

Brownfields Program
File Room Document Transmittal Sheet

23

Your Name: Shirley Liggins
Project ID: 0904905021
Facility Name: Leary Brothers Storage
Document Group: Environmental Assessment (EA)
Document Type: Sampling and Analysis Plan (SAP)
Description: Soil Sampling results by Solutions-IES
Date of Doc: 4/5/2012
Author of Doc: James Joyner

File Room Use Only

Date Recieved by File Room:

Date Scanned:

Month	Day	Year
06	28	2012

0904905021

Scanner's Initials:

sal

April 5, 2012

Mr. Tony Duque
NCDENR, Division of Waste Management
N.C. Brownfields Program
Mail Service Center 1646
Raleigh, NC 27699-1646

Re.: Soil Sampling Results
Former Leary Brothers Storage Site, Edenton, NC
Solutions-IES Project No.2012.0013.MARL

Dear Mr. Duque:

Solutions-IES was retained by Marlin, LLC (formerly Virginia Road, LLC) to conduct soil sampling as required in the Brownfields Agreement between NCDENR and Virginia Road, LLC for the former Leary Brothers Storage Site located at 101 Virginia Road, Edenton, Chowan County, North Carolina (Figure 1). Soil sampling was previously conducted in January 2009 from the accessible areas of the site. At that time, one building remained on-site. This building was recently razed. As stipulated in the Brownfield Agreement, soil sampling was required upon demolition of the building.

Solutions-IES conducted the soil sampling on March 29, 2012 in accordance with the Soil Sampling Work Plan dated March 21, 2012. This summary report presents the sample locations from within the previous building's footprint and the results of the laboratory analyses pursuant to the Brownfield Agreement.

Results

Solutions-IES collected soil samples in accordance with NCDENR Inactive Hazardous Sites Program, *Guidelines for Assessment and Cleanup* (August, 2011). The dimensions of the building footprint were approximately 50 x 80 feet. Based upon the former building footprint, the soil samples were collected on a 20-ft grid pattern. One sample was collected from each grid using a hand auger. Therefore, a total of six grids were sampled as illustrated in Figure 2. The soil samples from each grid were composited into one sample. Following NCDENR guidance, a one additional grab sample was collected from grid #1. All

soil samples were collected from 0 to 6 inches below land surface (bls). The two samples were submitted to ESC Lab Sciences analytical laboratory under chain-of-custody procedures and analyzed for arsenic by USEPA Method 6010B. The laboratory report is attached.

The results of the laboratory analysis on the soil samples are summarized below.

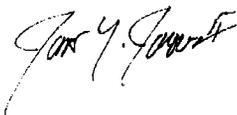
<u>Sample ID</u>	<u>Sample Method</u>	<u>Concentration (mg/kg)</u>
SIES-1	Grab	<1.2
SIES-2	Composite	<1.6

As indicated above, arsenic was not detected in the soil samples above the laboratory detection limit.

This report concludes the investigation activities required in the Brownfields Agreement for the Former Leary Brothers Storage Site. If you have any questions or need any additional information, please feel free to contact me at (919) 873-1060.

Yours truly,

Solutions-IES



James Y. Joyner, II, RSM
Senior Project Manager

Attachments: Figure 1 – Site Location
Figure 2 – Soil Sample Locations
Analytical Laboratory Report

cc: Steve Lane, Marlin, LLC

FIGURES

PROJECT NUMBER
2012.0013.MARL

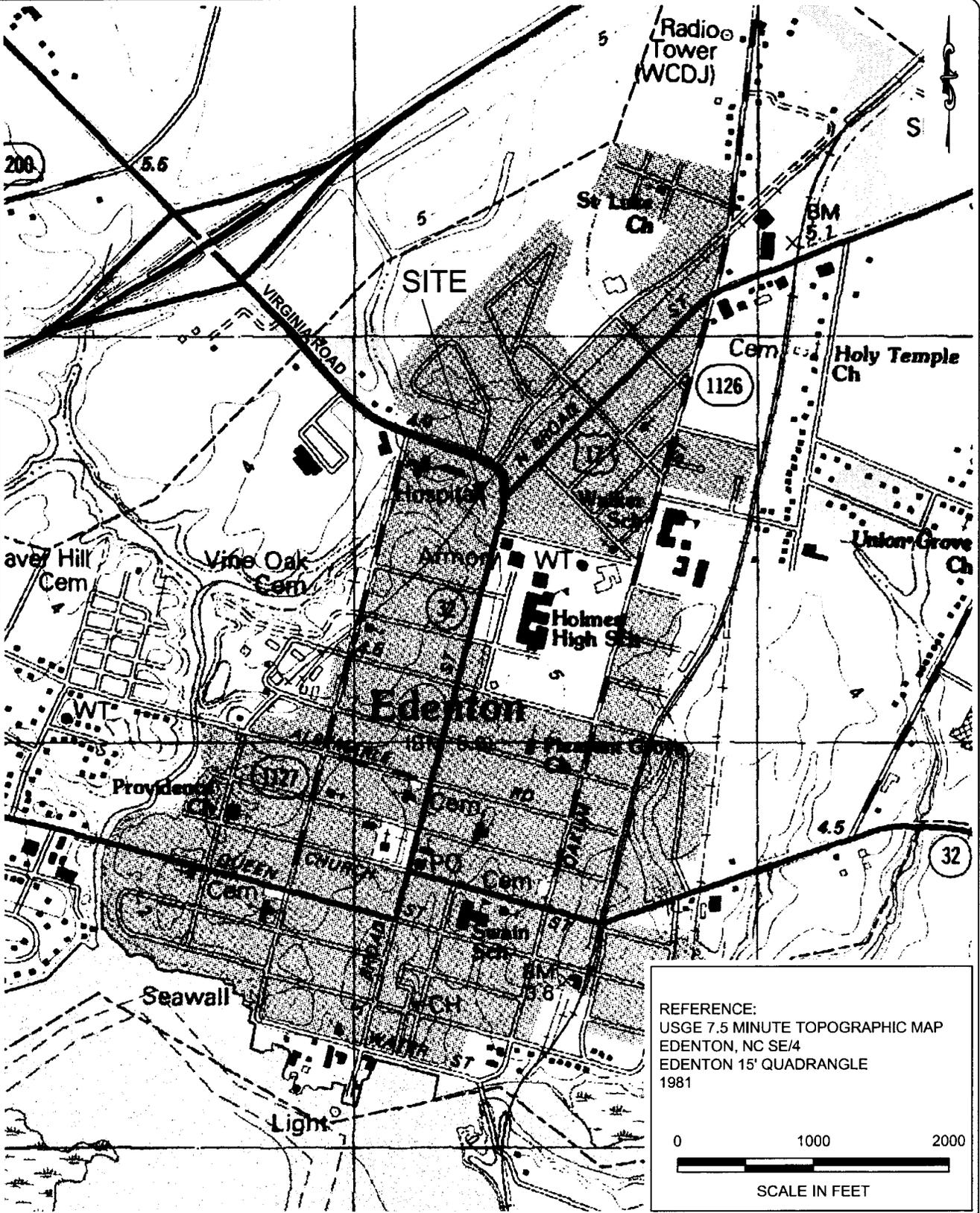
DRAFTER
DMM

CHECKED BY
JJ

PROJECT MANAGER
JJ

DATE
09/20/2012

FILE
Figure 1_.pdf



REFERENCE:
 USGS 7.5 MINUTE TOPOGRAPHIC MAP
 EDENTON, NC SE/4
 EDENTON 15' QUADRANGLE
 1981

0 1000 2000

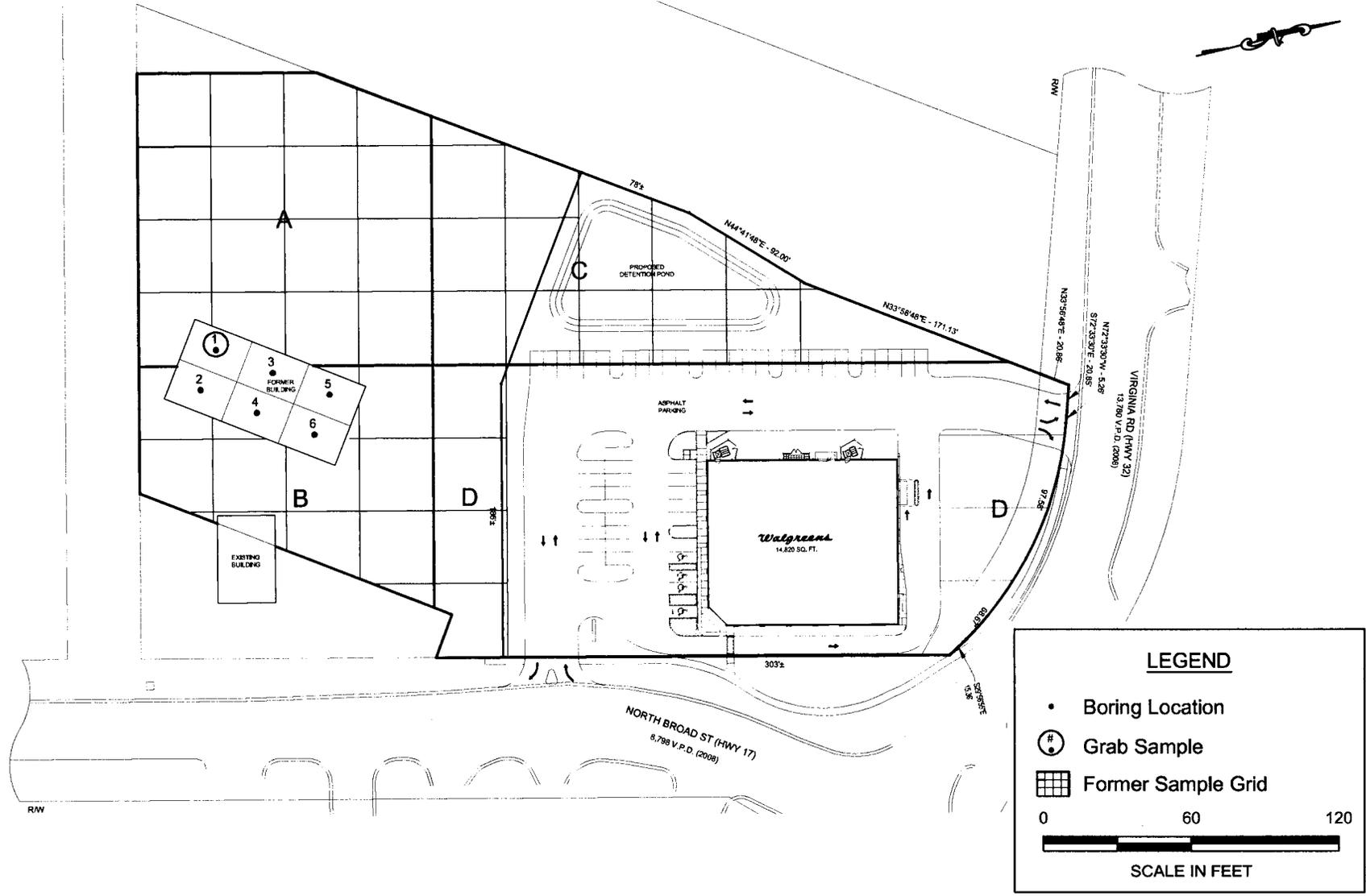
SCALE IN FEET

Solutions-IES
 Industrial & Environmental Services
 1101 NOWELL ROAD
 RALEIGH, NORTH CAROLINA 27607
 TEL.: (919) 873-1060 FAX.: (919) 873-1074

SITE LOCATION MAP
 FORMER LEARY BROTHERS STORAGE SITE
 101 VIRGINIA ROAD
 EDENTON, CHOWAN COUNTY, NORTH CAROLINA

FIGURE:
 1

FILE Figure 2.pdf	DATE 03/20/2012	PROJECT MANAGER JJ	CHECKED BY JJ	DRAFTER DMM	PROJECT NUMBER 2012.0013.MARL
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Solutions-IES
 Industrial & Environmental Services
 1101 NOWELL ROAD
 RALEIGH, NORTH CAROLINA 27607
 TEL.: (919) 873-1060 FAX.: (919) 873-1074

SOIL SAMPLE LOCATION MAP
 FORMER LEARY BROTHERS STORAGE SITE
 101 VIRGINIA ROAD
 EDENTON, CHOWAN COUNTY, NORTH CAROLINA

FIGURE:
 2

LABORATORY REPORT



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

James Joyner
Solutions-IES
1101 Nowell Road
Raleigh, NC 27607

Report Summary

Wednesday April 04, 2012

Report Number: L567612

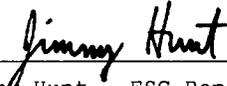
Samples Received: 03/30/12

Client Project:

Description: Virginia Road

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:


Jimmy Hunt, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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REPORT OF ANALYSIS

James Joyner
Solutions-IES
1101 Nowell Road
Raleigh, NC 27607

April 04, 2012

Date Received : March 30, 2012
Description : Virginia Rd
Sample ID : SIES-1 0-6IN
Collected By :
Collection Date : 03/29/12 11:15

ESC Sample # : L567612-01

Site ID :

Project # :

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	86.8	0.100	%	2540G	04/04/12	1
Arsenic	BDL	1.2	mg/kg	6010B	04/01/12	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

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The reported analytical results relate only to the sample submitted

Reported: 04/04/12 13:07 Printed: 04/04/12 13:22



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REPORT OF ANALYSIS

April 04, 2012

James Joyner
Solutions-IES
1101 Nowell Road
Raleigh, NC 27607

ESC Sample # : L567612-02

Date Received : March 30, 2012
Description : Virginia Rd

Site ID :

Sample ID : SIES-2 0-6IN

Project # :

Collected By :
Collection Date : 03/29/12 11:45

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	63.6	0.100	%	2540G	04/04/12	1
Arsenic	BDL	1.6	mg/kg	6010B	04/01/12	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

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The reported analytical results relate only to the sample submitted

Reported: 04/04/12 13:07 Printed: 04/04/12 13:22



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Solutions-IES
James Joyner
1101 Nowell Road
Raleigh, NC 27607

Quality Assurance Report
Level II
L567612

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
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April 04, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Arsenic	< 1	mg/kg			WG585769	04/01/12 23:37
Total Solids	< .1	%			WG586060	04/04/12 12:48

Analyte	Units	Duplicate			Limit	Ref Samp	Batch
		Result	Duplicate	RPD			
Total Solids	%	71.0	75.0	6.02*	5	L567616-01	WG586060

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Sample Result			
Arsenic	mg/kg	92.6	89.4	96.5	82.9-117	WG585769
Total Solids	%	50	50.1	100.	85-115	WG586060

Batch number /Run number / Sample number cross reference

WG585769: R2098454: L567612-01 02
WG586060: R2104116: L567612-01 02

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

Solutions-IES
James Joyner
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Raleigh, NC 27607

Quality Assurance Report
Level II

L567612

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Est. 1970

April 04, 2012

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (&RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address: Solutions - IES 1101 Nonell Rd. Raleigh, NC 27607			Billing Information: Same 2012.0013.MARL			Analysis/Container/Preservative			Chain of Custody Page 1 of 1	
Report to: James Joyner			Email to: joyner@solutions-ies.com			Arsenic 6010			 12065 Lebanon Road Mt. Juliet, TN 37122 Phone: (800) 767-5859 Phone: (615) 758-5858 Fax: (615) 758-5859 G004	
Project Description: Virginia Rd.			City/State Collected							
Phone: 919-783-1060 FAX:		Client Project #:		ESC Key:						
Collected by: (print)		Site/Facility ID#:		P.O.#:						
Collected by (signature): 777 Immediately Packed on Ice N <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% <input type="checkbox"/> Three Day 25%		Date Results Needed: Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes FAX? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes						
Sample ID		Comp/Grab	Matrix*	Depth	Date	Time				
SLES-1		G	Soil	0-8"	3/29/12	1115	1	✓		L567/d2
SLES-2		Comp	Soil	0-8"	3/29/12	1145	1	✓		-01 -02

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

pH _____ Temp _____

Remarks: _____

Flow _____ Other _____

Relinquished by: (Signature) 7/4/12	Date: 3/29/12	Time: 131720	Received by: (Signature) [Signature]	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input checked="" type="checkbox"/> SWA	Condition: OK (lab use only)
Relinquished by: (Signature) [Signature]	Date:	Time:	Received by: (Signature) [Signature]	Temp: 3.4°C	Bottles Received: 2402 FTB
Relinquished by: (Signature) [Signature]	Date:	Time:	Received for lab by: (Signature) [Signature]	Date: 3-30-12	Time: 10:45
				pH Checked:	NCF: