



CHEROKEE NATION Environmental Programs

LEAD-BASED PAINT INSPECTION & RISK ASSESSMENT REPORT

Conducted At:

Name: Tamara Strasser
Address: 100 S. Baker St.
City State Zip: Muldrow, OK 74948
Coordinates: 35.40877, 94.60252
Built in: 1945

Prepared For:

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

Inspected By:

Samuel Tyler Moore

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OKRASR804155942, CNRASR00042

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Report Date: January 8, 2025

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1.0 EXECUTIVE SUMMARY

A lead based paint inspection was conducted at the Tamara Strasser site on December 13, 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/cm² 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 soffit, fascia, windows and columns are wrapped in metal.

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

Interior Lead-Based Paint

Living Room, Door, Jamb, Wood, Side A
Living Room, Windowsill, Wood, Side A
Living Room, Window Lintel, Wood, Side A

Exterior Lead-Based Paint

Porch, Ceiling, Wood, Side A
Soffit, Wood, Side A
Window, Lintel, Wood, Side B
Wall, Metal, Side B, C & D
Windowsill, Metal, Side C
Widow, Casing, Metal, Side D
Column, Metal, Side A

Deteriorated Lead-Based Paint

(Lead-Based Paint Hazards)

Living Room, Windowsill, Wood, Side A
Living Room, Window Lintel, Wood, Side A
Exterior, Window, Lintel, Wood, Side B
Exterior, Windowsill, Metal, Side C
Exterior, Widow, Casing, Metal, Side D

Lead in Dust Hazards

Living Room, Windowsill
Dining Room, Windowsill
Bedroom 1, Windowsill

Lead in Soil Hazards

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: 3177) 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 May 25, 2024.

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 both the interior and exterior of the site. The positive readings are shown in the following table. The full report with all readings is in Appendix 1.

#	Pb	Units	Pb Error	Result	NomSecs	Date	Time	RoomChoice	Structure	Member	Substrate	Wall	Condition
11	1.5	mg/cm2	0.3	Positive	2	12/13/2024	12:34:54	Living Room	Door	Jamb	Wood	A	Intact
75	1.2	mg/cm2	0.2	Positive	5	12/13/2024	13:12:31	Living Room	Window	Sill	Wood	A	Intact
76	1.3	mg/cm2	0.2	Positive	5	12/13/2024	13:12:55	Living Room	Window	Lintel	Wood	A	Intact
85	6.3	mg/cm2	0.3	Positive	2	12/13/2024	13:17:44	Exterior	Porch	Ceiling	Wood	A	Intact
86	9.2	mg/cm2	0.3	Positive	2	12/13/2024	13:19:24	Exterior	Soffit		Metal	A	Intact
89	24.6	mg/cm2	0.3	Positive	2	12/13/2024	13:22:00	Exterior	Window	Lintel	Wood	B	Intact
90	1.8	mg/cm2	0.3	Positive	2	12/13/2024	13:22:38	Exterior	Room	Wall	Metal	B	Intact
91	2	mg/cm2	0.3	Positive	2	12/13/2024	13:23:36	Exterior	Room	Wall	Metal	C	Intact
93	2.8	mg/cm2	0.3	Positive	2	12/13/2024	13:26:34	Exterior	Window	Sill	Metal	C	Intact
95	9.3	mg/cm2	0.3	Positive	2	12/13/2024	13:27:54	Exterior	Window	Casing	Metal	D	Intact
96	2.8	mg/cm2	0.3	Positive	2	12/13/2024	13:28:32	Exterior	Room	Wall	Metal	D	Intact
98	5.6	mg/cm2	0.3	Positive	2	12/13/2024	13:31:08	Exterior	Column	---	Metal	A	Intact

4.2 LBP RISK ASSESSMENT

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

The lead hazards are:

- Living Room, Door, Jamb, Wood, Side A
- Living Room, Windowsill, Wood, Side A
- Living Room, Window Lintel, Wood, Side A
- Exterior, Porch, Ceiling, Wood, Side A
- Exterior, Soffit, Wood, Side A
- Exterior, Window, Lintel, Wood, Side B
- Exterior, Wall, Metal, Side B, C & D
- Exterior, Windowsill, Metal, Side C
- Exterior, Window, Casing, Metal, Side D
- Exterior, Column, Metal, Side A

Lead in Dust Hazards:

- Living Room, Windowsill
- Dining Room, Windowsill
- Bedroom 1, Windowsill

Lead in Soil Hazards:

- No 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 and Back 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	
Total Number		12	

*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:

- **5 ug/ft² for floors, including carpeted floors**
- **40 ug/ft² for interior window sills**
- **100 ug/ft² for interior window troughs**
- **400 ug/ft² for exterior concrete**

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	<2.5	No
02	Living Room	Windowsill	72	Yes
03	Dining Room	Floor	<2.5	No
04	Dining Room	Windowsill	60	Yes

05	Kitchen	Floor	<2.5	No
06	Kitchen	Windowsill	<4.8	No
07	Bedroom 1	Floor	<2.5	No
08	Bedroom 1	Windowsill	240	Yes
09	Front Porch	Floor (Wood)	67	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
10	Dripline	Bare	160	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
Living Room, Dining Room, Bedroom 1	Windowsills	Dust		Wet scrape and repaint	Remove and Replace
Exterior Windows	All	Chips and Dust		Wet scrape and repaint	Remove and Replace

5.2 LEAD DUST CONTROL OPTIONS

Room	Surface	Acceptable Hazard Control Method
Living Room, Dining Room, Bedroom 1	Windowsill	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 December 2025 (12 months from now). If no lead-based paint hazards are identified at that time, another reevaluation should be conducted in December 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
3177
Pb200i-5.3.1

#	Pb	Units	Pb Error	Result	NomSecs	Date	Time	RoomChoice	Structure	Member	Substrate	Wall	Condition
1	1.1	mg/cm2	0.07		20.22	12/13/2024	12:25:03	Calibration					
2	1.08	mg/cm2	0.07		20.1	12/13/2024	12:25:49	Calibration					
3	1.09	mg/cm2	0.07		20.25	12/13/2024	12:26:36	Calibration					
4	0.3	mg/cm2	0.3	Negative	2	12/13/2024	12:31:12	Living Room	Room	Wall	Drywall	A	Intact
5	0.3	mg/cm2	0.3	Negative	2	12/13/2024	12:31:27	Living Room	Room	Wall	Drywall	B	Intact
6	0.2	mg/cm2	0.3	Negative	2	12/13/2024	12:31:51	Living Room	Room	Wall	Drywall	C	Intact
7	0.3	mg/cm2	0.3	Negative	2	12/13/2024	12:32:11	Living Room	Room	Wall	Drywall	D	Intact
8	0.2	mg/cm2	0.2	Negative	2	12/13/2024	12:32:50	Living Room	Room	Ceiling	Drywall		Intact
9	0	mg/cm2	0.2	Negative	2	12/13/2024	12:33:28	Living Room	Room	Baseboard	Wood	A	Intact
10	0.1	mg/cm2	0.3	Negative	2	12/13/2024	12:34:12	Living Room	Door	---	Wood	A	Intact
11	1.5	mg/cm2	0.3	Positive	2	12/13/2024	12:34:54	Living Room	Door	Jamb	Wood	A	Intact
12	0.3	mg/cm2	0.3	Negative	2	12/13/2024	12:36:06	Bedroom 1	Door	Jamb	Wood	C	Intact
13	0.1	mg/cm2	0.2	Negative	2	12/13/2024	12:36:27	Bedroom 1	Door	---	Wood	C	Intact
14	0.1	mg/cm2	0.3	Negative	2	12/13/2024	12:37:14	Bedroom 1	Window	Sill	Wood	B	Intact
15	0.1	mg/cm2	0.3	Negative	2	12/13/2024	12:37:47	Bedroom 1	Room	Wall	Drywall	A	Intact
16	0.1	mg/cm2	0.3	Negative	2	12/13/2024	12:38:05	Bedroom 1	Room	Wall	Drywall	B	Intact
17	0.1	mg/cm2	0.3	Negative	2	12/13/2024	12:38:22	Bedroom 1	Room	Wall	Drywall	C	Intact
18	0.4	mg/cm2	0.3	Negative	2	12/13/2024	12:38:37	Bedroom 1	Room	Wall	Drywall	D	Intact
19	0	mg/cm2	0.2	Negative	2	12/13/2024	12:38:57	Bedroom 1	Room	Baseboard	Wood	C	Intact
20	0.3	mg/cm2	0.3	Negative	2	12/13/2024	12:40:01	Bedroom 1	Room	Ceiling	Drywall		Intact
21	0.6	mg/cm2	0.3	Negative	2	12/13/2024	12:41:24	Bathroom	Room	Wall	Drywall	A	Intact
22	0.1	mg/cm2	0.3	Negative	2	12/13/2024	12:41:40	Bathroom	Room	Wall	Drywall	B	Intact
23	0.2	mg/cm2	0.3	Negative	2	12/13/2024	12:42:00	Bathroom	Room	Wall	Drywall	C	Intact
24	0.1	mg/cm2	0.3	Negative	2	12/13/2024	12:42:13	Bathroom	Room	Wall	Drywall	D	Intact
25	0.1	mg/cm2	0.3	Negative	2	12/13/2024	12:42:41	Bathroom	Door	---	Wood	D	Intact
26	0	mg/cm2	0.2	Negative	2	12/13/2024	12:42:58	Bathroom	Door	Jamb	Wood	D	Intact
27	0.3	mg/cm2	0.3	Negative	2	12/13/2024	12:43:56	Bathroom	Room	Ceiling	Drywall		Intact

28	0 mg/cm2	0.3 Negative	2	12/13/2024	12:45:13	Bedroom 2	Room	Ceiling	Drywall	Intact
29	0.1 mg/cm2	0.2 Negative	2	12/13/2024	12:45:38	Bedroom 2	Room	Baseboard	Wood	Intact
30	0.4 mg/cm2	0.3 Negative	2	12/13/2024	12:46:06	Bedroom 2	Room	Wall	Drywall	Intact
31	0.4 mg/cm2	0.3 Negative	2	12/13/2024	12:46:24	Bedroom 2	Room	Wall	Drywall	Intact
32	0.5 mg/cm2	0.2 Negative	2	12/13/2024	12:47:31	Bedroom 2	Room	Wall	Drywall	Intact
33	0.4 mg/cm2	0.3 Negative	2	12/13/2024	12:47:50	Bedroom 2	Room	Wall	Drywall	Intact
34	0.2 mg/cm2	0.3 Negative	2	12/13/2024	12:48:14	Bedroom 2	Door	---	Wood	Intact
35	0.1 mg/cm2	0.3 Negative	2	12/13/2024	12:48:37	Bedroom 2	Door	Jamb	Wood	Intact
36	0.1 mg/cm2	0.2 Negative	2	12/13/2024	12:50:43	Bathroom	Door	Jamb	Wood	Intact
37	0.2 mg/cm2	0.3 Negative	2	12/13/2024	12:51:01	Bathroom	Door	---	Wood	Intact
38	0.1 mg/cm2	0.3 Negative	2	12/13/2024	12:53:03	Pantry	Door	Jamb	Wood	Intact
39	0.1 mg/cm2	0.2 Negative	2	12/13/2024	12:53:39	Pantry	Door	---	Wood	Intact
40	0.1 mg/cm2	0.3 Negative	2	12/13/2024	12:54:45	Pantry	Window	Sill	Wood	Intact
41	0.2 mg/cm2	0.3 Negative	2	12/13/2024	12:55:11	Pantry	Window	Lintel	Wood	Intact
42	0.3 mg/cm2	0.2 Negative	2	12/13/2024	12:55:36	Pantry	Room	Wall	Drywall	Intact
43	0.2 mg/cm2	0.2 Negative	2	12/13/2024	12:55:55	Pantry	Room	Wall	Drywall	Intact
44	0.2 mg/cm2	0.3 Negative	2	12/13/2024	12:56:11	Pantry	Room	Wall	Drywall	Intact
45	0.3 mg/cm2	0.3 Negative	2	12/13/2024	12:56:30	Pantry	Room	Wall	Drywall	Intact
46	0.1 mg/cm2	0.2 Negative	2	12/13/2024	12:57:02	Pantry	Room	Baseboard	Wood	Intact
47	0.1 mg/cm2	0.2 Negative	2	12/13/2024	12:57:40	Laundry Room	Room	Baseboard	Wood	Intact
48	0.2 mg/cm2	0.3 Negative	2	12/13/2024	12:58:12	Laundry Room	Room	Wall	Drywall	Intact
49	0.1 mg/cm2	0.2 Negative	2	12/13/2024	12:58:26	Laundry Room	Room	Wall	Drywall	Intact
50	0.1 mg/cm2	0.3 Negative	2	12/13/2024	12:58:40	Laundry Room	Room	Wall	Drywall	Intact
51	0.1 mg/cm2	0.2 Negative	2	12/13/2024	12:58:55	Laundry Room	Room	Wall	Drywall	Intact
52	0.1 mg/cm2	0.3 Negative	2	12/13/2024	12:59:15	Laundry Room	Room	Ceiling	Wood	Intact
53	0.1 mg/cm2	0.2 Negative	2	12/13/2024	12:59:36	Laundry Room	Door	---	Wood	Intact
54	0.1 mg/cm2	0.2 Negative	2	12/13/2024	12:59:53	Laundry Room	Door	Jamb	Wood	Intact
55	0 mg/cm2	0.3 Negative	2	12/13/2024	13:00:22	Laundry Room	Window	Sill	Wood	Intact
56	0 mg/cm2	0.2 Negative	2	12/13/2024	13:00:41	Laundry Room	Window	Lintel	Wood	Intact
57	0.1 mg/cm2	0.2 Negative	2	12/13/2024	13:02:07	Kitchen	Window	Lintel	Wood	Intact
58	0 mg/cm2	0.3 Negative	2	12/13/2024	13:02:30	Kitchen	Window	Sill	Wood	Intact
59	0.1 mg/cm2	0.3 Negative	2	12/13/2024	13:03:07	Kitchen	Room	Wall	Wood	Intact
60	0.1 mg/cm2	0.2 Negative	2	12/13/2024	13:03:56	Kitchen	Room	Wall	Wood	Intact
61	0.2 mg/cm2	0.2 Negative	2	12/13/2024	13:04:13	Kitchen	Room	Wall	Wood	Intact

62	0 mg/cm2	0.2 Negative	2	12/13/2024	13:04:31	Kitchen	Room	Wall	Wood	D	Intact
63	0.1 mg/cm2	0.3 Negative	2	12/13/2024	13:05:19	Kitchen	Cabinets	Door	Wood	C	Intact
64	0.1 mg/cm2	0.2 Negative	2	12/13/2024	13:05:39	Kitchen	Cabinets	Frame	Wood	C	Intact
65	0.2 mg/cm2	0.3 Negative	2	12/13/2024	13:06:11	Kitchen	Room	Ceiling			Intact
66	0.2 mg/cm2	0.3 Negative	2	12/13/2024	13:06:47	Dining Room	Room	Ceiling	Drywall		Intact
67	0.1 mg/cm2	0.2 Negative	2	12/13/2024	13:07:36	Dining Room	Room	Baseboard	Wood	D	Intact
68	0.1 mg/cm2	0.3 Negative	2	12/13/2024	13:08:29	Dining Room	Room	Wall	Drywall	A	Intact
69	0.1 mg/cm2	0.3 Negative	2	12/13/2024	13:08:50	Dining Room	Room	Wall	Drywall	B	Intact
70	0.1 mg/cm2	0.3 Negative	2	12/13/2024	13:09:07	Dining Room	Room	Wall	Drywall	C	Intact
71	0 mg/cm2	0.3 Negative	2	12/13/2024	13:09:23	Dining Room	Room	Wall	Drywall	D	Intact
72	0.4 mg/cm2	0.3 Negative	2	12/13/2024	13:10:09	Dining Room	Window	Casing	Wood	D	Intact
73	0.1 mg/cm2	0.2 Negative	2	12/13/2024	13:11:01	Dining Room	Window	Lintel	Wood	D	Intact
74	0.1 mg/cm2	0.3 Negative	2	12/13/2024	13:11:48	Dining Room	Room	Wall	Wood	A	Intact
75	1.2 mg/cm2	0.2 Positive	5	12/13/2024	13:12:31	Living Room	Window	Sill	Wood	A	Intact
76	1.3 mg/cm2	0.2 Positive	5	12/13/2024	13:12:55	Living Room	Window	Lintel	Wood	A	Intact
77	0.1 mg/cm2	0.3 Negative	2	12/13/2024	13:13:46	Bedroom 2	Window	Lintel	Wood	B	Intact
78	0.5 mg/cm2	0.3 Negative	2	12/13/2024	13:14:12	Bedroom 2	Window	Sill	Wood	B	Intact
79	0.2 mg/cm2	0.3 Negative	2	12/13/2024	13:15:11	Exterior	Window	Sill	Wood	A	Intact
80	0 mg/cm2	0.2 Negative	2	12/13/2024	13:15:29	Exterior	Window	Lintel	Wood	A	Intact
81	0.1 mg/cm2	0.3 Negative	2	12/13/2024	13:15:43	Exterior	Window	Lintel	Wood	A	Intact
82	0.1 mg/cm2	0.3 Negative	2	12/13/2024	13:16:24	Exterior	Door	---	Metal	A	Intact
83	0.3 mg/cm2	0.3 Negative	2	12/13/2024	13:16:48	Exterior	Door	Jamb	Wood	A	Intact
84	0.6 mg/cm2	0.3 Negative	2	12/13/2024	13:17:17	Exterior	Room	Wall	Metal	A	Intact
85	6.3 mg/cm2	0.3 Positive	2	12/13/2024	13:17:44	Exterior	Porch	Ceiling	Wood	A	Intact
86	9.2 mg/cm2	0.3 Positive	2	12/13/2024	13:19:24	Exterior	Soffit		Metal	A	Intact
87	0.1 mg/cm2	0.2 Negative	2	12/13/2024	13:21:08	Exterior	Soffit		Metal	B	Intact
88	0.1 mg/cm2	0.3 Negative	2	12/13/2024	13:21:43	Exterior	Window	Sill	Wood	B	Intact
89	24.6 mg/cm2	0.3 Positive	2	12/13/2024	13:22:00	Exterior	Window	Lintel	Wood	B	Intact
90	1.8 mg/cm2	0.3 Positive	2	12/13/2024	13:22:38	Exterior	Room	Wall	Metal	B	Intact
91	2 mg/cm2	0.3 Positive	2	12/13/2024	13:23:36	Exterior	Room	Wall	Metal	C	Intact
92	0.1 mg/cm2	0.2 Negative	2	12/13/2024	13:25:07	Exterior	Soffit		Metal	C	Intact
93	2.8 mg/cm2	0.3 Positive	2	12/13/2024	13:26:34	Exterior	Window	Sill	Metal	C	Intact
94	0.2 mg/cm2	0.3 Negative	2	12/13/2024	13:26:53	Exterior	Window	Lintel	Wood	C	Intact
95	9.3 mg/cm2	0.3 Positive	2	12/13/2024	13:27:54	Exterior	Window	Casing	Metal	D	Intact

96	2.8 mg/cm2	0.3 Positive	2	12/13/2024	13:28:32	Exterior	Room	Wall	Metal	D	Intact
97	0.1 mg/cm2	0.2 Negative	2	12/13/2024	13:29:17	Exterior	Soffit		Metal	D	Intact
98	5.6 mg/cm2	0.3 Positive	2	12/13/2024	13:31:08	Exterior	Column	---	Metal	A	Intact
99	0.95 mg/cm2	0.08	16.73	12/13/2024	13:32:00	Calibration					
100	0.96 mg/cm2	0.07	20.12	12/13/2024	13:32:37	Calibration					
101	0.98 mg/cm2	0.07	20.02	12/13/2024	13:33:22	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: 375113
Date Received: 12/18/24
Received By: Courtney Holman
Date Sampled:
Time Sampled:
Analyst:
Date of Report: 12/20/24
AIHA LAP, LLC: 101352

Client: Cherokee Nation Environmental Programs
Tyler Moore
Acct. No.: C162
Project: Tamara Strasser
Location: Muldrow, OK
Project No.: N/A

Quantem ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	01	Wipe	Lead	<2.5	2.5	ug/sq. Ft.	12/19/24 9:57	NIOSH 7082
002	02	Wipe	Lead	72	5.6	ug/sq. Ft.	12/19/24 9:57	NIOSH 7082
003	03	Wipe	Lead	<2.5	2.5	ug/sq. Ft.	12/19/24 9:57	NIOSH 7082
004	04	Wipe	Lead	60	7.2	ug/sq. Ft.	12/19/24 9:57	NIOSH 7082
005	05	Wipe	Lead	<2.5	2.5	ug/sq. Ft.	12/19/24 9:57	NIOSH 7082
006	06	Wipe	Lead	<4.8	4.8	ug/sq. Ft.	12/19/24 9:57	NIOSH 7082
007	07	Wipe	Lead	<2.5	2.5	ug/sq. Ft.	12/19/24 9:57	NIOSH 7082
008	08	Wipe	Lead	240	2.5	ug/sq. Ft.	12/19/24 9:57	NIOSH 7082
009	09	Wipe	Lead	67	2.5	ug/sq. Ft.	12/19/24 9:57	NIOSH 7082
010	10	Soil	Lead	160	25	mg/kg	12/20/24 12:55	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: 21398
Test: Lead

Date: 12/19/2024
Matrix: Wipe

Lab Number: 375113
Approved By: Eric Caves
Date Approved: 12/19/2024

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
ICB	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
FCV	2.2	2.4	2.8
CCV	2.2	2.41	2.8
RLVS	0.05	0.08	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-W	0.000	2.428	2.560	105.4	2.430	100.1	5.2

Authorized Signature: _____



Eric Caves, Chemistry Technical Manager

Supplemental Report

QAQC Results

QA ID: 21400

Test: Lead

Date: 12/20/2024

Matrix: Soil

Lab Number: 375113

Approved By: Eric Caves

Date Approved: 12/20/2024

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
ICB	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
FCV	2.2	2.62	2.8
CCV	2.2	2.58	2.8
RLVS	0.05	0.07	0.15
ICV	0.9	0.99	1.1

Duplicate Data:

Sample Number	Result	Duplicate	% RPD
375113-010	0.630	0.620	1.6

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
LCS-S	0.000	2.428	2.490	102.6	2.480	102.1	0.4
375113-010	0.630	2.000	2.540	95.5			

Authorized Signature: _____





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LEAD CHAIN OF CUSTODY

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Page 1 of 1

For Lab Use Only
Lab No. **375113**

Accept ☒ Reject ☐

Contact Information		Project Information		Report Results (one box)	
Company: Cherokee Nation Environmental Programs	Phone: (918) 453-5000	Project Name: Tamara Strasser	<input type="radio"/> Quantem Website		
Contact: Tyler Moore	Cell Phone: (918) 772-8709	Project Location: Muldrow, OK	<input checked="" type="radio"/> Email: Tyler-Moore@cherokee.org		
Account #: C 162	E-mail: Tyler-Moore@cherokee.org	Project ID:	<input type="radio"/> Other		
SAMPLED BY: Name: Tyler Moore & Logan Girty	Date: 12/13/2024	P.O. Number: 895481			

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
<i>S. Girty</i>	12/13/2024	FedEx	<i>Tamara Strasser</i>	12/18/24 @ 10:00
	5 PM			

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume or Area	Flame Atomic Absorption				Other Analysis				TURNAROUND TIME					
				EPA 7000B		NIOSH 7082											
				Paint Chips wt% ppm mg/cm ²	Bulk (mg/kg)	Soil (mg/kg)	Wipes (ug/ft ²)	Air (µg /m ³)	TCLP - Pb	TCLP - RCRA 8	RCRA 8	Other	Same Day	24 - Hour	3 - Day	5 - Day	
1	01	Living Room Floor	144 sq in				✓										
2	02	Living Room Window Sill A Side	64 sq in				✓										
3	03	Dining Room Floor	144 sq in				✓										
4	04	Dining Room Window Sill	50 sq in				✓										
5	05	Kitchen Floor	144 sq in				✓										
6	06	Kitchen Window Sill	75 sq in				✓										
7	07	Bed 1 Floor	144 sq in				✓										
8	08	Bed 1 Window Sill	144 sq in				✓										
9	09	Porch Floor Wood	144 sq in				✓										
10	10	Drip Line Soil					✓										
11																	

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