CHEROKEE NATION
Environmental Programs

LEAD-BASED PAINT INSPECTION & RISK ASSESSMENT REPORT

Conducted At:

Name: Cathy Patton
Address: 2704 E Oklahoma Ave
City State Zip: Tulsa, OK 74110
Coordinates: 36.1752, -95.9509
Built in: 1946

Prepared For:

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

Inspected By:

Logan Girty
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OKRASR13822, CNRASR00037

Cherokee Nation Environmental Programs
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Cherokee Nation Firm: CNFIRM00001

Report Date: October 27, 2023

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1.0 EXECUTIVE SUMMARY

A lead based paint inspection was conducted at the Cathy Patton site on October 19, 2023 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^2 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:

* All Exterior Walls Vinyl Wrapped

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

Interior Lead-Based Paint
None identified

Exterior Lead-Based Paint
Door Jamb, Side A&C
Porch Ceiling, Side A
Windows (All Sides)
Window Sill, Side D
Window Trim, Side C&D
Soffit (All Sides)

Deteriorated Lead-Based Paint
(Lead-Based Paint Hazards)
Ext. Door Jamb, Side A&C
Porch Ceiling, Side A
Ext. Windows (All Sides)
Ext. Window Sill, Side D
Ext. Window Trim, Side C&D
Soffit (All Sides)

Lead in Dust Hazards
Bedroom 1 Window Trough Side A

Lead in Soil Hazards
None 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 (leasers) 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 Viken 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/cm2 and are considered lead-based paint. Negative results indicate lead in quantities less than 1.0 mg/cm2 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/cm2 must be considered a lead-based paint (LBP). However, detectable lead in quantities less than 1.0 mg/cm2 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 the 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	Room	Structure	Member	Substrate	Wall	Condition
59	1.4	mg/cm2	Exterior	Door	Jamb	Wood9	A	Cracking
60	5.4	mg/cm2	Exterior	Porch	Ceiling	Wood10	A	Peeling
62	1.9	mg/cm2	Exterior	Window		Wood12	A	Cracking
67	1.9	mg/cm2	Exterior	Window		Wood17	B	Cracking
69	1	mg/cm2	Exterior	Window		Wood19	C	Cracking
71	3.6	mg/cm2	Exterior	Window	Trim	Wood21	C	Cracking
75	2.9	mg/cm2	Exterior	Window		Wood25	D	Cracking
76	3.9	mg/cm2	Exterior	Window	Sill	Wood26	D	Cracking
77	6.3	mg/cm2	Exterior	Window	Trim	Wood27	D	Cracking
79	3.1	mg/cm2	Garage	Door	Jamb	Wood29	C	Peeling
80	4.7	mg/cm2	Exterior	Soffit		Wood30	D	Peeling

4.2 LBP RISK ASSESSMENT

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

The lead hazards are:

- Ext. Door Jamb, Side A&C
- Porch Ceiling, Side A
- Ext. Windows (All Sides)
- Ext. Window Sill, Side D
- Ext. Window Trim, Side C&D
- Soffit (All Sides)

Lead in Dust Hazards

- Bedroom 1 Window Trough Side A

Lead in Soil Hazards

- None

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:	Window Unit in Living Room & Bedroom 1
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	
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/ft2 for floors, including carpeted floors
- 100 ug/ft2 for interior window sills
- 100 ug/ft2 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^2)	Lead Hazard
01	Living Room	Floor	7.4	NO
02	Porch A Side	Floor (conc)	7.1	NO
03	Bedroom 1	Window Trough	2,500	YES
05	Kitchen	Floor	9.9	NO
06	Kitchen	Window Sill	<11	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^2)**	**Lead Hazard**
04	Dripline	Bare	340	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&C	Door Jamb	Paint		Wet scrape/Repaint	Encapsulate or Replace
A Side Porch	Ceiling	Paint		Wet scrape/Repaint	Encapsulate, Enclose or Replace
Exterior (All Sides)	Window	Paint		Wet scrape/Repaint	Encapsulate or Replace
Exterior Side D	Window Sill	Paint		Wet scrape/Repaint	Encapsulate or Replace
Exterior Side C&D	Window Trim	Paint		Wet scrape/Repaint	Encapsulate, Enclose or Replace
Exterior (All Sides)	Soffit	Paint		Wet scrape/Repaint	Encapsulate, Enclose or Replace

5.2 LEAD DUST CONTROL OPTIONS

Room	**Surface**	**Acceptable Hazard Control Method**
Bedroom 1	Window Trough	Hepa-Vac/Wet Wipe/Hepa-Vac

5.3 LEAD IN SOIL

Type Of Area	**Location**	**Acceptable Hazard Control Options**	
None			

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 Oct 2024 (12 months from now). If no lead-based paint hazards are identified at that time, another reevaluation should be conducted in Oct 2025 (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

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	1.01	mg/cm2	0.07		20.2	10/19/2023	14:58:55	Calibration					
2	1.09	mg/cm2	0.07		20.26	10/19/2023	14:59:34	Calibration					
3	1.07	mg/cm2	0.07		20.26	10/19/2023	15:00:12	Calibration					
4	0.1	mg/cm2	0.2	Negative	2	10/19/2023	15:02:33	Living Room	Room	Wall	Drywall1	A	Intact
5	0.3	mg/cm2	0.2	Negative	2	10/19/2023	15:02:51	Living Room	Room	Wall	Drywall2	B	Intact
6	0.4	mg/cm2	0.3	Negative	1	10/19/2023	15:03:08	Living Room	Room	Wall	Drywall3	C	Intact
7	0.3	mg/cm2	0.3	Negative	1	10/19/2023	15:03:18	Living Room	Room	Wall	Drywall4	D	Intact
8	0.3	mg/cm2	0.3	Negative	1	10/19/2023	15:03:35	Living Room	Room	Ceiling	Drywall5		Intact
9	0	mg/cm2	0.2	Negative	2	10/19/2023	15:03:59	Living Room	Room	Baseboard	Wood1	A	Intact
10	0.3	mg/cm2	0.2	Negative	2	10/19/2023	15:04:56	Living Room	Window		Wood2	D	Intact
11	0.1	mg/cm2	0.2	Negative	2	10/19/2023	15:05:06	Living Room	Window	Sill	Wood3	D	Intact
12	0.2	mg/cm2	0.2	Negative	2	10/19/2023	15:05:26	Living Room	Door		Wood4	A	Intact
13	0.2	mg/cm2	0.2	Negative	2	10/19/2023	15:05:34	Living Room	Door	Casing	Wood5	A	Intact
14	0.4	mg/cm2	0.2	Negative	2	10/19/2023	15:06:30	Bedroom 1	Room	Wall	Drywall1	A	Intact
15	0.3	mg/cm2	0.3	Negative	1	10/19/2023	15:06:40	Bedroom 1	Room	Wall	Drywall2	B	Intact
16	0.1	mg/cm2	0.2	Negative	2	10/19/2023	15:06:51	Bedroom 1	Room	Wall	Drywall3	C	Intact
17	0.2	mg/cm2	0.2	Negative	2	10/19/2023	15:07:09	Bedroom 1	Room	Wall	Drywall4	D	Intact
18	0.2	mg/cm2	0.2	Negative	2	10/19/2023	15:07:24	Bedroom 1	Room	Ceiling	Drywall5		Intact
19	0.3	mg/cm2	0.2	Negative	2	10/19/2023	15:07:47	Bedroom 1	Room	Baseboard	Wood1	C	Intact
20	0.4	mg/cm2	0.2	Negative	2	10/19/2023	15:08:17	Bedroom 1	Window		Wood2	A	Intact
21	0.1	mg/cm2	0.2	Negative	2	10/19/2023	15:08:25	Bedroom 1	Window	Sill	Wood3	A	Intact
22	0.1	mg/cm2	0.2	Negative	2	10/19/2023	15:08:34	Bedroom 1	Window	Trim	Wood4	A	Intact
23	0.2	mg/cm2	0.2	Negative	2	10/19/2023	15:08:59	Bedroom 1	Door		Wood5	C	Intact
24	0	mg/cm2	0.2	Negative	2	10/19/2023	15:09:16	Bedroom 1	Door	Casing	Wood6	C	Intact
25	0.6	mg/cm2	0.2	Negative	2	10/19/2023	15:10:13	Bathroom 1	Room	Wall	Drywall1	A	Intact
26	0.6	mg/cm2	0.3	Negative	1	10/19/2023	15:10:21	Bathroom 1	Room	Wall	Drywall2	B	Intact
27	0.5	mg/cm2	0.3	Negative	2	10/19/2023	15:10:32	Bathroom 1	Room	Wall	Drywall3	C	Intact

28	0.5 mg/cm2	0.2	Negative	2	10/19/2023	15:10:43	Bathroom 1	Room	Wall	Drywall4	D	Intact
29	0.5 mg/cm2	0.3	Negative	2	10/19/2023	15:11:01	Bathroom 1	Room	Ceiling	Drywall5		Intact
30	0.2 mg/cm2	0.2	Negative	2	10/19/2023	15:11:25	Bathroom 1	Window		Wood1	B	Intact
31	0.2 mg/cm2	0.2	Negative	2	10/19/2023	15:11:32	Bathroom 1	Window	Sill	Wood2	B	Intact
32	0.2 mg/cm2	0.2	Negative	2	10/19/2023	15:11:51	Bathroom 1	Cabinets	Door	Wood3	A	Intact
33	0 mg/cm2	0.2	Negative	2	10/19/2023	15:11:58	Bathroom 1	Cabinets	Frame	Wood4	A	Intact
34	0.2 mg/cm2	0.2	Negative	2	10/19/2023	15:12:33	Bathroom 1	Door		Wood5	D	Intact
35	0.3 mg/cm2	0.2	Negative	2	10/19/2023	15:12:40	Bathroom 1	Door	Casing	Wood6	D	Intact
36	0.4 mg/cm2	0.2	Negative	2	10/19/2023	15:13:11	Bedroom 2	Room	Wall	Drywall1	A	Intact
37	0.4 mg/cm2	0.3	Negative	1	10/19/2023	15:13:31	Bedroom 2	Room	Wall	Drywall2	B	Intact
38	0.3 mg/cm2	0.3	Negative	2	10/19/2023	15:13:38	Bedroom 2	Room	Wall	Drywall3	C	Intact
39	0.2 mg/cm2	0.3	Negative	2	10/19/2023	15:14:02	Bedroom 2	Room	Wall	Drywall4	D	Intact
40	0.3 mg/cm2	0.3	Negative	1	10/19/2023	15:14:14	Bedroom 2	Room	Ceiling	Drywall5		Intact
41	0.1 mg/cm2	0.2	Negative	2	10/19/2023	15:15:03	Bedroom 2	Room	Baseboard	Wood1	A	Intact
42	0 mg/cm2	0.2	Negative	2	10/19/2023	15:15:35	Bedroom 2	Window		Wood2	C	Intact
43	0.2 mg/cm2	0.2	Negative	2	10/19/2023	15:15:41	Bedroom 2	Window	Sill	Wood3	C	Intact
44	0.2 mg/cm2	0.2	Negative	2	10/19/2023	15:16:17	Bedroom 2	Door		Wood4	A	Intact
45	0.2 mg/cm2	0.2	Negative	2	10/19/2023	15:16:24	Bedroom 2	Door	Casing	Wood5	A	Intact
46	0.4 mg/cm2	0.2	Negative	2	10/19/2023	15:17:11	Kitchen	Room	Wall	Drywall1	A	Intact
47	0.6 mg/cm2	0.2	Negative	2	10/19/2023	15:17:18	Kitchen	Room	Wall	Drywall2	B	Intact
48	0.6 mg/cm2	0.2	Negative	2	10/19/2023	15:17:28	Kitchen	Room	Wall	Drywall3	C	Intact
49	0.5 mg/cm2	0.3	Negative	2	10/19/2023	15:17:34	Kitchen	Room	Wall	Drywall4	D	Intact
50	0.4 mg/cm2	0.2	Negative	2	10/19/2023	15:17:40	Kitchen	Room	Ceiling	Drywall5		Intact
51	0.1 mg/cm2	0.2	Negative	2	10/19/2023	15:17:55	Kitchen	Room	Baseboard	Wood1	A	Intact
52	0.2 mg/cm2	0.2	Negative	2	10/19/2023	15:18:13	Kitchen	Window		Wood2	C	Intact
53	0.1 mg/cm2	0.2	Negative	2	10/19/2023	15:18:22	Kitchen	Window	Sill	Wood3	C	Intact
54	0.2 mg/cm2	0.2	Negative	2	10/19/2023	15:18:52	Kitchen	Cabinets	Door	Wood4	C	Intact
55	0.3 mg/cm2	0.2	Negative	2	10/19/2023	15:18:58	Kitchen	Cabinets	Frame	Wood5	C	Intact
56	0.1 mg/cm2	0.2	Negative	2	10/19/2023	15:19:23	Kitchen	Door		Wood6	D	Intact
57	0.2 mg/cm2	0.2	Negative	2	10/19/2023	15:19:42	Kitchen	Door	Casing	Wood7	D	Intact
58	0.6 mg/cm2	0.2	Negative	2	10/19/2023	15:20:38	Exterior	Door		Wood8	A	Intact
59	1.4 mg/cm2	0.3	Positive	2	10/19/2023	15:20:45	Exterior	Door	Jamb	Wood9	A	Cracking
60	5.4 mg/cm2	0.2	Positive	2	10/19/2023	15:21:12	Exterior	Porch	Ceiling	Wood10	A	Peeling
61	0.1 mg/cm2	0.2	Negative	2	10/19/2023	15:21:31	Exterior	Porch	Column	Wood11	A	Intact

62	1.9 mg/cm2	0.2	Positive	2	10/19/2023	15:22:12	Exterior	Window		Wood12	A	Cracking
63	0.7 mg/cm2	0.2	Negative	2	10/19/2023	15:22:26	Exterior	Window	Sill	Wood13	A	Cracking
64	0.4 mg/cm2	0.2	Negative	2	10/19/2023	15:22:33	Exterior	Window	Trim	Wood14	A	Cracking
65	0.8 mg/cm2	0.2	Negative	2	10/19/2023	15:23:10	Garage	Door		Wood15	A	Peeling
66	0.5 mg/cm2	0.2	Negative	2	10/19/2023	15:23:18	Garage	Door	Casing	Wood16	A	Peeling
67	1.9 mg/cm2	0.2	Positive	2	10/19/2023	15:24:11	Exterior	Window		Wood17	B	Cracking
68	0.4 mg/cm2	0.2	Negative	2	10/19/2023	15:24:17	Exterior	Window	Sill	Wood18	B	Cracking
69	1 mg/cm2	0.1	Positive	5	10/19/2023	15:24:48	Exterior	Window		Wood19	C	Cracking
70	0.5 mg/cm2	0.2	Negative	2	10/19/2023	15:25:04	Exterior	Window	Sill	Wood20	C	Cracking
71	3.6 mg/cm2	0.2	Positive	2	10/19/2023	15:25:10	Exterior	Window	Trim	Wood21	C	Cracking
72	0.1 mg/cm2	0.2	Negative	2	10/19/2023	15:25:42	Exterior	Door		Wood22	D	Intact
73	0 mg/cm2	0.2	Negative	2	10/19/2023	15:25:49	Exterior	Door	Jamb	Wood23	D	Intact
74	0 mg/cm2	0.2	Negative	2	10/19/2023	15:25:56	Exterior	Door	Trim	Wood24	D	Intact
75	2.9 mg/cm2	0.2	Positive	2	10/19/2023	15:26:12	Exterior	Window		Wood25	D	Cracking
76	3.9 mg/cm2	0.2	Positive	2	10/19/2023	15:26:19	Exterior	Window	Sill	Wood26	D	Cracking
77	6.3 mg/cm2	0.3	Positive	1	10/19/2023	15:26:26	Exterior	Window	Trim	Wood27	D	Cracking
78	0.8 mg/cm2	0.2	Negative	4	10/19/2023	15:26:50	Garage	Door		Wood28	C	Peeling
79	3.1 mg/cm2	0.2	Positive	2	10/19/2023	15:27:01	Garage	Door	Jamb	Wood29	C	Peeling
80	4.7 mg/cm2	0.2	Positive	2	10/19/2023	15:27:45	Exterior	Soffit		Wood30	D	Peeling
81	0.8 mg/cm2	0.1	Negative	4	10/19/2023	15:28:08	Exterior	Fascia		Wood31	D	Peeling
82	0.92 mg/cm2	0.07		20.08	10/19/2023	15:28:59	Calibration					
83	1.11 mg/cm2	0.07		20.12	10/19/2023	15:29:43	Calibration					
84	1.09 mg/cm2	0.07		20.11	10/19/2023	15:30:21	Calibration					

APPENDIX B: DUST WIPE & SOIL ANALYSIS

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

Environmental Chemistry Analysis Report

QuanTEM Set ID: 363500
Date Received: 10/23/23
Received By: Baylie Longstreth
Date Sampled:
Time Sampled:
Analyst: CR
Date of Report: 10/26/23

AIHA LAP, LLC: 101352

Client: Cherokee Nation Environmental Programs
Logan Girty
PO Box 948
Tahlequah, OK 74464

Acct. No.: C162

Project: Cathy Patton
Location: Tulsa
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	01	Wipe	Lead	7.4	5	ug/sq. Ft.	10/26/23 11:33	NIOSH 7082
002	02	Wipe	Lead	7.1	5	ug/sq. Ft.	10/26/23 11:33	NIOSH 7082
003	03	Wipe	Lead	2,500	11	ug/sq. Ft.	10/26/23 11:33	NIOSH 7082
004	04	Soil	Lead	340	40	mg/kg	10/26/23 11:33	Soil EPA 7000B (1)
005	05	Wipe	Lead	9.9	5	ug/sq. Ft.	10/26/23 11:33	NIOSH 7082
006	06	Wipe	Lead	<11	11	ug/sq. Ft.	10/26/23 11:33	NIOSH 7082

Authorized Signature: Cherry Rossen

Cherry Rossen, 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: 20979
Test: Lead
Date: 10/26/2023
Matrix: Soil
Lab Number: 363500
Approved By: Cherry Rossen
Date Approved: 10/26/2023

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	2.3	2.8
FCV	2.2	2.5	2.8
RLVS	0.08	0.21	0.24
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
LCS-S1	0.000	2.428	2.633	108.4	2.355	97.0	11.1

Cherry Rossen

Authorized Signature: _____

Cherry Rossen, Technical Manager

Supplemental Report
QAQC Results

QA ID: 20980
Test: Lead
Date: 10/26/2023
Matrix: Wipe
Lab Number: 363500
Approved By: Cherry Rossen
Date Approved: 10/26/2023

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	2.3	2.8
FCV	2.2	2.5	2.8
RLVS	0.05	0.13	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	2.355	97.0	2.815	115.9	17.8

Cherry Rossen

Authorized Signature: _____

Cherry Rossen, Technical Manager

LEAD CHAIN OF CUSTODY

QuanTEM LABORATORIES
www.QuanTEM.com
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. 363500
Accept Reject

Contact Information				Project Information		Report Results (☑ one box)	
Company: Cherokee Nation Environmental Programs		Phone:	(918) 453-5000	Project Name:	Cathy Patton	○	QuanTEM Website
Contact: Logan Girty		Cell Phone:	(918) 772-8346	Project Location:	Tulsa	◉	Email logan-girty@cherokee.org
Account #: C 162		E-mail:	logan-girty@cherokee.org	Project ID:		○	Other
SAMPLED BY:	Name: Logan Girty	Date:	10/19/2023	P.O. Number:	874812		

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
Logan E. Girty	10/20/2023	FedEx		10/23/23 10:00
	11 AM			

REQUESTED SERVICES (Please ☑ the Appropriate Boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume or Area	Flame Atomic Absorption EPA 7000B: Paint Chips (○ wt% ◉ ppm ○ mg/cm²)	Bulk (mg/kg)	Soil (mg/kg)	NIOSH 7082: Wipes (ug/ft²)	Air (µg /m³)	Other Analysis: TCLP - Pb	TCLP - RCRA 8	RCRA 8	Other
1	01	Living Rm Floor	144 sq in				✓					
2	02	Porch Floor (conc)	144 sq in				✓					
3	03	Bedroom 1 Window Trough	64 sq in				✓					
4	04	Composite Soil (dripline)				✓						
5	05	Kitchen Floor	144 sq in				✓					
6	06	Kitchen Window Sill	65.25 sq in				✓					
7												
8												
9												
10												
11												

TURNAROUND TIME	
○	Same Day
○	24 - Hour
◉	3 - Day
○	5 - Day

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