



## CHEROKEE NATION Environmental Programs

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# LEAD-BASED PAINT INSPECTION & RISK ASSESSMENT REPORT

**Conducted At:**

Name: **Lila Morton**  
Address: **321 W Poplar**  
City State Zip: **Stilwell, OK 74960**  
Coordinates: **35.81898, -94.62985**  
Built in: **1970**

**Prepared For:**

HACN Housing Rehabilitation - George Hubbard  
Using ODEQ, EPA and CN Work Practice Standards  
Established in 40 CFR 745-227

**Inspected By:**

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Report Date: **May 22, 2024**

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## 1.0 EXECUTIVE SUMMARY

A lead based paint inspection was conducted at the **Lila Morton** site on **May 8, 2024** as requested by the Cherokee Nation Housing Rehabilitation Department. The inspection **confirmed the presence of lead** in amounts greater than or equal to 1.0 mg/cm<sup>2</sup> in paint, using the inspection protocol in Chapter 7 of the U.S. Department of Housing and Urban Development's (HUD) Guidelines for the Evaluation of Control of Lead-Based Paint Hazards in Housing (2012). A Risk Assessment was performed to fulfill the requirements for a federally assisted rehabilitation.

The full inspection report can be found in Appendix A (XRF Field Data Sheets). Building components that were unable to be tested with an XRF and are assumed positive include the following:

**The following is a summary of the survey findings for the subject property:**

### **Interior Lead-Based Paint**

**Garage Wall Wood Side A**

### **Exterior Lead-Based Paint**

### **Deteriorated Lead-Based Paint**

#### **(Lead-Based Paint Hazards)**

**Exterior Door Jamb Wood Side A**

**Exterior Porch Ceiling Wood Side A**

**Exterior Porch Column Wood Side A**

**Exterior Porch Header Wood Side A**

**Exterior Wall Wood Side A**

**Exterior Soffit Wood Side A**

**Exterior Wall Wood Side C**

**Exterior Wall Wood Side D**

### **Lead in Dust Hazards**

**Bedroom 1 Floor**

### **Lead in Soil Hazards**

**No lead in soil hazards were identified.**

*This executive summary has been prepared for the convenience of the users of this report. This summary does not contain all the information presented in this report and, therefore, the entire report should be read to assure all pertinent information is transmitted.*

## 2.0 DISCLOSURE

A copy of this report or a summary of this report must be provided to new lessees (tenants) and purchasers of the property under Federal law (24 CFR part 35 and 40 CFR part 745) before they become



obligated under a lease or sales contract. The complete report must also be provided to new purchasers and it must be made available to new tenants. Property owners (lessors) and sellers are also required to distribute an educational pamphlet approved by the US Environmental Protection Agency (EPA) and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards.

## 3.0 INSPECTION/ RISK ASSESSMENT METHODOLOGY

### 3.1 SURFACE-BY-SURFACE INSPECTION METHODOLOGY

A surface-by-surface lead-based paint inspection was performed to identify interior and exterior building components finished with lead-based paint. The inspection was performed inside the residence and on exterior surfaces of the residence using a portable X-Ray Fluorescence Analyzer (XRF). The inspection was limited to accessible painted and/or varnished surfaces. All substrates within inaccessible rooms are assumed positive for lead-based paint until access is available to prove otherwise.

The inspection was conducted in accordance with the EPA's work practice standards for conducting lead-based paint activities (40 CFR 745.227), HUD's Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (Guidelines) with the 2012 revisions. Samples were collected to represent component types; therefore, it should be assumed that similar component types in the rest of that room or room equivalent also contain lead-based paint. When standing in any four-sided room facing side A, which coincides with the front of the dwelling, side B will be to the right, side C will be to the rear, and side D will be to the left (clockwise from side A).

When evaluating this report it is assumed that, according to Chapter 7 HUD Guidelines, if one testing combination (i.e. window, door) is positive for lead in an interior or exterior room equivalent, all other similar testing combinations in those areas are assumed to be positive. The same is true for negative readings.

### 3.2 X-RAY FLUORESCENCE ANALYZER LEAD DETECTOR

The sampling strategy utilized to determine the presence of lead-based paint adheres to the EPA Performance Characteristic Sheet for the particular XRF instrument used, as well as the manufacturers' modifications and recommendations. The Heuresis PB200i lead x-ray fluorescence analyzer (Serial Number: 2312) was used for detection of building components finished with lead-based paint. The instrument was manufactured by Viken Detection, 21 North Avenue, Burlington, MA 01803. The radioactive source is cobalt-57 and was last resourced on August 15, 2023.

Samples may be classified as positive or negative. Positive results indicate lead in quantities greater than 1.0 mg/cm<sup>2</sup> and are considered lead-based paint. Negative results indicate lead in quantities less than 1.0 mg/cm<sup>2</sup> and are not considered lead-based paint.

### 3.3 RISK ASSESSMENT METHODOLOGY

The lead-based paint risk assessment was performed to determine if the lead-based paint present in the residence presents an immediate hazard. This was accomplished through combining measurements of lead in dust, surface-by-surface paint analysis, visual assessment of the residence, assessment of paint

condition, and by collecting maintenance and management data to identify and address lead-based paint hazards.

The risk assessment was performed in accordance with the EPA's work practice standards for conducting lead-based paint activities (40 CFR 745.227), HUD's Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (Guidelines) with the 2012 revisions.

### 3.4 DESCRIPTION OF PAINT CONDITION HAZARD RANKINGS

The paint condition is placed into one of two categories using the risk assessor's professional judgment. These categories are intact or deteriorated. Type of deterioration may also be noted on surfaces in deteriorated condition. Based on the approximate surface area of deteriorated paint, the risk assessor then assesses the paint condition as intact or deteriorated. These conditions indicate the potential for lead hazards associated with paint condition and lead in household dust.

Hazard ranking protocol was performed in accordance with the HUD Guidelines for Evaluation and Control of Lead-Based Paint Hazards in Housing, dated July 2012, Chapter 5: Risk Assessment and Reevaluation; Identification of Deteriorated Paint (Form 5.2). This information is summarized below.

#### **Deteriorated**

*EPA regulations define deteriorated paint as "any interior or exterior paint or other coating that is peeling, chipping, chalking, or cracking, or any paint or coating located on an interior or exterior surface or fixture that is otherwise damaged or separated from the substrate"(40 CFR 745.63).*

### 3.5 LABORATORY ANALYSIS

Laboratory analysis of dust wipe/soil samples were performed by QuanTEM Laboratories (NLLAP 101352), 2033 Heritage Park Drive, Oklahoma City, OK 73120 Phone: 405-755-7272. Laboratory analysis of the dust wipes and soil samples are analyzed based on the EPA SW846-7420/ HUD – Flame Atomic Absorption.

## 4.0 DESCRIPTION OF RESULTS

This is a report of an X-ray Fluorescence (XRF) inspection and risk assessment to determine if lead-based paint exists in the readily accessible areas of this residence and tested components. The presence or absence of lead-based paint only applies to surfaces tested or assessed on the date of the field visit. According to HUD/EPA Guidelines, paint with concentrations of lead that exceed 1.0 mg/cm<sup>2</sup> must be considered a lead-based paint (LBP). However, detectable lead in quantities less than 1.0 mg/cm<sup>2</sup> may contribute to the development of lead dust hazards even though it is not considered a lead-based paint hazard.

### 4.1 LBP INSPECTION

Lead based paint was found on both the interior and exterior of the site. The positive readings are shown in the following table. The full report with all readings are in Appendix 1.



Reading # Pb	Units	Pb Error Result	Secs	Date	Time	Room	Structure	Member	Substrate	Wall Condition
56	1.2 mg/cm2	0.2 Positive	5	5/8/2024	12:46:03	Garage (Interior)	Room	Wall	Wood8	A1 Deteriorated
61	1.6 mg/cm2	0.2 Positive	2	5/8/2024	12:50:50	Exterior	Door	Jamb	Wood13	A6 Deteriorated
62	1.2 mg/cm2	0.2 Positive	5	5/8/2024	12:51:30	Exterior	Porch	Ceiling	Wood14	A7 Deteriorated
63	1.7 mg/cm2	0.3 Positive	2	5/8/2024	12:52:14	Exterior	Porch	Column	Wood15	A8 Deteriorated
64	1.5 mg/cm2	0.2 Positive	2	5/8/2024	12:52:33	Exterior	Porch	Header	Wood16	A9 Deteriorated
65	1.2 mg/cm2	0.2 Positive	5	5/8/2024	12:53:01	Exterior	Room	Wall	Wood17	A10 Deteriorated

## 4.2 LBP RISK ASSESSMENT

Lead-based paint hazards and dust hazards were identified during the survey.

The lead hazards are:

- Interior Garage Wall Wood Side A
- Exterior Door Jamb Wood Side A
- Exterior Porch Ceiling Wood Side A
- Exterior Porch Column Wood Side A
- Exterior Porch Header Wood Side A
- Exterior Wall Wood Side A

Lead in Dust Hazards

- Bedroom 1 Floor

Lead in Soil Hazards

- 

## 4.3 RESIDENT QUESTIONNAIRE FORM 5.0

A resident questionnaire was completed as part of the Assessment, to help the identify particular use patterns, which may be associated with potential LBP hazards, such as opening and closing windows painted with LBP. The answers to the questionnaire were obtained during an interview with the occupants. Following is a summary of the information obtained during the interview.

Children in the Household:	None
Children's bed locations:	-
Children's eating locations:	-
Primary interior play area(s):	-
Primary exterior play area(s):	-
Pets:	-
Blood lead testing history:	-
Observed chewed surfaces:	-
Women of child bearing age:	0
Previous lead testing:	None
Frequently used entrances:	Front Door
Frequently opened windows:	None
Structure Cooling Method:	HVAC

Gardening –type and location:	none
Plans for landscaping:	None
Cleaning regiment:	Weekly
Cleaning Methods:	Mopping, sweeping, dusting, vacuuming
Recent completed renovations:	None
Demolition debris on site:	None
Resident with work lead exposure:	None
Planned Renovations:	A scope of work document for this residence is included in Appendix C.

#### 4.4 BUILDING CONDITION FORM 5.1

Condition	Yes	No	Comments
Roof is missing parts of surfaces (tiles, boards, shakes, etc.)		X	
Roof has holes or large cracks		X	
Gutters or downspouts broken, missing.		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	
Walls or ceilings deteriorated		X	
More than "very small*" amount of paint in a room 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, structure leans, or visibly unsound		X	Kitchen Floor
Total Number	0	10	

\*The "very small" amount is the de minimis amount under the HUD Lead Safe Housing Rule (24 CFR 35.1350(d)), or the amount of paint that is not "paint in poor condition" under the EPA lead training and certification ("402") rule (40 CFR 745.223)

Notes (including other conditions of concern):

#### 4.5 DUST WIPE SAMPLE ANALYSIS

Dust wipe samples were collected in an effort to help determine the levels of lead-containing dust on the interior windowsills and floors. The following tables note the presence or absence of lead hazards in dust per the EPA risk assessment and clearance standards. Please refer to Appendix B for detailed analytical reports. The presence of these hazards indicates that sample results exceed the following EPA criteria:

- 10 ug/ft<sup>2</sup> for floors, including carpeted floors
- 100 ug/ft<sup>2</sup> for interior window sills
- 100 ug/ft<sup>2</sup> for interior window troughs

The following table indicates the sample number, location, surface type, lead concentration, and presence or absence of lead dust hazards for dust wipe samples collected during this LBP Risk Assessment:

Dust Wipe Sample Analysis				
Sample #	Location	Surface Types	Concentration (Micrograms/ft <sup>2</sup> )	Lead Hazard
01	Living Room	Floor	<5	NO
02	Living Room	Window Sill	<11	NO
03	Kitchen	Floor	<5	NO
04	Kitchen	Window Sill	58	NO
05	Bedroom 1	Floor	47	YES
06	Bedroom 1	Window Sill	34	NO
08	Front Porch	Floor	<5	NO

#### 4.6 SOIL SAMPLE ANALYSIS

The EPA has established lead hazard standards for lead in soil under TSCA Section 403 (Residential Lead Hazards). Please refer to Appendix B for detailed analytical reports. The following level of lead in soil should be considered hazardous and may result in excessive lead exposure and elevated blood lead levels:

- 400 milligrams per kilogram (mg/Kg) in children's play areas with bare residential soil (e.g., sandboxes, gardens)
- 1,200 mg/Kg (average) in bare soil for the remainder of the yard.



The following table indicates the sample number, location, surface type, lead concentration, and presence or absence of lead soil hazards for soil samples collected during this LBP Risk Assessment:

Soil Sample Analysis				
Sample #	Location	Bare or Covered	Concentration (Micrograms/ft <sup>2</sup> )	Lead Hazard
07	Dripline	Bare	120	NO
09	Play Area	Bare	140	NO

## 5.0 RECOMMENDATIONS

### 5.1 DETERIORATED LEAD-BASED PAINT

Room or Exterior Location	Component	Type of Hazard	Approximate Area or Length	Acceptable Hazard Control Options	
				Interim	Abatement
Garage Side A	Wall	Paint		Wet scrape/Repaint	Replace or Enclose
Exterior Side A	Door Jamb	Paint		Wet scrape/Repaint	Replace or Enclose
Exterior Side A	Porch Ceiling	Paint		Wet scrape/Repaint	Replace or Enclose
Exterior Side A	Porch Column	Paint		Wet scrape/Repaint	Replace or Enclose
Exterior Side A	Porch Header	Paint		Wet scrape/Repaint	Replace or Enclose
Exterior Side A, C, D	Wall	Paint		Wet scrape/Repaint	Replace or Enclose
Exterior Side B	Soffit	Paint		Wet scrape/Repaint	Replace or Enclose

## 5.2 LEAD DUST CONTROL OPTIONS

Room	Surface	Acceptable Hazard Control Method
Bedroom 1	Floor	Hepa-Vac/Wet Wipe/Hepa-Vac

## 5.3 LEAD IN SOIL

Type Of Area	Location	Acceptable Hazard Control Options

## 6.0 RE-EVALUATION 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 end 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.

**Re-evaluation:** Standard Re-evaluation 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 May 2025 (12 months from now). If no lead-based paint hazards are identified at that time, another reevaluation should be conducted in May 2026 (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.

## APPENDIX A: XRF Field Data Sheets & Floor Plan



Viken Detection  
Pb200i  
XRF Lead Paint Analyzer  
2312  
Pb200i-5.3.1

Reading #	Pb	Units	Pb Error	Result	Secs	Date	Time	Room	Structure	Member	Substrate	Wall	Condition
1	1.04	mg/cm2	0.07		20.21	5/8/2024	12:15:02	Calibration					4
2	1.16	mg/cm2	0.07		20.03	5/8/2024	12:15:57	Calibration					5
3	1.17	mg/cm2	0.07		20.01	5/8/2024	12:16:48	Calibration					6
4	0.1	mg/cm2	0.2	Negative	2	5/8/2024	12:19:41	Living Room/Kitc	Room	Wall	Drywall1	A1	Intact
5	0.4	mg/cm2	0.2	Negative	2	5/8/2024	12:19:55	Living Room/Kitc	Room	Wall	Drywall2	B2	Intact
6	0.6	mg/cm2	0.2	Negative	2	5/8/2024	12:20:18	Living Room/Kitc	Room	Wall	Drywall3	C3	Intact
7	0.3	mg/cm2	0.2	Negative	2	5/8/2024	12:20:38	Living Room/Kitc	Room	Wall	Drywall4	D4	Intact
8	0.3	mg/cm2	0.2	Negative	2	5/8/2024	12:21:20	Living Room/Kitc	Room	Ceiling	Drywall5		1 Intact
9	0.1	mg/cm2	0.2	Negative	2	5/8/2024	12:21:47	Living Room/Kitc	Room	Baseboard	Wood1	A1	Intact
10	0.1	mg/cm2	0.2	Negative	2	5/8/2024	12:22:14	Living Room/Kitc	Door		Wood2	A2	Intact
11	0.1	mg/cm2	0.3	Negative	2	5/8/2024	12:22:34	Living Room/Kitc	Door	Jamb	Wood3	A3	Intact
12	0	mg/cm2	0.2	Negative	2	5/8/2024	12:23:01	Living Room/Kitc	Window	Sill	Wood4	A4	Intact
13	0.2	mg/cm2	0.2	Negative	2	5/8/2024	12:23:36	Living Room/Kitc	Cabinets	Door	Wood5	A5	Intact
14	0.1	mg/cm2	0.2	Negative	2	5/8/2024	12:23:56	Living Room/Kitc	Cabinets	Frame	Wood6	A6	Intact
15	0	mg/cm2	0.3	Negative	2	5/8/2024	12:25:03	Bedroom 1	Window	Sill	Wood7	B1	Intact
16	0	mg/cm2	0.3	Negative	2	5/8/2024	12:25:26	Bedroom 1	Window	Frame	Wood8	B2	Intact
17	0.3	mg/cm2	0.2	Negative	2	5/8/2024	12:25:54	Bedroom 1	Door		Wood9	D1	Intact
18	0.1	mg/cm2	0.2	Negative	2	5/8/2024	12:26:13	Bedroom 1	Door		Wood10	D2	Intact
19	0.2	mg/cm2	0.2	Negative	2	5/8/2024	12:26:40	Bedroom 1	Room	Jamb	Wood11	D3	Intact
20	0.2	mg/cm2	0.2	Negative	2	5/8/2024	12:27:06	Bedroom 1	Room	Baseboard	Wood11	D3	Intact
21	0.3	mg/cm2	0.2	Negative	2	5/8/2024	12:27:30	Bedroom 1	Room	Ceiling	Drywall1		1 Intact
22	0.3	mg/cm2	0.2	Negative	2	5/8/2024	12:27:47	Bedroom 1	Room	Wall	Drywall2	A1	Intact
23	0.2	mg/cm2	0.3	Negative	2	5/8/2024	12:27:59	Bedroom 1	Room	Wall	Drywall3	B2	Intact
24	0.4	mg/cm2	0.2	Negative	2	5/8/2024	12:28:17	Bedroom 1	Room	Wall	Drywall4	C3	Intact
25	0	mg/cm2	0.2	Negative	2	5/8/2024	12:29:34	Bathroom 1	Room	Wall	Drywall5	D4	Intact
26	0	mg/cm2	0.2	Negative	2	5/8/2024	12:29:44	Bathroom 1	Room	Wall	Drywall6	A5	Intact
27	0.1	mg/cm2	0.2	Negative	2	5/8/2024	12:29:55	Bathroom 1	Room	Wall	Drywall7	B6	Intact
											Drywall8	C7	Intact

28	0.2 mg/cm2	0.2 Negative	2	5/8/2024	12:30:12	Bathroom 1	Room	Wall	Drywall9	D8	Intact
29	0.1 mg/cm2	0.2 Negative	2	5/8/2024	12:31:30	Bathroom 1	Room	Ceiling	Drywall10	1	Intact
30	0.2 mg/cm2	0.2 Negative	2	5/8/2024	12:32:04	Bathroom 1	Room	Baseboard	Wood1	C1	Intact
31	0.3 mg/cm2	0.2 Negative	2	5/8/2024	12:32:30	Bathroom 1	Door		Wood2	C2	Intact
32	0 mg/cm2	0.2 Negative	2	5/8/2024	12:32:52	Bathroom 1	Door	Jamb	Wood3	C3	Intact
33	0.4 mg/cm2	0.2 Negative	2	5/8/2024	12:34:31	Bathroom 1	Cabinets	Door	Wood4	C4	Intact
34	0.2 mg/cm2	0.3 Negative	2	5/8/2024	12:34:46	Bathroom 1	Cabinets	Frame	Wood5	C5	Intact
35	0.3 mg/cm2	0.2 Negative	2	5/8/2024	12:35:49	Bedroom 2	Window	Sill	Wood6	B1	Intact
36	0.1 mg/cm2	0.2 Negative	2	5/8/2024	12:36:24	Bedroom 2	Door		Wood7	D1	Intact
37	0.3 mg/cm2	0.2 Negative	2	5/8/2024	12:36:41	Bedroom 2	Door	Jamb	Wood8	D2	Intact
38	0.2 mg/cm2	0.2 Negative	2	5/8/2024	12:37:12	Bedroom 2	Room	Baseboard	Wood9	A1	Intact
39	0.3 mg/cm2	0.2 Negative	2	5/8/2024	12:37:55	Bedroom 2	Room	Ceiling	Drywall1	1	Intact
40	0.5 mg/cm2	0.3 Negative	2	5/8/2024	12:38:40	Bedroom 2	Room	Wall	Drywall2	A1	Intact
41	0.4 mg/cm2	0.2 Negative	2	5/8/2024	12:39:00	Bedroom 2	Room	Wall	Drywall3	B2	Intact
42	0.6 mg/cm2	0.2 Negative	2	5/8/2024	12:39:15	Bedroom 2	Room	Wall	Drywall4	C3	Intact
43	0.5 mg/cm2	0.3 Negative	2	5/8/2024	12:39:33	Bedroom 2	Room	Wall	Drywall5	D4	Intact
44	0 mg/cm2	0.2 Negative	2	5/8/2024	12:40:20	Laundry Room	Room	Wall	Drywall6	A5	Intact
45	0.3 mg/cm2	0.2 Negative	2	5/8/2024	12:40:35	Laundry Room	Room	Wall	Drywall7	B6	Intact
46	0.4 mg/cm2	0.3 Negative	2	5/8/2024	12:40:48	Laundry Room	Room	Wall	Drywall8	C7	Intact
47	0.4 mg/cm2	0.2 Negative	2	5/8/2024	12:40:59	Laundry Room	Room	Wall	Drywall9	D8	Intact
48	0.3 mg/cm2	0.2 Negative	2	5/8/2024	12:41:33	Laundry Room	Room	Ceiling	Drywall10	1	Intact
49	0.2 mg/cm2	0.2 Negative	2	5/8/2024	12:42:08	Laundry Room	Room	Baseboard	Wood1	A1	Intact
50	0.3 mg/cm2	0.2 Negative	2	5/8/2024	12:42:26	Laundry Room	Door		Wood2	A2	Intact
51	0.1 mg/cm2	0.2 Negative	2	5/8/2024	12:42:42	Laundry Room	Door	Jamb	Wood3	A3	Intact
52	0.3 mg/cm2	0.2 Negative	2	5/8/2024	12:43:14	Laundry Room	Window	Sill	Wood4	C1	Intact
53	0.4 mg/cm2	0.2 Negative	2	5/8/2024	12:44:52	Garage (Interior)	Door		Wood5	B1	Intact
54	0.2 mg/cm2	0.3 Negative	2	5/8/2024	12:45:10	Garage (Interior)	Door	Jamb	Wood6	B2	Intact
55	0.6 mg/cm2	0.2 Negative	2	5/8/2024	12:45:34	Garage (Interior)	Room	Ceiling	Wood7	1	Intact
56	1.2 mg/cm2	0.2 Positive	5	5/8/2024	12:46:03	Garage (Interior)	Room	Wall	Wood8	A1	Deteriorated
57	0.9 mg/cm2	0.2 Negative	5	5/8/2024	12:46:20	Garage (Interior)	Room	Wall	Wood9	B2	Intact
58	0.7 mg/cm2	0.2 Negative	3	5/8/2024	12:47:00	Garage (Interior)	Room	Wall	Wood10	C3	Intact
59	0.3 mg/cm2	0.2 Negative	2	5/8/2024	12:47:16	Garage (Interior)	Room	Wall	Wood11	D4	Intact
60	0.2 mg/cm2	0.2 Negative	2	5/8/2024	12:50:31	Exterior	Door		Wood12	A5	Intact
61	1.6 mg/cm2	0.2 Positive	2	5/8/2024	12:50:50	Exterior	Door	Jamb	Wood13	A6	Deteriorated



62	1.2 mg/cm2	0.2 Positive	5	5/8/2024	12:51:30	Exterior	Porch	Ceiling	Wood14	A7	Deteriorated
63	1.7 mg/cm2	0.3 Positive	2	5/8/2024	12:52:14	Exterior	Porch	Column	Wood15	A8	Deteriorated
64	1.5 mg/cm2	0.2 Positive	2	5/8/2024	12:52:33	Exterior	Porch	Header	Wood16	A9	Deteriorated
65	1.2 mg/cm2	0.2 Positive	5	5/8/2024	12:53:01	Exterior	Room	Wall	Wood17	A10	Deteriorated
66	0.3 mg/cm2	0.2 Negative	2	5/8/2024	12:53:41	Exterior	Window	Frame	Wood18	A11	Intact
67	0.1 mg/cm2	0.2 Negative	2	5/8/2024	12:55:02	Exterior	Soffit	Soffit	Wood19	A1	Intact
68	1.8 mg/cm2	0.2 Positive	2	5/8/2024	12:57:59	Exterior	Soffit	Soffit	Wood20	B1	Deteriorated
69	0.5 mg/cm2	0.2 Negative	2	5/8/2024	12:58:47	Exterior	Room	Wall	Wood21	B2	Intact
70	2.2 mg/cm2	0.3 Positive	2	5/8/2024	12:59:23	Exterior	Room	Wall	Wood22	C1	Deteriorated
71	0.9 mg/cm2	0.2 Negative	5	5/8/2024	13:00:04	Exterior	Soffit	Soffit	Wood23	C2	Intact
72	0.4 mg/cm2	0.3 Negative	2	5/8/2024	13:01:39	Exterior	Soffit	Soffit	Wood24	D1	Intact
73	1.5 mg/cm2	0.2 Positive	2	5/8/2024	13:02:07	Exterior	Room	Wall	Wood25	D2	Deteriorated
74	0.2 mg/cm2	0.2 Negative	2	5/8/2024	13:02:26	Exterior	Door	Door	Wood26	D3	Intact
75	0.1 mg/cm2	0.2 Negative	2	5/8/2024	13:02:49	Exterior	Door	Jamb	Wood27	D4	Intact
76	1.17 mg/cm2	0.07	20.11	5/8/2024	13:04:40	Calibration				1	1
77	1.17 mg/cm2	0.07	20	5/8/2024	13:05:31	Calibration				2	2
78	1.18 mg/cm2	0.07	20.22	5/8/2024	13:06:22	Calibration				3	3



## APPENDIX B: DUST WIPE & SOIL ANALYSIS




2033 HERITAGE PARK DR, OKLAHOMA CITY, OK 73120 1.800.822.1650

## Environmental Chemistry Analysis Report

<b>Quantem Set ID:</b> 368871	<b>Client:</b> Cherokee Nation Environmental Programs Tyler Moore
<b>Date Received:</b> 05/10/24	
<b>Received By:</b> Courtney Holman	
<b>Date Sampled:</b>	
<b>Time Sampled:</b>	<b>Acct. No.:</b> C162
<b>Analyst:</b>	<b>Project:</b> Lila Morton
<b>Date of Report:</b> 05/14/24	<b>Location:</b> Stilwell, OK
<b>AIHA LAP, LLC:</b> 101352	<b>Project No.:</b> 874586

Quantem ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	01	Wipe	Lead	<5.0	5	ug/sq. Ft.	05/14/24 14:00	NIOSH 7082
002	02	Wipe	Lead	<11	11	ug/sq. Ft.	05/14/24 14:00	NIOSH 7082
003	03	Wipe	Lead	<5.0	5	ug/sq. Ft.	05/14/24 14:00	NIOSH 7082
004	04	Wipe	Lead	58	12	ug/sq. Ft.	05/14/24 14:00	NIOSH 7082
005	05	Wipe	Lead	47	5	ug/sq. Ft.	05/14/24 14:00	NIOSH 7082
006	06	Wipe	Lead	34	8.9	ug/sq. Ft.	05/14/24 14:00	NIOSH 7082
007	07	Soil	Lead	120	40	mg/kg	05/14/24 14:00	Soil EPA 7000B (1)
008	08	Wipe	Lead	<5.0	5	ug/sq. Ft.	05/14/24 14:00	NIOSH 7082
009	09	Soil	Lead	140	40	mg/kg	05/14/24 14:00	Soil EPA 7000B (1)

Authorized Signature:   
Eric Caves, Chemistry Technical Manager

Note: Sample results have not been corrected for blank values.

This report applies only to the standards or procedures indicated and to the specific samples tested. It is not indicative of the qualities of apparently identical or similar products or procedures, nor does it represent an ongoing assurance program unless so noted. These reports are for the exclusive use of the client and are not to be reproduced without specific written permission. Quantem is not responsible for user-supplied data used in calculations. Customer provided data such as volumes, areas, etc., cannot be verified by Quantem Laboratories, LLC.

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Wipe materials must meet ASTM E1792 criteria. Method detection limits and resultant reporting limits may not be valid for non-ASTM E1792 wipe material.

EPA Method 7000B (1) = EPA 600/R-93/200 Preparation Modified, EPA 7000B Analysis Modified

EPA Method 7082 (2) = EPA 600/R-93/200 Preparation Modified, EPA 7082 Analysis Modified

## Supplemental Report QAQC Results

QA ID: 21111  
Test: Lead

Date: 5/14/2024  
Matrix: Soil

Lab Number: 368871  
Approved By: Eric Caves  
Date Approved: 5/14/2024

**Notes:**

**Blank Data:**

Type of Blank	Blank Value
FCB	0
ICB	0
Matrix Blank	0

**Standards Data:**

Standard	Low Limit	Obtained	High Limit
CCV	2.2	2.26	2.8
FCV	2.2	2.44	2.8
RLVS	0.08	0.15	0.24
ICV	0.9	1.1	1.1

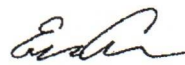
**Duplicate Data:**

Sample Number	Result	Duplicate	% RPD
368871-009	0.565	0.472	17.9

**Recovery Data:**

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
LCS-S	0.000	2.428	2.060	84.8	2.200	90.6	6.6
368871-009	0.470	2.000	2.130	83.0			

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



Eric Caves, Chemistry Technical Manager



# Supplemental Report QAQC Results

QA ID: 21112  
Test: Lead

Date: 5/14/2024  
Matrix: Wipe

Lab Number: 368871  
Approved By: Eric Caves  
Date Approved: 5/14/2024

Notes:

### Blank Data:

Type of Blank	Blank Value
FCB	0
ICB	0
Matrix Blank	0

### Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	2.2	2.26	2.8
FCV	2.2	2.44	2.8
RLVS	0.05	0.12	0.15
ICV	0.9	1.1	1.1

### Duplicate Data:

### Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W1	0.000	2.428	2.590	106.7	2.420	99.7	6.8
MS-W2	0.000	2.428	2.480	102.1	2.300	94.7	7.5

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



Eric Caves, Chemistry Technical Manager



# LEAD CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502  
 (800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

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For Lab Use Only  
 Lab No. 368871  
 Accept  Reject

<b>Contact Information</b> Company: Cherokee Nation Environmental Programs Contact: Tyler Moore Account #: C 162 Phone: (918) 453-5000 Cell Phone: (918) 772-8709 E-mail: Tyler-Moore@cherokee.org Date: 05/08/2024		<b>Project Information</b> Project Name: Lila Morton Project Location: Stilwell, OK Project ID: P.O. Number: 874586	
<b>SAMPLED BY:</b> Name: Tyler Moore & Chris Cochran RELINQUISHED BY: <i>TCM</i>		<b>Report Results</b> (☑ one box) <input type="radio"/> Quantem Website <input checked="" type="radio"/> Email Tyler-Moore@cherokee.org <input type="radio"/> Other	

DATE & TIME	RECEIVED BY	DATE & TIME
5/8/2024	<i>TCM</i>	5/10/24 @ 10:30
5 PM	VIA FedEx	

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

No. (10 Characters Max)	Sample ID	Sample Description	Volume or Area	Flame Atomic Absorption				NIOSH 7082		Other Analysis	TURNAROUND TIME
				Paint Chips wt% ppm mg/cm <sup>2</sup>	EPA 7000B	Soil (mg/kg)	Wipes (ug/ft <sup>2</sup> )	Air (ug/m <sup>3</sup> )	TCLP - Pb		
1	01	Living Room Floor	144 sq in				✓				<input type="radio"/> Same Day <input type="radio"/> 24 - Hour <input checked="" type="radio"/> 3 - Day <input type="radio"/> 5 - Day
2	02	Living Room Window Sill	66 sq in				✓				
3	03	Kitchen Floor	144 sq in				✓				
4	04	Kitchen Window Sill	62.5 sq in				✓				
5	05	Bedroom 1 Floor	144 sq in				✓				
6	06	Bedroom 1 Window Sill	81 sq in				✓				
7	07	Composite Soil Sample									
8	08	Front Porch Floor	144 sq in				✓				
9	09	Play Area Soil					✓				
10											
11											