



CHEROKEE NATION  
Environmental Programs

---

LEAD-BASED PAINT INSPECTION &  
RISK ASSESSMENT REPORT

**Conducted At:**

Name: Rosle Jones  
Address: 418 E Shawnee  
City State Zip: Tahlequah, OK 74464  
Coordinates: 35.9132, -94.9636  
Built In: 1955

**Prepared For:**

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

**Inspected By:**

---

C. Nicolas Clark  
OKRASR13910, CNRASR00036

Cherokee Nation Environmental Programs  
PO Box 948, Tahlequah, OK 74465  
(918) 453-5000  
Oklahoma Firm: OKFIRM11198  
Cherokee Nation Firm: CNFIRM00001

Report Date: October 18, 2022

# CONTENTS

<b>1.0 EXECUTIVE SUMMARY.....</b>	<b>3</b>
<b>2.0 DISCLOSURE .....</b>	<b>3</b>
<b>3.0 INSPECTION/ RISK ASSESSMENT METHODOLOGY.....</b>	<b>4</b>
3.1 Surface-by-Surface Inspection Methodology .....	4
3.2 X-Ray Fluorescence Analyzer Lead Detector .....	4
3.3 Risk Assessment Methodology.....	4
3.4 Description of Paint Condition Hazard Rankings .....	5
3.5 Laboratory Analysis .....	5
<b>4.0 DESCRIPTION OF RESULTS.....</b>	<b>5</b>
4.1 LBP Inspection.....	5
4.2 LBP Risk Assessment.....	6
4.3 Resident Questionnaire Form 5.0.....	6
4.4 Building Condition Form 5.1.....	7
4.5 Dust Wipe Sample Analysis.....	7
4.6 Soil Sample ANALYSIS .....	8
<b>5.0 RECOMMENDATIONS .....</b>	<b>9</b>
5.1 Deteriorated Lead-Based Paint .....	9
5.2 Lead Dust Control Options .....	9
5.3 Lead in Soil .....	9
<b>6.0 Re-evaluation and Monitoring Schedule .....</b>	<b>10</b>
<b>APPENDIX A: XRF Field Data Sheets &amp; Floor Plan .....</b>	<b>11</b>
<b>APPENDIX B: Dust Wipe &amp; Soil Analysis .....</b>	<b>12</b>
<b>APPENDIX C: Scope of Work/Request .....</b>	<b>13</b>

## 1.0 EXECUTIVE SUMMARY

A lead based paint inspection was conducted at the Rosie Jones site on October 5, 2022 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:

N/A

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

**Interior Lead-Based Paint**  
No lead in paint identified.

**Exterior Lead-Based Paint**  
A side door trim

**Deteriorated Lead-Based Paint  
(Lead-Based Paint Hazards)**  
A side door rim

**Lead in Dust Hazards**  
No lead in dust hazards were identified

**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 26, 2021.

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.

Read	Conc	Units	3 SD	Result	Nom	Secs	Date	Time	Room	Room	Room	Structure	-->Member	Substrate	Wall	Cond
6	1.7	mg/cm <sup>2</sup>	0.3	Positive		2	10/5/2022	17:03:39	Exterior	House	Door	Outer Trim		Wood	A	Chipping

#### 4.2 LBP RISK ASSESSMENT

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

The lead hazards are:

- Exterior A side door trim

Lead in Dust Hazards

- No hazards were identified

Lead in Soil Hazards

- No hazards were identified

#### 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:	Central
Gardening -type and location:	none
Plans for landscaping:	None
Cleaning regimen:	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	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	
Total Number	2	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	Porch	Floor	<5.0	NO
02	Living Room	Floor	<5.0	NO
03	Living Room	Window Sill	<2.4	NO
04	Living Room	Window Trough	35	NO
05	Bath	Floor	<5.0	NO
06	Bath	Window Sill	<3.1	NO
07	Bath	Window Trough	76	NO
08	Hallway	Floor	<5.0	NO
09	Bedroom 2	Window Sill	<2.9	NO
10	Bedroom 2	Window Trough	21	NO

#### 4.6 SOIL SAMPLE ANALYSIS1

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
11	Dripline	Bare	80	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
Exterior Side A	Door Trim	Paint		Wet scrape/Repaint	Replace or Enclose

### 5.2 LEAD DUST CONTROL OPTIONS

Room	Surface	Acceptable Hazard Control Method
Exterior Side A	Door Trim	HEPA Vacuum/ Mop/ HEPA Vacuum

### 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 6/28/2023 (12 months from now). If no lead-based paint hazards are identified at that time, another reevaluation should be conducted in 6/28/2024 (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

Readi	Concrt	Units	3 SD	Result	Norm		Room		Structure	-->Member	Substrate	Wall	Cond	
					Secs	Date	Time	Room						Choice
1	1.02	mg/cm2	0.07		20.23	10/5/2022	16:59:53	Apartment	Calibration					
2	1.05	mg/cm2	0.07		20.18	10/5/2022	17:00:40	Apartment	Calibration					
3	1.04	mg/cm2	0.07		20.21	10/5/2022	17:01:27	Apartment	Calibration					
4	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:03:03	Exterior	House	Door	---	Metal	A	Intact
5	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:03:19	Exterior	House	Door	Casing	Wood	A	Intact
6	1.7	mg/cm2	0.3	Positive	2	10/5/2022	17:03:39	Exterior	House	Door	Outer Trim	Wood	A	Chipping
7	0.9	mg/cm2	0.2	Negative	5	10/5/2022	17:04:28	Exterior	House	Porch	Ceiling	Wood	A	Intact
8	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:05:14	Exterior	House	Porch	Column	Wood	A	Intact
9	0.6	mg/cm2	0.2	Negative	2	10/5/2022	17:05:49	Exterior	House	Room	Wall	Concrete	B	Intact
10	0.4	mg/cm2	0.2	Negative	2	10/5/2022	17:06:09	Exterior	House	Room	Wall	Concrete	C	Intact
11	0.2	mg/cm2	0.3	Negative	2	10/5/2022	17:06:48	Exterior	House	Door	---	Metal	C	Intact
12	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:07:04	Exterior	House	Door	Casing	Wood	C	Intact
13	0	mg/cm2	0.3	Negative	2	10/5/2022	17:07:24	Exterior	House	Porch	Column	Wood	C	Intact
14	0	mg/cm2	0.3	Negative	2	10/5/2022	17:07:45	Exterior	House	Porch	Header	Wood	C	Intact
15	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:08:16	Exterior	House	Room	Wall	Wood	C	Intact
16	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:08:45	Exterior	House	Room	Wall	Wood	D	Intact
17	0.2	mg/cm2	0.3	Negative	2	10/5/2022	17:10:18	Apartment	Living Room	Room	Wall	Concrete	A	Intact
18	0	mg/cm2	0.3	Negative	2	10/5/2022	17:10:31	Apartment	Living Room	Room	Wall	Drywall	A	Intact
19	0.2	mg/cm2	0.3	Negative	2	10/5/2022	17:10:44	Apartment	Living Room	Room	Wall	Drywall	B	Intact
20	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:11:00	Apartment	Living Room	Room	Wall	Drywall	C	Intact
21	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:11:30	Apartment	Living Room	Room	Ceiling	Drywall	D	Intact
22	0	mg/cm2	0.2	Negative	2	10/5/2022	17:11:51	Apartment	Living Room	Room	Crown Molding	Drywall		Intact
23	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:12:22	Apartment	Living Room	Door	---	Metal	A	Intact
24	0	mg/cm2	0.3	Negative	2	10/5/2022	17:12:46	Apartment	Living Room	Door	Header Trim	Metal	A	Intact
25	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:13:07	Apartment	Living Room	Window	Sill	Wood	A	Intact
26	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:14:03	Apartment	Bedroom 1	Window	Sill	Wood	A	Intact
27	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:14:24	Apartment	Bedroom 1	Room	Wall	Drywall	A	Intact
28	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:14:43	Apartment	Bedroom 1	Room	Wall	Drywall	B	Intact
29	0	mg/cm2	0.3	Negative	2	10/5/2022	17:14:57	Apartment	Bedroom 1	Room	Wall	Drywall	C	Intact
30	0.2	mg/cm2	0.3	Negative	2	10/5/2022	17:15:12	Apartment	Bedroom 1	Room	Wall	Drywall	D	Intact
31	0.1	mg/cm2	0.2	Negative	2	10/5/2022	17:15:54	Apartment	Bedroom 1	Room	Ceiling	Drywall		Intact
32	0.2	mg/cm2	0.3	Negative	2	10/5/2022	17:16:32	Apartment	Bedroom 1	Door	---	Wood	C	Intact



33	0.1 mg/cm2	0.3 Negative	2	10/5/2022	17:16:49	Apartment	Bedroom 1	Door	Casing	Wood	C	Intact
34	0.1 mg/cm2	0.3 Negative	2	10/5/2022	17:17:14	Apartment	Bedroom 1	Room	Baseboard	Wood	C	Intact
35	0.1 mg/cm2	0.3 Negative	2	10/5/2022	17:17:47	Apartment	Bedroom 2	Room	Baseboard	Wood	A	Intact
36	0.1 mg/cm2	0.3 Negative	2	10/5/2022	17:18:05	Apartment	Bedroom 2	Room	Wall	Drywall	A	Intact
37	0 mg/cm2	0.2 Negative	2	10/5/2022	17:18:18	Apartment	Bedroom 2	Room	Wall	Drywall	B	Intact
38	0 mg/cm2	0.3 Negative	2	10/5/2022	17:18:34	Apartment	Bedroom 2	Room	Wall	Drywall	C	Intact
39	0.1 mg/cm2	0.3 Negative	2	10/5/2022	17:18:50	Apartment	Bedroom 2	Room	Wall	Drywall	D	Intact
40	0.1 mg/cm2	0.2 Negative	2	10/5/2022	17:19:12	Apartment	Bedroom 2	Room	Ceiling	Drywall	D	Intact
41	0.3 mg/cm2	0.3 Negative	2	10/5/2022	17:19:36	Apartment	Bedroom 2	Door	---	Wood	D	Intact
42	0.1 mg/cm2	0.3 Negative	2	10/5/2022	17:19:36	Apartment	Bedroom 2	Door	Casing	Wood	D	Intact
43	0.1 mg/cm2	0.3 Negative	2	10/5/2022	17:20:05	Apartment	Bedroom 2	Window	Sill	Wood	B	Intact
44	0 mg/cm2	0.3 Negative	2	10/5/2022	17:20:42	Apartment	Bedroom 2	Window	Sill	Wood	C	Intact
45	0.1 mg/cm2	0.3 Negative	2	10/5/2022	17:21:21	Apartment	Bathroom	Window	Sill	Wood	C	Intact
46	0.1 mg/cm2	0.3 Negative	2	10/5/2022	17:21:51	Apartment	Bathroom	Room	Wall	Drywall	A	Intact
47	0.2 mg/cm2	0.3 Negative	2	10/5/2022	17:22:04	Apartment	Bathroom	Room	Wall	Drywall	B	Intact
48	0 mg/cm2	0.3 Negative	2	10/5/2022	17:22:16	Apartment	Bathroom	Room	Wall	Drywall	C	Intact
49	0 mg/cm2	0.3 Negative	2	10/5/2022	17:22:48	Apartment	Bathroom	Room	Wall	Concrete	D	Intact
50	0.1 mg/cm2	0.2 Negative	2	10/5/2022	17:23:20	Apartment	Bathroom	Room	Ceiling	Drywall	D	Intact
51	0.1 mg/cm2	0.3 Negative	2	10/5/2022	17:23:56	Apartment	Bathroom	Door	---	Wood	A	Intact
52	0 mg/cm2	0.3 Negative	2	10/5/2022	17:24:09	Apartment	Bathroom	Door	Casing	Wood	A	Intact
53	0 mg/cm2	0.3 Negative	2	10/5/2022	17:24:44	Apartment	Bathroom	Cabinets	Door	Wood	D	Intact
54	0 mg/cm2	0.3 Negative	2	10/5/2022	17:24:57	Apartment	Bathroom	Cabinets	Frame	Wood	D	Intact
55	0 mg/cm2	0.3 Negative	2	10/5/2022	17:25:46	Apartment	Kitchen	Cabinets	Frame	Wood	B	Intact
56	0.1 mg/cm2	0.3 Negative	2	10/5/2022	17:25:58	Apartment	Kitchen	Cabinets	Door	Wood	B	Intact
57	0 mg/cm2	0.3 Negative	2	10/5/2022	17:26:22	Apartment	Kitchen	Room	Wall	Drywall	A	Intact
58	0.2 mg/cm2	0.3 Negative	2	10/5/2022	17:26:38	Apartment	Kitchen	Room	Wall	Drywall	B	Intact
59	0 mg/cm2	0.3 Negative	2	10/5/2022	17:26:52	Apartment	Kitchen	Room	Wall	Drywall	C	Intact
60	0.1 mg/cm2	0.3 Negative	2	10/5/2022	17:27:11	Apartment	Kitchen	Room	Wall	Concrete	D	Intact
61	0.1 mg/cm2	0.2 Negative	2	10/5/2022	17:27:49	Apartment	Kitchen	Room	Ceiling	Drywall	D	Intact
62	0 mg/cm2	0.3 Negative	2	10/5/2022	17:28:16	Apartment	Kitchen	Door	---	Wood	D	Intact
63	0.1 mg/cm2	0.3 Negative	2	10/5/2022	17:28:30	Apartment	Kitchen	Door	Casing	Wood	D	Intact
64	0.1 mg/cm2	0.3 Negative	2	10/5/2022	17:28:57	Apartment	Kitchen	Window	Sill	Wood	C	Intact
65	0 mg/cm2	0.2 Negative	3	10/5/2022	17:30:24	Apartment	Bathroom 2	Room	Wall	Drywall	A	Intact
66	0.1 mg/cm2	0.3 Negative	2	10/5/2022	17:30:41	Apartment	Bathroom 2	Room	Wall	Drywall	B	Intact
					17:30:55	Apartment	Bathroom 2	Room	Wall	Drywall	C	Intact

67	0	mg/cm2	0.3	Negative	2	10/5/2022	17:31:13	Apartment	Bathroom 2	Room	Wall	Drywall	D	Intact
68	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:31:49	Apartment	Bathroom 2	Room	Ceiling	Drywall		Intact
69	0	mg/cm2	0.3	Negative	2	10/5/2022	17:32:23	Apartment	Bathroom 2	Door	---	Wood	A	Intact
70	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:32:39	Apartment	Bathroom 2	Door	Casing	Wood	A	Intact
71	0	mg/cm2	0.3	Negative	2	10/5/2022	17:33:25	Apartment	Bathroom 2	Cabinets	Door	Wood	B	Intact
72	0	mg/cm2	0.3	Negative	2	10/5/2022	17:33:39	Apartment	Bathroom 2	Cabinets	Frame	Wood	B	Intact
73	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:34:11	Apartment	Bedroom 3	Room	Wall	Drywall	A	Intact
74	0	mg/cm2	0.3	Negative	2	10/5/2022	17:34:40	Apartment	Bedroom 4	Room	Wall	Drywall	B	Intact
75	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:35:03	Apartment	Bedroom 5	Window	Sill	Wood	B	Intact
76	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:35:30	Apartment	Bedroom 6	Room	Wall	Drywall	C	Intact
77	0	mg/cm2	0.3	Negative	2	10/5/2022	17:35:49	Apartment	Bedroom 7	Room	Wall	Drywall	D	Intact
78	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:36:13	Apartment	Bedroom 8	Room	Ceiling	Drywall		Intact
79	0.1	mg/cm2	0.2	Negative	2	10/5/2022	17:36:41	Apartment	Bedroom 9	Door	---	Wood	B	Intact
80	0.1	mg/cm2	0.3	Negative	2	10/5/2022	17:36:55	Apartment	Bedroom 10	Door	Casing	Wood	B	Intact
81	1.03	mg/cm2	0.07		20.19	10/5/2022	17:39:43	Apartment	Calibration					
82	1.04	mg/cm2	0.07		19.01	10/5/2022	17:40:31	Apartment	Calibration					
83	1.04	mg/cm2	0.07		20.08	10/5/2022	17:41:15	Apartment	Calibration					
84	1.01	mg/cm2	0.07		20.14	10/5/2022	17:42:04	Apartment	Calibration					



## APPENDIX B: DUST WIPE & SOIL ANALYSIS



2033 HERITAGE PARK DR, OKLAHOMA CITY, OK 73120 | 1.800.822.1650

## Environmental Chemistry Analysis Report

**Quantem Set ID:** 351491  
**Date Received:** 10/11/22  
**Received By:** Jake Martin  
**Date Sampled:** 10/06/22  
**Time Sampled:** 0:00  
**Analyst:** JM  
**Date of Report:** 10/13/22

**Client:** Cherokee Nation Environmental Programs  
 Carlton N Clark  
 PO Box 948  
 Tahlequah, OK 74464

**Acct. No.:** C162

**Project:** Rosie Jones

**Location:** Tahlequah

**Project No.:**

AIHA LAP, LLC: 101352

Quantem ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	01	Wipe	Lead	<5.0	5	ug/sq. Ft.	10/11/22 12:15	NIOSH 7082
002	02	Wipe	Lead	<5.0	5	ug/sq. Ft.	10/11/22 12:15	NIOSH 7082
003	03	Wipe	Lead	<2.4	2.4	ug/sq. Ft.	10/11/22 12:15	NIOSH 7082
004	04	Wipe	Lead	35	17	ug/sq. Ft.	10/11/22 12:15	NIOSH 7082
005	05	Wipe	Lead	<5.0	5	ug/sq. Ft.	10/11/22 12:15	NIOSH 7082
006	06	Wipe	Lead	<3.1	3.1	ug/sq. Ft.	10/11/22 12:15	NIOSH 7082
007	07	Wipe	Lead	76	22	ug/sq. Ft.	10/11/22 12:15	NIOSH 7082
008	08	Wipe	Lead	<5.0	5	ug/sq. Ft.	10/11/22 12:15	NIOSH 7082
009	09	Wipe	Lead	<2.9	2.9	ug/sq. Ft.	10/11/22 12:15	NIOSH 7082
010	10	Wipe	Lead	<21	21	ug/sq. Ft.	10/11/22 12:15	NIOSH 7082
011	11	Soil	Lead	80	40	mg/kg	10/13/22 16:19	Soil EPA 7000B (1)

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





2033 HERITAGE PARK DR, OKLAHOMA CITY, OK 73120 | 1.800.822.1650

## Environmental Chemistry Analysis Report

**Quantem Set ID:** 351491  
**Date Received:** 10/11/22  
**Received By:** Jake Martin  
**Date Sampled:** 10/06/22  
**Time Sampled:** 0:00  
**Analyst:** JM  
**Date of Report:** 10/13/22

**Client:** Cherokee Nation Environmental Programs  
 Carlton N Clark  
 PO Box 948  
 Tahlequah, OK 74464

**Acct. No.:** C162

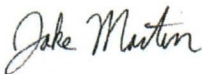
**Project:** Rosie Jones

**Location:** Tahlequah

**Project No.:**

AIHA LAP, LLC: 101352

Quantem ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
------------	-----------	--------	-----------	---------	------------------	-------	--------------------	--------

Authorized Signature:   
 \_\_\_\_\_  
 Jake Martin, Laboratory Analyst

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: 20320  
Test: Lead

Date: 10/11/2022  
Matrix: Wipe

Lab Number: 351491  
Approved By: Jake Martin  
Date Approved: 10/11/2022

**Notes:**

**Blank Data:**

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

**Standards Data:**

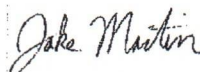
Standard	Low Limit	Obtained	High Limit
FCV	2.2	2.7	2.8
CCV	2.2	2.7	2.8
RLVS	0.05	0.07	0.15
ICV	0.9	1	1.1

**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	2.497	102.9	2.402	98.9	3.9

Authorized Signature:





## Supplemental Report QAQC Results

QA ID: 20325  
Test: Lead

Date: 10/13/2022  
Matrix: Soil

Lab Number: 351491  
Approved By: Jake Martin  
Date Approved: 10/13/2022

**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	2.5	2.8
FCV	2.2	2.5	2.8
RLVS	0.08	0.14	0.24
ICV	0.9	0.9	1.1

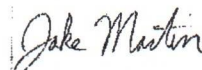
**Duplicate Data:**

Sample Number	Result	Duplicate	% RPD
351491-011	0.321	0.314	2.1

**Recovery Data:**

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
LCS-S1	0.000	2.428	2.746	113.1	2.605	107.3	5.3
351491-011	0.321	2.000	2.418	104.9			

Authorized Signature:



Jake Martin, Laboratory Analyst



# LEAD CHAIN OF CUSTODY

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

**LEGAL DOCUMENT - PLEASE PRINT LEGIBLY**

For Lab Use Only  
 Lab No. 351491  
 Accept  Reject

<b>Contact Information</b> Company: Cherokee Nation Environmental Programs Phone: (918) 453-5000 Contact: C. Nicolas Clark Cell Phone: (918) 316-7451 Account #: C162 Email: cartlon-clark@cherokee.org Project Name: Rosie Jones Project Location: Tahlequah Project ID: 271953		<b>Project Information</b> Report Results (one box) <input type="radio"/> Quantem Website <input checked="" type="radio"/> Email: cartlon-clark@cherokee.org <input type="radio"/> Other	
--	--	--	--

RELINQUISHED BY <i>C. Nicolas Clark</i>	DATE & TIME 10/06/2022 10am	VIA Fed Ex	RECEIVED BY	DATE & TIME
--	--------------------------------	---------------	-------------	-------------

No. (10 Characters Max)	Sample ID	Sample Description	Volume or Area	Flame Atomic Absorption			Wipes (ug/ft <sup>2</sup> )	Air (ug/m <sup>3</sup> )	TCLP - Pb	TCLP - RCRA 8	Other Analysts	TURNAROUND TIME
				EPA 7000B	NIOSH 7082	EPA 7000B						
1	01	Porch Floor	144 sq in	<input type="radio"/> wt% <input type="radio"/> ppm <input type="radio"/> mg/cm <sup>2</sup>			✓					<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 Floor	144 sq in				✓					
3	03	Living Room Window Sill	306 sq in				✓					
4	04	Living Room Window Trough	42.50 sq in				✓					
5	05	Bath Floor	144 sq in				✓					
6	06	Bath Window Sill	234 sq in				✓					
7	07	Bath Window Trough	32.50 sq in				✓					
8	08	Hallway Floor	144 sq in				✓					
9	09	Bedroom 2 Window Sill	238 sq in				✓					
10	10	Bedroom 2 Window Trough	34 sq in				✓					
11	11	Soil					✓					

REQUESTED SERVICES (Please  the Appropriate Boxes)

**SATURDAY FEDEX SAMPLE DELIVERY - CALL TO SCHEDULE** • Use this address for Saturday Delivery only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517 • Mark Package "Hold for Saturday Pickup"  
 Please Note - UPS and USPS are NOT available for Saturday Delivery

## APPENDIX C: SCOPE OF WORK/REQUEST