



CHEROKEE NATION Environmental Programs

LEAD-BASED PAINT INSPECTION & RISK ASSESSMENT REPORT

Conducted At:

Name: Jason Norris
Address: 232 SE Avondale
City State Zip: Barlesville, OK 74006
Coordinates: 36.7541, -95.9330
Built in: 1950

Prepared For:

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

Inspected By:

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Report Date: October 17, 2022

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1.0 EXECUTIVE SUMMARY

A lead based paint inspection was conducted at the Jason Norris site on October 6, 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/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:

N/A

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

Interior Lead-Based Paint

Living Rm Wall Side D

Exterior Lead-Based Paint

Deteriorated Lead-Based Paint

(Lead-Based Paint Hazards)

Exterior Window Sill Side A

Exterior Soffit Side B,C & D

Lead in Dust Hazards

Living Rm Window Trough

Bath Window Trough

Bedroom 1 Window Trough

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/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 are in Appendix 1.

Reading #	Pb	Units	Room	Structure	Member	Substrate	Wall	Condition
7	1.2	mg/cm ²	Living Room	Room	Wall	Drywall	D	Intact
93	1.8	mg/cm ²	Exterior	Window	Sill	Wood	A	Cracking
109	1	mg/cm ²	Exterior	Soffit		Wood	B	Peeling
113	1.2	mg/cm ²	Exterior	Soffit		Wood	C	Peeling
117	1.1	mg/cm ²	Exterior	Soffit		Wood	D	Peeling

4.2 LBP RISK ASSESSMENT

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

The lead hazards are:

- Exterior Window Sill Side A
- Exterior Soffit Side B,C & D

Lead in Dust Hazards

- Living Rm Window Trough
- Bath Window Trough
- Bedroom 1 Window Trough

Lead in Soil Hazards

-

4.3 RESIDENT QUESTIONNAIRE FORM 5.0

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

Children in the Household:	None
Children's bed locations:	-
Children's eating locations:	-
Primary interior play area(s):	-
Primary exterior play area(s):	-
Pets:	-
Blood lead testing history:	-
Observed chewed surfaces:	-
Women of child bearing age:	0
Previous lead testing:	None
Frequently used entrances:	Front Door
Frequently opened windows:	None
Structure Cooling Method:	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		Kitchen Floor
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/ft²)	Lead Hazard
01	Living Room	Floor	<5	NO
02	Living Room	Window Sill	<9.3	NO
03	Living Room	Window Trough	150	YES
04	Bath	Floor	<5	NO
05	Bath	Window Sill	<20	NO
06	Bath	Window Trough	120	YES
07	Bedroom 1	Window Sill	<6.2	NO
08	Bedroom 1	Window Trough	120	YES
09	Bedroom 1	Floor	<5	NO
10	Porch	Floor	9.6	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/ft²)	Lead Hazard
11	Dripline	Bare	120	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	Window Sill	Paint		Wet scrape/Repaint	Replace or Enclose
Exterior Side B,C&D	Soffit	Paint		Wet scrape/Repaint	Replace or Enclose

5.2 LEAD DUST CONTROL OPTIONS

Room	Surface	Acceptable Hazard Control Method
Living Room	Window Trough	Hepa-Vac/Wet Wipe/Hepa-Vac
Bath	Window Trough	Hepa-Vac/Wet Wipe/Hepa-Vac
Bedroom 1	Window Trough	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 Oct 2023 (12 months from now). If no lead-based paint hazards are identified at that time, another reevaluation should be conducted in Oct 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

Viken Detection

Pb200i

XRF Lead Paint Analyzer

3177

Pb200i-5.2.0

Reading #	Pb	Units	Pb Error	Result	Secs	Date	Time	Room	Structure	Member	Substrate	Wall	Condition
1	1.03	mg/cm2	0.07		20.02	10/6/2022	13:33:13	Calibration					
2	1.05	mg/cm2	0.06		23.86	10/6/2022	13:34:03	Calibration					
3	1.04	mg/cm2	0.07		20	10/6/2022	13:34:59	Calibration					
4	0	mg/cm2	0.3	Negative	2	10/6/2022	13:38:02	Living Room	Room	Wall	Drywall	A	Intact
5	0.9	mg/cm2	0.2	Negative	5	10/6/2022	13:38:18	Living Room	Room	Wall	Drywall	B	Intact
6	0.9	mg/cm2	0.2	Negative	5	10/6/2022	13:38:49	Living Room	Room	Wall	Drywall	C	Intact
7	1.2	mg/cm2	0.2	Positive	5	10/6/2022	13:39:17	Living Room	Room	Wall	Drywall	D	Intact
8	0.1	mg/cm2	0.3	Negative	2	10/6/2022	13:40:45	Living Room	Room	Ceiling	Drywall		Intact
9	0	mg/cm2	0.3	Negative	2	10/6/2022	13:41:06	Living Room	Room	Baseboard	Wood	A	Intact
10	0.2	mg/cm2	0.3	Negative	2	10/6/2022	13:41:29	Living Room	Window	Sill	Wood	A	Intact
11	0	mg/cm2	0.3	Negative	2	10/6/2022	13:42:41	Living Room	Room	Crown Mo	Wood	A	Intact
12	0.1	mg/cm2	0.3	Negative	2	10/6/2022	13:43:02	Living Room	Room	Ceiling	Drywall		Intact
13	0.1	mg/cm2	0.3	Negative	2	10/6/2022	13:43:54	Living Room	Door	Metal		A	Intact
14	0	mg/cm2	0.3	Negative	2	10/6/2022	13:44:11	Living Room	Door	Casing	Wood	A	Intact
15	0.1	mg/cm2	0.3	Negative	2	10/6/2022	13:45:05	Kitchen	Room	Wall	Drywall	A	Intact
16	0.2	mg/cm2	0.3	Negative	2	10/6/2022	13:45:17	Kitchen	Room	Wall	Drywall	B	Intact
17	0.1	mg/cm2	0.3	Negative	2	10/6/2022	13:45:28	Kitchen	Room	Wall	Drywall	C	Intact
18	0.3	mg/cm2	0.3	Negative	2	10/6/2022	13:45:39	Kitchen	Room	Wall	Drywall	D	Intact
19	0	mg/cm2	0.3	Negative	2	10/6/2022	13:45:51	Kitchen	Room	Ceiling	Drywall		Intact
20	0.1	mg/cm2	0.3	Negative	2	10/6/2022	13:46:14	Kitchen	Room	Crown Mo	Wood	A	Intact
21	0.1	mg/cm2	0.3	Negative	2	10/6/2022	13:46:36	Kitchen	Room	Baseboard	Wood	A	Intact
22	0.1	mg/cm2	0.2	Negative	2	10/6/2022	13:47:19	Kitchen	Door		Wood	B	Intact
23	0	mg/cm2	0.3	Negative	2	10/6/2022	13:47:31	Kitchen	Door	Casing	Wood	B	Intact
24	0.4	mg/cm2	0.3	Negative	2	10/6/2022	13:48:43	Kitchen	Room	Wall	Tile	A	Intact
25	0.3	mg/cm2	0.3	Negative	2	10/6/2022	13:49:04	Kitchen	Window	Sill	Tile	A	Intact
26	0	mg/cm2	0.3	Negative	2	10/6/2022	13:49:34	Kitchen	Cabinets	Door	Wood	D	Intact
27	0	mg/cm2	0.3	Negative	2	10/6/2022	13:49:41	Kitchen	Cabinets	Frame	Wood	D	Intact

28	0 mg/cm2	0.3 Negative	2	10/6/2022	13:50:11 Kitchen	Door	Casing	Wood	C	Intact
29	0.1 mg/cm2	0.3 Negative	2	10/6/2022	13:52:17 Bathroom	Room	Wall	Drywall	A	Intact
30	0.1 mg/cm2	0.3 Negative	2	10/6/2022	13:52:33 Bathroom	Room	Wall	Drywall	B	Intact
31	0 mg/cm2	0.3 Negative	2	10/6/2022	13:52:40 Bathroom	Room	Wall	Drywall	C	Intact
32	0.1 mg/cm2	0.3 Negative	2	10/6/2022	13:52:52 Bathroom	Room	Wall	Drywall	D	Intact
33	0.1 mg/cm2	0.3 Negative	2	10/6/2022	13:53:01 Bathroom	Room	Ceiling	Drywall		Intact
34	0.1 mg/cm2	0.3 Negative	2	10/6/2022	13:53:22 Bathroom	Room	Baseboard	Wood	A	Intact
35	0.1 mg/cm2	0.3 Negative	2	10/6/2022	13:54:07 Bathroom	Window	Sill	Wood	B	Intact
36	0 mg/cm2	0.3 Negative	2	10/6/2022	13:54:28 Bathroom	Cabinets	Door	Wood	A	Intact
37	0 mg/cm2	0.3 Negative	2	10/6/2022	13:54:35 Bathroom	Cabinets	Frame	Wood	A	Intact
38	0 mg/cm2	0.2 Negative	2	10/6/2022	13:54:56 Bathroom	Door		Wood	D	Intact
39	0 mg/cm2	0.3 Negative	2	10/6/2022	13:55:03 Bathroom	Door	Casing	Wood	D	Intact
40	0.3 mg/cm2	0.3 Negative	2	10/6/2022	13:56:04 Bedroom 1	Room	Wall	Drywall	A	Intact
41	0.1 mg/cm2	0.3 Negative	2	10/6/2022	13:56:15 Bedroom 1	Room	Wall	Drywall	B	Intact
42	0.1 mg/cm2	0.3 Negative	2	10/6/2022	13:56:28 Bedroom 1	Room	Wall	Drywall	C	Intact
43	0 mg/cm2	0.3 Negative	2	10/6/2022	13:56:39 Bedroom 1	Room	Wall	Drywall	D	Intact
44	0.1 mg/cm2	0.3 Negative	2	10/6/2022	13:56:48 Bedroom 1	Room	Ceiling	Drywall		Intact
45	0.1 mg/cm2	0.3 Negative	2	10/6/2022	13:57:10 Bedroom 1	Room	Crown Mo	Wood	A	Intact
46	0.1 mg/cm2	0.3 Negative	2	10/6/2022	13:57:24 Bedroom 1	Room	Baseboard	Wood	A	Intact
47	0.1 mg/cm2	0.3 Negative	2	10/6/2022	13:57:50 Bedroom 1	Window	Sill	Wood	B	Intact
48	0.2 mg/cm2	0.3 Negative	2	10/6/2022	14:00:34 Bathroom 2	Room	Wall	Drywall	A	Intact
49	0 mg/cm2	0.3 Negative	2	10/6/2022	14:00:42 Bathroom 2	Room	Wall	Drywall	B	Intact
50	0 mg/cm2	0.3 Negative	2	10/6/2022	14:00:50 Bathroom 2	Room	Wall	Drywall	C	Intact
51	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:00:57 Bathroom 2	Room	Wall	Drywall	D	Intact
52	0 mg/cm2	0.3 Negative	2	10/6/2022	14:01:05 Bathroom 2	Room	Ceiling	Drywall		Intact
53	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:01:24 Bathroom 2	Room	Crown Mo	Wood	A	Intact
54	0 mg/cm2	0.2 Negative	2	10/6/2022	14:01:40 Bathroom 2	Window	Sill	Wood	B	Intact
55	0 mg/cm2	0.3 Negative	2	10/6/2022	14:01:59 Bathroom 2	Cabinets	Door	Wood	B	Intact
56	0 mg/cm2	0.3 Negative	2	10/6/2022	14:02:06 Bathroom 2	Cabinets	Frame	Wood	B	Intact
57	0 mg/cm2	0.3 Negative	2	10/6/2022	14:02:25 Bathroom 2	Door		Wood	C	Intact
58	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:02:32 Bathroom 2	Door	Casing	Wood	C	Intact
59	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:02:56 Bedroom 2	Room	Wall	Drywall	A	Intact
60	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:03:04 Bedroom 2	Room	Wall	Drywall	B	Intact
61	0 mg/cm2	0.3 Negative	2	10/6/2022	14:03:15 Bedroom 2	Room	Wall	Drywall	C	Intact

62	0.2 mg/cm2	0.3 Negative	2	10/6/2022	14:03:25	Bedroom 2	Room	Wall	Drywall	D	Intact
63	0 mg/cm2	0.3 Negative	2	10/6/2022	14:03:35	Bedroom 2	Room	Ceiling	Drywall		Intact
64	0 mg/cm2	0.3 Negative	2	10/6/2022	14:03:55	Bedroom 2	Room	Crown Mo Wood		A	Intact
65	0 mg/cm2	0.3 Negative	2	10/6/2022	14:04:03	Bedroom 2	Room	Baseboard Wood		A	Intact
66	0 mg/cm2	0.3 Negative	2	10/6/2022	14:04:23	Bedroom 2	Window	Sill	Wood	B	Intact
67	0.1 mg/cm2	0.2 Negative	2	10/6/2022	14:04:39	Bedroom 2	Door		Wood	D	Intact
68	0 mg/cm2	0.3 Negative	2	10/6/2022	14:04:47	Bedroom 2	Door	Casing	Wood	D	Intact
69	0.1 mg/cm2	0.2 Negative	2	10/6/2022	14:05:13	Living Room	Room	Wall	Wood	A	Intact
70	0.1 mg/cm2	0.2 Negative	2	10/6/2022	14:05:22	Living Room	Room	Wall	Wood	B	Intact
71	0.1 mg/cm2	0.2 Negative	2	10/6/2022	14:05:30	Living Room	Room	Wall	Wood	C	Intact
72	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:05:42	Living Room	Room	Wall	Wood	D	Intact
73	0 mg/cm2	0.3 Negative	2	10/6/2022	14:06:00	Living Room	Room	Ceiling	Drywall		Intact
74	0 mg/cm2	0.3 Negative	2	10/6/2022	14:06:17	Living Room	Room	Baseboard Wood		B	Intact
75	0 mg/cm2	0.3 Negative	2	10/6/2022	14:06:42	Living Room	Window	Sill	Wood	D	Intact
76	0.2 mg/cm2	0.3 Negative	2	10/6/2022	14:07:25	Bedroom 3	Room	Wall	Drywall	A	Intact
77	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:07:33	Bedroom 3	Room	Wall	Drywall	B	Intact
78	0 mg/cm2	0.3 Negative	2	10/6/2022	14:07:45	Bedroom 3	Room	Wall	Drywall	C	Intact
79	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:07:53	Bedroom 3	Room	Wall	Drywall	D	Intact
80	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:08:03	Bedroom 3	Room	Ceiling	Drywall		Intact
81	0 mg/cm2	0.3 Negative	2	10/6/2022	14:08:20	Bedroom 3	Room	Crown Mo Wood		A	Intact
82	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:08:35	Bedroom 3	Room	Baseboard Wood		D	Intact
83	0 mg/cm2	0.3 Negative	2	10/6/2022	14:08:55	Bedroom 3	Window	Sill	Wood	D	Intact
84	0 mg/cm2	0.2 Negative	2	10/6/2022	14:09:10	Bedroom 3	Door		Wood	B	Intact
85	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:09:19	Bedroom 3	Door	Casing	Wood	B	Intact
86	0.2 mg/cm2	0.3 Negative	2	10/6/2022	14:11:03	Basement B:	Room	Wall	Concrete	A	Intact
87	0.1 mg/cm2	0.3 Negative	1	10/6/2022	14:11:10	Basement B:	Room	Wall	Concrete	B	Intact
88	0 mg/cm2	0.3 Negative	1	10/6/2022	14:11:18	Basement B:	Room	Wall	Concrete	C	Intact
89	0.1 mg/cm2	0.3 Negative	1	10/6/2022	14:11:25	Basement B:	Room	Wall	Concrete	D	Intact
90	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:13:12	Exterior	Door		Wood	A	Intact
91	0.1 mg/cm2	0.2 Negative	2	10/6/2022	14:13:30	Exterior	Door	Jamb	Wood	A	Intact
92	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:14:03	Exterior	Room	Wall	Wood	A	Intact
93	1.8 mg/cm2	0.3 Positive	2	10/6/2022	14:14:26	Exterior	Window	Sill	Wood	A	Cracking
94	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:14:48	Porch	Room	Ceiling	Wood	A	Intact
95	0 mg/cm2	0.2 Negative	2	10/6/2022	14:14:58	Porch	Room	Ceiling	Wood	A	Intact

96	0 mg/cm2	0.3 Negative	2	10/6/2022	14:15:18	Porch	Column	Wood	A	Intact
97	0 mg/cm2	0.3 Negative	2	10/6/2022	14:15:33	Porch	Beam	Wood	A	Intact
98	0.8 mg/cm2	0.2 Negative	2	10/6/2022	14:16:06	Exterior	Soffit	Wood	A	Intact
99	0 mg/cm2	0.3 Negative	2	10/6/2022	14:16:17	Exterior	Fascia	Wood	A	Intact
100	0.2 mg/cm2	0.3 Negative	2	10/6/2022	14:17:33	Exterior	Room	Concrete	A	Intact
101	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:17:56	Garage (Exte Door	Wall	Metal	A	Intact
102	0 mg/cm2	0.3 Negative	2	10/6/2022	14:18:25	Garage (Exte Door	Casing	Wood	A	Intact
103	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:18:43	Garage (Exte Door	Casing	Wood	A	Intact
104	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:19:02	Garage (Exte Door	Trim	Wood	A	Intact
105	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:19:32	Exterior	Room	Wood	B	Intact
106	0 mg/cm2	0.2 Negative	2	10/6/2022	14:20:29	Exterior	Window	Wood	B	Intact
107	0.9 mg/cm2	0.2 Negative	5	10/6/2022	14:20:42	Exterior	Sill	Wood	B	Intact
108	0 mg/cm2	0.3 Negative	2	10/6/2022	14:21:12	Exterior	Window	Wood	B	Intact
109	1 mg/cm2	0.2 Positive	5	10/6/2022	14:23:16	Exterior	Soffit	Wood	B	Peeling
110	0 mg/cm2	0.2 Negative	2	10/6/2022	14:23:47	Exterior	Fascia	Wood	B	Intact
111	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:25:27	Exterior	Room	Concrete	C	Intact
112	0 mg/cm2	0.3 Negative	2	10/6/2022	14:25:45	Exterior	Window	Wood	C	Intact
113	1.2 mg/cm2	0.2 Positive	5	10/6/2022	14:26:49	Exterior	Soffit	Wood	C	Peeling
114	0 mg/cm2	0.2 Negative	2	10/6/2022	14:27:09	Exterior	Fascia	Wood	C	Intact
115	0.1 mg/cm2	0.3 Negative	2	10/6/2022	14:27:57	Exterior	Room	Concrete	D	Intact
116	0.3 mg/cm2	0.2 Negative	2	10/6/2022	14:29:00	Exterior	Sill	Wood	D	Intact
117	1.1 mg/cm2	0.2 Positive	5	10/6/2022	14:29:56	Exterior	Soffit	Wood	D	Peeling
118	0 mg/cm2	0.2 Negative	2	10/6/2022	14:30:18	Exterior	Fascia	Wood	D	Intact
119	1.02 mg/cm2	0.07	20.19	10/6/2022	14:31:43	Calibration				
120	0.93 mg/cm2	0.07	20.03	10/6/2022	14:32:40	Calibration				
121	0.96 mg/cm2	0.07	20.12	10/6/2022	14:33:27	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: 351553
Date Received: 10/12/22
Received By: Courtney Holman
Date Sampled:
Time Sampled:
Analyst: JM
Date of Report: 10/14/22

AIHA LAP, LLC: 101352

Client: Cherokee Nation Environmental Programs
Logan Girty
PO Box 948
Tahlequah, OK 74464
Acct. No.: C162
Project: Jason Norris
Location: Bartlesville
Project No.: 271953

Quantem ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	01	Wipe	Lead	<5.0	5	ug/sq. Ft.	10/14/22 13:14	NIOSH 7082
002	02	Wipe	Lead	<9.3	9.3	ug/sq. Ft.	10/14/22 13:14	NIOSH 7082
003	03	Wipe	Lead	150	18	ug/sq. Ft.	10/14/22 13:14	NIOSH 7082
004	04	Wipe	Lead	<5.0	5	ug/sq. Ft.	10/14/22 13:14	NIOSH 7082
005	05	Wipe	Lead	<20	20	ug/sq. Ft.	10/14/22 13:14	NIOSH 7082
006	06	Wipe	Lead	120	16	ug/sq. Ft.	10/14/22 13:14	NIOSH 7082
007	07	Wipe	Lead	<6.2	6.2	ug/sq. Ft.	10/14/22 13:14	NIOSH 7082
008	08	Wipe	Lead	120	13	ug/sq. Ft.	10/14/22 13:14	NIOSH 7082
009	09	Wipe	Lead	<5.0	5	ug/sq. Ft.	10/14/22 13:14	NIOSH 7082
010	10	Wipe	Lead	9.6	5	ug/sq. Ft.	10/14/22 13:14	NIOSH 7082
011	11	Soil	Lead	120	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: 351553
Date Received: 10/12/22
Received By: Courtney Holman
Date Sampled:
Time Sampled:
Analyst: JM
Date of Report: 10/14/22
AIHA LAP, LLC: 101352

Client: Cherokee Nation Environmental Programs
Logan Girty
PO Box 948
Tahlequah, OK 74464
Acct. No.: C162
Project: Jason Norris
Location: Bartlesville
Project No.: 271953

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
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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: 20325
Test: Lead

Date: 10/13/2022
Matrix: Soil

Lab Number: 351553
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:



Supplemental Report

QAQC Results

QA ID: 20326
Test: Lead

Date: 10/14/2022
Matrix: Wipe

Lab Number: 351553
Approved By: Jake Martin
Date Approved: 10/14/2022

Notes:

Blank Data:

Type of Blank	Blank Value
FCB	0
ICB	0
Matrix Blank 1	0
Matrix Blank 2	0

Standards Data:

Standard	Low Limit	Obtained	High Limit
CCV	2.2	2.5	2.8
FCV	2.2	2.5	2.8
RLVS	0.05	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	2.214	91.2	2.135	87.9	3.6
MS-W2	0.000	2.428	2.292	94.4	2.499	102.9	8.6

Authorized Signature:





www.QuanTEM.com

LEAD CHAIN OF CUSTODY

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

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Page 1 of 1

For Lab Use Only

Lab No. **351553**

Accept ☒ Reject ☐

Contact Information		Project Information		Report Results (one box)	
Company: Cherokee Nation Environmental Programs	Phone: (918) 453-5000	Project Name: Jason Norris	<input type="radio"/> Quantem Website		
Contact: Logan Girty	Cell Phone: (918) 772-8346	Project Location: Bartlesville	<input checked="" type="radio"/> Email: logan-girty@cherokee.org		
Account #: C 162	E-mail: logan-girty@cherokee.org	Project ID:	<input type="radio"/> Other		
SAMPLED BY: Name: Logan Girty	Date: 10/06/2022	P.O. Number: 271953			

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
<i>Logan Girty</i>	10/7/2022	FedEx	<i>Jason M. Hise</i>	10/12/2022 @ 4:15
	9 AM			

REQUESTED SERVICES (Please ☒ the Appropriate Boxes)

No.	Sample ID (10 Characters Max)	Sample Description	Volume or Area	Flame Atomic Absorption						TURNAROUND TIME							
				EPA 7000B		NIOSH 7082		Other Analysis									
				Paint Chips mg/cm ²	wt% ppm	Bulk (mg/kg)	Soil (mg/kg)	Wipes (ug/ft ²)	Air (ug /m ³)	TCLP - Pb	TCLP - RCRA 8	RCRA 8	Other	Same Day	24 - Hour	3 - Day	5 - Day
1	01	Living Rm Floor	144 sq in					✓									
2	02	Living Rm Window Sill	77.187 sq in					✓									
3	03	Living Rm Window Trough	40 sq in					✓									
4	04	Bath Floor	144 sq in					✓									
5	05	Bath Window Sill	36 sq in					✓									
6	06	Bath Window Trough	46.5 sq in					✓									
7	07	Bedroom 1 Window Sill	114.56 sq in					✓									
8	08	Bedroom 1 Window Trough	55.56 sq in					✓									
9	09	Bedroom 1 Floor	144 sq in					✓									
10	10	Porch Floor (A side) conc.	144 sq in					✓									
11	11	Composite Soil						✓									

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



Housing Rehab Department
Environmental Review Request

Environmental Review ☒ Lead-Based Paint ☒ Asbestos ☒ URGENT ☐

Date of Request: 10/4/2022

Rehab Program Contact Name/Phone: Jamie Walters 918.456.5482

Name of Participant: Jason Norris

Participant Phone Number: (918) 440-5116

Project Type: Emergency (specify below)

Anticipated Project Cost: \$ 19,508.41

Funding Source: NAHASDA

Is there a structure currently located on site? Yes

☒ Year structure was built: 1950

Physical Address of site: 232 SE Avondale
Bartlesville, OK. 74006

Emergency Project Description:

Please attach:
Work Write-up & Bid Document
HACN Housing Rehab Site Direction form
Deed

36. 754108
- 95.933019



Email Completed Form to:
Cherokee Nation Environmental

Revised August 2022

WorkWrite-Up and Bid Document/By Trade

Jason Norris

232 SE Avondale Bartlesville, OK 7-4006

(918) 440-5116

Contractor Name:

Contractor Signature:

This document must be signed to be a valid bid.

PROJECT TYPE: Emergency Repairs Bid Due Date:

Trade	Work Description / Comments	Gen. Spec.	Qty Unit	Item Bid
Appliances				
1 Area: KITCHEN	Vent-A-Hood/30"/Recirc./Install new kitchen vent-a-hood (recirc.)/30" Install a range hood vent 30" white, includes electric wire installation.	Div.# 10.D. 3.D	1 Ea	
Carpentry				
2 Area: KITCHEN	Base Cabinets/Replace/Oak. Replace base cabinets with new cabinets, pre-finished oak. Includes door and drawer pulls. Replace the existing cabinets, arrange according to existing.	Div.# 6.O.1	17 LF	
3 Area: KITCHEN	Countertop/New/Post Form Top. Install new countertop and backsplash. Install new counter tops, with the new cabinets. Bar cabinet may have to be site built.	Div.# 6.O.4.	20 LF	

Trade	Work Description / Comments	Gen. Spec.	Qty Unit	Item Bid
Carpentry				
4	Area: EXTERIOR	Div.# 8.A.	2 Ea	
Door/Exterior/6-Panel Steel/Pre-Hung/Replace. Replace exterior entrance door with new pre-hung-steel six panel door. Work shall include paint-both sides, lockset, deadbolt & peephole.				
Replace the front and back entrance doors, includes all new door trim, locks keyed alike, new hardware, and painting.				
5	Area: KITCHEN	Div.# 6.D.	240 SF	
Floor System/Replace. Replace entire floor system, include rim joists, floor joist, mudseal, 3/4" T&G subflooring.				
Replace the entire kitchen floor system, 2"x 6" joist with a double 2"x 6" girder beam across the bottom for added strength, 3/4" sub-floor + 3/8" smooth overlayment glued and nailed.				
6	Area: KITCHEN	Div.# 6.O.2	17 LF	
Wall Hung Cabinets/Replace/Pre-Finished Oak. Replace wall hung cabinet(s) with new pre-finished oak cabinet(s).				
Replace all upper wall cabinet s, use same arrangement; except over the range, use a cabinet that will accept a 30" rangehood.				
Electrical				
7	Area: INTERIOR	Div.# 13.D. 11	1 Ea	
Carbon Monoxide Detector/Direct Plug Type/Install. Install a new direct plug type carbon monoxide detector.				
Install in the hallway near the bedrooms.				

Trade	Work Description / Comments	Gen. Spec.	Qty Unit	Item Bid
Electrical				
8	Area: INTERIOR	Div.# 13.D. 11	3 Ea	
Smoke Detector/Battery Operated/Install new smoke detector, battery operated (10 year lithium battery). All bedrooms and hallways adjacent to bedrooms. Use Firex #4015 or written approved equal.				
Install smoke detectors in each bedroom over the doorway, and one in the living room back wall.				
Flooring				
9	Area: KITCHEN	Div.# 9.L	240 SY	
Flooring/ Install vinyl flooring planks. 7"x 48" min 12-mil lifetime warranty.Glue down and rolled installation.				
Install new vinyl plank flooring after all of the repairs have been completed. Includes all base trim as necessary to complete. Provide 5/6 colors to the home owner for selection.				
Plumbing				
10	Area: KITCHEN	Div.# 11.A	1 Ea	
Sink Strainers, Drain Lines & Trap. Replace sink strainers (2), drain lines and trap at kitchen sink.				
Replace all of the drain lines and trap beneath the sink.				
All construction shall be in accordance with local codes, manufacturers' recommended installation procedures, good quality workmanship practices, General Specifications and Lead-Based Paint requirements when applicable. Conflicts between requirements will be resolved by compliance with the more stringent requirement.				Total: <div></div>