

# Lead-Based Paint Risk Assessment Report

For the Dwelling Located at:

#18345  
918-333-9683  
4106 Bonnie Lee Lane  
Bartlesville, OK 74006  
Year Built: 1930

Prepared For:

**Cherokee Nation Housing Rehab**  
Using ODEQ, EPA and CN Work Practice Standards  
Established in 40 CFR 745-227

**Lab Analysis by**  
EMSL Analytical, INC.  
3029 S. Jefferson  
Saint Louis, MO 63118  
Phone: (314) 577-0150 Fax: (314)776-3313

By:  
**Carlton N. Clark, Certified Risk Assessor**  
Expiration: March 31, 2015  
P.O. Box 948  
Tahlequah, OK 74465  
(918) 453-4607  
Niton Model #: XLp306A 26522

OK Risk Assessor OKRASR13777  
OK Firm OKFIRM11198  
CN Firm CNFIRM00001  
CN Risk Assessor CNRASR00036

Date: 7-27-15

Signature: Carlton N. Clark

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### Summary

#### **Part I: Identifying Information**

Identity of dwelling(s) covered by report, identity of property(ies).

1. Risk Assessor, Name of Certificate (or License) and Number and State issuing certificate/license.
2. Property Owner Name, Address, and Phone Number.
3. Date of Report, Date of Environmental Sampling.

#### **Part II: Completed Management, Maintenance, and Environmental Results Forms and Analyses**

4. List of Location and Type of Identified Lead Hazards including and indication of which hazards are priorities (this summary should be suitable for use as notification to residents).
5. Optional Management Information (Form 5.6) (not required if all dwellings were sampled).
6. Maintenance/Paint Condition Information (Form 5.2 or 5.7)
7. Building Condition (Form 5.1)
8. Brief Narrative Description of Dwelling Selection Process (not required if all dwellings were sampled).
9. Analysis of Previous XRF Testing Report (if applicable).
10. Deteriorated Paint Sampling Results (Form 5.3 or 5.3a)
11. Dust Sampling Results (Form 5.4 or 5.4a)
12. Soil Sampling Results (Form 5.5)
13. Other Sampling Results (if applicable)

#### **Part III: Lead Hazard Control Plan**

14. Lead-Based Paint Policy Statement (not applicable for homeowners).
15. Name of individual in Charge of Lead-Based Paint Hazard Control Program.
16. Recommended Changes to Work Order System and Property Management (optional, not applicable for homeowners or property owner without work order systems).
17. Acceptable Interim Control Options For This Property and Estimated Costs.
18. Acceptable Abatement Options For This Property and Estimated Costs.
19. Reevaluation Schedule (if applicable).
20. Interim Control/Abatement to Be Implemented in This Property.
21. A Training Plan for Managers, Maintenance Supervisors, and Workers (this should include named individuals), if applicable.
22. Method of Resident Notification of Results of Risk Assessment and Lead Hazard Control Program (not applicable for homeowners). Note: This section should include a discussion of how residents are to be educated about lead poisoning, *before* the risk assessment results are released.
23. Signature (Risk Assessor) and Date.
24. All laboratory raw data.

## Part IV: Appendix

### Part I: Identifying Information

For the Dwelling Located at:

Phone Number: 918-333-9683

Address: 4106 Bonnie Lee Lane Bartlesville, OK 74006

Year of home construction: 1930

### Part II: Results

COMPONENT	SUBSTRATE	SIDE	COLOR	SITE	ROOM	Results	PbC	PbC Error
Door	WOOD	B	White		DINING	Positive	< LOD	11.1
Door Trim	WOOD	B	White		DINING	Positive	7.3	4.2
Wall	DRYWALL	D	Tan		KITCHEN	Positive	2.4	1.2
Ceiling	DRYWALL	UPPER	White		KITCHEN	Positive	1.7	0.7
Ceiling	DRYWALL	UPPER	Tan		LAUNDRY	Positive	3.4	2.2
Window	WOOD	B	Tan		BATH 1	Positive	5.2	3.3
Ceiling	DRYWALL	UPPER	White		BATH 1	Positive	3	1.9
Door	WOOD	B	White		BR 1	Positive	3.3	2.2
Window	WOOD	C	White		BR 1	Positive	6.1	3.8
W Sill	WOOD	C	White		BR 1	Positive	6.7	4
Door	WOOD	C	White		BR 2	Positive	4.5	2.9
Door Trim	WOOD	C	White		BR 2	Positive	4.6	2.4
Window	WOOD	C	White		BR 2	Positive	4.7	2.9
W Sill	WOOD	C	White		BR 2	Positive	< LOD	12.6
Door	WOOD	A	White		BR 3	Positive	3	1.8
Door Casing	WOOD	A	White		BR 3	Positive	4.6	2.7
Window	WOOD	C	White		BR 3	Positive	< LOD	4.65
Door Trim	WOOD	C	White		BR 3	Positive	4.7	3.1
Wall	DRYWALL	A	Tan		BATH 2	Positive	< LOD	4.2
Wall	DRYWALL	B	Tan		BATH 2	Positive	7.5	4.3
Wall	WOOD	C	Tan		BATH 2	Positive	< LOD	2.4
Wall	DRYWALL	C	Tan		BATH 2	Positive	5.2	2.9
Window	WOOD	D	White		BATH 2	Positive	< LOD	3
W Sill	WOOD	D	White		BATH 2	Positive	2.4	1.2
Door	WOOD	D	Red		BR 4	Positive	< LOD	10.35
W Casing	WOOD	A	Brown		EXTERIOR	Positive	2.1	0.8
W Casing	WOOD	B	Brown		EXTERIOR	Positive	2.6	1.5
Door	WOOD	C	Brown		EXTERIOR	Positive	1.6	0.5
W Casing	WOOD	C	Brown		EXTERIOR	Positive	< LOD	7.65
W Casing	WOOD	D	Brown		EXTERIOR	Positive	5.5	3.6

## List of Location and Type of Identified Lead Hazards

A few other painted surfaces that have not been tested for lead are in "fair" condition and should be repainted within the next year before further deterioration occurs. However, these surfaces are not considered to be immediate "hazards," using criteria in the 1995 *HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*. Those surfaces are:

There has not been any previous lead-based paint testing at this dwelling, although a lead-based paint inspection of all painted surfaces is recommended so that potential lead problems can be monitored before they become hazardous. Soil lead levels were all below 400ug/g. Current EPA and HUD Guidance for soil is 400ug/g for bare play areas and 1,200 ug/g for other areas. Using these criteria, soil is not a hazard at this property.

The owner has decided to select the following hazard control measures, which are all acceptable based on HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*:

**Reevaluation:** Standard Reevaluation Schedule 3 contained in the HUD Guidelines applies to this property, since one of the rooms had a dust lead level greater than the standard. Therefore, the dwelling should be reevaluated in N/A (12 months from now). If no lead-based paint hazards are identified at this time, no further reevaluations are needed. However, since lead-based paint may be present in the dwelling, the owner should monitor the condition of all painted surfaces at least annually or whenever other information indicates a potential problem.

## Resident Questionnaire

### Children/Children's Habits

1. (a) Do you have any children that live in your home? Yes \_\_\_\_\_ No X  
 (b) If yes, how many? \_\_\_\_\_ Ages? \_\_\_\_\_  
 (c) Record blood lead levels, if known \_\_\_\_\_  
 IF NO CHILDREN, SKIP TO Q.5

2. Locate the rooms/areas where each child sleeps, eats, and plays.

Name of Child	Location of Bedroom	Location of All Rooms Where Child Eats	Primary Location Where Child Plays Indoors	Primary Location Where Child Plays Outdoors

3. Where are toys stored/kept? \_\_\_\_\_  
 4. Is there any visible evidence of chewed or peeling paint on the wood work, furniture, or toys? Yes \_\_\_\_\_ No X

### Family Use Patterns

5. Which entrances are used most frequently? A side entrance  
 6. Which windows are opened most frequently? A Side  
 7. Do you use window air conditioners? If yes, where? \_\_\_\_\_  
 (*Condensation often causes paint deterioration*)  
 8. (a) Do any household member engage in gardening? Yes \_\_\_\_\_ No \_\_\_\_\_  
 (b) Record the location of any vegetable garden, \_\_\_\_\_  
 (c) Are you planning any landscaping activities that will remove grass or ground covering? Yes \_\_\_\_\_ No X  
 9. (a) How often is the household cleaned? Occasionally  
 (b) What cleaning methods do you use? Soap and water  
 10. (a) Did you recently complete any building renovations? Yes \_\_\_\_\_ No X  
 (b) If yes, where? \_\_\_\_\_  
 (c) Was building debris stored in the yard? If yes, where? \_\_\_\_\_  
 11. Are you planning any building renovations? Where? \_\_\_\_\_ No X  
 12. (a) Do any household members work in a lead-related industry? Yes \_\_\_\_\_ No X  
 (b) If yes, where are dirty work clothes placed and cleaned? \_\_\_\_\_

### Building Condition Form

CONDITION	YES	NO
Roof Missing Parts of Surfaces (tiles, boards, etc.)	X	
Roof Has Holes or Large Cracks	X	
Gutter or Downspouts Broken	X	
Chimney Masonry cracked, bricks loose or missing, obviously out of plumb		X
Exterior or interior walls have obvious large cracks or holes, requiring more than routine painting		X
Exterior siding has missing boards or shingles		X
Water stains on interior walls or ceilings	X	
Plaster walls deteriorated		X
Two or more windows or doors broken, missing, or boarded up		X
Porch or steps have major elements broken, missing, or boarded up		X
Foundation has major cracks, missing material, structural leans, or visibly unsound		X
<b>Total</b>	<b>4</b>	<b>7</b>

If the "Yes" column has 2 or more checks, the dwelling is considered to be in poor condition for the purposes of a risk assessment. However, specific conditions and extenuating circumstances should be considered before determining final condition of the building and the appropriateness of a lead hazard screen.

Notes:

**Overall, the home is in "Fair" condition.**

8. Dwelling Selection Process: N/A
9. Analysis of Previous XRF Testing Report: N/A

## Field Sampling Form for Deteriorated Paint

Name of Risk Assessor                      Carlton Clark

Name of Property Owner                     

Property Address            4106 Bonnie Lee Lane Bartlesville, OK 74006

Sampling Protocol            Single-Family

Target Dwelling Criteria (Check All That Apply)

- Code Violations
- Judged to be in Poor Condition
- Presence of 2 or More Children between Ages of 6 Months and 6 Years
- Serves as Day-Care Facility
- Recently Prepared for Re-occupancy
- Random Sampling
- None of the above

**XRF 7/17/2015**

COMPONENT	SUBSTRATE	SIDE	COLOR	SITE	ROOM	Results	PbC	PbC Err
Door	WOOD	B	White		DINING	Positive	< LOD	1
Door Trim	WOOD	B	White		DINING	Positive	7.3	
Wall	DRYWALL	D	Tan		KITCHEN	Positive	2.4	
Ceiling	DRYWALL	UPPER	White		KITCHEN	Positive	1.7	
Ceiling	DRYWALL	UPPER	Tan		LAUNDRY	Positive	3.4	
Window	WOOD	B	Tan		BATH 1	Positive	5.2	
Ceiling	DRYWALL	UPPER	White		BATH 1	Positive	3	
Door	WOOD	B	White		BR 1	Positive	3.3	
Window	WOOD	C	White		BR 1	Positive	6.1	
W Sill	WOOD	C	White		BR 1	Positive	6.7	
Door	WOOD	C	White		BR 2	Positive	4.5	
Door Trim	WOOD	C	White		BR 2	Positive	4.6	
Window	WOOD	C	White		BR 2	Positive	4.7	
W Sill	WOOD	C	White		BR 2	Positive	< LOD	1
Door	WOOD	A	White		BR 3	Positive	3	
Door Casing	WOOD	A	White		BR 3	Positive	4.6	
Window	WOOD	C	White		BR 3	Positive	< LOD	4
Door Trim	WOOD	C	White		BR 3	Positive	4.7	
Wall	DRYWALL	A	Tan		BATH 2	Positive	< LOD	
Wall	DRYWALL	B	Tan		BATH 2	Positive	7.5	
Wall	WOOD	C	Tan		BATH 2	Positive	< LOD	
Wall	DRYWALL	C	Tan		BATH 2	Positive	5.2	
Window	WOOD	D	White		BATH 2	Positive	< LOD	
W Sill	WOOD	D	White		BATH 2	Positive	2.4	
Door	WOOD	D	Red		BR 4	Positive	< LOD	10
W Casing	WOOD	A	Brown		EXTERIOR	Positive	2.1	
W Casing	WOOD	B	Brown		EXTERIOR	Positive	2.6	
Door	WOOD	C	Brown		EXTERIOR	Positive	1.6	
W Casing	WOOD	C	Brown		EXTERIOR	Positive	< LOD	7
W Casing	WOOD	D	Brown		EXTERIOR	Positive	5.5	

**Please see summary report of lead paint inspection on next page**

Sample all layer of paint. not just deteriorated paint layers

Total Number of Samples This Page 30

Page 1 of 1

Date of Sample Collection 7/17/2015 Date shipped to lab 7/22/2015

Field Sampling Form for Dust  
(Single Surface)

Sample Number	Room (Record Name of Room Used by the Owner or Resident)	Surface Type	Is Surface Smooth and Cleanable?	Dimension <sup>1</sup> of Sample Area (inches x inches)	Area (In <sup>2</sup> )	Result of Lab Analysis (ug/ft <sup>2</sup> )
01	Living Room	Floor	Yes	12X12	144	<10
<b>02</b>	<b>Living Room</b>	<b>W/S</b>	<b>Yes</b>	<b>2.25X28.25</b>	<b>63.56</b>	<b>390</b>
03	Laundry Room	Floor	Yes	12X12	144	36
04	Laundry Room	W/S	Yes	2.5X17	33.5	61
05	Bathroom 1	Floor	Yes	12X12	144	<10
06	Bathroom 1	W/S	Yes	3X33.75	101.25	110
07	Basement Den	Floor	Yes	12X12	144	<10
08	Bedroom 4	W/S	Yes	4.75X22	104.5	17

<sup>1</sup> Measure to the nearest 1/8 inch

Total Number of Samples This Page 8

Page 1 of 1

Date of Sample Collection 7/17/2015 Date shipped to lab 7/22/2015

Shipped by Carlton N. Clark  
(signature)

Received by EMSL  
(signature)

HUD Standards: 40 ug/ft<sup>2</sup> (floors), 250 ug/ft<sup>2</sup> (interior window sills), 400 ug/ft<sup>2</sup> (window troughs)

Field Sampling Form for Soil  
(Composite Sampling Only)

Name of Risk Assessor Carlton N. Clark  
Name of Property Owner \_\_\_\_\_  
Property Address 4106 Bonnie Lee Lane Bartlesville, OK 74006  
Sampling Protocol Single-Family

SAMPLE NO.	LOCATION	BARE OR COVERED	LAB RESULTS mg/Kg
01	Dripline	Covered	930

Collect only the 1/2" of soil

Total Number of Samples This Page 1

Page 1 of 1

Date of Sample Collection 7/17/2015 Date shipped to lab 7/22/2015

Shipped by Carlton N. Clark  
(signature)

Received by EMSL  
(signature)

13. Other Sampling Results: N/A

**Part III: Lead Hazard Control Options**

14. Lead-Based Paint Policy Statement

**On File CNEP and Cherokee Nation Housing Rehab**

15. Name of Individual in Charge of Lead-Based Paint Hazard Control Program:

**Cherokee Nation Housing Rehab (George Hubbard)**

16. Recommended Changes to Work Order System and Property Management

The existing work order system is an informal verbal one. If painted surfaces will be disturbed during a particular repair job, the painted surface should be tested to determine if it has lead-based paint on it. If it does (or if testing is not completed), the maintenance worker should take the necessary precautions by wetting down the surface and performing

cleanup. If the surface area is large or if the work will generate a significant amount of dust, clearance testing should be completed before residents move back into the room. The table below can be used as a general guide in determining whether maintenance jobs are likely to be high risk or low risk.

When work is assigned, the owner or worker should determine whether or not the job is low or high risk and adopt protective measures as needed.

**Table 17.1 (Taken from HUD Guidelines  
Summary of Low-and High-Risk Job Designations for Surfaces Known or  
Suspected to Have Lead-Based Paint**

<b>Job Description</b>	<b>Low Risk</b>	<b>High Risk</b>
Repainting (includes surface Preparation)		√
Plastering or wall repair		√
Window repair		√
Water or moisture damage repair (repainting and plumbing)		√
Door repair	√	
Building component replacement		√
Welding on Painted Surfaces		√
Door lock repair or replacement	√	
Electrical fixture repair	√	
Floor refinishing		√
Carpet replacement		√
Groundskeeping	√	
Radiator leak repair	√	
Baluster repair (metal)		√
Demolition		√

High-risk jobs typically disturb more than 2 square feet per room. If these jobs disturb less than 2 square feet, then they can be considered low-risk jobs.

**Table 17.2**

	<b>Low Risk</b>	<b>High Risk</b>
Worksite preparation with plastic sheeting (6 mil thick)	Plastic sheet no less than 5 feet immediately underneath work area	Whole floor, plus simple airlock at door or tape door shut
Children kept out of work area	Yes	Yes
Resident relocation during work	No	Yes
Respirators	Probably not necessary*	Recommended
Protective clothing Note: Protective shoe coverings are not to be worn on ladders, scaffolds, etc.	Probably not necessary*	Recommended
Personal hygiene (enforced hand washing after job)	Required	Required
Showers	Probably not necessary	Recommended
Work practices	Use wet methods, except near electrical circuits	Use wet methods, except near electrical circuits
Cleaning	Wet cleaning with lead-specific detergent trisodium phosphate or other suitable detergent around the work area only (2 linear feet beyond plastic)	HEPA vacuum/wet wash/HEPA vacuum the entire work area
Clearance	Visual examination only	Dust sampling during the preliminary phase of the maintenance program and periodically thereafter (not required for every job)

- Employers must have objective data showing that worker exposures are less than the OSHA Permissible Exposure Limit of 50ug/m<sup>3</sup> if respirators and protective clothing will not be provided.

## 17. Interim Control Options and Estimated Costs

The costs shown below include labor, materials, worker protection, site containment and cleanup. These are only very rough estimates that may not be accurate; a precise estimate should be obtained from a certified lead-based paint abatement contractor. I would be pleased to perform clearance testing after this work has been completed at your request.

COMPONENT	SUBSTRATE	SIDE	ROOM	Recommendations
Door	WOOD	B	DINING	Wetscrape and Repaint
Door Trim	WOOD	B	DINING	Wetscrape and Repaint
Wall	DRYWALL	D	KITCHEN	Wetscrape and Repaint
Ceiling	DRYWALL	UPPER	KITCHEN	Wetscrape and Repaint
Ceiling	DRYWALL	UPPER	LAUNDRY	Wetscrape and Repaint
Window	WOOD	B	BATH 1	Wetscrape and Repaint
Ceiling	DRYWALL	UPPER	BATH 1	Wetscrape and Repaint
Door	WOOD	B	BR 1	Wetscrape and Repaint
Window	WOOD	C	BR 1	Wetscrape and Repaint
W Sill	WOOD	C	BR 1	Wetscrape and Repaint
Door	WOOD	C	BR 2	Wetscrape and Repaint
Door Trim	WOOD	C	BR 2	Wetscrape and Repaint
Window	WOOD	C	BR 2	Wetscrape and Repaint
W Sill	WOOD	C	BR 2	Wetscrape and Repaint
Door	WOOD	A	BR 3	Wetscrape and Repaint
Door Casing	WOOD	A	BR 3	Wetscrape and Repaint
Window	WOOD	C	BR 3	Wetscrape and Repaint
Door Trim	WOOD	C	BR 3	Wetscrape and Repaint
Wall	DRYWALL	A	BATH 2	Wetscrape and Repaint
Wall	DRYWALL	B	BATH 2	Wetscrape and Repaint
Wall	WOOD	C	BATH 2	Wetscrape and Repaint
Wall	DRYWALL	C	BATH 2	Wetscrape and Repaint
Window	WOOD	D	BATH 2	Wetscrape and Repaint
W Sill	WOOD	D	BATH 2	Wetscrape and Repaint
Door	WOOD	D	BR 4	Wetscrape and Repaint
W Casing	WOOD	A	EXTERIOR	Wetscrape and Repaint
W Casing	WOOD	B	EXTERIOR	Wetscrape and Repaint
Door	WOOD	C	EXTERIOR	Wetscrape and Repaint
W Casing	WOOD	C	EXTERIOR	Wetscrape and Repaint
W Casing	WOOD	D	EXTERIOR	Wetscrape and Repaint

## 18. Acceptable Abatement Options and Estimated Costs

COMPONENT	SUBSTRATE	SIDE	ROOM	Recommendations
Door	WOOD	B	DINING	Replace
Door Trim	WOOD	B	DINING	Replace
Wall	DRYWALL	D	KITCHEN	Encapsulate or Enclose
Ceiling	DRYWALL	UPPER	KITCHEN	Replace or Encapsulate
Ceiling	DRYWALL	UPPER	LAUNDRY	Replace or Encapsulate
Window	WOOD	B	BATH 1	Replace
Ceiling	DRYWALL	UPPER	BATH 1	Replace or Encapsulate
Door	WOOD	B	BR 1	Replace
Window	WOOD	C	BR 1	Replace
W Sill	WOOD	C	BR 1	Replace
Door	WOOD	C	BR 2	Replace
Door Trim	WOOD	C	BR 2	Replace
Window	WOOD	C	BR 2	Replace
W Sill	WOOD	C	BR 2	Replace
Door	WOOD	A	BR 3	Replace
Door Casing	WOOD	A	BR 3	Replace
Window	WOOD	C	BR 3	Replace
Door Trim	WOOD	C	BR 3	Replace
Wall	DRYWALL	A	BATH 2	Encapsulate or Enclose
Wall	DRYWALL	B	BATH 2	Encapsulate or Enclose
Wall	WOOD	C	BATH 2	Encapsulate or Enclose
Wall	DRYWALL	C	BATH 2	Encapsulate or Enclose
Window	WOOD	D	BATH 2	Replace
W Sill	WOOD	D	BATH 2	Replace
Door	WOOD	D	BR 4	Replace
W Casing	WOOD	A	EXTERIOR	Enclose or Encapsulate
W Casing	WOOD	B	EXTERIOR	Enclose or Encapsulate
Door	WOOD	C	EXTERIOR	Enclose or Encapsulate
W Casing	WOOD	C	EXTERIOR	Enclose or Encapsulate
W Casing	WOOD	D	EXTERIOR	Enclose or Encapsulate

## 19. Reevaluation and Monitoring Schedule

Each of these treatments will need to be reexamined periodically to make certain that they remain effective and to ensure that new lead-based paint hazards do not appear. The interim controls shown above are less expensive initially, but they may be more expensive in the long run since they need to be reevaluated more frequently. The replacement and paint removal methods are more expensive initially, but do not require any reevaluation.

The owner should monitor the condition of the paint at least annually or if there is some indication that paint might be failing. A professional reevaluation is also needed. The standard schedule for reevaluation the dwelling is shown above.

**Reevaluation:** Standard Reevaluation Schedule 3 contained in the HUD Guidelines applies to this property, since one of the rooms had a dust lead level greater than the standard. Therefore, the dwelling should be reevaluated in   N/A   12 months from now). If no lead-based paint hazards are identified at that time, another reevaluation should be conducted in   N/A   (2 years later). If no lead-based paint hazards are identified at that time, no further reevaluations are needed. However, since lead-based paint may be present in the dwelling, the owner should monitor the condition of all painted surfaces at least annually or whenever other information indicates a potential problem.

**Part IV: Site Specific Lead Hazard Control Plan**

20. Lead Hazard Control Option to Be Implemented in This Property

**I recommend abatement options be implemented on all areas with Lead Based Paint**

21. Training Plan for Managers, Maintenance Supervisors and Workers

**On File at Cherokee Nation Housing Rehab**

22. Method of Resident Notification of Results of Risk Assessment and Lead Hazard Control Program

**In Person by Cherokee Nation Housing Rehab**

23. Signatures (Risk Assessor and Owner), Date and Certificate of Lead-Based Paint Compliance

\_\_\_\_\_  
Owner Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Certified Risk Assessor Signature

\_\_\_\_\_  
Date

**Certificate of Lead-Based Paint Compliance**

I hereby certify that on \_\_\_\_\_ the dwelling located at \_\_\_\_\_ meets the criteria established by the Department of Housing and Urban Development for lead safety. Either no lead-based paint hazards were identified or all lead-based paint hazards have been corrected.

\_\_\_\_\_  
Owner

\_\_\_\_\_  
Authorized Signature

Risk Assessor License # \_\_\_\_\_

Expiration Date: \_\_\_\_\_

**Cherokee Nation  
Environmental Programs**

**EMSL Analytical, Inc.**

3029 S. Jefferson, Saint Louis, MO 63118  
 Phone/Fax (314) 577-6150 / (314) 776-3313  
<http://www.EMSL.com> [saintlouis.ab@emsl.com](mailto:saintlouis.ab@emsl.com)

EMSL Order	391505534
CustomerID	CHER25
CustomerPO	163155
ProjectID	

<b>Attn: Nick Clark</b> <b>Cherokee Nation Environmental Programs</b> <b>206 East Allen Road</b> <b>Tahlequah, OK 74464</b>	Phone (918) 453-5370 Fax Received 07/24/15 9:50 AM Analysis Date 7/27/2015 Collected
Project Ruth Nash	

### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
01-01		Various	27% Cellulose	73% Non-fibrous (other)	None Detected
391505534-0001		Non-Fibrous Heterogeneous			

Analyst(s)  
 See Ferraro 11

Jeff Sina, Laboratory Manager  
 or other approved signatory

EMSL maintains a very limited cost of analysis. This report relates only to the samples reported and may not be reproduced, copied, or fully without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification approval or endorsement by NVLAP, NIST or any agency of the federal government. Non-hazardous materials present a problem matrix and therefore EMSL recommends a limited reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Clients requested by the client building materials manufactured with multiple layers (ie. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%.  
 Samples analyzed by EMSL Analytical, Inc., Saint Louis, MO by WPL Lab Code 2007430

Initial report from 07/27/2015 10:14:24

