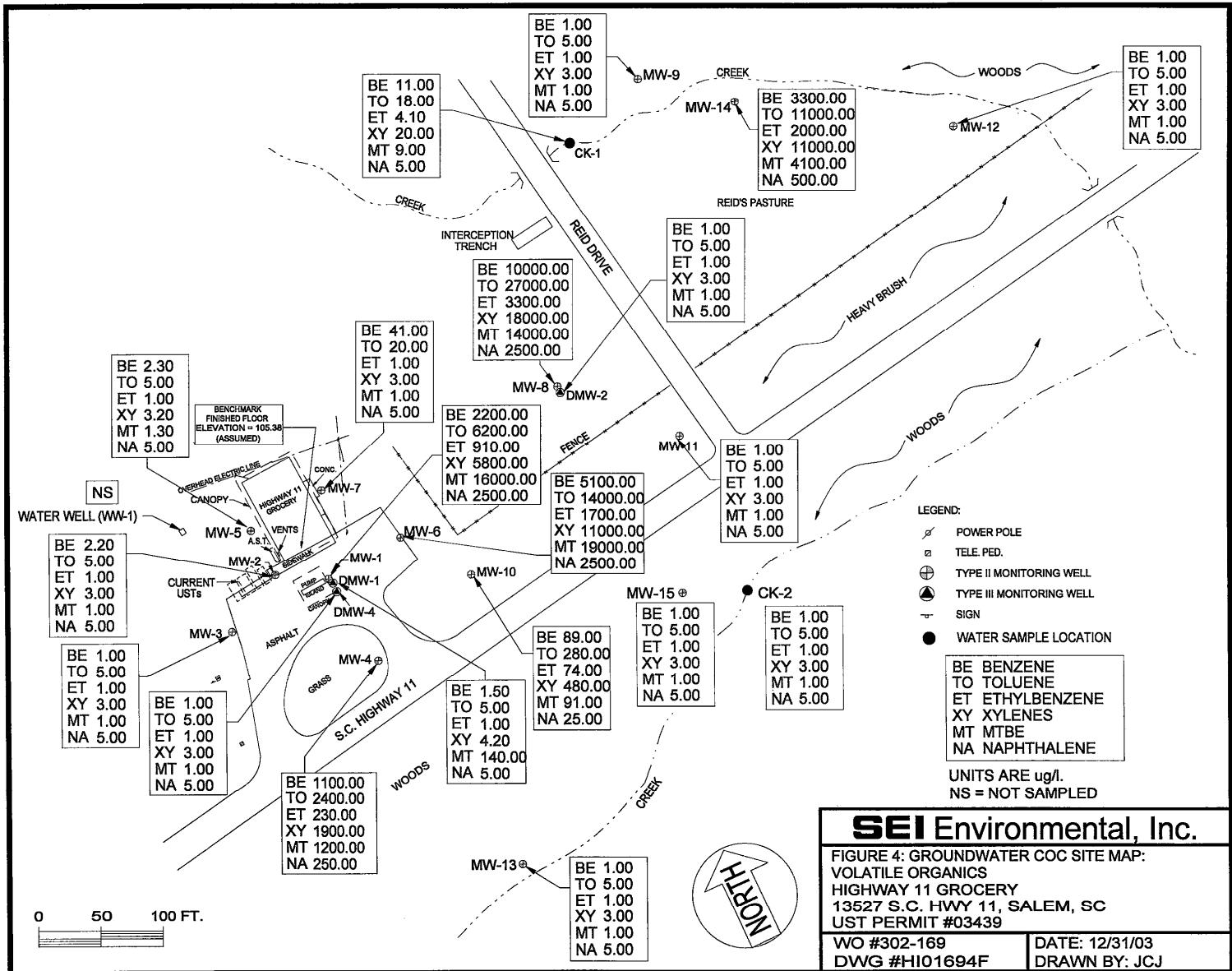
Remarks:

E_1 G_1

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier _____	Condition:	(lab use only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: _____	Bottles Received: _____	
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date:	Time:	pH Checked: _____ NCF: _____

Appendix G

Figure 4, CoC Map based on the December 18, 2003 Laboratory Analytical Data



Appendix H
**Copies of the Non-Hazardous Waste Manifest
&
Certificate for Disposal**

**NON-HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest
Document No.
GK62162. Page 1
of

12/19/03

3. Generator's Name and Mailing Address

SEI ENVIRONMENTAL, INC
3021 MCNAUGHTON DR SUITE 9
COLOMBIA, SC 29223

4. Generator's Phone ()

5. Transporter 1 Company Name
SEI ENVIRONMENTAL, INC

6. US EPA ID Number

A. Transporter's Phone
803-788-2535

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

G & K TANKING SERVICES
PO BOX 1384
SUMTER, SC 29151
987573557

10. US EPA ID Number

C. Facility's Phone

800-800-6840

11. Waste Shipping Name and Description

a. NON HAZARDOUS PETROLEUM CONTAMINATED WATER
HWY 11 GROCERY SALEM, SC

12. Containers

No.

Type

13. Total
Quantity14. Unit
Wt/Vol

02DM

b.

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

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

*Van Chisholm**Van Chisholm*

12/19/03

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

*S. Collier**S. Collier*

12/19/03



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-4593 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 2 Drums
Hwy 11 Grocery
Salem, SC

Contaminant NonHazardous Petroleum
Contaminated Water

This is to certify the above ~~soil~~^{water} 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. Schut

Date 12/19/03

Appendix I

Table 5, Summary of December 18, 2003 System's Effectiveness Analysis

Table 5
Concentration Reduction Calculation
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-1	Initial	226,000.00	301,000.00	280,000.00	278,000.00	5,110,000.00	2,000.00	
	SSTL	22.00	4,497.00	3,148.00	44,969.00	180.00	112.00	
	Initial > SSTL	225,978.00	296,503.00	276,852.00	233,031.00	5,109,820.00	1,888.00	6,144,072.00
	Subsequent*	2,200.00	6,200.00	910.00	5,800.00	16,000.00	2,500.00	
	SSTL	22.00	4,497.00	3,148.00	44,969.00	180.00	112.00	
	Subsequent > SSTL	2,178.00	1,703.00	0.00	0.00	15,820.00	2,388.00	22,089.00
MW-2	Initial	13.00	8.00	1.00	5.00	5.00	5.00	
	SSTL	13.00	8.00	1.00	5.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	2.20	5.00	1.00	3.00	1.00	5.00	
	SSTL	13.00	8.00	1.00	5.00	5.00	5.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MW-3	Initial	1.00	1.00	1.00	1.00	5.00	5.00	
	SSTL	1.00	1.00	1.00	1.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	5.00	
	SSTL	1.00	1.00	1.00	1.00	5.00	5.00	
	Subsequent > SSTL	0.00	4.00	0.00	2.00	0.00	0.00	6.00
MW-4	Initial	1,500.00	5,320.00	620.00	3,360.00	810.00	500.00	
	SSTL	1,500.00	5,320.00	620.00	3,360.00	810.00	500.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	1,100.00	2,400.00	230.00	1,900.00	1,200.00	250.00	
	SSTL	1,500.00	5,320.00	620.00	3,360.00	810.00	500.00	
	Subsequent > SSTL	0.00	0.00	0.00	0.00	390.00	0.00	390.00

Table 5 - Continued
Concentration Reduction Calculation
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
MW-5	Initial	1.00	1.00	1.00	1.00	5.00	5.00	
	SSTL	1.00	1.00	1.00	1.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	2.30	5.00	1.00	3.20	1.30	5.00	
	SSTL	1.00	1.00	1.00	1.00	5.00	5.00	
	Subsequent > SSTL	1.30	4.00	0.00	2.20	0.00	0.00	7.50
MW-6	Initial	1,780.00	4,950.00	490.00	2,880.00	6,350.00	500.00	
	SSTL	1,780.00	4,950.00	490.00	2,880.00	6,350.00	500.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	5,100.00	14,000.00	1,700.00	11,000.00	19,000.00	2,500.00	
	SSTL	1,780.00	4,950.00	490.00	2,880.00	6,350.00	500.00	
	Subsequent > SSTL	3,320.00	9,050.00	1,210.00	8,120.00	12,650.00	2,000.00	36,350.00
MW-7	Initial	34.00	20.00	1.00	8.00	7.00	5.00	
	SSTL	22.00	20.00	1.00	8.00	7.00	5.00	
	Initial > SSTL	12.00	0.00	0.00	0.00	0.00	0.00	12.00
	Subsequent	41.00	20.00	1.00	3.00	1.00	5.00	
	SSTL	22.00	20.00	1.00	8.00	7.00	5.00	
	Subsequent > SSTL	19.00	0.00	0.00	0.00	0.00	0.00	19.00
MW-8	Initial	226,000.00	301,000.00	280,000.00	278,000.00	5,110,000.00	2,000.00	
	SSTL	204.00	40,888.00	28,622.00	278,000.00	1,362.00	1,021.00	
	Initial > SSTL	225,796.00	260,112.00	251,378.00	0.00	5,108,638.00	979.00	5,846,903.00
	Subsequent	10,000.00	27,000.00	3,300.00	18,000.00	14,000.00	2,500.00	
	SSTL	204.00	40,888.00	28,622.00	278,000.00	1,362.00	1,021.00	
	Subsequent > SSTL	9,796.00	0.00	0.00	0.00	12,638.00	1,479.00	23,913.00

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

Table 5 - Continued
Concentration Reduction Calculation
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

BOSTON - 2000

CONFIDENTIAL INFORMATION

ALL INFORMATION CONTAINED

HEREIN IS UNCLASSIFIED

DATE 2005 BY SP/CS/SP/CS

ALL INFORMATION CONTAINED

Table 5 - Continued
Concentration Reduction Calculation
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit #03439

Sample ID		Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Concentration > SSTL (ppb)
DMW-2	Initial	1.00	1.00	1.00	1.00	5.00	5.00	
	SSTL	1.00	1.00	1.00	1.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	5.00	
	SSTL	1.00	1.00	1.00	1.00	5.00	5.00	
	Subsequent > SSTL	0.00	4.00	0.00	2.00	0.00	0.00	6.00
DMW-4	Initial	1.00	1.00	1.00	1.00	5.00	5.00	
	SSTL	1.00	1.00	1.00	1.00	5.00	5.00	
	Initial > SSTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subsequent	1.00	5.00	1.00	3.00	1.00	5.00	
	SSTL	1.00	1.00	1.00	1.00	5.00	5.00	
	Subsequent > SSTL	0.00	4.00	0.00	2.00	0.00	0.00	6.00
Totals	Initial > SSTL	(Sum of Initial Concentration Above SSTL for all Wells)						12,046,007.00
	Subsequent > SSTL	(Sum of Subsequent Concentration Above SSTL for all Wells)						103,196.50

CoC Mass Reduction = (Sum of Initial Conc. > SSTL - Sum of Subsequent Conc. > SSTL) / (Sum of Initial Conc. > SSTL) * 100

CoC Mass Reduction = (12,046,007.00-103,196.50) / (12,046,007.00) * 100

CoC Mass Reduction = 99.14%

Notes: MW-1 was Observed to have Free Product Resulting in No Sample Collection; Initial Results used for Subsequent Results

Geographie der Erde

34-Tech

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

July 14, 2003

Konstantine Akhvlediani
Hydrogeologist / Project Manager
SCDHEC
2600 Bull Street
Columbia, SC 29201-1708

Re: Summary of Corrective Action and Gauging Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit # 03439

Dear Mr. Akhvlediani;

SEI Environmental, Inc. (SEI) summary of gauging results and laboratory analytical results for samples collected for the month of July 2003. Attached, Appendix A, are a topographic map depicting the location of the site and a site map illustrating the location of the monitoring wells.

May 7, 2002, fourteen samples were collected from the monitoring wells onsite. The samples collected were analyzed for Benzene, Toluene, Ethylbenzene, Xylene, Methyl Tert-butyl Ether, and Naphthalene. Attached in Appendix B is Table 1, which summarizes the May 7, 2002 laboratory analytical results.

July 1, 2003, SEI personnel gauged, purged, field screened and collected samples from 21 sample points. The findings of the gauging event were the presence of free product in MW-1 and MW-8 and no evidence of free product in the remaining 19 points. MW-1 was observed to have 0.24 feet of free product and MW-8 was observed to have 0.60 feet of free product. Attached in Appendix C is Table 2, which summarizes the July 1, 2003 gauging results and field screening observations. Attached in Appendix D are copies of SCDHEC Field Data Information Sheet for Groundwater Sampling.

Upon completion of gauging and purging of the sample points, a representative sample was collected from each sample point. Each sample was submitted to Environmental Science Laboratory in Nashville, Tennessee for analysis for Benzene, Toluene, Ethylbenzene, Xylene (BTEX) by EPA method 8260B, Methyl Tert-butyl Ether (MTBE)

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Underground Storage
Tank Program

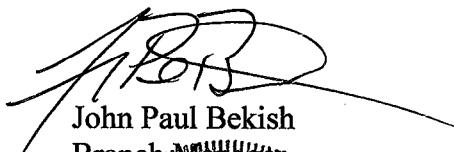
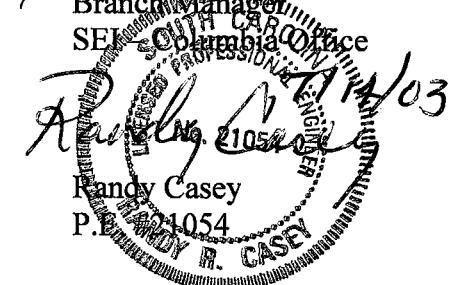
by EPA method 8260B, and Naphthalene by EPA method 8260B. Attached in Appendix E is Table 3, which summarizes the laboratory analytical results. Attached in Appendix F are copies of the laboratory analytical results and a copy of the Chain of Custody.

July 2, 2003, 122.89 gallons of petroleum-impacted water, which was generated from the purging of the sample points was disposed at G & K Tank Services, Inc.; located in Sumter, SC. Attached in Appendix G are copies of the Non-Hazardous Waste Manifest and Certificate for Disposal for 122.89 gallons of petroleum-impacted water.

SEI is presently awaiting approval and a Notice to Proceed for the installation of the hydrogen peroxide injection system (trade name "Per-Petual", US patent application serial number 60/357,550) from the South Carolina Division of Water. SEI submits upon receiving the Notice to Proceed from the SC Division of Water, SEI will initiate corrective action activities via the "Per-Petual" hydrogen peroxide system. Once the system has been operational for a nominal length of time, SEI will collect groundwater samples from the sample points and will submit a subsequent report detailing the laboratory analytical data.

If you have any questions and / or comments, concerning the information provided in this document, please contact John Paul Bekish at (803) 788-2535.

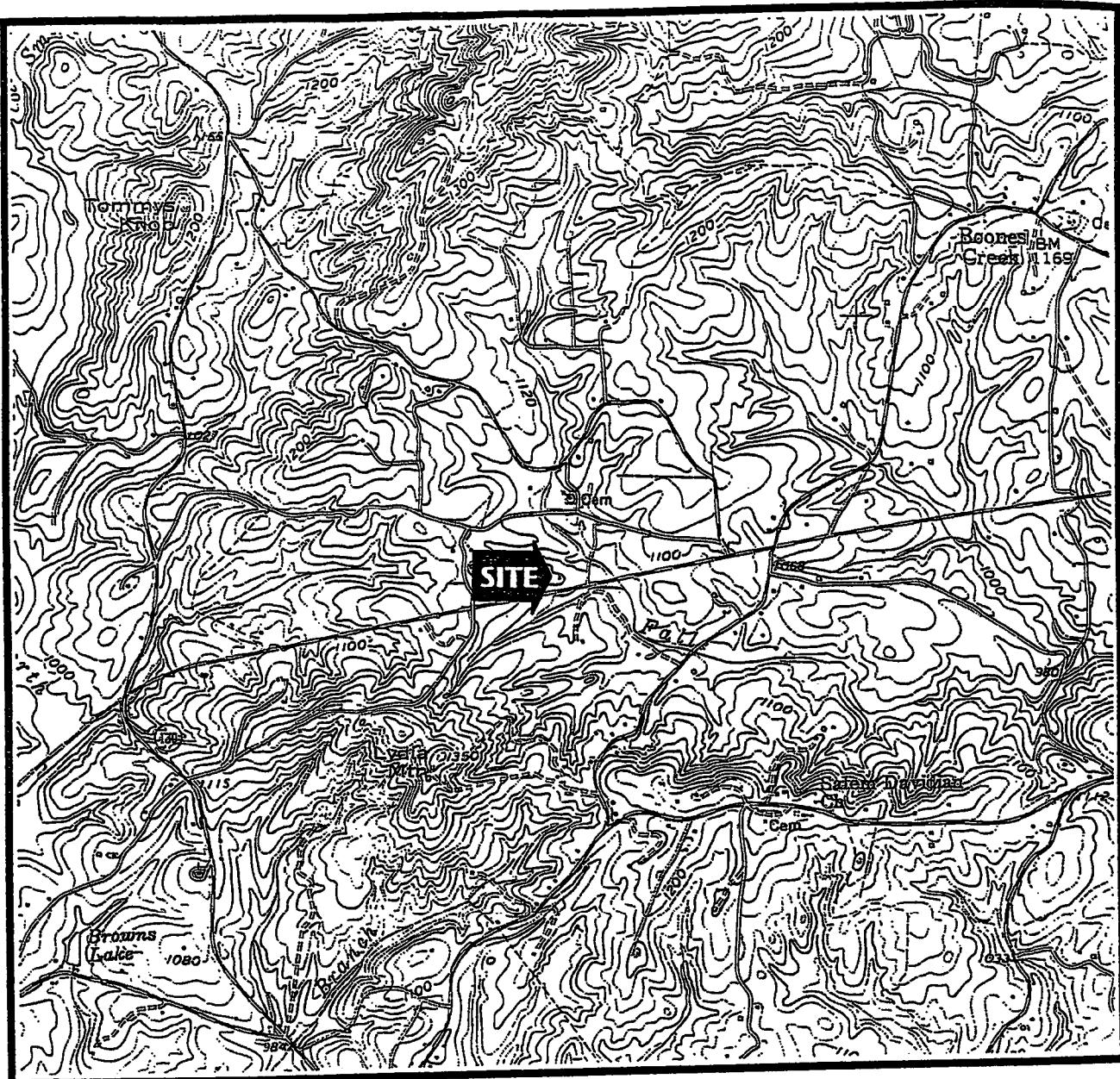
Sincerely,


John Paul Bekish
Branch Manager
SEI - Columbia Office

Randy R. Casey
P.E. #21054

Attachment(s)

CC: Steven Smith, Hwy 11 Property Owner
SEI Project Files

Appendix A
Topographic Map and Site Map



SCALE 1:24000
1 MILE
0 1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER



SEI Environmental, Inc.

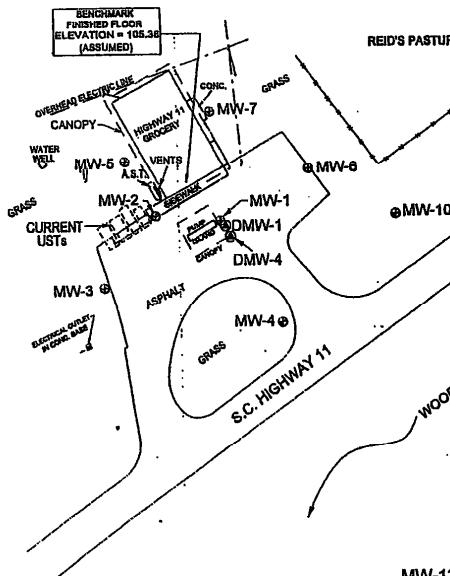
FIGURE 1: SITE LOCATION MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

W.O. #: 300-388
DWG #

DATE: 9/5/01
DRAWN BY: IC

WELL #	INNER CASING ELEVATION
MW-1	103.98
MW-2	104.85
MW-3	104.89
MW-4	99.80
MW-5	109.08
MW-6	100.00
MW-7	103.68
MW-8	88.61
MW-9	58.39
MW-10	83.78
MW-11	83.20
MW-12	58.89
MW-13	77.91
MW-14	59.19
MW-15	71.62
DMW-1	103.27
DMW-2	88.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.



0 50 100 FT.

- LEGEND:
- ↗ POWER POLE
 - TELE. PED.
 - ⊕ TYPE II MONITORING WELL
 - Ⓐ TYPE III MONITORING WELL
 - ↔ SIGN
 - WATER SAMPLE LOCATION

SEI Environmental, Inc.

FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

WO #302-043
DWG #HI0388F1

DATE: 5/31/02
DRAWN BY: JCJ



Appendix B

Table 1 – Summary of May 7, 2002 Laboratory Analytical Data

Table 1
May 7, 2002 Laboratory Analytical Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
SCDHEC Site # 03439

Well	Benzene (ppb)	Toleune (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Naphthalene (ppb)	Total Conc. (ppb)
MW-1	226,000.00	301,000.00	280,000.00	278,000.00	5,110,000.00	2,000.00	6,197,000.00
MW-2	13.00	8.00	1.00	5.00	5.00	5.00	37.00
MW-3	1.00	1.00	1.00	1.00	5.00	5.00	14.00
MW-4	1,500.00	5,320.00	620.00	3,360.00	810.00	500.00	12,110.00
MW-5	1.00	1.00	1.00	1.00	5.00	5.00	14.00
MW-6	1,780.00	4,950.00	490.00	2,880.00	6,350.00	500.00	16,950.00
MW-7	34.00	20.00	1.00	8.00	7.00	5.00	75.00
MW-8	226,000.00	301,000.00	280,000.00	278,000.00	5,110,000.00	2,000.00	6,197,000.00
MW-10	115.00	185.00	68.00	328.00	86.00	9.00	791.00
MW-11	1.00	1.00	1.00	1.00	5.00	5.00	14.00
MW-14	3,780.00	13,800.00	27,000.00	14,700.00	7,010.00	500.00	66,790.00
DMW-1	215.00	430.00	50.00	50.00	1,780.00	250.00	2,775.00
DMW-2	1.00	1.00	1.00	1.00	5.00	5.00	14.00
DMW-4	1.00	1.00	1.00	1.00	5.00	5.00	14.00
Initial Conc.	459,442.00	626,718.00	588,235.00	577,336.00	10,236,073.00	5,794.00	12,493,598.00
SSTL Conc.	3,881.00	57,303.00	33,705.00	339,605.00	10,645.00	2,452.00	447,591.00
Initial Conc. Above SSTL	455,561.00	569,415.00	554,530.00	237,731.00	10,225,428.00	3,342.00	12,046,007.00

Appendix C

Table 2 – Summary of July 1, 2003 Gauging and Field Screening Activities

Table 2 - Continued
Summary of Field Observations - July 1, 2003
Highway 11 Grocery
13527 South Carolina Highway
Salem, South Carolina
UST Permit # 03439

Sample ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-11	3rd Volume				23.00	5.02	0.016	18.20	5.21	1.30	
MW-11	Post Sampling				23.00	4.85	0.015	18.10	5.20		Full Recharge
MW-12	Initial			3.10	12.00	4.94	0.036	19.80	2.46		
MW-12	1st Volume				12.00	4.81	0.016	18.20	2.21	1.40	
MW-12	2nd Volume				12.00	4.64	0.016	18.30	2.21	1.40	
MW-12	3rd Volume				12.00	N/A	N/A	N/A	N/A	1.50	Full Recharge
MW-13	Initial			6.44	N/A	5.48	0.022	18.50	4.28		
MW-13	1st Volume				N/A	5.42	0.021	18.70	4.21	1.30	
MW-13	2nd Volume				N/A	5.47	0.021	18.50	4.17	1.30	
MW-13	3rd Volume				N/A	5.40	0.020	18.20	4.22	1.50	
MW-13	Post Sampling				N/A	5.42	0.022	18.50	4.28		Full Recharge
MW-14	Initial			1.82	10.00	N/A	N/A	N/A	N/A	3.90	Strong Odor
MW-15	Initial			10.83	12.00	N/A	N/A	N/A	N/A	0.57	Low Volume
DMW-1	Initial			22.97	45.00	N/A	N/A	N/A	N/A	10.70	Strong Odor
DMW-2	Initial			16.44	75.00	5.93	0.083	15.80	6.23		
DMW-2	1st Volume				75.00	6.27	0.083	16.40	6.46	9.50	
DMW-2	2nd Volume				75.00	6.49	0.083	16.70	0.07	9.50	
DMW-2	3rd Volume				75.00	6.49	0.059	16.40	6.89	9.60	
DMW-2	Post Sampling				75.00	6.50	0.057	16.40	6.78		Full Recharge
DMW-3	Initial			23.32	60.00	5.76	0.079	18.70	6.81		
DMW-3	1st Volume				60.00	5.60	0.037	18.10	7.50	5.90	
DMW-3	2nd Volume				60.00	5.39	0.037	18.00	7.12	5.90	
DMW-3	3rd Volume				60.00	5.48	0.040	17.90	7.14	6.10	
DMW-3	Post Sampling				60.00	5.47	0.041	17.90	7.17		Full Recharge

Notes: N/A = Not Applicable

Table 2
Summary of Field Observations - July 1, 2003
Highway 11 Grocery
13527 South Carolina Highway
Salem, South Carolina
UST Permit # 03439

Sample ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-1	Initial	23.04	0.24	23.28	30.00	N/A	N/A	N/A	N/A	3.20	Free Product
MW-2	Initial			24.08	35.00	N/A	N/A	N/A	N/A	5.30	Strong Odor
MW-3	Initial			22.51	30.00	4.74	0.022	20.20	5.58		
MW-3	1st Volume				30.00	4.56	0.019	18.10	5.99	1.22	
MW-3	2nd Volume				30.00	4.49	0.018	17.40	6.40	1.22	
MW-3	3rd Volume				30.00	4.48	0.017	17.20	6.33	1.16	
MW-3	Post Sampling				30.00	4.39	0.016	17.10	6.35		Full Recharge
MW-4	Initial			22.10	35.00	N/A	N/A	N/A	N/A	6.30	Strong Odor
MW-5	Initial			26.82	35.00	4.30	0.067	17.70	6.15		
MW-5	1st Volume				35.00	4.04	0.017	17.30	6.56	1.30	
MW-5	2nd Volume				35.00	3.97	0.014	17.20	6.61	1.30	
MW-5	3rd Volume				35.00	3.93	0.014	17.10	6.81	1.40	
MW-5	Post Sampling				35.00	3.97	0.015	17.10	6.68		Full Recharge
MW-6	Initial			19.77	35.00	N/A	N/A	N/A	N/A	7.40	Strong Odor
MW-7	Initial			26.55	40.00	N/A	N/A	N/A	N/A	6.50	Strong Odor
MW-8	Initial	20.36	0.60	20.96	30.00	N/A	N/A	N/A	N/A	4.42	Free Product
MW-9	Initial			2.30	12.00	5.52	0.073	17.30	5.78		
MW-9	1st Volume				12.00	5.73	0.033	17.60	6.94	1.50	
MW-9	2nd Volume				12.00	5.22	0.032	19.30	5.91	1.50	
MW-9	3rd Volume				12.00	4.96	0.033	19.60	5.08	1.70	
MW-9	Post Sampling				12.00	4.86	0.034	19.70	5.13		Full Recharge
MW-10	Initial			16.20	24.00	N/A	N/A	N/A	N/A	3.80	Strong Odor
MW-11	Initial			15.93	23.00	5.73	0.024	20.50	5.07		
MW-11	1st Volume				23.00	5.41	0.020	19.00	5.23	1.10	
MW-11	2nd Volume				23.00	5.19	0.018	18.50	4.41	1.10	

Appendix D

July 1, 2003 Field Data Information Sheet(s) for Groundwater Sampling

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Date (mm/dd/yy): 7.1.03
Field Personnel: VC, KB, JW
General Weather Conditions: cloudy

Ambient Air Temperature: °C

Quality Assurance

pH Meter	Conductivity Meter
serial no.	1854
pH=4.0	standard 4.49 mS/cm
pH=7.0	standard
pH=10.0	standard
AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody	

Relinquished by _____ **Date/Time** _____ **Received by** _____ **Date/Time** _____

Facility Name: May 11 Grocery
Site ID#: 20403439 Monitoring Well # 1
Water Supply Well Public Private

Monitoring Well Diameter (D): 2 feet

* Free Product Thickness: .24 feet

Depth to Ground Water (DGW) 23.28 feet

Total Well Depth (TWD) 30,00 feet

Length of the water column (LWC=TWD-DGW) _____ feet

$$1 \text{ casing volume (CV=LWC X C)} = \underline{\quad} \times \underline{\quad} = \underline{1.0} \text{ gals}$$

3 casing volume (3 X CV) = 3 x 2 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

***If free product is present over 1/8 inch, sampling will not be required.**

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1515
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos/cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: not well

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 7.1.03
 Field Personnel: VC, KB, JW
 General Weather Conditions: Cloudy

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no. <u>1854</u>	serial no. <u>1854</u>
pH=4.0 <u>± 0.002 PH@25°C</u>	standard <u>4.49 mS/cm</u>
pH=7.0	standard
pH=10.0	standard
<i>AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody</i>	

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Facility Name: hwy 11
 Site ID#: 03439 Monitoring Well # 2
 Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2 feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 24.08 feet

Total Well Depth (TWD) 35.00 feet

Length of the water column (LWC=TWD-DGW) 10.92 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 1.72 gals
 3 casing volume (3 X CV)= 5.3 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1525</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: hot well

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	7.1.03
Field Personnel:	VC, KB, JW
General Weather Conditions:	Cloudy
Ambient Air Temperature:	_____ °C
Quality Assurance	
PH Meter serial no.	1854
pH=4.0	<u>± 0.002 PH @ 25°C</u>
pH=7.0	_____
pH=10.0	_____
<i>AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody</i>	
Relinquished by	Date/Time
Received by	Date/Time

Facility Name:	hwy 11		
Site ID#:	03439	Monitoring Well #	3
Water Supply Well	Public	Private	_____
Monitoring Well Diameter (D):	2	feet	_____
Conversion Factor (C):	3.14 x (D/2) ²	for a 2 inch well C=0.163	for a 4 inch well C=0.652
* Free Product Thickness:	2	feet	_____
Depth to Ground Water (DGW)	22.51	feet	_____
Total Well Depth (TWD)	30.02	feet	_____
Length of the water column (LWC=TWD-DGW)	7.49	feet	_____
1 casing volume (CV=LWC X C)=	_____ X _____	= 1.22 gals	_____
3 casing volume (3 X CV)=	3.6	gals (standard purge volume)	_____
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							15:30
pH (s.u.)	4.74	4.56	4.49	4.48			4.39
Specific Conductivity (μmhos/cm)	.022	.019	.018	.017			.016
Water Temperature (°C)	20.2	18.1	17.4	17.2			17.1
Dissolved Oxygen	5.58	5.99	6.40	6.33			6.35
PID readings, if required							

Remarks: _____

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South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	7/1/03
Field Personnel:	Vc, KB, JW
General Weather Conditions:	Cloudy
Ambient Air Temperature:	_____ °C
<u>Quality Assurance</u>	
pH Meter serial no.	1854
pH=4.0	<u>±0.002 PH@25°C</u>
pH=7.0	_____
pH=10.0	_____
AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody	
Relinquished by	Date/Time
Received by	Date/Time

Facility Name:	bay 11		
Site ID#:	03439	Monitoring Well #	4
Water Supply Well	Public	Private	_____
Monitoring Well Diameter (D): _____ feet			
Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 for a 4 inch well C=0.652			
* Free Product Thickness: _____ feet			
Depth to Ground Water (DGW) 22.10 feet			
Total Well Depth (TWD) 35.00 feet			
Length of the water column (LWC=TWD-DGW) 12.9 feet			
1 casing volume (CV=LWC X C)= _____ X _____ = 2.1 gals			
3 casing volume (3 X CV)= 6.3 gals (standard purge volume)			
Total Volume of Water Purged Before Sampling _____ gals. *If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1445
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: hot well

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Facility Name:	<u>hwy 11</u>		
Site ID#:	<u>03439</u>	Monitoring Well #	<u>5</u>
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	<u> </u> feet		
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	<u> </u> feet		
Depth to Ground Water (DGW)	<u>26.82</u> feet		
Total Well Depth (TWD)	<u>35.00</u> feet		
Length of the water column (LWC=TWD-DGW)	<u>8.18</u> feet		
1 casing volume (CV=LWC X C)=	<u> </u> X <u> </u>	= <u>1.3</u> gals	
3 casing volume (3 X CV)=	<u>4.0</u> gals	(standard purge volume)	
Total Volume of Water Purged Before Sampling	<u> </u> gals.		
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1500
pH (s.u.)	9.30	9.04	3.97	3.93			3.93
Specific Conductivity ($\mu\text{mhos/cm}$)	.067	.017	.019	.014			.015
Water Temperature (°C)	17.7	17.3	17.2	17.1			17.1
Dissolved Oxygen	6.15	6.56	6.61	6.81			6.68
PID readings, if required							

Remarks:

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 7-1-03
Field Personnel: VC, KB, JW
General Weather Conditions: Cloudy

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter
serial no. 1854
pH=4.0 ± 0.002 PH @ 25°C
pH=7.0 _____
pH=10.0 _____
AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR AROMA
Chain of Custody

Conductivity Meter
serial no. 1854
standard 4.49 mS/cm
standard _____
standard _____

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Facility Name: hwy 11
Site ID#: 03439 Monitoring Well # 6
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): _____ feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 19.77 feet

Total Well Depth (TWD) 35 feet

Length of the water column (LWC=TWD-DGW) 15.23 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 2.4 gals
3 casing volume (3 X CV)= 7.4 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: hot well

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South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 7.1.03

Field Personnel: VC KB JW

General Weather Conditions: Cloudy

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter

serial no. 1854

pH=4.0 ± 0.002 PH@25°C

pH=7.0

pH=10.0

Conductivity Meter

serial no. 1854

standard 4.49 mS/cm

standard

standard

AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR HONDA
Chain of Custody

Relinquished by

Date/Time

Received by

Date/Time

Facility Name: hwy 11

Site ID#: 03439 Monitoring Well # 7

Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2' feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163

for a 4 inch well C=0.652

* Free Product Thickness: feet

Depth to Ground Water (DGW) 26.55 feet

Total Well Depth (TWD) 40 feet

Length of the water column (LWC=TWD-DGW) 13.45 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 2.1 gals

3 casing volume (3 X CV)= 6.5 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1910</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: hot well

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	7.1.03		
Field Personnel:	VC KB, JW		
General Weather Conditions:	Cloudy		
Ambient Air Temperature:	_____ °C		
Quality Assurance			
pH Meter serial no.	1854	Conductivity Meter serial no.	1854
pH=4.0	<u>±0.002 PH @ 25°C</u>	standard	<u>449 mS/cm</u>
pH=7.0		standard	
pH=10.0		standard	
<i>AUTO CAL. SOLUTION PROVIDES PINE ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody</i>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	hwy 11		
Site ID#:	03439	Monitoring Well #	8
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	2		feet
Conversion Factor (C):	$3.14 \times (D/2)^2$		for a 2 inch well C=0.163 for a 4 inch well C=0.652
* Free Product Thickness:	.60		feet
Depth to Ground Water (DGW)	20.96		feet
Total Well Depth (TWD)	30		feet
Length of the water column (LWC=TWD-DGW)	9.04		feet
1 casing volume (CV=LWC X C)=	X	= 1.47 gals	
3 casing volume (3 X CV)=	4.42	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling <u>4.42</u> gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: not well / FP

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 7.1.03
Field Personnel: VC, KB, JW
General Weather Conditions: Cloudy

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no. <u>1854</u>	serial no. <u>1854</u>
pH=4.0 <u>±0.002 PH@25°C</u>	standard <u>449 mS/cm</u>
pH=7.0	standard
pH=10.0	standard
AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR AQUA-BA Chain of Custody	

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Facility Name: hwy 11
Site ID#: 03439 Monitoring Well # 9
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 2.30 feet
Total Well Depth (TWD) 12 feet
Length of the water column (LWC=TWD-DGW) 9.7 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 1.5 gals
3 casing volume (3 X CV)= 4.5 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post-Sampling
Time (military)							<u>1645</u>
pH (s.u.)	<u>5.52</u>	<u>5.73</u>	<u>5.22</u>	<u>7.96</u>			<u>4.86</u>
Specific Conductivity (μmhos/cm)	<u>.073</u>	<u>.033</u>	<u>.032</u>	<u>.033</u>			<u>.034</u>
Water Temperature (°C)	<u>17.3</u>	<u>17.6</u>	<u>19.3</u>	<u>19.6</u>			<u>19.7</u>
Dissolved Oxygen	<u>5.78</u>	<u>6.94</u>	<u>5.91</u>	<u>5.08</u>			<u>5.13</u>
PID readings, if required							

Remarks: _____

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South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 7-1-03

Field Personnel: VC, KB, JW

General Weather Conditions: Cloudy

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no. <u>1854</u>	serial no. <u>1854</u>
pH=4.0 <u>±0.002 PH@25°C</u>	standard <u>4.49 mS/m AC</u>
pH=7.0	standard
pH=10.0	standard
AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody	

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Facility Name: hwy 11

Site ID#: 03439 Monitoring Well # 10

Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2' feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 16.20 feet

Total Well Depth (TWD) 24.0 feet

Length of the water column (LWC=TWD-DGW) 7.8 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 1.2 gals

3 casing volume (3 X CV)= 3.8 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1430</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos/cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: hot well

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 7-10-3

Field Personnel: VG KB, Jcw

General Weather Conditions: Rainy

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter

serial no. 1854

pH=4.0 ± 0.002 PH@25°C

pH=7.0

pH=10.0

Conductivity Meter

serial no. 1854

standard 4.49 mS/cm

standard

standard

*AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR HONDA
Chain of Custody*

Relinquished by _____ Date/Time _____

Received by _____ Date/Time _____

Facility Name: hwy 11

Site ID#: 302169

Monitoring Well # 11

Water Supply Well Public _____

Private _____

Monitoring Well Diameter (D): 2 feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 15.93 feet

Total Well Depth (TWD) 23 feet

Length of the water column (LWC=TWD-DGW) _____ feet

1 casing volume (CV=LWC X C)= _____ X _____ = 1.1 gals

3 casing volume (3 X CV)= 3.4 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)	pH -	5.73	5.41	5.19	5.02		1720
pH (s.u.)							485
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	0.24	0.20	0.18	0.16			015
Water Temperature (°C)	20.5	19.0	18.5	18.2			18.1
Dissolved Oxygen	5.07	5.23	4.91	5.21			5.20
PID readings, if required							

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	7.1.03		
Field Personnel:	VC, KD, JW		
General Weather Conditions:	Cloudy		
Ambient Air Temperature:	_____ °C		
Quality Assurance			
PH Meter serial no.	1854	Conductivity Meter serial no.	
pH=4.0	<u>± 0.002 PH@25°C</u>	standard	
pH=7.0		standard	
pH=10.0		standard	
<i>AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody</i>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	hwy 11		
Site ID#:	03439	Monitoring Well #	12
Water Supply Well	Public	Private	_____
Monitoring Well Diameter (D): _____ feet			
Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 for a 4 inch well C=0.652			
* Free Product Thickness: _____ feet			
Depth to Ground Water (DGW) _____ feet			
Total Well Depth (TWD) _____ feet			
Length of the water column (LWC=TWD-DGW) _____ feet			
1 casing volume (CV=LWC X C)= _____ X _____ = 6.4 gals			
3 casing volume (3 X CV)= 4.3 gals (standard purge volume)			
Total Volume of Water Purged Before Sampling _____ gals. *If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1515
pH (s.u.)	7.0	6.81	6.64				
Specific Conductivity ($\mu\text{mhos/cm}$)	130	.014	.010				
Water Temperature (°C)	22.8	22	23				
Dissolved Oxygen	2.46	2.21	2.21				
PID readings, if required							

Remarks: _____

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 7.103
Field Personnel: VC KB, JW
General Weather Conditions: Rainy

Ambient Air Temperature:

Quality Assurance

pH Meter	Conductivity Meter
serial no.	1854
pH=4.0	standard
pH=7.0	4.49 mS/cm
pH=10.0	standard

PH-10.0 Standard
AUTO CAL. SOLUTION PROVIDE PINE ENVIRON-
MENTAL SERVICE FOR HONDA
Chain of Custody

Relinquished by _____ **Date/Time** _____ **Received by** _____ **Date/Time** _____

Facility Name: hwy 11 **Site ID#:** 302169 **Monitoring Well #** 13
Water Supply Well **Public** **Private**

Monitoring Well Diameter (D): 2 feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 6.44 feet

Total Well Depth (TWD) _____ feet

1 casing volume (CV=LWC X C)= ____ X ____ = 1.3 gals

Total Volume of Water Pumped Before Sampling = 101

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1630
pH (s.u.)	5.48	5.42	5.42	5.40			5.42
Specific Conductivity ($\mu\text{mhos/cm}$)	.022	.021	.021	.020			.022
Water Temperature (°C)	18.5	18.7	18.5	18.2			18.5
Dissolved Oxygen	4.28	4.21	4.17	4.22			4.28
PID readings, if required							

Remarks:

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South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program
Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 7-103
Field Personnel: VC KB, JW
General Weather Conditions: Cloudy

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no. <u>1854</u>	serial no. <u>1854</u>
pH=4.0 <u>± 0.002 PH @ 25°C</u>	standard <u>449 mS/cm</u>
pH=7.0	standard
pH=10.0	standard
AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR AQUA- MENTAL SERVICE FOR AQUA- Chain of Custody	

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Facility Name: hwy 11
Site ID#: 03439 Monitoring Well # 14
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2' feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 1.92 feet
Total Well Depth (TWD) 10 feet
Length of the water column (LWC=TWD-DGW) 8.08 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 1.3 gals
3 casing volume (3 X CV)= 3.9 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1530</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: hot well

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	7-1-03		
Field Personnel:	VC, KB, JW		
General Weather Conditions:	Cloudy		
Ambient Air Temperature:	°C		
<u>Quality Assurance</u>			
pH Meter	Conductivity Meter		
serial no.	1854	serial no.	1854
pH=4.0	$\pm 0.002 \text{ pH @ } 28^\circ\text{C}$	standard	4.49 mS/cm
pH=7.0		standard	
pH=10.0		standard	
AUTO CAL. SOLUTION PROVIDES ENVIRONMENTAL SERVICE FOR FLORIDA <u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>hwy 11</u>	
Site ID#:	<u>03439</u>	Monitoring Well # <u>15</u>
Water Supply Well	Public	Private
Monitoring Well Diameter (D):	<u>2</u>	feet
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163	
	for a 4 inch well C=0.652	
* Free Product Thickness:		feet
Depth to Ground Water (DGW)	<u>10.83</u>	feet
Total Well Depth (TWD)	<u>12</u>	feet
Length of the water column (LWC=TWD-DGW)	<u>1.17</u>	feet
1 casing volume (CV=LWC X C)=	X	= <u>.19</u> gals
3 casing volume (3 X CV)=	<u>.57</u>	gals (standard purge volume)
Total Volume of Water Purged Before Sampling		gals.
*If free product is present over 1/8 inch, sampling will not be required.		

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1410
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos/cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: not metred, insufficient volume

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 7-1-03

Field Personnel: VC, KB, JW

General Weather Conditions: Cloudy

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter

serial no. 1854

pH=4.0 ±0.002 PH@25°C

pH=7.0

pH=10.0

Conductivity Meter

serial no. 1854

standard 449 mS/m

standard

standard

AUTO CAL. SOLUTIONS PROVIDE PINE ENVIRONMENTAL SERVICE FOR HONDA
Chain of Custody

Relinquished by

Date/Time

Received by

Date/Time

Facility Name: hwy 11

Site ID#: 03439

Monitoring Well # DMW-1

Water Supply Well

Public

Private

Monitoring Well Diameter (D): 2' feet

Conversion Factor (C): $3.14 \times (D/2)^2$

for a 2 inch well C=0.163

for a 4 inch well C=0.652

* Free Product Thickness: _____ feet

Depth to Ground Water (DGW) 22.17 feet

Total Well Depth (TWD) 45 feet

Length of the water column (LWC=TWD-DGW) 22.03 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 3.5 gals

3 casing volume (3 X CV)= 10.5 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)

Initial

1st Vol

2nd Vol

3rd Vol

4th Vol

5th Vol

Post Sampling

Time (military)

pH (s.u.)

Specific Conductivity ($\mu\text{mhos}/\text{cm}$)

Water Temperature (°C)

Dissolved Oxygen

PID readings, if required

Remarks: hot well

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 7-18-03
Field Personnel: VC, KB, JW
General Weather Conditions: Cloudy

Ambient Air Temperature: °C

Quality Assurance

pH Meter	Conductivity Meter
serial no.	1854
pH=4.0	standard
<u>± 0.002 pH @ 25°C</u>	<u>4.49 mS/cm</u>
pH=7.0	standard
pH=10.0	standard

AUTO CAL. SOLUTION PROVIDED BY FINE ENVIRONMENTAL SERVICE FOR HONDA
Chain of Custody

Relinquished by _____ **Date/Time** _____ **Received by** _____ **Date/Time** _____

Facility Name: Hwy 11
Site ID#: 03439 **Monitoring Well #** DMW-2
Water Supply Well **Public** **Private**

Monitoring Well Diameter (D): 2 feet

* Free Product Thickness: feet

Depth to Ground Water (DGW) 16.44 feet

Total Well Depth (TWD) 75.00 feet

Length of the water column (LWC = TWD - DGW) 58.5 feet

1 casing volume (CV=LWC X C) = _____ X _____ = 9.5 gals
3 casing volume (3 X CV) = 28.6 gals (standard purge volume)

Total Volume of Water Purged Before Sampling 28 () gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1930
pH (s.u.)	5.73	6.27	6.19	6.49			6.50
Specific Conductivity ($\mu\text{mhos/cm}$)	.083	.083	.083	.059			.059
Water Temperature (°C)	15.8	16.4	16.7	16.4			16.4
Dissolved Oxygen	6.23	6.46	6.07	6.88			6.92
PID readings, if required							

Remarks:

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	7.1.03		
Field Personnel:	VC, KB, JW		
General Weather Conditions:	Cloudy		
Ambient Air Temperature:	_____ °C		
Quality Assurance			
pH Meter serial no.	1854	Conductivity Meter serial no.	
pH=4.0	± 0.002 PH @ 25°C	standard	
pH=7.0		standard	
pH=10.0		standard	
AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICES FOR HONDA Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	Hwy 11		
Site ID#:	03439	Monitoring Well #	DW-4
Water Supply Well	Public	Private	_____
Monitoring Well Diameter (D):	2'		feet
Conversion Factor (C):	$3.14 \times (D/2)^2$		for a 2 inch well C=0.163 for a 4 inch well C=0.652
* Free Product Thickness:	_____		feet
Depth to Ground Water (DGW)	23.32		feet
Total Well Depth (TWD)	60.0		feet
Length of the water column (LWC=TWD-DGW)	36.68		feet
1 casing volume (CV=LWC X C)=	_____	X	5.9 gals
3 casing volume (3 X CV)=	17.9		gals (standard purge volume)
Total Volume of Water Purged Before Sampling _____ gals. *If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							16.0
pH (s.u.)	5.76	5.60	5.39	5.18			5.47
Specific Conductivity ($\mu\text{mhos/cm}$)	.049	.037	.037	.040			.041
Water Temperature (°C)	18.7	18.1	18.0	17.9			17.9
Dissolved Oxygen	6.81	7.50	7.12	7.14			7.17
PID readings, if required							

Remarks: _____

Appendix E

Table 3 – Summarizes July 1, 2003 Laboratory Analytical Data

Table 3
July 1, 2003 Laboratory Analytical Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
SCDHEC Site # 03439

Well	Benzene (ppb)	Toleune (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Naphthalene (ppb)
MW-1	10,000.00	34,000.00	4,400.00	23,000.00	34,000.00	<1200.00
MW-2	4.70	<5.00	<1.00	<3.00	<1.00	<5.00
MW-3	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00
MW-4	4,800.00	14,000.00	2,300.00	12,000.00	2,600.00	<500.00
MW-5	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00
MW-6	2,200.00	6,600.00	820.00	4,400.00	12,000.00	<2500.00
MW-7	37.00	36.00	1.70	20.00	9.20	<5.00
MW-8	12,000.00	51,000.00	7,800.00	40,000.00	11,000.00	<2500.00
MW-9	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00
MW-10	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00
MW-11	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00
MW-12	<1.00	<5.00	<1.00	<3.00	1.00	<5.00
MW-13	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00
MW-14	3,500.00	10,000.00	1,900.00	10,000.00	5,300.00	<500.00
MW-15	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00
DMW-1	<1.00	<5.00	<1.00	<3.00	6.40	<5.00
DMW-2	<1.00	12.00	5.50	25.00	<1.00	<5.00
DMW-4	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00
CK-1	2.60	<5.00	<1.00	4.80	4.50	<5.00
CK-2	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00
WW-1	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00

Appendix F
July 1, 2003 Laboratory Analytical Report

**ENVIRONMENTAL
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Est. 1970

REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental ~ Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : MW-1
Collected By : VC-JW-KB
Collection Date : 07/01/03 15:15

ESC Sample # : L119527-01
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	10000	250	ug/l	8260B	07/06/03	250
Toluene	34000	1200	ug/l	8260B	07/06/03	250
Ethylbenzene	4400	250	ug/l	8260B	07/06/03	250
Total Xylenes	23000	750	ug/l	8260B	07/06/03	250
Methyl tert-butyl ether	34000	250	ug/l	8260B	07/06/03	250
Naphthalene	BDL	1200	ug/l	8260B	07/06/03	250
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/06/03	250
Dibromofluoromethane	110		% Rec.	8260B	07/06/03	250
4-Bromofluorobenzene	100		% Rec.	8260B	07/06/03	250

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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Leslie Newton, ESC Representative

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Tax I.D. 62-0814289

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REPORT OF ANALYSIS

Mr. Paul Beckish
SKI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : MW-2
Collected By : VC-JW-KB
Collection Date : 07/01/03 15:25

ESC Sample # : L119527-02
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	4.7	1.0	ug/l	8260B	07/09/03	1
Toluene	BDL	5.0	ug/l	8260B	07/09/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	07/09/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	07/09/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	07/09/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/09/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/09/03	1
Dibromofluoromethane	99.		% Rec.	8260B	07/09/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	07/09/03	1

Leslie Newton Leslie Newton, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

AZLA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

July 09, 2003

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

ESC Sample # : L119527-03

Data Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : MW-3
Collected By : VC-JW-KB
Collection Date : 07/01/03 15:30

Site ID : 03439

Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	07/06/03	1
Toluene	BDL	5.0	ug/l	8260B	07/06/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	07/06/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	07/06/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	07/06/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/06/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/06/03	1
Dibromofluoromethane	110		% Rec.	8260B	07/06/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	07/06/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

July 09, 2003

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

ESC Sample # : L119527-04

Date Received : July 03, 2003
Description : Highway 11 Grocery

Site ID : 03439

Sample ID : MW-4

Project # : 302-169

Collected By : VC-JW-KB
Collection Date : 07/01/03 14:45

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	4800	100	ug/l	8260B	07/06/03	100
Toluene	14000	500	ug/l	8260B	07/06/03	100
Ethylbenzene	2300	100	ug/l	8260B	07/06/03	100
Total Xylenes	12000	300	ug/l	8260B	07/06/03	100
Methyl tert-butyl ether	2600	100	ug/l	8260B	07/06/03	100
Naphthalene	BDL	500	ug/l	8260B	07/06/03	100
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/06/03	100
Dibromofluoromethane	110		% Rec.	8260B	07/06/03	100
4-Bromofluorobenzene	110		% Rec.	8260B	07/06/03	100

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : MW-5
Collected By : VC-JW-KB
Collection Date : 07/01/03 15:00

ESC Sample # : L119527-05

Site ID : 03439

Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	07/06/03	1
Toluene	BDL	5.0	ug/l	8260B	07/06/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	07/06/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	07/06/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	07/06/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/06/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/06/03	1
Dibromofluoromethane	110		% Rec.	8260B	07/06/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	07/06/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : MW-6
Collected By : VC-JW-KB
Collection Date : 07/01/03 14:00

ESC Sample # : L119527-06
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	2200	500	ug/l	8260B	07/09/03	500
Toluene	6600	2500	ug/l	8260B	07/09/03	500
Ethylbenzene	820	500	ug/l	8260B	07/09/03	500
Total Xylenes	4400	1500	ug/l	8260B	07/09/03	500
Methyl tert-butyl ether	12000	500	ug/l	8260B	07/09/03	500
Naphthalene	BDL	2500	ug/l	8260B	07/09/03	500
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/09/03	500
Dibromofluoromethane	100		% Rec.	8260B	07/09/03	500
4-Bromofluorobenzene	100		% Rec.	8260B	07/09/03	500

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

AZLA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : MW-7
Collected By : VC-JW-KB
Collection Date : 07/01/03 14:10

ESC Sample # : L119527-07
Site ID : 03439
Project # : 302-169

Paramster	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	37.	1.0	ug/l	8260B	07/07/03	1
Toluene	36.	5.0	ug/l	8260B	07/07/03	1
Ethylbenzene	1.7	1.0	ug/l	8260B	07/07/03	1
Total Xylenes	20.	3.0	ug/l	8260B	07/07/03	1
Methyl tert-butyl ether	9.2	1.0	ug/l	8260B	07/07/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/07/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/07/03	1
Dibromofluoromethane	110		% Rec.	8260B	07/07/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	07/07/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : MW-8
Collected By : VC-JW-KB
Collection Date : 07/01/03 17:00

ESC Sample # : L119527-08
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	12000	500	ug/l	8260B	07/07/03	500
Toluene	51000	2500	ug/l	8260B	07/07/03	500
Ethylbenzene	7800	500	ug/l	8260B	07/07/03	500
Total Xylenes	40000	1500	ug/l	8260B	07/07/03	500
Methyl tert-butyl ether	11000	500	ug/l	8260B	07/07/03	500
Naphthalene	BDL	2500	ug/l	8260B	07/07/03	500
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/07/03	500
Dibromofluoromethane	110		% Rec.	8260B	07/07/03	500
4-Bromofluorobenzene	110		% Rec.	8260B	07/07/03	500

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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Leslie Newton, ESC Representative



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Est. 1970

REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : MW-9
Collected By : VC-JW-KB
Collection Date : 07/01/03 16:45

ESC Sample # : L119527-09
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	07/07/03	1
Toluene	BDL	5.0	ug/l	8260B	07/07/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	07/07/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	07/07/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	07/07/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/07/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/07/03	1
Dibromofluoromethane	110		% Rec.	8260B	07/07/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	07/07/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : MW-10
Collected By : VC-JW-KB
Collection Date : 07/01/03 14:30

ESC Sample # : L119527-10
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	07/07/03	1
Toluene	BDL	5.0	ug/l	8260B	07/07/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	07/07/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	07/07/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	07/07/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/07/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/07/03	1
Dibromofluoromethane	110		% Rec.	8260B	07/07/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	07/07/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIBA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : MW-11
Collected By : VC-JW-KB
Collection Date : 07/01/03 17:20

ESC Sample # : L119527-11
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	07/07/03	1
Toluene	BDL	5.0	ug/l	8260B	07/07/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	07/07/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	07/07/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	07/07/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/07/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/07/03	1
Dibromofluoromethane	100		% Rec.	8260B	07/07/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	07/07/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery

ESC Sample # : L119527-12

Sample ID : MW-12

Site ID : 03439

Collected By : VC-JW-KB
Collection Date : 07/01/03 15:15

Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	07/07/03	1
Toluene	BDL	5.0	ug/l	8260B	07/07/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	07/07/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	07/07/03	1
Methyl tert-butyl ether	1.0	1.0	ug/l	8260B	07/07/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/07/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/07/03	1
Dibromofluoromethane	110		% Rec.	8260B	07/07/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	07/07/03	1


Leslie Newton, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received :	July 03, 2003	ESC Sample # :	L119527-13
Description :	Highway 11 Grocery	Site ID :	03439
Sample ID :	MW-13	Project # :	302-169
Collected By :	VC-JW-KB		
Collection Date :	07/01/03 16:30		

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	07/07/03	1
Toluene	BDL	5.0	ug/l	8260B	07/07/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	07/07/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	07/07/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	07/07/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/07/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/07/03	1
Dibromofluoromethane	110		% Rec.	8260B	07/07/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	07/07/03	1


Leslie Newton, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

AZLA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003 ESC Sample # : L119527-14
Description : Highway 11 Grocery Site ID : 03439
Sample ID : MW-14 Project # : 302-169
Collected By : VC-JW-KB
Collection Date : 07/01/03 15:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	3500	100	ug/l	8260B	07/07/03	100
Toluene	10000	500	ug/l	8260B	07/07/03	100
Ethylbenzene	1900	100	ug/l	8260B	07/07/03	100
Total Xylenes	10000	300	ug/l	8260B	07/07/03	100
Methyl tert-butyl ether	5300	100	ug/l	8260B	07/07/03	100
Naphthalene	BDL	500	ug/l	8260B	07/07/03	100
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/07/03	100
Dibromofluoromethane	100		% Rec.	8260B	07/07/03	100
4-Bromofluorobenzene	110		% Rec.	8260B	07/07/03	100

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E97487, GA - 923, IN - C-TN-01
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REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

ESC Sample # : L119527-15

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : MW-15
Collected By : VC-JW-KB
Collection Date : 07/01/03 16:10

Site ID : 03439

Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	07/07/03	1
Toluene	BDL	5.0	ug/l	8260B	07/07/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	07/07/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	07/07/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	07/07/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/07/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/07/03	1
Dibromofluoromethane	110		% Rec.	8260B	07/07/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	07/07/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : DMW-1
Collected By : VC-JW-KB
Collection Date : 07/01/03 15:50

ESC Sample # : L119527-16
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	07/07/03	1
Toluene	BDL	5.0	ug/l	8260B	07/07/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	07/07/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	07/07/03	1
Methyl tert-butyl ether	6.4	1.0	ug/l	8260B	07/07/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/07/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/07/03	1
Dibromofluoromethane	110		% Rec.	8260B	07/07/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	07/07/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KVUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : DMW-2
Collected By : VC-JW-KB
Collection Date : 07/01/03 17:30

ESC Sample # : L119527-17

Site ID : 03439

Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	07/07/03	1
Toluene	12.	5.0	ug/l	8260B	07/07/03	1
Ethylbenzene	5.5	1.0	ug/l	8260B	07/07/03	1
Total Xylenes	25.	3.0	ug/l	8260B	07/07/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	07/07/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/07/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/07/03	1
Dibromofluoromethane	110		% Rec.	8260B	07/07/03	1
4-Bromofluorobenzene	110		% Rec.	8260B	07/07/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

AZLA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DN21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : DMW-4
Collected By : VC-JW-KB
Collection Date : 07/01/03 16:10

ESC Sample # : L119527-18
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	07/07/03	1
Toluene	BDL	5.0	ug/l	8260B	07/07/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	07/07/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	07/07/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	07/07/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/07/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/07/03	1
Dibromofluoromethane	110		% Rec.	8260B	07/07/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	07/07/03	1


Leslie Newton, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 1-2327, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : CK-1
Collected By : VC-JW-KB
Collection Date : 07/01/03 16:45

ESC Sample # : L119527-19
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	2.6	1.0	ug/l	8260B	07/07/03	1
Toluene	BDL	5.0	ug/l	8260B	07/07/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	07/07/03	1
Total Xylenes	4.8	3.0	ug/l	8260B	07/07/03	1
Methyl tert-butyl ether	4.5	1.0	ug/l	8260B	07/07/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/07/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/07/03	1
Dibromofluoromethane	98.		% Rec.	8260B	07/07/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	07/07/03	1


Leslie Newton, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 07/09/03 15:15 Printed: 07/09/03 15:16



**ENVIRONMENTAL
SCIENCE CORP.**

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5856
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

REPORT OF ANALYSIS

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : CK-2
Collected By : VC-JW-KB
Collection Date : 07/01/03 16:15

ESC Sample # : L119527-20
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	07/07/03	1
Toluene	BDL	5.0	ug/l	8260B	07/07/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	07/07/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	07/07/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	07/07/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/07/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/07/03	1
Dibromofluoromethane	110		% Rec.	8260B	07/07/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	07/07/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

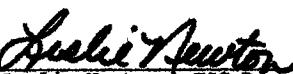
A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 07/09/03 15:15 Printed: 07/09/03 15:16


Leslie Newton, ESC Representative



**ENVIRONMENTAL
SCIENCE CORP.**

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Paul Beckish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

July 09, 2003

Date Received : July 03, 2003
Description : Highway 11 Grocery
Sample ID : WW-1
Collected By : VC-JW-KB
Collection Date : 07/01/03 14:50

ESC Sample # : L119527-21
Site ID : 03439
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	07/06/03	1
Toluene	BDL	5.0	ug/l	8260B	07/06/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	07/06/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	07/06/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	07/06/03	1
Naphthalene	BDL	5.0	ug/l	8260B	07/06/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	07/06/03	1
Dibromofluoromethane	110		% Rec.	8260B	07/06/03	1
4-Bromofluorobenzene	95.		% Rec.	8260B	07/06/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 07/09/03 15:15 Printed: 07/09/03 15:16

Leslie Newton, ESC Representative

Summary of Remarks For Samples Printed
07/09/03 at 15:16:25

TSR Signing Reports: 044

Sample: L119527-01 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-02 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-03 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-04 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-05 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-06 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-07 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-08 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-09 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-10 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-11 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-12 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-13 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-14 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-15 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-16 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-17 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-18 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-19 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-20 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15
Sample: L119527-21 Account: SEICSC Received: 07/03/03 09:00 Due Date: 07/10/03 00:00 RPT Date: 07/09/03 15:15

Company Name/Address:

**SEI Environmental - Columbia,
SC**

3021 McNaughton Drive, Suite 9.
Columbia, SC 29223

Alternate billing information:

Analysis/Container/Preservative

Prepared by:

**ENVIRONMENTAL
SCIENCE CORP.**

12065 Lebanon Road

Report to:

P. Beckish

Email to:

Project
Description:

hwy 11 Grassy
Phone: (803) 788-2535
FAX: (803) 788-2399

Client Project #:

City/State
Collected **Salem, S.C.**
ESC Rev:

P.O.#:

Collected by:

V. Shirey/
J. Gandy

Site/Facility ID#: **3439**

Rush? (Lab MUST Be Notified)

Date Results Needed:
7-10-03
No.

Same Day.....200%

Email? **No** Yes

Next Day.....100%

FAX? **No** Fees

Two Day.....50%

of
Cost

Packed on Ice N

(**Y**)

Sample ID

Comp/Grab

Matrix

Depth

Date

Time

Comments/Containment

Sample # (lab only)

Sample ID	Comp/Grab	Matrix	Depth	Date	Time	Comments/Containment	Sample # (lab only)
1	Grab	GW		7-1-03	1515	2	
2					1525		
3					1530		
4					1445		
5					1500		
6					1400		
7					1410		
8					1700		
9					1645		

*Matrix: ss - Soil/solid GW - Groundwater WW - Waste/Water DW - Drinking Water OT - Other

Remarks:

pH _____ Flow _____ Other _____

Relinquished by: (Signature) **J. Gandy** Date: **7-20-03** Time: **16:45** Received by: Signature **V. Shirey**

Relinquished by: (Signature) **J. Gandy** Date: **7-20-03** Time: **16:45** Received by: Signature **V. Shirey**

Relinquished by: (Signature) **J. Gandy** Date: **7-20-03** Time: **16:45** Received by: Signature **V. Shirey**

Samples returned via: FedEx Courier UPS

Comments

Initials

Chain of Custody
Page **3** of **3**

Company Name/Address: SEI Environmental - Columbia, SC 3021 McNaughton Drive, Suite 9 Columbia, SC 29223		Alternate billing information:		Analysis/Container/Preservative				Chain of Custody Page <u>1</u> of <u>1</u>
Report to: <u>P. Beckish</u>		Email to:						Prepared by:
Project Description: <u>hwy 11 Grocery</u>		City/State Collected <u>Salem SC</u>						ENVIRONMENTAL SCIENCE CORP. 12065 Lebanon Road Mt. Juliet, TN 37122 Phone (615) 758-5858 Phone (800) 767-5859 FAX (615) 758-5859
Phone: (803) 788-2535 FAX: (803) 788-2399	Client Project #: <u>302-169</u>	ESC Key:						
Collected by: <u>V. Chisholm</u> <u>J. Maynard</u> K. Ballenger	Site/Facility ID#: <u>03939</u>	P.O.#:						
Collected by (signature): <u>Van + Chisholm</u> <u>JMM</u>	Rush? (Lab MUST Be Notified) <input checked="" type="checkbox"/> Same Day 200% <input type="checkbox"/> Next Day 100% <input type="checkbox"/> Two Day 50%	Date Results Needed: <u>7-10-03</u>	No. of Cntns: <u>2</u>					CoCode: <u>SEICSC</u> (lab use only)
Packed on Ice: N (P)	Email? <u>No</u> Yes FAX? <u>No</u> Yes					Template/Preflgm:		
Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	Remarks/Contaminant		Sample # (lab only)
MW- 10	Grab	GW		7-10-03	1430	<u>11452-10</u>		
11					1720			
12					1515			
13					1630			
14					1530			
15					1610			
DMW 1					1550			
DMW 2					1730			
DMW 4					1610			

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____

Flow _____ Other _____

Remarks:

Relinquished by: (Signature) <u>J. Maynard</u>	Date: <u>7-10-03</u>	Time: <u>16:45</u>	Received by: (Signature) <u>Chavis</u>	Samples returned via: <input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier	Condition: <u>OK</u>	(lab use only)
Relinquished by: (Signature) <u>J. Maynard</u>	Date: _____	Time: _____	Received by: (Signature) _____	Delivery Report No.: <u>1234</u>	Received Date: <u>7-10-03</u>	Received Time: <u>1720-1730</u>
Relinquished by: (Signature) <u>J. Maynard</u>	Date: _____	Time: _____	Received for lab by: (Signature) _____	Date: <u>7-10-03</u>	Time: <u>09:00</u>	pH Checked: <u>OK</u>

*Matrix: SS - Soil/Sed. GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

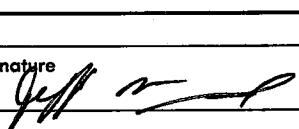
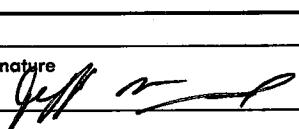
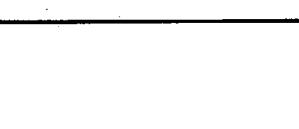
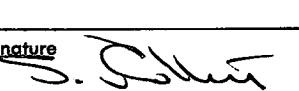
pH _____ Temp _____

Remarks:

Flow Other

Relinquished by: (Signature) <i>John W. Horn</i>	Date: 7-203	Time: 16:45	Received by: (Signature) <i>Wally Grannis</i>	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>	Condition: <i>OK</i>	(Lab Use Only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 23°C	Groups Received: 42-U-105	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date: 7-203	Date: 07-06	pH Checked: NCP

Appendix G
Non-Hazardous Manifest & Disposal Receipt

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of		
3. Generator's Name and Mailing Address		SEI ENVIRONMENTAL, INC 3021 MCNAUGHTON DR SUITE 9 COLOMBIA, SC 29223		GK5660 07/02/03		
4. Generator's Phone ()						
5. Transporter 1 Company Name SEI ENVIRONMENTAL, INC		6. US EPA ID Number	A. Transporter's Phone 803-788-2535			
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 PO BOX 1384 SUMTER, SC 29151		10. US EPA ID Number 987573557	C. Facility's Phone 800-800-6840			
11. Waste Shipping Name and Description		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	
a. NON HAZARDOUS PETROLEUM PRODUCT SANTEE BP STATION SANTEE, SC		01DM				
b. NON HAZARDOUS PETROLEUM CONTAMINATED WATER GALLEANA CHRYSLER COLUMBIA, SC		6		98.8	gal	
c.						
d. NON HAZARDOUS PETROLEUM CONTAMINATED WATER HWY 11 GRICERY SALEM, SC				122.89	gal	
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
Jeff Weyand				07	10	03
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month	Day	Year
Jeff Weyand				07	10	03
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month	Day	Year
S. Collier				07	12	03
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
S. Collier				07	12	03



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 122.89 gallons
Hwy 11 Grocery
Salem, SC

Contaminant NonHazardous Petroleum
Contaminated Water

This is to certify 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 S. Schut Date 07/02/03

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED

AUG 20 2003

Underground Storage
Tank Program

August 18, 2003

Konstantine Akhvlediani
Hydrogeologist / Project Manager
SCDHEC
2600 Bull Street
Columbia, SC 29201-1708

35-Tech

Re: Summary of Corrective Action and Gauging Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit # 03439

Dear Mr. Akhvlediani;

SEI Environmental, Inc. (SEI) summary of gauging results and laboratory analytical results for samples collected on July 30, 2003. Attached, Appendix A, are Figure 1, a topographic map depicting the location of the site and Figure 2, a site map illustrating the location of the monitoring wells.

May 7, 2002, fourteen samples were collected from the monitoring wells onsite. The samples collected were analyzed for Benzene, Toluene, Ethylbenzene, Xylene, Methyl Tert-butyl Ether, and Naphthalene. Attached in Appendix B is Table 1, which summarizes the May 7, 2002 laboratory analytical results.

July 22, 2003, SEI personnel commenced with corrective action at the site via an injection system utilizing duel phase extraction system, MAV, a patented "EDOT" oxygen injection system and a patented hydrogen peroxide injection system ("Per-Petual").

July 30, 2003, SEI personnel were on site to gauge the monitoring wells, remove free product and collect groundwater samples. Eighteen (18) monitoring wells were gauged and two (2), MW-1 and MW-8, were found to free product. MW-1 was found to have 0.08 feet of free product and MW-8 was found to have 0.20 feet of free product. Upon completion of gauging, fourteen (14) monitoring wells were purged and field screened. 96.39 gallons of petroleum-impacted water was generated from the purging of the fourteen (14) wells. Attached in Appendix C are Table 2, which summarizes the July 30, 2003 gauging and field screening information and copies of the Field Data Information Sheet(s) for Ground Water Sampling. Upon completion of purging and collection of field screening information, a representative sample was collected from each sample point. Each sample was submitted to Environmental Science Laboratory in Nashville, Tennessee for analysis for Benzene, Toluene, Ethylbenzene, Xylene (BTEX) by EPA method 8260B, Methyl Tert-butyl Ether (MTBE) by EPA method 8260B, and Naphthalene by EPA method

CHRONOLOGY

1860-1865

1860 - 1865
1860 - 1865

31

8260B. Attached in Appendix D are Table 3, which summarizes the laboratory analytical results and copies of the laboratory analytical results and a copy of the Chain of Custody. Attached in Appendix E is Figure 3, a CoC map based on the July 30, 2003 laboratory analytical data.

July 31, 2003, 96.39 gallons of petroleum-impacted water, which was generated from the purging of the sample points was disposed at G & K Tank Services, Inc.; located in Sumter, SC. Attached in Appendix F are copies of the Non-Hazardous Waste Manifest and Certificate for Disposal for the 96.39 gallons of petroleum-impacted water.

The evaluation of the corrective action activities effectiveness consists of comparing the July 30, 2003 laboratory analytical data against the May 7, 2002 laboratory data and determining the percent of total concentration reduction. The percent of total concentration reduction is calculated by using the following formula:

$$\text{Percent of Total Concentration Reduction} = ((\text{Initial Mass Above SSTL}) - (\text{Current Mass Above SSTL})) * (100) / (\text{Initial Mass Above SSTL})$$

The calculation for the July 30, 2003 Percent of Total Concentration Reduction was found to be 69.93%. Attached in Appendix G is Table 4, which illustrates the system's effectiveness analysis.

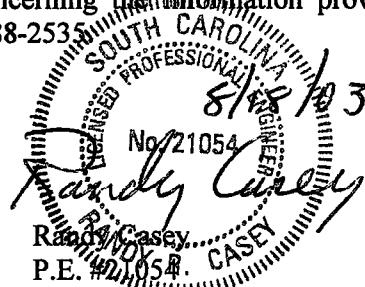
The patented "EDOT" oxygen injection system and a patented hydrogen peroxide injection system ("Per-Petual") at the above referenced facility are currently active. SEI has scheduled a MAV treatment, for removal of free product, for the first week of September. Two (2) weeks after completion of the MAV event, SEI will collect groundwater samples for evaluation of the corrective action activities. Upon receipt of the laboratory analytical, SEI will submit a report summarizing the findings.

If you have any questions and / or comments, concerning the information provided in this document, please contact John Paul Bekish at (803) 788-2535.

Sincerely,



John Paul Bekish
Branch Manager
SEI – Columbia Office

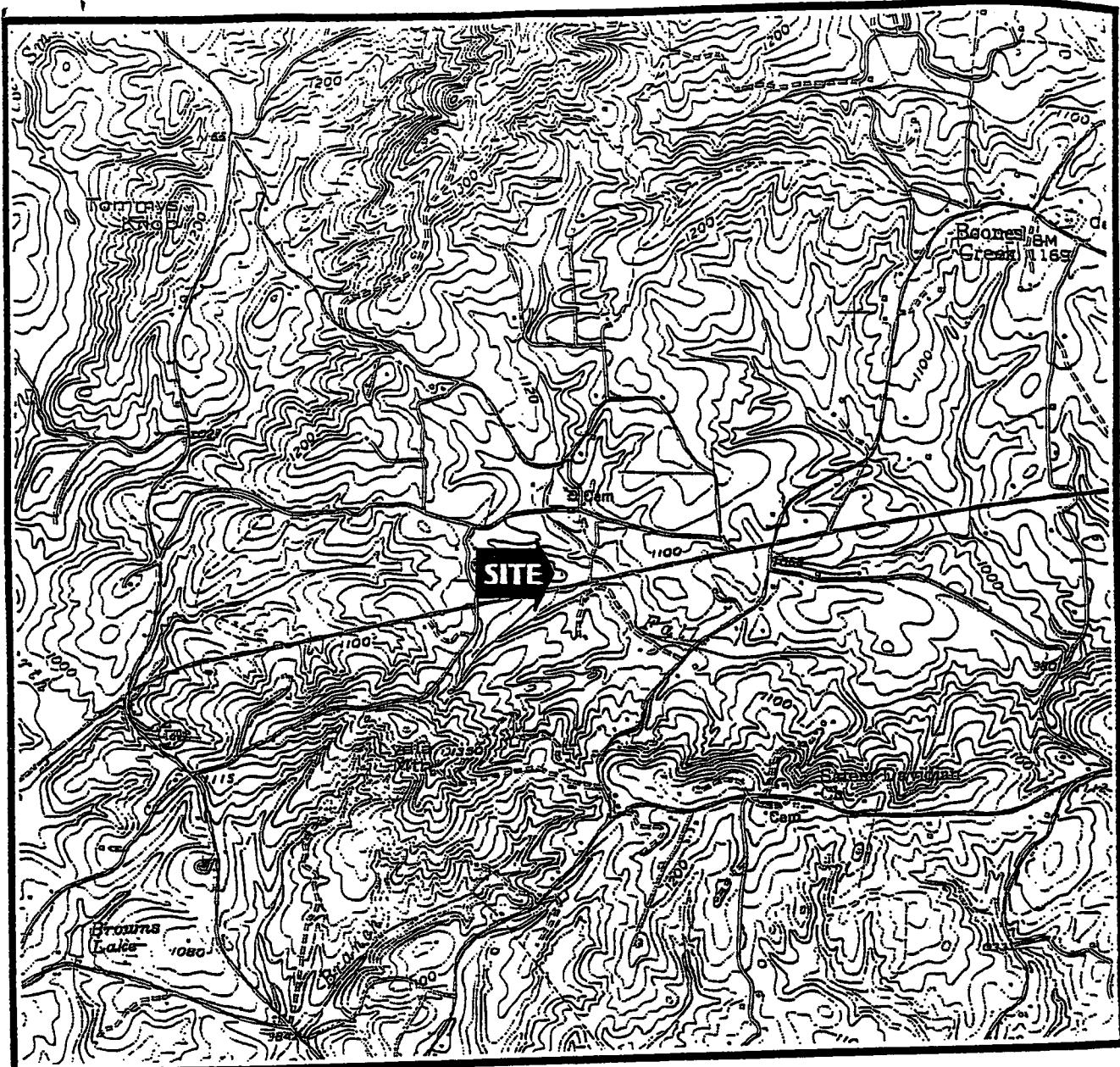


Attachment(s)

CC: Steven Smith, Hwy 11 Property Owner
SEI Project Files

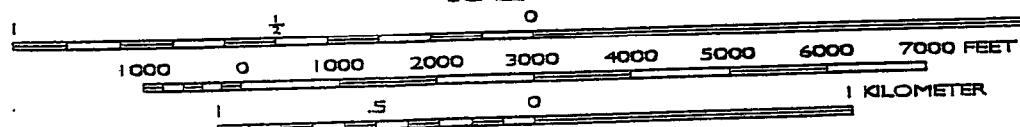
8/21/03
1st invole pd 40%

Appendix A
Figure 1 - Topographic Map
&
Figure 2 - Site Map



SCALE 1:24000

1 MILE



SEI Environmental, Inc

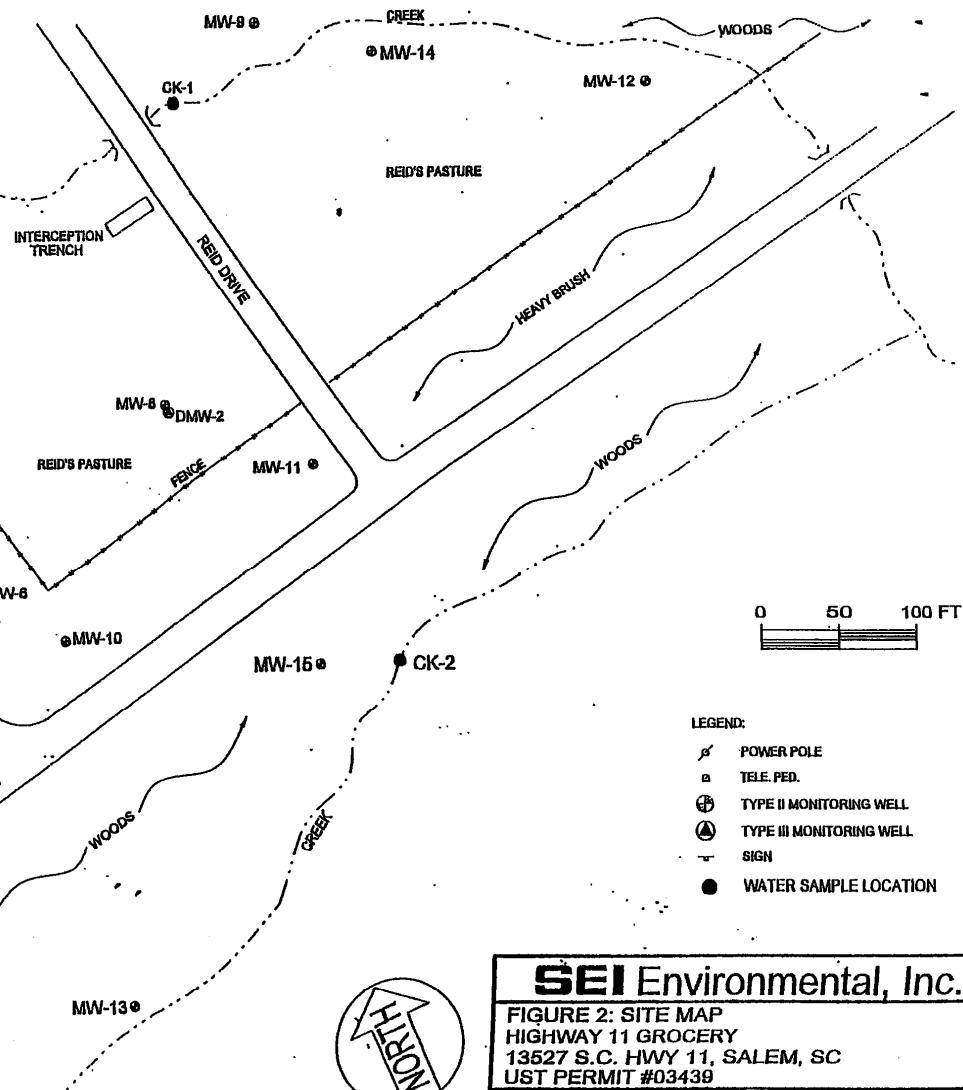
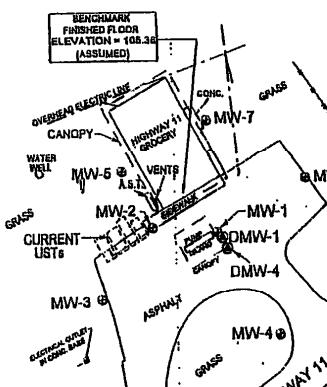
FIGURE 1: SITE LOCATION MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

W.O. #: 300-388
DWG #

DATE: 9/5/01
DRAWN BY: IC

WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.65
MW-3	104.69
MW-4	99.90
MW-5	106.08
MW-6	100.00
MW-7	103.68
MW-8	88.51
MW-9	58.39
MW-10	63.78
MW-11	83.20
MW-12	68.59
MW-13	27.91
MW-14	59.19
MW-15	71.52
DMW-1	103.27
DMW-2	88.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.



SEI Environmental, Inc.

FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

WO #302-043

DATE: 5/31/02

Appendix B

Table 1 – Summary of May 7, 2002 Laboratory Analytical Data

Table 1
May 7, 2002 Laboratory Analytical Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
SCDHEC Site # 03439

Well	Benzene (ppb)	Toleune (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Naphthalene (ppb)	Total Conc. (ppb)
MW-1	226,000.00	301,000.00	280,000.00	278,000.00	5,110,000.00	2,000.00	6,197,000.00
MW-2	13.00	8.00	1.00	5.00	5.00	5.00	37.00
MW-3	1.00	1.00	1.00	1.00	5.00	5.00	14.00
MW-4	1,500.00	5,320.00	620.00	3,360.00	810.00	500.00	12,110.00
MW-5	1.00	1.00	1.00	1.00	5.00	5.00	14.00
MW-6	1,780.00	4,950.00	490.00	2,880.00	6,350.00	500.00	16,950.00
MW-7	34.00	20.00	1.00	8.00	7.00	5.00	75.00
MW-8	226,000.00	301,000.00	280,000.00	278,000.00	5,110,000.00	2,000.00	6,197,000.00
MW-10	115.00	185.00	68.00	328.00	86.00	9.00	791.00
MW-11	1.00	1.00	1.00	1.00	5.00	5.00	14.00
MW-14	3,780.00	13,800.00	27,000.00	14,700.00	7,010.00	500.00	66,790.00
DMW-1	215.00	430.00	50.00	50.00	1,780.00	250.00	2,775.00
DMW-2	1.00	1.00	1.00	1.00	5.00	5.00	14.00
DMW-4	1.00	1.00	1.00	1.00	5.00	5.00	14.00
Initial Conc.	459,442.00	626,718.00	586,235.00	577,336.00	10,236,073.00	5,794.00	12,493,598.00
SSTL Conc.	3,881.00	57,303.00	33,705.00	339,605.00	10,645.00	2,452.00	447,591.00
Initial Conc. Above SSTL	455,561.00	569,415.00	554,530.00	237,731.00	10,225,428.00	3,342.00	12,046,007.00

Appendix C

Table 2 – Summary of July 1, 2003 Gauging and Field Screening Activities
&
Field Data Information Sheet(s) for Ground Water Sampling

Table 2
Summary of Field Observations - July 30, 2003
Highway 11 Grocery
13527 South Carolina Highway
Salem, South Carolina
UST Permit # 03439

Sample ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-1	Initial	22.81	0.08	22.89	30.00	N/A	N/A	N/A	N/A	3.40	Free Product
MW-2	Initial			23.78	35.00	N/A	N/A	N/A	N/A	5.40	Strong Odor
MW-3	Initial			22.21	30.00	5.00	0.099	19.20	5.81		
MW-3	1st Volume				30.00	5.10	0.017	18.20	5.53	1.20	
MW-3	2nd Volume				30.00	4.91	0.013	17.80	5.73	1.20	
MW-3	3rd Volume				30.00	4.62	0.012	17.70	5.51	1.40	
MW-3	Post Sampling				30.00	4.50	0.012	17.70	5.80		Full Recharge
MW-4	Initial			22.09	35.00	N/A	N/A	N/A	N/A	6.30	Strong Odor
MW-5	Initial			26.53	35.00	4.69	0.013	18.90	6.96		
MW-5	1st Volume				35.00	4.52	0.012	18.00	6.11	1.30	
MW-5	2nd Volume				35.00	4.27	0.012	17.90	6.10	1.30	
MW-5	3rd Volume				35.00	4.33	0.012	17.70	6.29	1.50	
MW-5	Post Sampling				35.00	4.21	0.012	17.80	5.98		Full Recharge
MW-6	Initial			19.88	35.00	N/A	N/A	N/A	N/A	7.38	Strong Odor
MW-7	Initial			26.22	40.00	N/A	N/A	N/A	N/A	6.75	Strong Odor
MW-8	Initial	20.22	0.20	20.46	30.00	N/A	N/A	N/A	N/A	4.68	Free Product
MW-9	Initial			2.26	12.00	N/A	N/A	N/A	N/A		Gauged Only
MW-10	Initial			18.95	24.00	N/A	N/A	N/A	N/A	2.46	Strong Odor
MW-11	Initial			15.92	23.00	5.14	0.018	19.70	5.78		
MW-11	1st Volume				23.00	4.87	0.012	17.70	5.58	1.15	
MW-11	2nd Volume				23.00	4.58	0.011	17.00	5.92	1.35	
MW-11	Post Sampling				23.00	4.11	0.011	17.40	4.93		Bailed Dry
MW-12	Initial			3.02	12.00	N/A	N/A	N/A	N/A		Gauged Only
MW-13	Initial			6.28	15.00	N/A	N/A	N/A	N/A		Gauged Only
MW-14	Initial			1.77	10.00	N/A	N/A	N/A	N/A	4.02	Strong Odor

Table 2 - Continued
Summary of Field Observations - July 30, 2003
Highway 11 Grocery
13527 South Carolina Highway
Salem, South Carolina
UST Permit # 03439

Sample ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-15	Initial			10.67	12.00	N/A	N/A	N/A	N/A		Gauged Only
DMW-1	Initial			22.72	46.00	N/A	N/A	N/A	N/A	10.80	Strong Odor
DMW-2	Initial			16.49	75.00	6.29	0.050	19.80	4.94		
DMW-2	1st Volume				75.00	6.14	0.050	18.70	4.74	9.54	
DMW-2	2nd Volume				75.00	6.34	0.051	17.80	5.43	9.54	
DMW-2	3rd Volume				75.00	6.71	0.043	18.20	6.12	9.54	
DMW-2	Post Sampling				75.00	6.54	0.039	17.30	7.03		Full Recharge
DMW-4	Initial			23.18	60.00	5.21	0.048	21.70	5.94		
DMW-4	1st Volume				60.00	5.50	0.034	20.40	6.29	6.00	
DMW-4	2nd Volume				60.00	5.40	0.034	19.10	6.73	6.00	
DMW-4	3rd Volume				60.00	5.20	0.034	19.10	6.39	6.00	
DMW-4	Post Sampling				60.00	5.11	0.034	18.90	6.77		Full Recharge

Notes: N/A = Not Applicable

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South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy): 7/30/03
Field Personnel: S. WEIAND, J. MONEGAN, V. CRISMAN

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no. <u>1854</u>	serial no. <u>1854</u>
pH=4.0 <u>± 0.002 PH @ 25°C</u>	standard <u>449 mS/m</u>
pH=7.0 _____	standard _____
pH=10.0 _____	standard _____

AUTO CAL. SOLUTION PROVIDES PINE ENVIRONMENTAL SERVICE FOR HONDA
Chain of Custody

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Facility Name: Hwy 11 Groc
Site ID#: 03439 Monitoring Well # MW1

Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: .08 feet
Depth to Ground Water (DGW) 22.89 feet
Total Well Depth (TWD) 30 feet
Length of the water column (LWC=TWD-DGW) 7.11 feet

1 casing volume (CV=LWC X C)= _____ X _____ = _____ gals
3 casing volume (3 X CV)= 3.4 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1145</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: Not well free product at 22.81

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	7/30/03		
Field Personnel:	J. WEYAND, J. MONEGAN, V. CRISMAN		
General Weather Conditions:			
Ambient Air Temperature:	_____ °C		
Quality Assurance			
pH Meter serial no.	1854	Conductivity Meter serial no.	
pH=4.0	± 0.002 PH @ 28°C	standard	
pH=7.0		standard	
pH=10.0		standard	
AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR FLORIDA Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	HWY 11 GROC	
Site ID#:	03439	Monitoring Well #
Water Supply Well	Public	Private
Monitoring Well Diameter (D):	2" feet	
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652	
* Free Product Thickness:	feet	
Depth to Ground Water (DGW)	23.78 feet	
Total Well Depth (TWD)	35 feet	
Length of the water column (LWC=TWD-DGW)	11.22 feet	
1 casing volume (CV=LWC X C) =	X	= gals
3 casing volume (3 X CV) =	5.4	gals (standard purge volume)
Total Volume of Water Purged Before Sampling	5.4 gals.	
*If free product is present over 1/8 inch, sampling will not be required.		

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1215
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks:	hot well						

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>7/30/03</u>		
Field Personnel:	<u>J. WEYAND, J. NUNEZ-HAN, V. CROSBY</u>		
General Weather Conditions:			
Ambient Air Temperature:	_____ °C		
Quality Assurance			
pH Meter serial no.	<u>1854</u>	Conductivity Meter serial no.	<u>1854</u>
pH=4.0	<u>± 0.002 PH @ 25°C</u>	standard	<u>449 mS/m</u>
pH=7.0		standard	
pH=10.0		standard	
<small>AUTO CAL. SOLUTIONS PROVIDES PINE ENVIRONMENTAL SERVICE FOR YOUR CHAIN OF CUSTODY</small>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 GROC</u>	
Site ID#:	<u>03439</u>	Monitoring Well # <u>MW3</u>
Water Supply Well	Public	Private
Monitoring Well Diameter (D):	<u>2"</u> feet	
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652	
* Free Product Thickness:	feet	
Depth to Ground Water (DGW)	<u>22.21</u> feet	
Total Well Depth (TWD)	<u>30</u> feet	
Length of the water column (LWC=TWD-DGW)	<u>7.79</u> feet	
1 casing volume (CV=LWC X C)=	X	= <u>1.2</u> gals
3 casing volume (3 X CV)=	<u>3.8</u>	gals (standard purge volume)
Total Volume of Water Purged Before Sampling _____ gals.		
*If free product is present over 1/8 inch, sampling will not be required.		

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1110</u>
pH (s.u.)	<u>5.00</u>	<u>5.10</u>	<u>4.91</u>	<u>4.62</u>			<u>4.50</u>
Specific Conductivity ($\mu\text{mhos/cm}$)	<u>.099</u>	<u>.017</u>	<u>.013</u>	<u>.012</u>			<u>.012</u>
Water Temperature (°C)	<u>19.2</u>	<u>18.2</u>	<u>17.8</u>	<u>17.7</u>			<u>17.7</u>
Dissolved Oxygen	<u>5.81</u>	<u>5.53</u>	<u>5.73</u>	<u>5.51</u>			<u>5.80</u>
PID readings, if required							
Remarks:							

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South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	7/30/03		
Field Personnel:	S. WEYAND, J. NUNEZ-HAN, V. CROSHAW		
General Weather Conditions:			
Ambient Air Temperature:	_____ °C		
<u>Quality Assurance</u>			
pH Meter serial no.	1854	Conductivity Meter serial no.	1854
pH=4.0	$\pm 0.002 \text{ pH @ } 28^\circ\text{C}$	standard	4.49 mS/cm
pH=7.0		standard	
pH=10.0		standard	
AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time

302168

Facility Name:	HWY 11 GROC		
Site ID#:	03439	Monitoring Well #	MW4
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	2" feet		
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	22.09 feet		
Total Well Depth (TWD)	35 feet		
Length of the water column (LWC=TWD-DGW)	12.91 feet		
1 casing volume (CV=LWC X C)=	X = gals		
3 casing volume (3 X CV)=	6.3 gals (standard purge volume)		
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1215
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: Not well

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**
Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>7/30/03</u>		
Field Personnel:	<u>S. WEYAND, J. NUNEZ-HAN, V. CROSBY</u>		
General Weather Conditions:			
Ambient Air Temperature:	_____ °C		
Quality Assurance			
pH Meter serial no.	<u>1854</u>	Conductivity Meter serial no.	<u>1854</u>
pH=4.0	<u>±0.002 PH @ 28°C</u>	standard	<u>4.49 mS/cm</u>
pH=7.0		standard	
pH=10.0		standard	
AUTO CAL. SOLUTION PROVIDED BY ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time

302169

Facility Name:	<u>Hwy 11 Groc</u>		
Site ID#:	<u>03439</u>	Monitoring Well #	<u>MW5</u>
Water Supply Well	Public	Private	
Monitoring Well Diameter (D): <u>2"</u> feet			
Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 for a 4 inch well C=0.652			
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	<u>26.53</u> feet		
Total Well Depth (TWD)	<u>35</u> feet		
Length of the water column (LWC=TWD-DGW)	<u>8.47</u> feet		
1 casing volume (CV=LWC X C)=	X	=	<u>1.3</u> gals
3 casing volume (3 X CV)=	<u>4.1</u>	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1140</u>
pH (s.u.)	<u>4.09</u>	<u>4.52</u>	<u>4.27</u>	<u>4.33</u>			<u>4.21</u>
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	<u>.013</u>	<u>.012</u>	<u>.012</u>	<u>.012</u>			<u>.012</u>
Water Temperature (°C)	<u>18.9</u>	<u>18.0</u>	<u>17.9</u>	<u>17.7</u>			<u>17.8</u>
Dissolved Oxygen	<u>6.96</u>	<u>6.11</u>	<u>6.10</u>	<u>6.29</u>			<u>5.98</u>
PID readings, if required							
Remarks:							

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South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program
Field Data Information Sheet for Ground Water Sampling

302164

Date (mm/dd/yy):	7/30/03		
Field Personnel:	J. WEYAND, J. NOVAKOW, V. CROSBY		
General Weather Conditions:			
Ambient Air Temperature:	_____ °C		
Quality Assurance			
pH Meter serial no.	1854	Conductivity Meter serial no.	1854
pH=4.0	$\pm 0.002 \text{ pH @ } 28^\circ\text{C}$	standard	449 mS/cm
pH=7.0		standard	
pH=10.0		standard	
<i>AUTO CAL. SOLUTION PROVIDED BY ENVIRONMENTAL SERVICE FOR FLORIDA Chain of Custody</i>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	HWY 11 GROC		
Site ID#:	03439	Monitoring Well #	MW6
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	2" feet		
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	19.88 feet		
Total Well Depth (TWD)	35 feet		
Length of the water column (LWC=TWD-DGW)	15.12 feet		
1 casing volume (CV=LWC X C)=	X	=	2.46 gals
3 casing volume (3 X CV)=	7.38	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling	1.38 gals.		
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1235
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos/cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks:	<i>Not well</i>						

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy):	7/30/03		
Field Personnel:	J. WEYAND, J. MONEGAN, V. CROSBY		
General Weather Conditions:			
Ambient Air Temperature:	°C		
<u>Quality Assurance</u>			
pH Meter serial no.	1854	Conductivity Meter serial no.	1854
pH=4.0	$\pm 0.002 \text{ pH @ } 25^\circ\text{C}$	standard	4.49 mS/m
pH=7.0		standard	
pH=10.0		standard	
AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR EPA HANDBOOK Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1130
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos/cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: *Not well*

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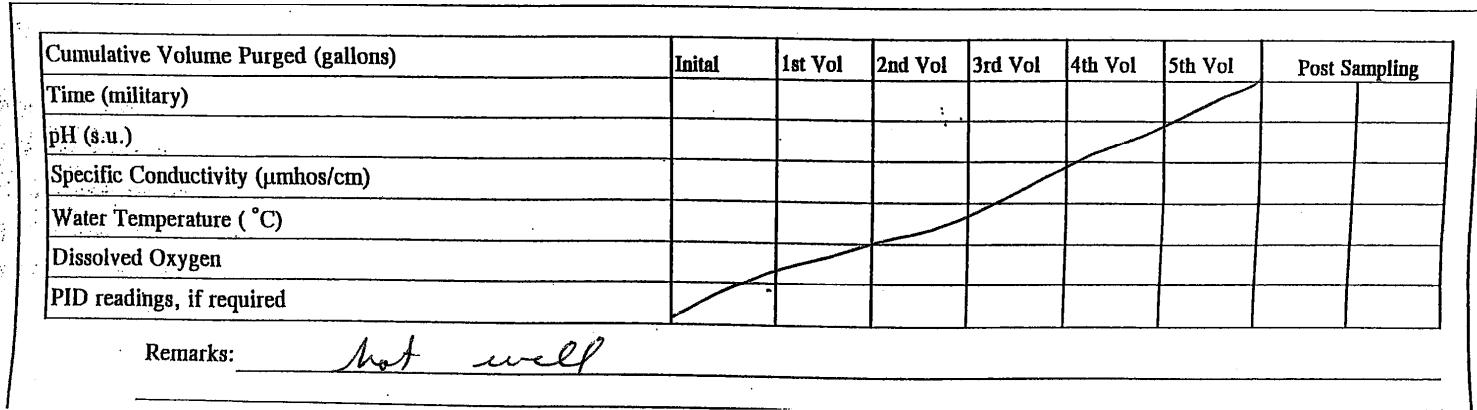
South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy):	7/30/03		
Field Personnel:	S. WEYAND, J. NUNEZ-HAN, V. CROSBY		
General Weather Conditions:			
Ambient Air Temperature:	_____ °C		
<u>Quality Assurance</u>			
pH Meter serial no.	1854	Conductivity Meter serial no.	1854
pH=4.0	$\pm 0.002 \text{ pH} @ 28^\circ\text{C}$	standard	4.49 mS/cm
pH=7.0		standard	
pH=10.0		standard	
AUTO CAL. SOLUTION PROVIDES PINE ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	HWY 11 GRC		
Site ID#:	03439	Monitoring Well #	MW 8
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	2" feet		
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	20.22	feet	
Depth to Ground Water (DGW)	20.46	feet	
Total Well Depth (TWD)	30	feet	
Length of the water column (LWC=TWD-DGW)	9.54	feet	
1 casing volume (CV=LWC X C)=	X	= 1.56	gals
3 casing volume (3 X CV)=	4.68	gals	(standard purge volume)
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			



Page ____ of ____.

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy):	7/30/03		
Field Personnel:	J. WEYAND, J. NOSEGIAN, V. CRISMON		
General Weather Conditions:			
Ambient Air Temperature:	____ °C		
Quality Assurance			
pH Meter serial no.	1854	Conductivity Meter serial no.	1854
pH=4.0	$\pm 0.002 \text{ pH} @ 28^\circ\text{C}$	standard	449 mS/ μA
pH=7.0		standard	
pH=10.0		standard	
AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time
Facility Name: Hwy 11 Groc			
Site ID#:		03439	Monitoring Well # MW9
Water Supply Well	Public	Private	
Monitoring Well Diameter (D): 2" feet			
Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 for a 4 inch well C=0.652			
* Free Product Thickness: 2.26 feet			
Depth to Ground Water (DGW) 2.26 feet			
Total Well Depth (TWD) 12 feet			
Length of the water column (LWC=TWD-DGW) 10 feet			
1 casing volume (CV=LWC X C)= ____ X ____ = ____ gals			
3 casing volume (3 X CV)= ____ gals (standard purge volume)			
Total Volume of Water Purged Before Sampling ____ gals. *If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos/cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks:							

Page ____ of ____.

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy):	7/30/03		
Field Personnel:	S. WEYAND, J. NOLAN, V. CROSBY		
General Weather Conditions:			
Ambient Air Temperature:	____ °C		
<u>Quality Assurance</u>			
pH Meter	Conductivity Meter		
serial no.	1854		
pH=4.0	standard 4.49msf/ac		
pH=7.0	standard		
pH=10.0	standard		
AUTO CAL. SOLUTIONS PROVIDE PINE ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time
Facility Name: Hwy 11 GROC Site ID#: 03439 Monitoring Well # MW10 Water Supply Well Public Private Monitoring Well Diameter (D): 2" feet Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 for a 4 inch well C=0.652 * Free Product Thickness: 18.95 feet Depth to Ground Water (DGW) 18.95 feet Total Well Depth (TWD) 24 feet Length of the water column (LWC=TWD-DGW) 5.05 feet 1 casing volume (CV=LWC X C)= ____ X ____ = .82 gals 3 casing volume (3 X CV)= 2.46 gals (standard purge volume) Total Volume of Water Purged Before Sampling _____ gals. *If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1230
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks:	short well						

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	7/30/03		
Field Personnel:	S. LEYLAND, J. MCNEILAN, V. CROSHAW		
General Weather Conditions:			
Ambient Air Temperature:	____ °C		
Quality Assurance			
pH Meter	Conductivity Meter		
serial no.	1854		
pH=4.0	standard 4.49ms/cm		
pH=7.0	standard		
pH=10.0	standard		
<i>AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR FLORIDA Chain of Custody</i>			
Relinquished by	Date/Time	Received by	Date/Time

302169

Facility Name:	HWY 11 GROC		
Site ID#:	03439	Monitoring Well #	MW11
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	2" feet		
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	15.92 feet		
Total Well Depth (TWD)	23 feet		
Length of the water column (LWC=TWD-DGW)	7.08 feet		
1 casing volume (CV=LWC X C)=	X	=	1.15 gals
3 casing volume (3 X CV)=	3.45	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling	2.5 gals.		
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1205
pH (s.u.)	5.14	4.87	4.58				4.11
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	.018	.012	.011				,011
Water Temperature (°C)	19.7	17.7	17.0				17.4
Dissolved Oxygen	5.78	5.58	5.92				4.8
PID readings, if required							

Remarks: BANED PNY

Page ____ of ____.

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	7/30/03		
Field Personnel:	S. WEYAND, J. MONEGAN, V. CROSBY		
General Weather Conditions:			
Ambient Air Temperature:	____ °C		
<u>Quality Assurance</u>			
pH Meter	Conductivity Meter		
serial no. 1854	serial no. 1854		
pH=4.0 <u>± 0.002 PH@25°C</u>	standard <u>4.49 mS/cm</u>		
pH=7.0	standard		
pH=10.0	standard		
<u>AUTO CAL. SOLUTION PROVIDES PINE ENVIRONMENTAL SERVICE FOR HAZARDOUS Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	HWY 11 GROC		
Site ID#:	03439	Monitoring Well #	MW12
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	2"	feet	
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	3.02 feet		
Total Well Depth (TWD)	12 feet		
Length of the water column (LWC=TWD-DGW)	feet		
1 casing volume (CV=LWC X C)=	_____	X	_____ gals
3 casing volume (3 X CV)=	_____	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: _____

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy):	7/30/03		
Field Personnel:	S. WEYAND, J. MONEGAN, V. CROSHAW		
General Weather Conditions:			
Ambient Air Temperature:	____ °C		
Quality Assurance			
pH Meter	Conductivity Meter		
serial no.	1854		
pH=4.0	standard 0.002 pH @ 25°C		
pH=7.0	standard 449 mS/cm		
pH=10.0	standard		
AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR HAZARDOUS Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	HWY 11 GROC		
Site ID#:	03439	Monitoring Well #	MW13
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	2" feet		
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	6.28 feet		
Total Well Depth (TWD)	12' * (15) feet		
Length of the water column (LWC=TWD-DGW)	feet		
1 casing volume (CV=LWC X C)=	gals		
3 casing volume (3 X CV)=	gals (standard purge volume)		
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: * stand up well (3' side)

15

South Carolina Department of Health and Environmental Control
 Bureau of Land and Waste Management Underground Storage Tank Program
Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>7/30/03</u>		
Field Personnel:	<u>J. LEYLAND, J. MONEGAN, V. CROSBY</u>		
General Weather Conditions:			
Ambient Air Temperature:	_____ °C		
Quality Assurance			
pH Meter	Conductivity Meter		
serial no. <u>1854</u>	serial no. <u>1854</u>		
pH=4.0 <u>± 0.002 PH @ 25°C</u>	standard <u>4.49 mS/cm</u>		
pH=7.0	standard		
pH=10.0	standard		
<i>AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR HOMBA Chain of Custody</i>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Groc</u>		
Site ID#:	<u>03438</u>	Monitoring Well #	<u>MW14</u>
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	<u>2"</u> feet		
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	<u>1.77</u> feet		
Total Well Depth (TWD)	<u>10</u> feet		
Length of the water column (LWC=TWD-DGW)	<u>8.23</u> feet		
1 casing volume (CV=LWC X C)=	_____ X _____	=	<u>1.34</u> gals
3 casing volume (3 X CV)=	<u>4.02</u>	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling	<u>4.02</u> gals.		
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1300</u>
pH (s.u.)							
Specific Conductivity (μmhos/cm)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: hot well

South Carolina Department of Health and Environmental Control
 Bureau of Land and Waste Management Underground Storage Tank Program
Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy):	7/30/03		
Field Personnel:	S. LEYLAND, J. McNEILAN, V. CROSBY		
General Weather Conditions:			
Ambient Air Temperature:	____ °C		
Quality Assurance			
pH Meter	Conductivity Meter		
serial no. 1854	serial no. 1854		
pH=4.0 ±0.002 PH@25°C	standard 449 mS/m		
pH=7.0	standard		
pH=10.0	standard		
AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	Hwy 11 GROC		
Site ID#:	03439	Monitoring Well #	MW15
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	2" feet		
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	10.67 feet		
Total Well Depth (TWD)	* 9 (12) feet		
Length of the water column (LWC=TWD-DGW)	feet		
1 casing volume (CV=LWC X C)=	_____	X	_____ gals
3 casing volume (3 X CV)=	_____	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity (μmhos/cm)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: * stand up well (3' min)

Page ____ of ____

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program
Field Data Information Sheet for Ground Water Sampling**

Date (mm/dd/yy):	7/30/03	
Field Personnel:	J. WEYAND, J. MONEGAN, V. CROSBY	
General Weather Conditions:		
Ambient Air Temperature:	____ °C	
Quality Assurance		
pH Meter	Conductivity Meter	
serial no. 1854	serial no. 1854	
pH=4.0 ± 0.002 pH @ 25°C	standard	4.49 mS/cm
pH=7.0	standard	
pH=10.0	standard	
<i>AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR HOMA Chain of Custody</i>		
Relinquished by	Date/Time	Received by

Facility Name:	HWY 11 GROC	
Site ID#:	03439	Monitoring Well # DW1
Water Supply Well	Public	Private
Monitoring Well Diameter (D):	2" feet	
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652	
* Free Product Thickness:	feet	
Depth to Ground Water (DGW)	22.72 feet	
Total Well Depth (TWD)	45 feet	
Length of the water column (LWC=TWD-DGW)	22.28 feet	
1 casing volume (CV=LWC X C)=	X	= 3.6 gals
3 casing volume (3 X CV)=	10.8	gals (standard purge volume)
Total Volume of Water Purged Before Sampling _____ gals.		
*If free product is present over 1/8 inch, sampling will not be required.		

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1130
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: *Not well*

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program
Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy):	7/30/03			Facility Name:	HWY 11 GROC		
Field Personnel:	J. WEYAND, J. MONEGAN, V. CROSBY			Site ID#:	03439	Monitoring Well #	DMW 2
General Weather Conditions:				Water Supply Well	Public	Private	
Ambient Air Temperature:	____ °C			Monitoring Well Diameter (D): 2" feet			
Quality Assurance							
pH Meter	Conductivity Meter						
serial no. 1854	serial no. 1854						
pH=4.0 ± 0.002 PH @ 25°C	standard 449 mS/m						
pH=7.0	standard						
pH=10.0	standard						
AUTO CAL. SOLUTIONS PROVIDE PINE ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody							
Relinquished by	Date/Time	Received by	Date/Time	Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 for a 4 inch well C=0.652			
* Free Product Thickness: _____ feet							
Depth to Ground Water (DGW) 16.49 feet							
Total Well Depth (TWD) 75 feet							
Length of the water column (LWC=TWD-DGW) 58.51 feet							
1 casing volume (CV=LWC X C) = _____ X _____ = 9.54 gals							
3 casing volume (3 X CV) = 28.62 gals (standard purge volume)							
Total Volume of Water Purged Before Sampling _____ gals.							
*If free product is present over 1/8 inch, sampling will not be required.							

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1315
pH (s.u.)	6.29	6.14	6.34	6.71			6.54
Specific Conductivity (μmhos/cm)	1050	050	051	043			.039
Water Temperature (°C)	19.8	18.7	17.8	18.2			17.3
Dissolved Oxygen	4.94	4.74	5.43	6.12			7.03
PID readings, if required							
Remarks:							

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program
Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>7/30/03</u>		
Field Personnel:	<u>J. WEYAND, J. NOVAKOW, V. CRESPO</u>		
General Weather Conditions:			
Ambient Air Temperature:	_____ °C		
Quality Assurance			
pH Meter serial no.	<u>1854</u>	Conductivity Meter serial no.	<u>1854</u>
pH=4.0	<u>± 0.002 PH @ 25°C</u>	standard	<u>449 mS/m</u>
pH=7.0		standard	
pH=10.0		standard	
<i>AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody</i>			
Relinquished by	Date/Time	Received by	Date/Time

302169

Facility Name:	<u>Hwy 11 Groc</u>		
Site ID#:	<u>03439</u>	Monitoring Well #	<u>DMW4</u>
Water Supply Well	Public	Private	
Monitoring Well Diameter (D): <u>2"</u> feet			
Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 for a 4 inch well C=0.652			
* Free Product Thickness: _____ feet			
Depth to Ground Water (DGW) <u>23.18</u> feet			
Total Well Depth (TWD) <u>60</u> feet			
Length of the water column (LWC=TWD-DGW) <u>36.82</u> feet			
1 casing volume (CV=LWC X C)= _____ X _____ = <u>6.0</u> gals			
3 casing volume (3 X CV)= <u>18.0</u> gals (standard purge volume)			
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1115</u>
pH (s.u.)	<u>5.21</u>	<u>5.50</u>	<u>5.40</u>	<u>5.20</u>			<u>5.11</u>
Specific Conductivity ($\mu\text{mhos/cm}$)	<u>0.48</u>	<u>0.34</u>	<u>0.34</u>	<u>0.34</u>			<u>0.34</u>
Water Temperature (°C)	<u>21.7</u>	<u>20.4</u>	<u>19.1</u>	<u>19.1</u>			<u>18.9</u>
Dissolved Oxygen	<u>5.94</u>	<u>6.29</u>	<u>6.73</u>	<u>6.39</u>			<u>6.77</u>
PID readings, if required							
Remarks:							

Appendix D

Table 3 – Summary of July 30, 2003 Laboratory Analytical Data
&
Copies of Laboratory Analytical Data and Chain of Custody

Table 3
July 30, 2003 Laboratory Analytical Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
SCDHEC Site # 03439

Well	Benzene (ppb)	Toleune (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Naphthalene (ppb)
MW-1	7,600.00	28,000.00	6,300.00	32,000.00	25,000.00	<2500.00
MW-2	5.80	<5.00	<1.00	5.30	<1.00	<5.00
MW-3	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00
MW-4	4,000.00	14,000.00	2,700.00	13,000.00	2,100.00	<500.00
MW-5	4.20	17.00	3.60	18.00	2.20	<5.00
MW-6	4,200.00	13,000.00	1,600.00	8,900.00	21,000.00	400.00
MW-7	18.00	18.00	<1.00	9.70	<1.00	<5.00
MW-8	12,000.00	40,000.00	3,600.00	18,000.00	15,000.00	660.00
MW-9	N/A	N/A	N/A	N/A	N/A	N/A
MW-10	170.00	420.00	43.00	240.00	540.00	6.50
MW-11	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00
MW-12	N/A	N/A	N/A	N/A	N/A	N/A
MW-13	N/A	N/A	N/A	N/A	N/A	N/A
MW-14	3,100.00	9,700.00	1,800.00	9,300.00	4,300.00	<500.00
MW-15	N/A	N/A	N/A	N/A	N/A	N/A
DMW-1	<1.00	<5.00	<1.00	<3.00	4.20	<5.00
DMW-2	<1.00	8.40	6.80	30.00	<1.00	6.70
DMW-4	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00
CK-1	N/A	N/A	N/A	N/A	N/A	N/A
CK-2	N/A	N/A	N/A	N/A	N/A	N/A
WW-1	N/A	N/A	N/A	N/A	N/A	N/A

Notes: N/A = Not Applicable



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Est. 1970

REPORT OF ANALYSIS

August 07, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

Date Received :	August 01, 2003	ESC Sample # :	L122656-01
Description :	HWY 11 Grocery	Site ID :	03439
Sample ID :	MW-1	Project # :	302-169
Collected By :	JW/SM/VC		
Collection Date :	07/30/03 11:45		

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	7600	500	ug/l	8260B	08/04/03	500
Toluene	28000	2500	ug/l	8260B	08/04/03	500
Ethylbenzene	6300	500	ug/l	8260B	08/04/03	500
Total Xylenes	32000	1500	ug/l	8260B	08/04/03	500
Methyl tert-butyl ether	25000	500	ug/l	8260B	08/04/03	500
Naphthalene	BDL	2500	ug/l	8260B	08/04/03	500
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	500
Dibromofluoromethane	97.		% Rec.	8260B	08/04/03	500
4-Bromofluorobenzene	99.		% Rec.	8260B	08/04/03	500

Leslie Newton, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
Note:

The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

August 07, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

Date Received : August 01, 2003 ESC Sample # : L122656-02
 Description : HWY 11 Grocery Site ID :
 Sample ID : MW-2 Project # : 302-169
 Collected By : JW/SM/VC
 Collection Date : 07/30/03 12:15

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	5.8	1.0	ug/l	8260B	08/04/03	1
Toluene	BDL	5.0	ug/l	8260B	08/04/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	08/04/03	1
Total Xylenes	5.3	3.0	ug/l	8260B	08/04/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	08/04/03	1
Naphthalene	BDL	5.0	ug/l	8260B	08/04/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	1
Dibromofluoromethane	95.		% Rec.	8260B	08/04/03	1
4-Bromofluorobenzene	99.		% Rec.	8260B	08/04/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
 KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
 Note:

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Leslie Newton, ESC Representative



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REPORT OF ANALYSIS

August 07, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-3
Collected By : JW/SM/VC
Collection Date : 07/30/03 11:10

ESC Sample # : L122656-03
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	08/01/03	1
Toluene	BDL	5.0	ug/l	8260B	08/01/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	08/01/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	08/01/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	08/01/03	1
Naphthalene	BDL	5.0	ug/l	8260B	08/01/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/01/03	1
Dibromofluoromethane	100		% Rec.	8260B	08/01/03	1
4-Bromofluorobenzene	98.		% Rec.	8260B	08/01/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

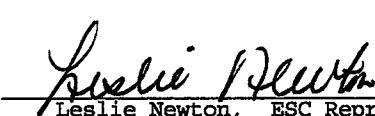
A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

The reported analytical results relate only to the sample submitted.

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Leslie Newton, ESC Representative



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REPORT OF ANALYSIS

August 07, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-4
Collected By : JW/SM/VC
Collection Date : 07/30/03 12:15

ESC Sample # : L122656-04
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	4000	100	ug/l	8260B	08/04/03	100
Toluene	14000	500	ug/l	8260B	08/04/03	100
Ethylbenzene	2700	100	ug/l	8260B	08/04/03	100
Total Xylenes	13000	300	ug/l	8260B	08/04/03	100
Methyl tert-butyl ether	2100	100	ug/l	8260B	08/04/03	100
Naphthalene	BDL	500	ug/l	8260B	08/04/03	100
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	100
Dibromofluoromethane	98.		% Rec.	8260B	08/04/03	100
4-Bromofluorobenzene	100		% Rec.	8260B	08/04/03	100

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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Leslie Newton, ESC Representative



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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-5
Collected By : JW/SM/VC
Collection Date : 07/30/03 11:40

ESC Sample # : L122656-05
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	4.2	1.0	ug/l	8260B	08/01/03	1
Toluene	17.	5.0	ug/l	8260B	08/01/03	1
Ethylbenzene	3.6	1.0	ug/l	8260B	08/01/03	1
Total Xylenes	18.	3.0	ug/l	8260B	08/01/03	1
Methyl tert-butyl ether	2.2	1.0	ug/l	8260B	08/01/03	1
Naphthalene	BDL	5.0	ug/l	8260B	08/01/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/01/03	1
Dibromofluoromethane	100		% Rec.	8260B	08/01/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	08/01/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-6
Collected By : JW/SM/VC
Collection Date : 07/30/03 12:35

ESC Sample # : L122656-06
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	4200	50.	ug/l	8260B	08/01/03	50
Toluene	13000	2500	ug/l	8260B	08/04/03	500
Ethylbenzene	1600	50.	ug/l	8260B	08/01/03	50
Total Xylenes	8900	150	ug/l	8260B	08/01/03	50
Methyl tert-butyl ether	21000	500	ug/l	8260B	08/04/03	500
Naphthalene	400	250	ug/l	8260B	08/01/03	50
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/01/03	50
Dibromofluoromethane	96.		% Rec.	8260B	08/01/03	50
4-Bromofluorobenzene	96.		% Rec.	8260B	08/01/03	50

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

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REPORT OF ANALYSIS

August 07, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

Date Received : August 01, 2003 ESC Sample # : L122656-07
 Description : HWY 11 Grocery Site ID :
 Sample ID : MW-7 Project # : 302-169
 Collected By : JW/SM/VC
 Collection Date : 07/30/03 11:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	18.	1.0	ug/l	8260B	08/04/03	1
Toluene	18.	5.0	ug/l	8260B	08/04/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	08/04/03	1
Total Xylenes	9.7	3.0	ug/l	8260B	08/04/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	08/04/03	1
Naphthalene	BDL	5.0	ug/l	8260B	08/04/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	1
Dibromofluoromethane	98.		% Rec.	8260B	08/04/03	1
4-Bromofluorobenzene	98.		% Rec.	8260B	08/04/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-8
Collected By : JW/SM/VC
Collection Date : 07/30/03 13:00

ESC Sample # : L122656-08

Site ID :

Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	12000	500	ug/l	8260B	08/04/03	500
Toluene	40000	2500	ug/l	8260B	08/04/03	500
Ethylbenzene	3600	50.	ug/l	8260B	08/02/03	50
Total Xylenes	18000	150	ug/l	8260B	08/02/03	50
Methyl tert-butyl ether	15000	500	ug/l	8260B	08/04/03	500
Naphthalene	660	250	ug/l	8260B	08/02/03	50
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/02/03	50
Dibromofluoromethane	99.		% Rec.	8260B	08/02/03	50
4-Bromofluorobenzene	100		% Rec.	8260B	08/02/03	50

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

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August 07, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-10
Collected By : JW/SM/VC
Collection Date : 07/30/03 12:30

ESC Sample # : L122656-09

Site ID :

Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	170	1.0	ug/l	8260B	08/02/03	1
Toluene	420	50.	ug/l	8260B	08/04/03	10
Ethylbenzene	43.	1.0	ug/l	8260B	08/02/03	1
Total Xylenes	240	3.0	ug/l	8260B	08/02/03	1
Methyl tert-butyl ether	540	10.	ug/l	8260B	08/04/03	10
Naphthalene	6.5	5.0	ug/l	8260B	08/02/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/02/03	1
Dibromofluoromethane	97.		% Rec.	8260B	08/02/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	08/02/03	1

Leslie Newton, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-11
Collected By : JW/SM/VC
Collection Date : 07/30/03 12:05

ESC Sample # : L122656-10

Site ID :

Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	08/04/03	1
Toluene	BDL	5.0	ug/l	8260B	08/04/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	08/04/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	08/04/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	08/04/03	1
Naphthalene	BDL	5.0	ug/l	8260B	08/04/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	1
Dibromofluoromethane	96.		% Rec.	8260B	08/04/03	1
4-Bromofluorobenzene	96.		% Rec.	8260B	08/04/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-14
Collected By : JW/SM/VC
Collection Date : 07/30/03 13:00

ESC Sample # : L122656-11
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	3100	100	ug/l	8260B	08/04/03	100
Toluene	9700	500	ug/l	8260B	08/04/03	100
Ethylbenzene	1800	100	ug/l	8260B	08/04/03	100
Total Xylenes	9300	300	ug/l	8260B	08/04/03	100
Methyl tert-butyl ether	4300	100	ug/l	8260B	08/04/03	100
Naphthalene	BDL	500	ug/l	8260B	08/04/03	100
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	100
Dibromofluoromethane	98.		% Rec.	8260B	08/04/03	100
4-Bromofluorobenzene	100		% Rec.	8260B	08/04/03	100

Leslie Newton, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

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REPORT OF ANALYSIS

August 07, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : DMW-1
Collected By : JW/SM/VC
Collection Date : 07/30/03 11:30

ESC Sample # : L122656-12
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	08/04/03	1
Toluene	BDL	5.0	ug/l	8260B	08/04/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	08/04/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	08/04/03	1
Methyl tert-butyl ether	4.2	1.0	ug/l	8260B	08/04/03	1
Naphthalene	BDL	5.0	ug/l	8260B	08/04/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	1
Dibromofluoromethane	95.		% Rec.	8260B	08/04/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	08/04/03	1


Leslie Newton, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : DMW-2
Collected By : JW/SM/VC
Collection Date : 07/30/03 13:15

ESC Sample # : L122656-13
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	08/04/03	1
Toluene	8.4	5.0	ug/l	8260B	08/04/03	1
Ethylbenzene	6.8	1.0	ug/l	8260B	08/04/03	1
Total Xylenes	30.	3.0	ug/l	8260B	08/04/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	08/04/03	1
Naphthalene	6.7	5.0	ug/l	8260B	08/04/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	1
Dibromofluoromethane	98.		% Rec.	8260B	08/04/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	08/04/03	1



Leslie Newton, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

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August 07, 2003

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : DMW-4
Collected By : JW/SM/VC
Collection Date : 07/30/03 11:15

ESC Sample # : L122656-14

Site ID :

Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	08/02/03	1
Toluene	BDL	5.0	ug/l	8260B	08/02/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	08/02/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	08/02/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	08/02/03	1
Naphthalene	BDL	5.0	ug/l	8260B	08/02/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/02/03	1
Dibromofluoromethane	97.		% Rec.	8260B	08/02/03	1
4-Bromofluorobenzene	98.		% Rec.	8260B	08/02/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

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SEI Environmental - Columbia, SC 3021 McNaughton Drive, Suite 9 Columbia, SC 29223		Alternate billing information:				Analysis/Container/Preservative				Chain of Custody Page <u>1</u> of <u>1</u>	
Report to: Mr. Paul Bekish		Email: pbekish@sei-environmental.								Prepared by: ENVIRONMENTAL SCIENCE CORP. 12065 Lebanon Road Mt. Juliet, TN 37122 Phone (800) 767-5859 FAX (615) 758-5859	
Project Description: Hwy 11 GLOC		City/State Collected SALEM, SC		Y18760BTEXMN 40ml/Amb-HCl						CoCode: SEICSC (lab use only) Template/Prelogin: T20210/P88989 Cooler #: 711605 Shipped Via: FedEX Standard	
Phone: (803) 788-2535 FAX: (803) 788-2399		Client Project #: 302-169									Lab Project # SEICSC-302169
Collected by (print): J. WEAVER & D. J. MONECHAN V. CRESHAM		Site/Facility ID#: O3439		P.O.#:							
Collected by (signature): J. WEAVER & D. J. MONECHAN V. CRESHAM		<input checked="" type="checkbox"/> Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day 200% <input type="checkbox"/> Next Day 100% <input type="checkbox"/> Two Day 50%		Date Results Needed 8/7/03		No. of Cntrs					
Packed on Ice N v				Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes							
Sample ID	Comp/Grab	Matrix*	Depth	Date	Time					Remarks/Contaminant	Sample # (lab only)
MW1	G	GW		7/30/03	1145	2	X				L122656-01
MW2		GW			1215	2	X				02
MW3		GW			1110	2	X				03
MW4		GW			1215	2	X				04
MW5		GW			1140	2	X				05
MW6		GW			1235	2	X				06
MW7		GW			1130	2	X				07
MW8		GW			1300	2	X				08
MW10		GW			1230	2	X				09

*Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

Remarks: _____

pH _____ Temp _____

Flow _____ Other _____

Relinquished by: (Signature) J. WEAVER	Date: 7/31/03	Time: 1400	Received by: (Signature) J. MONECHAN	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>	Condition: Oil
Relinquished by: (Signature) J. MONECHAN	Date: _____	Time: _____	Received by: (Signature) J. WEAVER	Temp: 2.7 Bottles Received: 28 + 1TB	
Relinquished by: (Signature) J. WEAVER	Date: _____	Time: _____	Received for lab by: (Signature) J. MONECHAN	Date: 8/1/03 Time: 9:00	pH Checked: NCF

SEI Environmental - Columbia, SC 3021 McNaughton Drive, Suite 9 Columbia, SC 29223		Alternate billing information:				Analysis/Container/Preservative				Chain of Custody Page <u>2</u> of <u>2</u>	
Report to: Mr. Paul Bekish Project Description: Hwy 11 GROC Phone: (803) 788-2535 FAX: (803) 788-2399		Email: pbekish@sei-environmental.com City/State Collected SALEM, SC Client Project #: 302-169 Lab Project #: SEICSC-302169 Site/Facility ID#: 03439 P.O.#								Prepared by: ENVIRONMENTAL SCIENCE CORP. 12065 Lebanon Road Mt. Juliet, TN 37122 Phone (800) 767-5859 FAX (615) 758-5859	
Collected by (print): J. W. BEKISH J. W. BEKISH, S. C. HEC HOLM										CoCode: SEICSC (lab use only) Template/Prologin: T20210/P88989 Cooler #: 7116ds Shipped Via: FedEX Standard	
Collected by (signature): 		Rush? (Lab MUST Be Notified) Same Day 200% Next Day 100% Two Day 50%				Date Results Needed 8/7/03 Email? <u>No</u> Yes FAX? <u>No</u> Yes				No. of Cntrs V8260BT/TEXAN 40ml Amb-HCl	
Packed on Ice N (Y)										Remarks/Contaminant Sample # (lab only)	
Sample ID	Comp/Grab	Matrix*	Depth	Date	Time						
MW11	G	GW		7/30/03	12:05	2	X				
MW14		GW			1:30	2	X				
0MW1		GW			1:30	2	X				
0MW2		GW			1:35	2	X				
0MW4		GW			1:15	2	X				

*Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

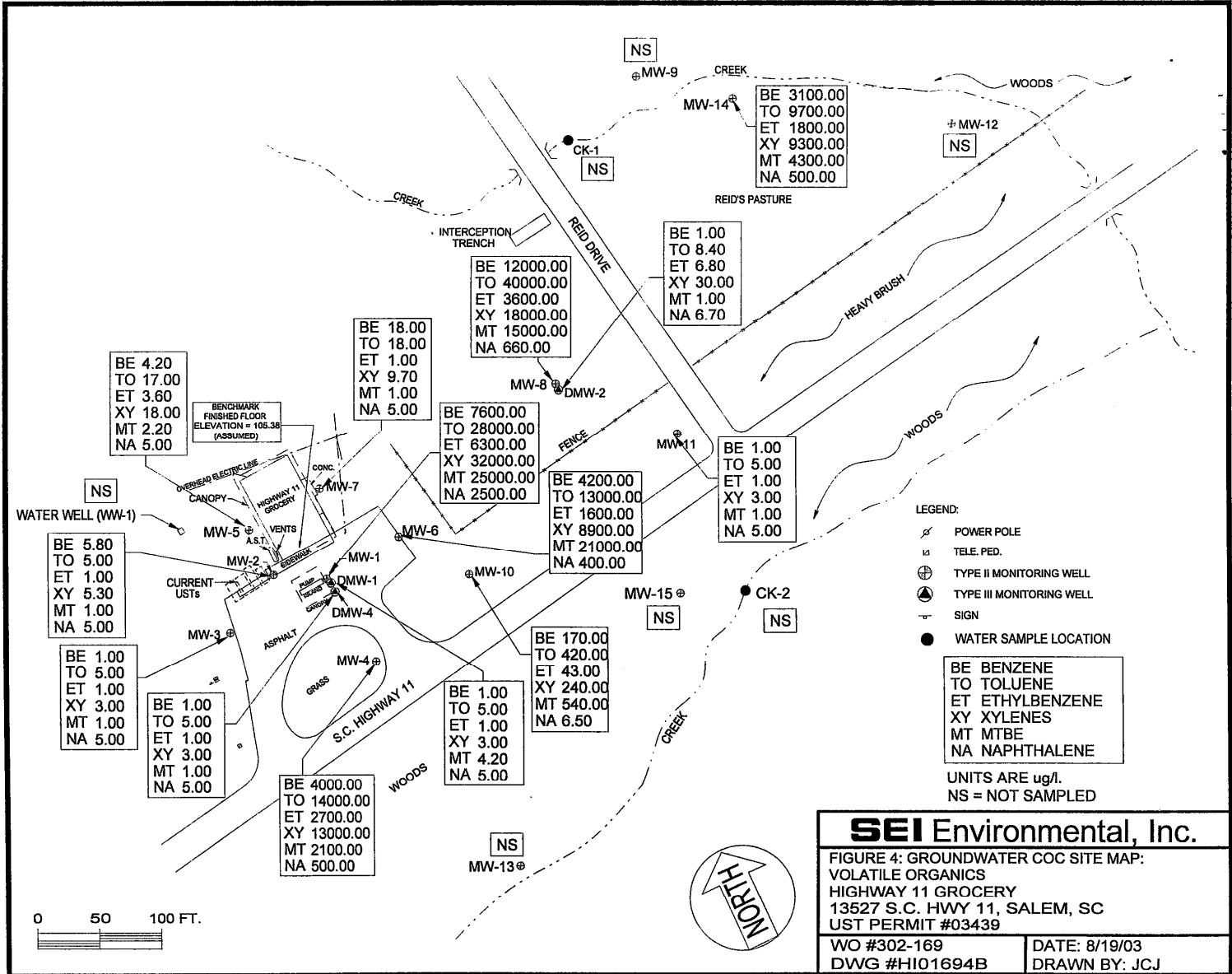
pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature) 	Date: 7/30/03	Time: 1400	Received by: (Signature)	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>	Condition: OK		
Relinquished by: (Signature) 	Date: _____	Time: _____	Received by: (Signature) _____	Temp: 27	Bottles Received: 28 + 178		
Relinquished by: (Signature) 	Date: _____	Time: _____	Received for lab by: (Signature) R. M. R.	Date: 8/1/03	Time: 9:06	pH Checked _____	NOF _____

Appendix E
Figure 3 – July 30, 2003 CoC Map



Appendix F
Non-Hazardous Manifest & Disposal Receipt

**NON-HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest
Document No.
GK57862. Page 1
of

07/31/03

3. Generator's Name and Mailing Address

SET ENVIRONMENTAL INC
3021 MCNAUGHTON DR SUITE 9
COLOMBIA, SC 29223

4. Generator's Phone ()

5. Transporter 1 Company Name

SET ENVIRONMENTAL, INC

6. US EPA ID Number

A. Transporter's Phone
803-788-2535

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

G & K TANK SERVICE INC Number
PO BOX 1384
SUMTER, SC 29151
987573557

C. Facility's Phone

800-800-6840

11. Waste Shipping Name and Description

12. Containers
No. Type13. Total
Quantity14.
Unit
Wt/Vola. NON HAZARDOUS PETROLEUM CONTAMINATED WATER
CAMDEN SHELL CAMDEN, SC

01DM

b. NON HAZARDOUS PETROLEUM CONTAMINATED WATER
HWY 11 GROCERY SALEM, SC

96.39 gal

GEN
ERA
TO
R

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
--------------------	-----------	-------	-----	------

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name <i>Jeff Weyand</i>	Signature <i>Jeff W</i>	Month	Day	Year
--	----------------------------	-------	-----	------

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 <i>S. Collett</i>	Signature <i>S. Collett</i>	Month	Day	Year
---	--------------------------------	-------	-----	------

ORIGINAL - RETURN TO GENERATOR



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 96.39 gallons
Hwy 11 Grocery
Salem, SC

Contaminant NonHazardous Petroleum
Contaminanted Water

This is to certify the above ~~soil~~^{water} 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. Chen

Date 07/31/03

Appendix G
Table 4 – July 30, 2003 System Effectiveness

Table 4
System Effectiveness - July 30, 2003 Laboratory Analytical Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
SCDHEC Site # 03439

Well	Benzene (ppb)	Toleune (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Naphthalene (ppb)	Total Conc. (ppb)
MW-1	7,600.00	28,000.00	6,300.00	32,000.00	25,000.00	2,500.00	101,400.00
MW-2	5.80	5.00	1.00	5.30	1.00	5.00	23.10
MW-3	1.00	5.00	1.00	3.00	1.00	5.00	16.00
MW-4	4,000.00	14,000.00	2,700.00	13,000.00	2,100.00	500.00	36,300.00
MW-5	4.20	17.00	3.60	18.00	2.20	5.00	50.00
MW-6	4,200.00	13,000.00	1,600.00	8,900.00	21,000.00	400.00	49,100.00
MW-7	18.00	18.00	1.00	9.70	1.00	5.00	52.70
MW-8	12,000.00	40,000.00	3,600.00	18,000.00	15,000.00	660.00	89,260.00
MW-10	170.00	420.00	43.00	240.00	540.00	6.50	1,419.50
MW-11	1.00	5.00	1.00	3.00	1.00	5.00	16.00
MW-14	3,100.00	9,700.00	1,800.00	9,300.00	4,300.00	500.00	28,700.00
DMW-1	1.00	5.00	1.00	3.00	4.20	5.00	19.20
DMW-2	1.00	8.40	6.80	30.00	1.00	6.70	53.90
DMW-4	1.00	5.00	1.00	3.00	1.00	5.00	16.00
Initial Conc.	31,103.00	105,188.40	16,059.40	81,515.00	67,952.40	4,608.20	306,426.40
SSTL Conc.	3,881.00	57,303.00	33,705.00	339,605.00	10,645.00	2,452.00	447,591.00
Initial Conc. Above SSTL	27,222.00	47,885.40	0.00	0.00	57,307.40	2,156.20	134,571.00

(Initial Mass above SSTL - Current Mass Above SSTL)(100)/(Initial Mass Above SSTL)=(447,591.00 - 134,571.00) (100) / (134571.00)=69.93%

SEI
Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

RECEIVED

AUG 20 2003

Underground Storage
Tank Program

August 18, 2003

Konstantine Akhvlediani
Hydrogeologist / Project Manager
SCDHEC
2600 Bull Street
Columbia, SC 29201-1708

Re: Summary of Corrective Action and Gauging Results
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit # 03439

36-Tech

Dear Mr. Akhvlediani;

SEI Environmental, Inc. (SEI) summary of gauging results and laboratory analytical results for samples collected on July 30, 2003. Attached, Appendix A, are Figure 1, a topographic map depicting the location of the site and Figure 2, a site map illustrating the location of the monitoring wells.

May 7, 2002, fourteen samples were collected from the monitoring wells onsite. The samples collected were analyzed for Benzene, Toluene, Ethylbenzene, Xylene, Methyl Tert-butyl Ether, and Naphthalene. Attached in Appendix B is Table 1, which summarizes the May 7, 2002 laboratory analytical results.

July 22, 2003, SEI personnel commenced with corrective action at the site via an injection system utilizing duel phase extraction system, MAV, a patented "EDOT" oxygen injection system and a patented hydrogen peroxide injection system ("Per-Petual").

July 30, 2003, SEI personnel were on site to gauge the monitoring wells, remove free product and collect groundwater samples. Eighteen (18) monitoring wells were gauged and two (2), MW-1 and MW-8, were found to free product. MW-1 was found to have 0.08 feet of free product and MW-8 was found to have 0.20 feet of free product. Upon completion of gauging, fourteen (14) monitoring wells were purged and field screened. 96.39 gallons of petroleum-impacted water was generated from the purging of the fourteen (14) wells. Attached in Appendix C are Table 2, which summarizes the July 30, 2003 gauging and field screening information and copies of the Field Data Information Sheet(s) for Ground Water Sampling. Upon completion of purging and collection of field screening information, a representative sample was collected from each sample point. Each sample was submitted to Environmental Science Laboratory in Nashville, Tennessee for analysis for Benzene, Toluene, Ethylbenzene, Xylene (BTEX) by EPA method 8260B, Methyl Tert-butyl Ether (MTBE) by EPA method 8260B, and Naphthalene by EPA method

8260B. Attached in Appendix D are Table 3, which summarizes the laboratory analytical results and copies of the laboratory analytical results and a copy of the Chain of Custody. Attached in Appendix E is Figure 3, a CoC map based on the July 30, 2003 laboratory analytical data.

July 31, 2003, 96.39 gallons of petroleum-impacted water, which was generated from the purging of the sample points was disposed at G & K Tank Services, Inc.; located in Sumter, SC. Attached in Appendix F are copies of the Non-Hazardous Waste Manifest and Certificate for Disposal for the 96.39 gallons of petroleum-impacted water.

The evaluation of the corrective action activities effectiveness consists of comparing the July 30, 2003 laboratory analytical data against the May 7, 2002 laboratory data and determining the percent of total concentration reduction. The percent of total concentration reduction is calculated by using the following formula:

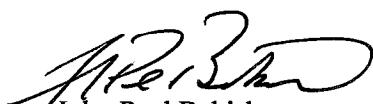
$$\text{Percent of Total Concentration Reduction} = ((\text{Initial Mass Above SSTL}) - (\text{Current Mass Above SSTL})) * (100) / (\text{Initial Mass Above SSTL})$$

The calculation for the July 30, 2003 Percent of Total Concentration Reduction was found to be 69.93%. Attached in Appendix G is Table 4, which illustrates the system's effectiveness analysis.

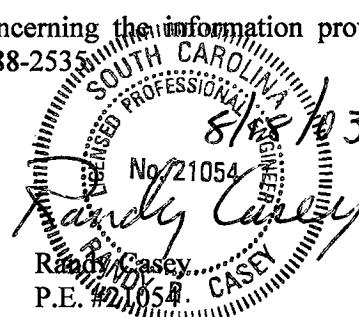
The patented "EDOT" oxygen injection system and a patented hydrogen peroxide injection system ("Per-Petual") at the above referenced facility are currently active. SEI has scheduled a MAV treatment, for removal of free product, for the first week of September. Two (2) weeks after completion of the MAV event, SEI will collect groundwater samples for evaluation of the corrective action activities. Upon receipt of the laboratory analytical, SEI will submit a report summarizing the findings.

If you have any questions and / or comments, concerning the information provided in this document, please contact John Paul Bekish at (803) 788-2535.

Sincerely,



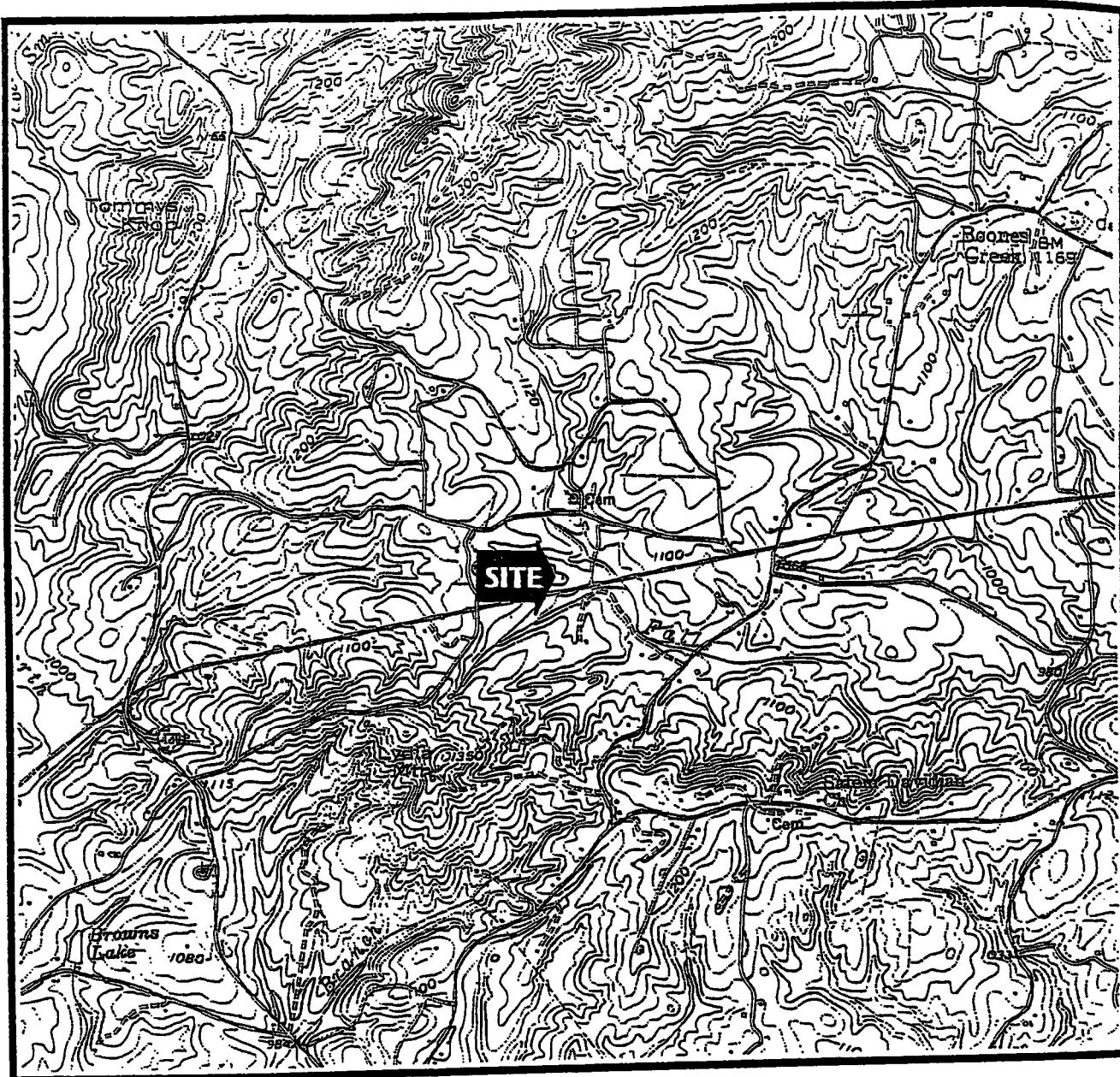
John Paul Bekish
Branch Manager
SEI – Columbia Office



Attachment(s)

CC: Steven Smith, Hwy 11 Property Owner
SEI Project Files

Appendix A
Figure 1 - Topographic Map
&
Figure 2 - Site Map



SCALE 1:24000

0

1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1

1 KILOMETER

.5

**SEI Environmental, Inc.**

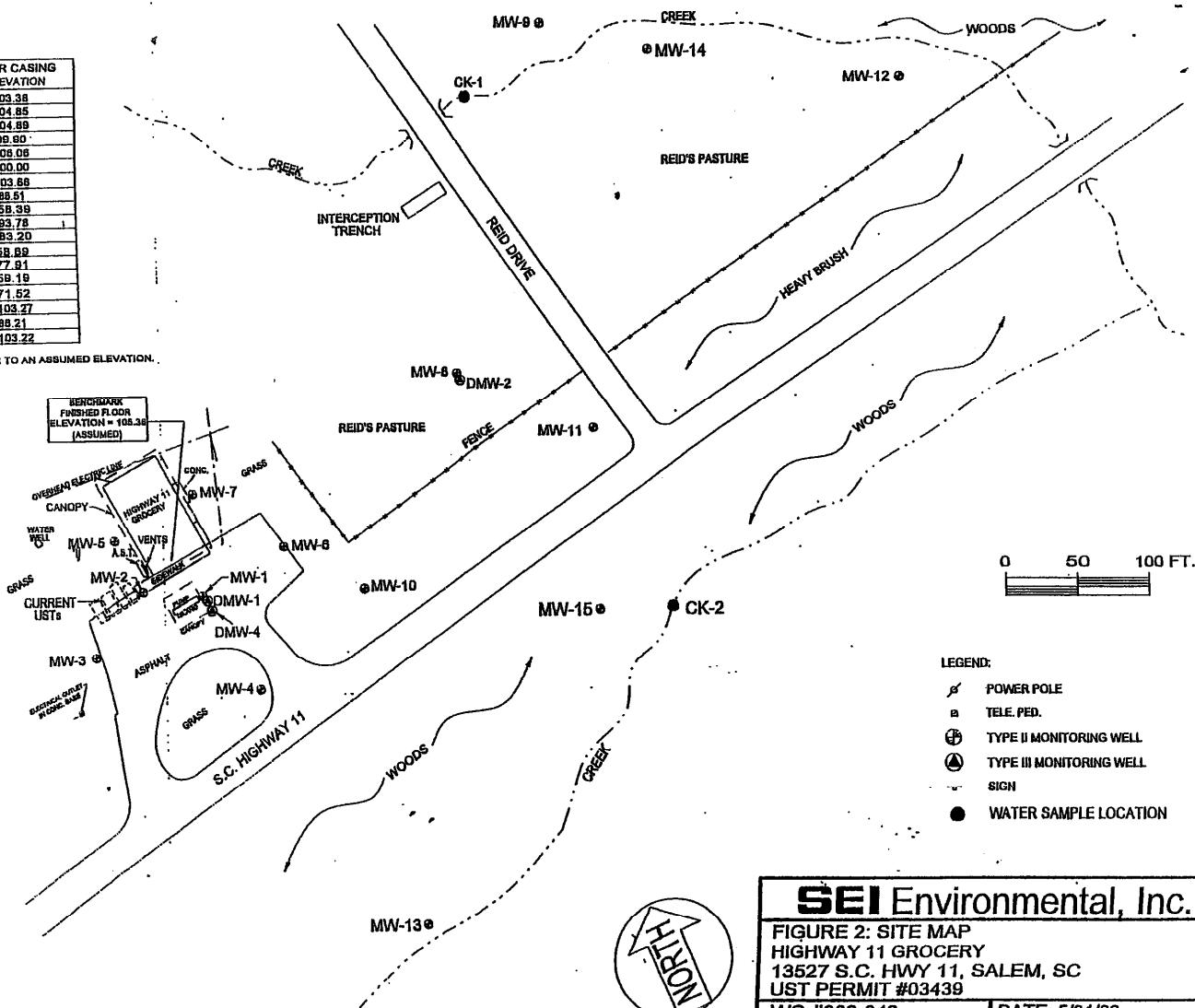
FIGURE 1: SITE LOCATION MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

W.O. # 300-388
DWG #

DATE 9/5/01
DRAWN BY: JC

WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.65
MW-3	104.69
MW-4	99.80
MW-5	105.06
MW-6	100.00
MW-7	103.68
MW-8	88.51
MW-9	58.39
MW-10	83.78
MW-11	83.20
MW-12	58.88
MW-13	77.81
MW-14	58.19
MW-15	71.62
DMW-1	103.27
DMW-2	88.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.



LEGEND:

- ↙ POWER POLE
- ▲ TELE. PED.
- (+) TYPE II MONITORING WELL
- (△) TYPE III MONITORING WELL
- - SIGN
- WATER SAMPLE LOCATION

SEI Environmental, Inc.

Appendix B

Table 1 – Summary of May 7, 2002 Laboratory Analytical Data

Table 1
May 7, 2002 Laboratory Analytical Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
SCDHEC Site # 03439

Well	Benzene (ppb)	Toleune (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Naphthalene (ppb)	Total Conc. (ppb)
MW-1	226,000.00	301,000.00	280,000.00	278,000.00	5,110,000.00	2,000.00	6,197,000.00
MW-2	13.00	8.00	1.00	5.00	5.00	5.00	37.00
MW-3	1.00	1.00	1.00	1.00	5.00	5.00	14.00
MW-4	1,500.00	5,320.00	620.00	3,360.00	810.00	500.00	12,110.00
MW-5	1.00	1.00	1.00	1.00	5.00	5.00	14.00
MW-6	1,780.00	4,950.00	490.00	2,880.00	6,350.00	500.00	16,950.00
MW-7	34.00	20.00	1.00	8.00	7.00	5.00	75.00
MW-8	226,000.00	301,000.00	280,000.00	278,000.00	5,110,000.00	2,000.00	6,197,000.00
MW-10	115.00	185.00	68.00	328.00	86.00	9.00	791.00
MW-11	1.00	1.00	1.00	1.00	5.00	5.00	14.00
MW-14	3,780.00	13,800.00	27,000.00	14,700.00	7,010.00	500.00	66,790.00
DMW-1	215.00	430.00	50.00	50.00	1,780.00	250.00	2,775.00
DMW-2	1.00	1.00	1.00	1.00	5.00	5.00	14.00
DMW-4	1.00	1.00	1.00	1.00	5.00	5.00	14.00
Initial Conc.	459,442.00	626,718.00	588,235.00	577,336.00	10,236,073.00	5,794.00	12,493,598.00
SSTL Conc.	3,881.00	57,303.00	33,705.00	339,605.00	10,645.00	2,452.00	447,591.00
Initial Conc. Above SSTL	455,561.00	569,415.00	554,530.00	237,731.00	10,225,426.00	3,342.00	12,046,007.00

Appendix C

Table 2 – Summary of July 1, 2003 Gauging and Field Screening Activities
&
Field Data Information Sheet(s) for Ground Water Sampling

Table 2
Summary of Field Observations - July 30, 2003
Highway 11 Grocery
13527 South Carolina Highway
Salem, South Carolina
UST Permit # 03439

Sample ID	Frequency	Depth to Product (Feet)	Free Product Thickness (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)	pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
MW-1	Initial	22.81	0.08	22.89	30.00	N/A	N/A	N/A	N/A	3.40	Free Product
MW-2	Initial			23.78	35.00	N/A	N/A	N/A	N/A	5.40	Strong Odor
MW-3	Initial			22.21	30.00	5.00	0.099	19.20	5.81		
MW-3	1st Volume				30.00	5.10	0.017	18.20	5.53	1.20	
MW-3	2nd Volume				30.00	4.91	0.013	17.80	5.73	1.20	
MW-3	3rd Volume				30.00	4.62	0.012	17.70	5.51	1.40	
MW-3	Post Sampling				30.00	4.50	0.012	17.70	5.80		Full Recharge
MW-4	Initial			22.09	35.00	N/A	N/A	N/A	N/A	6.30	Strong Odor
MW-5	Initial			26.53	35.00	4.69	0.013	18.90	6.96		
MW-5	1st Volume				35.00	4.52	0.012	18.00	6.11	1.30	
MW-5	2nd Volume				35.00	4.27	0.012	17.90	6.10	1.30	
MW-5	3rd Volume				35.00	4.33	0.012	17.70	6.29	1.50	
MW-5	Post Sampling				35.00	4.21	0.012	17.80	5.98		Full Recharge
MW-6	Initial			19.88	35.00	N/A	N/A	N/A	N/A	7.38	Strong Odor
MW-7	Initial			26.22	40.00	N/A	N/A	N/A	N/A	6.75	Strong Odor
MW-8	Initial	20.22	0.20	20.46	30.00	N/A	N/A	N/A	N/A	4.68	Free Product
MW-9	Initial			2.26	12.00	N/A	N/A	N/A	N/A		Gauged Only
MW-10	Initial			18.95	24.00	N/A	N/A	N/A	N/A	2.46	Strong Odor
MW-11	Initial			15.92	23.00	5.14	0.018	19.70	5.78		
MW-11	1st Volume				23.00	4.87	0.012	17.70	5.58	1.15	
MW-11	2nd Volume				23.00	4.58	0.011	17.00	5.92	1.35	
MW-11	Post Sampling				23.00	4.11	0.011	17.40	4.93		Bailed Dry
MW-12	Initial			3.02	12.00	N/A	N/A	N/A	N/A		Gauged Only
MW-13	Initial			6.28	15.00	N/A	N/A	N/A	N/A		Gauged Only
MW-14	Initial			1.77	10.00	N/A	N/A	N/A	N/A	4.02	Strong Odor

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JOURNAL OF CLIMATE

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Table 2 - Continued
Summary of Field Observations - July 30, 2003
Highway 11 Grocery
13527 South Carolina Highway
Salem, South Carolina
UST Permit # 03439

Sample ID	Frequency	Depth to Product				pH (S.U.)	Specific Conductivity (umhos/cm)	Water Temp. (Degrees C)	Dissolved Oxygen (S.U.)	Volume Purged (Gal.)	Notes
		Thickness (Feet)	Free Product (Feet)	Depth to Groundwater (Feet)	Total Well Depth (Feet)						
MW-15	Initial			10.67	12.00	N/A	N/A	N/A	N/A		Gauged Only
DMW-1	Initial			22.72	45.00	N/A	N/A	N/A	N/A	10.80	Strong Odor
DMW-2	Initial			16.49	75.00	6.29	0.050	19.80	4.94		
DMW-2	1st Volume				75.00	6.14	0.050	18.70	4.74	9.54	
DMW-2	2nd Volume				75.00	6.34	0.051	17.80	5.43	9.54	
DMW-2	3rd Volume				75.00	6.71	0.043	18.20	6.12	9.54	
DMW-2	Post Sampling				75.00	6.54	0.039	17.30	7.03		Full Recharge
DMW-4	Initial			23.18	60.00	5.21	0.048	21.70	5.94		
DMW-4	1st Volume				60.00	5.50	0.034	20.40	6.29	6.00	
DMW-4	2nd Volume				60.00	5.40	0.034	19.10	6.73	6.00	
DMW-4	3rd Volume				60.00	5.20	0.034	19.10	6.39	6.00	
DMW-4	Post Sampling				60.00	5.11	0.034	18.90	6.77		Full Recharge

Notes: N/A = Not Applicable

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy): 7/30/03
Field Personnel: S. WEYAND, J. NEIGHAN, V. CROSBY
General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter
serial no. 1854
pH=4.0 ± 0.002 pH @ 25°C
pH=7.0 _____
pH=10.0 _____

AUTO CAL. SOLUTIONS PROVIDE PINE ENVIRONMENTAL SERVICE FOR HONDA Chain of Custody

Conductivity Meter
serial no. 1854
standard 4.49 mS/cm
standard _____
standard _____

Facility Name: Hwy 11 GROC
Site ID#: 03438 Monitoring Well # MW1
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: .08 feet
Depth to Ground Water (DGW) 22.89 feet
Total Well Depth (TWD) 30 feet
Length of the water column (LWC=TWD-DGW) 7.11 feet

1 casing volume (CV=LWC X C)= _____ X _____ = _____ gals
3 casing volume (3 X CV)= 3.4 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.
*If free product is present over 1/8 inch, sampling will not be required.

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1145</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: not well free product at 22.81

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy): 7/30/03
Field Personnel: J. WEYAND, J. NOEGHAN, V. CROSBY
General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no. <u>1854</u>	serial no. <u>1854</u>
pH=4.0 <u>± 0.002 PH@25°C</u>	standard <u>4.49 mS/m</u>
pH=7.0	standard
pH=10.0	standard

AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR LONGA Chain of Custody

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Facility Name: Hwy 11 Groc
Site ID#: 03439 Monitoring Well # MW2
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:
Depth to Ground Water (DGW) 23.78 feet
Total Well Depth (TWD) 35 feet
Length of the water column (LWC=TWD-DGW) 11.22 feet

1 casing volume (CV=LWC X C)= _____ X _____ = _____ gals
3 casing volume (3 X CV)= 5.4 gals (standard purge volume)

Total Volume of Water Purged Before Sampling 5.4 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1215</u>
pH (s.u.)							
Specific Conductivity (μmhos/cm)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: not used

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South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy): 7/30/03
Field Personnel: S. WEYAND, J. NUNEZ-HAWK, V. CROSBY
General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no. <u>1854</u>	serial no. <u>1854</u>
pH=4.0 <u>± 0.002 PH@25°C</u>	standard <u>4.49 mS/sec</u>
pH=7.0	standard
pH=10.0	standard
AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR FONDA Chain of Custody	

Relinquished by Date/Time Received by Date/Time

Facility Name: Hwy 11 GROC
Site ID#: 03439 Monitoring Well # MW3
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:
Depth to Ground Water (DGW) 22.21 feet
Total Well Depth (TWD) 30 feet
Length of the water column (LWC=TWD-DGW) 7.79 feet

1 casing volume (CV=LWC X C)= 1.2 gals
3 casing volume (3 X CV)= 3.8 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1110</u>
pH (s.u.)	<u>5.00</u>	<u>5.10</u>	<u>4.91</u>	<u>4.62</u>			<u>4.50</u>
Specific Conductivity (μmhos/cm)	<u>.099</u>	<u>.017</u>	<u>.013</u>	<u>.012</u>			<u>.012</u>
Water Temperature (°C)	<u>19.2</u>	<u>18.2</u>	<u>17.8</u>	<u>17.7</u>			<u>17.7</u>
Dissolved Oxygen	<u>5.81</u>	<u>5.53</u>	<u>5.73</u>	<u>5.51</u>			<u>5.80</u>
PID readings, if required							

Remarks: _____

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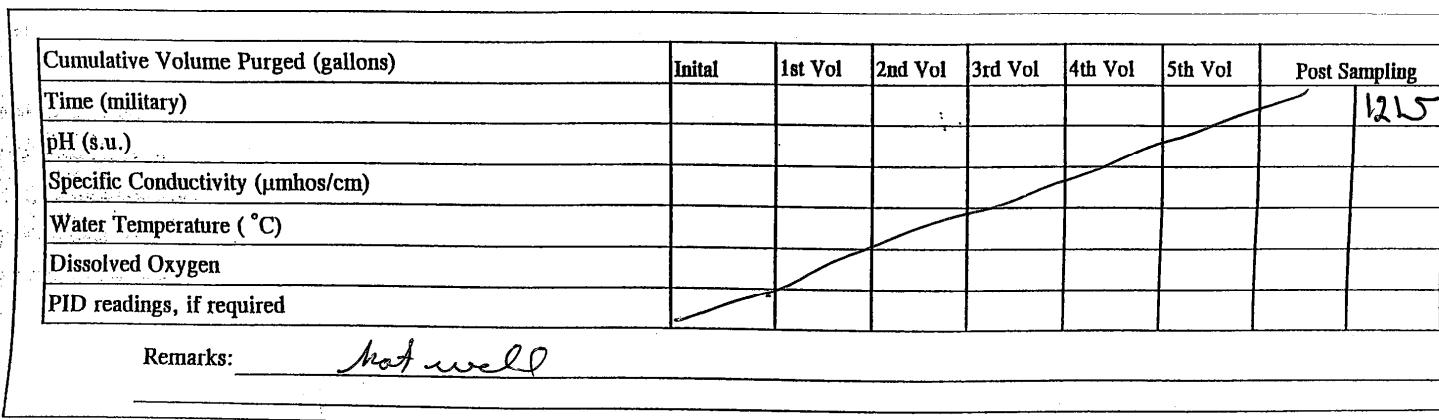
South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302168

Date (mm/dd/yy):	7/30/03		
Field Personnel:	S. WEYAND, J. NORGREN, V. CROSBY		
General Weather Conditions:			
Ambient Air Temperature:	____ °C		
<u>Quality Assurance</u>			
pH Meter serial no.	1854	Conductivity Meter serial no.	
pH=4.0	<u>± 0.002 PH @ 25°C</u>	standard	
pH=7.0		standard	
pH=10.0		standard	
<small>AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR EPA/NSA Chain of Custody</small>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	HWY 11 GROC		
Site ID#:	03439	Monitoring Well #	MW4
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	2"		feet
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:			
Depth to Ground Water (DGW)	22.09		feet
Total Well Depth (TWD)	35		feet
Length of the water column (LWC=TWD-DGW)	12.91		feet
1 casing volume (CV=LWC X C) =	X	=	gals
3 casing volume (3 X CV) =	63	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			



South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy):	7/30/03		
Field Personnel:	S. WEYAND, J. NAWEGHAM, V. CRESSEAU		
General Weather Conditions:			
Ambient Air Temperature:	____ °C		
<u>Quality Assurance</u>			
pH Meter serial no.	1854	Conductivity Meter serial no.	
pH=4.0	1.002 PH@28°C	standard	
pH=7.0		standard	
pH=10.0		standard	
<small>AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR LONGA Chain of Custody</small>			
Relinquished by	Date/Time	Received by	Date/Time
# 302169			
Facility Name: Hwy 11 GROC			
Site ID#: 03439 Monitoring Well # ML05			
Water Supply Well Public Private			
Monitoring Well Diameter (D): 2" feet			
Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 for a 4 inch well C=0.652			
* Free Product Thickness: feet			
Depth to Ground Water (DGW) 26.53 feet			
Total Well Depth (TWD) 35 feet			
Length of the water column (LWC=TWD-DGW) 8.47 feet			
1 casing volume (CV=LWC X C) = 1.3 gals			
3 casing volume (3 X CV) = 4.1 gals (standard purge volume)			
Total Volume of Water Purged Before Sampling gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1140
pH (s.u.)	4.09	4.52	4.27	4.33			4.21
Specific Conductivity (μmhos/cm)	,013	,012	,012	,012			,012
Water Temperature (°C)	18.9	18.0	17.9	17.7			17.8
Dissolved Oxygen	6.96	6.11	6.10	6.29			5.98
PID readings, if required							
Remarks:							

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 7/30/03
Field Personnel: J. WEIAND, J. NANCEMAN, V. CRESPO
General Weather Conditions:

Ambient Air Temperature: °C

Quality Assurance

pH Meter
serial no. 1854
pH=4.0 ± 0.002 pH @ 25°C
pH=7.0
pH=10.0

pH=10.0 standard
AUTO CAL. SOLUTION PROVIDE PINE ENVIRON-
MENTAL SERVICE FOR HONDA
Chain of Custody

Relinquished by	Date/Time	Received by	Date/Time
------------------------	------------------	--------------------	------------------

Facility Name: Hwy 11 GROC
Site ID#: 03438 Monitoring Well # MW6
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: feet
Depth to Ground Water (DGW) 19.88 feet
Total Well Depth (TWD) 35 feet
Length of the water column (LWC=TWD-DGW) 15.12 feet

1 casing volume ($CV = LWC \times C$) = _____ X _____ = 2.46 gals
3 casing volume ($3 \times CV$) = 7.38 gals (standard purge volume)

Total Volume of Water Purged Before Sampling 7.38 gals.
*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1235
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos/cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: met well

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South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy): 7/30/03
Field Personnel: S. WEYAND, J. NORGREN, V. CROSBY
General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no. <u>1854</u>	serial no. <u>1854</u>
pH=4.0 <u>± 0.002 PH@25°C</u>	standard <u>4.49 mS/cm</u>
pH=7.0	standard _____
pH=10.0	standard _____
AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR FONDA Chain of Custody	

Relinquished by Date/Time Received by Date/Time

Facility Name: Hwy 11 Groc
Site ID#: 03439 Monitoring Well # MW7
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 26.22 feet
Total Well Depth (TWD) 40 feet
Length of the water column (LWC=TWD-DGW) 13.78 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 2.25 gals
3 casing volume (3 X CV)= 6.75 gals (standard purge volume)

Total Volume of Water Purged Before Sampling 6.75 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1130</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: that well

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South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy): 7/30/03
Field Personnel: S. WEYAND, J. NEWEGHAM, V. CRISMAN
General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no. <u>1854</u>	serial no. <u>1854</u>
pH=4.0 <u>± 0.002 PH@25°C</u>	standard <u>4.49 mS/cm</u>
pH=7.0	standard
pH=10.0	standard
AUTO CAL. SOLUTION PROVIDES FOR A LONG TERM ENVIRONMENTAL SERVICE Chain of Custody	

Relinquished by Date/Time Received by Date/Time

Facility Name: Hwy 11 Groc
Site ID#: 03439 Monitoring Well # MW8
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:	<u>20.22</u> feet
Depth to Ground Water (DGW)	<u>20.46</u> feet
Total Well Depth (TWD)	<u>30</u> feet
Length of the water column (LWC=TWD-DGW)	<u>9.54</u> feet

1 casing volume (CV=LWC X C)= 1.56 gals
3 casing volume (3 X CV)= 4.68 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity (μmhos/cm)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: Not well

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**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy):	7/30/03		Facility Name:	HWY 11 GROC	
Field Personnel:	S. WEIAND, J. NOEGHAN, V. CROSBY		Site ID#:	03439	Monitoring Well # MW9
General Weather Conditions:			Water Supply Well	Public	Private
Ambient Air Temperature:	°C		Monitoring Well Diameter (D):	2" feet	
<u>Quality Assurance</u>					
pH Meter serial no.	1854	Conductivity Meter serial no.	1854	Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 for a 4 inch well C=0.652	
pH=4.0	$\pm 0.002 \text{ pH @ } 28^\circ\text{C}$	standard	4.49 mS/cm	* Free Product Thickness: feet	
pH=7.0		standard		Depth to Ground Water (DGW) feet	
pH=10.0		standard		Total Well Depth (TWD) feet	
AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR LONGA Chain of Custody					
Relinquished by	Date/Time	Received by	Date/Time	Length of the water column (LWC=TWD-DGW) feet	
1 casing volume (CV=LWC X C)= ____ X ____ = ____ gals					
3 casing volume (3 X CV)= ____ gals (standard purge volume)					
Total Volume of Water Purged Before Sampling ____ gals.					
*If free product is present over 1/8 inch, sampling will not be required.					

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks:							

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South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy): 7/30/03

Field Personnel: S. WEYAND, J. McNEIGHAN, V. CROSBY

General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter

serial no.

pH=4.0 1854

pH=7.0

pH=10.0

AUTO CAL. SOLUTION PROVIDE PINE ENVIRON-
MENTAL SERVICE FOR LONGA
Chain of Custody

Conductivity Meter

serial no.

standard 1854

standard

standard

Relinquished by

Date/Time

Received by

Date/Time

Facility Name: Hwy 11 Groc

Site ID#: 03439 Monitoring Well # MW10

Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:

Depth to Ground Water (DGW) 18.95 feet

Total Well Depth (TWD) 24 feet

Length of the water column (LWC=TWD-DGW) 5.05 feet

1 casing volume (CV=LWC X C)= _____ X _____ = .92 gals
3 casing volume (3 X CV)= 2.76 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1230</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos/cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: shut well

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy):	<u>7/30/03</u>		
Field Personnel:	<u>J. WEYAND, J. NOEGHAN, V. CROSBY</u>		
General Weather Conditions:			
Ambient Air Temperature:	_____ °C		
<u>Quality Assurance</u>			
pH Meter serial no.	<u>1854</u>	Conductivity Meter serial no.	<u>1854</u>
pH=4.0	<u>±0.002 PH@28°C</u>	standard	<u>4.49 mS/mac</u>
pH=7.0		standard	
pH=10.0		standard	
<i>AUTO CAL. SOLUTION PROVIDE A FINE ENVIRONMENTAL SERVICE FOR YOUR Chain of Custody</i>			
Relinquished by	Date/Time	Received by	Date/Time
Facility Name: <u>Hwy 11 Groc</u> Site ID#: <u>03439</u> Monitoring Well # <u>MW11</u> Water Supply Well Public Private Monitoring Well Diameter (D): <u>2"</u> feet Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 for a 4 inch well C=0.652 * Free Product Thickness: _____ feet Depth to Ground Water (DGW) <u>15.92</u> feet Total Well Depth (TWD) <u>23</u> feet Length of the water column (LWC=TWD-DGW) <u>7.08</u> feet 1 casing volume (CV=LWC X C)= _____ X _____ = <u>1.15</u> gals 3 casing volume (3 X CV)= <u>3.45</u> gals (standard purge volume) Total Volume of Water Purged Before Sampling <u>2.5</u> gals. *If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1205</u>
pH (s.u.)	<u>5.14</u>	<u>4.87</u>	<u>4.58</u>				<u>4.11</u>
Specific Conductivity (μmhos/cm)	<u>.018</u>	<u>.012</u>	<u>.011</u>				<u>.011</u>
Water Temperature (°C)	<u>19.7</u>	<u>17.7</u>	<u>17.0</u>				<u>17.4</u>
Dissolved Oxygen	<u>5.78</u>	<u>5.58</u>	<u>5.92</u>				<u>4.9</u>
PID readings, if required							
Remarks:	<u>BANCO ONLY</u>						

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South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy): 7/30/03
Field Personnel: S. WEYAND, J. NAWEGHAN, V. CROSHAW
General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no. <u>1854</u>	serial no. <u>1854</u>
pH=4.0 <u>± 0.002 PH@28°C</u>	standard <u>4.49 mS/cm</u>
pH=7.0	standard
pH=10.0	standard
AUTO CAL. SOLUTIONS PROVIDE PINE ENVIRONMENTAL SERVICE FOR LONGA Chain of Custody	

Relinquished by Date/Time Received by Date/Time

Facility Name: Hwy 11 Groc
Site ID#: 03439 Monitoring Well # MW12
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 3.02 feet
Total Well Depth (TWD) 12 feet
Length of the water column (LWC=TWD-DGW) _____ feet

1 casing volume (CV=LWC X C)= _____ X _____ = _____ gals
3 casing volume (3 X CV)= _____ gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity (μmhos/cm)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: _____

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy):	<u>7/30/03</u>		
Field Personnel:	<u>S. WEYAND, J. NOEGHAN, V. CROSBY</u>		
General Weather Conditions:			
Ambient Air Temperature:	_____ °C		
Quality Assurance			
PH Meter serial no.	<u>1854</u>	Conductivity Meter serial no.	<u>1854</u>
pH=4.0	<u>± 0.002 PH@28°C</u>	standard	<u>4.49 mS/m</u>
pH=7.0		standard	
pH=10.0		standard	
<i>AUTO CAL. SOLUTIONS PROVIDE PINE ENVIRONMENTAL SERVICE FOR LONGA Chain of Custody</i>			
Relinquished by	Date/Time	Received by	Date/Time
# 302169			
Facility Name:	<u>Hwy 11 GROC</u>		
Site ID#:	<u>03439</u>	Monitoring Well #	<u>MW13</u>
Water Supply Well	Public	Private	
Monitoring Well Diameter (D):	<u>2"</u> feet		
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:			
Depth to Ground Water (DGW)	<u>6.28</u> feet		
Total Well Depth (TWD)	<u>12</u> * <u>(15)</u> feet		
Length of the water column (LWC=TWD-DGW)			
1 casing volume (CV=LWC X C) =	_____ X _____	=	_____ gals
3 casing volume (3 X CV) =	_____ gals	(standard purge volume)	
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity (μmhos/cm)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks:	<u>* stand up well (3' size)</u>						

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South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy): 7/30/03
Field Personnel: J. WEYAND, J. McNEIGHAN, V. CROSBY
General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

PH Meter	Conductivity Meter
serial no. <u>1854</u>	serial no. <u>1854</u>
pH=4.0 <u>± 0.002 PH@28°C</u>	standard <u>4.49 mS/Sec</u>
pH=7.0	standard
pH=10.0	standard
AUTO CAL. SOLUTION PROVIDES PINE ENVIRONMENTAL SERVICE FOR FLORIDA Chain of Custody	

Relinquished by Date/Time Received by Date/Time

Facility Name: Hwy 11 Groc
Site ID#: 03439 Monitoring Well # MW14
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:
Depth to Ground Water (DGW) 1.77 feet
Total Well Depth (TWD) 10 feet
Length of the water column (LWC=TWD-DGW) 8.23 feet

1 casing volume (CV=LWC X C)= 1.34 gals
3 casing volume (3 X CV)= 4.02 gals (standard purge volume)

Total Volume of Water Purged Before Sampling 4.02 gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1300</u>
pH (s.u.)							
Specific Conductivity (μmhos/cm)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: Not well

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South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy): 7/30/03
Field Personnel: J. WEYAND, J. NEWEGHAM, V. CROSBY
General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no. <u>1854</u>	serial no. <u>1854</u>
pH=4.0 <u>± 0.002 PH@25°C</u>	standard <u>4.49 mS/cm</u>
pH=7.0	standard
pH=10.0	standard
AUTO CAL. SOLUTION PROVIDED BY PINE ENVIRONMENTAL SERVICE FOR FONDA Chain of Custody	

Relinquished by Date/Time Received by Date/Time

Facility Name: Hwy 11 Groc
Site ID#: 03439 Monitoring Well # MW15
Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 10.67 feet
Total Well Depth (TWD) * 9 (1/2) feet
Length of the water column (LWC=TWD-DGW) _____ feet

1 casing volume (CV=LWC X C)= _____ X _____ = _____ gals
3 casing volume (3 X CV)= _____ gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity (μmhos/cm)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: * stand up well (3' min)

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy): 7/30/03
Field Personnel: S. WEYAND, J. McNEIGHAN, V. CROSHAW
General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter serial no. <u>1854</u>	Conductivity Meter serial no. <u>1854</u>
pH=4.0 <u>± 0.002 PH@25°C</u>	standard <u>4.49 mS/cm</u>
pH=7.0	standard
pH=10.0	standard
AUTO CAL. SOLUTION PROVIDED BY ENVIRONMENTAL SERVICE FOR EPA HANDBA Chain of Custody	

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Facility Name: Hwy 11 Groc
Site ID#: 03439 Monitoring Well # DW1
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:
Depth to Ground Water (DGW) 22.72 feet
Total Well Depth (TWD) 45 feet
Length of the water column (LWC=TWD-DGW) 22.28 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 3.6 gals
3 casing volume (3 X CV)= 10.8 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1130</u>
pH (s.u.)							
Specific Conductivity (μmhos/cm)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							

Remarks: Not well

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy): 7/30/03
Field Personnel: J. WEYAND, J. NEWEGAN, V. CROSBY
General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter serial no. <u>1854</u>	Conductivity Meter serial no. <u>1854</u>
pH=4.0 <u>± 0.002 PH@25°C</u>	standard <u>4.49 mS/cm</u>
pH=7.0	standard _____
pH=10.0	standard _____
AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR LONGA Chain of Custody	

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Facility Name: Hwy 11 Groc
Site ID#: 03439 Monitoring Well # DNW 2
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
Depth to Ground Water (DGW) 16.49 feet
Total Well Depth (TWD) 75 feet
Length of the water column (LWC=TWD-DGW) 58.51 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 9.54 gals
3 casing volume (3 X CV)= 28.62 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1315</u>
pH (s.u.)	<u>6.29</u>	<u>6.14</u>	<u>6.34</u>	<u>6.71</u>			<u>6.54</u>
Specific Conductivity (μmhos/cm)	<u>.0502</u>	<u>.050</u>	<u>.051</u>	<u>.043</u>			<u>.039</u>
Water Temperature (°C)	<u>19.8</u>	<u>18.7</u>	<u>17.8</u>	<u>18.2</u>			<u>17.3</u>
Dissolved Oxygen	<u>4.94</u>	<u>4.74</u>	<u>5.43</u>	<u>6.12</u>			<u>7.03</u>
PID readings, if required							

Remarks: _____

Page ____ of ____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

302169

Date (mm/dd/yy): 7/30/03
Field Personnel: S. WEYAND, J. NEWEGHAN, V. CRISSMAN
General Weather Conditions: _____

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter serial no. <u>1854</u>	Conductivity Meter serial no. <u>1854</u>
pH=4.0 <u>± 0.002 PH@25°C</u>	standard <u>4.49 mS/mac</u>
pH=7.0 _____	standard _____
pH=10.0 _____	standard _____
AUTO CAL. SOLUTION PROVIDE PINE ENVIRONMENTAL SERVICE FOR FONDA Chain of Custody	

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Facility Name: Hwy 11 Groc
Site ID#: 03439 Monitoring Well # DMW4
Water Supply Well Public _____ Private _____

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
for a 4 inch well C=0.652

* Free Product Thickness:
Depth to Ground Water (DGW) 23.18 feet
Total Well Depth (TWD) 60 feet
Length of the water column (LWC=TWD-DGW) 36.82 feet

1 casing volume (CV=LWC X C)= _____ X _____ = 6.0 gals
3 casing volume (3 X CV)= 18.0 gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>115</u>
pH (s.u.)	<u>5.21</u>	<u>5.50</u>	<u>5.40</u>	<u>5.20</u>			<u>5.11</u>
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	<u>0.48</u>	<u>0.34</u>	<u>0.34</u>	<u>0.34</u>			<u>0.34</u>
Water Temperature (°C)	<u>21.7</u>	<u>20.4</u>	<u>19.1</u>	<u>19.1</u>			<u>18.9</u>
Dissolved Oxygen	<u>5.94</u>	<u>6.29</u>	<u>6.73</u>	<u>6.39</u>			<u>6.77</u>
PID readings, if required							

Remarks: _____

Appendix D

Table 3 – Summary of July 30, 2003 Laboratory Analytical Data
&
Copies of Laboratory Analytical Data and Chain of Custody

Table 3
July 30, 2003 Laboratory Analytical Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
SCDHEC Site # 03439

Well	Benzene (ppb)	Toleune (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Naphthalene (ppb)
MW-1	7,600.00	28,000.00	6,300.00	32,000.00	25,000.00	<2500.00
MW-2	5.80	<5.00	<1.00	5.30	<1.00	<5.00
MW-3	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00
MW-4	4,000.00	14,000.00	2,700.00	13,000.00	2,100.00	<500.00
MW-5	4.20	17.00	3.60	18.00	2.20	<5.00
MW-6	4,200.00	13,000.00	1,600.00	8,900.00	21,000.00	400.00
MW-7	18.00	18.00	<1.00	9.70	<1.00	<5.00
MW-8	12,000.00	40,000.00	3,600.00	18,000.00	15,000.00	660.00
MW-9	N/A	N/A	N/A	N/A	N/A	N/A
MW-10	170.00	420.00	43.00	240.00	540.00	6.50
MW-11	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00
MW-12	N/A	N/A	N/A	N/A	N/A	N/A
MW-13	N/A	N/A	N/A	N/A	N/A	N/A
MW-14	3,100.00	9,700.00	1,800.00	9,300.00	4,300.00	<500.00
MW-15	N/A	N/A	N/A	N/A	N/A	N/A
DMW-1	<1.00	<5.00	<1.00	<3.00	4.20	<5.00
DMW-2	<1.00	8.40	6.80	30.00	<1.00	6.70
DMW-4	<1.00	<5.00	<1.00	<3.00	<1.00	<5.00
CK-1	N/A	N/A	N/A	N/A	N/A	N/A
CK-2	N/A	N/A	N/A	N/A	N/A	N/A
WW-1	N/A	N/A	N/A	N/A	N/A	N/A

Notes: N/A = Not Applicable

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003

ESC Sample # : L122656-01

Description : HWY 11 Grocery

Site ID : 03439

Sample ID : MW-1

Project # : 302-169

Collected By : JW/SM/VC

Collection Date : 07/30/03 11:45

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	7600	500	ug/l	8260B	08/04/03	500
Toluene	28000	2500	ug/l	8260B	08/04/03	500
Ethylbenzene	6300	500	ug/l	8260B	08/04/03	500
Total Xylenes	32000	1500	ug/l	8260B	08/04/03	500
Methyl tert-butyl ether	25000	500	ug/l	8260B	08/04/03	500
Naphthalene	BDL	2500	ug/l	8260B	08/04/03	500
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	500
Dibromofluoromethane	97.		% Rec.	8260B	08/04/03	500
4-Bromofluorobenzene	99.		% Rec.	8260B	08/04/03	500

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-2
Collected By : JW/SM/VC
Collection Date : 07/30/03 12:15

ESC Sample # : L122656-02
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	5.8	1.0	ug/l	8260B	08/04/03	1
Toluene	BDL	5.0	ug/l	8260B	08/04/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	08/04/03	1
Total Xylenes	5.3	3.0	ug/l	8260B	08/04/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	08/04/03	1
Naphthalene	BDL	5.0	ug/l	8260B	08/04/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	1
Dibromofluoromethane	95.		% Rec.	8260B	08/04/03	1
4-Bromofluorobenzene	99.		% Rec.	8260B	08/04/03	1



Leslie Newton, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-3
Collected By : JW/SM/VC
Collection Date : 07/30/03 11:10

ESC Sample # : L122656-03
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	08/01/03	1
Toluene	BDL	5.0	ug/l	8260B	08/01/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	08/01/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	08/01/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	08/01/03	1
Naphthalene	BDL	5.0	ug/l	8260B	08/01/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/01/03	1
Dibromofluoromethane	100		% Rec.	8260B	08/01/03	1
4-Bromofluorobenzene	98.		% Rec.	8260B	08/01/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-4
Collected By : JW/SM/VC
Collection Date : 07/30/03 12:15

ESC Sample # : L122656-04
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	4000	100	ug/l	8260B	08/04/03	100
Toluene	14000	500	ug/l	8260B	08/04/03	100
Ethylbenzene	2700	100	ug/l	8260B	08/04/03	100
Total Xylenes	13000	300	ug/l	8260B	08/04/03	100
Methyl tert-butyl ether	2100	100	ug/l	8260B	08/04/03	100
Naphthalene	BDL	500	ug/l	8260B	08/04/03	100
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	100
Dibromofluoromethane	98.		% Rec.	8260B	08/04/03	100
4-Bromofluorobenzene	100		% Rec.	8260B	08/04/03	100



Leslie Newton, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

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KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-5
Collected By : JW/SM/VC
Collection Date : 07/30/03 11:40

ESC Sample # : L122656-05
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	4.2	1.0	ug/l	8260B	08/01/03	1
Toluene	17.	5.0	ug/l	8260B	08/01/03	1
Ethylbenzene	3.6	1.0	ug/l	8260B	08/01/03	1
Total Xylenes	18.	3.0	ug/l	8260B	08/01/03	1
Methyl tert-butyl ether	2.2	1.0	ug/l	8260B	08/01/03	1
Naphthalene	BDL	5.0	ug/l	8260B	08/01/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/01/03	1
Dibromofluoromethane	100		% Rec.	8260B	08/01/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	08/01/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-6
Collected By : JW/SM/VC
Collection Date : 07/30/03 12:35

ESC Sample # : L122656-06
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	4200	50.	ug/l	8260B	08/01/03	50
Toluene	13000	2500	ug/l	8260B	08/04/03	500
Ethylbenzene	1600	50.	ug/l	8260B	08/01/03	50
Total Xylenes	8900	150	ug/l	8260B	08/01/03	50
Methyl tert-butyl ether	21000	500	ug/l	8260B	08/04/03	500
Naphthalene	400	250	ug/l	8260B	08/01/03	50
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/01/03	50
Dibromofluoromethane	96.		% Rec.	8260B	08/01/03	50
4-Bromofluorobenzene	96.		% Rec.	8260B	08/01/03	50

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-7
Collected By : JW/SM/VC
Collection Date : 07/30/03 11:30

ESC Sample # : L122656-07
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	18.	1.0	ug/l	8260B	08/04/03	1
Toluene	18.	5.0	ug/l	8260B	08/04/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	08/04/03	1
Total Xylenes	9.7	3.0	ug/l	8260B	08/04/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	08/04/03	1
Naphthalene	BDL	5.0	ug/l	8260B	08/04/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	1
Dibromofluoromethane	98.		% Rec.	8260B	08/04/03	1
4-Bromofluorobenzene	98.		% Rec.	8260B	08/04/03	1

Leslie Newton, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-8
Collected By : JW/SM/VC
Collection Date : 07/30/03 13:00

ESC Sample # : L122656-08
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	12000	500	ug/l	8260B	08/04/03	500
Toluene	40000	2500	ug/l	8260B	08/04/03	500
Ethylbenzene	3600	50.	ug/l	8260B	08/02/03	50
Total Xylenes	18000	150	ug/l	8260B	08/02/03	50
Methyl tert-butyl ether	15000	500	ug/l	8260B	08/04/03	500
Naphthalene	660	250	ug/l	8260B	08/02/03	50
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/02/03	50
Dibromofluoromethane	99.		% Rec.	8260B	08/02/03	50
4-Bromofluorobenzene	100		% Rec.	8260B	08/02/03	50

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

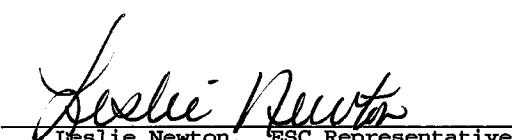
A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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Leslie Newton, ESC Representative



**ENVIRONMENTAL
SCIENCE CORP.**

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859
TAX I.D. 62-0814289
Est. 1970

REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-10
Collected By : JW/SM/VC
Collection Date : 07/30/03 12:30

ESC Sample # : L122656-09
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	170	1.0	ug/l	8260B	08/02/03	1
Toluene	420	50.	ug/l	8260B	08/04/03	10
Ethylbenzene	43.	1.0	ug/l	8260B	08/02/03	1
Total Xylenes	240	3.0	ug/l	8260B	08/02/03	1
Methyl tert-butyl ether	540	10.	ug/l	8260B	08/04/03	10
Naphthalene	6.5	5.0	ug/l	8260B	08/02/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/02/03	1
Dibromofluoromethane	97.		% Rec.	8260B	08/02/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	08/02/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01
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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-11
Collected By : JW/SM/VC
Collection Date : 07/30/03 12:05

ESC Sample # : L122656-10
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	08/04/03	1
Toluene	BDL	5.0	ug/l	8260B	08/04/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	08/04/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	08/04/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	08/04/03	1
Naphthalene	BDL	5.0	ug/l	8260B	08/04/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	1
Dibromofluoromethane	96.		% Rec.	8260B	08/04/03	1
4-Bromofluorobenzene	96.		% Rec.	8260B	08/04/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01
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Est. 1970

REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : MW-14
Collected By : JW/SM/VC
Collection Date : 07/30/03 13:00

ESC Sample # : L122656-11
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	3100	100	ug/l	8260B	08/04/03	100
Toluene	9700	500	ug/l	8260B	08/04/03	100
Ethylbenzene	1800	100	ug/l	8260B	08/04/03	100
Total Xylenes	9300	300	ug/l	8260B	08/04/03	100
Methyl tert-butyl ether	4300	100	ug/l	8260B	08/04/03	100
Naphthalene	BDL	500	ug/l	8260B	08/04/03	100
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	100
Dibromofluoromethane	98.		% Rec.	8260B	08/04/03	100
4-Bromofluorobenzene	100		% Rec.	8260B	08/04/03	100

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003

ESC Sample # : L122656-12

Description : HWY 11 Grocery

Site ID :

Sample ID : DMW-1

Project # : 302-169

Collected By : JW/SM/VC

Collection Date : 07/30/03 11:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	08/04/03	1
Toluene	BDL	5.0	ug/l	8260B	08/04/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	08/04/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	08/04/03	1
Methyl tert-butyl ether	4.2	1.0	ug/l	8260B	08/04/03	1
Naphthalene	BDL	5.0	ug/l	8260B	08/04/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	1
Dibromofluoromethane	95.		% Rec.	8260B	08/04/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	08/04/03	1


Leslie Newton, ESC Representative

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01
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1-800-767-5859
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Est. 1970

REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : DMW-2
Collected By : JW/SM/VC
Collection Date : 07/30/03 13:15

ESC Sample # : L122656-13
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	08/04/03	1
Toluene	8.4	5.0	ug/l	8260B	08/04/03	1
Ethylbenzene	6.8	1.0	ug/l	8260B	08/04/03	1
Total Xylenes	30.	3.0	ug/l	8260B	08/04/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	08/04/03	1
Naphthalene	6.7	5.0	ug/l	8260B	08/04/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/04/03	1
Dibromofluoromethane	98.		% Rec.	8260B	08/04/03	1
4-Bromofluorobenzene	100		% Rec.	8260B	08/04/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

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Est. 1970

REPORT OF ANALYSIS

Mr. Paul Bekish
SEI Environmental - Columbia, SC
3021 McNaughton Drive, Suite 9
Columbia, SC 29223

August 07, 2003

Date Received : August 01, 2003
Description : HWY 11 Grocery
Sample ID : DMW-4
Collected By : JW/SM/VC
Collection Date : 07/30/03 11:15

ESC Sample # : L122656-14
Site ID :
Project # : 302-169

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	1.0	ug/l	8260B	08/02/03	1
Toluene	BDL	5.0	ug/l	8260B	08/02/03	1
Ethylbenzene	BDL	1.0	ug/l	8260B	08/02/03	1
Total Xylenes	BDL	3.0	ug/l	8260B	08/02/03	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260B	08/02/03	1
Naphthalene	BDL	5.0	ug/l	8260B	08/02/03	1
Surrogate Recovery						
Toluene-d8	100		% Rec.	8260B	08/02/03	1
Dibromofluoromethane	97.		% Rec.	8260B	08/02/03	1
4-Bromofluorobenzene	98.		% Rec.	8260B	08/02/03	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit (EQL)

Laboratory Certification Numbers:

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233

Note:

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Leslie Newton, ESC Representative

SEI Environmental - Columbia, SC 3021 McNaughton Drive, Suite 9 Columbia, SC 29223			Alternate billing information:			Analysis/Container/Preservative			Chain of Custody Page <u>2</u> of <u>2</u>	
Report to: Mr. Paul Bekish Project Description: Hwy 11 GROC Phone: (803) 788-2535 FAX: (803) 788-2399 Collected by (print): J. MONECHAN, J. CASHMAN Packed on Ice: N			Email: pbekish@sei-environmental. City/State Collected: SALEM, SC Client Project #: 302-169 Lab Project #: SEICSC-302169 Site/Facility ID#: 03439 P.O. #:			V8260BTXXMN 40mlAmb-HCl No. of Cntrs			Prepared by: ENVIRONMENTAL SCIENCE CORP. 12065 Lebanon Road Mt. Juliet, TN 37122 Phone (800) 767-5859 FAX (615) 758-5859	
Collected by (signature): 			Rush? <input checked="" type="checkbox"/> (Lab MUST Be Notified) Same Day 200% 8/7/03 Next Day 100% X Two Day 50% Email? No Yes FAX? No Yes						CoCode: SEICSC (lab use only) Template/Preligin: T20210 P88989 Cooler #: 7/16/03 Shipped Via: FedEX Standard	
Sample ID			Comp/Grab	Matrix*	Depth	Date	Time		Remarks/Contaminant	Sample # (lab only)
MW1	G	GW		7/30/03	1145	2	X		L122656-01	
MW2		GW			1215	2	X		02	
MW3		GW			1110	2	X		03	
MW4		GW			1215	2	X		04	
MW5		GW			1140	2	X		05	
MW6		GW			1235	2	X		06	
MW7		GW			1130	2	X		07	
MW8		GW			1300	2	X		08	
MW10		GW			1230	2	X		09	

Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____

Flow _____ Other _____

Relinquished by: (Signature) 	Date: 7/31/03	Time: 1400	Received by: (Signature) 	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier	Condition: 01
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.7 Bottles Received: 28 + 173	
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) 	Date: 8/1/03 Time: 9:00	pH Checked: NCF

SEI Environmental - Columbia, SC 3021 McNaughton Drive, Suite 9 Columbia, SC 29223		Alternate billing information:				Analysis/Container/Preservative				Chain of Custody Page <u>2</u> of <u>2</u>		
Report to: Mr. Paul Bekish Project Description: Hwy 11 GROC		Email: pbekish@sei-environmental. City/State Collected: SALEM, SC								Prepared by: ENVIRONMENTAL SCIENCE CORP. 12065 Lebanon Road Mt. Juliet, TN 37122 Phone (800) 767-5859 FAX (615) 758-5859		
Phone: (803) 788-2535 FAX: (803) 788-2399	Client Project #: 302-169	Lab Project #: SEICSC-302169										
Collected by (print): J. M. ECKHOLM	Site/Facility ID#: 03439	P.O.#:										
Collected by (signature): 	Rush? <input checked="" type="checkbox"/> (Lab MUST Be Notified) <input type="checkbox"/> Same Day 200% <input type="checkbox"/> Next Day 100% <input type="checkbox"/> Two Day 50%	Date Results Needed 8/7/03				No. of Cntrs						
Packed on Ice N <input checked="" type="checkbox"/>	Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes											
Sample ID	Comp/Grab	Matrix*	Depth	Date	Time					Remarks/Contaminant	Sample # (lab only)	
MW11	G	GW		7/30/03	1205	2	X				L12210810	
MW14		GW			1300	2	X				11	
DMW1		GW			130	2	X				13	
DMW2		GW			1315	2	X				13	
DMW4		GW			1115	2	X				14	

*Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

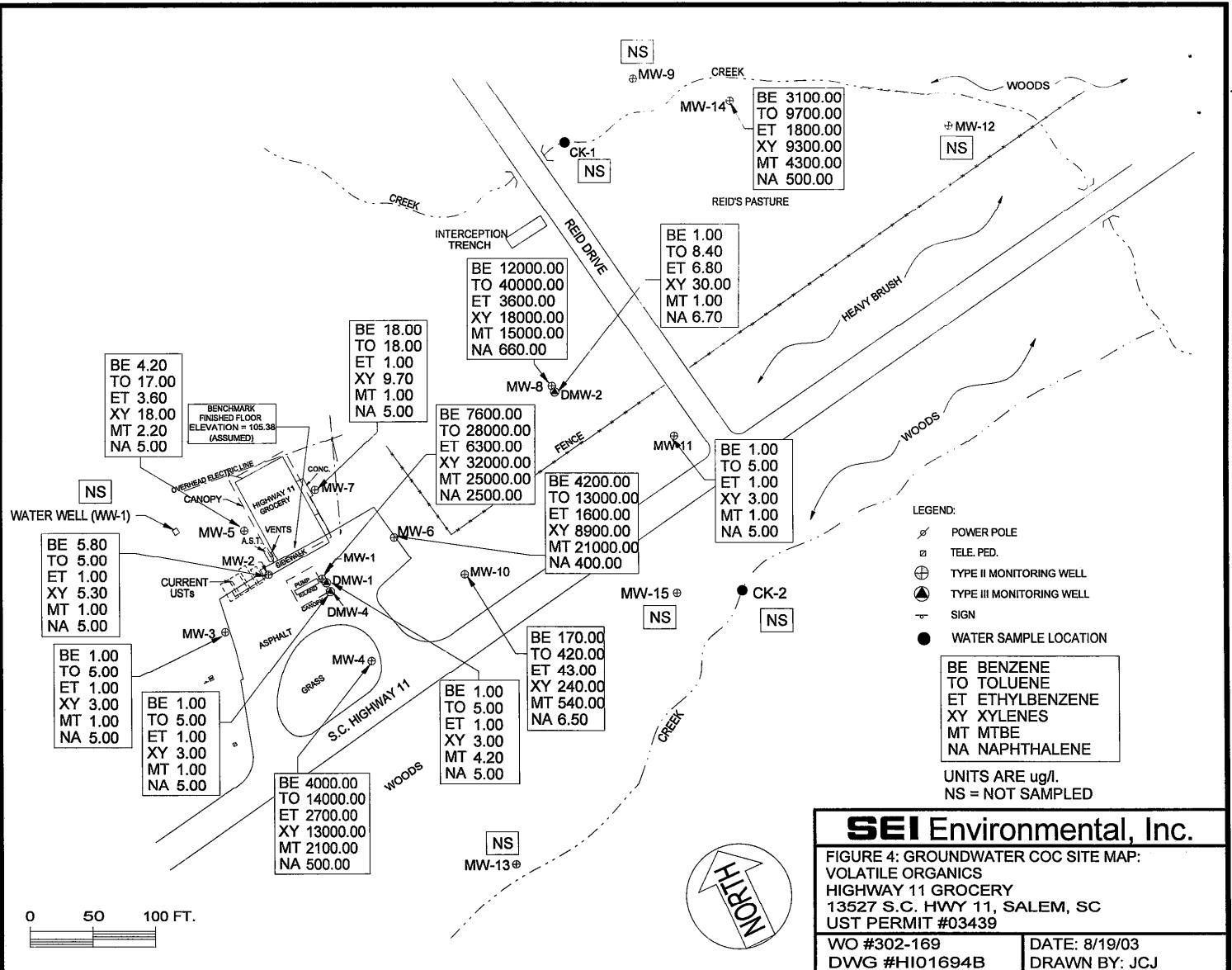
pH _____ Temp. _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature) 	Date: 7/31/03	Time: 1400	Received by: (Signature) 	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>	Condition: (lab use only) OK
Relinquished by: (Signature) 	Date: _____	Time: _____	Received by: (Signature) 	Temp: 2.7	Bottles Received: 25-173
Relinquished by: (Signature) 	Date: _____	Time: _____	Received for lab by: (Signature) 	Date: 8/1/03	Time: 9:00
				pH Checked: _____	NCF: _____

Appendix E
Figure 3 – July 30, 2003 CoC Map



Appendix F
Non-Hazardous Manifest & Disposal Receipt

**NON-HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest
Document No.
GK57862. Page 1
of

07/31/03

3. Generator's Name and Mailing Address

SET ENVIRONMENTAL INC
8021 MCNAUGHTON DR SUITE 9
COLUMBIA, SC 29223

4. Generator's Phone ()

5. Transporter 1 Company Name

6. US EPA ID Number

A. Transporter's Phone
803-788-2535

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

G & K TANK SERVICE EPA ID Number
PO BOX 1384
SUMTER, SC 29151

987573557

C. Facility's Phone

800-800-6840

11. Waste Shipping Name and Description

a. NON HAZARDOUS PETROLEUM CONTAMINATED WATER
CAMDEN SHELL CAMDEN, SC12. Containers
No. | Type13. Total
Quantity14.
Unit
Wt/Volb. NON HAZARDOUS PETROLEUM CONTAMINATED WATER
HWY 11 GROCERY SALEM, SC

96.39 gal

GEN
ERA
TO
R

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

. . .

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

. . .

19. Discrepancy Indication Space

FACILITY

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

. . .

ORIGINAL - RETURN TO GENERATOR



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 96.39 gallons
Hwy 11 Grocery
Salem, SC

Contaminant NonHazardous Petroleum
Contaminated Water

This is to certify the above ~~soil~~^{water} 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. Schenck

Date 07/31/03

Appendix G
Table 4 – July 30, 2003 System Effectiveness

Table 4
System Effectiveness - July 30, 2003 Laboratory Analytical Data
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
SCDHEC Site # 03439

Well	Benzene (ppb)	Toleune (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	MTBE (ppb)	Naphthalene (ppb)	Total Conc. (ppb)
MW-1	7,600.00	28,000.00	6,300.00	32,000.00	25,000.00	2,500.00	101,400.00
MW-2	5.80	5.00	1.00	5.30	1.00	5.00	23.10
MW-3	1.00	5.00	1.00	3.00	1.00	5.00	16.00
MW-4	4,000.00	14,000.00	2,700.00	13,000.00	2,100.00	500.00	36,300.00
MW-5	4.20	17.00	3.60	18.00	2.20	5.00	50.00
MW-6	4,200.00	13,000.00	1,800.00	8,900.00	21,000.00	400.00	49,100.00
MW-7	18.00	18.00	1.00	9.70	1.00	5.00	52.70
MW-8	12,000.00	40,000.00	3,600.00	18,000.00	15,000.00	660.00	89,260.00
MW-10	170.00	420.00	43.00	240.00	540.00	6.50	1,419.50
MW-11	1.00	5.00	1.00	3.00	1.00	5.00	16.00
MW-14	3,100.00	9,700.00	1,800.00	9,300.00	4,300.00	500.00	28,700.00
DMW-1	1.00	5.00	1.00	3.00	4.20	5.00	19.20
DMW-2	1.00	8.40	6.80	30.00	1.00	6.70	53.90
DMW-4	1.00	5.00	1.00	3.00	1.00	5.00	16.00
Initial Conc.	31,103.00	105,188.40	16,059.40	81,515.00	67,952.40	4,608.20	306,426.40
SSTL Conc.	3,881.00	57,303.00	33,705.00	339,605.00	10,645.00	2,452.00	447,591.00
Initial Conc. Above SSTL	27,222.00	47,885.40	0.00	0.00	57,307.40	2,156.20	134,571.00

(Initial Mass above SSTL - Current Mass Above SSTL)(100)/(Initial Mass Above SSTL)=(447,591.00 - 134,571.00) (100) / (134571.00)=69.93%

RECEIVED

APR 06 2001

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

**Underground Storage
Tank Program**

April 4, 2001

Mr. Konstantine Akhvlediani, Hydrogeologist
SCDHEC – UST Program
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201-1708

38-Tan

Re: Highway 11 Grocery
13527 SC Highway 11
Salem, South Carolina
UST Permit #03439

Dear Mr. Akhvlediani:

Please find enclosed laboratory analytical results for the two groundwater monitor wells that SEI Environmental, Inc. (SEI) personnel installed on March 29, 2001. Monitor Wells MW-1 and MW-2 were installed with a truck mounted CME-75 drill rig to approximate depths of 30 feet and 35 feet below ground surface (bgs), respectively. Specifically, Monitor Well MW-1 was installed adjacent to the dispenser island, and Monitor Well MW-2 was installed adjacent to the underground storage tank basin. Monitor Well MW-1 was installed using hollow stem augers, and air rotary drilling techniques were used in the installation of Monitor Well MW-2. Monitor well construction logs are presented in Appendix A. A site map depicting the monitor well locations is attached.

During the installation of the monitor wells, SEI personnel collected soil samples at five foot intervals. New, disposable, latex gloves were used to maintain sample integrity during the sampling process. The interval from each monitor well that had the highest OVA-FID reading was submitted for laboratory analysis. At each monitor well, the highest OVA-FID reading was detected approximately 20 feet bgs. These samples were placed in laboratory supplied containers, placed on ice, and delivered to TestAmerica Inc. in Columbia, South Carolina for laboratory analysis. The samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), and naphthalene by EPA method 8260B, and polynuclear aromatic hydrocarbons (PAH) by EPA method 8270C. BTEX



Environmental, Inc.

Mr. Konstantine Akhvlediani

April 4, 2001

Page 2 of 2

and naphthalene constituents were detected at each monitor well location. Laboratory results are presented in Appendix B.

On March 30, 2001, SEI personnel mobilized to the site and sampled Monitor Wells MW-1 and MW-2 for BTEX, EDB, naphthalene, MTBE, PAH, and lead constituents. New, disposable, latex gloves were used to maintain sample integrity during the sampling process. A new, disposable, polyethylene bailer was used for the collection of the water samples from the monitor wells. Each sample was obtained after pH and temperature values had equilibrated unless petroleum odor was emanating from the well. If petroleum odors were observed in the monitor well, the groundwater sample was obtained after three well volumes were purged. All purge water was drummed for proper disposal at a permitted treatment facility. The samples were placed in laboratory supplied containers, placed on ice, and shipped via FedEx to TestAmerica Inc. in Orlando, Florida for proper analysis. Laboratory results detected the presence of BTEX, MTBE, naphthalene, and lead concentrations at Monitor Wells MW-1 and MW-2. Laboratory results are presented in Appendix C.

As a result of BTEX, MTBE, naphthalene, and lead concentrations existing greater than their respective risk based screening levels at Monitor Well MW-1, SEI has attached a Tier II Assessment proposal in Appendix D. Should you have any questions or require additional information, please contact me at 788-2535.

Sincerely,

SEI Environmental, Inc.

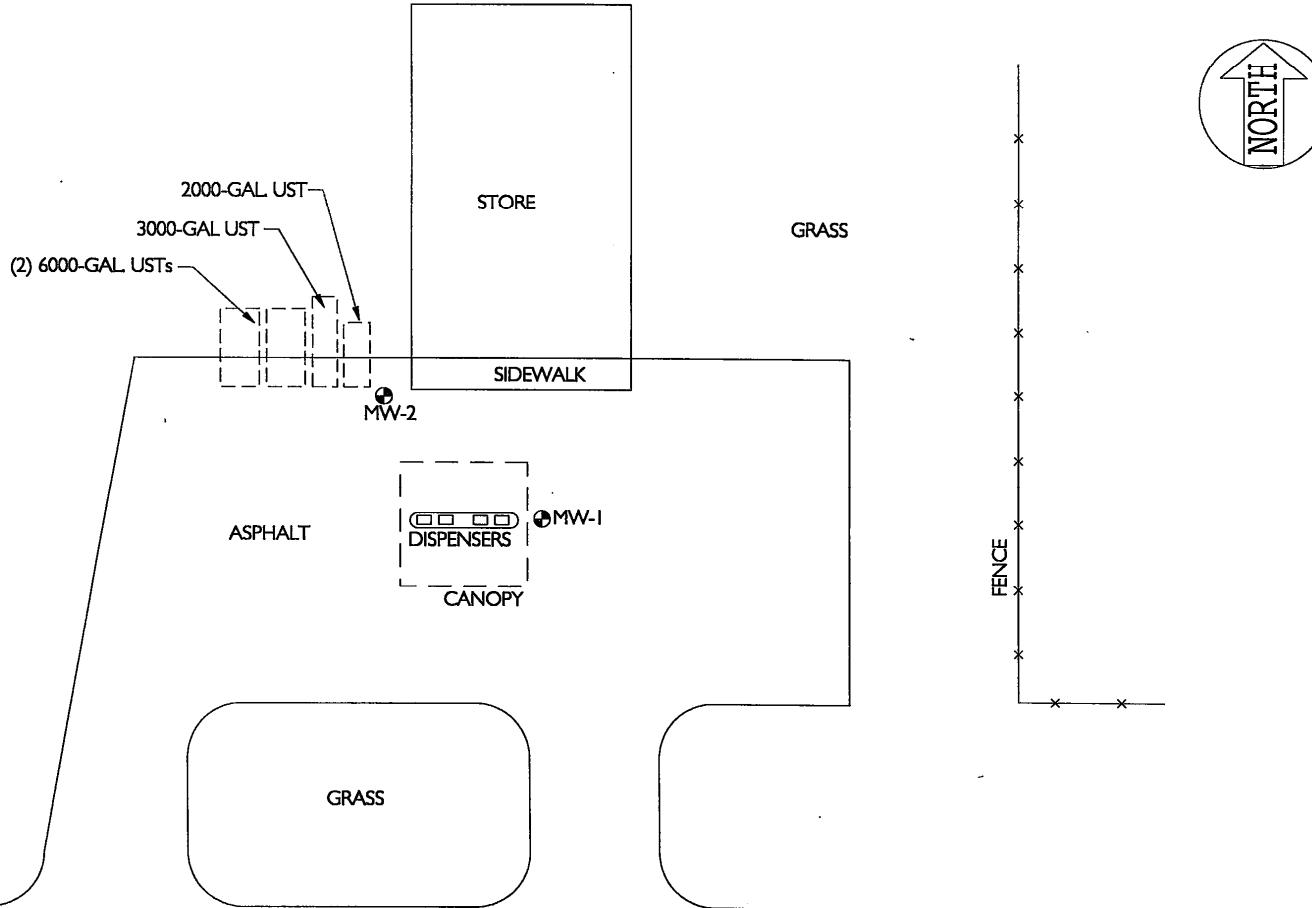
A handwritten signature in black ink that reads "Bob Bolton".

Bob Bolton

Project Manager

Enclosure

cc: Mr. Steve Smith, Highway 11 Grocery



LEGEND:
MONITORING WELL

0 15 30 FT.
APPROXIMATE SCALE

SEI Environmental, Inc.

FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HIGHWAY 11
SALEM, SC

WO #300-388 DWG #HG0388F2	DATE: 4/4/01 DRAWN BY: JCJ
------------------------------	-------------------------------



APPENDIX A

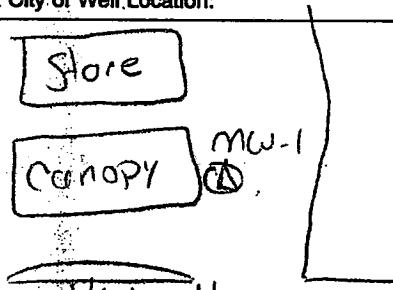
Monitor Well Construction Logs



Water Well Record

Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300

1. LOCATION OF WELL:		4. OWNER OF WELL: Hwy 11 Grocery Address: 150 Shallowford Rd. Salem, SC 29676 Telephone No. _____	
County: Oconee	System Name: OCONEE	Engineer: SCI Address: 3021 McNaughton Dr., Ste 9 Columbia, SC 29223 Telephone No.: 803-788-2535	Date Started: 3-29-01
Latitude: _____ Longitude: _____	Distance and Direction from Road Intersections: 135 27 SL. Hwy 11	5. WELL DEPTH (completed) 30' ft.	
Sketch Map: 		Date Completed: 3-29-01	
2. CUTTING SAMPLES: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		6. <input type="checkbox"/> Mud Rotary <input type="checkbox"/> Jetted <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Air Rotary <input type="checkbox"/> Driven <input type="checkbox"/> Cable tool <input checked="" type="checkbox"/> Other HSA	
Geophysical Logs: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No		7. USE: <input type="checkbox"/> Domestic <input type="checkbox"/> Public Supply—Permit No. _____ <input type="checkbox"/> Industry <input type="checkbox"/> Irrigation <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Commercial <input type="checkbox"/> Test Well <input checked="" type="checkbox"/> Monitor Well <input type="checkbox"/>	
Formation Description	Thickness of Stratum	Depth to Bottom of Stratum	8. CASING: <input checked="" type="checkbox"/> Threaded <input type="checkbox"/> Welded Diam.: 3" Type: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Galvanized <input type="checkbox"/> Steel <input type="checkbox"/> Other 15 in. to 15 ft. depth 15 in. to 15 ft. depth
Brnss	30	30	Height: Above/Below Surface _____ ft. Weight _____ lb./ft. Drive Shoe? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Rock	30	30	9. SCREEN Type: PVC Diam.: 2" Slot/Gauge: .010 Length: 15 Set Between: 15 ft. and 30 ft. NOTE: MULTIPLE SCREENS Sieve Analysis <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No
10. STATIC WATER LEVEL		27 ft. below land surface after 24 hours	
11. PUMPING LEVEL Below Land Surface.		ft. after _____ hrs. Pumping _____ G.P.M. Pumping Test: <input type="checkbox"/> Yes (please enclose) <input checked="" type="checkbox"/> No Yield: _____	
12. WATER QUALITY		Chemical Analysis <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Bacterial Analysis <input type="checkbox"/> Yes <input type="checkbox"/> No Please enclose lab results.	
13. ARTIFICIAL FILTER (gravel pack)		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Installed from 13 ft. to 30 ft. Effective size .01/30 Uniformity Coefficient 5/10 Sand	
14. WELL GROUTED?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Neat Cement <input type="checkbox"/> Sand Cement <input type="checkbox"/> Concrete <input type="checkbox"/> Other _____ Depth: From 15 ft. to 11 ft.	
15. NEAREST SOURCE OF POSSIBLE CONTAMINATION:		ft. direction Type well disinfected <input type="checkbox"/> Yes Type: _____ upon completion <input type="checkbox"/> No Amount: _____	
16. PUMP:		Date installed: _____ Not installed <input type="checkbox"/> Mfr. Name: _____ Model No.: _____ H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity _____ gpm TYPE: <input type="checkbox"/> Submersible <input type="checkbox"/> Jet (shallow) <input type="checkbox"/> Turbine <input type="checkbox"/> Jet (deep) <input type="checkbox"/> Reciprocating <input type="checkbox"/> Centrifugal	
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		17. WATER WELL CONTRACTOR'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.	
3. REMARKS: MW-1 Bentonite Seal frame 11-13'		Registered Business Name: C.S. Inc. Date: 3-30-01 Address: P.O. Box 703 Matthews NC 28106 Signed: Chris Rander Cert. No. 1333 Authorized Representative	

***Indicate Water Bearing Zones**

3. REMARKS



Water Well Record

Bureau of Water

2600 Bull Street, Columbia, SC 29201-1708; (803) 734-5300



APPENDIX B

Soil Laboratory Analytical Results

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A43207
 Sample ID: MW-1
 Sample Type: Soil
 Site ID:

Project:
 Project Name: HIGHWAY 11 GROCERY
 Sampler: BOB BOLTON

Date Collected: 3/29/01
 Time Collected: 11:11
 Date Received: 3/31/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch	
ORGANIC PARAMETERS											
Naphthalene	51.4	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
Acenaphthene	ND	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
Anthracene	ND	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
Fluoranthene	ND	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
Fluorene	ND	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
Pyrene	ND	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
Benzo(a)anthracene	ND	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
Benzo(a)pyrene	ND	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
Benzo(b)fluoranthene	ND	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
Benzo(k)fluoranthene	ND	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
Chrysene	ND	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
Dibeno(a,h)anthracene	ND	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
Indeno(1,2,3-cd)pyrene	ND	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
Acenaphthylene	ND	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
Benzo(g,h,i)perylene	ND	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
Phenanthrene	ND	mg/kg	1.87	0.081	20	4/ 1/01	14:33	J.Fuqua	8270C	3046	
VOLATILE ORGANICS											
Benzene	93.68	mg/kg	1.149	0.0020	500	4/ 2/01	7:43	B.Herford	8260B	3595	
Ethylbenzene	678.2	mg/kg	22.99	0.0020	10000	4/ 2/01	16:46	B.Herford	8260B	3595	
Naphthalene	110.3	mg/kg	2.874	0.0050	500	4/ 2/01	7:43	B.Herford	8260B	3595	
Toluene	678.2	mg/kg	22.99	0.0020	10000	4/ 2/01	16:46	B.Herford	8260B	3595	
Xylenes, Total	1061.	mg/kg	22.99	0.0020	10000	4/ 2/01	16:46	B.Herford	8260B	3595	
GENERAL CHEMISTRY PARAMETERS											
% Dry Weight	87.	%				1	3/31/01	9:42	D.Yeager	CLP	2647

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A43207
Sample ID: MW-1
Project:
Page 2

TCLP RESULTS

Analyte	Result	Units	Reg Limit	Recovery (%)	Date	Method
-----	-----	-----	-----	-----	-----	-----

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol	Extracted	Extract Vol	Date	Time	Analyst	Method
-----	-----	-----	-----	-----	-----	-----	-----
BNA's	24.6 gm	1.0 ml	3/31/01			J. Rudden	3550
Volatile Organics	5.0 g	5.0 ml	3/29/01	11:11		B.Herford	5035

Surrogate	% Recovery	Target Range
-----	-----	-----
surr-1,2-Dichloroethane, d4	95.	50. - 140.
surr-Toluene d8	104.	73. - 139.
surr-4-Bromofluorobenzene	109.	62. - 131.
surr-Dibromofluoromethane	95.	64. - 145.

- Recovery outside Laboratory historical limits.

All metal and organic results have been corrected for dry weight.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A43207
Sample ID: MW-1
Project:
Page 3

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

Report Approved By:



Report Date: 4/ 2/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

ANALYTICAL REPORT

SEI 8990
 BOB BOLTON
 3021 MCNAUGHTON DR. STE 9
 COLUMBIA, SC 29223

Lab Number: 01-A43208
 Sample ID: MW-2
 Sample Type: Soil
 Site ID:

Project:
 Project Name: HIGHWAY 11 GROCERY
 Sampler: BOB BOLTON

Date Collected: 3/29/01
 Time Collected: 13:40
 Date Received: 3/31/01
 Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
Acenaphthene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
Anthracene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
Fluoranthene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
Fluorene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
Pyrene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
Benzo(a)anthracene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
Benzo(a)pyrene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
Benzo(b)fluoranthene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
Benzo(k)fluoranthene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
Chrysene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
Dibenzo(a,h)anthracene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
Acenaphthylene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
Benzo(g,h,i)perylene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
Phenanthrene	ND	mg/kg	0.089	0.079	1	3/31/01	23:30	J.Fuqua	8270C	3046
VOLATILE ORGANICS										
Benzene	0.0063	mg/kg	0.0023	0.0020	1	4/ 2/01	0:55	B.Herford	8260B	3595
Ethylbenzene	ND	mg/kg	0.0023	0.0020	1	4/ 2/01	0:55	B.Herford	8260B	3595
Naphthalene	ND	mg/kg	0.0059	0.0050	1	4/ 2/01	0:55	B.Herford	8260B	3595
Toluene	0.0206	mg/kg	0.0023	0.0020	1	4/ 2/01	0:55	B.Herford	8260B	3595
Xylenes, Total	0.0078	mg/kg	0.0023	0.0020	1	4/ 2/01	0:55	B.Herford	8260B	3595
GENERAL CHEMISTRY PARAMETERS										
% Dry Weight	89.	%			1	3/31/01	9:42	D.Yeager	CLP	2647

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A43208
Sample ID: MW-2
Project:
Page 2

TCLP RESULTS

Analyte	Result	Units	Reg Limit	Matrix Spike		Date	Method
				Recovery (%)	Date		
-----	-----	-----	-----	-----	-----	-----	-----

ND - Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
BNA's	25.2 gm	1.0 ml	3/31/01		J. Rudden	3550
Volatile Organics	4.8 g	5.0 ml	3/29/01	13:40	B.Herford	5035

Surrogate	% Recovery	Target Range
surr-1,2-Dichloroethane, d4	93.	50. - 140.
surr-Toluene d8	93.	73. - 139.
surr-4-Bromofluorobenzene	104.	62. - 131.
surr-Dibromofluoromethane	88.	64. - 145.
surr-Nitrobenzene-d5	78.	26. - 106.
surr-2-Fluorobiphenyl	75.	25. - 107.
surr-Terphenyl d14	81.	28. - 128.

- Recovery outside Laboratory historical limits.

All metal and organic results have been corrected for dry weight.

Sample report continued . . .

TestAmerica

INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 01-A43208
Sample ID: MW-2
Project:
Page 3

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

Report Approved By:



Report Date: 4/ 2/01

Paul E. Lane, Jr., Lab Director
Michael H. Dunn, M.S., Technical Director
Johnny A. Mitchell, Dir. Technical Serv.
Eric S. Smith, Assistant Technical Director

Gail A. Lage, Technical Serv.
Glenn L. Norton, Technical Serv.
Kelly S. Comstock, Technical Serv.
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 84009

End of Sample Report.

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA

Project Number:

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
---------	-------	------------	--------	------------	----------	--------------	------------	--------------

VOA PARAMETERS

Benzene	mg/kg	< 0.0020	0.0429	0.0500	86	60. - 115.	3595	01-A41956
Toluene	mg/kg	< 0.0020	0.0403	0.0500	81	46. - 114.	3595	01-A41956

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
---------	-------	------------	-----------	-----	-------	------------

VOA PARAMETERS

Benzene	mg/kg	0.0429	0.0433	0.93	25.	3595
Toluene	mg/kg	0.0403	0.0404	0.25	28.	3595

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
---------	-------	------------	--------------	------------	--------------	------------

UST PARAMETERS

Naphthalene	mg/kg	1.67	0.957	57	38 - 175	3046
Acenaphthene	mg/kg	1.67	0.957	57	41 - 122	3046
Anthracene	mg/kg	1.67	0.990	59	49 - 122	3046
Fluoranthene	mg/kg	1.67	1.02	61	53 - 127	3046
Fluorene	mg/kg	1.67	0.990	59	51 - 120	3046
Pyrene	mg/kg	1.67	0.957	57	49 - 130	3046
Benzo(a)anthracene	mg/kg	1.67	0.957	57	50 - 128	3046
Benzo(a)pyrene	mg/kg	1.67	0.957	57	51 - 132	3046
Benzo(b)fluoranthene	mg/kg	1.67	0.858	51	40 - 129	3046
Benzo(k)fluoranthene	mg/kg	1.67	0.957	57	49 - 167	3046
Chrysene	mg/kg	1.67	0.990	59	54 - 125	3046
Dibenzo(a,h)anthracene	mg/kg	1.67	1.25	75	32 - 146	3046

Project QC continued . . .

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number:

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Indeno(1,2,3-cd)pyrene	mg/kg	1.67	1.52	91	28 - 147	3046
Acenaphthylene	mg/kg	1.67	0.990	59	40 - 124	3046
Benzo(g,h,i)perylene	mg/kg	1.67	1.42	85	23 - 153	3046
Phenanthrene	mg/kg	1.67	0.990	59	52 - 123	3046

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
VOA PARAMETERS						
Benzene	mg/kg	0.0500	0.0443	89	77 - 119	3595
Ethylbenzene	mg/kg	0.0500	0.0471	94	78 - 120	3595
Naphthalene	mg/kg	0.0500	0.0487	97	62 - 140	3595
Toluene	mg/kg	0.0500	0.0423	85	76 - 117	3595
Xylenes, Total	mg/kg	0.1500	0.1390	93	81 - 117	3595

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
UST PARAMETERS					
Naphthalene	< 0.165	mg/kg	3046	3/31/01	22:15
Acenaphthene	< 0.165	mg/kg	3046	3/31/01	22:15
Anthracene	< 0.165	mg/kg	3046	3/31/01	22:15
Fluoranthene	< 0.165	mg/kg	3046	3/31/01	22:15
Fluorene	< 0.165	mg/kg	3046	3/31/01	22:15
Pyrene	< 0.165	mg/kg	3046	3/31/01	22:15
Benzo(a)anthracene	< 0.165	mg/kg	3046	3/31/01	22:15
Benzo(a)pyrene	< 0.165	mg/kg	3046	3/31/01	22:15
Benzo(b)fluoranthene	< 0.165	mg/kg	3046	3/31/01	22:15
Benzo(k)fluoranthene	< 0.165	mg/kg	3046	3/31/01	22:15
Chrysene	< 0.165	mg/kg	3046	3/31/01	22:15

Project QC continued . . .

TestAmerica

INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number:

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Dibenzo(a,h)anthracene	< 0.165	mg/kg	3046	3/31/01	22:15
Indeno(1,2,3-cd)pyrene	< 0.165	mg/kg	3046	3/31/01	22:15
Acenaphthylene	< 0.165	mg/kg	3046	3/31/01	22:15
Benzo(g,h,i)perylene	< 0.165	mg/kg	3046	3/31/01	22:15
Phenanthrene	< 0.165	mg/kg	3046	3/31/01	22:15

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
---------	-------------	-------	------------	---------------	---------------

****VOA PARAMETERS****

Benzene	< 0.0020	mg/kg	3595	4/ 1/01	18:42
Ethylbenzene	< 0.0020	mg/kg	3595	4/ 1/01	18:42
Naphthalene	< 0.0050	mg/kg	3595	4/ 1/01	18:42
Toluene	< 0.0020	mg/kg	3595	4/ 1/01	18:42
Xylenes, Total	< 0.0020	mg/kg	3595	4/ 1/01	18:42
surr-1,2-Dichloroethane, d4	99.	% Rec	3595	4/ 1/01	18:42
surr-Toluene d8	95.	% Rec	3595	4/ 1/01	18:42
surr-4-Bromofluorobenzene	111.	% Rec	3595	4/ 1/01	18:42
surr-Dibromofluoromethane	92.	% Rec	3595	4/ 1/01	18:42

- Value outside Laboratory historical QC limits.

End of Report for Project 232122



APPENDIX C

Groundwater Laboratory Analytical Results

TestAMERICA

INCORPORATED

April 4, 2001

Page 1

CLIENT: SEI ENVIRONMENTAL, INC.
3021 MCNAUGHTON DR.
SUITE 9
COLUMBIA, SC 29223

Order Number: 11866
Project Name: AMOCO HWY 11
Project Number:
Date Received: 03/31/01

ATTN: BOB BOLTON

Sample Identification	Lab Number	Collection Date and Time	
MU-1	01-F8227	3/30/01	9:45
MW-2	01-F8228	3/30/01	10:25

Approved By:

Mark Rusler, Director of Technical Services
K.R. Vault, Client Services Manager
Elizabeth A. Rich, Q.A. Officer

South Carolina Certification Number: DHEC 96012

Attachments: chain-of-custody/field sheet

April 4, 2001

Page 2

CLIENT: SEI ENVIRONMENTAL, INC.
 3021 McNAUGHTON DR.
 SUITE 9
 COLUMBIA, SC 29223

ATTN: BOB BOLTON

Order Number: 11866
 Project: AMOCO HWY 11
 Sample ID: MW-1
 Lab Number: 01-F8227
 Date Collected: 03/30/01
 Time Collected: 09:45
 Date Received: 03/31/01

LABORATORY REPORT

Analyte	Result	Q	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	394.		ug/l	5.00	10	4/ 3/01	0:25	JLS	8270C	6832
Acenaphthene	< 1.00	U	ug/l	1.00	1	4/ 3/01	0:25	JLS	8270C	6832
Anthracene	< 1.00	U	ug/l	1.00	1	4/ 3/01	0:25	JLS	8270C	6832
Fluoranthene	< 1.00	U	ug/l	1.00	1	4/ 3/01	0:25	JLS	8270C	6832
Fluorene	0.370	I	ug/l	1.00	1	4/ 3/01	0:25	JLS	8270C	6832
Pyrene	< 5.00	U	ug/l	5.00	1	4/ 3/01	0:25	JLS	8270C	6832
Benzo(a)anthracene	< 0.200	U	ug/l	0.200	1	4/ 3/01	0:25	JLS	8270C	6832
Benzo(a)pyrene	< 0.200	U	ug/l	0.200	1	4/ 3/01	0:25	JLS	8270C	6832
Benzo(b)fluoranthene	< 0.200	U	ug/l	0.200	1	4/ 3/01	0:25	JLS	8270C	6832
Benzo(k)fluoranthene	< 0.500	U	ug/l	0.500	1	4/ 3/01	0:25	JLS	8270C	6832
Chrysene	< 2.00	U	ug/l	2.00	1	4/ 3/01	0:25	JLS	8270C	6832
Dibenzo(a,h)anthracene	< 0.200	U	ug/l	0.200	1	4/ 3/01	0:25	JLS	8270C	6832
Indeno(1,2,3-cd)pyrane	< 0.200	U	ug/l	0.200	1	4/ 3/01	0:25	JLS	8270C	6832
Acenaphthylene	< 5.00	U	ug/l	5.00	1	4/ 3/01	0:25	JLS	8270C	6832
Benzo(g,h,i)perylene	< 2.00	U	ug/l	2.00	1	4/ 3/01	0:25	JLS	8270C	6832
Phenanthrene	< 1.00	U	ug/l	1.00	1	4/ 3/01	0:25	JLS	8270C	6832
1-Methylnaphthalene	81.8		ug/l	5.00	10	4/ 3/01	0:25	JLS	8270C	6832
2-Methylnaphthalene	159.		ug/l	5.00	10	4/ 3/01	0:25	JLS	8270C	6832
VOLATILE ORGANICS										
Benzene	4800		ug/l	1.00	1	4/ 2/01	11:32	CTH	8260B	6786
1,2-Dibromoethane (EDB)	< 1.00	U	ug/l	1.00	1	4/ 2/01	11:32	CTH	8260B	6786
Ethylbenzene	3430		ug/l	1.00	1	4/ 2/01	11:32	CTH	8260B	6786
Naphthalene	578.		ug/l	5.00	1	4/ 2/01	11:32	CTH	8260B	6786
Toluene	7300		ug/l	1.00	1	4/ 2/01	11:32	CTH	8260B	6786
Xylenes	9800		ug/l	1.00	1	4/ 2/01	11:32	CTH	8260B	6786
Methyl-t-butyl ether	14000		ug/l	1.00	1	4/ 2/01	11:32	CTH	8260B	6786
METALS										
Lead, Total	0.0781		mg/l	0.0030	1	4/ 2/01	17:01	RQ	7421	6743

Sample Extraction Date

Parameter	Wt/Vol	Extracted	Extract Vol	Date	Analyst	Method

April 4, 2001

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CLIENT: SEI ENVIRONMENTAL, INC.
 Order No.: 11866
 Lab No.: 01-F8227
 Sample ID: MW-1

LABORATORY REPORT CONTINUED**Sample Extraction Data**

Parameter	Extracted Wt/Vol	Extract Vol	Date	Analyst	Method
BNA's	1000 ml	1.0 ml	3/31/01	DS	3510C

Surrogate	% Recovery	Target Range
VDA: 1,2-Dichloroethane-d4	17 #	82.0 - 130
VDA: Toluene-d8	71 #	84.0 - 119
VDA: 4-Bromofluorobenzene	101	84.0 - 121
VDA: Dibromofluoromethane	117	82.0 - 136
8270C: Nitrobenzene-d5	27 #	35.0 - 114
8270C: 2-Fluorobiphenyl	39 #	43.0 - 116
8270C: Terphenyl-d14	32	16.0 - 122

April 4, 2001

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CLIENT: SEI ENVIRONMENTAL, INC.
 3021 MCNAUGHTON DR.
 SUITE 9
 COLUMBIA, SC 29223

ATTN: BOB BOLTON

Order Number: 11866
 Project: AMOCO HWY 11
 Sample ID: MW-2
 Lab Number: 01-P8228
 Date Collected: 03/30/01
 Time Collected: 10:25
 Date Received: 03/31/01

LABORATORY REPORT

Analyte	Result	Q	Units	Report Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Naphthalene	< 5.00	U	ug/l	5.00	1	4/ 2/01	23:46	JLS	8270C	6832
Acenaphthene	< 1.00	U	ug/l	1.00	1	4/ 2/01	23:46	JLS	8270C	6832
Anthracene	< 1.00	U	ug/l	1.00	1	4/ 2/01	23:46	JLS	8270C	6832
Fluoranthene	< 1.00	U	ug/l	1.00	1	4/ 2/01	23:46	JLS	8270C	6832
Fluorene	0.250	t	ug/l	1.00	1	4/ 2/01	23:46	JLS	8270C	6832
Pyrene	< 5.00	U	ug/l	5.00	1	4/ 2/01	23:46	JLS	8270C	6832
Benzo(a)anthracene	< 0.200	U	ug/l	0.200	1	4/ 2/01	23:46	JLS	8270C	6832
Benzo(a)pyrene	< 0.200	U	ug/l	0.200	1	4/ 2/01	23:46	JLS	8270C	6832
Benzo(b)fluoranthene	< 0.200	U	ug/l	0.200	1	4/ 2/01	23:46	JLS	8270C	6832
Benzo(k)fluoranthene	< 0.500	U	ug/l	0.500	1	4/ 2/01	23:46	JLS	8270C	6832
Chrysene	< 2.00	U	ug/l	2.00	1	4/ 2/01	23:46	JLS	8270C	6832
Dibenzo(a,h)anthracene	< 0.200	U	ug/l	0.200	1	4/ 2/01	23:46	JLS	8270C	6832
Indeno(1,2,3-cd)pyrene	< 0.200	U	ug/l	0.200	1	4/ 2/01	23:46	JLS	8270C	6832
Acenaphthylene	< 5.00	U	ug/l	5.00	1	4/ 2/01	23:46	JLS	8270C	6832
Benzo(g,h,i)perylene	< 2.00	U	ug/l	2.00	1	4/ 2/01	23:46	JLS	8270C	6832
Phenanthrene	1.49		ug/l	1.00	1	4/ 2/01	23:46	JLS	8270C	6832
1-Methylnaphthalene	< 5.00	U	ug/l	5.00	1	4/ 2/01	23:46	JLS	8270C	6832
2-Methylnaphthalene	< 5.00	U	ug/l	5.00	1	4/ 2/01	23:46	JLS	8270C	6832
VOLATILE ORGANICS										
Benzene	15.1		ug/l	1.00	1	4/ 2/01	11:57	CTH	8260B	6786
1,2-Dibromoethane (EDB)	< 1.00	U	ug/l	1.00	1	4/ 2/01	11:57	CTH	8260B	6786
Ethylbenzene	9.61		ug/l	1.00	1	4/ 2/01	11:57	CTH	8260B	6786
Naphthalene	15.6		ug/l	5.00	1	4/ 2/01	11:57	CTH	8260B	6786
Toluene	61.7		ug/l	1.00	1	4/ 2/01	11:57	CTH	8260B	6786
Xylenes	52.0		ug/l	1.00	1	4/ 2/01	11:57	CTH	8260B	6786
Methyl-t-butyl ether	45.2		ug/l	1.00	1	4/ 2/01	11:57	CTH	8260B	6786
METALS										
Lead, Total	0.0117		mg/l	0.0030	1	4/ 2/01	17:04	RQ	7421	6743

April 4, 2001

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CLIENT: SEI ENVIRONMENTAL, INC.
 Order No.: 11866
 Lab No.: 01-F8228
 Sample ID: MW-2

LABORATORY REPORT CONTINUED**Sample Extraction Data**

Parameter	Extracted Wt/Vol	Extract Vol	Date	Analyst	Method
BNA's	1000 ml	1.0 ml	3/31/01	DS	3510C

Surrogate	% Recovery	Target Range
VOA: 1,2-Dichloroethane-d6	124	82.0 - 130
VOA: Toluene-d8	103	84.0 - 119
VOA: 4-Bromofluorobenzene	101	84.0 - 121
VOA: Dibromoformmethane	108	82.0 - 136
8270C: Nitrobenzene-d5	51	35.0 - 114
8270C: 2-Fluorobiphenyl	49	43.0 - 116
8270C: Terphenyl-d14	57	16.0 - 122

April 4, 2001

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CLIENT: SEI ENVIRONMENTAL, INC.
Order No.: 11866
Project: AMOCO HWY 11

Qualifier Definitions:

B = results based upon colony counts outside the acceptable range
I = the reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
J1 = surrogate recovery limits have been exceeded
J3 = the reported value failed to meet the established quality control criteria for either precision and/or accuracy
J4 = the sample matrix interfered with the ability to make an accurate determination
J5 = the data is questionable because of improper lab or field protocols
K = off-scale low, actual value is less than the value given
L = off-scale high, actual value is known to be greater than the value given
Q = sample held beyond acceptable holding time
U = the compound was analyzed for but not detected
V = the analyte was detected in both the sample and the associated method blank
Z = too many colonies present (TNTC)

*TA = sampled by TestAmerica, Inc. Field Services

the # indicates reported value is outside method defined and/or charted laboratory control limit



APPENDIX D

Tier II Assessment Plan



South Carolina Department of Health
and Environmental Control

**UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT**

2600 Bull Street
Columbia, SC 29201
Telephone (803) 896-6240
Fax (803) 896-6245

M E M O R A N D U M

DATE: December 2, 2002

TO: Ms. Mary Peyton Davis, Bureau of Air Quality

FROM: Konstantine T. Akhvlediani, Underground Storage Tank Program

SUBJECT: Hwy 11 Grocery, 13527 N Hwy 11, Salem, SC
UST Permit #03439
Air Permit Request received December 2, 2002
Oconee County

Attached for your review and approval is the BAQ Modeling/Air Toxic Questionnaire submitted with the Corrective Action Plan for the above referenced site submitted by SEI Environmental, Inc.

Questions may be referred to my attention at (803) 896-6647.

39-Tech

SCDHEC/UST/00/12/02/02

RECEIVED

DEC 03 2002

Bureau of Air Quality

**CORRECTIVE ACTION PLAN
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
Oconee County**

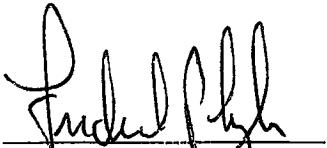
SCDHEC Site # 03439

PREPARED FOR:

South Carolina Department of Health and Environmental Control
UST Management Section
2600 Bull Street
Columbia, S.C. 29201

PREPARED BY:

SEI Environmental, Inc.
3021 McNaughton Drive #9
Columbia, S.C. 29223



Frederick P. Lyke,
Professional Geologist #1055

November 20, 2002

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- 1.0 INTRODUCTION
- 2.0 SITE CHARACTERIZATION
- 3.0 GROUNDWATER QUALITY
- 4.0 GROUNDWATER REMEDIATION
 - 4.1 Free Product Recovery System Design
 - 4.2 Free Product Recovery System Operation and Maintenance
 - 4.3 Insitu bioremediation theory
 - 4.4 Insitu bioremediation evaluation and design
 - 4.5 Proposed Corrective Action Plan
- 5.0 CORRECTIVE ACTION MONITORING
- 6.0 ABANDONMENT
- 7.0 REFERENCES

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FIGURES

- Figure 1 Site Location Map
- Figure 2 Site Map
- Figure 3 Proposed Injection Well Locations
- Figure 4 Injection Well Schematic

APPENDICES

- A – Free Product Recovery System Specifications
- B – BAQC Modeling Information
- C – UIC Type V.A. I Permit Application
- D – Remediation System Design for Dissolved CoC

1.0 Introduction

The South Carolina Department of Health and Environmental Control (SCDHEC) Bureau of Underground Storage Tank Management (BUST) received bids to conduct remedial action at the Highway 11 Grocery facility located at 13527 SC Highway 11, Salem, South Carolina (see Figure 1 for site location). SEI Environmental, Inc. (SEI) was awarded a purchase order to conduct the remediation on November 6, 2002. Free phase petroleum product has been detected in one monitoring wells onsite (MW-1 and MW-8). The release was reported on November 28, 2000. The site is supplied potable water by on onsite drinking water well.

2.0 Site Characterization

For a complete review of the site geologic/hydrogeologic characterization, a review of the complete project file at SCDHEC/BUST is recommended. The site is within the Inner Piedmont Belt of the Piedmont Physiographic Province. Native rocks are generally medium to high grade metamorphic rocks such as granitic gneiss, mica schist, and amphibolite.

Visual analysis of subsurface soils collected from field screening activities and monitor well installations conducted as part of the assessment indicated the soil types of medium to fine sand and medium grained saprolite. The maximum depth of the current investigation was approximately 60 feet bls (below land surface).

Ground water generally flows to the east, consistent with the topography of the area. Saturated conditions are encountered at approximately 20 - 25 feet below grade.

3.0 Ground Water Quality

A Rapid Assessment Plan (RAP) was submitted by SEI Environmental in June, 2002. A baseline groundwater sampling event was conducted by SCDHEC on May 7, 2002. A table summarizing the analytical results of the ground water samples collected during that assessment is included as Table 1. Free product was measured in wells MW-1 and MW-8. Dissolved constituents above calculated SSTL's were found in wells MW-1, MW-7, MW-8 and MW-14. Additional ground water quality data can be found in the project file at SCDHEC/BUST.

4.0 GROUND WATER REMEDIATION

Ground water remediation will be accomplished by removing the existing free-phase product using a dual phase extraction system referred to as MAV. The dissolved-phase chemicals of concern will be treated using a patented “EDOT” oxygen injection system and a patented hydrogen peroxide injection system (“Per-Petual”) to enhance natural attenuation processes in situ. Detailed descriptions of the two techniques are presented in the sections that follow.

4.1 Free Product Recovery System Design

An MAV free product recovery system is proposed to remove the free phase petroleum hydrocarbons present on the groundwater table at the Highway 11 Grocery site. The proposed system will include dual phase recovery events utilizing up to 45 points as recovery wells. These points are to be installed as part of the “EDOT” System discussed in Section 4.4. Figure 3 provides the location of the product recovery points.

4.2 Free Product Removal System Operation and Monitoring

The proposed free product recovery events will occur until the desired endpoints are achieved. Presently, the target endpoint is ≤ 0.01 feet of free product detected in monitoring well MW-1 and MW-8 onsite. This endpoint is based on the designed removal efficiency of the MAV system to be installed.

Monitoring of the free product recovery system will be conducted monthly for the first twelve months of system operation. Free product thickness will be gauged in MW-1 and MW-8 during these visits in order to verify system operation. Also, any necessary system maintenance will be conducted during these visits. It is anticipated that after this twelve-month period the desired endpoint will be achieved. Monthly monitoring of the site will continue until compliance with the target endpoint is confirmed by SCDHEC.

4.3 In Situ Bioremediation Theory

In situ bioremediation refers to the use of natural microbiological processes occurring in the subsurface environment to breakdown complex organic compounds into simpler, non-toxic compounds without the removal of aquifer material. Contaminant degradation takes place by microorganisms when the contaminants either serve as a primary energy source (electron donor), or are fortuitously metabolized when other primary substrates are available to the microorganisms (co-metabolism). In order for the electron donors to be utilized by the indigenous microbial community, compounds must also be available which allow energy transfer by the microorganisms to take place. Oxygen is required for micro-organisms to utilize the compounds for energy transfer.

A hydrogen peroxide injection system (trade name “Per-Petual”, U.S. patent application serial number 60/357,550) continuously injects a mild solution of peroxide into numerous injection points arranged across the groundwater contamination plume in a grid-like fashion. It is our intent to use the MAV points as injection points. Decontamination occurs through chemical oxidation and through enhanced bioremediation due to elevated dissolved oxygen levels. Chemical oxidation (responsible for roughly 25% of total decontamination) is often augmented by the presence of naturally occurring minerals which act as catalysts (Fenton’s Reaction). Bioremediation (responsible for roughly 75% of total decontamination) is enhanced by elevating dissolved oxygen levels from typically 0-5 ppm in the presence of contamination to 100+ ppm and thereby providing naturally occurring microbes with a sustained oxygen level required for microbial activity.

4.4 In Situ Bioremediation Evaluation and Design

Remediation System design and specifications details are presented in Appendix D. The oxygen and hydrogen peroxide injection system will include approximately 45 injection points. This bore-hole layout was designed to get injection points spaced in a grid like fashion over as much

of the contamination plume as possible. Each injection point will simply be the end of a section of $\frac{1}{4}$ inch polypropylene tubing that is scored with slits/holes along the last 12 inches in order to ensure proper oxygen diffusion. The 45 lengths of PPT tubing will exit the bore-holes along the rear of the system building and then will run to the enclosure in shallow (1 foot) trenches.

The 45 injection points will be connected to PPT tubing and then connected to individual conduits on the patented control panels. These control panels contain a flow meter and control valve for each injection point, as well as a regulator that controls the incoming flow/pressure of oxygen from the liquid oxygen cylinder to the control panel. Given the number of injection points in this system, the system will include two control panels and two oxygen cylinders. Each control panel is connected via a pressure hose to a liquid oxygen cylinder. The control panels and oxygen cylinders are stored within a 6' x 8' locked wooden enclosure.

After considering the advantages, disadvantages, and feasibility of the available options, The patented "EDOT" oxygen injection system is the most effective and least costly option for treatment of the contaminated soil and groundwater at the site. The primary reasons for selecting this option is the ability of this type of system to enhance bioremediation, the ability of injected oxygen gas to diffuse effectively in the sandy silt and clay soil present at this site, the ability of this system to reach parts of the contamination plume under dispensers and the store that could not be reached with other systems and also eliminating costly and time-consuming need for concrete and asphalt cutting, the ability of this system to attack the entire plume by installing injection points in a grid-like fashion across the plume, the ability of this system to be installed quickly and inexpensively relative to other options, and the low maintenance and operating costs associated with this system.

4.5 PROPOSED CORRECTIVE ACTION PLAN

Based on the findings of previous investigations, soil and groundwater at the site have been impacted by a release of petroleum hydrocarbons from the UST system. The continuous injection of oxygen gas through the patented "EDOT" system is recommended to remediate the impacted soil and groundwater at the site.

A plan view of the proposed EDOT system is presented in Figure 3 and in Appendix D. Forty five bore-holes, each spaced 10-15 feet apart are proposed to cover the area of adsorbed phase contaminants.

Construction drawings for the oxygen injection system are included as Appendix D. Following completion of all construction activities, as-built drawings will be generated and forwarded as an addition to this CAP.

The remediation system will be housed and secured within a wooden enclosure in order to prevent unwarranted tampering. The structure shall meet all necessary requirements by the South Carolina Building Code. The injection point tubing sections will be buried below grade from the enclosure to the horizontal bore-hole entrance point. Both the entrance point and exit point of all horizontal bore holes will be sealed with bentonite and neat Portland cement layers.

Inside the building, the control panel will have clearly marked and labeled control valves, regulators, and flow meters. A local gas supply company will be issued a key to the enclosure for the purpose of swapping out used liquid oxygen cylinders on a monthly basis.

Monthly site visits will be conducted to inspect and adjust the oxygen injection system, and to measure soil gas and dissolve oxygen concentrations. One copy of the system operation and maintenance manual will be provided and located permanently at the site for future reference.

5.0 CORRECTIVE ACTION MONITORING

Prior to system start up a groundwater sample will be collected from each of the existing monitoring wells. Prior to sample collection the water level in each well will be measured. The volume of water standing in the well will be calculated. A volume equal to or greater than three times the calculated volume will be purged from the well before a sample is collected. Field measurements of pH, temperature, and specific conductance will be made and recorded after each single volume purge. Purge water will be containerized and temporarily stored onsite in

labeled containers for subsequent off site disposal through an approved facility. Samples will be placed in laboratory supplied containers, maintained at 4 degrees C, in a cooler and shipped to a SC certified laboratory for analysis. The groundwater samples will be analyzed for the BTEX components, PAHs (including naphthalene), and MTBE. Analytical methodologies shall be as specified in the bid document, or their equivalent. Proper field notes and chain of custody documentation will be maintained.

Sampling and reporting will be conducted on a quarterly basis. The quarterly corrective action monitoring report will contain those elements described in the bid document.

6.0 VERIFICATION AND ABANDONMENT

Air delivery equipment and the structure housing the equipment will be dismantled and removed from the site. The in situ bioreactors will be abandoned in place by disconnecting the air and nutrient delivery lines. A bentonite slurry will be pumped through air and nutrient delivery lines, to fill the reactors, and the protective well vaults will be filled with concrete to match the existing grade. Air delivery lines will be capped and abandoned in place. Abandonment in place of the system as much as possible will minimize disruption of the owner/operator's normal operations. At the completion of the abandonment operations, an abandonment report will be prepared documenting all abandonment actions.

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Bedient, P.B., Rifai, H.S., and Newell, C.J., 1994, *Ground Water Contamination: Transport and Remediation*, PTR Prentice-Hall, Inc., Englewood Cliffs, NJ.

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Portier, Ph.D., Ralph J., Louisiana State University, Aquatic/Industrial Toxicology Laboratory, Institute for Environmental Studies, 1997. Personal communication.

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USEPA, 1995, *Bioventing Principles and Practice, Volume I and II*, EPA/540/R-95/53a, Office of Research and Development, Washington, DC.

Wiedemeier, Todd H., Matthew A. Swanson, John T. Wilson, Donald H. Campbell, Ross N. Miller, and Jerry E. Hansen, *Patterns of Intrinsic Bioremediation at Two U.S. Air Force Bases*, in Third International In Situ and On-Site Bioreclamation Symposium, Vol 3(1), *Intrinsic Bioremediation*, Battelle Press, Columbus, Ohio, 1995.

Wiedemeier, Todd H., John T. Wilson, Donald H. Campbell, and Ross N. Miller, *Proposed Air Force Guidelines for Successfully Supporting the Intrinsic Remediation (Natural Attenuation)*

Option at Fuel Hydrocarbon Contaminated Sites, from National Ground Water Association
Proceedings of The Eighth national Outdoor Action Conference and Exposition, Minneapolis,
Minnesota, May 23-25.

Table I (reprinted from CA Bid Document).

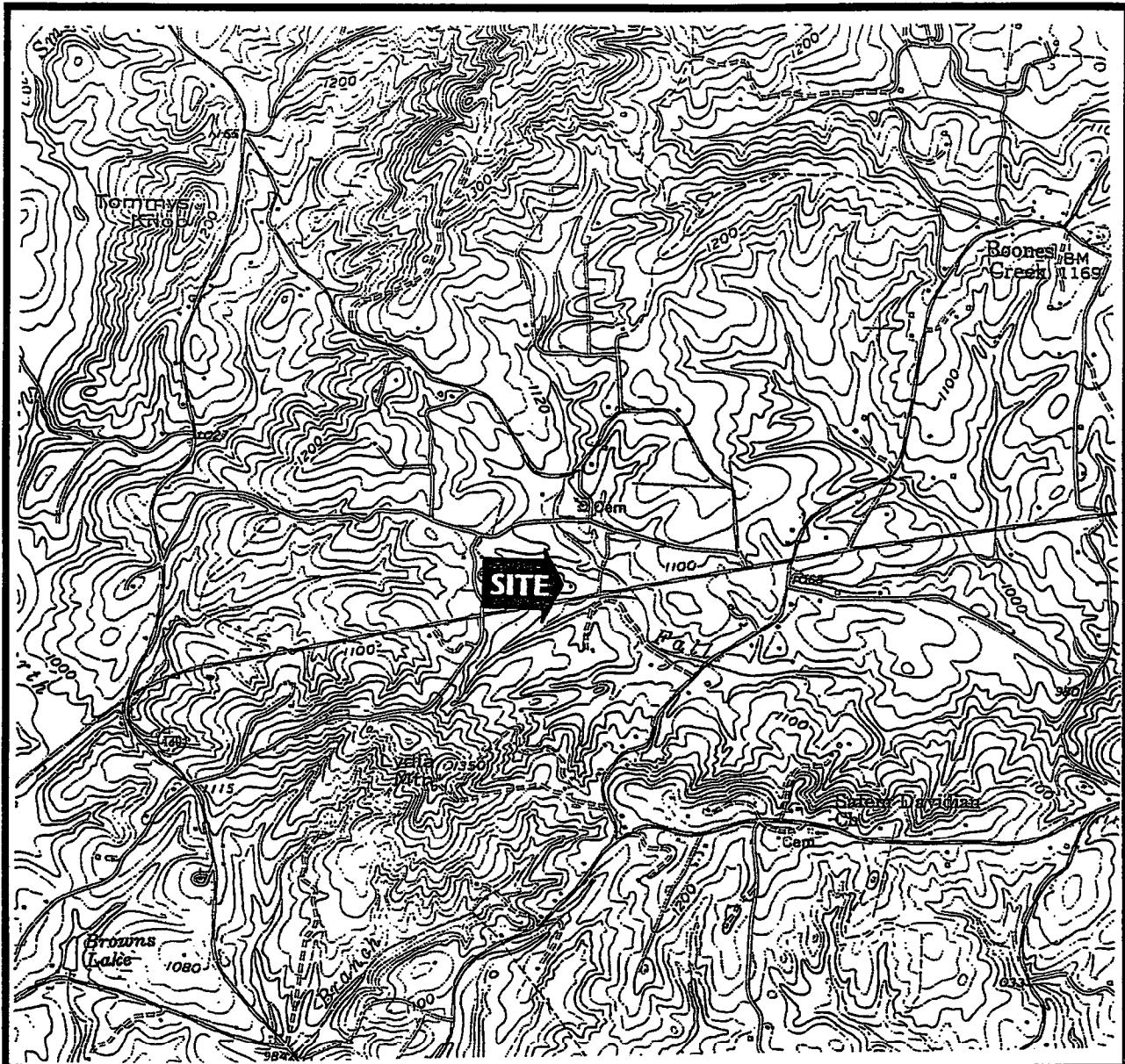
CoC concentration in parts per billion ($\mu\text{g/l}$) based on May 7, 2002 sampling: (CoC may increase or decrease in the future)

Well	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	Total Conc.
MW-1**	226,000	301,000	280,000	278,000	5,110,000	2,000	6,197,000
MW-2	13	8	1	5	5	5	37
MW-3	1*	1*	1*	1*	5*	5*	14
MW-4	1,500	5,320	620	3,360	810	500	12,110
MW-5	1*	1*	1*	1*	5*	5*	14
MW-6	1,780	4,950	490	2,880	6,350	500	42,871
MW-7	34	20	1*	8	7	5*	75
MW-8**	226,000	301,000	280,000	278,000	5,110,000	2,000	6,197,000
MW-10	115	185	68	328	86	9	791
MW-11	1*	1*	1*	1*	5*	5*	14
MW-14	3,780	13,800	27,000	14,700	7,010	500	66,790
DMW-1	215	430	50	50	1,780	250	2,775
DMW-2	1*	1*	1*	1*	5*	5*	14
DMW-4	1*	1*	1*	1*	5*	5*	14
Initial Conc.***	459,442	626,718	588,235	577,336	10,236,073	5,794	12,493,598
SSTL Conc.	3,881	57,303	33,705	339,605	10,645	2,452	447,591
Initial Conc. Above SSTL	455,561	569,415	554,530	237,731	10,225,428	3,342	12,046,007

*Laboratory analysis is below detection limits; therefore, initial concentration is set equal to the detection limit.

** Well contains free phase petroleum, concentrations set based on Henry's Law solubility limits.

*** CoC concentration may change due to seasonal fluctuations in the groundwater.



SCALE 1:24000

1 $\frac{1}{2}$ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

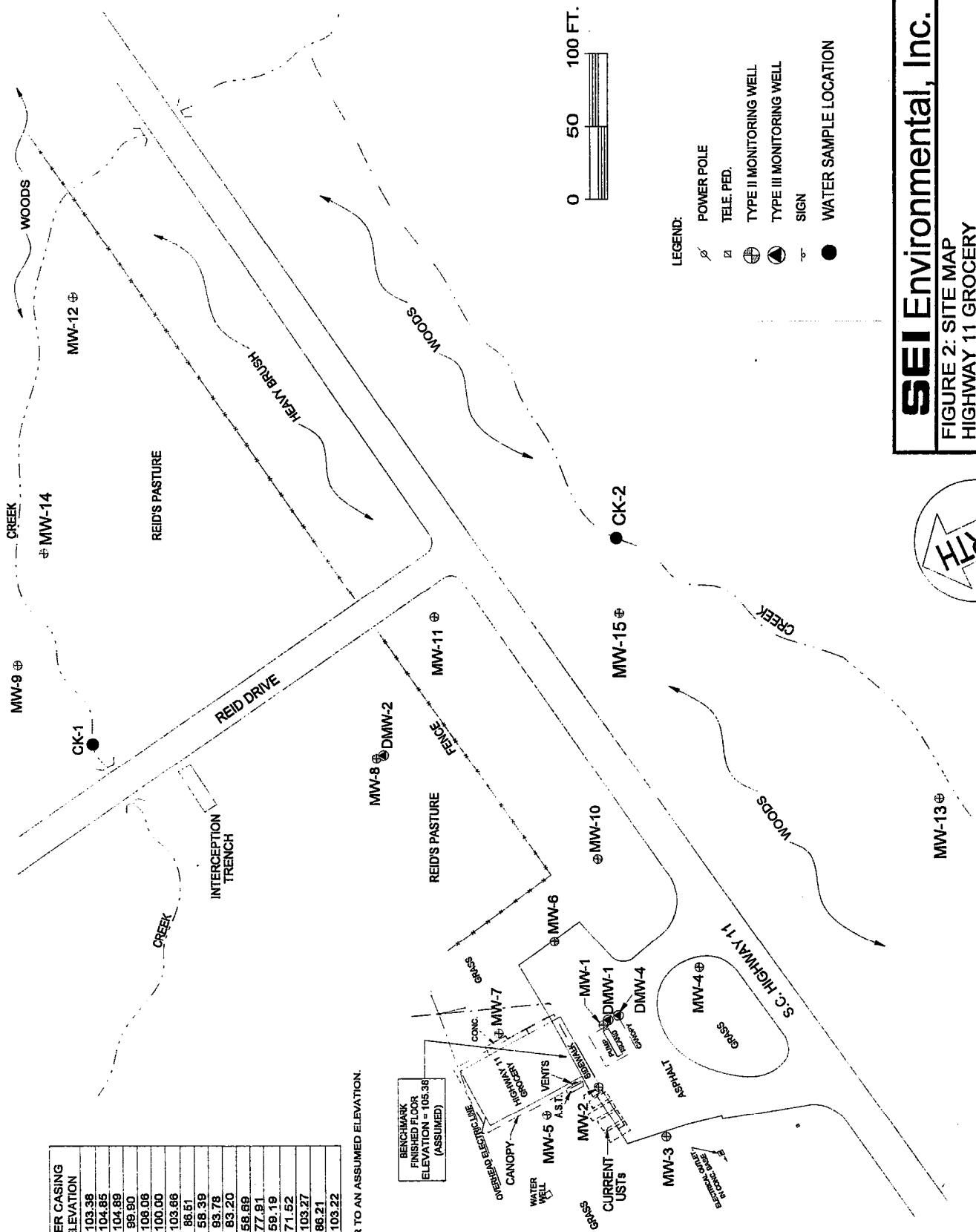
SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

WO #302-169
DWG #

DATE: 11/20/02
DRAWN BY: JCJ





SEI Environmental, Inc.

FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

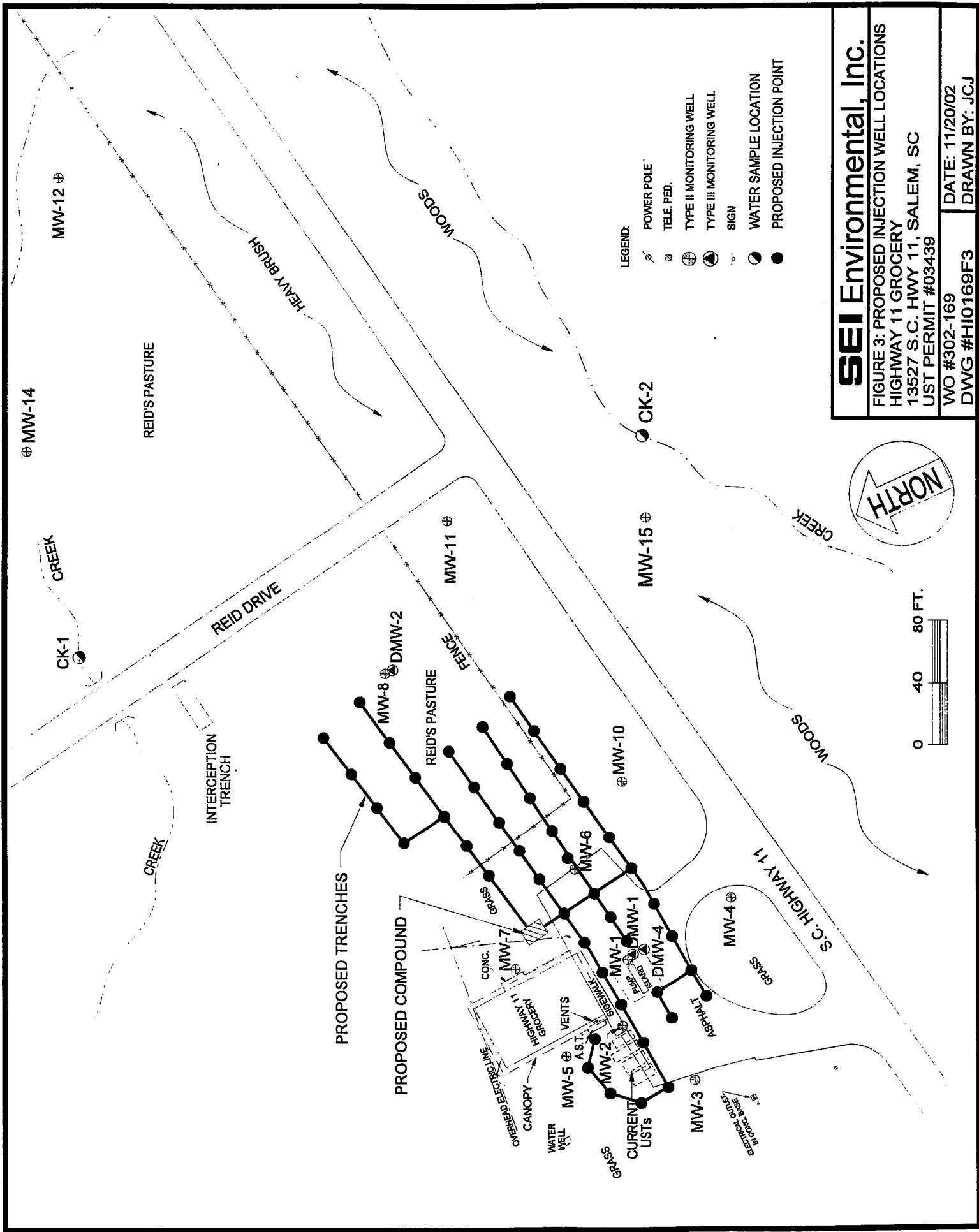
DATE: 5/31/02
DRAWN BY: JCJ

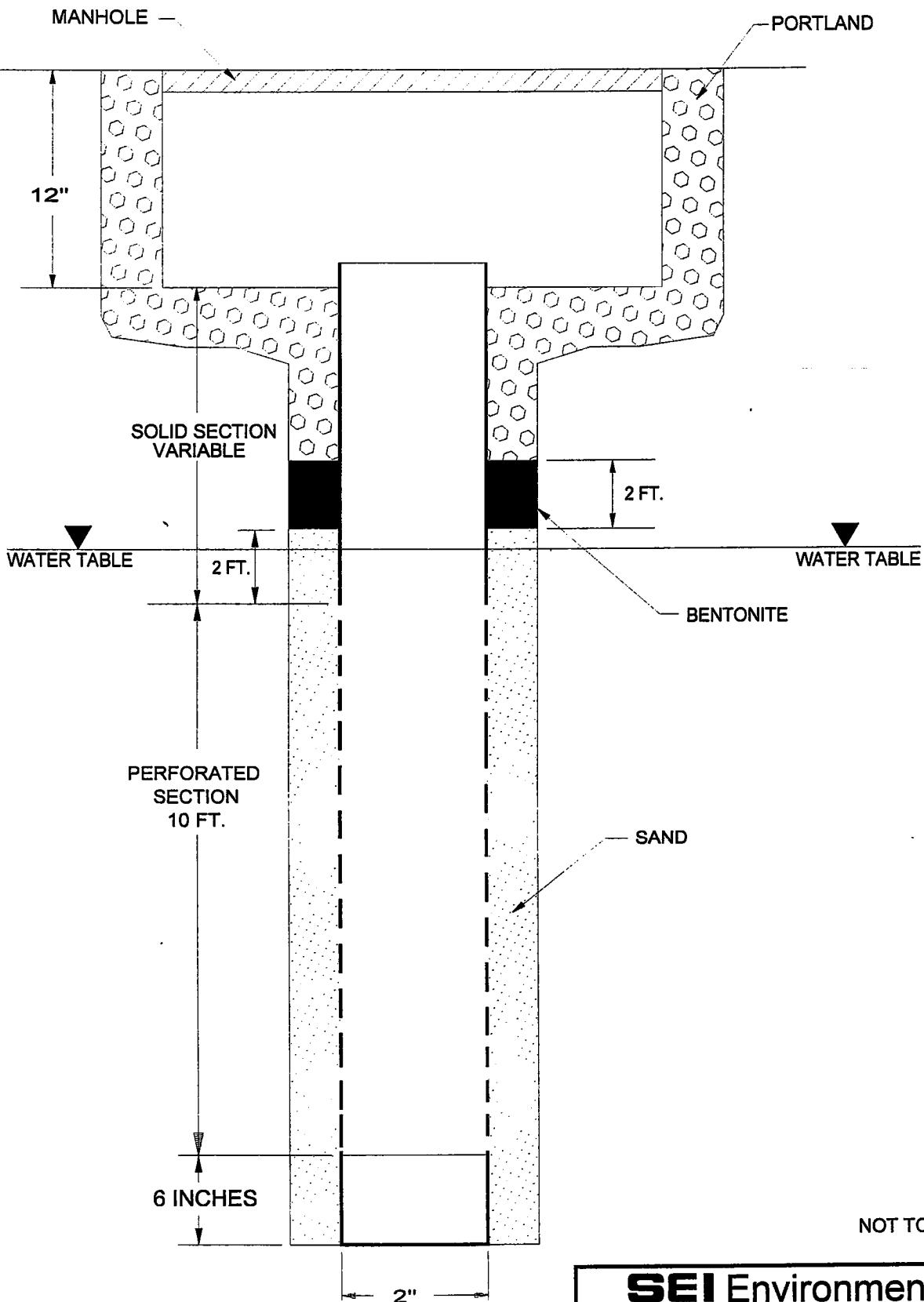


SEI Environmental, Inc.

FIGURE 3: PROPOSED INJECTION WELL LOCATIONS
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

DATE: 11/20/02
WO #302-169
DWG #HIO169F3 DRAWN BY: JC.J





SEI Environmental, Inc.

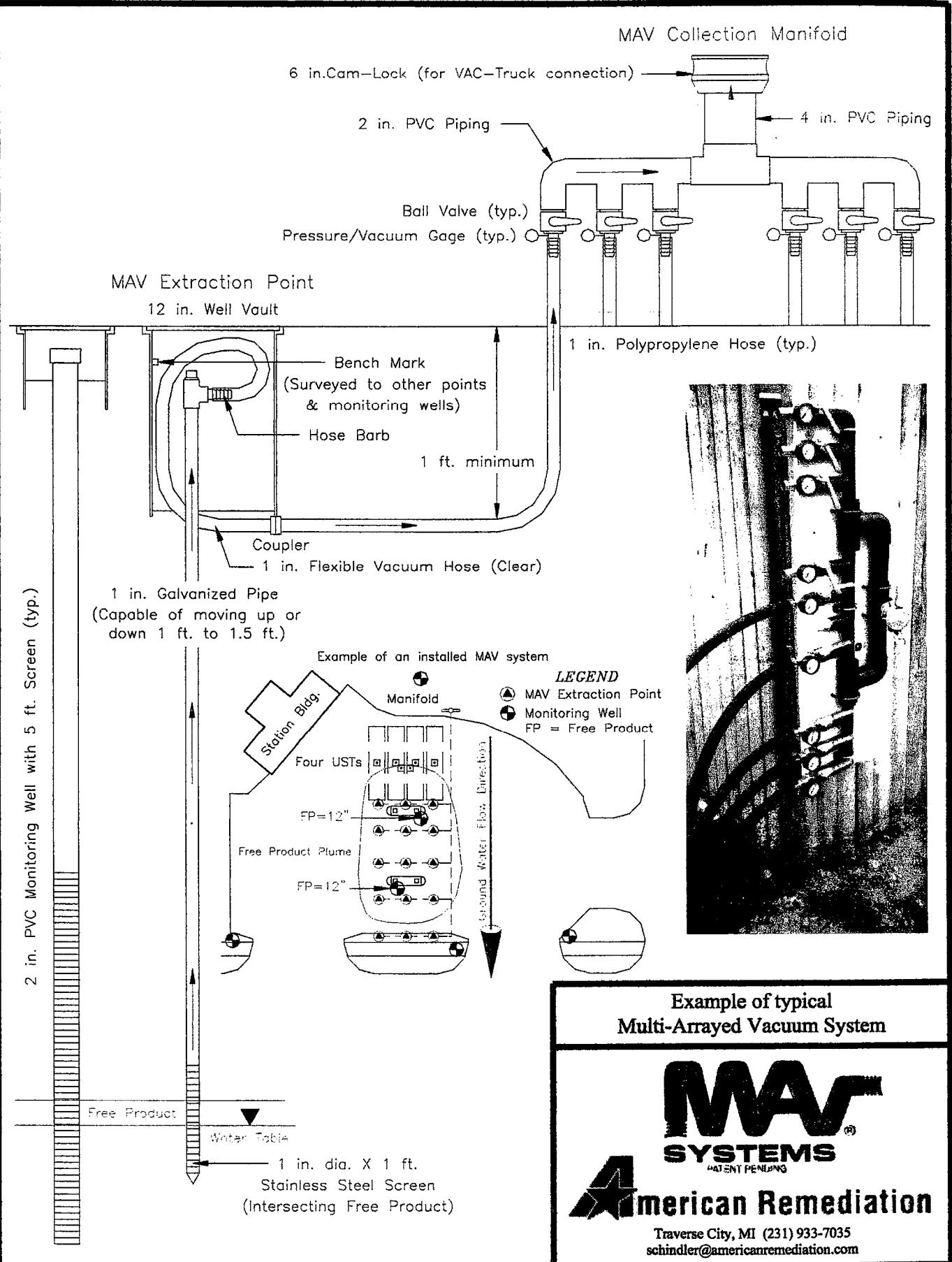
FIGURE 4: INJECTION WELL SCHEMATIC
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

WO #302-169
DWG #HII0169F4

DATE: 11/20/02
DRAWN BY: JCJ

APPENDIX A

FREE PRODUCT REMOVAL SYSTEM SPECIFICATIONS



Traverse City, MI (231) 933-7035
schindler@americanremediation.com

APPENDIX B

BAQC PERMIT APPLICATION

BAQC UST MODELING INFORMATION

PLEASE FILL OUT COMPLETELY

COMPANY NAME: Hwy 11 Grocery

CLEANUP LOCATION: 13527 SC Hwy 11, Salem, SC

PCAS:

TYPE OF OPERATION (i.e. AIR STRIPPER): Dual Phase Recovery

CONTACT: Fred Lyle - SEI Environmental Inc.

PHONE NUMBER: 803 788 2535

SITE MAPS

Please include a scaled plot plan of the site location that clearly shows distances from the stack to the property boundaries. All buildings and/or structures within a radius of 5 stack heights (measured from the stack/vent) shall be incorporated on this plot plan and information on each building and/or structure's height, width, and length shall also be included.

STACK INFORMATION

HEIGHT ABOVE GROUND 10 FEET; DIAMETER .333 FEET

TEMPERATURE 110 F; VELOCITY 10 FEET/SECOND

AIR TOXIC INFORMATION

AIR TOXIC EMITTED (i.e. BENZENE)	CHEMICAL ABSTRACT SERVICE (CAS) NUMBER	EMISSION RATE LB/HR
A) <u>Benzene</u>	<u>71432</u>	<u>.08</u>
B) <u>Toluene</u>	<u>108883</u>	<u>.007</u>
C) <u>Cetylbenzene</u>	<u>160414</u>	<u>.024</u>
D) <u>Xylene</u>	<u>1330207</u>	<u>.008</u>
E)		

Please submit the completed form with maps to the appropriate SCDHEC project manager at the Ground-Water Protection Division. (BAQC-MIF)

Hwy 11 Grocery, 13527 Scottsville, Salem, 0% catalytic trans GPC emissions
 Groundwater MW-1 concentrations, Maximum Dissolved concentration
 in water from E.K. Nyer, Ground
 Treatment Technology 2nd ed, 1992,
 Van Nostrand Reinhold, NY, p.49, Tab

- Benzene 1.750 mg/l
- Ethylbenzene 1.52 mg/l
- Toluene 5.35 mg/l
- Xylene 1.75 mg/l

Flow Rate:

$$Q_{std} = \left(\frac{60 \text{ sec}}{1 \text{ min}} \right) (1 - B_{ws}) (V)(A) \left[\frac{528}{460 + T(\text{°F})} \right]$$

$$= 60 (1 - .03)(.10)(.0871) \left[\frac{528}{580} \right]$$

$$\approx 46.45 \text{ ft}^3/\text{min}$$

COC emissions

$$\text{Benzene: } (.00175 \frac{\text{kg}}{\text{l}}) \left(\frac{4645 \text{ ft}^3}{\text{min}} \right) \left(\frac{60 \text{ min}}{1 \text{ hr}} \right) \left(\frac{3.53 \times 10^{-2} \text{ l}}{\text{ft}^3} \right) \left(\frac{1 \text{ lb}}{2.205 \text{ kg}} \right) = 1.08 \text{ lbs/hr}$$

$$\text{Toluene: } (.000452 \frac{\text{kg}}{\text{l}}) 44.34 = .007 \text{ lbs/hr}$$

$$\text{Ethylbenzene: } (.000535 \frac{\text{kg}}{\text{l}}) 44.34 = .024 \text{ lbs/hr}$$

$$\text{Xylene: } (.000175 \frac{\text{kg}}{\text{l}}) 44.34 = .008 \text{ lbs/hr}$$

Total estimated COC in lbs per 12 hr event = 1.43 lbs/event

APPENDIX C

UNDERGROUND INJECTION CONTROL PERMIT APPLICATION

CLASS V. A. TYPE I

Attachments A – F only. Injection of air and hydrogen peroxide are proposed. No injection of fluid whose chemical constituents exceeds any drinking water standard or may otherwise adversely affect the health of persons is proposed.

Form 1 UIC	 Underground Injection Control Permit Application Ground-Water Protection Division <small>(Collected under the Authority of Title 48 Chapter 1 of the 1976 South Carolina Code of Laws)</small>	I. EPA ID NUMBER				
				T/A	C	
		U				
Read attached instructions before starting. For Official Use Only						
Application Approved month day year		Date Received month day year		Permit/Well Number		
Comments						
II. Facility Name and Address				III. Owner/Operator and Address		
Facility Name <i>Hwy 11 Grocery</i>				Owner/Operator Name <i>Steve Smith</i>		
Street Address <i>13527 SC Hwy 11</i>				Street Address <i>13527 SC Hwy 11</i>		
City State		Zip Code		City State Zip Code		
<i>Salem SC</i>				<i>Salem SC</i>		
IV. Ownership Status (Mark "x")				V. SIC Codes		
<input type="checkbox"/> A. Federal <input type="checkbox"/> B. State <input checked="" type="checkbox"/> C. Private <input type="checkbox"/> D. Public <input type="checkbox"/> E. Other (Explain)						
VI. Well Status (Mark "x")						
<input type="checkbox"/> A. Operating		Date Started month day year	<input type="checkbox"/> B. Modification/Conversion		<input checked="" type="checkbox"/> C. Proposed	
VII. Type of Permit Requested - Class and Type of Well (see reverse)						
A. Class(es) enter code(s) <i>V A</i>	B. Type(s) enter code(s) <i>I</i>	C. If class is "other" or type is code "x", explain			D. Number of Wells per type <i>45</i>	
VIII. Location of Wells or Approximate Center of field or Project						
C	A. Latitude			B. Longitude		
	I	Deg <i>34</i>	Min <i>54</i>	Sec <i>31</i>	Deg <i>83</i>	Min <i>58</i>	Sec 12
IX. Attachments						
Complete the following questions on a separate sheet(s) and number accordingly; see instructions for Classes II, III, and V, complete and submit on a separate sheet(s) attachments A-U as appropriate. Attach maps where required. List attachments by letter which are applicable and include with your application.						
X. Certification						
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.						
A. Name and Title (Type or Print) <i>Steven M Smith</i>			B. Phone No. (864) 921-0194			
C. Signature <i>Steve M Smith</i>			D. Date Signed 11-25-02			

Attachment A – Activity for Review

The permit application is in support of the remedial activities proposed for the Highway 11 Grocery site in Salem, SC (SCDHEC/BUSTM Site ID #03439). Remedial activities proposed the installation and operation of a system for remediation of dissolved phase hydrocarbons. The operation of the proposed system requires the injection of air and hydrogen peroxide as the oxygen delivery system for the aerobic degradation of the hydrocarbons.

Attachment B – Well Construction Details

Forty five (45) injection points are proposed. Attached is a typical schematic of an injection point. This bore-hole layout was designed to get injection points spaced in a grid like fashion over as much of the contamination plume as possible. Each injection point will simply be the end of a section of $\frac{1}{4}$ inch polypropylene tubing that is scored with slits/holes along the last 12 inches in order to ensure proper oxygen diffusion. The 45 lengths of PPT tubing will exit the bore-holes along the rear of the building and then will run to the enclosure in shallow (1 foot) trenches.

The 45 injection points will be connected to PPT tubing and then connected to individual conduits on the patented control panels. These control panels contain a flow meter and control valve for each injection point, as well as a regulator that controls the incoming flow/pressure of oxygen from the liquid oxygen cylinder to the control panel. Given the number of injection points in this system, the system will include two control panels and two oxygen cylinders. Each control panel is connected via a pressure hose to a liquid oxygen cylinder. The control panels and oxygen cylinders are stored within a 6' x 8' locked wooden enclosure.

Attachment C – Operating Data

For each injection point:

1. An average and a maxim flow of 1.5 cubic feet per minute (CFM) (2,160 cubic feet per day) of air per injection point. No routine recovery of ground water is anticipated. No air permeability data is available.
2. Average and maximum injection pressure will be 5 pounds per square inch and 7 pounds per square inch.
3. Injection will be continuous.
4. A diluted solution of hydrogen peroxide will be in the injected fluid.
5. Based on calculations in the Corrective Action Plan estimated length of clean up will be 24 months. It is requested that the permit be valid for an initial period of three years.

Attachment D – Monitoring Program

1. At 30, 45, and 60 days after startup dissolved oxygen, pH, nitrates, and gasoline range organics will be monitored. In addition, prior to system startup a ground water sample will be collected from each of the existing monitoring wells. Prior to sample collection the water level in each well will be measured. The volume of water standing in the well will be calculated. A volume equal to or greater than three times the calculated volume will be purged from the well before a sample is collected. Field measurements of pH, temperature, and specific conductance will be made and recorded after each single volume purge. Purge water will be containerized and temporarily stored onsite in labeled containers for subsequent off site disposal through an approved facility. Samples will be placed in laboratory supplied containers, maintained at 4^o C, in a cooler and shipped to a SC certified laboratory for analysis. The ground water samples will be analyzed for the BTEX components, Naphthalene, and MTBE. Analytical methodologies shall be as specified in SCDHEC DUSTM guidance documents (or equivalent). Proper field notes and chain of custody documentation will be maintained.

Sampling and reporting will be conducted on a quarterly basis. The quarterly corrective action monitoring report will contain those elements described in bid request document.

2. No contaminant constituents will be present in the injectate.
3. No hydraulic impact on the contaminant plume is anticipated. Water level measurements will be collected and potentiometric maps at intervals specified above to confirm that the existing ground water flow direction is not affected.

Attachment E – Existing or Pending State/Federal Permits

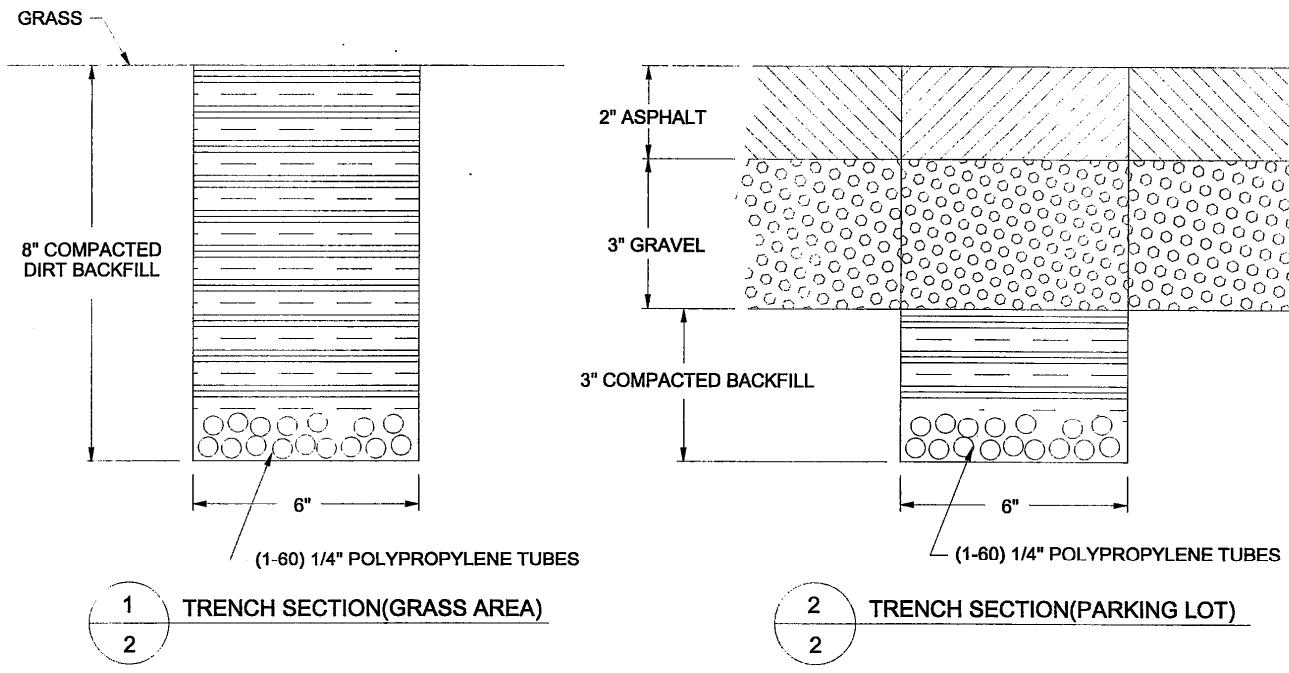
The site is identified under SCDHEC/DUST site ID number 03439. Underground storage tanks currently exist on the site. No other known permits exist.

Attachment F – Description of Business

Highway 11 Grocery is a convenience store that also sells gasoline.

APPENDIX D

REMEDIATION SYSTEM DESIGN FOR DISSOLVED COC



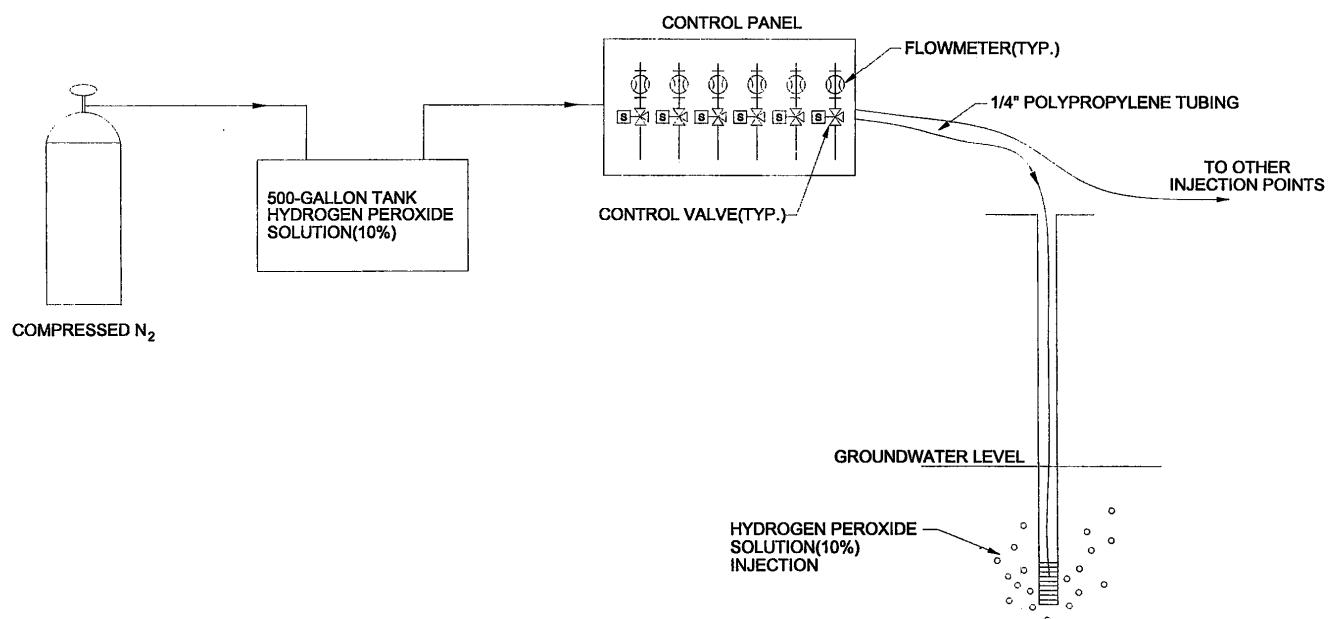
SEI Environmental, Inc.

APPENDIX D, FIGURE 1: TRENCH DETAILS
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

WO #302-169
DWG #: HI0169S1

DATE: 11/20/02
DRAWN BY: JCJ

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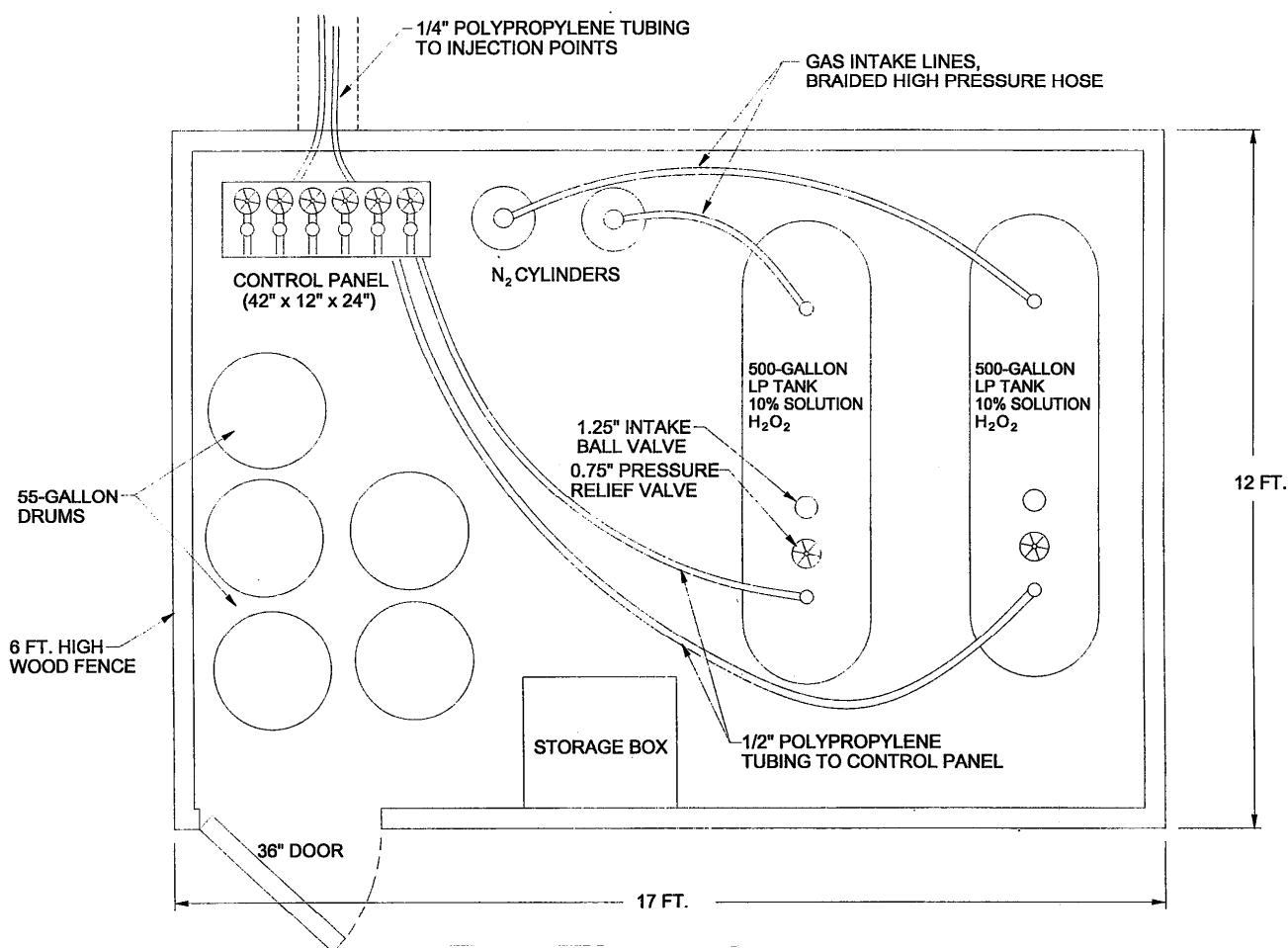
SEI Environmental, Inc.

APPENDIX D, FIGURE 2: PROCESS FLOW DIAGRAM
 HIGHWAY 11 GROCERY
 13527 S.C. HWY 11, SALEM, SC
 UST PERMIT #03439

WO #302-169
 DWG #: HI0169S2

DATE: 11/20/02
 DRAWN BY: JCJ

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SEI Environmental, Inc.

APPENDIX D, FIGURE 3: PROCESS PLAN
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

WO #302-169
DWG #: HI0169S3

DATE: 11/20/02
DRAWN BY: JCJ

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0 15 30 INCHES

RECEIVED

DEC 03 2002

Bureau of Air Quality

SEI

Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

R E C E I V E D

JAN 29 2003

**Underground Storage
Tank Program**

January 29, 2003

Mr. Konstantine Akhvlediani, Hydrogeologist
SCDHEC – UST Program
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201

40-Tech

**Re: Initial Sampling Event
Highway 11 Grocery, 13527 SC Highway 11, Salem, SC
UST Permit #03439; CA #17616
Oconee County**

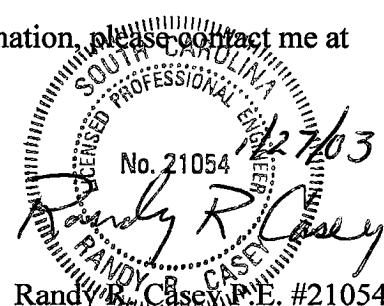
Dear Mr. Akhvlediani:

On December 16, 2002, SEI Environmental, Inc. (SEI) personnel mobilized to Highway 11 Grocery to conduct the initial groundwater sampling event as part of the Corrective Action Plan activities. The groundwater samples were not collected at Monitor Wells MW-1 and MW-8 due to approximate free product thicknesses of 0.09 feet and 0.24 feet, respectively. Groundwater sampling field measurements are presented in Appendix A, and laboratory analytical results are presented in Appendix B. A summary table of the laboratory results is attached, as well as a site map.

Should you have any questions or require additional information, please contact me at 788-2535.

Sincerely,
SEI Environmental, Inc.

Bob Bolton
Project Manager



Attachments

cc: Mr. Steve Smith

TABLE I
Groundwater Elevation Data
Highway 11 Grocery / Salem, South Carolina

Monitor Well Number	Gauging Date	Top of Casing Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Depth of Well (feet)	Water Table Elevation (feet)
MW-1	12/16/02	103.38	23.84*	0.09	30	79.54
MW-2	12/16/02	104.85	25.33	0	35	79.52
MW-3	12/16/02	104.89	24.02	0	30	80.87
MW-4	12/16/02	99.90	22.42	0	35	77.48
MW-5	12/16/02	106.06	28.42	0	35	77.64
MW-6	12/16/02	100.00	20.83	0	35	79.17
MW-7	12/16/02	103.66	27.28	0	40	76.38
MW-8	12/16/02	86.51	20.39*	0.24	30	66.12
MW-9	12/16/02	58.39	2.25	0	12	56.14
MW-10	12/16/02	93.78	19.16	0	24	74.62
MW-11	12/16/02	83.20	15.53	0	23	67.67
MW-12	12/16/02	58.69	2.57	0	12	56.12
MW-13	12/16/02	77.72	6.29	0	12	71.43
MW-14	12/16/02	59.19	2.40	0	10	56.79
MW-15	12/16/02	71.52	9.71	0	12	61.81
DMW-1	12/16/02	103.27	23.93	0	45	79.34
DMW-2	12/16/02	86.21	16.77	0	75	69.44
DMW-4	12/16/02	103.22	24.31	0	60	78.91

* Adjusted depth to water = depth to water - [(LPH thickness) x 0.78)]

TABLE II
Groundwater Analytical Results, dated December 16, 2002
Highway 11 Grocery / Salem, South Carolina

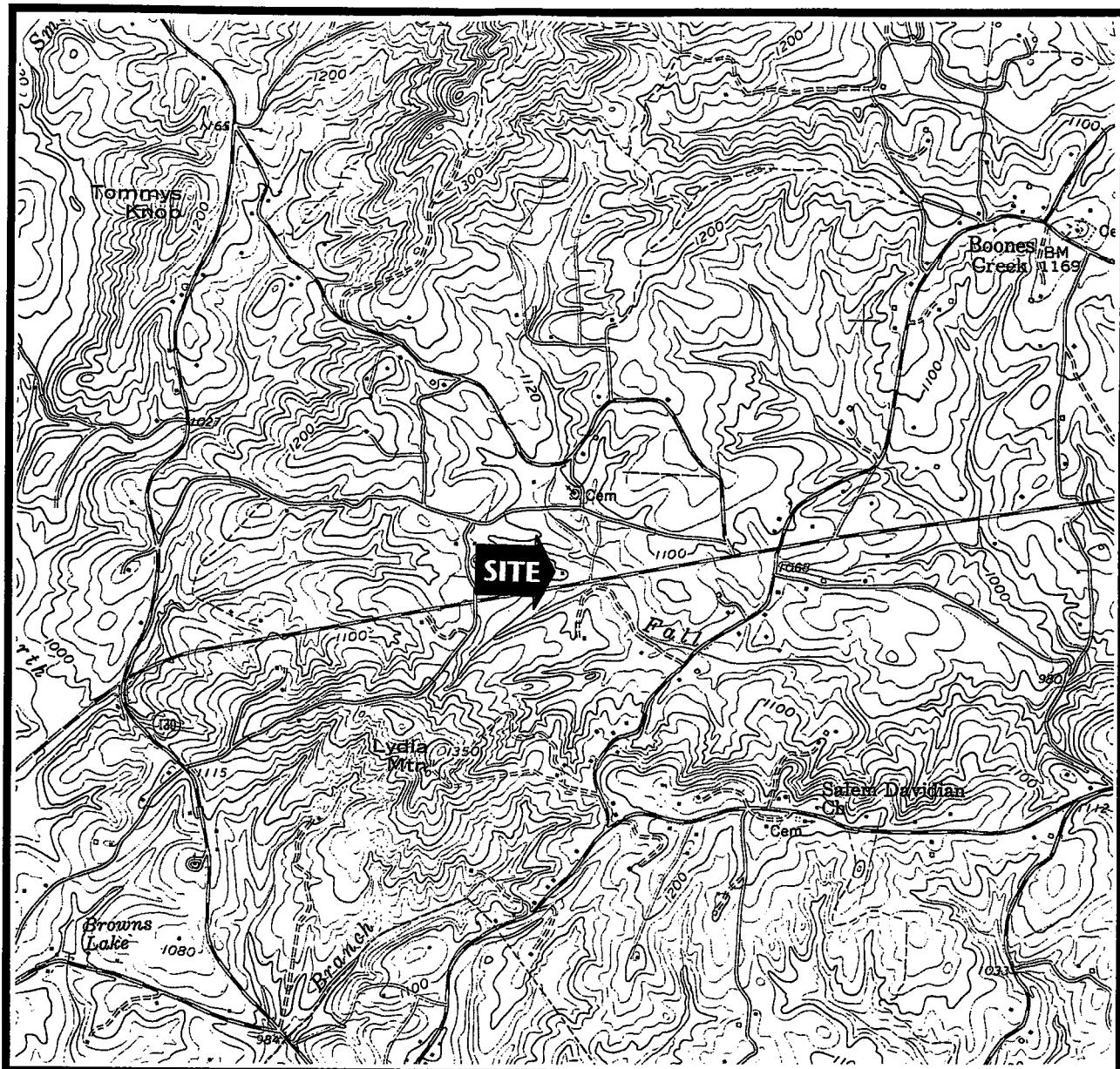
Chemical of Concern	MW-1 ($\mu\text{g/l}$)	MW-2 ($\mu\text{g/l}$)	MW-3 ($\mu\text{g/l}$)	MW-4 ($\mu\text{g/l}$)	MW-5 ($\mu\text{g/l}$)	MW-6 ($\mu\text{g/l}$)	MW-7 ($\mu\text{g/l}$)	MW-8 ($\mu\text{g/l}$)	MW-9 ($\mu\text{g/l}$)	MW-10 ($\mu\text{g/l}$)	MW-11 ($\mu\text{g/l}$)	MW-12 ($\mu\text{g/l}$)
Free Product Thickness	0.09'	None	None	None	None	None	None	0.24'	None	None	None	None
Benzene	NS	27.1	<1.0	1600	<1.0	6900	200	NS	<1.0	1.2	<1.0	<1.0
Toluene	NS	21.0	<1.0	6420	<1.0	12000	252	NS	<1.0	4.3	<1.0	<1.0
Ethylbenzene	NS	<1.0	<1.0	1910	<1.0	1940	10.0	NS	<1.0	1.1	<1.0	<1.0
Xylenes	NS	17.5	<1.0	8480	<1.0	11000	127	NS	<1.0	4.9	<1.0	<1.0
Total BTEX	NA	<66.6	<4.0	18410	<4.0	31840	589	NA	<4.0	11.5	<4.0	<4.0
MTBE	NS	<1.0	<1.0	1510	<1.0	23100	24.6	NS	<1.0	1.4	<1.0	2.3
Naphthalene	NS	<5.00	<5.00	301	398	265	<2.50	NS	<2.50	<2.50	<2.50	<2.50
Benzo(a)anthracene	NS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NS	<2.0	<2.0	<2.0	<2.0
Benzo(b)flouranthene	NS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NS	<2.0	<2.0	<2.0	<2.0
Benzo(k)flouranthene	NS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NS	<2.0	<2.0	<2.0	<2.0
Chrysene	NS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NS	<2.0	<2.0	<2.0
Dibenzo(a,h)anthracene	NS	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NS	<2.0	<2.0	<2.0

NA = Not Applicable; NS = Not Sampled

TABLE II (continued)
Groundwater Analytical Results, dated December 16, 2002
Highway 11 Grocery / Salem, South Carolina

Chemical of Concern	MW-13 ($\mu\text{g/l}$)	MW-14 ($\mu\text{g/l}$)	MW-15 ($\mu\text{g/l}$)	DMW-1 ($\mu\text{g/l}$)	DMW-2 ($\mu\text{g/l}$)	DMW-4 ($\mu\text{g/l}$)	CK-1 ($\mu\text{g/l}$)	CK-2 ($\mu\text{g/l}$)	WW-1 ($\mu\text{g/l}$)
Free Product Thickness	None	None	None	None	None	None	None	None	None
Benzene	<1.0	4500	<1.0	2.0	<1.0	<1.0	5.7	<1.0	<1.0
Toluene	<1.0	11300	<1.0	1.8	<1.0	<1.0	9.0	<1.0	<1.0
Ethylbenzene	<1.0	3110	<1.0	1.0	<1.0	<1.0	3.9	<1.0	<1.0
Xylenes	<1.0	16500	<1.0	<1.0	<1.0	<1.0	5.7	<1.0	<1.0
Total BTEX	<4.0	35410	<4.0	<5.8	<4.0	<4.0	24.3	<4.0	<4.0
MTBE	<1.0	5900	<1.0	154	1.3	<1.0	7.9	<1.0	<1.0
Naphthalene	<2.50	345	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<5.00
Benzo(a)anthracene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Benzo(b)flouranthene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Benzo(k)flouranthene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chrysene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibenzo(a,h)anthracene	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

NA = Not Applicable



SCALE 1:24000

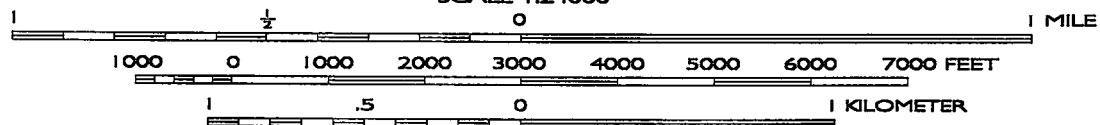
**SEI Environmental, Inc.**

FIGURE 1: SITE LOCATION MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

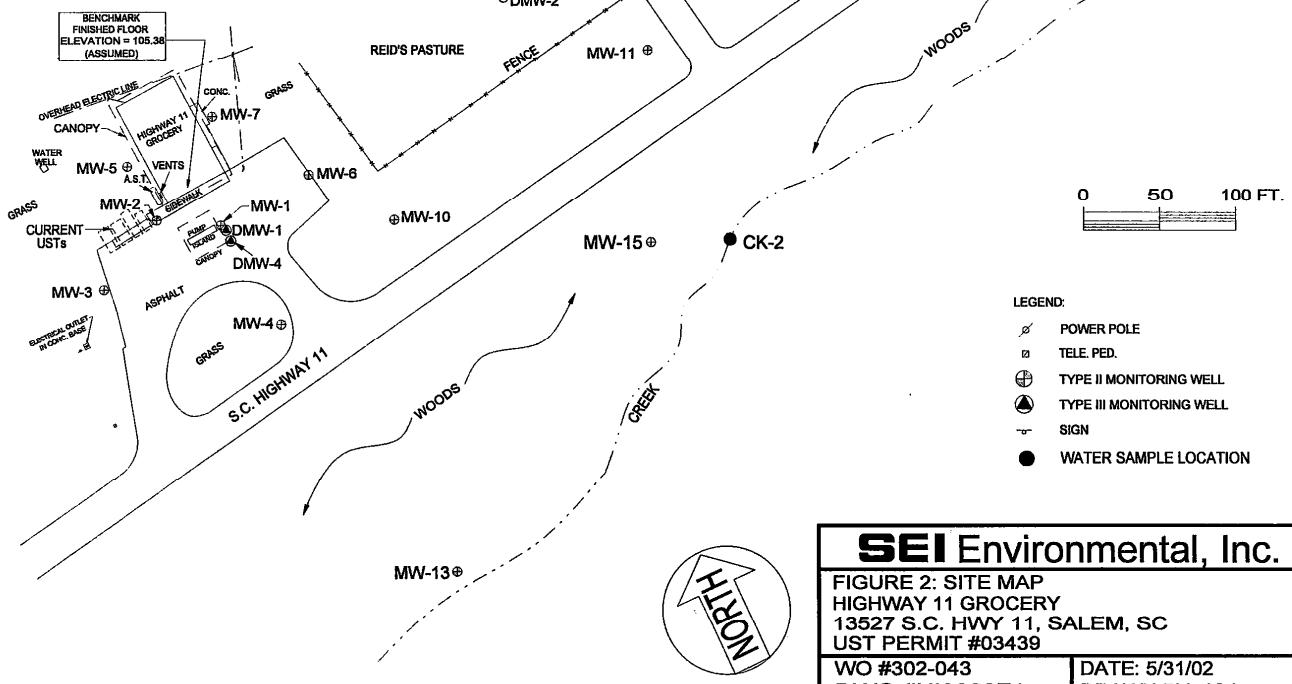
W.O. #: 300-388
DWG #

DATE: 9/5/01
DRAWN BY: JC



WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.89
MW-4	99.90
MW-5	108.08
MW-6	100.00
MW-7	103.88
MW-8	86.51
MW-9	58.39
MW-10	93.78
MW-11	83.20
MW-12	58.69
MW-13	77.91
MW-14	59.19
MW-15	71.52
DMW-1	103.27
DMW-2	88.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.



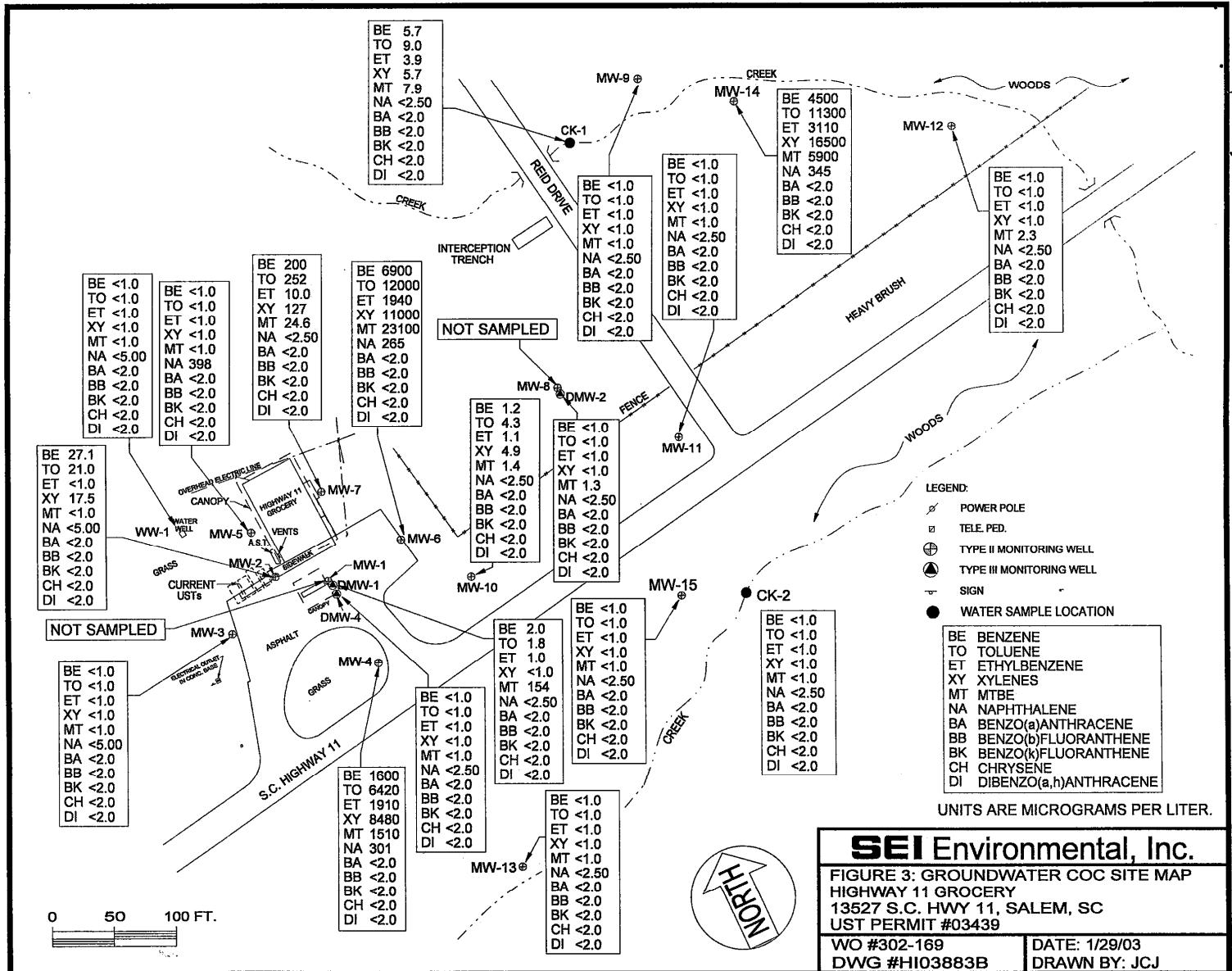
SEI Environmental, Inc.

FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

WO #302-043
DWG #HI0388F1

DATE: 5/31/02
DRAWN BY: JCJ







APPENDIX A

Groundwater Sampling Field Measurements

105 - 11 - 16

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>12/16/02</u>		
Field Personnel:	<u>R. Cate, J. Monahan, B. Maples</u>		
General Weather Conditions:	<u>cool / clear</u>		
Ambient Air Temperature:	<u> </u> °C		
Quality Assurance			
pH Meter	Conductivity Meter		
serial no.	serial no.		
pH=4.0	<u>110 803043</u>		
pH=7.0	standard <u>4.49 mS/cm (±10% at 25°C)</u>		
pH=10.0	standard <u> </u>		
Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Grocery</u>					
Site ID#:	<u> </u>	Monitoring Well #	<u>MW-1</u>			
Water Supply Well	Public	Private	<u> </u>			
Monitoring Well Diameter (D):	<u>2"</u>	feet	<u> </u>			
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652					
* Free Product Thickness:	<u>23.82</u>	feet	<u> </u>			
Depth to Ground Water (DGW)	<u>23.91</u>	feet	<u> </u>			
Total Well Depth (TWD)	<u>30</u>	feet	<u> </u>			
Length of the water column (LWC=TWD-DGW)	<u> </u>	feet	<u> </u>			
1 casing volume (CV=LWC X C) =	<u> </u>	X	<u> </u>	=	<u> </u>	gals
3 casing volume (3 X CV) =	<u> </u>	gals (standard purge volume)				
Total Volume of Water Purged Before Sampling _____ gals.						
*If free product is present over 1/8 inch, sampling will not be required.						

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks:	<u>hot. free product. Not sampled.</u>						

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>12/16/02</u>		
Field Personnel:	<u>R. Cate, J. Mountain, B. Maples</u>		
General Weather Conditions:	<u>cool / clear</u>		
Ambient Air Temperature:	<u> </u> °C		
<u>Quality Assurance</u>			
pH Meter	Conductivity Meter		
serial no.	serial no.		
pH=4.0	<u>140 803013</u>		
pH=7.0	standard <u>4.49 μS/cm (±10% ±2%)</u>		
pH=10.0	standard <u> </u>		
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Grocery</u>		
Site ID#:	<u> </u>	Monitoring Well #	<u>MW-2</u>
Water Supply Well	Public	Private	<u> </u>
Monitoring Well Diameter (D):		<u>2</u>	feet
Conversion Factor (C): $3.14 \times (D/2)^2$		for a 2 inch well C=0.163 for a 4 inch well C=0.652	
* Free Product Thickness:		feet	
Depth to Ground Water (DGW)		<u>25.33</u>	feet
Total Well Depth (TWD)		<u>35</u>	feet
Length of the water column (LWC=TWD-DGW)		<u>9.67</u>	feet
1 casing volume (CV=LWC X C)=		<u> </u> X <u> </u> = <u>1.57</u> gals	
3 casing volume (3 X CV)=		<u>4.72</u> gals (standard purge volume)	
Total Volume of Water Purged Before Sampling		<u>5.0</u> gals.	
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks: <u>hot</u>							

116-5-16

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	12/16/02	
Field Personnel:	R. Cate, J. Monahan, B. Maples	
General Weather Conditions:	cool / clear	
Ambient Air Temperature:	_____ °C	
<u>Quality Assurance</u>		
pH Meter	Conductivity Meter	
serial no.	U-10 803043	
pH=4.0	standard	4.49 mS/cm ($\pm 10\%$ at 25°C)
pH=7.0	standard	_____
pH=10.0	standard	_____
<u>Chain of Custody</u>		
Relinquished by	Date/Time	Received by

Facility Name:	Hwy 11 Grocery	
Site ID#:	Monitoring Well # MW-3	
Water Supply Well	Public	Private
Monitoring Well Diameter (D): 2" feet		
Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness: _____ feet		
Depth to Ground Water (DGW) 24.02 feet		
Total Well Depth (TWD) 30 feet		
Length of the water column (LWC=TWD-DGW) 5.98 feet		
1 casing volume (CV=LWC X C)= _____ X _____ = .97 gals		
3 casing volume (3 X CV)= 2.91 gals (standard purge volume)		
Total Volume of Water Purged Before Sampling _____ gals.		
*If free product is present over 1/8 inch, sampling will not be required.		

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							1230
pH (s.u.)	4.70	4.69	4.52				4.64
Specific Conductivity (μ mhos/cm)	.014	.015	.014				.013
Water Temperature (°C)	17.8	17.8	17.6	17.4			17.4
Dissolved Oxygen	6.61	6.60	6.97				6.51
PID readings, if required							

Remarks: _____

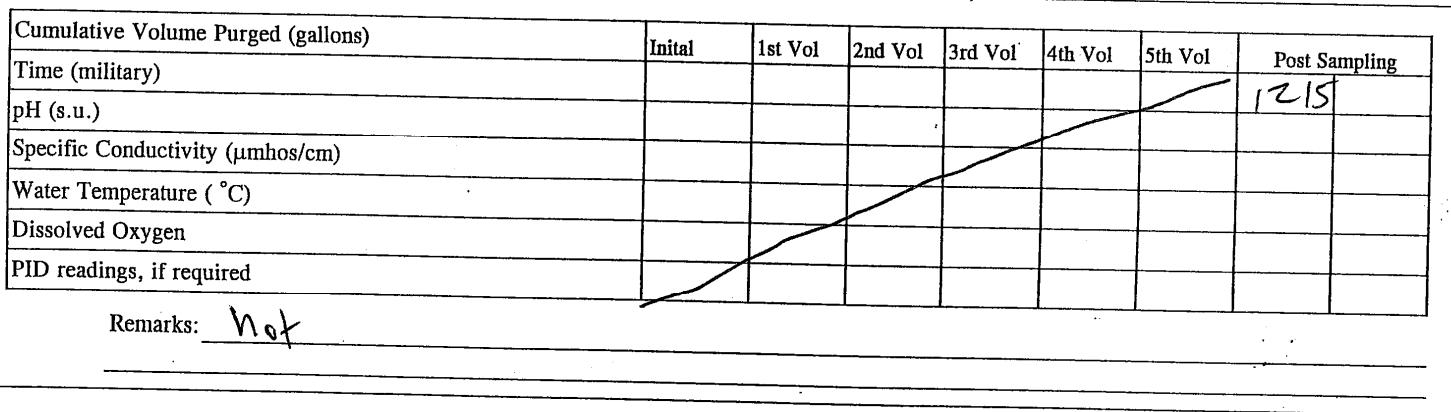
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**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>12/16/02</u>
Field Personnel:	<u>R. Cate, J. Monahan, B. Maples</u>
General Weather Conditions:	<u>cool / clear</u>
Ambient Air Temperature:	_____ °C
<u>Quality Assurance</u>	
pH Meter serial no.	<u>U-10 803043</u>
pH=4.0	<u>± .002 @ 25°C</u>
pH=7.0	<u>standard</u>
pH=10.0	<u>4.49 mS/cm (± 10% at 25°C)</u>
Conductivity Meter serial no.	<u>U-10 803043</u>
standard	<u>standard</u>
<u>Chain of Custody</u>	
Relinquished by	Date/Time
Received by	Date/Time

Facility Name:	<u>Hwy 11 Grocery</u>		
Site ID#:	<u></u>	Monitoring Well #	<u>MW-4</u>
Water Supply Well	<input checked="" type="checkbox"/> Public	<input type="checkbox"/> Private	<u></u>
Monitoring Well Diameter (D):	<u>2'</u>	feet	
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	<u>feet</u>		
Depth to Ground Water (DGW)	<u>22.42</u>	feet	
Total Well Depth (TWD)	<u>35</u>	feet	
Length of the water column (LWC=TWD-DGW)	<u>12.58</u>	feet	
1 casing volume (CV=LWC X C)=	<u>2.45</u>	gals	
3 casing volume (3 X CV)=	<u>6.15</u>	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling	<u>6.15</u>	gals.	
*If free product is present over 1/8 inch, sampling will not be required.			



South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>12/16/02</u>		
Field Personnel:	<u>R. Cate, S. Monahan, B. Maples</u>		
General Weather Conditions:	<u>cool / clear</u>		
Ambient Air Temperature:	_____ °C		
<u>Quality Assurance</u>			
pH Meter	Conductivity Meter		
serial no.	<u>140 803043</u>		
pH=4.0	standard <u>4.49 mS/cm (±10% at 25°C)</u>		
pH=7.0	standard _____		
pH=10.0	standard _____		
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Grocery</u>		
Site ID#:	<u></u>	Monitoring/Well #	<u>MW-5</u>
Water Supply Well	Public	Private	_____
Monitoring Well Diameter (D):		<u>2"</u>	feet
Conversion Factor (C): $3.14 \times (D/2)^2$		for a 2 inch well C=0.163	
		for a 4 inch well C=0.652	
* Free Product Thickness:		feet	
Depth to Ground Water (DGW)		<u>28.42</u>	
Total Well Depth (TWD)		<u>35</u>	
Length of the water column (LWC=TWD-DGW)		<u>6.58</u>	
1 casing volume (CV=LWC X C)= _____ X _____		<u>= 1.07</u>	gals
3 casing volume (3 X CV)= <u>3.21</u>		gals (standard purge volume)	
Total Volume of Water Purged Before Sampling		<u>4</u>	gals.
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1206</u>
pH (s.u.)	<u>4.52</u>	<u>4.72</u>	<u>4.68</u>	<u>4.61</u>			<u>4.61</u>
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	<u>D11</u>	<u>1024</u>	<u>.016</u>	<u>.015</u>			<u>.015</u>
Water Temperature (°C)	<u>17.7</u>	<u>17.6</u>	<u>17.4</u>	<u>17.3</u>			<u>17.4</u>
Dissolved Oxygen	<u>7.84</u>	<u>7.05</u>	<u>6.93</u>	<u>7.10</u>			<u>7.10</u>
PID readings, if required							
Remarks:	<hr/> <hr/>						

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**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>12/16/02</u>		
Field Personnel:	<u>R.Gate, S.Monehan, B.Maples</u>		
General Weather Conditions:	<u>cool / clear</u>		
Ambient Air Temperature:	_____ °C		
<u>Quality Assurance</u>			
pH Meter	Conductivity Meter		
serial no.	<u>110 803013</u>		
pH=4.0	standard <u>4.49 mS/cm (±10% at 25°C)</u>		
pH=7.0	standard _____		
pH=10.0	standard _____		
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Grocery</u>		
Site ID#:	<u></u>	Monitoring Well #	<u>MW-7</u>
Water Supply Well	Public	Private	_____
Monitoring Well Diameter (D):	<u>2'</u>	feet	_____
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163		
	for a 4 inch well C=0.652		
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	<u>27.28</u>	feet	
Total Well Depth (TWD)	<u>40</u>	feet	
Length of the water column (LWC=TWD-DGW)	<u>12.72</u>	feet	
1 casing volume (CV=LWC X C)=	X	= <u>20.7</u> gals	
3 casing volume (3 X CV)=	<u>62.1</u>	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

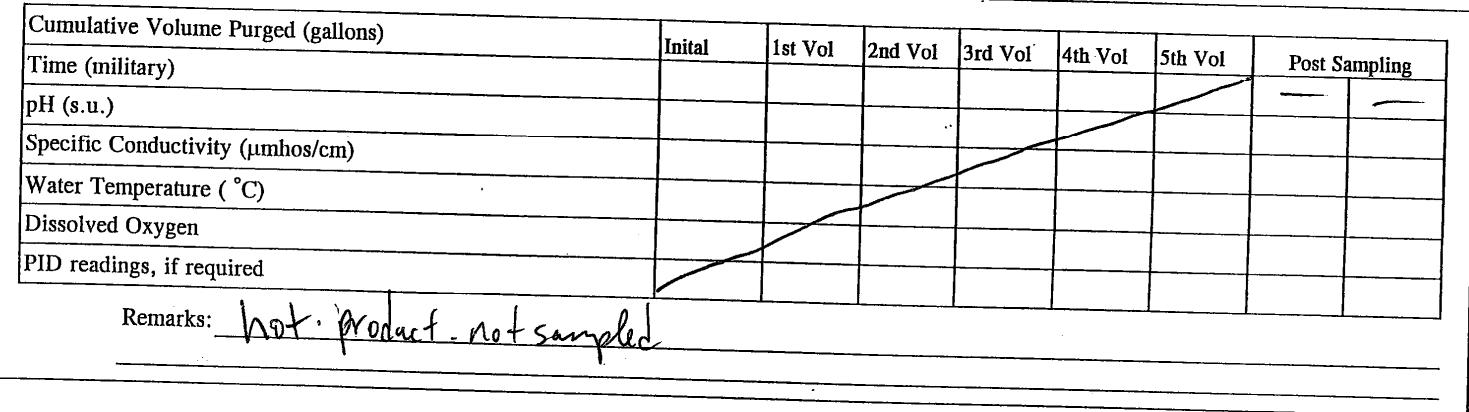
Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1225</u>
pH (s.u.)							
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)							
Water Temperature (°C)							
Dissolved Oxygen							
PID readings, if required							
Remarks: <u>No</u>							

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>12/16/02</u>
Field Personnel:	<u>R.Cate, J.Monehan, B.Maples</u>
General Weather Conditions:	<u>cool / clear</u>
Ambient Air Temperature:	_____ °C
<u>Quality Assurance</u>	
pH Meter serial no.	<u>U-10 803043</u>
pH=4.0	<u>t.1002 @ 25°C</u>
pH=7.0	<u></u>
pH=10.0	<u></u>
Conductivity Meter serial no.	<u>U-10 803043</u>
standard	<u>4.49 mS/cm ($\pm 10\%$)</u>
standard	<u></u>
standard	<u></u>
<u>Chain of Custody</u>	
Relinquished by	Date/Time
Received by	Date/Time

Facility Name:	<u>Hwy 11 Grocery</u>
Site ID#:	<u></u>
Water Supply Well	Public <input checked="" type="checkbox"/> Private <input type="checkbox"/>
Monitoring Well Diameter (D):	<u>2"</u> feet
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652
* Free Product Thickness:	<u>20.34</u> feet
Depth to Ground Water (DGW)	<u>20.58</u> feet
Total Well Depth (TWD)	<u>30</u> feet
Length of the water column (LWC=TWD-DGW)	<u></u> feet
1 casing volume (CV=LWC X C)=	<u></u> X <u></u> = <u></u> gals
3 casing volume (3 X CV)=	<u></u> gals (standard purge volume)
Total Volume of Water Purged Before Sampling _____ gals.	
*If free product is present over 1/8 inch, sampling will not be required.	



South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 12/16/02
 Field Personnel: R. Gute, S. Monahan, B. Maples
 General Weather Conditions: cool / clear

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no.	serial no.
pH=4.0	140 803043
pH=7.0	standard 4.49 mS/cm ($\pm 10\%$ at 25°C)
pH=10.0	standard

Chain of Custody

Relinquished by Date/Time Received by Date/Time

Facility Name: Hwy 11 Grocery
 Site ID#: _____ Monitoring Well # MW-9
 Water Supply Well Public Private

Monitoring Well Diameter (D): 2" feet

Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163
 for a 4 inch well C=0.652

* Free Product Thickness: _____ feet
 Depth to Ground Water (DGW) 22.25 feet
 Total Well Depth (TWD) 12 feet
 Length of the water column (LWC=TWD-DGW) _____ feet

1 casing volume (CV=LWC X C)= _____ X _____ = _____ gals
 3 casing volume (3 X CV)= _____ gals (standard purge volume)

Total Volume of Water Purged Before Sampling _____ gals.

*If free product is present over 1/8 inch, sampling will not be required.

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1415</u>
pH (s.u.)	<u>5.79</u>	<u>5.65</u>	<u>5.62</u>	<u>5.11</u>			<u>5.56</u>
Specific Conductivity (μ mhos/cm)	<u>.023</u>	<u>.029</u>	<u>.031</u>	<u>.032</u>			<u>.032</u>
Water Temperature (°C)	<u>14.9</u>	<u>13.7</u>	<u>13.6</u>	<u>13.4</u>			<u>13.3</u>
Dissolved Oxygen	<u>6.53</u>	<u>6.48</u>	<u>5.32</u>	<u>4.94</u>			<u>5.46</u>
PID readings, if required							

Remarks: _____

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy): 12/16/02
 Field Personnel: R. Gate, S. Monahan, B. Maples
 General Weather Conditions: cool / clear

Ambient Air Temperature: _____ °C

Quality Assurance

pH Meter	Conductivity Meter
serial no.	serial no.
pH=4.0	<u>140 803043</u>
pH=7.0	standard <u>4.49 mS/cm ($\pm 10\%$ at 25°C)</u>
pH=10.0	standard _____

Chain of Custody

Relinquished by _____ Date/Time _____ Received by _____ Date/Time _____

Facility Name:	<u>Any II Grocery</u>	
Site ID#:	_____	Monitoring Well # <u>MW-11</u>
Water Supply Well	Public	Private
Monitoring Well Diameter (D): <u>2"</u> feet		
Conversion Factor (C): $3.14 \times (D/2)^2$ for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness: _____ feet		
Depth to Ground Water (DGW) <u>15.53</u> feet		
Total Well Depth (TWD) <u>23</u> feet		
Length of the water column (LWC=TWD-DGW) <u>7.47</u> feet		
1 casing volume (CV=LWC X C)= _____ X _____ = <u>1.21</u> gals		
3 casing volume (3 X CV)= <u>3.63</u> gals (standard purge volume)		
Total Volume of Water Purged Before Sampling <u>2.5</u> gals.		
*If free product is present over 1/8 inch, sampling will not be required.		

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1330</u>
pH (s.u.)	<u>5.24</u>	<u>5.18</u>	<u>5.08</u>				<u>5.03</u>
Specific Conductivity (μ mhos/cm)	<u>.012</u>	<u>.016</u>	<u>.016</u>				<u>.016</u>
Water Temperature (°C)	<u>19.8</u>	<u>18.8</u>	<u>18.6</u>				<u>18.4</u>
Dissolved Oxygen	<u>6.09</u>	<u>5.86</u>	<u>5.66</u>				<u>5.41</u>
PID readings, if required							

Remarks: BAILED DRY

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>12/16/02</u>		
Field Personnel:	<u>R.Gate, S.Monehan, B.Maples</u>		
General Weather Conditions:	<u>cool / clear</u>		
Ambient Air Temperature:	<u> </u> °C		
<u>Quality Assurance</u>			
pH Meter	Conductivity Meter		
serial no.	<u>140 803013</u>		
pH=4.0	standard <u>4.49 mS/cm (±10% at 25°C)</u>		
pH=7.0	standard <u> </u>		
pH=10.0	standard <u> </u>		
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Grocery</u>		
Site ID#:	<u> </u>	Monitoring Well #	<u>MW-12</u>
Water Supply Well	Public	Private	<u> </u>
Monitoring Well Diameter (D):	<u>2"</u>	feet	
Conversion Factor (C):	<u>3.14 x (D/2)²</u>	for a 2 inch well C=0.163	
		for a 4 inch well C=0.652	
* Free Product Thickness:	<u> </u>	feet	
Depth to Ground Water (DGW)	<u>2.57</u>	feet	
Total Well Depth (TWD)	<u>12</u>	feet	
Length of the water column (LWC=TWD-DGW)	<u>9.43</u>	feet	
1 casing volume (CV=LWC X C)=	<u>9.43 X 163 = 15</u>	gals	
3 casing volume (3 X CV)=	<u>4.5</u>	gals (standard purge volume)	
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1400</u>
pH (s.u.)	<u>4.98</u>	<u>4.91</u>	<u>4.83</u>	<u>4.83</u>			<u>4.82</u>
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	<u>.026</u>	<u>.025</u>	<u>.025</u>	<u>.025</u>			<u>.025</u>
Water Temperature (°C)	<u>12.8</u>	<u>12.5</u>	<u>11.6</u>	<u>11.6</u>			<u>11.6</u>
Dissolved Oxygen	<u>9.70</u>	<u>9.40</u>	<u>9.97</u>	<u>4.98</u>			<u>4.93</u>
PID readings, if required							
Remarks:	<u> </u>						

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>12/16/02</u>		
Field Personnel:	<u>R. Gafe, J. Morehan, B. Maples</u>		
General Weather Conditions:	<u>cool / clear</u>		
Ambient Air Temperature:	<u> </u> °C		
Quality Assurance			
pH Meter	Conductivity Meter		
serial no.	serial no.		
pH=4.0	<u>140 803013</u>		
pH=7.0	standard <u>4.49 mS/cm (±10% ±2%)</u>		
pH=10.0	standard <u> </u>		
Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Grocery</u>		
Site ID#:	<u> </u>	Monitoring Well #	<u>MW-13</u>
Water Supply Well	Public	Private	<u> </u>
Monitoring Well Diameter (D): <u>2"</u> feet			
Conversion Factor (C): $3.14 \times (D/2)^2$		for a 2 inch well C=0.163 for a 4 inch well C=0.652	
* Free Product Thickness:			
Depth to Ground Water (DGW) <u>6.29</u> feet			
Total Well Depth (TWD) <u>12</u> feet			
Length of the water column (LWC=TWD-DGW) <u>5.71</u> feet			
1 casing volume (CV=LWC X C)= <u> </u> X <u> </u> = <u>.93</u> gals			
3 casing volume (3 X CV)= <u>2.79</u> gals (standard purge volume)			
Total Volume of Water Purged Before Sampling <u>3</u> gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1300</u>
pH (s.u.)	<u>5.34</u>	<u>5.33</u>	<u>5.36</u>				<u>5.34</u>
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	<u>.035</u>	<u>.035</u>	<u>.036</u>				<u>.036</u>
Water Temperature (°C)	<u>13.8</u>	<u>13.8</u>	<u>13.4</u>				<u>13.4</u>
Dissolved Oxygen	<u>7.91</u>	<u>7.10</u>	<u>6.93</u>				<u>6.66</u>
PID readings, if required							

Remarks: _____

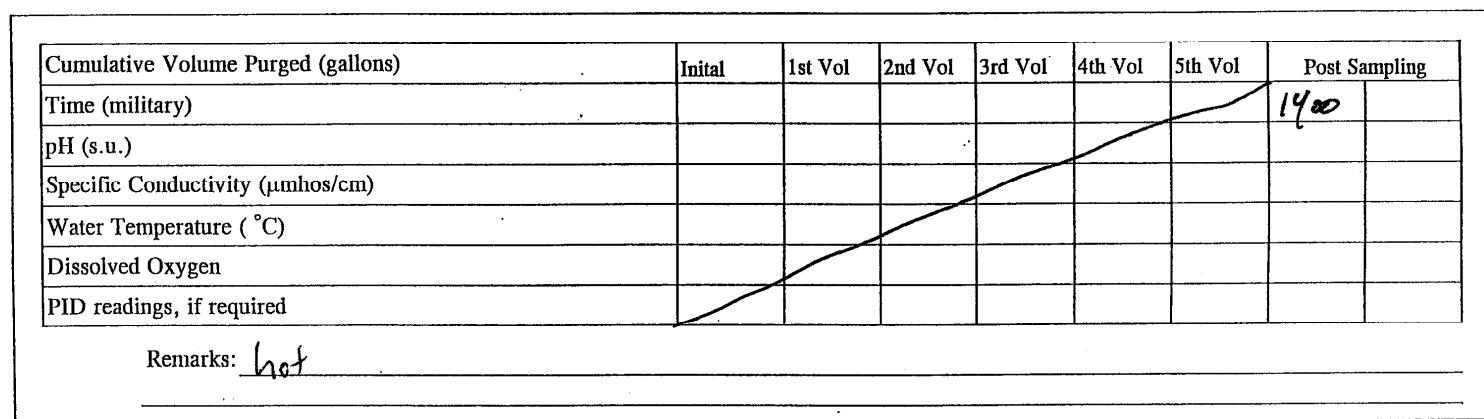
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**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>12/16/02</u>		
Field Personnel:	<u>R.Cate, J.Mouhan, B.Maples</u>		
General Weather Conditions:	<u>cool / clear</u>		
Ambient Air Temperature:	_____ °C		
<u>Quality Assurance</u>			
pH Meter	Conductivity Meter		
serial no.	serial no.		
pH=4.0	4.49 mS/cm ($\pm 10\%$ at 25°C)		
pH=7.0	standard		
pH=10.0	standard		
<u>Chain of Custody</u>			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Hwy 11 Grocery</u>		
Site ID#:	<u></u>	Monitoring Well #	<u>MW-14</u>
Water Supply Well	Public	Private	_____
Monitoring Well Diameter (D): <u>2</u> feet			
Conversion Factor (C): $3.14 \times (D/2)^2$		for a 2 inch well C=0.163	
		for a 4 inch well C=0.652	
* Free Product Thickness: _____ feet			
Depth to Ground Water (DGW) <u>2.4</u> feet			
Total Well Depth (TWD) <u>10</u> feet			
Length of the water column (LWC=TWD-DGW) <u>7.60</u> feet			
1 casing volume (CV=LWC X C)= <u>7.60</u> X <u>.163</u> = <u>1.23</u> gals			
3 casing volume (3 X CV)= <u>3.72</u> gals (standard purge volume)			
Total Volume of Water Purged Before Sampling <u>3.72</u> gals.			
*If free product is present over 1/8 inch, sampling will not be required.			



**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Facility Name:	<u>Hay II Grocery</u>	
Site ID#:	Monitoring Well #	<u>MW-15</u>
Water Supply Well	Public	Private
Monitoring Well Diameter (D):	<u>2'</u> feet	
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652	
* Free Product Thickness:	feet	
Depth to Ground Water (DGW)	<u>9.71'</u> feet	
Total Well Depth (TWD)	<u>12.0</u> feet	
Length of the water column (LWC=TWD-DGW)	<u>2.29</u> feet	
1 casing volume (CV=LWC X C)=	X	= <u>.34</u> gals
3 casing volume (3 X CV)=	<u>.11</u>	gals (standard purge volume)
Total Volume of Water Purged Before Sampling	<u>1</u>	gals.
*If free product is present over 1/8 inch, sampling will not be required.		

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							
pH (s.u.)	5.09						1345
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	.024						
Water Temperature (°C)	13.9						
Dissolved Oxygen	6.22						
PID readings, if required							

Remarks:

12-16-02

**South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management Underground Storage Tank Program**

Field Data Information Sheet for Ground Water Sampling

Date (mm/dd/yy):	<u>12/16/02</u>		
Field Personnel:	<u>R.Cate, J.Mounhan, B.Maples</u>		
General Weather Conditions:	<u>cool/clear</u>		
Ambient Air Temperature:	<u> </u> °C		
Quality Assurance			
pH Meter	Conductivity Meter		
serial no.	serial no.		
pH=4.0	<u>140 803043</u>		
pH=7.0	standard <u>4.49 mS/cm ($\pm 10\%$) standard</u>		
pH=10.0	<u>1002 @ 25°C</u>		
Chain of Custody			
Relinquished by	Date/Time	Received by	Date/Time

Facility Name:	<u>Any II Grocery</u>		
Site ID#:	<u> </u>	Monitoring Well #	<u>MW-4</u>
Water Supply Well	Public	Private	<u> </u>
Monitoring Well Diameter (D):	<u>2"</u>	feet	<u> </u>
Conversion Factor (C): $3.14 \times (D/2)^2$	for a 2 inch well C=0.163 for a 4 inch well C=0.652		
* Free Product Thickness:	feet		
Depth to Ground Water (DGW)	<u>24.31</u>	feet	<u> </u>
Total Well Depth (TWD)	<u>40</u>	feet	<u> </u>
Length of the water column (LWC=TWD-DGW)	<u>35.69</u>	feet	<u> </u>
1 casing volume (CV=LWC X C) =	<u> </u>	X	<u>5.81</u> gals
3 casing volume (3 X CV) =	<u>17.45</u>	gals (standard purge volume)	<u> </u>
Total Volume of Water Purged Before Sampling _____ gals.			
*If free product is present over 1/8 inch, sampling will not be required.			

Cumulative Volume Purged (gallons)	Initial	1st Vol	2nd Vol	3rd Vol	4th Vol	5th Vol	Post Sampling
Time (military)							<u>1200</u>
pH (s.u.)	<u>5.27</u>	<u>5.96</u>	<u>5.99</u>	<u>6.00</u>			<u>6.02</u>
Specific Conductivity ($\mu\text{mhos}/\text{cm}$)	<u>.070</u>	<u>.045</u>	<u>.041</u>	<u>.039</u>			<u>.039</u>
Water Temperature (°C)	<u>20.0</u>	<u>18.2</u>	<u>17.8</u>	<u>17.7</u>			<u>17.8</u>
Dissolved Oxygen	<u>4.38</u>	<u>5.68</u>	<u>5.31</u>	<u>5.48</u>			<u>5.38</u>
PID readings, if required							
Remarks:	<u> </u>						



APPENDIX B

Laboratory Analytical Results



APPENDIX C

Disposal Manifest

**NON-HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest
Document No.
GK50692. Page 1
of

3. Generator's Name and Mailing Address

SET ENVIRONMENTAL, INC.
3021 MCNAUGHTON DR. SUITE 9
COLUMBIA, SC 29223

4. Generator's Phone ()

5. Transporter 1 Company Name
SEI ENVIRONMENTAL, INC.

6. US EPA ID Number

A. Transporter's Phone
803-788-2535

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address

G & K TANK¹⁰ SERVICES
PO BOX 1284
SUMTER, SC 29151

US EPA ID Number

C. Facility's Phone

800-800-6840

11. Waste Shipping Name and Description

a. NON HAZARDOUS PETROLEUM CONTAMINATED WATER
HWY 11 GROCERY SALEM, SC12. Containers
No. | Type13. Total
Quantity14.
Unit
Wt/Vol

02DR

G
E
N
E
R
A
T
O
R

b.

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

. . .

T
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17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name:

MICHAEL B. MAPLES

Signature

Month Day Year

12 17 02

F
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L
I
T
Y

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. Collier

Signature

S. Collier

Month Day Year

12 17 02



Broad St. Extension • PO Box 1384 • Sumter, SC 29151
(803) 494-2694 • 1-800-800-6840 • FAX: (803) 494-8598

Certificate of Disposal

Tons 2 Drums
Hwy 11 Grocery
Salem, SC

Contaminant NonHazardous Petroleum
Contaminanted Water

This is to certify the above ^{water} ~~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 S. Colley Date 12/17/02

	MR	MR	AR
MW-1	2/14/08	4/27/10	12/13/10
DTW		FP	26.92
Benzene	(0.03')	(0.55')	4530
Toluene			8750
Ethylbenzene			1150
Xylenes			6430
MTBE			30400
Naphthalene			529
Lead			na
DCA			<250
EDB			na
DIPE			449
TAA			3430
TAME			735
TBA			1600

	2/14/08	4/27/10	12/13/10
DTW	27.53	25.39	28.00
Benzene	4	4	<5
Toluene	<1	<5	<5
Ethylbenzene	<1	<5	<5
Xylenes	1	3	<10
MTBE	<1	<5	<5
Naphthalene	<2	<5	<5
Lead	na	<5	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

	2/14/08	4/27/10	12/13/10
DTW	26.21	24.09	26.71
Benzene	<1	<5	<5
Toluene	<1	<5	<5
Ethylbenzene	<1	<5	<5
Xylenes	1	<10	<10
MTBE	<1	<5	<5
Naphthalene	<2	<5	<5
Lead	na	9	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

	2/14/08	4/27/10	12/13/10
DTW	26.44	22.28	24.04
Benzene	<1	532	520
Toluene	<1	906	224
Ethylbenzene	<1	179	55
Xylenes	<3	895	482
MTBE	1	381	763
Naphthalene	<2	31	18
Lead	na	<5	na
DCA	na	<5	<25
EDB	na	<0.02	na
DIPE	na	22	25
TAA	na	355	342
TAME	na	14	<50
TBA	na	<100	<500

	2/14/08	4/27/10	12/13/10
DTW	30.60	well	well
Benzene	<1	not	not
Toluene	<1	located	located
Ethylbenzene	<1		
Xylenes	<3		
MTBE	<1		
Naphthalene	<2		
Lead	na		
DCA	na		
EDB	na		
DIPE	na		
TAA	na		
TBA	na		
TAME	na		

41-Tech

MW-6	2/14/08	4/27/10	12/13/10
DTW	22.77	21.02	23.60
Benzene	162	5570	1300
Toluene	750	19900	6340
Ethylbenzene	26	2260	360
Xylenes	575	12300	7910
MTBE	11	35300	2500
Naphthalene	12	463	<250
Lead	na	8	na
DCA	na	<5	<250
EDB	na	<0.02	na
DIPE	na	536	<250
TAA	na	3110	<5000
TAME	na	914	<500
TBA	na	<100	<5000

MW-7	2/14/08	4/27/10	12/13/10
DTW	26.64	well	well
Benzene	59	not	not
Toluene	60	accessible	located
Ethylbenzene	3		
Xylenes	41		
MTBE	2		
Naphthalene	<2		
Lead	na		
DCA	na		
EDB	na		
DIPE	na		
TAA	na		
TAME	na		
TBA	na		

MW-8	2/14/08	4/27/10	12/13/10
DTW	FP	FP	FP
Benzene	(1.93")	(0.45")	(1.00")
Toluene			
Ethylbenzene			
Xylenes			
MTBE			
Naphthalene			
Lead			
DCA			
EDB			
DIPE			
TAME			
TBA			

MW-9	2/14/08	4/27/10	12/13/10
DTW	2.22	nm	2.30
Benzene	<1	<5	<5
Toluene	<1	<5	<5
Ethylbenzene	<1	<5	<5
Xylenes	<3	<10	<10
MTBE	<1	<5	<5
Naphthalene	<2	<5	<5
Lead	na	<5	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

MW-10	2/14/08	4/27/10	12/13/10
DTW	20.72	18.91	20.59
Benzene	401	<5	50
Toluene	129	<5	8
Ethylbenzene	167	<5	5
Xylenes	721	<10	52
MTBE	296	4	23
Naphthalene	46	<5	<5
Lead	na	4	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

MW-11	2/14/08	4/27/10	12/13/10
DTW	16.90	16.04	15.80
Benzene	<1	<5	<5
Toluene	2	3	<5
Ethylbenzene	1	<5	<5
Xylenes	7	4	<10
MTBE	2	<5	<5
Naphthalene	1	<5	<5
Lead	na	<5	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

MW-12	2/14/08	4/27/10	12/13/10
DTW	3.15	2.71	3.33
Benzene	<1	<5	<5
Toluene	<1	<5	<5
Ethylbenzene	<1	<5	<5
Xylenes	<3	<10	<10
MTBE	<1	<5	<5
Naphthalene	<2	<5	<5
Lead	na	4	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

MW-13	2/14/08	4/27/10	12/13/10
DTW	well	6.31	6.27
Benzene	not	<5	<5
Toluene	located	<5	<5
Ethylbenzene		<5	<5
Xylenes		<10	<10
MTBE		<5	<5
Naphthalene		<5	<5
Lead		6	na
DCA		<5	<5
EDB		0.05	na
DIPE		<5	<5
TAA		<100	<100
TAME		<10	<10
TBA		<100	<100

MW-14	2/14/08	4/27/10	12/13/10
DTW	2.09	2.21	2.53
Benzene	3640	1770	1410
Toluene	14500	6420	4840
Ethylbenzene	2700	1560	1490
Xylenes	14300	8850	8450
MTBE	5500	2020	1500
Naphthalene	439	432	359
Lead	na	<5	na
DCA	na	<5	<250
EDB	na	<0.02	na
DIPE	na	96	<250
TAA	na	717	<5000
TAME	na	134	<500
TBA	na	<100	<5000

MW-15	2/14/08	4/27/10	12/13/10
DTW	nm	10.30	well
Benzene	ns	<5	not
Toluene		<5	located
Ethylbenzene		<5	
Xylenes		<10	
MTBE		<5	
Naphthalene		<5	
Lead		<5	
DCA		<5	
EDB		<0.02	
DIPE		<5	
TAA		<100	
TAME		<10	
TBA		<100	

DMW-1	2/14/08	4/27/10	12/13/10
DTW	26.18	24.12	26.45
Benzene	<1	<5	3
Toluene	<1	3	4
Ethylbenzene	<1	<5	<5
Xylenes	<3	5	3
MTBE	12	<5	104
Naphthalene	<2	4	<5
Lead	na	<5	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

DMW-2	2/14/08	4/27/10	12/13/10
DTW	20.86	24.20	17.85
Benzene	<1	<5	<5
Toluene	<1	<5	<5
Ethylbenzene	<1	<5	<5
Xylenes	<3	3	<10
MTBE	<1	<5	<5
Naphthalene	<2	<5	<5
Lead	na	<5	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

DMW-4	2/14/08	4/27/10	12/13/10
DTW	26.44	24.41	26.90
Benzene	<1	<5	<5
Toluene	<1	<5	<5
Ethylbenzene	<1	<5	<5
Xylenes	<3	<10	<10
MTBE	<1	<5	<5
Naphthalene	<2	<5	<5
Lead	na	<5	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

RW-1		12/13/10
DTW		26.65
Benzene		3550
Toluene		13500
Ethylbenzene		1190
Xylenes		6220
MTBE		24500
Naphthalene		874
Lead		na
DCA		<125
EDB		na
DIPE		373
TAA		3850
TAME		586
TBA		5200

RW-2		12/13/10
DTW		FP
Benzene		(0.02")
Toluene		
Ethylbenzene		
Xylenes		
MTBE		
Naphthalene		
Lead		
DCA		
EDB		
DIPE		
TAA		
TAME		
TBA		

RW-3			12/13/10
DTW			23.68
Benzene.			4860
Toluene			20800
Ethylbenzene			3240
Xylenes			17500
MTBE			10200
Naphthalene			1290
Lead			na
DCA			<250
EDB			na
DIPE			284
TAA			<5000
TAME			454
TBA			<5000

RW-4			12/13/10
DTW			24.34
Benzene			2390
Toluene			6720
Ethylbenzene			467
Xylenes			4020
MTBE			7780
Naphthalene			169
Lead			na
DCA			<5
EDB			na
DIPE			203
TAA			581
TAME			259
TBA			764

CK-1	2/14/08	4/27/10	12/13/10
DTW			
Benzene	9	3	4
Toluene	17	6	6
Ethylbenzene	5	2	2
Xylenes	24	8	9
MTBE	12	5	5
Naphthalene	1	<5	<5
Lead	na	na	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

CK-2	2/14/08	4/27/10	12/13/10
DTW			
Benzene	ns	13	16
Toluene		36	36
Ethylbenzene		6	7
Xylenes		32	34
MTBE		17	23
Naphthalene		<5	7
Lead	na	na	na
DCA		<5	<5
EDB		<0.02	na
DIPE		<5	<5
TAA		<100	<100
TAME		<10	<10
TBA		<100	<100

CK-3	2/14/08	4/27/10	12/13/10
DTW			
Benzene	21	13	18
Toluene	54	38	39
Ethylbenzene	10	7	8
Xylenes	62	37	42
MTBE	<40	19	28
Naphthalene	4	<5	4
Lead	na	na	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

WSW-1	2/14/08	4/27/10	12/13/10
DTW			
Benzene	<1	ns	<5
Toluene	<1		<5
Ethylbenzene	<1		<5
Xylenes	<3		<10
MTBE	<1		<5
Naphthalene	<2		<5
Lead	na		na
DCA	na		<5
EDB	na		na
DIPE	na		<5
TAA	na		<100
TAME	na		<10
TBA	na		<100

FP- free-phase product

na- not analyzed

nd- not detected

nm- not measured

ns- not sampled

RECEIVED

Joel

NOV 29 2007

PERMISSION FORM

UNDERGROUND STORAGE TANK AND PROPERTY OWNER

UST Permit #03439

**UNDERGROUND STORAGE
TANK PROGRAM**

If you are the owner of the former or existing underground storage tanks and the property owner, please complete this form.

I, Steven Smith, certify that I am the legal owner of the underground storage tanks and property located at the facility identified below or serve as the authorized representative for the owner. I grant permission to the South Carolina Department of Health and Environmental Control (SCDHEC) to secure on my behalf contractor services to conduct assessment and corrective action activities as required, and authorize SCDHEC, or a contractor selected by SCDHEC, to enter this property at reasonable times only to accomplish these site rehabilitation tasks. The contractor(s) will be designated as my contractor for only the required site rehabilitation activities. Compensation to the contractor(s) will be from the SUPERB Account and I will have no obligation to pay the contractor(s). I understand that SCDHEC will be responsible for notifying me of all activities that are necessary prior to their initiation and will promptly provide to me a copy of each environmental report. I understand that I may choose to select my own contractor at the completion of any phase of work by notifying the Bureau of Underground Storage Tank Management in writing.

Name of Facility Hwy 11 Grocery Phone # 864 944-0494

Street Address of Facility 13521 N Hwy 11

Town, City, District, Suburb Salem SC 29676

Name of nearest intersecting street, road, highway, alley

SC Hwy 11 / 130

Is this facility within the city limits? (yes or no) NO

Does a public water or sewer utility service this facility? (yes or no) NO, if no, please provide the name and phone number of a person that we can contact that can assist in the location of private water and septic tank lines Steven Smith, phone number 944-0494

Were underground storage tanks previously removed from the ground at this facility? (yes or no) NO

If yes, please provide the name of a person we can contact that can assist in the location of the former underground storage tank excavation _____

Phone number _____

Is the property currently leased or rented to someone? (yes or no) NO. If yes, please provide their name _____ and phone number _____ and let them know about the pending assessment activities. If vehicles or other mobile structures are parked over the former or existing underground storage tanks, they should be moved before SCDHEC's contractor gets to the site.

NAME of UST/property owner (Please Print): Steven Smith

Phone Number (home) _____ (work) 864 944-0494

Signature of UST/property Owner: Stan M Smith

Witness: Elaine Cope

Date: 11 Month 28 Day 2007 Year

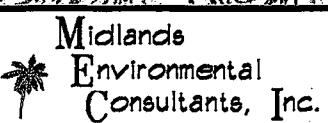
UST PRO
DOCKETING # SCANNED



GRAPHIC SCALE

A horizontal scale bar with tick marks at 0, 1000, 2000, and 4000. Below the bar, the text "1IN = 2000FT" is centered.

Reference: Salem and Old Pickens, South Carolina
Tamassee and Walhalla, South Carolina
USGS 7.5 Min. Quad
Contour Interval - 20 Feet

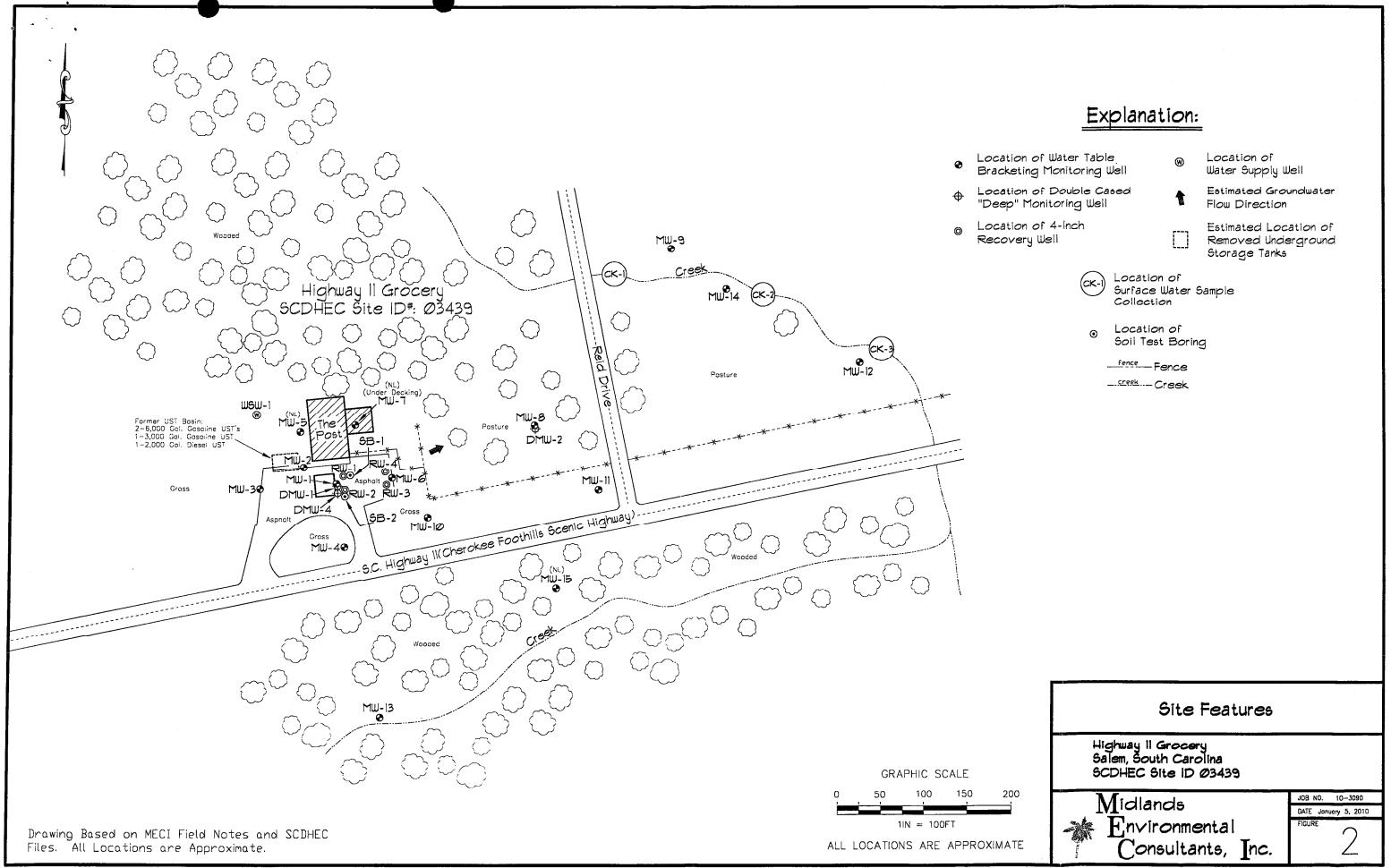


Site Location

Highway 11 Grocery
13527 South Carolina Highway 11, Salem, SC
SCDHEC Site ID# 03439

Figure 1

MECI 10-3090



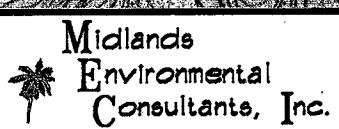
UST Permit: 03439
Facility: Highway 11 Grocery
County: Oconee

WELL #	SCREEN	TOC
MW-1	15-30'	103.38'
MW-2	20-35'	104.85'
MW-3	20-30'	104.89'
MW-4	20-35'	99.90'
MW-5	20-35'	106.06'
MW-6	20-35'	100.00'
MW-7	25-40'	103.66'
MW-8	15-30'	86.51'
MW-9	2-10'	58.39'
MW-10	13-28'	93.78'
MW-11	8-23'	83.20'
MW-12	2-12'	58.69'
MW-13	2-12'	77.91'
MW-14	2-10'	59.19'
MW-15	4-9'	71.52'
RW-1	10-30'	103.29'
RW-2	10-30'	102.85'
RW-3	10-30'	100.25'
RW-4	10-30'	101.00'
DMW-1	40-45'	103.27'
DMW-2	65-75'	86.21'
DMW-4	55-60'	103.22'



GRAPHIC SCALE
0 1000 2000 4000
1IN = 2000FT

Reference: Salem and Old Pickens, South Carolina
Tamassee and Walhalla, South Carolina
USGS 7.5 Min. Quad
Contour Interval - 20 Feet

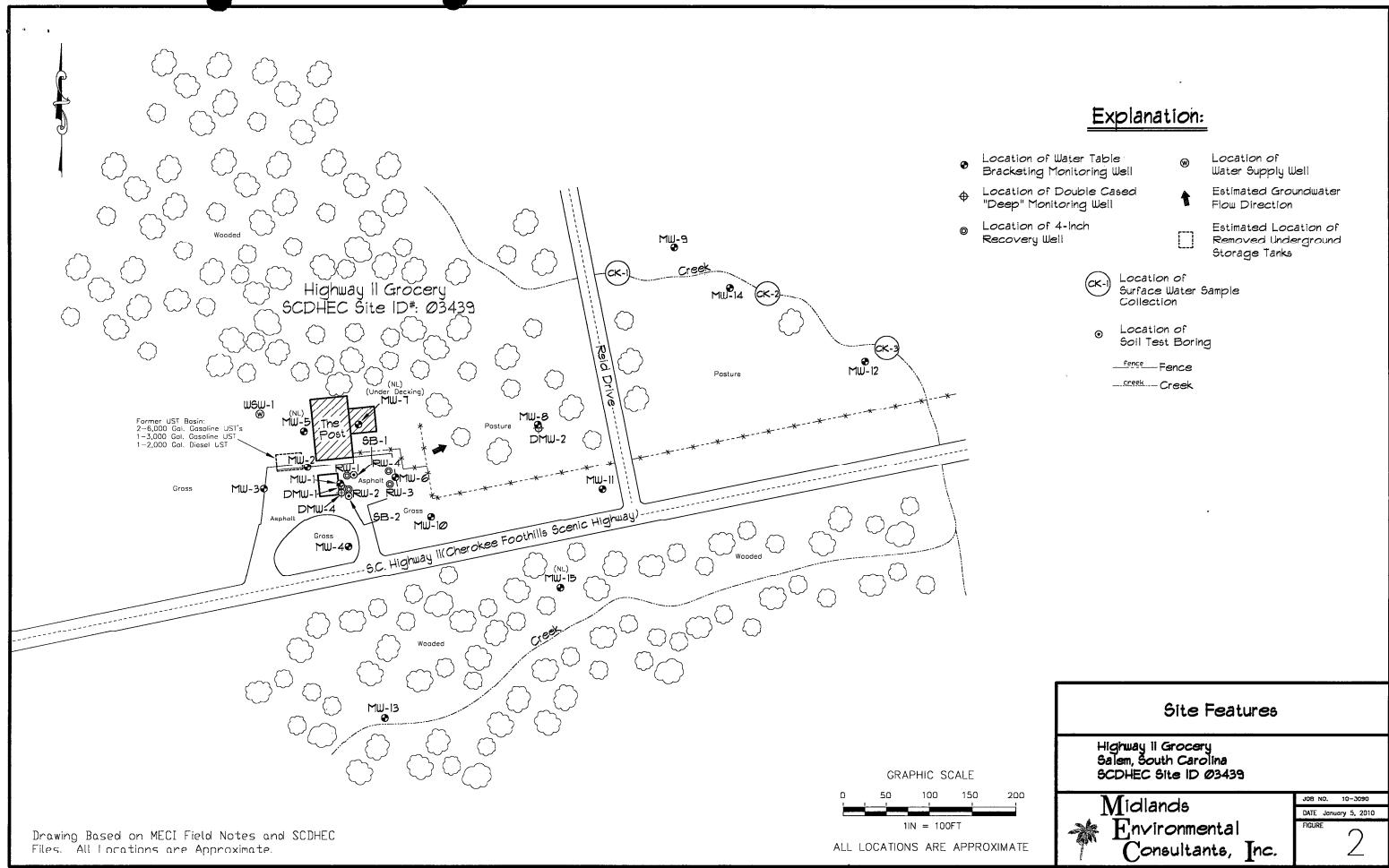


Highway II Grocery
13527 South Carolina Highway II, Salem, SC
SCDHEC Site ID# 03439

Site Location

Figure 1

MECI 10-3090



Notes:
 Depth to groundwater measured on December 13, 2010.
 Contour Interval = 5.00 Foot
 Site Datum Based on Assumed Spot Elevation.
 NL = Not Located
 Monitoring wells DMW-1, DMW-2, and DMW-4 not used in contouring.
 Groundwater elevation for monitoring wells MW-8 and RW-2 corrected for the presence of free phase petroleum product using specific gravity of fuel of 0.85.
 Groundwater Contours Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

Explanation:

- Location of Water Table Bracketing Monitoring Well
- Location of Double Cased "Deep" Monitoring Well
- Location of 4-inch Recovery Well
- Location of Water Supply Well
- ↑ Estimated Groundwater Flow Direction
- Estimated Location of Removed Underground Storage Tanks
- Location of Surface Water Sample Collection

— Groundwater Elevation Contour (feet)

Groundwater Elevation Data

Well #	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Well Head Elevation	Groundwater Elevation
MW-1	---	26.82	---	103.38	76.46
MW-2	---	28.00	---	104.85	76.85
MW-3	---	26.71	---	104.88	78.18
MW-4	---	24.04	---	99.92	75.86
MW-5	---	NL	---	106.06	NL
MW-6	---	23.60	---	100.00	76.40
MW-7	---	NL	---	103.66	NL
MW-8	22.10	23.10	1.00	88.51	63.66
MW-9	---	2.30	---	58.39	56.03
MW-10	---	20.59	---	83.78	73.19
MW-11	---	15.80	---	83.20	67.40
MW-12	---	3.33	---	58.69	55.36
MW-13	---	6.27	---	77.91	71.64
MW-14	---	2.53	---	59.19	56.66
MW-15	---	NL	---	71.52	NL
DMW-1	---	26.45	---	103.27	76.82
DMW-2	---	17.85	---	86.21	68.36
DMW-4	---	26.90	---	103.32	76.32
RW-1	---	26.65	---	103.39	76.64
RW-2	26.63	26.65	0.02	102.85	76.22
RW-3	---	23.68	---	102.25	76.57
RW-4	---	24.34	---	101.00	76.66

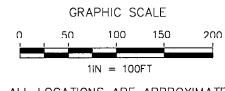
Groundwater Contour Map

Highway II Grocery
 Salem, South Carolina
 SCDHEC Site ID 03439

Midlands
 Environmental
 Consultants, Inc.

JOB NO. 10-3090
 DATE: January 5, 2010
 FIGURE 3

Drawing Based on MECI Field Notes and SCDHEC Files. All Locations are Approximate.



Notes:

Groundwater samples collected on December 13, 2010.

Isoptile Interval = 15,000 ug/l

BDL = Below Detection Limit

NL = Not Located

PROD = Free Phase Petroleum Product

"J" Values included in Total BTEX Calculations

Concentration Isoptiles Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

Explanation:

- Location of Water Table
- Bracketing Monitoring Well
- Location of Double Cased "Deep" Monitoring Well
- Location of 4-Inch Recovery Well
- Location of Water Supply Well
- ↑ Estimated Groundwater Flow Direction
- Estimated Location of Removed Underground Storage Tanks
- (○) Location of Surface Water Sample Collection

Total BTEX Concentration Isoptile (ug/l)

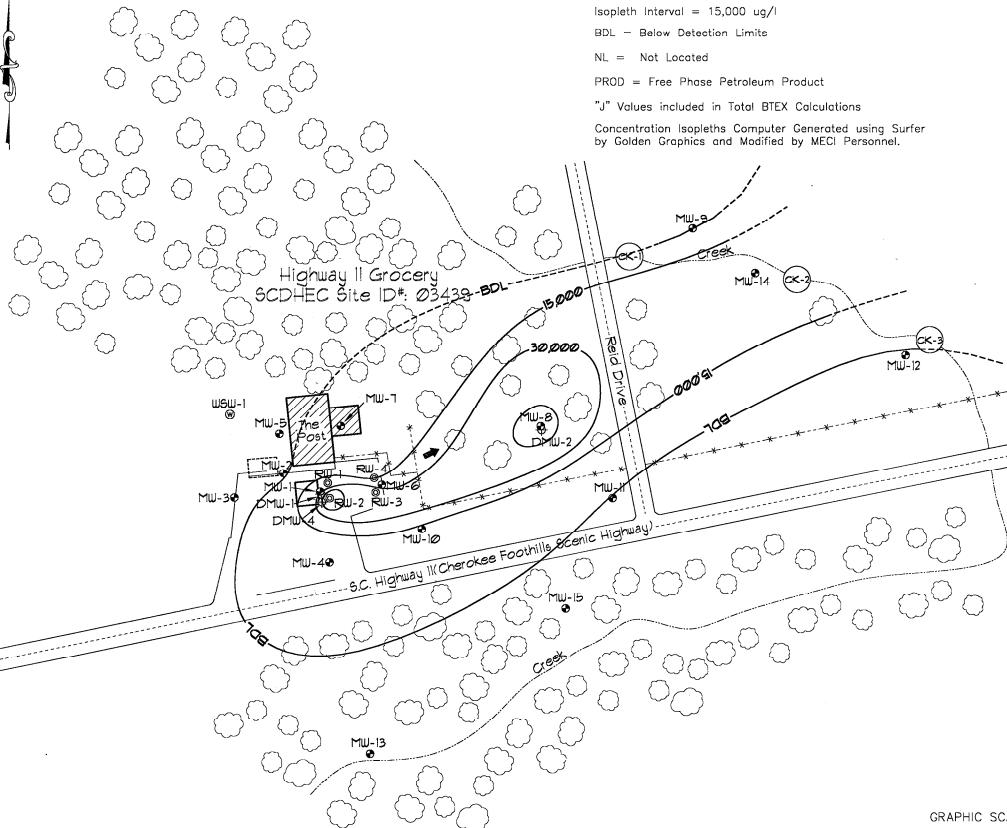
Sample #	COC Concentration Data							
	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	Naphthalene (ug/l)	DCA (ug/l)	
MW-1	4,530	8,750	1,150	6,430	20,860	30,400	529	<250
MW-2	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-3	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-4	520	274	55.2	482	1,041.2	7,13	18.2	<25.0
MW-5	NL	NL	NL	NL	NL	NL	NL	NL
MW-6	1,300	6,340	380	7,810	15,910	2,500	<250	<250
MW-7	NL	NL	NL	NL	NL	NL	NL	NL
MW-8	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
MW-9	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-10	50.0	8.0	5.2	51.7	114.9	22.9	<5.0	<5.0
MW-11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-12	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-13	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-14	1,410	4,840	1,490	8,450	16,190	1,500	359	<250
MW-15	NL	NL	NL	NL	NL	NL	NL	NL
DMW-1	3.0	3.6	<5.0	3.1	8.7	1.04	<5.0	<5.0
DMW-2	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
DMW-4	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
RW-1	3,550	13,500	1,190	6,220	24,460	24,500	874	<125
RW-2	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
RW-3	4,860	20,800	3,240	4,020	45,480	10,200	1,290	<250
RW-4	2,390	6,720	467	13,597	7,780	169	<5.0	<5.0
CK-1	4.4	6.2	2.1	9.3	22.0	5.4	<5.0	<5.0
CK-2	16.1	35.6	6.8	34.2	92.7	23.2	6.8	<5.0
CK-3	17.9	39.1	8.1	41.9	107.0	28.1	37.3	<5.0
WSU-1	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0

Total BTEX Isoptile Map

Highway II Grocery
Salem, South Carolina
SCDHEC Site ID 03439

Midlands
Environmental
Consultants, Inc.

JOB NO. 10-3090
DATE January 5, 2010
FIGURE 4



Drawing Based on MECI Field Notes and SCDHEC Files. All Locations are Approximate.

GRAPHIC SCALE
0 50 100 150 200
1IN = 100FT
ALL LOCATIONS ARE APPROXIMATE

Notes:

Groundwater samples collected on December 13, 2010.

Isoptile Interval = 12,000 ug/l

BDL = Below Detection Limits

NL = Not Located

PROD = Free Phase Petroleum Product

"J" Values included in Total BTEX Calculations

Concentration Isoptiles Computer Generated using Surfer by Golden Graphics and Modified by MECI Personnel.

Explanation:

- Location of Water Table
- Bracketing Monitoring Well
- Location of Water Supply Well
- ◆ Location of Double Cased "Deep" Monitoring Well
- ↑ Estimated Groundwater Flow Direction
- ◎ Location of 4-Inch Recovery Well
- Estimated Location of Removed Underground Storage Tanks

- (X) Location of Surface Water Sample Collection

MTBE Concentration Isoptile (ug/l)

COC Concentration Data

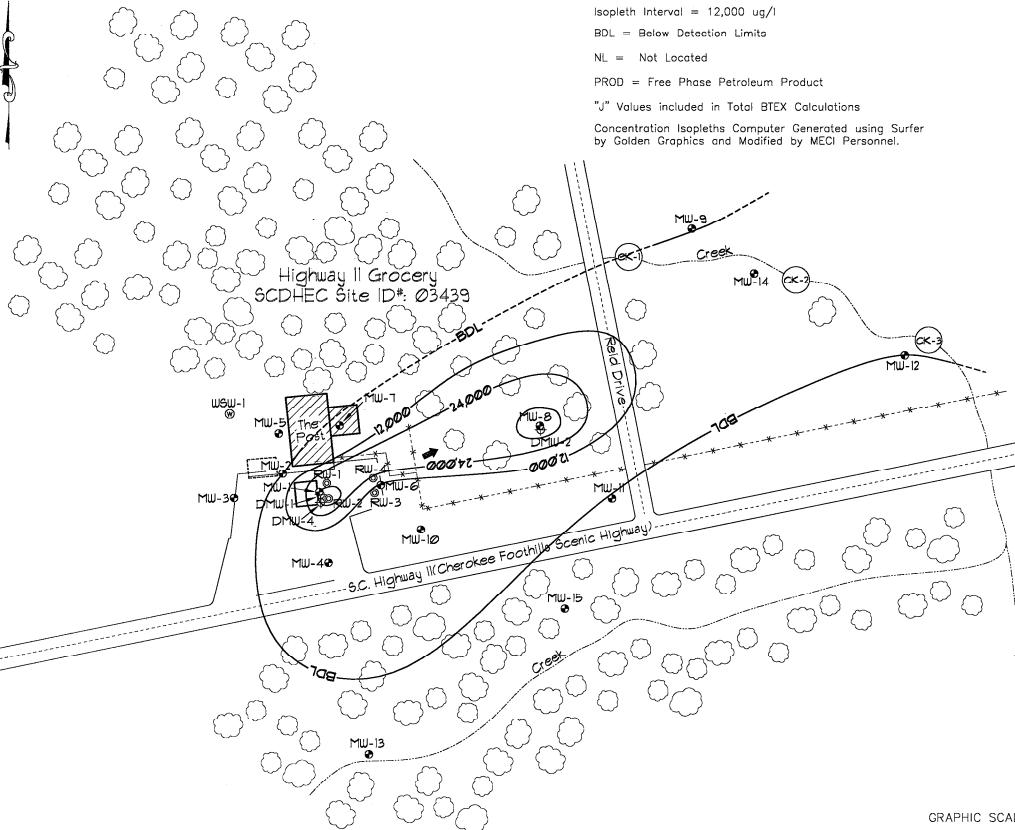
Sample #	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	Total BTEX (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	12 DCA (ug/l)
MW-1	4,530	8,750	1,150	6,430	20,880	30,400	529	<250
MW-2	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-3	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-4	520	274	55.2	482	1,261.2	76.3	18.2	<25.0
MW-5	1	NL	NL	NL	NL	NL	NL	NL
MW-6	1,300	6,340	380	7,910	15,910	2,500	<250	<250
MW-7	NL	NL	NL	NL	NL	NL	NL	NL
MW-8	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
MW-9	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-10	50.0	8.0	5.2	51.7	114.9	22.9	<5.0	<5.0
MW-11	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-12	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-13	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
MW-14	1,410	4,840	1,490	8,450	16,190	1,500	359	<250
MW-15	NL	NL	NL	NL	NL	NL	NL	NL
DMW-1	3.64	<5.0	3.14	9.74	10.4	<5.0	<5.0	<5.0
DMW-2	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
DMW-4	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0
RW-1	3,550	13,500	1,190	6,220	24,450	24,500	874	<125
RW-2	PROD	PROD	PROD	PROD	PROD	PROD	PROD	PROD
RW-3	4,860	20,800	3,240	17,500	46,400	10,200	1,290	<250
RW-4	2,390	8,720	467	4,020	13,597	7,780	169	<5.0
CK-1	4.42	6.2	2.1	9.31	22.0	5.4	<5.0	<5.0
CK-2	16.1	35.6	6.8	34.2	92.7	23.2	6.8	<5.0
CK-3	17.9	39.1	8.1	41.9	107.0	28.1	3.74	<5.0
MSW-31	<5.0	<5.0	<5.0	<10.0	BDL	<5.0	<5.0	<5.0

MTBE Isoptile Map

Highway II Grocery
Salem, South Carolina
SCDHEC Site ID 03439

Midlands Environmental Consultants, Inc.

FIGURE 5
DATE: January 5, 2010
JOT NO: 10-3090



Drawing Based on MECI Field Notes and SCDHEC Files. All Locations are Approximate.

GRAPHIC SCALE
0 50 100 150 200
1IN = 100FT

ALL LOCATIONS ARE APPROXIMATE

	MR	MR	AR
MW-1	2/14/08	4/27/10	12/13/10
DTW	FP	FP	26.92
Benzene	(0.03')	(0.55')	4530
Toluene			8750
Ethylbenzene			1150
Xylenes			6430
MTBE			30400
Naphthalene			529
Lead			na
DCA			<250
EDB			na
DIPE			449
TAA			3430
TAME			735
TBA			1600

MW-2	2/14/08	4/27/10	12/13/10
DTW	27.53	25.39	28.00
Benzene	4	4	<5
Toluene	<1	<5	<5
Ethylbenzene	<1	<5	<5
Xylenes	1	3	<10
MTBE	<1	<5	<5
Naphthalene	<2	<5	<5
Lead	na	<5	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

MW-3	2/14/08	4/27/10	12/13/10
DTW	26.21	24.09	26.71
Benzene	<1	<5	<5
Toluene	<1	<5	<5
Ethylbenzene	<1	<5	<5
Xylenes	1	<10	<10
MTBE	<1	<5	<5
Naphthalene	<2	<5	<5
Lead	na	9	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

MW-4	2/14/08	4/27/10	12/13/10
DTW	26.44	22.28	24.04
Benzene	<1	532	520
Toluene	<1	906	224
Ethylbenzene	<1	179	55
Xylenes	<3	895	482
MTBE	1	381	763
Naphthalene	<2	31	18
Lead	na	<5	na
DCA	na	<5	<25
EDB	na	<0.02	na
DIPE	na	22	25
TAA	na	355	342
TAME	na	14	<50
TBA	na	<100	<500

MW-5	2/14/08	4/27/10	12/13/10
DTW	30.60	well	well
Benzene	<1	not	not
Toluene	<1	located	located
Ethylbenzene	<1		
Xylenes	<3		
MTBE	<1		
Naphthalene	<2		
Lead	na		
DCA	na		
EDB	na		
DIPE	na		
TAA	na		
TBA	na		
TAME	na		

MW-6	2/14/08	4/27/10	12/13/10
DTW	22.77	21.02	23.60
Benzene	162	5570	1300
Toluene	750	19900	6340
Ethylbenzene	26	2260	360
Xylenes	575	12300	7910
MTBE	11	35300	2500
Naphthalene	12	463	<250
Lead	na	8	na
DCA	na	<5	<250
EDB	na	<0.02	na
DIPE	na	536	<250
TAAC	na	3110	<5000
TAME	na	914	<500
TBA	na	<100	<5000

MW-7	2/14/08	4/27/10	12/13/10
DTW	26.64	well	well
Benzene	59	not	not
Toluene	60	accessible	located
Ethylbenzene	3		
Xylenes	41		
MTBE	2		
Naphthalene	<2		
Lead	na		
DCA	na		
EDB	na		
DIPE	na		
TAAC	na		
TAME	na		
TBA	na		

MW-8	2/14/08	4/27/10	12/13/10
DTW	FP	FP	FP
Benzene	(1.93')	(0.45')	(1.00')
Toluene			
Ethylbenzene			
Xylenes			
MTBE			
Naphthalene			
Lead			
DCA			
EDB			
DIPE			
TAME			
TBA			

MW-9	2/14/08	4/27/10	12/13/10
DTW	2.22	nm	2.30
Benzene	<1	<5	<5
Toluene	<1	<5	<5
Ethylbenzene	<1	<5	<5
Xylenes	<3	<10	<10
MTBE	<1	<5	<5
Naphthalene	<2	<5	<5
Lead	na	<5	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAAC	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

MW-10	2/14/08	4/27/10	12/13/10
DTW	20.72	18.91	20.59
Benzene	401	<5	50
Toluene	129	<5	8
Ethylbenzene	167	<5	5
Xylenes	721	<10	52
MTBE	296	4	23
Naphthalene	46	<5	<5
Lead	na	4	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAAC	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

MW-11	2/14/08	4/27/10	12/13/10
DTW	16.90	16.04	15.80
Benzene	<1	<5	<5
Toluene	2	3	<5
Ethylbenzene	1	<5	<5
Xylenes	7	4	<10
MTBE	2	<5	<5
Naphthalene	1	<5	<5
Lead	na	<5	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

MW-12	2/14/08	4/27/10	12/13/10
DTW	3.15	2.71	3.33
Benzene	<1	<5	<5
Toluene	<1	<5	<5
Ethylbenzene	<1	<5	<5
Xylenes	<3	<10	<10
MTBE	<1	<5	<5
Naphthalene	<2	<5	<5
Lead	na	4	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

MW-13	2/14/08	4/27/10	12/13/10
DTW	well	6.31	6.27
Benzene	not	<5	<5
Toluene	located	<5	<5
Ethylbenzene		<5	<5
Xylenes		<10	<10
MTBE		<5	<5
Naphthalene		<5	<5
Lead		6	na
DCA		<5	<5
EDB		0.05	na
DIPE		<5	<5
TAA		<100	<100
TAME		<10	<10
TBA		<100	<100

MW-14	2/14/08	4/27/10	12/13/10
DTW	2.09	2.21	2.53
Benzene	3640	1770	1410
Toluene	14500	6420	4840
Ethylbenzene	2700	1560	1490
Xylenes	14300	8850	8450
MTBE	5500	2020	1500
Naphthalene	439	432	359
Lead	na	<5	na
DCA	na	<5	<250
EDB	na	<0.02	na
DIPE	na	96	<250
TAA	na	717	<5000
TAME	na	134	<500
TBA	na	<100	<5000

MW-15	2/14/08	4/27/10	12/13/10
DTW	nm	10.30	well
Benzene	ns	<5	not
Toluene		<5	located
Ethylbenzene		<5	
Xylenes		<10	
MTBE		<5	
Naphthalene		<5	
Lead		<5	
DCA		<5	
EDB		<0.02	
DIPE		<5	
TAA		<100	
TAME		<10	
TBA		<100	

DMW-1	2/14/08	4/27/10	12/13/10
DTW	26.18	24.12	26.45
Benzene	<1	<5	3
Toluene	<1	3	4
Ethylbenzene	<1	<5	<5
Xylenes	<3	5	3
MTBE	12	<5	104
Naphthalene	<2	4	<5
Lead	na	<5	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

DMW-2	2/14/08	4/27/10	12/13/10
DTW	20.86	24.20	17.85
Benzene	<1	<5	<5
Toluene	<1	<5	<5
Ethylbenzene	<1	<5	<5
Xylenes	<3	3	<10
MTBE	<1	<5	<5
Naphthalene	<2	<5	<5
Lead	na	<5	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

DMW-4	2/14/08	4/27/10	12/13/10
DTW	26.44	24.41	26.90
Benzene	<1	<5	<5
Toluene	<1	<5	<5
Ethylbenzene	<1	<5	<5
Xylenes	<3	<10	<10
MTBE	<1	<5	<5
Naphthalene	<2	<5	<5
Lead	na	<5	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

RW-1		12/13/10
DTW		26.65
Benzene		3550
Toluene		13500
Ethylbenzene		1190
Xylenes		6220
MTBE		24500
Naphthalene		874
Lead		na
DCA		<125
EDB		na
DIPE		373
TAA		3850
TAME		586
TBA		5200

RW-2		12/13/10
DTW		FP
Benzene		(0.02')
Toluene		
Ethylbenzene		
Xylenes		
MTBE		
Naphthalene		
Lead		
DCA		
EDB		
DIPE		
TAA		
TAME		
TBA		

RW-3			12/13/10
DTW			23.68
Benzene			4860
Toluene			20800
Ethylbenzene			3240
Xylenes			17500
MTBE			10200
Naphthalene			1290
Lead			na
DCA			<250
EDB			na
DIPE			284
TAA			<5000
TAME			454
TBA			<5000

RW-4			12/13/10
DTW			24.34
Benzene			2390
Toluene			6720
Ethylbenzene			467
Xylenes			4020
MTBE			7780
Naphthalene			169
Lead			na
DCA			<5
EDB			na
DIPE			203
TAA			581
TAME			259
TBA			764

CK-1	2/14/08	4/27/10	12/13/10
DTW			
Benzene	9	3	4
Toluene	17	6	6
Ethylbenzene	5	2	2
Xylenes	24	8	9
MTBE	12	5	5
Naphthalene	1	<5	<5
Lead	na	na	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

CK-2	2/14/08	4/27/10	12/13/10
DTW			
Benzene	ns	13	16
Toluene		36	36
Ethylbenzene		6	7
Xylenes		32	34
MTBE		17	23
Naphthalene		<5	7
Lead		na	na
DCA		<5	<5
EDB		<0.02	na
DIPE		<5	<5
TAA		<100	<100
TAME		<10	<10
TBA		<100	<100

CK-3	2/14/08	4/27/10	12/13/10
DTW			
Benzene	21	13	18
Toluene	54	38	39
Ethylbenzene	10	7	8
Xylenes	62	37	42
MTBE	<40	19	28
Naphthalene	4	<5	4
Lead	na	na	na
DCA	na	<5	<5
EDB	na	<0.02	na
DIPE	na	<5	<5
TAA	na	<100	<100
TAME	na	<10	<10
TBA	na	<100	<100

WSW-1	2/14/08	4/27/10	12/13/10
DTW			
Benzene	<1	ns	<5
Toluene	<1		<5
Ethylbenzene	<1		<5
Xylenes	<3		<10
MTBE	<1		<5
Naphthalene	<2		<5
Lead	na		na
DCA	na		<5
EDB	na		na
DIPE	na		<5
TAA	na		<100
TAME	na		<10
TBA	na		<100

FP- free-phase product

na- not analyzed

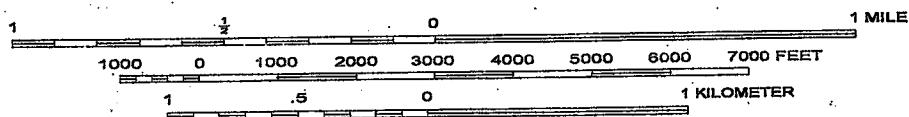
nd- not detected

nm- not measured

ns- not sampled



SCALE 1:24000



SALEM QUADRANGLE
SOUTH CAROLINA-OCONEE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC-BATHYMETRIC)
BY U.S. GEOLOGICAL SURVEY

SEI Environmental, Inc.

FIGURE 1: SITE LOCATION MAP
HIGHWAY 11 GROCER
13527 Highway 11, Salem, SC
FACILITY I.D. #03439

WO # 302169
DWG # Hw 11_topo_sitemap

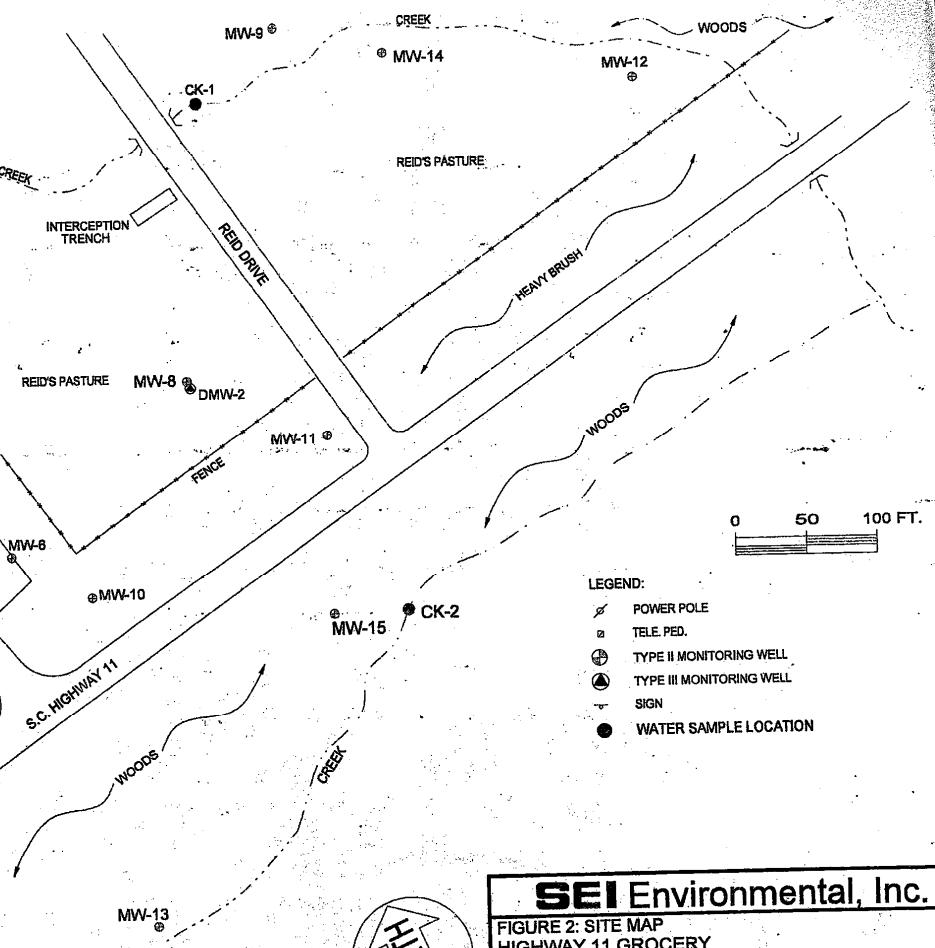
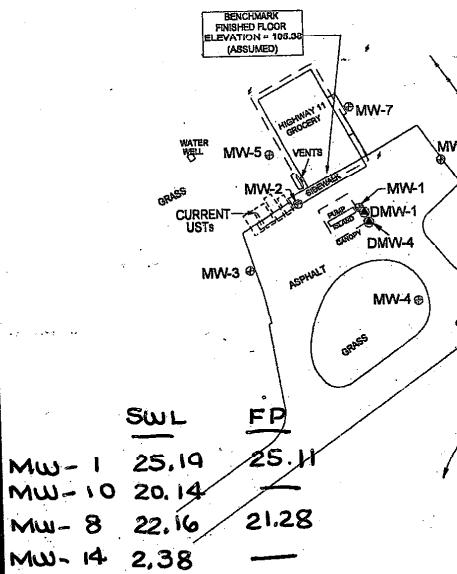
DATE: 9/16/05
DRAWN BY: HWH

4/30/08 Gauging Event - J. Radgett, C. Doll

791-1996

WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.89
MW-4	99.80
MW-5	106.06
MW-6	100.00
MW-7	103.66
MW-8	86.51
MW-9	58.39
MW-10	83.78
MW-11	83.20
MW-12	58.69
MW-13	77.91
MW-14	59.19
MW-15	71.52
DMW-1	103.27
DMW-2	86.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.



SEI Environmental, Inc.
FIGURE 2: SITE MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439
WO #302-043 DATE: 3/17/05
DVG #H101692G DRAWN BY: JCJ

RECEIVED
Joel
NOV 29 2007

PERMISSION FORM

UNDERGROUND STORAGE TANK AND PROPERTY OWNER

UST Permit #03439

UNDERGROUND STORAGE
TANK PROGRAM

If you are the owner of the former or existing underground storage tanks and the property owner, please complete this form.

I, Steven Smith, certify that I am the legal owner of the underground storage tanks and property located at the facility identified below or serve as the authorized representative for the owner. I grant permission to the South Carolina Department of Health and Environmental Control (SCDHEC) to secure on my behalf contractor services to conduct assessment and corrective action activities as required, and authorize SCDHEC, or a contractor selected by SCDHEC, to enter this property at reasonable times only to accomplish these site rehabilitation tasks. The contractor(s) will be designated as my contractor for only the required site rehabilitation activities. Compensation to the contractor(s) will be from the SUPERB Account and I will have no obligation to pay the contractor(s). I understand that SCDHEC will be responsible for notifying me of all activities that are necessary prior to their initiation and will promptly provide to me a copy of each environmental report. I understand that I may choose to select my own contractor at the completion of any phase of work by notifying the Bureau of Underground Storage Tank Management in writing.

Name of Facility Hwy 11 Grocery Phone # 864 944-0494

Street Address of Facility 13521 N Hwy 11

Town, City, District, Suburb Salem SC 29676

Name of nearest intersecting street, road, highway, alley

SC Hwy 11 / 130

Is this facility within the city limits? (yes or no) NO

Does a public water or sewer utility service this facility? (yes or no) NO, if no, please provide the name and phone number of a person that we can contact that can assist in the location of private water and septic tank lines Steven Smith, phone number 944 - 0494

Were underground storage tanks previously removed from the ground at this facility? (yes or no) NO

If yes, please provide the name of a person we can contact that can assist in the location of the former underground storage tank excavation _____

Phone number _____

Is the property currently leased or rented to someone? (yes or no) NO. If yes, please provide their name _____ and phone number _____ and let them know about the pending assessment activities. If vehicles or other mobile structures are parked over the former or existing underground storage tanks, they should be moved before SCDHEC's contractor gets to the site.

NAME of UST/property owner (Please Print): Steven Smith

Phone Number (home) _____ (work) 864 944 0494

Signature of UST/property Owner: Sten M Smith

Witness: Elaine C Lee

Date: 11 Month 28 Day 2007 Year

UST PROGRAM
DOCKETING # SCANNED



C. Earl Hunter, Commissioner

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

MR STEVEN SMITH
180 SHALLOW FORD RD
SALEM SC 29676

Re: Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; CA #17616
Release reported November 28, 2000
Corrective Action System Evaluation (CASE) received November 7, 2007
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program has reviewed the referenced report. The Program notes that the AFVR events conducted on monitoring wells MW-1 and MW-8 were effective in removing free-phase product based upon reported off-gas measurements. However, as product persists in MW-8 and has emerged in MW-14, continued AFVR events are warranted. Please have your contractor focus AFVR events on MW-8 and, in particular, MW-14 as this well is adjacent to the creek. Also, please include creek sample CK-3 in the sampling protocol since this location is downstream from MW-14.

Based upon the current data, the Program calculates a -1.42% reduction in total concentrations of chemicals of concern (CoC) across the site (see enclosed CoC reduction calculation sheets). Please note that the calculation uses the last known concentrations for MW-1, which was not sampled during the August 2007 monitoring event. The low reduction is a result of the emergence of free-phase product in MW-14.

The next CASE report documenting the December monitoring event and quarterly AFVR events is due on or before February 1, 2008. On all correspondence regarding this site, please reference UST Permit #03439. If you have any questions regarding this correspondence, feel free to contact me by telephone at (803) 896-6398, by fax at (803) 896-6245, or by e-mail at padgettjp@dhec.sc.gov.

Sincerely,

Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

UST PROGRAM
DOCKETING #

JPP/jpp
03439.15

enc: CoC reduction calculation sheets

cc: Chris Boggs, P.G., SEI Environmental, Inc., 130 Penmarc Drive, Suite #108,
Raleigh, NC 27603 (w/enc)
James W. Reid, 185 Reid Drive, Salem, SC 29676 (w/enc)
Technical file (w/o enc)



C. Earl Hunter, Commissioner

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

MAR 27 2007

MR STEVEN SMITH
180 SHALLOW FORD RD
SALEM SC 29676

Re: Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; CA #17616
Release reported November 28, 2000
Corrective Action Plan (CAP) Addendum received March 22, 2007
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program has received the referenced Corrective Action Plan (CAP) Addendum. Per the Addendum, your contractor will conduct Aggressive Fluid and Vapor Recovery (AFVR) events quarterly in conjunction with required groundwater sampling. The Program also notes that your contractor will evaluate the existing hydrogen peroxide system to determine what repairs are necessary to place it back into operation.

As the proposed remediation technologies have previously been placed on public notice, SEI Environmental, Inc. may proceed with implementation of the Addendum. Per correspondence to you dated March 5, 2007, the next corrective action system evaluation (CASE) report is due on or before **August 1, 2007**.

On all correspondence regarding this site, please reference UST Permit #03439. If you have any questions regarding this correspondence, feel free to contact me by telephone at (803) 896-6398, by fax at (803) 896-6245, or by e-mail at padgettjp@dhec.sc.gov.

Sincerely,

Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

JPP/jpp
03439.13

cc: Chris Boggs, P.G., SEI Environmental, Inc., 130 Penmarc Drive, Suite #108, Raleigh, NC 27603
James W. Reid, 185 Reid Drive, Salem, SC 29676
Technical file

DHEC/UST/JPP/032707



RECEIVED

130 Penmarc Drive, Suite 108
Raleigh, NC 27603
919.832.2535
Fax 919.832.5914

MAR 22 2007

**UNDERGROUND STORAGE
TANK PROGRAM**

March 16, 2007

Mr. Joel P. Padgett, P.G., Hydrogeologist
South Carolina Department of Health and Environmental Control
Assessment & Corrective Action Section, Underground Storage Tank Program
2600 Bull Street
Columbia, South Carolina 29201

**RE: Corrective Action Plan Addendum
Highway 11 Grocery
13527 North SC Highway 11
Salem, Oconee County, South Carolina
UST Permit Number: 03439
SEI Project Number: 302169**

Dear Mr. Padgett:

In order to address the free product at the above referenced site SEI Environmental will conduct AFVR events in conjunction with quarterly groundwater sampling at the site. Quarterly sampling events are scheduled fro February, May August, and November. In addition, SEI Environmental is evaluating the existing hydrogen peroxide system to determine what repairs are required to bring it back into operation. If you have any questions or comments, please contact me at (919) 832-2535.

Sincerely,
SEI Environmental, Inc.

A handwritten signature in black ink, appearing to read "Chris L. Boggs, P.G." followed by "Project Manager".

Chris L. Boggs, P.G.
Project Manager

cc: Mr. John Smith, Highway 11 Grocery



C. Earl Hunter, Commissioner

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

MAR 05 2007

MR STEVEN SMITH
180 SHALLOW FORD RD
SALEM SC 29676

Re: Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; CA #17616
Release reported November 28, 2000
Corrective Action System Evaluation (CASE) received March 2, 2007
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program has reviewed the referenced report. Based upon the current data, the Program calculates a **-0.08%** reduction in total concentrations of chemicals of concern (CoC) across the site. Please note use of the **correct** saturation values for free-phase product (those used in the original bid solicitation). Please have your contractor amend their CoC tables and concentration reduction calculations accordingly.

The report documents the presence of free-phase product in monitoring wells MW-1 and MW-8. As this likely contributes to elevated CoC levels in creek samples CK-1 and CK-3, your contractor's recommendation to continue quarterly monitoring only is unacceptable. Therefore, the Program requests that your contractor submit a Corrective Action Plan (CAP) Addendum that presents a technology and timetable for removal of free-phase product at the site. The CAP Addendum is due within **thirty (30) days** of the date of this letter. **Failure to submit the Addendum will result in a Notice of Violation and potential enforcement action.**

The next CASE report for the June 2007 quarterly sampling event is due on or before **August 1, 2007**. On all correspondence regarding this site, please reference UST Permit #03439. If you have any questions regarding this correspondence, feel free to contact me by telephone at (803) 896-6398, by fax at (803) 896-6245, or by e-mail at padgettjp@dhec.sc.gov.

Sincerely,

Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

JPP/jpp
03439.12

enc: CoC reduction calculation sheets

cc: Chris Boggs, P.G., SEI Environmental, Inc., 130 Penmarc Drive, Suite #108,
Raleigh, NC 27603 (w/enc)
James W. Reid, 185 Reid Drive, Salem, SC 29676 (w/enc)
Technical file (w/o enc)

03439 Highway 11 Grocery

2/7/07 sampling

Enter Initial, SSTL and subsequent

CoC Reduction: -0.0832 %

Well		Benzene	Toluene	Ethylbenzene	Xylene	MtBE	Naphthalene	EDB	Totals
MW-1	Initial	226000	301000	280000	278000	5110000	2000	0	6197000
	SSTL	22	4497	3148	44969	180	112	0	52928
	Initial > SSTL	225978	296503	276852	233031	5109820	1888	0	6144072
	Subsequent	226000	301000	280000	278000	5110000	2000	0	6197000
	Subsequent > SSTL	225978	296503	276852	233031	5109820	1888	0	6144072
MW-2	Initial	13	8	1	5	5	5	0	37
	SSTL	13	8	1	5	5	5	0	37
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	7	2	1	3	1	2	0	16
	Subsequent > SSTL	0	0	0	0	0	0	0	0
MW-3	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	3	1	2	0	9
	Subsequent > SSTL	0	0	0	2	0	0	0	2
MW-4	Initial	1500	5320	620	3360	810	500	0	12110
	SSTL	1500	5320	620	3360	810	500	0	12110
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	25	59	13	67	47	2	0	213
	Subsequent > SSTL	0	0	0	0	0	0	0	0
MW-5	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	3	1	2	0	9
	Subsequent > SSTL	0	0	0	2	0	0	0	2
MW-6	Initial	1780	4950	490	2880	6350	500	0	16950
	SSTL	1780	4950	490	2880	6350	500	0	16950
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	4970	18100	2070	12000	30500	500	0	68140
	Subsequent > SSTL	3190	13150	1580	9120	24150	0	0	51190
MW-7	Initial	34	20	1	8	7	5	0	75
	SSTL	22	20	1	8	7	5	0	63
	Initial > SSTL	12	0	0	0	0	0	0	12
	Subsequent	182	261	13	202	19	2	0	679
	Subsequent > SSTL	160	241	12	194	12	0	0	619
MW-8	Initial	226000	301000	280000	278000	5110000	2000	0	6197000
	SSTL	204	40888	28622	278000	1362	1021	0	350097
	Initial > SSTL	225796	260112	251378	0	5108638	979	0	5846903
	Subsequent	226000	301000	280000	278000	5110000	2000	0	6197000
	Subsequent > SSTL	225796	260112	251378	0	5108638	979	0	5846903
MW-10	Initial	115	185	68	328	86	9	0	791
	SSTL	115	185	68	328	86	9	0	791
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	376	1080	454	2440	507	83	0	4940
	Subsequent > SSTL	261	895	386	2112	421	74	0	4149
MW-11	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	9	1	2	0	15
	Subsequent > SSTL	0	0	0	8	0	0	0	8
MW-14	Initial	3780	13800	27000	14700	7010	500	0	66790
	SSTL	5	1000	700	10000	40	25	0	11770
	Initial > SSTL	3775	12800	26300	4700	6970	475	0	55020
	Subsequent	2010	4080	1180	6320	3320	261	0	17171
	Subsequent > SSTL	2005	3080	480	0	3280	236	0	9081

03439 Highway 11 Grocery

Total Concentration Reduction		Individual Constituent Reductions					
Total Initial Conc. :	12493598 µg/L	CoC	Initial	Subseq.	Initial >SSTL	Subseq. > SSTL	CoC % Reduction
Total Subsequent Conc. :	12485400 µg/L	Benzene	459442	459584	455561	457390	-0.401483007
Total SSTL Conc. :	447591 µg/L	Toluene	626718	625589	569415	573981	-0.801875609
Initial > SSTL :	12046007 µg/L	Ethylbenzene	588235	563737	554530	530688	4.299496871
Subsequent > SSTL :	12056030 µg/L	Xylenes	577336	577063	237731	244473	-2.83597848
Total Reduction:	-0.0832 %	MTBE	10236073	10254563	10225428	10246321	-0.204323966
		Naphthalene	5794	4864	3342	3177	4.937163375
		EDB	0	0	0	0	non-SSTL CoC



C.Earl Hunter, Commissioner

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

DEC 08 2006

**MR STEVEN SMITH
180 SHALLOW FORD RD
SALEM SC 29676**

**Re: Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; CA #17616
Release reported November 28, 2000
Corrective Action System Evaluation (CASE) received December 4, 2006
Oconee County**

Dear Mr. Smith:

The Underground Storage Tank (UST) Program has reviewed the referenced report. The report documents completion of an AFVR event on monitoring wells MW-1 and MW-8, and abandonment of the interceptor trench located on adjacent property owned by Mr. James Reid. The Program notes that free-phase product persists in MW-1 and MW-8, and therefore recommends that AFVR events be continued at the site.

Based upon the current data, the Program calculates a 0.38% reduction in the total concentration of chemicals of concern (CoC) across the site (see enclosed CoC reduction calculation sheets). The 85.65% reduction cited by your contractor does not factor in the correct CoC saturation values for free-phase product (those used in the original bid solicitation) or the last reported values for monitoring well MW-14 (not located during the last sampling event).

The next CASE report for the February 2007 quarterly sampling event is due on or before **April 2, 2006**. On all correspondence regarding this site, please reference UST Permit #03439. If you have any questions regarding this correspondence, feel free to contact me by telephone at (803) 896-6398, by fax at (803) 896-6245, or by e-mail at padgetjp@dhec.sc.gov.

Sincerely,

**Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management**

JPP/jpp
03439.11

enc: CoC reduction calculation sheets

cc: Chris Boggs, P.G., SEI Environmental, Inc., 130 Penmarc Drive, Suite #108,
Raleigh, NC 27603 (w/enc)
James W. Reid, 185 Reid Drive, Salem, SC 29676 (w/enc)
Technical file (w/o enc)

03439 Highway 11 Grocery

8/28/06 sampling

Enter Initial, SSTL and subsequent

CoC Reduction: 0.3777 %

Well		Benzene	Toluene	Ethylbenzene	Xylene	MTBE	Naphthalene	EDB	Totals
MW-1	Initial	226000	301000	280000	278000	5110000	2000	0	6197000
	SSTL	22	4497	3148	44969	180	112	0	52928
	Initial > SSTL	225978	296503	276852	233031	5109820	1888	0	6144072
	Subsequent	226000	301000	280000	278000	5110000	2000	0	6197000
	Subsequent > SSTL	225978	296503	276852	233031	5109820	1888	0	6144072
MW-2	Initial	13	8	1	5	5	5	0	37
	SSTL	13	8	1	5	5	5	0	37
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	8	1	1	3	1	2	0	16
	Subsequent > SSTL	0	0	0	0	0	0	0	0
MW-3	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	3	1	2	0	9
	Subsequent > SSTL	0	0	0	2	0	0	0	2
MW-4	Initial	1500	5320	620	3360	810	500	0	12110
	SSTL	1500	5320	620	3360	810	500	0	12110
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	195	24	19	184	225	12	0	659
	Subsequent > SSTL	0	0	0	0	0	0	0	0
MW-5	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	3	1	2	0	9
	Subsequent > SSTL	0	0	0	2	0	0	0	2
MW-6	Initial	1780	4950	490	2880	6350	500	0	16950
	SSTL	1780	4950	490	2880	6350	500	0	16950
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	34	61	2	194	355	20	0	666
	Subsequent > SSTL	0	0	0	0	0	0	0	0
MW-7	Initial	34	20	1	8	7	5	0	75
	SSTL	22	20	1	8	7	5	0	63
	Initial > SSTL	12	0	0	0	0	0	0	12
	Subsequent	50	44	1	23	2	2	0	122
	Subsequent > SSTL	28	24	0	15	0	0	0	67
MW-8	Initial	226000	301000	280000	278000	5110000	2000	0	6197000
	SSTL	204	40888	28622	278000	1362	1021	0	350097
	Initial > SSTL	225796	260112	251378	0	5108638	979	0	5846903
	Subsequent	226000	301000	280000	278000	5110000	2000	0	6197000
	Subsequent > SSTL	225796	260112	251378	0	5108638	979	0	5846903
MW-10	Initial	115	185	68	328	86	9	0	791
	SSTL	115	185	68	328	86	9	0	791
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	203	412	67	226	137	5	0	1050
	Subsequent > SSTL	88	227	0	0	51	0	0	366
MW-11	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	3	1	1	9	5	2	0	21
	Subsequent > SSTL	2	0	0	8	0	0	0	10
MW-14	Initial	3780	13800	27000	14700	7010	500	0	66790
	SSTL	5	1000	700	10000	40	25	0	11770
	Initial > SSTL	3775	12800	26300	4700	6970	475	0	55020
	Subsequent	2010	4080	1180	6320	3320	261	0	17171
	Subsequent > SSTL	2005	3080	480	0	3280	236	0	9081

03439 Highway 11 Grocery

Total Concentration Reduction		Individual Constituent Reductions					
		CoC	Initial	Subseq.	Initial >SSTL	Subseq. > SSTL	CoC % Reduction
Total Initial Conc. :	12493598 µg/L	Benzene	459442	454508	455561	453897	0.365263927
Total Subsequent Conc. :	12413840 µg/L	Toluene	626718	606628	569415	559946	1.662934766
Total SSTL Conc. :	447591 µg/L	Ethylbenzene	588235	561276	554530	528710	4.656195337
Initial > SSTL :	12046007 µg/L	Xylenes	577336	562974	237731	233062	1.963984503
Subsequent > SSTL :	12000507 µg/L	MtBE	10236073	10224140	10225428	10221789	0.035587752
Total Reduction: 0.37772 %		Naphthalene	5794	4314	3342	3103	7.151406344
		EDB	0	0	0	0	non-SSTL CoC

03439

From: Joel P. Padgett
To: Boggs, Chris
Date: 11/20/2006 10:56:30 AM
Subject: Re: FW: Reid Property

Chris-

I have reviewed the analytical data for the water sample collected 10/19/06 from the trench located on Mr. Reid's property. All chemicals of concern are below the risk-based screening levels (Federal MCLs for drinking water). Accordingly, SEI Environmental may proceed with the trench abandonment and discharge the water into the nearby creek provided that: 1) SEI has permission to proceed from the landowner, Mr. James Reid, and, 2) no suspended particulates (i.e silt, clay) are entrained in the discharge water. Please feel free to contact me by phone or e-mail if you have any questions.

-Joel

>>> "Chris Boggs" <cboggs@sei-environmental.com> 11/16/2006 3:29 PM >>>

> -----Original Message-----

> From: Chris Boggs
> Sent: Thursday, November 16, 2006 3:28 PM
> To: padgetjp@dhec.sc.com
> Subject: FW: Reid Property

>

>

>

> -----Original Message-----

> From: Chris Boggs
> Sent: Wednesday, November 15, 2006 11:05 AM
> To: jpadget@dhec.sc.gov
> Subject: Reid Property

>

> Per our conversation here are analytical results for the water sample collected from the trench on the Reid property.

>

> Thanks

> Chris

> > <<f44643 trench water.pdf>>

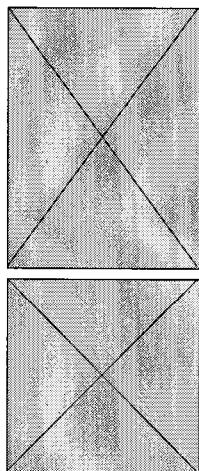
CC: Block, Susan E.

e-Hardcopy 2.0
Automated Report



IT'S ALL IN THE CHEMISTRY

11/15/06



Technical Report for

SEI-Charlotte , NC

James Reid Property/trench, 185 Reid Dr, Salem, SC

Accutest Job Number: F44643

Sampling Date: 10/19/06

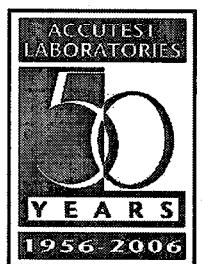
Report to:

SEI Environmental-Raleigh

cboggs@sei-environmental.com

ATTN: Chris Boggs

Total number of pages in report: 8



Test results contained within this data package meet the requirements
 of the National Environmental Laboratory Accreditation Conference
 and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
 Laboratory Director

Certifications FL (DOH E83510), NC (573) NJ (FL002) MA (FL948) IA (386) LA (03051) KS (E-10327) SC, AK
 This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections:

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3.1: Chain of Custody	7

Accutest LabLink@56472 10:52 15-Nov-2006

Sample Summary

SEI-Charlotte, NC

Job No: F44643

James Reid Property/trench, 185 Reid Dr, Salem, SC

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F44643-1	10/19/06	11:00 SS	10/21/06	AQ	Ground Water	TRENCH



Section 2

2

Sample Results

Report of Analysis

Accutest LabLink@56472 10:52 15-Nov-2006

2.1

2

Report of Analysis

Page 1 of 1

Client Sample ID:	TRENCH	Date Sampled:	10/19/06
Lab Sample ID:	F44643-1	Date Received:	10/21/06
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	James Reid Property/trench, 185 Reid Dr, Salem, SC		
Run #1	File ID B042081.D	DF 1	Analyzed 10/23/06
Run #2	By KW	Prep Date n/a	Prep Batch n/a
Run #1	Purge Volume 5.0 ml	Analytical VB17 78	Batch
Run #2			

Purgeable Aromatics, MTBE, Naphthalene

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	1.0	ug/l	
108-88-3	Toluene	5.8	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
1330-20-7	Xylene (total)	3.9	3.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromoformate	110%		86-115%
17060-07-0	1,2-Dichloroethane-D4	88%		73-126%
2037-26-5	Toluene-D8	90%		86-112%
460-00-4	4-Bromofluorobenzene	93%		83-119%

ND = Not detected

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound



Section 3

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

Chain of Custody

CHAIN OF CUSTODY															
 ACCUTEST. Laboratories				4405 VINELAND ROAD • SUITE C-18 ORLANDO, FL 32811 TEL: 407-425-0700 • FAX: 407-425-0707				ACCUTEST JOB #: P64843 ACCUTEST SUBJOB #							
CLIENT INFORMATION				FACILITY INFORMATION				ANALYTICAL INFORMATION				INVENTORY CODES			
NAME: SEI Environmental ADDRESS: 100 Research Dr. Suite 100 CITY: Charlotte, N.C. 28260 STATE: NC ZIP: 28260 SEND REPORT TO: SEI PHONE #: 704-596-9624				PROJECT NAME: Jones Reid Property Trench LOCATION: 185 Reid Dr. PROJECT NO.: Salem, SC 29676 FAX #: 702-566-4605								DW - DRINKING WATER GW - GROUND WATER WW - WASTE WATER SO - SOLID LIQ - LIQUID CH - COL LIQ - OTHER LIQUID SOL - OTHER SOLID			
ACCUTEST SAMPLE #	FIELD ID / POINT OF COLLECTION	COLLECTION				PRESERVATION				LAB USE ONLY					
		DATE	TIME	SAMPLED BY:	MATRIX	6 CP	BOTTLES	PER	MEASURED			REFRACT	PH	TEMP	
/	Trench	Wednesday	11:00	SS	GW	6	6				XX				
DATA TURNAROUND INFORMATION												DATA DELIVERABLE INFORMATION		COMMENTS/REMARKS	
<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAY <input type="checkbox"/> 48 HOUR RUSH <input type="checkbox"/> 24 HOUR EMERGENCY <input type="checkbox"/> OTHER _____		APPROVED BY: _____		<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAY <input type="checkbox"/> COMMERCIAL "B" <input type="checkbox"/> DISK DELIVERABLE <input type="checkbox"/> STATE FORMS <input type="checkbox"/> OTHER (SPECIFY) _____											
EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED															
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY															
RELINQUISHED BY:		DATE/TIME:		RECEIVED BY:		RELINQUISHED BY:		DATE/TIME:		RECEIVED BY:					
<i>[Signature]</i>		10/20/08 10:00 AM		1. <i>[Signature]</i>		2. <i>[Signature]</i>		10/20/08 10:00 AM		2. <i>[Signature]</i> REC'D					
RELINQUISHED BY:		DATE/TIME:		RECEIVED BY:		RELINQUISHED BY:		DATE/TIME:		RECEIVED BY:					
3. <i>[Signature]</i>		3. <i>[Signature]</i>		4. <i>[Signature]</i>		4. <i>[Signature]</i>		4. <i>[Signature]</i>							
RELINQUISHED BY:		DATE/TIME:		RECEIVED BY:		RELINQUISHED BY:		DATE/TIME:		RECEIVED BY:		ON ICE: <i>[Signature]</i>			
5. <i>[Signature]</i>		5. <i>[Signature]</i>		RECEIVED BY: <i>[Signature]</i>		RELINQUISHED BY:		PRESERVE WHERE APPLICABLE: <i>[Signature]</i>				TEMPERATURE: <i>[Signature]</i> C			

F44643: Chain of Custody

Page 1 of 2

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUATEST'S JOB NUMBER: **F44643** CLIENT: **SEI** PROJECT: **French**
DATE/TIME RECEIVED: **10/21/06 2:00** # OF COOLERS RECEIVED: **1** COOLER TEMPS: **52**
METHOD OF DELIVERY: **FEDEX** UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
AIRBILL NUMBERS: **8636 3068 2983**

COOLER INFORMATION

- CUSTODY SEAL NOT PRESENT OR NOT INTACT
CHAIN OF CUSTODY NOT RECEIVED (COC)
ANALYSIS REQUESTED IS UNCLEAR OR MISSING
SAMPLE DATES OR TIMES UNCLEAR OR MISSING
TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- TRIP BLANK PROVIDED
 - TRIP BLANK NOT PROVIDED
 - TRIP BLANK NOT ON COC
 - TRIP BLANK INTACT
 - TRIP BLANK NOT INTACT
 - RECEIVED WATER TRIP BLANK
 - RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

- NUMBER OF ENCORES ?**
NUMBER OF 5035 FIELD KITS ?
NUMBER OF LAB FILLED METALS ?

SUMMARY OF CONVENTIONS

- SUMMARY OF COMMENTS:**

SAMPLE INFORMATION

- SAMPLE LABELS NOT PRESENT ON ALL BOTTLES
CORRECT NUMBER OF CONTAINERS USED
SAMPLE RECEIVED IMPROPERLY PRESERVED
INSUFFICIENT VOLUME FOR ANALYSIS
TIMES ON COC DOES NOT MATCH LABEL(S)
ID'S ON COC DOES NOT MATCH LABEL(S)
VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
UNCLEAR FILTERING INSTRUCTIONS
UNCLEAR COMPOSITING INSTRUCTIONS
SAMPLE CONTAINER(S) RECEIVED BROKEN
% SOLIDS JAR NOT RECEIVED
5035 FIELD BIT NOT FROZEN WITHIN 48 HOUR'S
PRESIDENTIAL CHLORINE PRESENT

[APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS]

TECHNICIAN SIGNATURE/DATE

TECHNICIAN SIGNATURE/DATE:

ASBD 10/03/08

F44643: Chain of Custody

Page 2 of 2



C. Earl Hunter, Commissioner

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

OCT 09 2006

MR CHRIS BOGGS PG
SEI ENVIRONMENTAL INC
130 PENMARC DR STE 108
RALEIGH NC 27603-2434

Re: Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; Cost Agreement #28113
Solicitation for abandonment of recovery trench received April 20, 2006
Oconee County

Dear Mr. Boggs:

The Underground Storage Tank (UST) Program has reviewed the referenced solicitation submitted by SEI Environmental, Inc. The Program accepts your price quotation for abandonment of the recovery trench located on property adjacent to Highway 11 Grocery.

Cost Agreement #28113 has been approved in the amount of \$5,344.05 and will be kept on file for payment from the SUPERB Account. Trench abandonment activities may proceed upon receipt of this letter. Please contact the adjacent property owner, Mr. James W. Reid, at (864) 944-0360 to coordinate the necessary property access prior to initiating work. SCDHEC reserves the authority to pay only for work properly performed and/or technically justified. Further, SCDHEC reserves the right to question and/or reject costs if deemed unreasonable, and the right to audit project records at any time during the project or after completion of the work.

An invoice and brief report documenting the trench abandonment activities must be submitted within 120 days of the date of this letter. Please reference Cost Agreement #28113 on the invoice and any supporting documentation submitted for the work. A completed W-9 form will be necessary to process your invoice for payment. The W-9 form and invoice form have been enclosed for your convenience. Please note that Sections 44-2-110(4) and 44-2-130(B) of the SUPERB Statute state that no costs will be allowed unless prior approval from the Department is obtained. If for any reason there is a change in the proposed scope of work, the change must be pre-approved by the Department in order for SEI Environmental to seek additional payment from SUPERB.

On all correspondence concerning this site, please reference UST Permit #03439. If there are any questions concerning this correspondence, please feel free to contact me by telephone at (803) 896-6398, by fax at (803) 896-6245, or by e-mail at padgettjp@dhec.sc.gov.

Sincerely,

Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

JPP/jpp
03439.10

enc: W-9 form
Assessment Component Invoice form

cc: Steven Smith, 180 Shallow Ford Rd., Salem, SC 29676 (w/o enc)
James W. Reid, 185 Reid Dr., Salem, SC 29203 (w/o enc)
Technical file (w/enc)

Approved Cost Agreement

113

Facility: 03439 HWY 11 GROCERY

PADGETJP

PO Number:

<u>Task / Description</u>	<u>Categories</u>	<u>Item Description</u>	<u>Qty / Pct</u>	<u>Unit Price</u>	<u>Amount</u>
18 MISCELLANEOUS		INTERCEPTOR TRENCH ABANDONMENT	1.0000	5,344.05	5,344.05
Total Amount					5,344.05



C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

OCT 03 2006

MR STEVEN SMITH
180 SHALLOW FORD RD
SALEM SC 29676

Re: Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; CA #17616
Release reported November 28, 2000
Corrective Action System Evaluation (CASE) received September 25, 2006
Notice of Alleged Violation
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program has reviewed the referenced report. The report indicates that free-phase product has increased in monitoring well MW-8 and reemerged in monitoring well MW-1. The Program notes that your contractor did not conduct AFVR events on either well during the last monitoring period as proposed in the CASE report received on May 1, 2006. As the continued presence of free-phase product in the wells is contributing to the on-going contamination noted in creek sample CK-1, the Program requests that your contractor implement the measures proposed in the referenced CASE report, and CASE reports received on December 28, 2005, and May 1, 2006 (AFVR events on MW-1, MW-8, MW-10, MW-14). A report documenting the AFVR events must be submitted to the Program on or before **December 2, 2006**. Failure to do so will result in referral to enforcement.

The Program has not received the two additional bids (or statements of no bid) requested in correspondence to you added contractor for abandonment of the recovery trench on Mr. Reid's property requested in correspondence to you dated May 17, 2006. The bids must be submitted to the Program by **December 2, 2006**. Failure to do so will result in referral to enforcement.

Based upon the current data, the Program calculates a 0.38% reduction in the total concentration of chemicals of concern (CoC) across the site (see enclosed CoC reduction calculation sheets). As noted in previous correspondence you dated December 29, 2005 and May 16, 2006, the CoC saturation values used in the reduction calculation must be the same as those reported in the bid solicitation (i.e. 226,000 ug/l for benzene, 301,000 ug/l for toluene, etc.).

The Program notes that the referenced CASE report was due on July 3, 2006. Please have your contractor adhere to a quarterly schedule as outlined in the bid specification. To maintain the required schedule, the next sampling event should be conducted in November 2006 with a CASE report due no later than January 2, 2006. On all correspondence regarding this site, please reference

UST Permit #03439. If you have any questions regarding this correspondence, feel free to contact me by telephone at (803) 896-6398, by fax at (803) 896-6245, or by e-mail at padgettjp@dhec.sc.gov.

Sincerely,



Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

JPP/jpp
03439.8

enc: CoC reduction calculation sheets

cc: Chris Boggs, P.G., SEI Environmental, Inc., 130 Penmarc Drive, Suite 108, Raleigh, NC
27603-2434 (w/enc)
James W. Reid, 185 Reid Drive, Salem, SC 29676 (w/enc)
Technical file (w/o enc)

03439 Highway 11 Grocery

8/28/06 sampling

Enter Initial, SSTL and subsequent

CoC Reduction: 0.3776 %

Well		Benzene	Toluene	Ethylbenzene	Xylene	MTBE	Naphthalene	EDB	Totals
MW-1	Initial	226000	301000	280000	278000	5110000	2000	0	6197000
	SSTL	22	4497	3148	44969	180	112	0	52928
	Initial > SSTL	225978	296503	276852	233031	5109820	1888	0	6144072
	Subsequent	226000	301000	280000	278000	5110000	2000	0	6197000
	Subsequent > SSTL	225978	296503	276852	233031	5109820	1888	0	6144072
MW-2	Initial	13	8	1	5	5	5	0	37
	SSTL	13	8	1	5	5	5	0	37
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	32	3	1	4	1	2	0	43
	Subsequent > SSTL	19	0	0	0	0	0	0	19
MW-3	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	3	1	2	0	9
	Subsequent > SSTL	0	0	0	2	0	0	0	2
MW-4	Initial	1500	5320	620	3360	810	500	0	12110
	SSTL	1500	5320	620	3360	810	500	0	12110
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	43	7	4	88	153	4	0	299
	Subsequent > SSTL	0	0	0	0	0	0	0	0
MW-5	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	3	1	2	0	9
	Subsequent > SSTL	0	0	0	2	0	0	0	2
MW-6	Initial	1780	4950	490	2880	6350	500	0	16950
	SSTL	1780	4950	490	2880	6350	500	0	16950
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	99	76	2	243	22	4	0	446
	Subsequent > SSTL	0	0	0	0	0	0	0	0
MW-7	Initial	34	20	1	8	7	5	0	75
	SSTL	22	20	1	8	7	5	0	63
	Initial > SSTL	12	0	0	0	0	0	0	12
	Subsequent	99	95	4	127	7	2	0	334
	Subsequent > SSTL	77	75	3	119	0	0	0	274
MW-8	Initial	226000	301000	280000	278000	5110000	2000	0	6197000
	SSTL	204	40888	28622	278000	1362	1021	0	350097
	Initial > SSTL	225796	260112	251378	0	5108638	979	0	5846903
	Subsequent	226000	301000	280000	278000	5110000	2000	0	6197000
	Subsequent > SSTL	225796	260112	251378	0	5108638	979	0	5846903
MW-10	Initial	115	185	68	328	86	9	0	791
	SSTL	115	185	68	328	86	9	0	791
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	79	98	16	69	169	2	0	433
	Subsequent > SSTL	0	0	0	0	83	0	0	83
MW-11	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	6	1	1	83	4	2	0	97
	Subsequent > SSTL	5	0	0	82	0	0	0	87
MW-14	Initial	3780	13800	27000	14700	7010	500	0	66790
	SSTL	5	1000	700	10000	40	25	0	11770
	Initial > SSTL	3775	12800	26300	4700	6970	475	0	55020
	Subsequent	2010	4080	1180	6320	3320	261	0	17171
	Subsequent > SSTL	2005	3080	480	0	3280	236	0	9081

03439 Highway 11 Grocery

Total Concentration Reduction		Individual Constituent Reductions					
CoC		Initial	Subseq.	Initial >SSTL	Subseq. > SSTL	CoC % Reduction	
Benzene	459442	454373		455561	453880	0.36899559	
Toluene	626718	606365		569415	559770	1.693843682	
Ethylbenzene	588235	561213		554530	528713	4.655654338	
Xylenes	577336	562949		237731	233240	1.88910996	
MTBE	10236073	10223700		10225428	10221821	0.035274807	
Naphthalene	5794	4287		3342	3103	7.151406344	
EDB	0	0		0	0	non-SSTL CoC	



C. Earl Hunter, Commissioner

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

MAY 17 2006

MR STEVEN SMITH
180 SHALLOW FORD RD
SALEM SC 29676

Re: Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; CA #17616
Release reported November 28, 2000
Corrective Action System Evaluation (CASE) received May 1, 2006
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program has reviewed the referenced report. The Program notes that free-phase product (FPP) has decreased in monitoring well MW-8 and was not detected in monitoring well MW-1. However, the toluene concentration in MW-1 exceeds the effective solubility limit for gasoline indicating that FPP may still be present. The Program concurs with your contractor's proposal to conduct aggressive fluid and vapor recovery events on monitoring wells MW-1, MW-8, MW-10, and MW-14 to remove FPP and reduce CoC concentrations.

The Program has received one bid through your contractor for abandonment of the recovery trench on Mr. Reid's property. Please note that two more written bids from different solicitors will be necessary to meet SC procurement requirements.

Based upon the current data, the Program calculates a 49.91% reduction in the total concentration of chemicals of concern (CoC) across the site (see enclosed CoC reduction calculation sheets). Again, as mentioned in correspondence to you dated December 29, 2005, please note that the CoC saturation values used in the reduction calculation must be the same as those reported in the bid solicitation (i.e. 226,000 ug/l for benzene, 301,000 ug/l for toluene, etc.).

The next CASE report for the May 2006 quarterly sampling event is due on or before July 3, 2006. On all correspondence regarding this site, please reference UST Permit #03439. If you have any questions regarding this correspondence, feel free to contact me by telephone at (803) 896-6398, by fax at (803) 896-6245, or by e-mail at padgettjp@dhec.sc.gov.

Sincerely,

Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

JPP/jpp
03439.8

enc: CoC reduction calculation sheets

cc: Chris Boggs, P.G., SEI Environmental, Inc., 6190 Regency Parkway, Suite #308,
Norcross, GA 30071 (w/enc)
James W. Reid, 185 Reid Drive, Salem, SC 29676 (w/enc)
Technical file (w/o enc)

03439 Highway 11 Grocery

Enter Initial, SSTL and subsequent

CoC Reduction: 49.9126 %

Well		Benzene	Toluene	Ethylbenzene	Xylene	MtBE	Naphthalene	FDB	Totals
MW-1	Initial	226000	301000	280000	278000	5110000	2000	0	6197000
	SSTL	22	4497	3148	44969	180	112	0	52928
	Initial > SSTL	225978	296503	276852	233031	5109820	1888	0	6144072
	Subsequent	20700	41100	3100	11700	103000	4000	0	183600
	Subsequent > SSTL	20678	36603	0	0	102820	3888	0	163989
MW-2	Initial	13	8	1	5	5	5	0	37
	SSTL	13	8	1	5	5	5	0	37
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	12	4	1	3	1	2	0	23
	Subsequent > SSTL	0	0	0	0	0	0	0	0
MW-3	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	3	1	2	0	9
	Subsequent > SSTL	0	0	0	2	0	0	0	2
MW-4	Initial	1500	5320	620	3360	810	500	0	12110
	SSTL	1500	5320	620	3360	810	500	0	12110
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	3	1	2	0	9
	Subsequent > SSTL	0	0	0	0	0	0	0	0
MW-5	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	3	1	2	0	9
	Subsequent > SSTL	0	0	0	2	0	0	0	2
MW-6	Initial	1780	4950	490	2880	6350	500	0	16950
	SSTL	1780	4950	490	2880	6350	500	0	16950
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1280	3480	399	2880	8600	200	0	16839
	Subsequent > SSTL	0	0	0	0	2250	0	0	2250
MW-7	Initial	34	20	1	8	7	5	0	75
	SSTL	22	20	1	8	7	5	0	63
	Initial > SSTL	12	0	0	0	0	0	0	12
	Subsequent	27	42	4	24	1	2	0	100
	Subsequent > SSTL	5	22	3	16	0	0	0	46
MW-8	Initial	226000	301000	280000	278000	5110000	2000	0	6197000
	SSTL	204	40888	28622	278000	1362	1021	0	350097
	Initial > SSTL	225796	260112	251378	0	5108638	979	0	5846903
	Subsequent	226000	301000	280000	278000	5110000	2000	0	6197000
	Subsequent > SSTL	225796	260112	251378	0	5108638	979	0	5846903
MW-10	Initial	115	185	68	328	86	9	0	791
	SSTL	115	185	68	328	86	9	0	791
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	3	1	2	0	9
	Subsequent > SSTL	0	0	0	0	0	0	0	0
MW-11	Initial	1	1	1	1	5	5	0	14
	SSTL	1	1	1	1	5	5	0	14
	Initial > SSTL	0	0	0	0	0	0	0	0
	Subsequent	1	1	1	3	2	2	0	10
	Subsequent > SSTL	0	0	0	2	0	0	0	2
MW-14	Initial	3780	13800	27000	14700	7010	500	0	66790
	SSTL	5	1000	700	10000	40	25	0	11770
	Initial > SSTL	3775	12800	26300	4700	6970	475	0	55020
	Subsequent	3290	10600	1820	11000	4950	400	0	32060
	Subsequent > SSTL	3285	9600	1120	1000	4910	375	0	20290

03439 Highway 11 Grocery

Total Concentration Reduction		Individual Constituent Reductions					
		CoC	Initial	Subseq.	Initial >SSTL	Subseq. > SSTL	CoC % Reduction
Total Initial Conc. :	12493598 µg/L	Benzene	459442	251319	455561	249764	45.17441133
Total Subsequent Conc. :	6429867 µg/L	Toluene	626718	356268	569415	306337	46.20145237
Total SSTL Conc. :	447591 µg/L	Ethylbenzene	588235	285347	554530	252501	54.4657638
Initial > SSTL:	12046007 µg/L	Xylenes	577336	303720	237731	1068	99.55075274
Subsequent > SSTL:	6033530 µg/L	MtBE	10236073	5226582	10225428	5218618	48.96430741
Total Reduction: 49.9126 %		Naphthalene	5794	6631	3342	5242	-56.85218432
		EDB	0	0	0	0	non-SSTL CoC



South Carolina Department of Health
and Environmental Control

2600 Bull Street
Columbia, SC 29201-1708

FAX MESSAGE

Date: 3/31/06

Number of Pages Including Cover Sheet: 2

Please Deliver This Fax Message

TO:

Cary

Name

Pollock & Assoc

Organization/Department

(864) 582-5472 582-7280

Fax Number

Phone Number

FROM: Joni Padgett

Bureau of Land & Waste Management
Underground Storage Tank Program

Fax Number

(803) 896-6245

Regulatory Phone

(803) 896-7957

Technical Phone

(803) 896-6241

SUBJECT/COMMENT: _____



PROMOTE PROTECT PROSPER
South Carolina Department of Health
and Environmental Control

NOTICE

State of South Carolina
Department of Health and Environmental Control
Columbia, South Carolina

Public Notice #03439-01: Hwy 11 Grocery 03439

Date: 1/17/03

NOTICE OF PROPOSED CORRECTIVE ACTION

Section 280.67 of the S.C. Underground Storage Tank Control Regulations (R.61-92) requires that any Corrective Action Plan prepared to meet the requirements of 280.66 must be placed on notice for public comment. The following applicant has submitted a Corrective Action Plan for the rehabilitation of groundwater contaminated by petroleum constituents released from underground storage tanks (USTs).

Applicant: Hwy 11 Grocery, 13527 N Hwy. 11, Salem, SC 29506. The Hwy 11 Grocery has four USTs used for storage of petroleum products. The facility is located at 13527 N Hwy. 11, in Oconee County, South Carolina.

Corrective Action will consist of vacuum extraction and bioremediation. These corrective action activities will be followed by Intrinsic Remediation/Natural Attenuation for the rehabilitation of ground water contaminated by petroleum constituents released from underground storage tanks. Vacuum extraction is a technology in which air is suctioned from the subsurface utilizing a mechanical pump for the purpose of removing contaminants by volatilization and controlling the potential migration of vapors. Bioremediation is a technology where the addition of nutrients enhances the biological degradation of the petroleum product.

A copy of the Corrective Action Plan is available for review at the Department's Freedom of Information Office, 2600 Bull Street in Columbia, SC. Please call (803) 898-3882 to schedule an appointment.

Persons wishing to comment upon or object to Corrective Action approval are invited to submit same in writing within fifteen (15) days of the date of this notice to South Carolina Department of Health and Environmental Control, Underground Storage Tank Program, 2600 Bull Street, Columbia, S.C. 29201 or call Konstantine Akhvlediani at (803) 896-6647. The public notice #03439-01 should be placed at the top of the first page of comments. Where there is a significant degree of public interest, the Department will hold a public hearing.

Please bring the foregoing to the attention of persons who you know will be interested in this matter.



C. Earl Hunter, Commissioner

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

JAN 05 2006

MR HARTFORD HIGHT PG
SEI ENVIRONMENTAL INC
6190 REGENCY PKWY STE 308
NORCROSS, GA 30071

Re: Pay For Performance Corrective Action Projects
Proposed Reporting Schedule received December 12, 20051

Dear Mr. Hight:

Thank you for providing the proposed reporting schedule. The schedule has been reviewed by our project managers and is approvable as submitted with one exception.

For the Perry's Grocery project (UST Permit ID# 03426, SEI Project No. 303196) semi-annual sampling and reporting was proposed. Because this corrective action is being augmented with the use of the Potassium Triple Salt, the Department would like to reports submitted on a quarterly basis to better characterize the effect of the new technology.

The UST Program appreciates SEI's efforts to get these projects back on track. We look forward to working with you in the near future to bring these sites to closure. Please feel free to contact me at (803) 896-6585 if you have any questions or need additional information.

Sincerely,

Christopher S. Doll, P.G., Manager
Northeastern SC Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

Cc: Technical Files (11585, 03713, 14457, 09322, 03467, 11732, 14839, 06601, 02476, 08327, 09160,
14433, 14561, 03439, 05981, 02427, 03426, 14541, 04031, 09319, 03462, 03463,
09370, 08376, 02542, 08551, 02724, 04744, 11756)

Lee Monts, Manager, Southwestern SC Corrective Action Section
Kent Coleman, P. G., Director, Assessment and Corrective Action Division

DHEC/UST/010506



C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

DEC 30 2005

MR STEVEN SMITH
180 SHALLOW FORD RD
SALEM SC 29676

Re: Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; CA #17616
Release reported November 28, 2000
Corrective Action System Evaluation (CASE) received December 28, 2005
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program has reviewed the referenced report. The Program notes that free-phase product (FPP) has dramatically increased in monitoring well MW-8. As the FPP in MW-8 likely contributes to increasing concentrations of chemicals of concern (CoC) in creek sample CK-1, it is imperative for your contractor to take aggressive steps to remove it. Further, the Program requests that SEI submit a cost estimate for abandonment of the interceptor trench located north of MW-8 on property owned by Mr. J.W. Reid. As the trench was installed prior corrective action as an emergency abatement measure, abandonment costs are not associated with the corrective action bid solicitation.

Based upon the current data, the Program calculates a -.33% reduction in the total concentration of chemicals of concern (CoC) across the site. Please note that the CoC saturation values used in the reduction calculation must be the same as those reported in the bid solicitation (i.e. 226,000 ug/l for benzene, 301,000 ug/l for toluene, etc.).

The next CASE report for the February 2006 quarterly sampling event is due on or before **April 3, 2006**. On all correspondence regarding this site, please reference UST Permit #03439. If you have any questions regarding this correspondence, feel free to contact me by telephone at (803) 896-6398, by fax at (803) 896-6245, or by e-mail at padgettjp@dhec.sc.gov.

Sincerely,

Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

JPP/jpp
03439.7

cc: Hartford W. Hight, P.G., SEI Environmental, Inc., 6190 Regency Parkway, Suite #308,
Norcross,
GA 30071
James W. Reid, 185 Reid Drive, Salem, SC 29676
Technical file



**South Carolina Department of
Health and Environmental Control**

Report On Records Destroyed

Records and Forms Management Unit

(UST Program ONLY)

1. Return this form to:
DHEC Forms Manager-Heritage Building
1777 St. Julian Place
Columbia, SC 29204

The records listed below have been disposed of in accordance with provisions of the Public Records Act, Code of Laws of South Carolina, 1976, Sections 30-1-10 through 30-1-140, as amended, and approved Records Retention Schedules.

2. Signature:

3. Date: 12/2/05

Records Officer signature:

*Documents put in recycle box on date of destruction

91

Total cubic Feet
destroyed

SITE ID # 03439

REVIEWED BY J. Padgett

FACILITY NAME: Highway 11 Grocery

DHEC 0521 (4/1998) Page 1 of 2 [Records Retention schedule #'s 12-300 and 12-331]



C. Earl Hunter, Commissioner

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

SEP 29 2005

MR STEVEN SMITH
180 SHALLOW FORD RD
SALEM SC 29676

Re: Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; CA #17616
Release reported November 28, 2000
Corrective Action System Evaluation (CASE) received September 26, 2005
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program has reviewed the referenced report and concurs with your contractor's recommendation to continue AFVR events on MW-8. Reduction of free-phase product in this well will help reduce concentrations of chemicals of concern (CoC) in monitoring well MW-14 and in the creek at sample locations CK-1 and CK-3. The Program also recommends that your contractor consider an AFVR event on monitoring well MW-1 to reduce dissolved CoC concentrations. The current toluene concentration in this well exceeds the effective solubility level for gasoline and therefore, free-phase product may be present.

The next CASE report for the November 2005 quarterly sampling event is due on or before **January 1, 2006**. On all correspondence regarding this site, please reference UST Permit #03439. If you have any questions regarding this correspondence, feel free to contact me by telephone at (803) 896-6398, by fax at (803) 896-6245, or by e-mail at padgettjp@dhec.sc.gov.

Sincerely,

Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

JPP/jpp
03439.6

cc: Hartford W. Hight, P.G., SEI Environmental, Inc., 130 Penmarc Drive, Suite 108, Raleigh, NC
27603-2434
Technical file

DHEC/UST/JPP/092605



C. Earl Hunter, Commissioner

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

JUN 10 2005

MR STEVEN SMITH
180 SHALLOW FORD RD
SALEM SC 29676

Re: Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; CA #17616
Release reported November 28, 2000
Corrective Action System Evaluation (CASE) received June 3, 2005
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced report. The report documents that multiple Aggressive Fluid and Vapor Recovery (AFVR) events have been successful in removing free-phase product from monitoring well MW-8. The Program concurs with your contractor's recommendation to continue AFVR events on MW-8 if necessary, and to evaluate alternative corrective action technologies to reduce the concentrations of chemicals of concern (CoC) at the site.

Your contractor requested removal from sampling or reduction in sampling frequency for monitoring wells MW-3, MW-11, MW-12, MW-13, MW-15, DMW-2, and DMW-4 citing historic lack of detectable CoC concentrations. The Program approves omission of MW-3, MW-11, MW-13, MW-15, and DMW-4 from quarterly monitoring. However, quarterly sampling of MW-12 and DMW-2 must be continued. The Program also approves your contractor's request to relocate of creek sample CK-2 to a point just southeast of MW-2. Please note that your contractor will be required to sample all monitoring wells during the post-corrective action monitoring period.

The next CASE report for the June 2005 quarterly sampling event is due on or before **August 1, 2005**. On all correspondence regarding this site, please reference UST Permit #03439. If you have any questions regarding this correspondence, feel free to call me at (803) 896-6398 or (800) 826-5435 (within South Carolina only), by fax at (803) 896-6245, or by e-mail at padgettj@dhc.sc.gov.

Sincerely,

Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

JPP/jpp
03439.5

cc: William D. Wood, Jr., P.G., SEI Environmental, Inc., 3021 McNaughton Drive, Suite 9,
Columbia, SC 29223
Technical file

DHEC/UST/JPP/060905



63439

C. Earl Hunter, Commissioner

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

APR 28 2005

MR BILL WOOD
SEI ENVIRONMENTAL INC
3021 MCNAUGHTON DR STE 9
COLUMBIA SC 29223

Re: SEI Environmental Pay For Performance Projects
Meeting on March 23, 2005

Dear Mr. Wood:

On behalf of Lee Monts and the staff of the Assessment and Corrective Action Division, I would like to express our thanks for you and your colleagues taking the time to meet and discuss SEI Environmental's current situation regarding pay for performance (PfP) cleanups.

As we discussed, it is the Department's desire to see SEI accomplish the following three objectives in relation to these projects:

1. Return projects to a regular sampling and reporting schedule;
2. Re-establish reductions at sites where levels of chemicals of concern (CoC) have rebounded; and,
3. Begin closing out those projects that have achieved 95+ percent reduction of CoC but progress is no longer occurring.

In response to the first objective, you indicated that all projects would be back on schedule by the end of April, at the latest. You also stated that SEI has hired staff in the Columbia office and has reallocated personnel resources in other offices to assist with this effort.

In order to accomplish the other two objectives, SEI provided several proposals:

1. In order to limit some short-term costs, SEI proposes to drop historically clean monitoring wells from the sampling schedules of appropriate sites;
2. On some projects, especially the older ones, SEI would like to confirm/update the receptor surveys and possibly re-model the SSTLs;
3. On selected sites SEI will implement changes in technology, to include chemical oxidation. Mr. Mark Martin will meet with DHEC staff in the next few weeks to provide a detailed overview of his technology.

All site-specific proposals should be submitted to the individual project managers for review. Changes in technology will require a new public notice period.

Mr. Wood

Page 2

You also raised the subject of monitoring wells that formerly contained free phase product. As we understand your hypothesis, the free phase product has been smeared in the well and is producing significant levels of CoC in subsequent sampling events that are not representative of the aquifer. In order to correct this condition, you would like to propose some method to "sterilize" these monitoring wells. You are asked to provide whatever data you may have to support your hypothesis along with your proposal. While treatment of monitoring wells is not allowed under the terms and conditions of the PfP agreements, the UST Program will consider your proposal.

We were encouraged by the statements of Mr. McAllen Finley that SEI has every intention of completing the work at all of these sites. We appreciate that Mr. Finley traveled from Nashville to attend this meeting.

Please feel free to contact me at (803) 896-6585 if you have any questions or need additional information.

Sincerely,



Christopher S. Doll, P.G., Manager
Northeastern SC Corrective Action Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

Cc: McAllen Finley, SEI Environmental, 2506 Grandview Ave., Nashville, TN 37211
Kent Coleman, Director, Assessment and Corrective Action Division
Lee Monts, Manager, Southwestern SC Corrective Action Section
Technical Files

DHEC/UST/032805



C. Earl Hunter, Commissioner

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

DEC 29 2004

MR STEVEN SMITH
180 SCHALLOW FORD RD
SALEM SC 29676

Re: Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; CA #17616
Release reported November 28, 2000
Corrective Action System Evaluation (CASE) received December 16, 2004
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced report. The report documents that free-phase product persists in MW-8 and high concentrations of chemicals of concern (CoC) are present in monitoring well MW-14 adjacent to Fall Creek. As the continued presence of free-phase product and elevated CoC pose a threat to the creek, the Program requests that your contractor submit a corrective action plan (CAP) addendum that addresses the problem.

The CAP addendum and next CASE report for the December 2004 quarterly sampling event are due on or before **February 1, 2005**. On all correspondence regarding this site, please reference UST Permit #03439. If you have any questions regarding this correspondence, feel free to call me at (803) 896-6398 or (800) 826-5435 (within South Carolina only), by fax at (803) 896-6245, or by e-mail at padgettjp@dhec.sc.gov.

Sincerely,

Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

JPP/jpp
03439.3

cc: David Pittman, SEI Environmental, Inc., 3021 McNaughton Drive, Suite 9, SC 29223
Technical file

DHEC/UST/JPP/122904

FIELD ACTIVITY WORKSHEET ORDER

Date of Request: September 9, 2004

Type of Request:

(Please indicate your request with a check mark)

- | | | |
|-----------|--------------------|-------------------------------------|
| Emergency | (<2 Working Days) | <input type="checkbox"/> |
| Specific | (1-5 Working Days) | <input type="checkbox"/> |
| Routine | (10 Working Days) | <input checked="" type="checkbox"/> |

Please specify the type of work to be completed:

Sample Reed WSWs. Check creek near MW-12 and CK-1 for possible FP.

Facility Name: Highway 11 Grocery

o/o

Permit Number: 03439

Jones W - Reid

Project Manager: J. Padgett

185 Reid Dr
Salem, SC 29676

County: Oconee

(Field Staff Only)

Date Field Activity Completed:
Completed by Field Staff:
Date Field Notes Entered into EFIS:

Field Staff Comments:

REMEMBER TO ESTABLISH COST PROPOSALS

PACE CA#: 23057

DICK CA#: _____

PALMETTO ENV GROUP CA#: _____

Fill out back of this form. Photocopy, attach a completed CP cover for each CP. Thank you very much!



[Send To Printer](#) [Back to Map](#)

13527 N Highway 11
Salem SC
29676-2926 US

Notes:

.....
.....

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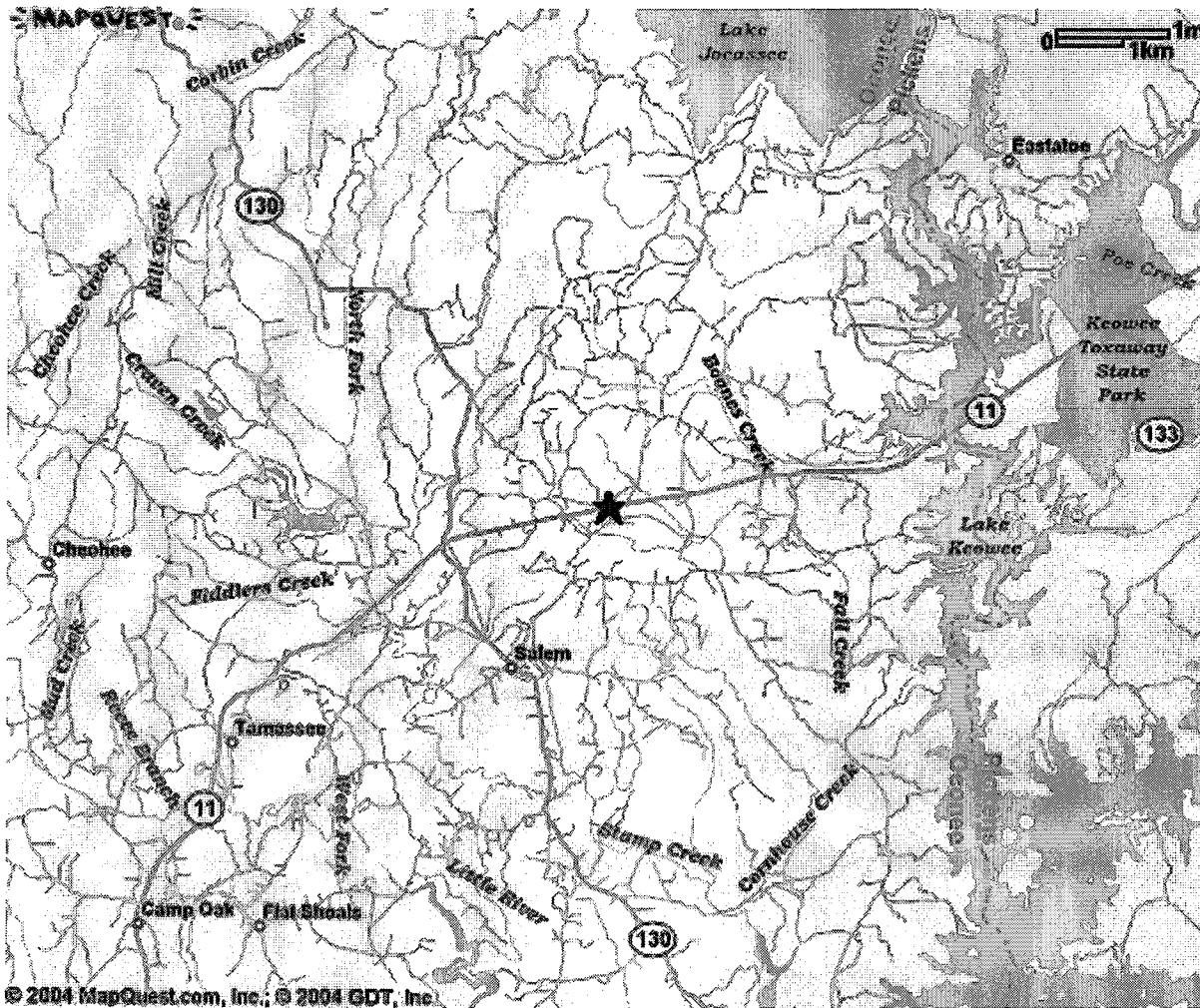
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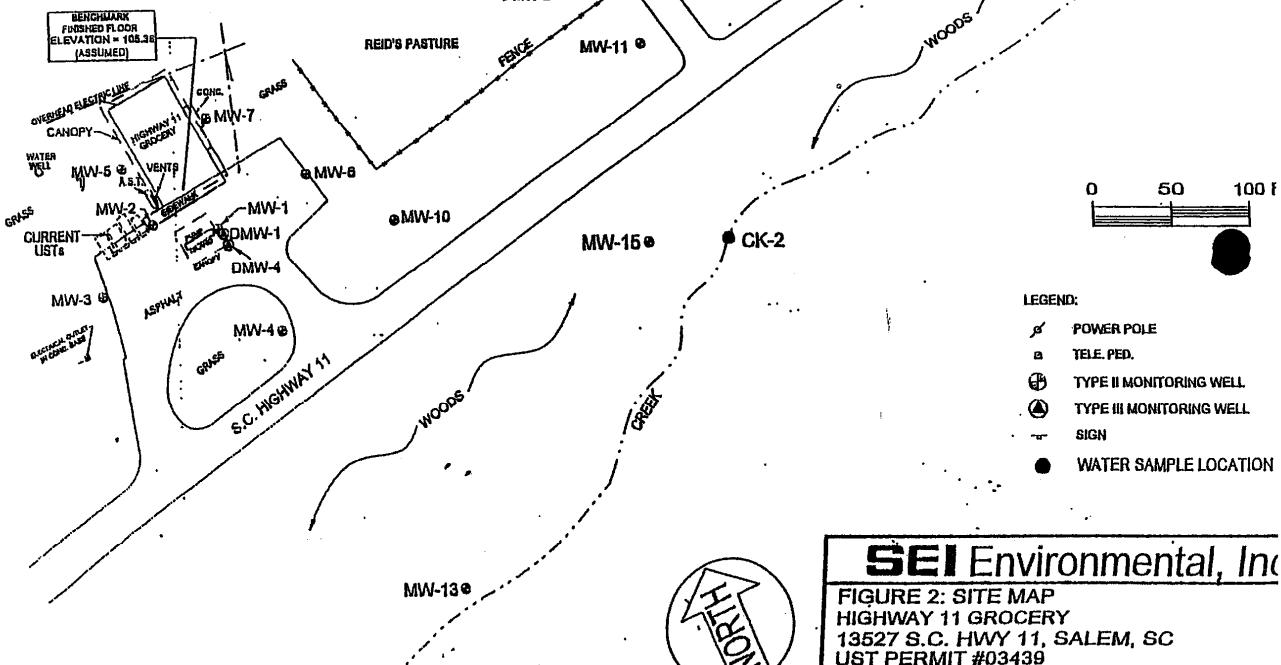
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WELL #	INNER CASING ELEVATION
MW-1	103.38
MW-2	104.85
MW-3	104.89
MW-4	99.80
MW-5	108.06
MW-6	100.00
MW-7	103.66
MW-8	88.51
MW-9	58.38
MW-10	93.78
MW-11	83.20
MW-12	58.89
MW-13	77.91
MW-14	59.19
MW-15	71.52
DMW-1	103.27
DMW-2	88.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.





C. Earl Hunter, Commissioner

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

OCT 05 2004

**SHERRI STABEL
PACE ANALYTICAL SERVICES
9800 KINCEY AVE STE 100
HUNTERSVILLE NC 28078**

**Re: Laboratory Analyses
Bid # SB-19780-6/11/02-EMW, PO # 416276**

Dear Ms. Stabel:

Under the terms and conditions of the referenced bid package, analytical sampling has been approved for the referenced facility. The facility has been assigned an individual Cost Agreement (CA) number as listed below. Please reference the CA number and Purchase Order #416276 on the appropriate invoice submitted for payment. SCDHEC personnel will perform the sampling on or before October 5, 2004. Please use the lowest detection limit possible for the method.

UST Permit #	County	Analyses-Groundwater	CA #	Bottles (Y/N)	Date Needed
03439	Oconee	3-BTEX, naph, MtBE (8260)	23057	N	10/20/04

If you have any questions or need further assistance, please contact me at (803) 896-6398 or (800) 826-5435 (within SC only).

Sincerely,

Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

enc: Approved cost agreement

cc: Debra Thoma, Northeastern SC Corrective Action Section
Technical file

DHEC/UST/JPP/100404

Approved Cost Agreement

0057

Facility: 03439 HWY 11 GROCERY

PADGETJP

PO Number:

<u>Task / Description</u>	<u>Categories</u>	<u>Item Description</u>	<u>Qty / Pct</u>	<u>Unit Price</u>	<u>Amount</u>
11 ANALYSES	GW GROUNDWATER	A BTEX+NAPTH+MTBE	3.0000	30.00	90.00
Total Amount					90.00



C. Earl Hunter, Commissioner

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

OCT 05 2004

**SHERRI STABEL
PACE ANALYTICAL SERVICES
9800 KINCEY AVE STE 100
HUNTERSVILLE NC 28078**

Re: Laboratory Analyses
Bid # SB-19780-6/11/02-EMW, PO # 416276

Dear Ms. Stabel:

Under the terms and conditions of the referenced bid package, analytical sampling has been approved for the referenced facility. The facility has been assigned an individual Cost Agreement (CA) number as listed below. Please reference the CA number and Purchase Order #416276 on the appropriate invoice submitted for payment. SCDHEC personnel will perform the sampling on or before October 5, 2004. Please use the lowest detection limit possible for the method.

UST Permit #	County	Analyses-Groundwater	CA #	Bottles (Y/N)	Date Needed
03439	Oconee	3-BTEX, naph, MtBE (8260)	23057	N	10/20/04

If you have any questions or need further assistance, please contact me at (803) 896-6398 or (800) 826-5435 (within SC only).

Sincerely,


Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

enc: Approved cost agreement

cc: Debra Thoma, Northeastern SC Corrective Action Section
Technical file

DHEC/UST/JPP/100404

Approved Cost Agreement 22057

Facility: 03439 HWY 11 GROCERY

PADGETJP

PO Number:

<u>Task / Description</u>	<u>Categories</u>	<u>Item Description</u>	<u>Qty / Pct</u>	<u>Unit Price</u>	<u>Amount</u>
11 ANALYSES	GW GROUNDWATER	A BTEX+NAPTH+MTBE	3.0000	30.00	90.00
Total Amount					90.00



PROMOTE PROTECT PROSPER
South Carolina Department of
Health and Environmental Control

Report On Records Destroyed Records and Forms Management Unit (UST Program ONLY)

1. Return this form to:
DHEC Forms Manager-Heritage Building
1777 St. Julian Place
Columbia, SC 29204

The records listed below have been disposed of in accordance with provisions of the Public Records Act, Code of Laws of South Carolina, 1976, Sections 30-1-10 through 30-1-140, as amended, and approved Records Retention Schedules.

2. Signature:

Jan 0000

3. Date: 6/22/04

Records Officer signature:

*Documents put in recycle box on date of destruction.

SITE ID # 03439

REVIEWED BY J. Rockett

REVIEWED BY J. R. Wallace
DTEC-0521 (4/1/08) Page 1 of 2 [Records Retention schedule #'s 12-300 and 12-331]



C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

APR 29 2004

MR STEVEN SMITH
180 SCHALLOW FORD RD
SALEM SC 29676

Re: Highway 11 Grocery, 13527 North SC-11, Salem, SC
UST Permit #03439; CA #17616
Release reported November 28, 2000
Corrective Action System Evaluation (CASE) received April 23, 2004
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced report. Sampling data in the report and data from verification samples taken March 31, 2004 by Program personnel indicate that free-phase product persists in monitoring well MW-8. Therefore, the seventy-five percent (75%) interim corrective action milestone has not been achieved. The data also document a substantial increase in concentrations of chemicals of concern (CoC) in monitoring well MW-12. This increase poses an immediate threat to the nearby creek and may be the cause of elevated CoC concentrations observed in creek sample CK-1. Please have your contractor take the necessary steps to reduce the CoC concentrations in MW-8 and MW-12.

The next CASE for the June 2004 quarterly gauging event is due on or before August 1, 2004. On all correspondence regarding this facility, please reference UST Permit #03439. If you have any questions regarding this correspondence, feel free to call me at (803) 896-6398 or (800) 826-5435 (within South Carolina only), or by fax at (803) 896-6245.

Sincerely,

Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

JPP/jpp
03439.1

cc: SEI Environmental, Inc., 3021 McNaughton Drive, Suite 9, SC 29223
Technical file

DHEC/UST/JPP/042804

FIELD ACTIVITY WORKSHEET ORDER

Date of Request: March 30, 2004

Type of Request:

(Please indicate your request with a check mark)

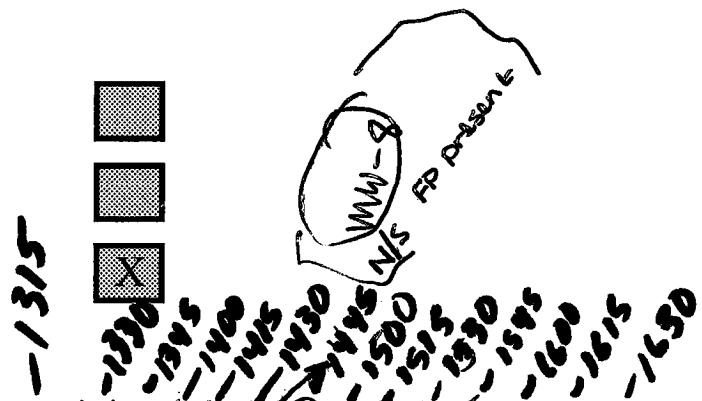
Emergency (<2 Working Days)



Specific (1-5 Working Days)



Routine (10 Working Days)



Please specify the type of work to be completed:

ACA verification sampling. Collect split samples from MW-1, 2, 3, 4, 5, 6, 7, (8), 9, 10, 11, 12, 13, 14, 15, DMW-1, 2, 3, and Creek (CK-1 and CK-2).

1645 1700 1715 1730 1745

MW-8 SWL 21.35 FPL 21.25
MW-6 Sheen
(Hot sample)

Facility Name: Highway 11 Grocery

Permit Number: 03439

Project Manager: J. Padgett

County: Newberry

(Field Staff Only)

Date Field Activity Completed: 3/31/04

Completed by Field Staff:

Date Field Notes Entered into EFIS:

Field Staff Comments:

REMEMBER TO ESTABLISH COST PROPOSALS

PACE CA#: 21733

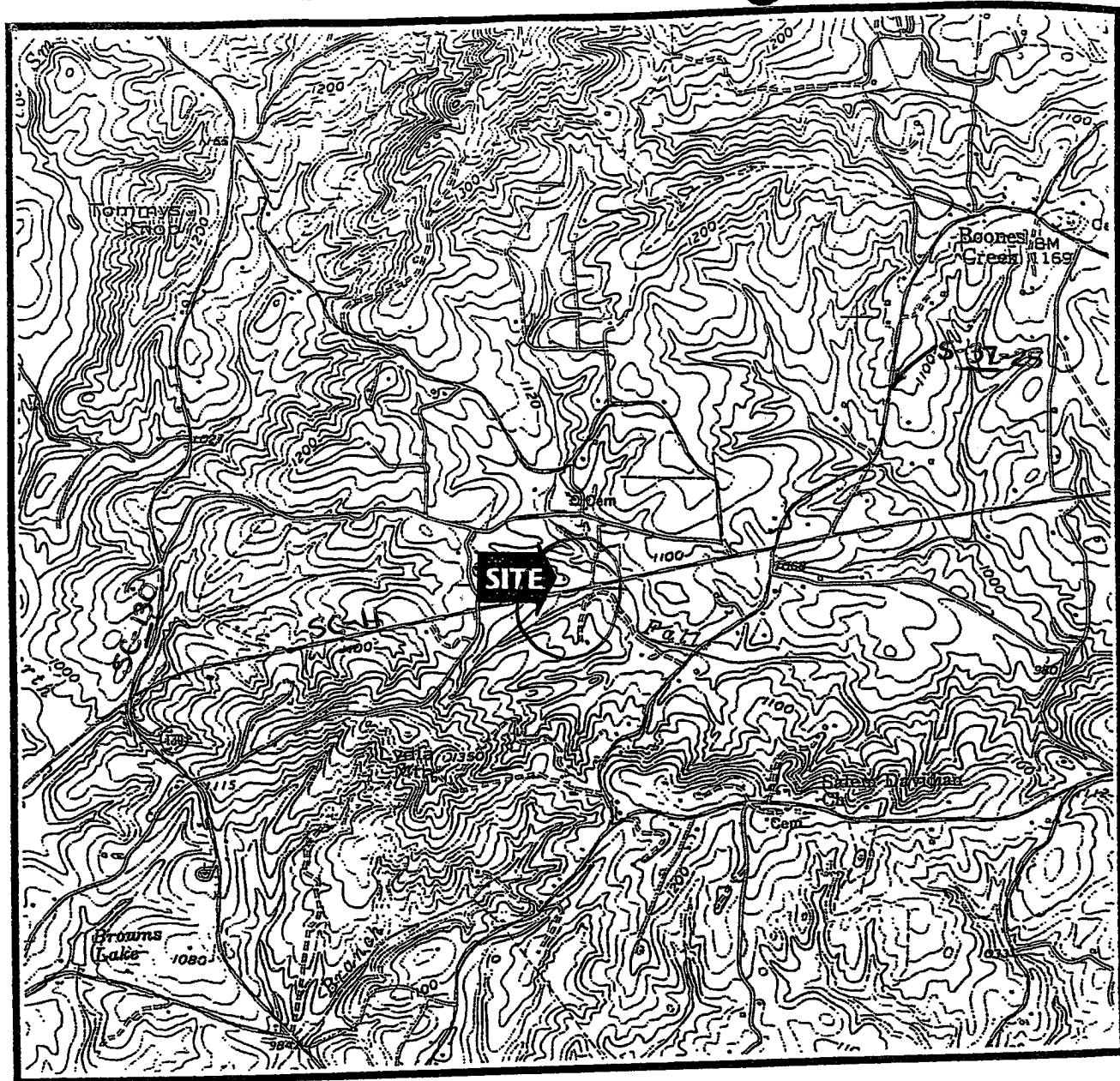
JA Jones CA#: _____

PALMETTO ENV GROUP CA#: _____

Fill out back of this form. Photocopy, attach a completed CP cover for each CP. Thank you very much!

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SCALE 1:24000

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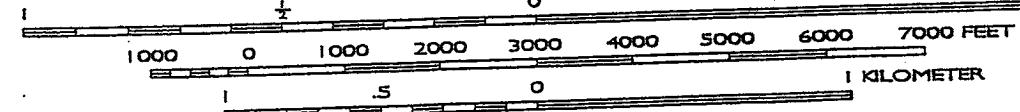
**SEI Environmental, Inc.**

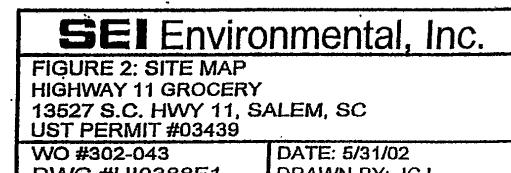
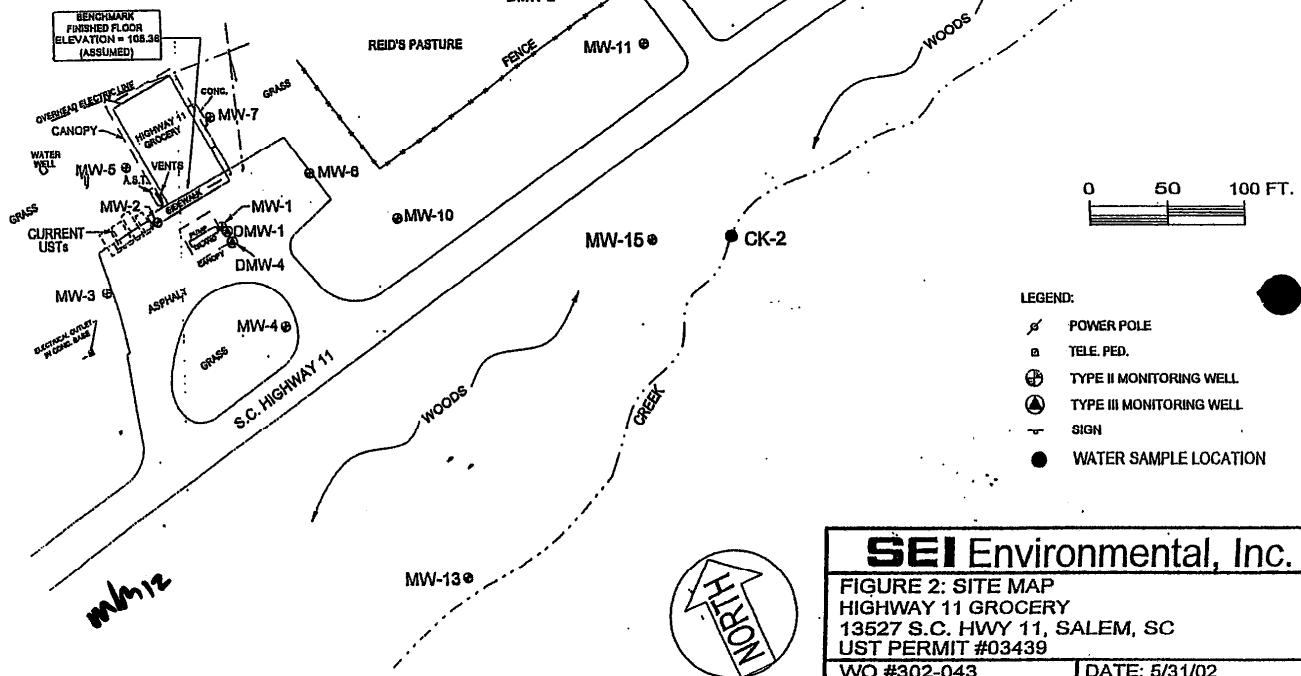
FIGURE 1: SITE LOCATION MAP
HIGHWAY 11 GROCERY
13527 S.C. HWY 11, SALEM, SC
UST PERMIT #03439

W.O. #: 300-388
DWG #

DATE: 9/5/01
DRAWN BY: JC

WELL #	INNER CASING ELEVATION
MW-1	103.88
MW-2	104.65
MW-3	104.89
MW-4	99.80
MW-5	108.05
MW-6	100.00
MW-7	103.66
MW-8	88.81
MW-9	58.39
MW-10	93.78
MW-11	83.20
MW-12	58.88
MW-13	77.81
MW-14	59.19
MW-15	71.52
DMW-1	103.27
DMW-2	88.21
DMW-4	103.22

NOTE: ELEVATIONS REFER TO AN ASSUMED ELEVATION.





C. Earl Hunter, Commissioner

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

MAR 30 2004

**SHERRI STABEL
PACE ANALYTICAL SERVICES
9800 KINCEY AVE STE 100
HUNTERSVILLE NC 28078**

**Re: Laboratory Analyses
Bid # SB-19780-6/11/02-EMW, PO # 416276**

Dear Ms. Stabel:

Under the terms and conditions of the referenced bid package, analytical sampling has been approved for the referenced facility. The facility has been assigned an individual Cost Agreement (CA) number as listed below. Please reference the CA number and Purchase Order #416276 on the appropriate invoice submitted for payment against the facility. SCDHEC personnel will perform the sampling on March 31, 2004.

UST Permit #	County	Analyses-Groundwater	CA #	Bottles (Y/N)	Date Needed
03439	Oconee	20-BTEX, Naph, MTBE (8260)	21733:P	N	04/15/04

If you have any questions or need further assistance, please contact me at (803) 896-6398 or (800) 826-5435 (within SC only).

Sincerely,

Joel P. Padgett, P.G., Hydrogeologist
Southwestern SC Corrective Action Section
Underground Storage Tank Program
Bureau of Land and Waste Management

enc: Approved Cost Agreement

cc: Debra Thoma, Northeastern SC Corrective Action Section
Technical file

BOARD:
Elizabeth M. Hagood
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary



BOARD:
Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Coleman F. Buckhouse, MD

C. Earl Hunter, Commissioner

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

JAN 15 2004

MR STEVEN SMITH
180 SCHALLOW FORD RD
SALEM SC 29676

Hwy. 11 Grocery, 13527 N Hwy 11, Salem, SC

UST Permit #03439, CA #17616

Corrective Action System Evaluation (CASE) Report received January 13, 2004
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control (SCDHEC) has reviewed the referenced report. The Program is pleased with the current results. Please have your contractor submit the next CASE within forty-five days after the ~~March 2004~~ quarterly sampling event.

The Program will be glad to conduct a split sampling with your environmental contractor in March 2004 as requested.

On all correspondence regarding this facility, please reference UST Permit #03439. If you have any questions regarding this correspondence, feel free to call me at (803) 896-6647

Sincerely,

Konstantine Akhvlediani, Hydrogeologist
Owner/Operator Support Section
Assessment and Corrective Action Division
Underground Storage Tank Program
Bureau of Land and Waste Management

cc: Mr. John Paul Bekish, SEI Environmental, Inc., 3021 McNaughton Dr., Suite 9, Columbia, SC 29223
Technical File

DHEC/UST/OO/KTA/01/14/04

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
2600 Bull Street • Columbia, SC 29201 • Phone: (803) 898-3432 • www.scdhec.net

SEI

Environmental, Inc.

3021 McNaughton Drive
Suite 9
Columbia, SC 29223
800-377-2826
803-788-2535
Fax 803-788-2399

July 24, 2003

Konstantine Akhvlediani
Hydrogeologist / Project Manager
SCDHEC
2600 Bull Street
Columbia, SC 29201-1708

Re: Underground Injection Control Permit #681
Highway 11 Grocery
13527 South Carolina Highway 11
Salem, South Carolina
UST Permit # 03439

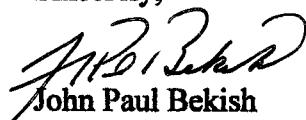
Dear Mr. Akhvlediani;

SEI Environmental, Inc. submits the attached Underground Injection Control Permit # 681 for the above referenced facility submitted by the South Carolina Groundwater Management Section.

In addition, SEI submits that the injection system was started on July 22, 2003. SEI had scheduled a sampling event for the week of July 28, 2003. Upon receipt of the laboratory analytical data, SEI will submit a report summarizing site activities.

If you have any questions and / or comments concerning the information contained in this document, please contact John Paul Bekish at (803) 788-2535.

Sincerely,



John Paul Bekish
Branch Manager
SEI – Columbia, SC

Attachment

CC: Steve Smith – Property Owner
SEI Project Files

RECEIVED

JUL 25 2003

Underground Storage
Tank Program



RECEIVED

JUL 23 2003

July 8, 2003

2600 Bull Street
Columbia, SC 29201-1708

COMMISSIONER: (BOW-GWMGMT)
Steve Smith
C. Earl Hunter
13527 SC Highway 11
BOARD: Bradford W. Wyche
Chairman
Salem, SC 29676-9801

Mark B. Kent
Vice Chairman
Howard L. Brilliant, MD
Secretary

Re: Underground Injection Control Permit #681
Highway 11 Grocery Site
Oconee County

Carl L. Brazell
Louisiana W. Wright
L. Michael Blackmon
Lawrence R. Chewning, Jr., DMD

Dear Mr. Smith:

Enclosed is a Permit to Operate for forty-five (45) Class VA-I (Aquifer Remediation) injection wells at Highway 11 Grocery Site, Oconee County, SC.

Affected parties may appeal this permit decision in accordance with State Regulation R.61-72. To contest a case, a request for a hearing must be made to the Clerk of the DHEC Board within 15 days of the date of this letter. All requests must include the following information:

- 1) name of the party requesting the hearing,
- 2) issue(s) for which the hearing is requested,
- 3) caption or other information sufficient to identify the decision, order, action or inaction which is the subject of the hearing,
- 4) relief requested.

Note further that Administrative Law Judge (ALJ) Division rules require that persons requesting a contested case hearing must file a copy of the request and pay a filing fee in the amount of \$100 dollars (US) with the ALJ Division at the following address:

Clerk, ALJ Division
1205 Pendleton Street, Suite 224
P.O. Box 11667
Columbia, SC 29211

If you have any question, please call Todd Adams at (803) 898-3549.

Sincerely,


Rob Devlin, Manager

GroundWater Management Section
Bureau of Water

cc: Kimberly Wilson, BLWM-USSTP
Bob Bolton, SEI



2600 Bull Street
Columbia, SC 29201-1708

WATER MONITORING ASSESSMENT & PROTECTION DIVISION

COMMISSIONER:
C. Earl Hunter

BOARD:
Bradford W. Wyche
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Lawrence R. Chewning, Jr., DMD

Injection Well Operating Approval
for

Class II, III, and V.A. Injection Well(s)

Date of Issue: July 8, 2003

In accordance with the provisions of Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, and pursuant to receiving a Permit to Operate forty-five (45) Class V.A.-I (Aquifer Remediation) injection wells, authorization is granted to SEI Environmental to operate forty-five (45) Class V.A.-I injection wells located at the Highway 11 Grocery Site, Oconee County, SC, and are subject to the attached provisos noted for the operator.

The Class V.A.-I injection wells are 1 inches in diameter and approximately 20-60 feet deep. The inspection was completed on July 7, 2003.

Pursuant to Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, this authorization may be rescinded if these injection wells should, at any time, contaminate, pollute, or otherwise adversely affect other water in the vicinity or for any other conditions contained in R61-87, Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended.

Expires: July 8, 2013

Rob Devlin, Manager
GroundWater Management Section
Bureau of Water

July 8, 2003
Date

DHEC 2104 (6/88)

Provisos to the Injection Well Operating Approval
for
Underground Injection Well Permit #681
Highway 11 Grocery Site
Oconee County, S.C.
July 8, 2003

- 1) Construction of new or abandonment of existing wells must be reported to the Department within thirty (30) days of completion.
- 2) Only oxygen as described in the Corrective Action Plan may be injected into the subsurface. Any changes in the system operation other than as presented in the UIC Permit Application must be reported to the Department prior to implementation.



July 8, 2003

RECEIVED

JUL 22 2003

Underground Storage
Tank Program

2600 Bull Street
Columbia, SC 29201-1708

COMMISSIONER:
C. Earl Hunter

BOARD:
Bradford W. Wyche
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Lawrence R. Chewning, Jr., DMD

(BOW-GWMGMT)

Steve Smith
13527 SC Highway 11
Salem, SC 29676-9801

Re: Underground Injection Control Permit #681
Highway 11 Grocery Site
Oconee County

Dear Mr. Smith:

Enclosed is a Permit to Operate for forty-five (45) Class VA-I (Aquifer Remediation) injection wells at Highway 11 Grocery Site, Oconee County, SC.

Affected parties may appeal this permit decision in accordance with State Regulation R.61-72. To contest a case, a request for a hearing must be made to the Clerk of the DHEC Board within 15 days of the date of this letter. All requests must include the following information:

- 1) name of the party requesting the hearing,
- 2) issue(s) for which the hearing is requested,
- 3) caption or other information sufficient to identify the decision, order, action or inaction which is the subject of the hearing,
- 4) relief requested.

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Clerk, ALJ Division
1205 Pendleton Street, Suite 224
P.O. Box 11667
Columbia, SC 29211

If you have any question, please call Todd Adams at (803) 898-3549.

Sincerely,


Rob Devlin, Manager
GroundWater Management Section
Bureau of Water

cc: Kimberly Wilson, BLWM-USSTP
Bob Bolton, SEI



2600 Bull Street
Columbia, SC 29201-1708

WATER MONITORING ASSESSMENT & PROTECTION DIVISION

Injection Well Operating Approval
for

COMMISSIONER:
C. Earl Hunter

BOARD:
Bradford W. Wyche
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Lawrence R. Chewning, Jr., DMD

Permit #681

Class II, III, and V.A. Injection Well(s)

Date of Issue: July 8, 2003

In accordance with the provisions of Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, and pursuant to receiving a Permit to Operate forty-five (45) Class V.A.-I (Aquifer Remediation) injection wells, authorization is granted to SEI Environmental to operate forty-five (45) Class V.A.-I injection wells located at the Highway 11 Grocery Site, Oconee County, SC, and are subject to the attached provisos noted for the operator.

The Class V.A.-I injection wells are 1 inches in diameter and approximately 20-60 feet deep. The inspection was completed on July 7, 2003.

Pursuant to Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, this authorization may be rescinded if these injection wells should, at any time, contaminate, pollute, or otherwise adversely affect other water in the vicinity or for any other conditions contained in R61-87, Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended.

Expires: July 8, 2013



Rob Devlin, Manager

GroundWater Management Section
Bureau of Water

July 8, 2003
Date

Provisos to the Injection Well Operating Approval
for
Underground Injection Well Permit #681
Highway 11 Grocery Site
Oconee County, S.C.
July 8, 2003

- 1) Construction of new or abandonment of existing wells must be reported to the Department within thirty (30) days of completion.
- 2) Only oxygen as described in the Corrective Action Plan may be injected into the subsurface. Any changes in the system operation other than as presented in the UIC Permit Application must be reported to the Department prior to implementation.



2600 Bull Street
Columbia, SC 29201-1708

COMMISSIONER:
C. Earl Hunter

BOARD:
Bradford W. Wyche
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Lawrence R. Chewning, Jr., DMD

(BOW-GWMGMT)

Steve Smith
13527 SC Highway 11
Salem, SC 29676-9801

Re: Underground Injection Control Permit #681
Highway 11 Grocery Site
Oconee County

Dear Mr. Smith:

Enclosed is a Permit to Operate for forty-five (45) Class VA-I (Aquifer Remediation) injection wells at Highway 11 Grocery Site, Oconee County, SC.

Affected parties may appeal this permit decision in accordance with State Regulation R.61-72. To contest a case, a request for a hearing must be made to the Clerk of the DHEC Board within 15 days of the date of this letter. All requests must include the following information:

- 1) name of the party requesting the hearing,
- 2) issue(s) for which the hearing is requested,
- 3) caption or other information sufficient to identify the decision, order, action or inaction which is the subject of the hearing,
- 4) relief requested.

Note further that Administrative Law Judge (ALJ) Division rules require that persons requesting a contested case hearing must file a copy of the request and pay a filing fee in the amount of \$100 dollars (US) with the ALJ Division at the following address:

Clerk, ALJ Division
1205 Pendleton Street, Suite 224
P.O. Box 11667
Columbia, SC 29211

If you have any question, please call Todd Adams at (803) 898-3549.

Sincerely,

Rob Devlin, Manager
GroundWater Management Section
Bureau of Water

cc: Kimberly Wilson, BLWM-USSTP
Bob Bolton, SEI

RECEIVED

JUL 22 2003

Underground Storage
Tank Program



2600 Bull Street
Columbia, SC 29201-1708

WATER MONITORING ASSESSMENT & PROTECTION DIVISION

COMMISSIONER:
C. Earl Hunter

**Injection Well Operating Approval
for**

BOARD:
Bradford W. Wyche
Chairman

Class II, III, and V.A. Injection Well(s)

Mark B. Kent
Vice Chairman

Permit #681

Date of Issue: July 8, 2003

Howard L. Brilliant, MD
Secretary

In accordance with the provisions of Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, and pursuant to receiving a Permit to Operate forty-five (45) Class V.A.-I (Aquifer Remediation) injection wells, authorization is granted to SEI Environmental to operate forty-five (45) Class V.A.-I injection wells located at the Highway 11 Grocery Site, Oconee County, SC, and are subject to the attached provisos noted for the operator.

Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Lawrence R. Chewning, Jr., DMD

The Class V.A.-I injection wells are 1 inches in diameter and approximately 20-60 feet deep. The inspection was completed on July 7, 2003.

Pursuant to Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, this authorization may be rescinded if these injection wells should, at any time, contaminate, pollute, or otherwise adversely affect other water in the vicinity or for any other conditions contained in R61-87, Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended.

Expires: July 8, 2013

Rob Devlin, Manager
GroundWater Management Section
Bureau of Water

July 8, 2003
Date

Provisos to the Injection Well Operating Approval
for
Underground Injection Well Permit #681
Highway 11 Grocery Site
Oconee County, S.C.
July 8, 2003

- 1) Construction of new or abandonment of existing wells must be reported to the Department within thirty (30) days of completion.
- 2) Only oxygen as described in the Corrective Action Plan may be injected into the subsurface. Any changes in the system operation other than as presented in the UIC Permit Application must be reported to the Department prior to implementation.



UNDERGROUND STORAGE TANK PROGRAM BUREAU OF LAND AND WASTE MANAGEMENT

2600 Bull Street
Columbia, SC 29201-1708

Phone (800) 826-5435 Fax (803) 896-6245

MAR 10 2003

**MR BOB BOLTON
SEI ENVIRONMENTAL SERVICES INC
3021 MCNAUGHTON DR SUITE 9
COLUMBIA SOUTH CAROLINA 29223-1854**

Hwy. 11 Grocery, 13527 N Hwy 11, Salem, SC
UST Permit #03439, CA #17616
UIC Permit Application received January 7, 2003
BAQC Modeling Information received January 2, 2003
Oconee County

Dear Mr. Bolton:

The Underground Storage Tank (UST) Program has reviewed the referenced documents. Further, as required by Section 280.67 of the South Carolina UST Regulations R.61-92, the Program has provided a public notice period including notice of the pending corrective actions to the surrounding land owners via certified correspondence. No objections to the proposed actions were expressed; therefore, corrective action activities may proceed at this time. Copies of the Bureau of Air Quality permit exemption and Underground Injection Control Permit to Construct are enclosed.

As stated in Specifications for Corrective Action, Item 2 of the Request for Bids, an initial monitoring report documenting CoC concentrations in all wells and potentiometric conditions prior to start up must be submitted to the Program within 45 days of award of bid contract. **Sampling for this initial monitoring event must occur prior to system startup.**

The Bureau grants pre-approval for transportation of virgin petroleum contaminated soil and groundwater which may be generated during site construction, drilling, and well development / purging from the referenced site to a permitted treatment facility. If the contaminated soil or groundwater is not immediately transported to the permitted treatment facility, it must be properly stored in labeled containers or covered with plastic as appropriate. The contaminated soil and/or groundwater must be accepted by the approved treatment facility. There can be no spillage or leakage in transport. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included in the report.

As outlined in the Department's November 6, 2002 correspondence, cost agreement #17616 has been approved in the amount of \$116,000.00. The first pay-for-performance invoice in the amount of \$46,400.00 (40%) may be submitted (on the enclosed invoice form) once the Underground Injection Control Permit to Operate has been issued and the treatment system has been placed into operation.

On all correspondence regarding this site, please reference the UST Permit #03439. If you have any questions, please contact me at (803) 896-6647 or (800) 826-5435 (within South Carolina only).

Sincerely,



Konstantine Akhvlediani, Hydrogeologist
Owner/Operator Support Section
Assessment and Corrective Action Division

Enc: Corrective Action Invoice (SCDHEC Form 3687)
Bureau of Air Quality Permit Exemption
Underground Injection Control Permit to Construct

cc: Technical File (w/out enc)



South Carolina Department of Health
and Environmental Control

NOTICE

State of South Carolina
Department of Health and Environmental Control
Columbia, South Carolina

Public Notice #03439-01: Hwy 11 Grocery 03439

Date: 1/17/03

NOTICE OF PROPOSED CORRECTIVE ACTION

Section 280.67 of the S.C. Underground Storage Tank Control Regulations (R.61-92) requires that any Corrective Action Plan prepared to meet the requirements of 280.66 must be placed on notice for public comment. The following applicant has submitted a Corrective Action Plan for the rehabilitation of groundwater contaminated by petroleum constituents released from underground storage tanks (USTs).

Applicant: *Hwy 11 Grocery, 13527 N Hwy. 11, Salem, SC 29506.* The *Hwy 11 Grocery* has four USTs used for storage of petroleum products. The facility is located at 13527 N Hwy. 11, in Oconee County, South Carolina.

Corrective Action will consist of vacuum extraction and bioremediation. These corrective action activities will be followed by Intrinsic Remediation/Natural Attenuation for the rehabilitation of ground water contaminated by petroleum constituents released from underground storage tanks. Vacuum extraction is a technology in which air is suctioned from the subsurface utilizing a mechanical pump for the purpose of removing contaminants by volatilization and controlling the potential migration of vapors. Bioremediation is a technology where the addition of nutrients enhances the biological degradation of the petroleum product.

A copy of the Corrective Action Plan is available for review at the Department's Freedom of Information Office, 2600 Bull Street in Columbia, SC. Please call (803) 898-3882 to schedule an appointment.

Persons wishing to comment upon or object to Corrective Action approval are invited to submit same in writing within fifteen (15) days of the date of this notice to South Carolina Department of Health and Environmental Control, Underground Storage Tank Program, 2600 Bull Street, Columbia, S.C. 29201 or call Konstantine Akhvlediani at (803) 896-6647. The public notice #03439-01 should be placed at the top of the first page of comments. Where there is a significant degree of public interest, the Department will hold a public hearing.

Please bring the foregoing to the attention of persons who you know will be interested in this matter.



**UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT**

Phone (803) 896-6240 Fax (803) 896-6245

2600 Bull Street
Columbia, SC 29201-1708

JAN 15 2003

**MR JAMES W REID
185 REID DRIVE
SALEM SC 29676-2938**

**Re: Hwy 11 Grocery, 13527 N Hwy. 11, Salem, SC
UST Permit # 03439
Release 1 Reported November 28, 2000
Oconee County**

Dear Mr. Reid:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental, Inc. has been retained to initiate corrective action of the impacted soil and groundwater using Vacuum Enhanced Recovery and Bio-Remediation followed by natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 896-4288 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental, Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call at (803) 896-6647. All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Konstantine Akhvlediani, Hydrogeologist
Owner/Operator Support Section
Assessment and Corrective Action Division

Enc.: Public Notice (copy)

cc: Technical file (without enclosure)



**UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT**

Phone (800) 826-5435 Fax (803) 896-6245

2600 Bull Street
Columbia, SC 29201-1708

JAN 15 2003

**MS MARGIE A SATTERFIELD
P O BOX 405
WEST UNION SC 29696-0405**

**Re: Hwy 11 Grocery, 13527 N Hwy. 11, Salem, SC
UST Permit # 03439
Release 1 Reported November 28, 2000
Oconee County**

Dear Ms. Satterfield:

As you may be aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, SEI Environmental, Inc. has been retained to initiate corrective action of the impacted soil and groundwater using Vacuum Enhanced Recovery and Bio-Remediation followed by natural attenuation. A copy of the proposed corrective action plan is available for your review at the SCDHEC Freedom of Information Office, 2600 Bull Street, Columbia, South Carolina. Please call the Freedom of Information Office at (803) 896-4288 for an appointment if you would like to review this corrective action plan.

Section 280.67 of the South Carolina Underground Storage Tank Regulations requires the SCDHEC to provide notice to those members of the public that may be affected by a planned corrective action. A copy of the public notice is enclosed for your information. You may observe limited drilling, trenching, and construction activities by SEI Environmental, Inc. at the referenced property.

If you have any questions or comments regarding the proposed corrective action, please call at (803) 896-6647. All comments should be submitted with fourteen (14) days of the date of this correspondence.

Sincerely,

Konstantine Akhvlediani, Hydrogeologist
Owner/Operator Assistance Section
Assessment and Corrective Action Division

Enc.: Public Notice (copy)

cc: Technical file (without enclosure)



South Carolina Department of Health
and Environmental Control

**UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT**
2600 Bull Street
Columbia, SC 29201
Telephone (803) 896-6240

MEMORANDUM

DATE: January 10, 2003

TO: *Dale Stoudemire or Robin Mack*
Compliance Section
Regulatory Compliance Division

FROM: Konstantine Akhvlediani
Owner/Operator Support Section
Assessment and Corrective Action Division

SUBJECT: Public Notice #03439-01
Hwy 11 Grocery, UST Permit #03439
Oconee County

Per section 280.67 of the South Carolina Underground Storage Tank Control Regulations R. 61-91, the South Carolina Department of Health and Environmental Control (SCDHEC) is required to provide public notice of proposed corrective actions at underground storage tank facilities.

The Assessment & Corrective Action Division requests your assistance in posting the enclosed notice at public offices (e.g. post offices, court houses, etc.) located in close proximity to the referenced facility.

If possible, the notice should be posted for 15 days. The attached notice has been postdated to January 17, 2003 to allow your office time to have it posted prior to its beginning date. Your assistance is greatly appreciated.

Questions may be referred to my attention at (803) 896-6647.

enc: Public Notice (4 copies)

cc: Technical File

SCDHEC/UST/OO/KTA



South Carolina Department of Health
and Environmental Control

**UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT**

**2600 Bull Street
Columbia, SC 29201
Telephone (803) 896-6240**

MEMORANDUM

DATE: January 10, 2003

TO: Jody Hamm
Freedom of Information Office

FROM: Konstantine Akhvlediani
Owner/Operator Support Section
Assessment and Corrective Action Division

SUBJECT: Public Notice #03439-01
Hwy 11 Grocery, UST Permit #03439
Oconee County

Per section 280.67 of the South Carolina Underground Storage Tank Control Regulations R. 61-91, the South Carolina Department of Health and Environmental Control (SCDHEC) is required to provide public notice of proposed corrective actions at underground storage tank facilities.

The Assessment and Corrective Action Division requests your assistance in making the technical file for the referenced facility available for review by any concerned citizens and/or environmental consultants.

The notice has been postdated to January 17, 2003 and will be posted for 15 days. A copy is enclosed for your information. Your assistance is greatly appreciated.

Questions may be referred to my attention at (803) 896-6647.

enc: Public Notice

cc: Technical File



2600 Bull Street
Columbia, SC 29201-1708

RECEIVED
DEC 30 2002

UNDERGROUND STORAGE
TANK PROGRAM

MEMORANDUM

COMMISSIONER:
C. Earl Hunter

BOARD:
Bradford W. Wyche
Chairman

Mark B. Kent
Vice Chairman

Howard L. Brilliant, MD
Secretary

Carl L. Brazell

Louisiana W. Wright

L. Michael Blackmon

Larry R. Chewning, Jr., DMD

DATE: December 27, 2002

TO: Konstantine T. Akhvlediani
Underground Storage Tank Program
Bureau of Land and Waste Management

FROM: Mary Peyton Davis *MAD*
Air Modeling Section
Bureau of Air Quality

SUBJECT: Hwy 11 Grocery, GWPD #03439
13527 North Hwy 11
Salem, South Carolina

The Bureau of Air Quality has reviewed the air emission information for the dual phase recovery event to be located at Hwy 11 Grocery in Salem, SC. Air dispersion modeling results indicate that the air toxics emitted (Benzene, Toluene, Ethylbenzene, Xylenes, Naphthalene, and MTBE) will result in off-site concentrations of these toxics that will meet the air toxic standards (Standard No. 8).

Since the total volatile organic compound (VOC) emissions are less than 1000 lbs./month, an air permit will not be required for the dual phase recovery event. If the 1000 lb. VOC limit is reached during the dual phase recovery event, the system will be shut down, and an air permit will be obtained from the Bureau of Air Quality before operation may continue. This is in accordance with Section II, Part F, Paragraph G of the SC Dept. of Health and Environmental Control Air Pollution Control Regulation No. 62.1.

cc: Rick Caldwell, Appalachia I EQC District
Tracey Stewart, BAQ Permitting
Engineering File

AIR DISPERSION MODELING SUMMARY SHEET

SITE NAME: Hwy 11 Grocery

DATE: 12/27/02

LOCATION: Salem

REVIEWED BY: MPD

GWPD NO.: 03439

MODEL: SCREEN3

SOURCE DESCRIPTION: Dual phase recovery event

RESULTS:

POLLUTANT	CAS NO.	AVERAGING PERIOD	MAX MODELED CONCENTRATION ($\mu\text{g}/\text{m}^3$)	STANDARD ($\mu\text{g}/\text{m}^3$)
Benzene	71-43-2	24 Hour	32.21	150
Toluene	108-88-3	24 Hour	2.82	2000
Ethyl benzene	100-41-4	24 Hour	9.66	4350
Xylene	1330-20-7	24 Hour	3.22	4350
MTBE	1634-04-4	24 Hour	0.24	N/A
Naphthalene	91-20-3	24 Hour	0.012	1250.00



Commissioner: Michael D. Jarrett

Board: John B. Pata, MD, Chairman
William E. Applegate, III, Vice Chairman
John H. Burris, Secretary

Promoting Health. Protecting the Environment

Toney Graham, Jr., MD
Richard E. Jabbour, DDS
Henry S. Jordan, MD
Currie G. Spivey, Jr.

BAQC UST MODELING INFORMATION

PLEASE FILL OUT COMPLETELY

COMPANY NAME: Hwy 11 Grocery

CLEANUP LOCATION: 13527 SC Hwy 11, Salem, SC PCAS:

TYPE OF OPERATION (i.e. AIR STRIPPER): Dual Phase Recovery

CONTACT: Fredlike - SEI Environmental Inc.

PHONE NUMBER: 803 722 2535

SITE MAPS

Please include a scaled plot plan of the site location that clearly shows distances from the stack to the property boundaries. All buildings and/or structures within a radius of 5 stack heights (measured from the stack/vent.) shall be incorporated on this plot plan and information on each building and/or structure's height, width, and length shall also be included.

STACK INFORMATION

HEIGHT ABOVE GROUND 10 FEET; DIAMETER .333 FEET

TEMPERATURE 110 F; VELOCITY 10 FEET/SECOND

AIR TOXIC INFORMATION

AIR TOXIC EMITTED (i.e. BENZENE)	CHEMICAL ABSTRACT SERVICE (CAS) NUMBER	EMISSION RATE LB/HR
A) Benzene	71432	.08
B) Toluene	108883	.007
C) Cetane	160414	.024
D) Xylene	1330207	.008
E) Naphthalene	91-20-3	0.00003
MTBE	1634-04-4	0.0006

Please submit the completed form with maps to the appropriate SCDHEC project manager at the Ground-Water Protection Division. (BAQC-MIF)

Huy II Grocery 13527 S Hwy 1, Salem, SC Calculations for air emissions

Groundwater MWL concentrations, Maximum Dissolved concentration
in water from E.K.Nyer, Ground
Treatment Technology 2nd ed, 1992.
Van Nostrand Reinhold, NY, p.49, Td

Benzene 1.750 mg/l
Ethylbenzene 1.52 mg/l
Toluene 5.25 mg/l
Xylene 1.75 mg/l
MTBE 14.0 mg/l
Naphthalene 0.578 mg/l

Flow Rate:

$$\begin{aligned} Q_{std} &= \left(\frac{60\text{sec}}{1\text{min}} \right) (1 - B_{st}) (V)(A) \left[\frac{528}{460 + T(\text{F})} \right] \\ &= 60 (1 - .03)(.10)(.0871) \left[\frac{528}{580} \right] \\ &\approx 46.15 \text{ ft}^3/\text{min} \end{aligned}$$

COC emissions:

$$\text{Benzene: } (.00175 \frac{\text{kg}}{\text{l}}) \left(\frac{4645 \text{ ft}^3}{\text{min}} \right) \left(\frac{60\text{min}}{1\text{hr}} \right) \left(\frac{3.53 \times 10^{-2} \text{ l}}{\text{ft}^3} \right) \left(\frac{1\text{b}}{2.205 \text{ kg}} \right) = 1.08 \text{ lb/hr}$$

$$\text{Toluene: } (.000152 \frac{\text{kg}}{\text{l}}) 44.34 = .007 \text{ lb/hr}$$

$$\text{Ethylbenzene: } (.000535 \frac{\text{kg}}{\text{l}}) 44.34 = .024 \text{ lb/hr}$$

$$\text{Xylene: } (.000175 \frac{\text{kg}}{\text{l}}) 44.34 = .008 \text{ lb/hr}$$

$$\text{Naphthalene: } (0.00000578) 44.34 = 0.00003 \text{ lb/hr}$$

$$\text{MTBE: } (0.000014) 44.34 = 0.0006 \text{ lb/hr}$$

$$\text{Total estimated COC in lbs per 12 hr event} = 1.43 \text{ lbs/event}$$



December 12, 2002

2600 Bull Street
Columbia, SC 29201-1708

COMMISSIONER: Steve Smith
C. Earl Hunter
13527 SC Highway 11
BOARD: Bradford W. Wyche
Salem, SC 29676-9801
Chairman

Mark B. Kent Re: Underground Injection Control Permit #681
Vice Chairman Highway 11 Grocery
Howard L. Brilliant, MD Oconee County
Secretary

Carl L. Brazell Dear Mr. Smith:

Louisiana W. Wright Enclosed is a Permit to Construct for forty-five (45) Class VA-I injection wells at the Highway
L. Michael Blackmon 11 Grocery, Oconee County as requested in the permit application received December 3,, 2002.

Lawrence R. Chewning, Jr., DMD Affected parties may appeal this permit decision in accordance with State Regulation R.61-72. To contest a case, a request for a hearing must be made to the Clerk of the DHEC Board

within 15 days of the date of this letter. All requests must include the following information:

- 1) name of the party requesting the hearing,
- 2) issue(s) for which the hearing is requested,
- 3) caption or other information sufficient to identify the decision, order, action or inaction which is the subject of the hearing,
- 4) relief requested.

Note further that Administrative Law Judge (ALJ) Division rules require that persons requesting a contested case hearing must file a copy of the request and pay a filing fee in the amount of \$100 dollars (US) with the ALJ Division at the following address:

Clerk, ALJ Division
1205 Pendleton Street, Suite 224
P.O. Box 11667
Columbia, SC 29211

An inspection of the UIC System must be conducted prior to issuance of Approval to Operate.
If you have any question, please call Todd Adams at (803) 898-3549.

Sincerely,

Rob Devlin, Manager
GroundWater Management Section
Bureau of Water

cc: Kimberly Wilson, BLWM-USTP
Bob Bolton, SEI



2600 Bull Street
Columbia, SC 29201-1708

COMMISSIONER:
C. Earl Hunter

WATER MONITORING ASSESSMENT & PROTECTION DIVISION

BOARD:
Bradford W. Wyche
Chairman

Injection Well Construction Permit for

Mark B. Kent
Vice Chairman

Class II, III, and V.A. Injection Well(s)

Howard L. Brilliant, MD Permit #681

Secretary

Date Issued: December 12, 2002
Date Expired: December 12, 2003

Carl L. Brazell For (Operator): SEI

Louisiana W. Wright

L. Michael Blackmon

Lawrence R. Chewning, Jr., D.P.M. Diameter of 1 $\frac{1}{4}$ inches, and a total depth of approximately 20-50 feet located at the Highway 11 Grocery,
Oconee County, SC with the following provisions:

- 1) The operator shall submit completed SCDHEC well record forms to the Departments Water Monitoring, Assessment & Protection Division after completion of the injection wells.
- 2) Upon completion of construction, injection activities shall not commence prior to receiving approval from the Department to operate the injection wells.
- 3) When the injection wells are no longer in use, or upon request by the Department, within sixty (60) days all injection wells must be permanently abandoned in accordance with the South Carolina Well Standards and Regulations (R.61-71).

Rob Devlin, Manager
GroundWater Management Section
Bureau of Water

December 12, 2002
Date

STATEMENT OF BASIS - UIC DRAFT PERMIT #681

In accordance with the South Carolina Underground Injection Control Regulations, Section R61-87.12,J., this Statement of Basis has been prepared for the Highway 11 Grocery Underground Injection Control permit application received December 3, 2002.

Ownership of the proposed injection wells is Steve Smith, 13527 SC Highway 11, Salem, SC 29676-9801. The permit (UIC #681) is for the construction of forty-five (45) injection wells for a corrective action system at the Highway 11 Grocery. The intent of the injection wells is to remediate volatile organic compounds from the ground water by injection into the subsurface of hydrogen peroxide as described in the Corrective Action Plan. The draft permit for the underground injection proposal has been prepared based on staff review and the application of the Pollution Control Act of South Carolina and the Underground Injection Control Regulations of South Carolina.

Conditions of the permit issuance include the submittal of well records for all injection wells installed and the inspection of well construction by the Department prior to injection.



**UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT**

Phone (803) 896-6240 Fax (803) 896-6245

2600 Bull Street
Columbia, SC 29201-1708

NOV 06 2002

MR STEVEN SMITH
180 SCHALLOW FORD ROAD
SALEM SC 29676

Re: Hwy 11 Grocery, 13527 N Hwy. 11, Salem, SC
UST Permit # 03439, CA # 17616
Release Reported November 28, 2000
Corrective Action Solicitation Response Summary Form received November 4, 2002
Oconee County

Dear Mr. Smith:

The Underground Storage Tank (UST) Program of the South Carolina Department of Health and Environmental Control has received your Corrective Action Solicitation Response Summary Form and understands that you have selected SEI Environmental, Inc. as the environmental contractor to perform corrective action activities at the referenced site.

A Corrective Action Plan (CAP) (3 copies), Engineering Report (4 copies), Underground Injection Control Permit Application (4 copies), Wastewater discharge permit application (3 copies), and Bureau of Air Quality Modeling Forms (3 copies), should be submitted to the Department within 30 days of receipt of this letter. All Corrective Actions are subject to the conditions and specifications as outlined in the Request for Corrective Action Price Quotation. This includes a performance bond or irrevocable standby letter of credit, equal to the financial approval amount of \$116,000.00, which must be submitted with the CAP and must specify that the State Underground Petroleum Environmental Response Bank (SUPERB) Account will be the recipient in case of any forfeiture. Since SCDHEC is responsible for the disbursement of funds from the SUPERB Account, the financial responsibility mechanism will be held by the Bureau until all work is successfully completed.

A cost agreement has been established in the amount of \$116,000.00. Compensation will be in accordance with the pay for performance schedule outlined below. Future invoices and/or other criteria included therein must comply with current SUPERB criteria per Section 44-2-20(2) and the referenced bid special conditions. The accepted price quotation is considered final and will not be increased for any reason (e.g., unanticipated iron fouling of a system, wells clogging because of biological activity or sediments, increased subcontractor costs, loss of utilities, modification to the system to meet the remediation goals, etc.) with the exception of unforeseen geologic circumstances or identification of additional CoC from another release. Per the referenced price quotation specification, invoices will be submitted at each payment milestone using the corrective action invoice form as follows:

- \$46,400.00 within 90 days of operation or issuance of a permit to operate for the remediation system or corrective action as described in the approved CAP and;
- \$11,600.00 once one-quarter of the initial BTEX and MTBE concentration is removed as compared to the initial sampling data and SSSL presented in the Corrective Action Solicitation;
- \$11,600.00 once one-half of the initial BTEX and MTBE concentration is removed as compared to the initial sampling data and SSSL presented in the Corrective Action Solicitation;
- \$17,400.00 once three-quarters of the initial BTEX and MTBE concentration is removed as compared to the initial sampling data and SSSL presented in the Corrective Action Solicitation; and
- \$29,000.00 once the concentration in and around all monitoring wells is at or below the SSSL goals for each CoC (see specifications item 11 in the Request for Corrective Action Price Quotation for the method of verification), and all remediation equipment, wells, and trenches installed by SEI Environmental, Inc. are removed from the site or properly abandoned.

On all correspondence regarding this site, please reference UST Permit #03439. If you have any questions, please contact me at (800) 826-5435 (within South Carolina only) or (803) 896-6647.

Sincerely,



Konstantine Akhvlediani, Hydrogeologist
Owner/Operator Support Section
Assessment and Corrective Action Division

cc: SEI Environmental, Inc., 3021 McNaughton Drive, Suite 9, Columbia, SC 29223
Technical Read Files
Financial File



**UNDERGROUND STORAGE TANK PROGRAM
BUREAU OF LAND AND WASTE MANAGEMENT**

2600 Bull Street
Columbia, SC 29201-1708

Phone (803) 896-6240 Fax (803) 896-6245

NOV 06 2002

MR FRED LYKE
SEI ENVIRONMENTAL SERVICES INC
3021 MCNAUGHTON DR SUITE 9
COLUMBIA SOUTH CAROLINA 29223

Hwy. 11 Grocery, 13527 N Hwy 11, Salem, SC
UST Permit #03439, CA #17616
Release Reported November 28, 2000
Corrective Action Solicitation Response Summary Form received November 4, 2002
Oconee County

Dear Mr. Lyke:

The Underground Storage Tank (UST) Program recently served as a coordinator to obtain solicitation responses for a reasonable, cost-effective response for soil and/or groundwater contamination at the above referenced facility. The Program's role of coordinator does not imply a contractual obligation from the Department. Mr. Steven Smith selected your company to implement the corrective action. Additionally, Mr. Smith requested that reimbursement from the State Underground Petroleum Response Bank (SUPERB) Account for the corrective action activities be paid directly to your company. Although payment will be issued from the SUPERB Account, the relationship between you and Mr. Smith is crucial for the success of the corrective action. **The UST Program highly recommends that a written contractual agreement be developed between your company and Mr. Steven Smith. The Department, as the coordinator, will not be a party to any contractual obligations between you, Mr. Smith, subcontractors, or any third party.**

By responding to the solicitation and/or agreeing to conduct the cleanup for the tank owner or operator, you are deemed to understand the specifications, terms, and conditions of the solicitation. Payment from the SUPERB Account will only be made for achieving the corrective action goals as specified in the solicitation package and that the required performance bond or irrevocable standby letter of credit shall specifically list the SUPERB Account as the payee.

Cost Agreement #17616 has been established in the amount of \$116,000.00 for all costs associated with cleanup activities at the referenced facility in accordance with the specification package. Future invoices against this amount must comply with the State Underground Petroleum Environmental Response Bank (SUPERB) Site Rehabilitation and Fund Access Regulations, R.61-98 and the special conditions of the corrective action specifications. The established price is final and will not be increased for any reason (e.g., unanticipated iron fouling of a system, wells clogging because of biological activity or sediments, increased subcontractor costs, loss of utilities, modification to the system to meet the remediation goals, etc.) with the exception of unforeseen geologic circumstances or identification of additional chemicals of concern from another release.

The UST Program will conduct split-sampling events to verify that reduction milestones have been met. If you think you are approaching a milestone, please contact me approximately two weeks prior to your quarterly sampling event. I will inform you if UST Program personnel plan to join you to obtain split or duplicate groundwater samples.

Any problems that occur during the implementation of the corrective action at the referenced facility should be immediately brought to the attention of the tank owner or operator, in writing, with a copy submitted to my attention. As stated above, the UST Program and the SUPERB Account will not be liable for any costs associated with work outside the scope of the Corrective Action Solicitation or costs in excess of \$116,000.00.

On all correspondence regarding this site, please reference UST Permit #03439. If you have any questions, please contact me at (800) 826-5435 (within South Carolina only) or (803) 896-6647.

Sincerely,



Konstantine Akhvlediani, Hydrogeologist
Owner/Operator Support Section
Assessment and Corrective Action Division

cc: Mr. Steven Smith, 180 Schallow Ford Road, Salem, SC 29676
~~Technical~~ Read Files
Pat Holland, Financial Section

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY**SOUTH CAROLINA****Department of Health and Environmental Control
Underground Storage Tank Program**

UST Permit #03439

Facility Name Hwy 11 Grocery**1. Completed Corrective Action Solicitation Response Forms are attached from 7 contractors.**

Consultech Environmental, Inc.	\$116,000.00
Palmetto Environmental Group	\$160,000.00
Brooks & Medlock Engineering	\$164,000.00
Terry Environmental Services	\$192,000.00
phA Environmental Restoration, Inc.	\$213,000.00
Gage Group, Inc.	\$250,000.00
Applied Earth Sciences	\$309,000.00

2. Based on a review of the corrective action responses, I select (please name):SEI ENVIRONMENTAL

I understand that the SUPERB Account will compensate for reasonable costs up to \$116,000.00 regardless of the proposed cost of the contractor selected by me.

3. Compensation from the SUPERB Account should be paid to: (please check one)

- UST Owner/ Operator
 SC Certified Site Rehabilitation Contractor named above in Item 2

4. List any anticipated changes to the site in the near future: (e.g. sale, UST removal, etc.)**5. Additional Comments:** (Attach additional page(s) if required)

UST Owner/ Operator Name

Steven M Smith

Address

13527 N Hwy 11SALEM SC 29676

Telephone Number

(864) 944 - 0494

FAX Number ()

Signature

Printed or Typed Name

Title

10.30.02

Date Signed

CORRECTIVE ACTION SOLICITATION RESPONSE SUMMARY

CAP SUM (modified 07/26/2001)

RECEIVED

NOV 04 2002

**UNDERGROUND STORAGE
TANK PROGRAM**

SUPERB :: Money Calculator version WIN

Site ID: 03439

11/04/2002

CP No. : 17616

Total Price Quoted for ACA : \$116000.00
Base Concentration : 12493598 ug/l
SSTL Concnetration : 447591 ug/l

Initial Money: \$ 46400.00 for system startup
25% Reduction Money: \$ 11600.00 for reaching 9482096 ug/L
50% Reduction Money: \$ 11600.00 for reaching 6470595 ug/L
75% Reduction Money: \$ 17400.00 for reaching 3459093 ug/L
For finishing the CA: \$ 29000.00 for reaching 447591 ug/L

Total Money: \$ 116000.00

Contents of this program and its use are the sole property of the South Carolina Department of Health and Environmental Control(SCDHEC).

Program Developed by Sriram Madabhushi.
Unauthorized use is strictly prohibited.