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**MONITORING REPORT
ROY GOODWIN PROPERTY
11 OLD CLYDE ROAD
LAKE JUNALUSKA, HAYWOOD CO, NORTH CAROLINA
NCDENR INCIDENT NO. 7217
S&ME PROJECT NO. 1354-10-012**

Prepared for:

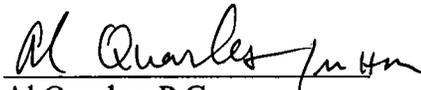
North Carolina Department of Environment and Natural Resources
Division of Waste Management
Underground Storage Tank Section
1637 Mail Service Center
Raleigh, North Carolina 27699
Attention: Sharon Ghiold

Prepared by:

S&ME, Inc.
44 Buck Shoals Road, Suite C-3
Arden, North Carolina 28764



Scott A. Spinner, P.G.
Project Geologist



Al Quarles, P.G.
Senior Hydrogeologist

S&ME, Inc.: Geology License (certification # C-145) and Engineering License (certification # F-0176)

July 1, 2010

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1 SITE IDENTIFICATION

Site Name: Roy Goodwin Property

Site Location: 11 Old Clyde Road
Lake Junaluska, Haywood Co, North Carolina

Incident Number: 7217

Current UST Owner: None - USTs were removed in 1993

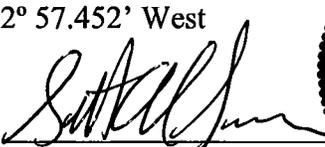
Current Property Owner: Michael and Janet Daggy
293 Thomas Park
Waynesville, NC 28786

Consultant: S&ME, Inc.
Contact: Scott A. Spinner
44 Buck Shoals Road, Suite C-3
Arden, North Carolina 28704
(828) 687-9080

Release Information: Date Discovered: February 1992
Estimated Quantity: Unknown
Cause of Release: Unknown

Former UST Systems: Two 750-gallon Gasoline

Source Latitude/Longitude: 35° 31.653' North
82° 57.452' West

Licensed Professional Geologist: 
Scott A. Spinner, P.G.



North Carolina Professional Geology Firm License No. C-145

2 SITE HISTORY

According to the *LUST Action Plan* provided by the North Carolina Department of Environment and Natural Resources' (NCDENR) Division of Waste Management (DWM), dated January 22, 2008, the site was previously operated as a service station with two 750-gallon underground storage tanks (USTs). The tanks were reportedly last used in the late 1950s. The site is located at 11 Old Clyde Road in Lake Junaluska, Haywood County, North Carolina. A site location map is presented as **Figure 1**.

In February 1992, the North Carolina Department of Transportation (NCDOT) conducted soil sampling and a geophysical survey at the site as part of a proposed right-of-way expansion project for Highway 209. The results of the survey concluded that four potential USTs were present onsite. Soil sampling results identified up to 200 milligrams per kilogram (mg/kg) total petroleum hydrocarbons (TPH) in the soil. NCDOT notified NCDENR that petroleum contaminated soils had been identified adjacent to the identified USTs onsite.

According to the *LUST Action Plan*, on December 8, 1993, the Federal Trust Fund (FTF) contracted Delta Environmental to remove the USTs from the subject site. Two 750-gallon gasoline USTs were removed, but the remaining two USTs identified by the NCDOT could not be located. Approximately 120 tons of petroleum impacted soil was excavated from the tank basins and disposed of offsite. Soil samples from the excavation indicated TPH concentrations as high as 14,200 mg/kg.

According to the Hart and Hickman (H&H) *Phase I LSA* report dated December 20, 2007, on October 8, 2007, H&H advanced a soil boring which was completed as a monitor well (MW-1). Soil and groundwater samples were collected for analysis. Thirteen target analytes were detected in the soil sample at concentrations exceeding the Soil-to-Water (S-W) Maximum Soil Contaminant Concentrations (MSCCs) and two target analytes were detected at concentrations above the Residential MSCCs. Ten (10) target analytes were detected above the North Carolina Groundwater Quality Standards (2L Standards) in the groundwater sample collected from monitor well MW-1. Soil sample analytical results are summarized on **Table 1**. Groundwater analytical results are summarized on **Table 2**. During the field activities, H&H conducted a water supply well survey within 1,000 feet of the source area. One active water supply well (WSW-1) was identified approximately 590 feet northeast the site, presumed to be upgradient of the site based on topography.

According to the AMEC Earth and Environmental, Inc. of North Carolina (AMEC) *NC Department of Transportation, Preliminary Site Assessment, Michael Daggy Property*, dated October 23, 2009, AMEC performed a preliminary site assessment of the subject property associated with a NCDOT road widening projected along Highway 209 (Crabtree Road). According to this report, Schnabel Engineering South of Greensboro, North Carolina identified an anomaly near the southern corner of the building onsite. The anomaly was suspected to be a UST with a capacity of approximately 550 gallons.

On September 1, 2009, twelve (12) soil borings were advanced onsite and soil samples

collected. The approximate soil sample locations are depicted on **Figure 2**. TPH diesel range and gasoline range organics (DRO and GRO) were detected at concentrations exceeding NCDENR Action Levels in the soil samples collected from two of the soil borings (SB-6 and SB-7). Soil sampling analytical results are summarized on **Table 1**.

This report was prepared in general accordance with the 15A NCAC 2L .0115 regulations and the NCDENR, July 15, 2008 Underground Storage Tank (UST) Section Guidelines for Assessment and Corrective Action, Contract # 16-1713-4F for the Western Region, and S&ME's Proposal Number 1354-22561-10 dated February 2, 2010, as approved with NCDENR's Task Authorization #01. The proposed services included conducting an initial project review and setup, a site reconnaissance and receptor survey update, collecting groundwater samples from monitor well MW-1 and water supply well WSW-1, installing a well boom in monitor well MW-1, and preparing a monitoring report.

3 UPDATED RECEPTOR SURVEY

On March 26, 2010, Mr. King Williams with S&ME conducted a survey of properties within a 1,000-foot radius of the site. The survey included a visual reconnaissance by vehicle and on-foot to locate water meters and any water well structures. A "Well Survey Questionnaire" was mailed to each property owner within 500 feet of the subject site. A copy of the questionnaire and cover letter is included in **Appendix I**.

Information obtained by the site reconnaissance and returned questionnaires indicates that one (1) active water supply well (WSW-1, ~590 feet northeast) and one (1) inactive water supply well (WSW-2, ~270 feet northeast) are located within 1,000 feet of the former UST locations. The approximately locations of the wells are shown on **Figure 3**. Available information regarding the water supply wells is provided in **Table 3**.

4 GROUNDWATER MONITORING

4.1 Monitor Well Sampling

On March 26, 2010, S&ME was on-site to gauge depth-to-water and collect a groundwater sample from monitor well MW-1. The depth to liquid below the top of well casing was 10.75 feet in monitor well MW-1. After measuring the depth-to-water, S&ME personnel purged the monitor well with a disposable polyethylene bailer by evacuating three well volumes. A Well Sampling Form is included in **Appendix II**. Site photographs are included in **Appendix III**.

After completing the well purging and allowing groundwater to recover, S&ME personnel collected a groundwater sample from monitor well MW-1. The groundwater sample was placed in laboratory-supplied containers, stored in a cooler with ice, and shipped under chain-of-custody procedures to Shealy Environmental Services, Inc., a North Carolina certified laboratory for laboratory analysis. The groundwater sample was analyzed for volatile organic compounds (VOCs) by EPA Method 6200B.

4.2 Monitor Well Sampling Results

The laboratory analytical results indicated that groundwater from monitoring well MW-1 contained petroleum constituents at concentrations greater than the 2L Standards, by approximately 1.5 to 10 times. The March 2010 contaminant concentrations are approximately 38% lower than the October, 2007 concentrations.

A summary of groundwater analytical results and a comparison to NCDENR's regulatory standards is included on **Table 2**. A copy of the laboratory analytical results and chain-of-custody form is included in **Appendix IV**.

4.3 Water Supply Well Sampling

On March 26, 2010, S&ME conducted a water supply well sampling event. One water supply well was sampled as part of this event. The Reeves water supply well (WSW-1) is located on the property addressed at 66 Lake Shadows Lane. The approximate location of the water supply well is depicted on **Figure 3**.

S&ME personnel collected a sample from water supply well WSW-1 from an exterior spigot on the south side of the house located on this property. The water supply well was purged for approximately 15 minutes prior to collection of the groundwater sample. The groundwater sample was placed in laboratory-supplied containers, stored in a cooler with ice, and delivered under chain-of-custody procedures to Shealy Environmental Services, Inc. for analysis. The samples were analyzed for volatile organic compounds (VOCs) by SW846 Method 6200B.

The laboratory analytical results of the groundwater sample collected from water supply wells WSW-1 were below the laboratory reporting limit for all analytes on the target compound list. The laboratory analytical results are summarized on **Table 2**. A copy of the laboratory analytical results and chain-of-custody form is included in **Appendix IV**.

5 WELL BOOM

Following the March 26, 2010 groundwater sampling event, S&ME installed a new 1.25-inch diameter by 48-inch long well boom (Universal Remediation Inc., Petroleum Remediation Product) in monitor well MW-1. The purpose of the well boom is to enhance the biodegradation (e.g. natural attenuation) of petroleum constituents in the vicinity of the monitor well.

6 CONCLUSIONS AND RECOMMENDATIONS

A groundwater monitoring event was conducted at the Roy Goodwin Property located at 11 Old Clyde Road in Lake Junaluska, Haywood County, North Carolina to assess potential petroleum impacts to groundwater. The findings at the site are as follows:

- On December 8, 1993, two 750-gallon gasoline USTs were removed, along with approximately 120 tons of petroleum impacted soil. Two other reportedly present USTs were not located or removed. Soil samples from the excavation indicated residual TPH concentrations as high as 14,200 mg/kg.

- In October 2007, source area boring/monitor well MW-1 was completed. Petroleum levels in the soil exceeded the S-W and Residential MSCCs and petroleum levels in the groundwater exceeded the 2L Standards. Resampling of MW-1 in March 2010 indicated an approximate 38% reduction in contaminant concentrations since October 2007. The extent of the impacted groundwater has not been fully characterized.
- One active water supply well (WSW-1, ~590 feet northeast) and one inactive water supply well (WSW-2, ~270 feet northeast) have been identified within 1,000 feet of the subject property. Well WSW-1 was sampled in March 2010, and the results were below the laboratory reporting limits for all analytes on the SW846 Method 6200B target compound list.

Based on the above information, S&ME recommends:

Semi-annual to annual sampling of water supply wells WSW-1 and monitor well MW-1 for VOCs by SW846 Method 6200B, with the next event in September 2010 or March 2011.

Or,

Obtain an agreement and connect water supply well WSW-1 to the municipal water supply and close the incident, abandon MW-1, and file a Notice of Residual Petroleum for the site with soil and groundwater restrictions.

TABLES

TABLE 1
 Summary of Historical Soil Analytical Data
 Roy Goodwin Property
 11 Old Clyde Road
 Lake Junaluska, Haywood County, North Carolina
 NCDENR Incident No. 7217
 S&ME Project No: 1354-10-012

Sample ID	Analytical Method	VOCs by EPA 8260B												EPA 8015B		MADEP VPH/EPH		
		Contaminant of Concern												DRO	GRO	C5-C8 Aliphatics	C9-C18 Aliphatics	C9-C22 Aromatics
		n-Butylbenzene	sec-Butylbenzene	Ethylbenzene	Isopropylbenzene	p-Isopropyltoluene	Naphthalene	n-Propylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Toluene	Xylene (Total)						
Date	Depth (ft-bls)	22	9.9	290	29	6.4	200	130	620	190	19	1,270	NA	NA	1,600	3,300	1,300	
MW-1		10/8/2007	8-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S4-SB1-1		9/1/2009	3-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S4-SB2-1		9/1/2009	3-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S4-SB3-1		9/1/2009	3-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S4-SB4-1		9/1/2009	5-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S4-SB5-1		9/1/2009	3-4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S4-SB6-1		9/1/2009	10-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S4-SB6-2		9/1/2009	6-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S4-SB7-1		9/1/2009	5-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S4-SB7-2		9/1/2009	13-14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S4-SB8-1		9/1/2009	5-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S4-SB9-1		9/1/2009	4-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S4-SB10-1		9/1/2009	5-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S4-SB11-1		9/1/2009	5-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S4-SB12-1		9/1/2009	5-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Soil to Water MSCCs		4.3	3.3	4.6	1.7	NSE	0.58	1.7	7.5	4.6	NSE	NSE	72	3,300	34	
		Residential Soil Cleanup Levels		626	626	1,560	1,564	NSE	313	626	782	3,129	NSE	NSE	939	9,386	469	
		Industrial/Commercial Soil Cleanup Levels		16,350	16,350	40,000	40,880	NSE	8,176	16,350	20,440	81,760	NSE	NSE	24,528	245,280	12,264	
		NCDENR UST Section Action Level		NSE	NSE	NSE	NSE	NSE	NSE	NSE	NSE	NSE	10	10	NSE	NSE	NSE	

- Notes:
1. Analytes that are not shown were not detected above their respective laboratory reporting limits.
 2. All soil concentrations are reported in milligrams per kilogram (mg/kg).
 3. MSCC = Maximum Soil Contaminant Concentration
 4. ft-bls = Feet below land surface
 5. NA = Not analyzed
 6. NSE = No standard established
 7. DRO = Diesel Range Organics
 8. GRO = Gasoline Range Organics
 9. NCDENR UST Section Action Levels = North Carolina Department of Environment and Natural Resources Underground Storage Tank Section Action Levels. Concentrations shown reflect the standards at the time the samples were collected. Current standards may vary.
 10. All soil concentrations that exceed the Soil to Water MSCCs or the NCDENR UST Section Action Levels are shown in bold and yellow highlight

TABLE 2
Summary of Current and Historical Groundwater Analytical Data
Roy Goodwin Property
11 Old Clyde Road
Lake Junaluska, Haywood County, North Carolina
NCDENR Incident No. 7217
S&ME Project No. 1354-10-012

Analytical Method Contaminant of Concern	Date Collected	EPA Methods 6210D/6200B										3030C	MADEP VPH/EPH			
		n-Butylbenzene	sec-Butylbenzene	Ethylbenzene	Isopropylbenzene	p-Isopropyltoluene	Naphthalene	n-Propylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene		Xylene (Total)	Lead	C5-C8 Aliphatics	C9-C18 Aliphatics
MW-1	10/8/2007	32	25	2,500	200	68	710	510	65	3,600	880	6,800	8.7	2,200	9,900	6,600
	3/26/2010	62	21	1,500	150	47	610	430	95	2,000	600	4,000	NA	NA	NA	NA
WSW-1	3/26/2010	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	NA	NA	NA	NA
	NCAC 2L Standards	70	70	600	70	NSE	6	70	600	400	400	500	15	400	700	200
Gross Contamination Levels		6,900	8,500	84,500	25,000	NSE	6,000	30,000	260,000	28,500	25,000	85,500	15,000	NSE	NSE	NSE

Notes:

1. Analytes that are not shown were not detected above their respective laboratory reporting limit
2. All concentrations are reported in micrograms per liter (µg/L)
3. 2L Standard: North Carolina Groundwater Quality Standards: 15A NCAC 2L.0202
4. NSE: Regulatory standard not established
5. NA = Not analyzed
6. All concentrations that exceed the 2L Standards are shown in **bold** and yellow highlight

TABLE 3
Summary of Water Supply Well Information
Roy Goodwin Property
11 Old Clyde Road
Lake Junaluska, Haywood County, North Carolina
NCDENR Incident No. 7217
S&ME Project No: 1354-10-012

Well ID	Property Address	Owner	Owner Address	Phone Number	Well Description (Total Depth/Casing Depth)	Status	Distance/Direction from UST basin
WSW-1	66 Lake Shadows Lane	Clyde Reeves	66 Lake Shadow Lane Lake Junaluska, NC 28745	828-452-4919	Unknown	Drinking	590' Northeast
WSW-2	73 Old Clyde Road	Patsy Medford	73 Old Clyde Road Lake Junaluska, NC 28745	828-456-9779	Unknown	Not in Use	270' Northeast

FIGURES

TOPOI map printed on 06/28/10 from "North Carolina.tpo" and "Untitled.tpg"

82°59.000' W

82°58.000' W

82°57.000' W

WGS84 82°56.000' W



35°33.000' N

35°32.000' N

35°31.000' N

35°30.000' N

35°33.000' N

35°32.000' N

35°31.000' N

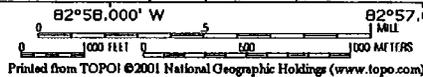
35°30.000' N

82°59.000' W

82°58.000' W

82°57.000' W

WGS84 82°56.000' W



Printed from TOPOI ©2001 National Geographic Holdings (www.topo.com)

SCALE:	AS SHOWN
CHECKED BY:	WAQ
DRAWN BY:	SAS
DATE:	6/28/2010



SITE LOCATION MAP	
Roy Goodwin Property	
11 Old Clyde Road, Lake Junaluska, NC	
JOB NO.	1354-10-012

FIGURE NO.	1
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BASE MAP AND SAMPLE LOCATIONS OBTAINED FROM AMEC EARTH AND ENVIRONMENTAL, INC., FIGURE 2 SITE #4 MICHAEL E. DAGGY PROPERTY SITE MAP FROM THEIR PRELIMINARY SITE ASSESSMENT REPORT DATED OCTOBER 23, 2009.



APPROXIMATE LOCATION OF SOIL SAMPLE
 APPROXIMATE LOCATION OF MONITORING WELL

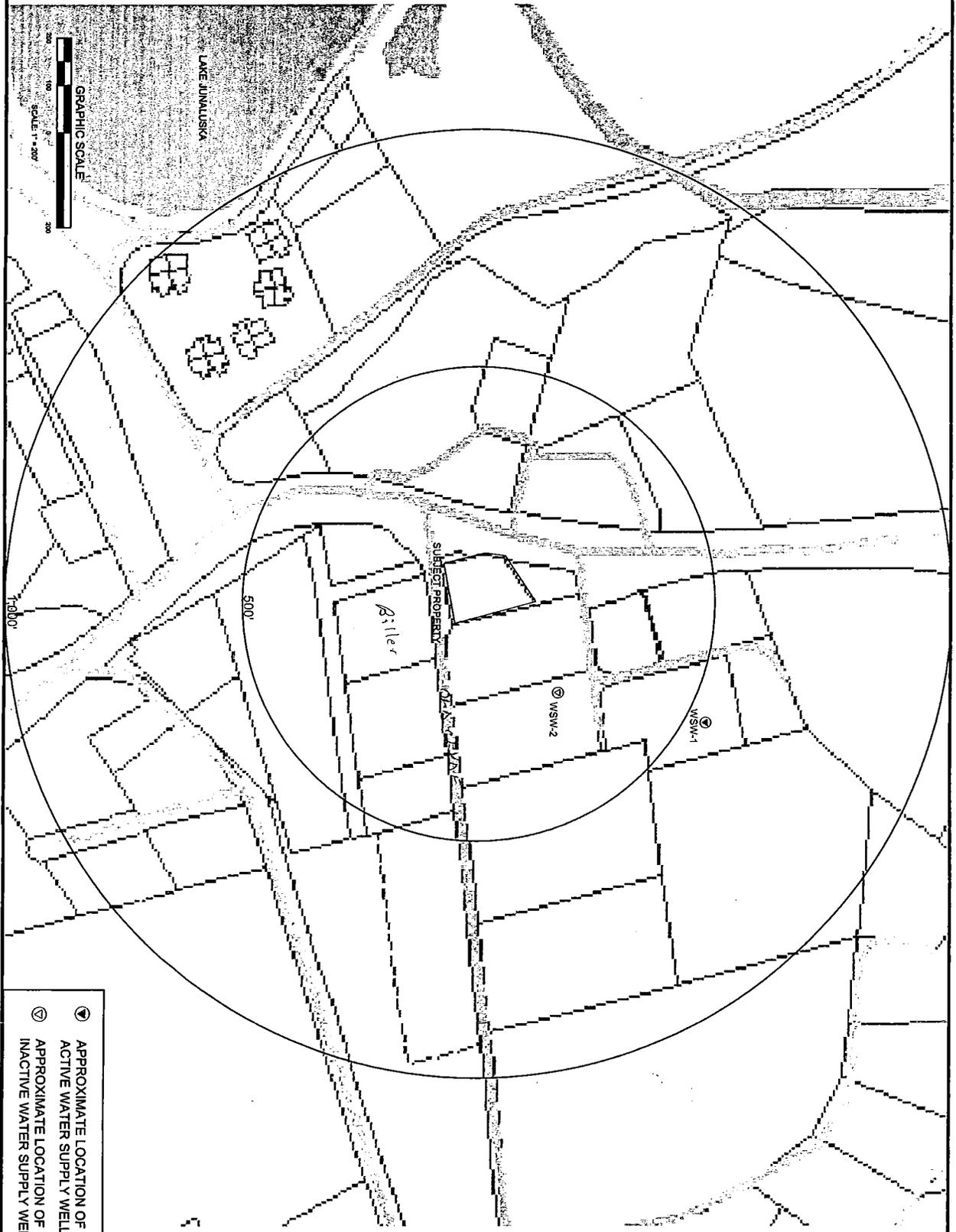


44 BUCK SHOALS ROAD, SUITE C-3
 ARDEN, NC 28704
 PH: 828-687-8280
 FAX: 828-687-8003
 WWW.SMEINC.COM

SAMPLE LOCATION MAP
 ROY GOODWIN PROPERTY
 LAKE JUNALUSKA, NC

SCALE: AS SHOWN	DRAWN BY: SAS	CHECKED BY: WAQ
JOB NO. 1354-10-012	DATE: JUNE 2010	FIGURE NO. 2

SOURCE OF PARCEL BASE MAP: HAYWOOD COUNTY GIS
 (http://maps.haywoodnc.net/gisweb/default.aspx)



 APPROXIMATE LOCATION OF ACTIVE WATER SUPPLY WELL
 APPROXIMATE LOCATION OF INACTIVE WATER SUPPLY WELL



44 BUCK SHOALS ROAD, SUITE C-3
 ARDEN, NC 28704
 PH. 828-687-9080
 FAX. 828-687-3003
 WWW.SMEINC.COM

SITE VICINITY MAP
 ROY GOODWIN PROPERTY
 LAKE JUNALUSKA, NC

SCALE: AS SHOWN	DRAWN BY: SAS	CHECKED BY: WAQ
JOB NO. 1354-10-012	DATE: JUNE 2010	FIGURE NO. 3

APPENDIX I

Well Survey Questionnaire



February 24, 2010

Brian Noland
63 Dogwood Rise Terrace
Waynesville, NC 28785

Reference: **Well Survey Questionnaire**
Roy Goodwin Property
11 Old Clyde Road
Lake Junaluska, North Carolina
S&ME Project No. 1354-10-012

To Whom It May Concern:

Petroleum contamination is suspected from a leaking underground storage tank system (UST) located within 500 feet of your property(s). The subject property is located at 11 Old Clyde Road in Lake Junaluska, North Carolina and is indicated with a red dot on the attached figure. The North Carolina Department of Environmental and Natural Resources (NCDENR) has contracted S&ME to gather information regarding water supply wells within 1,500 feet of the release. This information is critical for ensuring the safety of your water supply.

Please help us gather information regarding water supply wells by completing the survey attached with this letter and returning the completed form by mail or facsimile to Scott Spinner at S&ME, Inc. Also, if you know the location of a well on your property(s), please identify the well location on the parcel map provided and return it to us with the questionnaire. A self addressed stamped envelope to return the questionnaire by mail has been provided for your convenience. The results of the survey will be compiled and forwarded to the NCDENR for evaluation. Thank you for your cooperation. If you have any questions, please call Scott Spinner at (828) 687-9080.

Sincerely,

S&ME, Inc.

Scott Spinner
Project Manager

SAS/jmm
S:\7217 Roy Goodwin Property\TA-01 Updated Receptor, MW and WSW Sampling\Receptor Survey\Questionnaire Letter.doc

Attachments: Figure 1, Tax Parcel Map
Questionnaire

Incident Numbers: 7217

Please Provide the Following Information (to the best of your knowledge)

Name and telephone number of person completing the survey:

Name: _____

Telephone Number: _____

Addresses of properties on the attached map that you own:

What is the source of your drinking water? Public Water / Water Supply Well / Stream Intake / Other
(please explain below)

Is there a water supply well on this property(s)? Yes / No

Note: Please indicate the approximate location of the well(s) on the attached parcel map.

If "No," then disregard remaining questions and return the survey.

Name and address of owner(s) of property with water supply well: _____

What is the well(s) used for? (check all that apply) Drinking ___ Irrigation ___ Swimming Pool ___
Water Livestock ___ Other (specify) _____ You do not use the well ___.

How many residences are connected to the well (list addresses below) _____

How deep is the well(s)? _____ Date well(s) was installed: _____

What is the casing depth of the well(s)? _____

What is the screen interval of the well(s)? _____

Additional water supply well information: _____

A. This Part to be Completed by the Responsible Party or their Representative
Please complete the survey and return to S&ME, Inc. using one of the following methods:

1. Fax to (828) 687-8003
2. Mail to 44 Buck Shoals Road, Suite C-3
Arden, North Carolina 28704
3. Telephone (828) 687-9080
4. E-mail to sspinner@smeinc.com

If you have any questions, please contact Scott Spinner at S&ME (828) 687-9080.

APPENDIX II

Well Sampling Form

Project Name:
 Project Location:
 Project Number:

ROY GOODWIN
WAYNESVILLE, NC (LAKE
1354-10-012



Well ID MW-1

Sampling Personnel (1) King Williams (2)
 Weather Conditions 60°F / Cloudy
 Unusual Site Conditions _____

Water Level Data 2" well - 0.164 gal/ft, 4" well - 0.653 gal/ft, 6" well - 1.47 gal/ft
 Measuring Point Location _____ Well Casing Volume 3 = 4.66 Gallons
 Depth to Water (ft) 10.75' Well Casing Volume _____ Liters
 Depth to Base of Well (ft) 20.45' 3.785 liters/gallon
 Water Column (ft) 9.7'
 Equipment Used to Measure Depths ELECTRONIC WATER PROBE

Well Purging Data

Date 3/26/10 Purging Equipment BAILER

	Total Volume (Gal)	Time	pH	Temp (C/F)	Conductance	Turbidity	D.O.
Initial	0	10:10					
	2.5	10:25					
		:					
Final	4.66	10:40					

Well Sampling Data

Sampling Date 3/26/10
 Sampling Time 10:40
 Sampling Equipment BAILER
 Sample Observations N/A

Analytical Data

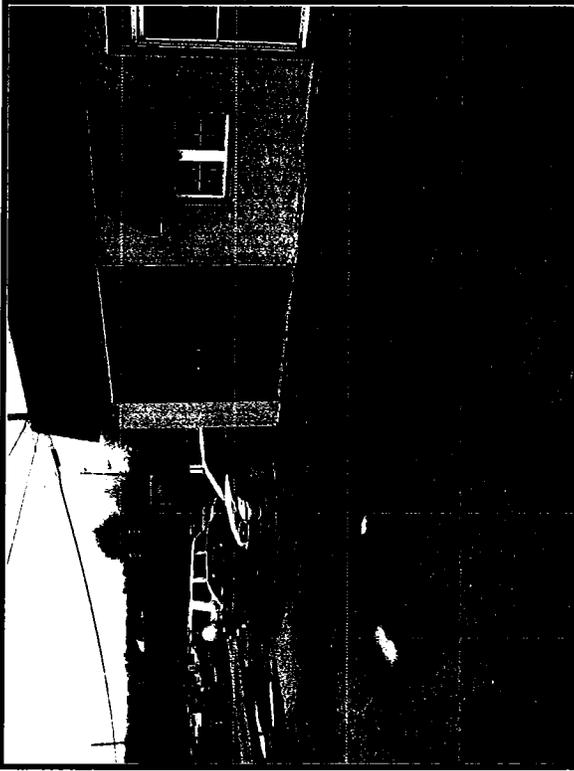
Method	Container Type and No.	Preservation
<u>6200 VOC w/MTBE</u>	<u>(3) VOA</u>	<u>HCL</u>
<u>EOB, TPE</u>		

Comments _____

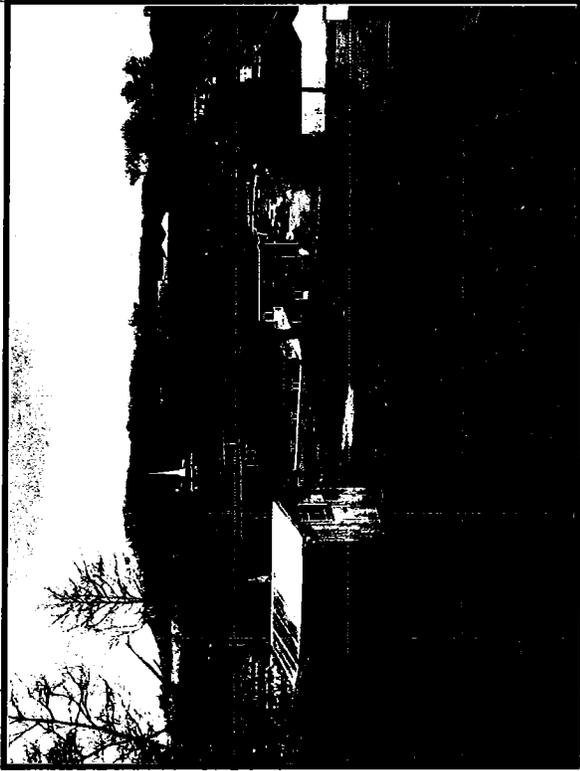
Sampler Signatures (1) [Signature]
(2)

APPENDIX III

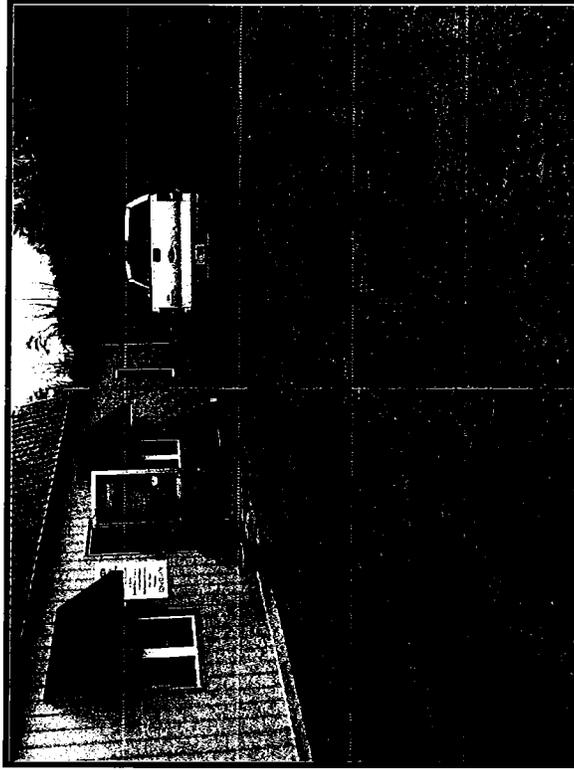
Site Photographs



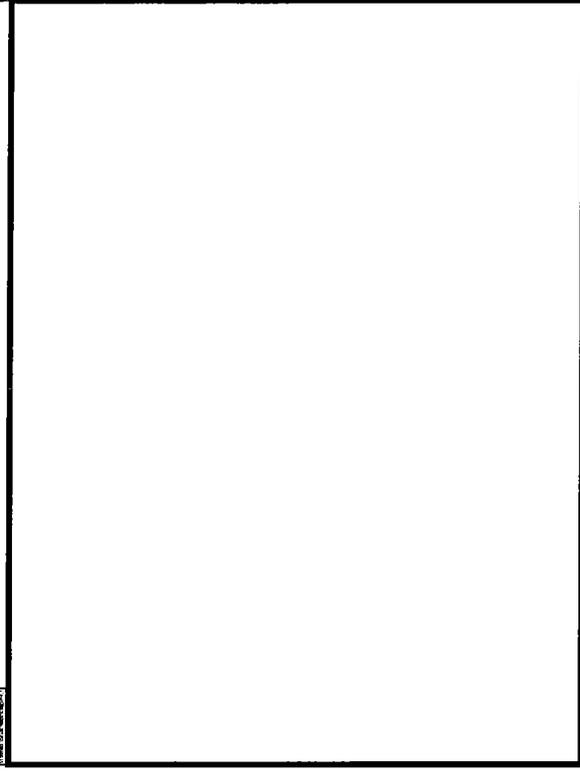
1 View of the front parking lot and front of the building at the Roy Goodwin Property facing southwest. Monitor well MW-1 is in the foreground.



3 View of well house for WSW-1 located at 66 Lake Shadows Lane.



2 View of monitor well MW-1 looking north from the front parking lot at the Roy Goodwin Property.



4



Roy Goodwin Property
11 Old Clyde Road, Lake Junaluska, North Carolina

S&ME Project # 1354-10-012

Taken by: PKW

Date Taken: 3-26-10

APPENDIX IV

Laboratory Report and Chain-of-Custody Form