

**EMSL Analytical, Inc.**

3 Cooper St., Westmont, NJ 08108

Phone: (856) 858-4800 Fax: (856) 858-9551 Email: [westmontleadlab@emsl.com](mailto:westmontleadlab@emsl.com)

Attn: **Faye Ralston**  
**Middle Tennessee State University**  
**TN Lead Elimination Action Program**  
**1500 Greenland Drive**  
**Murfreesboro, TN 37132**

Customer ID: MTSU25  
Customer PO: P0011640  
Received: 11/29/10 10:04 AM  
EMSL Order: 201016535

Fax: (615) 898-5597 Phone: (615) 898-5166

Project: **RA: Kimbrough Residence, 1705 Read Avenue,**  
**Chattanooga, TN 37408**

EMSL Proj:

**Test Report: Lead in Soils by Flame AAS (SW 846 3050B\*/7000B)**

<i>Client Sample Description</i>	<i>Lab ID</i>	<i>Analyzed</i>	<i>Inst. Result</i>	<i>Lead Concentration</i>
#1s Collected: 11/24/2010 Site: Right Side Drip / Veg. Garden (Comp)	0001	11/30/2010	1500 µg/g	1500 mg/Kg
#2s Collected: 11/24/2010 Site: Left Side Drip / Veg. Garden (Comp)	0002	11/30/2010	2000 µg/g	2000 mg/Kg
#3s Collected: 11/24/2010 Site: Rear Drip / Veg. Garden (Comp)	0003	11/30/2010	1900 µg/g	1900 mg/Kg
#4s Collected: 11/24/2010 Site: Front Drip / Planting Area (Comp)	0004	11/30/2010	8200 µg/g	8200 mg/Kg
#5s Collected: 11/24/2010 Site: Bare Yard - Rear Parking (Comp)	0005	11/30/2010	540 µg/g	540 mg/Kg
#6s Collected: 11/24/2010 Site: Bare Yard - Front & 2 Sides (Comp)	0006	11/30/2010	1300 µg/g	1300 mg/Kg

Initial report from

Shannon Kauffman, Lead Lab Supervisor  
or other approved signatory

Reporting limit is 40 mg/kg. The QC data associated with these sample results included in this report meet the method quality control requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities.

\* slight modifications to methods applied Samples received in good condition unless otherwise noted. Quality Control Data associated with this sample set is within acceptable limits, unless otherwise noted

Samples analyzed by EMSL Analytical, Inc. 3 Cooper St., Westmont NJ NJ-NELAP: 04653, AIHA-LAP, LLC. ELLAP Accreditation 100194

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Project: **RA: Kimbrough Residence, 1705 Read Avenue,**  
**Chattanooga, TN 37408**

EMSL Proj:

**Test Report: Lead in Dust by Flame AAS (SW 846 3050B\*/7000B)**

Client Sample Description	Lab ID	Analyzed	Inst. Result	Area Sampled	Lead Concentration
#1 Collected: 11/24/2010 Site: Living Room Floor	0001	11/29/2010	<10 µg/g	144 in <sup>2</sup>	<10 µg/ft <sup>2</sup>
#2 Collected: 11/24/2010 Site: Living Room Sill "A"	0002	11/29/2010	16 µg/g	36 in <sup>2</sup>	66 µg/ft <sup>2</sup>
#3 Collected: 11/24/2010 Site: Living Room Trough "A"	0003	11/29/2010	1500 µg/g	36 in <sup>2</sup>	6200 µg/ft <sup>2</sup>
#4 Collected: 11/24/2010 Site: Bedroom One Floor	0004	11/29/2010	<10 µg/g	144 in <sup>2</sup>	<10 µg/ft <sup>2</sup>
#5 Collected: 11/24/2010 Site: Bedroom One Sill "D"	0005	11/29/2010	14 µg/g	36 in <sup>2</sup>	57 µg/ft <sup>2</sup>
#6 Collected: 11/24/2010 Site: Bedroom One Trough "D"	0006	11/29/2010	390 µg/g	36 in <sup>2</sup>	1600 µg/ft <sup>2</sup>
#7 Collected: 11/24/2010 Site: Bedroom Two Floor	0007	11/29/2010	<10 µg/g	144 in <sup>2</sup>	<10 µg/ft <sup>2</sup>
#8 Collected: 11/24/2010 Site: Bedroom Two Sill "B"	0008	11/29/2010	15 µg/g	36 in <sup>2</sup>	59 µg/ft <sup>2</sup>
#9 Collected: 11/24/2010 Site: Bedroom Two Trough "B"	0009	11/29/2010	120 µg/g	36 in <sup>2</sup>	480 µg/ft <sup>2</sup>
#10 Collected: 11/24/2010 Site: Bedroom Three Floor	0010	11/29/2010	<10 µg/g	144 in <sup>2</sup>	<10 µg/ft <sup>2</sup>
#11 Collected: 11/24/2010 Site: Bedroom Three Sill "B"	0011	11/29/2010	<10 µg/g	36 in <sup>2</sup>	<40 µg/ft <sup>2</sup>

Initial report from

Shannon Kauffman, Lead Lab Supervisor  
or other approved signatory

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EMSL Order: 201016538


Fax: (615) 898-5597 Phone: (615) 898-5166  
Project: **RA: Kimbrough Residence, 1705 Read Avenue,**  
**Chattanooga, TN 37408**

EMSL Proj:

**Test Report: Lead in Dust by Flame AAS (SW 846 3050B\*/7000B)**

Client Sample Description	Lab ID	Analyzed	Inst. Result	Area Sampled	Lead Concentration
#12 Collected: 11/24/2010 Site: Bedroom Three Trough "B"	0012	11/29/2010	140 µg/g	36 in <sup>2</sup>	570 µg/ft <sup>2</sup>
#13 Collected: 11/24/2010 Site: Kitchen Floor	0013	11/29/2010	<10 µg/g	144 in <sup>2</sup>	<10 µg/ft <sup>2</sup>
#14 Collected: 11/24/2010 Site: Kitchen Sill "B"	0014	11/29/2010	<10 µg/g	36 in <sup>2</sup>	<40 µg/ft <sup>2</sup>
#15 Collected: 11/24/2010 Site: Kitchen Trough "B"	0015	11/29/2010	120 µg/g	36 in <sup>2</sup>	480 µg/ft <sup>2</sup>
#16 Collected: 11/24/2010 Site: Hallway Floor	0016	11/29/2010	<10 µg/g	144 in <sup>2</sup>	<10 µg/ft <sup>2</sup>
#17 Collected: 11/24/2010 Site: Front Porch Floor	0017	11/29/2010	110 µg/g	144 in <sup>2</sup>	110 µg/ft <sup>2</sup>
#18 Collected: 11/24/2010 Site: Rear Deck Floor	0018	11/29/2010	16 µg/g	144 in <sup>2</sup>	16 µg/ft <sup>2</sup>
#19 Collected: 11/24/2010 Site: Lower Entry Foyer Floor	0019	11/29/2010	<10 µg/g	144 in <sup>2</sup>	<10 µg/ft <sup>2</sup>
#20 Collected: 11/24/2010 Site: Upper Foyer Floor	0020	11/29/2010	<10 µg/g	144 in <sup>2</sup>	<10 µg/ft <sup>2</sup>

Initial report from

  
Shannon Kauffman, Lead Lab Supervisor  
or other approved signatory

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Phone: (856) 858-4800 Fax: (856) 858-4571 Email: [jsmith@emsl.com](mailto:jsmith@emsl.com)



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**Definitions:**

ND - indicates that the analyte was not detected at the reporting limit



EMSL ANALYTICAL, INC.  
LABORATORY PRODUCTS • TRAINING

# Environmental Chemistry Chain of Custody

EMSL Order Number (Lab Use Only):

011006269

EMSL ANALYTICAL, INC.  
3 COOPER ST.  
WESTMONT, NJ 08108  
PHONE: (856) 858-4800  
FAX: (856) 858-3899

Report To Contact Name: Faye Ralston		Bill To Company: MTSU - EMSL Client #MTSU25		Sampled By (Signature): <i>[Signature]</i>	
Company Name: MTSU - TN LEAP		Attention To: Faye Ralston		Number of Samples in Shipment: <i>Six (6)</i>	
Address 1: 1500 Greenland Drive, Box 19		Address 1: 1500 Greenland Drive, Box 19		Date of Shipment: 24 November 2010	
Address 2: Murfreesboro, TN 37132		Address 2: Murfreesboro, TN 37132		U.S. State where Samples Collected: TN	
Phone : 615-494-8795		Phone: 615-494-8795		Purchase Order: P0011640	
Email Results To: fralston@mtsu.edu - see comments		Project Name: Kimbrough Residence, 1705 Read Avenue, Chattanooga, TN 37408			
Standard Turnaround Time: <input checked="" type="checkbox"/> 2 Weeks		The following TAT's are subject to lab approval: <input type="checkbox"/> 1 Week <input type="checkbox"/> 4 Days <input type="checkbox"/> 3 Days <input type="checkbox"/> 2 Days <input type="checkbox"/> 1 Day			
Failure to complete will hinder processing of samples		List Test(s) Needed			
Client Sample ID	Comp Grab	Date/Time	Matrix	Preservative	Comments
1A GARDEN AREA LEFT SIDE		11/24 10am S	W=Water S=Soil A=Air SL=Sludge O=Other	1=HCL 2=HNO3 3=H2SO4 4=ICE 5=Other	Method 6010B
2A GARDEN AREA RIGHT SIDE		11/24 10am S		xxx	Method 6010B
3A GARDEN AREA PLANT AREA		11/24 10am S		xxx	Method 6010B
4A FRONT AREA		11/24 10am S		xxx	Method 6010B
5A PARKING AREA		11/24 10am S		xxx	Method 6010B
6A LG. BARGE AREA FRONT YARD		11/24 10am S		xxx	Method 6010B
-End of Samples-		11/24 10am S		xxx	Method 6010B
Released By (Signature): <i>[Signature]</i>		Date & Time: 24 NOV 2010 3 PM EST		Received By: <i>[Signature]</i>	
		Date & Time: 11/29/10 11:00am			
Please indicate reporting requirements: <input checked="" type="checkbox"/> Results Only <input type="checkbox"/> Results and QC <input type="checkbox"/> Reduced Deliverables <input type="checkbox"/> Disk Deliverable <input type="checkbox"/> Other					
Instructions or Comments: Standard TAT is 2 WEEKS. Email all results to: fralston@mtsu.edu; jfuller@mtsu.edu; ttleap@mtsu.edu					

## EMSL Analytical, Inc.

<http://www.emsl.com>

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Fax: (856) 858-4571

EMSL

SM

Attn: **Faye Ralston**  
**Middle Tennessee State University**  
**TN Lead Elimination Action Program**  
**1500 Greenland Drive**  
**Murfreesboro, TN 37132**

12/7/2010

Phone: (615) 898-5166  
Fax: (615) 898-5597

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 11/29/2010. The results are tabulated on the attached data pages for the following client designated project:

**Kimbrough Residence, 1705 Read Avenue, Chattanooga, TN  
37408**

The reference number for these samples is EMSL Order #011006269. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 858-4800.

Reviewed and Approved By:



Julie Smith - Laboratory Director or other approved  
signatory



The test results contained within this report meet the requirements of NELAC and/or the specific certification program that is applicable, unless otherwise noted.  
NJ-NELAP Accredited: 04653

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.



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**Middle Tennessee State University**  
**TN Lead Elimination Action Program**  
**1500 Greenland Drive**  
**Murfreesboro, TN 37132**

Customer ID: MTSU25  
 Customer PO: P0011640  
 Received: 11/29/10 11:00 AM  
 EMSL Order: 011006269

Fax: (615) 898-5597 Phone (615) 898-5166

Project: Kimbrough Residence, 1705 Read Avenue,  
 Chattanooga, TN 37408

### Analytical Results

<i>Client Sample Description</i> 1A Garden Area Left Side		<i>Collected:</i> 11/24/2010 10:00:00 AM		<i>Lab ID:</i> 0001	
<i>Method</i>	<i>Parameter</i>	<i>Concentration</i>	<i>Reporting Limit</i>	<i>Units</i>	<i>Analysis Date</i> <i>Analyst</i>
SM 2540G	Total Solids	80	N/A	%	11/29/2010 bwright
6010B	Arsenic	9.6	0.94	mg/Kg	12/4/2010 rferrer
<i>Client Sample Description</i> 2A Garden Area Right Side		<i>Collected:</i> 11/24/2010 10:00:00 AM		<i>Lab ID:</i> 0002	
<i>Method</i>	<i>Parameter</i>	<i>Concentration</i>	<i>Reporting Limit</i>	<i>Units</i>	<i>Analysis Date</i> <i>Analyst</i>
SM 2540G	Total Solids	69	N/A	%	11/29/2010 bwright
6010B	Arsenic	14	1.1	mg/Kg	12/4/2010 rferrer
<i>Client Sample Description</i> 3A Garden Area Rear		<i>Collected:</i> 11/24/2010 10:00:00 AM		<i>Lab ID:</i> 0003	
<i>Method</i>	<i>Parameter</i>	<i>Concentration</i>	<i>Reporting Limit</i>	<i>Units</i>	<i>Analysis Date</i> <i>Analyst</i>
SM 2540G	Total Solids	58	N/A	%	11/29/2010 bwright
6010B	Arsenic	55	1.4	mg/Kg	12/4/2010 rferrer
<i>Client Sample Description</i> 4A Plant Area Front		<i>Collected:</i> 11/24/2010 10:00:00 AM		<i>Lab ID:</i> 0004	
<i>Method</i>	<i>Parameter</i>	<i>Concentration</i>	<i>Reporting Limit</i>	<i>Units</i>	<i>Analysis Date</i> <i>Analyst</i>
SM 2540G	Total Solids	69	N/A	%	11/29/2010 bwright
6010B	Arsenic	12	1.1	mg/Kg	12/4/2010 rferrer
<i>Client Sample Description</i> 5A Parking Area Rear		<i>Collected:</i> 11/24/2010 10:00:00 AM		<i>Lab ID:</i> 0005	
<i>Method</i>	<i>Parameter</i>	<i>Concentration</i>	<i>Reporting Limit</i>	<i>Units</i>	<i>Analysis Date</i> <i>Analyst</i>
SM 2540G	Total Solids	81	N/A	%	11/29/2010 bwright
6010B	Arsenic	10	1.0	mg/Kg	12/4/2010 rferrer
<i>Client Sample Description</i> 6A Lg. Bare Area Front Yard		<i>Collected:</i> 11/24/2010 10:00:00 AM		<i>Lab ID:</i> 0006	
<i>Method</i>	<i>Parameter</i>	<i>Concentration</i>	<i>Reporting Limit</i>	<i>Units</i>	<i>Analysis Date</i> <i>Analyst</i>
SM 2540G	Total Solids	78	N/A	%	11/29/2010 bwright
6010B	Arsenic	11	0.97	mg/Kg	12/4/2010 rferrer