CHEROKEE NATION
Environmental Programs

# LEAD-BASED PAINT INSPECTION & RISK ASSESSMENT REPORT

**Conducted At:**

Name: Jed Scrapper
Address: 216 E Vine St
City State Zip: Sallisaw, OK 74955
Coordinates: 35.4621, -94.7880
Built in: 1929

**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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Report Date: April 19, 2023

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# 1.0 EXECUTIVE SUMMARY

A lead based paint inspection was conducted at the Jed Scrapper site on April 12, 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 Wood Windows & Window Sills (Side A,B&D)

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

**Interior Lead-Based Paint**
Bath Rm 1 Wall Tile & Base Tile Side A
Bedroom 2 Window Sill, Wood Side B
Bath Rm 2 Wall Tile Side A
Bedroom 3 Window & Trim, Wood Side B
Kitchen Wall Tile Side D

**Exterior Lead-Based Paint**

**Deteriorated Lead-Based Paint**
**(Lead-Based Paint Hazards)**
Exterior Gable Vent, Wood Side A
Exterior Window, Wood Side B (Assume all)
Exterior Window Sill, Wood Side B (Assume All)

**Lead in Dust Hazards**
Living Rm Window Trough
Bath Window Trough
Kitchen 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 (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 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 |
|---|---|---|---|---|---|---|---|---|
| 4 | 2.2 | mg/cm2 | Exterior | Gable | Vent | Wood | A | Cracking |
| 9 | 27.4 | mg/cm2 | Exterior | Window | | Wood | B | Cracking |
| 10 | 1.3 | mg/cm2 | Exterior | Window | Sill | Wood | B | Cracking |
| 48 | 7.3 | mg/cm2 | Bathroom 1 | Room | Wall | Tile | A | Intact |
| 49 | 14.4 | mg/cm2 | Bathroom 1 | Room | Baseboard | Tile | A | Intact |
| 69 | 1.3 | mg/cm2 | Bedroom 2 | Window | Sill | Wood | B | Intact |
| 78 | 6.9 | mg/cm2 | Bathroom 2 | Room | Wall | Tile | A | Intact |
| 93 | 1.2 | mg/cm2 | Bedroom 3 | Window | | Wood | B | Intact |
| 94 | 1.1 | mg/cm2 | Bedroom 3 | Window | Trim | Wood | B | Intact |
| 114 | 13.7 | mg/cm2 | Kitchen | Room | Wall | Tile | D | Intact |

## 4.2 LBP RISK ASSESSMENT

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

**The lead hazards are:**

- **Exterior Gable Vent, Wood Side A**
- **Exterior Windows & Sills, Wood Side B (Assume Sides A&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 & Side B Entrance |
| Frequently opened windows: | Living Rm & Kitchen |
| Structure Cooling Method: | HVAC Split System |
| 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 | | None |
| 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 | | Living, Dining, 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/ft$^2$) | Lead Hazard |
|---|---|---|---|---|
| 01 | Porch | Floor (concrete) | 51 | NO |
| 02 | Living Room | Window Sill | 64 | NO |
| 03 | Living Room | Window Trough | 940 | YES |
| 04 | Bath | Floor | <5 | NO |
| 05 | Bath | Window Sill | 84 | NO |
| 06 | Bath | Window Trough | 240 | YES |
| 07 | Kitchen | Floor | <5 | NO |
| 08 | Kitchen | Window Trough | 490 | YES |
| 09 | Den | Floor | <5 | NO |
| 10 | Den | Window Sill | 19 | 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** |
| 11 | Dripline | Bare | 330 | 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 | Gable Vent | Paint | | Wet scrape/Repaint | Replace, Encapsulate or Enclose |
| Exterior | Windows & Sills | Paint | | Wet scrape/Repaint | Replace |
| | | | | | |
| | | | | | |

## 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 |
| Kitchen | 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 April 2024 (12 months from now). If no lead-based paint hazards are identified at that time, another reevaluation should be conducted in April 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
3177
Pb200i-5.2.0

| Reading # | Pb | Units | Pb Error | Result | Secs | Date | Time | Room | Structure | Member | Substrate | Wall | Condition |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.01 | mg/cm2 | 0.07 | | 20.11 | 4/12/2023 | 14:25:20 | Calibration | | | | | |
| 2 | 1.02 | mg/cm2 | 0.07 | | 20.09 | 4/12/2023 | 14:26:29 | Calibration | | | | | |
| 3 | 0.9 | mg/cm2 | 0.07 | | 20.08 | 4/12/2023 | 14:27:36 | Calibration | | | | | |
| 4 | 2.2 | mg/cm2 | 0.3 | Positive | 2 | 4/12/2023 | 14:34:51 | Exterior | Gable | Vent | Wood | A | Cracking |
| 5 | 0.1 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:36:25 | Exterior | Door | | Wood | A | Intact |
| 6 | 0 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:36:44 | Exterior | Door | Jamb | Wood | A | Intact |
| 7 | 0.5 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:37:26 | Porch | Railing | | Concrete | A | Intact |
| 8 | 0.4 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:37:38 | Porch | Column | | Concrete | A | Intact |
| 9 | 27.4 | mg/cm2 | 0.3 | Positive | 2 | 4/12/2023 | 14:39:42 | Exterior | Window | | Wood | B | Cracking |
| 10 | 1.3 | mg/cm2 | 0.2 | Positive | 4 | 4/12/2023 | 14:39:55 | Exterior | Window | Sill | Wood | B | Cracking |
| 11 | 0.1 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:40:45 | Exterior | Crawl | Door | Wood | B | Intact |
| 12 | 0 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:41:28 | Exterior | Door | | Wood | B | Intact |
| 13 | 0.4 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:41:38 | Exterior | Door | Jamb | Wood | B | Intact |
| 14 | 0.2 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:42:05 | Porch | Railing | | Metal | B | Intact |
| 15 | 0.1 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:42:16 | Porch | Column | | Metal | B | Intact |
| 16 | 0 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:43:16 | Exterior | Door | | Wood | D | Intact |
| 17 | 0.1 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:43:27 | Exterior | Door | Jamb | Wood | D | Intact |
| 18 | 0.1 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:43:57 | Porch | Railing | | Metal | D | Intact |
| 19 | 0.3 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:46:37 | Living Room | Room | Wall | Drywall | A | Intact |
| 20 | 0.3 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:46:59 | Living Room | Room | Wall | Drywall | B | Intact |
| 21 | 0.3 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:47:13 | Living Room | Room | Wall | Drywall | C | Intact |
| 22 | 0 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:47:35 | Living Room | Room | Wall | Drywall | D | Intact |
| 23 | 0.3 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:47:52 | Living Room | Room | Ceiling | Drywall | | Intact |
| 24 | 0 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:48:21 | Living Room | Room | Baseboard | Wood | A | Intact |
| 25 | 0.1 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:48:52 | Living Room | Room | Crown Mol | Wood | C | Intact |
| 26 | 0.6 | mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 14:49:57 | Living Room | Window | | Wood | A | Intact |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 27 | 0.1 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:50:11 | Living Room | Window | Sill | Wood | A | Intact |
| 28 | 0.4 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:50:45 | Living Room | Fire Place | | Concrete | D | Intact |
| 29 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:51:29 | Living Room | Door | | Wood | A | Intact |
| 30 | 0.1 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:51:41 | Living Room | Door | Casing | Wood | A | Intact |
| 31 | 0.7 mg/cm2 | 0.2 Negative | 5 | 4/12/2023 | 14:52:18 | Bedroom 1 | Room | Wall | Drywall | A | Intact |
| 32 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:52:43 | Bedroom 1 | Room | Wall | Drywall | B | Intact |
| 33 | 0.9 mg/cm2 | 0.2 Negative | 5 | 4/12/2023 | 14:53:07 | Bedroom 1 | Room | Wall | Drywall | C | Intact |
| 34 | 0.5 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:53:30 | Bedroom 1 | Room | Wall | Drywall | D | Intact |
| 35 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:53:48 | Bedroom 1 | Room | Ceiling | Drywall | | Intact |
| 36 | 0.3 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:54:09 | Bedroom 1 | Room | Baseboard | Wood | C | Intact |
| 37 | 0 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:54:34 | Bedroom 1 | Window | | Wood | B | Intact |
| 38 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:54:44 | Bedroom 1 | Window | Sill | Wood | B | Intact |
| 39 | 0.1 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:55:14 | Bedroom 1 | Cabinets | Door | Wood | C | Intact |
| 40 | 0 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:55:24 | Bedroom 1 | Cabinets | Frame | Wood | C | Intact |
| 41 | 0 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:55:43 | Bedroom 1 | Door | | Wood | D | Intact |
| 42 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:55:54 | Bedroom 1 | Door | Casing | Wood | D | Intact |
| 43 | 0.3 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:56:28 | Bathroom 1 | Room | Wall | Drywall | A | Intact |
| 44 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:56:48 | Bathroom 1 | Room | Wall | Drywall | B | Intact |
| 45 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:57:02 | Bathroom 1 | Room | Wall | Drywall | C | Intact |
| 46 | 0.3 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:57:18 | Bathroom 1 | Room | Wall | Drywall | D | Intact |
| 47 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:57:39 | Bathroom 1 | Room | Ceiling | Drywall | | Intact |
| 48 | 7.3 mg/cm2 | 0.3 Positive | 2 | 4/12/2023 | 14:58:00 | Bathroom 1 | Room | Wall | Tile | A | Intact |
| 49 | 14.4 mg/cm2 | 0.3 Positive | 2 | 4/12/2023 | 14:58:45 | Bathroom 1 | Room | Baseboard | Tile | A | Intact |
| 50 | 0 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:59:10 | Bathroom 1 | Window | | Wood | C | Intact |
| 51 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:59:21 | Bathroom 1 | Window | Sill | Wood | C | Intact |
| 52 | 0.1 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:59:39 | Bathroom 1 | Door | | Wood | A | Intact |
| 53 | 0 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 14:59:52 | Bathroom 1 | Door | Casing | Wood | A | Intact |
| 54 | 0.3 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:01:21 | Dining Room | Room | Wall | Drywall | A | Intact |
| 55 | 0.5 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:01:38 | Dining Room | Room | Wall | Drywall | B | Intact |
| 56 | 0.3 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:01:54 | Dining Room | Room | Wall | Drywall | C | Intact |
| 57 | 0.4 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:02:13 | Dining Room | Room | Wall | Drywall | D | Intact |
| 58 | 0.4 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:02:32 | Dining Room | Room | Ceiling | Drywall | | Intact |
| 59 | 0.1 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:03:04 | Dining Room | Room | Baseboard | Wood | A | Intact |
| 60 | 0.6 mg/cm2 | 0.3 Negative | 3 | 4/12/2023 | 15:03:51 | Dining Room | Window | | Wood | D | Intact |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 61 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:04:10 | Dining Room | Window | Sill | Wood | D | Intact |
| 62 | 0.3 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:04:33 | Dining Room | Door | Casing | Wood | C | Intact |
| 63 | 0.3 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:05:39 | Bedroom 2 | Room | Wall | Drywall | A | Intact |
| 64 | 0.3 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:05:58 | Bedroom 2 | Room | Wall | Drywall | B | Intact |
| 65 | 0.4 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:06:10 | Bedroom 2 | Room | Wall | Drywall | C | Intact |
| 66 | 0.3 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:06:21 | Bedroom 2 | Room | Wall | Drywall | D | Intact |
| 67 | 0.5 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:06:54 | Bedroom 2 | Room | Ceiling | Drywall | | Intact |
| 68 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:07:14 | Bedroom 2 | Room | Baseboard | Wood | A | Intact |
| 69 | 1.3 mg/cm2 | 0.2 Positive | 4 | 4/12/2023 | 15:07:49 | Bedroom 2 | Window | Sill | Wood | B | Intact |
| 70 | 0.1 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:08:06 | Bedroom 2 | Window | Sill | Wood | B | Intact |
| 71 | 0.4 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:09:14 | Bedroom 2 | Door | | Wood | D | Intact |
| 72 | 0.4 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:09:25 | Bedroom 2 | Door | Casing | Wood | D | Intact |
| 73 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:09:58 | Bathroom 2 | Room | Wall | Drywall | A | Intact |
| 74 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:10:07 | Bathroom 2 | Room | Wall | Drywall | B | Intact |
| 75 | 0.3 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:10:27 | Bathroom 2 | Room | Wall | Drywall | C | Intact |
| 76 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:10:40 | Bathroom 2 | Room | Wall | Drywall | D | Intact |
| 77 | 0.3 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:11:00 | Bathroom 2 | Room | Ceiling | Drywall | | Intact |
| 78 | 6.9 mg/cm2 | 0.3 Positive | 2 | 4/12/2023 | 15:11:28 | Bathroom 2 | Room | Wall | Tile | A | Intact |
| 79 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:11:47 | Bathroom 2 | Room | Baseboard | Tile | A | Intact |
| 80 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:12:10 | Bathroom 2 | Room | Floor | Tile | A | Intact |
| 81 | 0.1 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:12:39 | Bathroom 2 | Cabinets | Door | Wood | C | Intact |
| 82 | 0.1 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:12:50 | Bathroom 2 | Cabinets | Frame | Wood | C | Intact |
| 83 | 0 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:13:13 | Bathroom 2 | Window | | Wood | B | Intact |
| 84 | 0.1 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:13:26 | Bathroom 2 | Window | Sill | Wood | B | Intact |
| 85 | 0.3 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:13:52 | Bathroom 2 | Door | | Wood | D | Intact |
| 86 | 0.5 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:14:06 | Bathroom 2 | Door | Casing | Wood | D | Intact |
| 87 | 0 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:14:50 | Bedroom 3 | Room | Wall | Drywall | A | Intact |
| 88 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:15:11 | Bedroom 3 | Room | Wall | Drywall | B | Intact |
| 89 | 0 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:15:33 | Bedroom 3 | Room | Wall | Drywall | C | Intact |
| 90 | 0.2 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:15:54 | Bedroom 3 | Room | Wall | Drywall | D | Intact |
| 91 | 0.1 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:16:27 | Bedroom 3 | Room | Ceiling | Drywall | | Intact |
| 92 | 0.6 mg/cm2 | 0.3 Negative | 2 | 4/12/2023 | 15:16:52 | Bedroom 3 | Room | Baseboard | Wood | A | Intact |
| 93 | 1.2 mg/cm2 | 0.2 Positive | 5 | 4/12/2023 | 15:17:28 | Bedroom 3 | Window | | Wood | B | Intact |
| 94 | 1.1 mg/cm2 | 0.2 Positive | 5 | 4/12/2023 | 15:17:47 | Bedroom 3 | Window | Trim | Wood | B | Intact |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95 | 0.2 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:18:24 | Bedroom 3 | Door | | Wood | A | Intact |
| 96 | 0.1 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:18:35 | Bedroom 3 | Door | Casing | Wood | A | Intact |
| 97 | 0 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:19:46 | Den | Room | Wall | Wood | A | Intact |
| 98 | 0.1 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:20:07 | Den | Room | Wall | Drywall | B | Intact |
| 99 | 0.1 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:20:26 | Den | Room | Wall | Drywall | C | Intact |
| 100 | 0.1 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:20:37 | Den | Room | Wall | Drywall | D | Intact |
| 101 | 0 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:20:59 | Den | Room | Ceiling | Drywall | | Intact |
| 102 | 0 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:21:23 | Den | Room | Baseboard | Wood | A | Intact |
| 103 | 0.2 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:21:51 | Den | Window | Sill | Wood | B | Intact |
| 104 | 0.1 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:22:12 | Den | Door | | Wood | B | Intact |
| 105 | 0.2 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:22:29 | Den | Door | Casing | Wood | B | Intact |
| 106 | 0.2 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:23:49 | Kitchen | Room | Wall | Drywall | A | Intact |
| 107 | 0.2 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:24:02 | Kitchen | Room | Wall | Drywall | B | Intact |
| 108 | 0.2 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:24:28 | Kitchen | Room | Wall | Drywall | C | Intact |
| 109 | 0.2 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:24:53 | Kitchen | Room | Wall | Drywall | D | Intact |
| 110 | 0.1 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:25:14 | Kitchen | Room | Ceiling | Drywall | | Intact |
| 111 | 0 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:25:51 | Kitchen | Room | Baseboard | Wood | C | Intact |
| 112 | 0.1 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:26:48 | Kitchen | Cabinets | Door | Wood | D | Intact |
| 113 | 0.1 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:26:59 | Kitchen | Cabinets | Frame | Wood | D | Intact |
| 114 | 13.7 mg/cm2 | 0.3 | Positive | 2 | 4/12/2023 | 15:27:32 | Kitchen | Room | Wall | Tile | D | Intact |
| 115 | 0.4 mg/cm2 | 0.3 | Negative | 2 | 4/12/2023 | 15:28:17 | Kitchen | Door | Casing | Wood | C | Intact |
| 116 | 1 mg/cm2 | 0.07 | | 20.1 | 4/12/2023 | 15:35:13 | Calibration | | | | | |
| 117 | 1.06 mg/cm2 | 0.07 | | 20.08 | 4/12/2023 | 15:36:27 | Calibration | | | | | |
| 118 | 1.04 mg/cm2 | 0.07 | | 20.12 | 4/12/2023 | 15:37:36 | 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:** 357470
**Date Received:** 04/14/23
**Received By:** Baylie Longstreth
**Date Sampled:**
**Time Sampled:**
**Analyst:** CR
**Date of Report:** 04/18/23

AIHA LAP, LLC: 101352

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

**Acct. No.:** C162

**Project:** Jed Scrapper
**Location:** Sallisaw
**Project No.:** N/A

| QuanTEM ID | Client ID | Matrix | Parameter | Results | Reporting Limits | Units | Date/Time Analyzed | Method |
|---|---|---|---|---|---|---|---|---|
| 001 | 01 | Wipe | Lead | 51 | 5 | ug/sq. Ft. | 04/17/23 11:52 | NIOSH 7082 |
| 002 | 02 | Wipe | Lead | 64 | 4.5 | ug/sq. Ft. | 04/17/23 11:52 | NIOSH 7082 |
| 003 | 03 | Wipe | Lead | 940 | 4.2 | ug/sq. Ft. | 04/17/23 11:52 | NIOSH 7082 |
| 004 | 04 | Wipe | Lead | <5.0 | 5 | ug/sq. Ft. | 04/17/23 11:52 | NIOSH 7082 |
| 005 | 05 | Wipe | Lead | 84 | 9.3 | ug/sq. Ft. | 04/17/23 11:52 | NIOSH 7082 |
| 006 | 06 | Wipe | Lead | 240 | 6.2 | ug/sq. Ft. | 04/17/23 11:52 | NIOSH 7082 |
| 007 | 07 | Wipe | Lead | <5.0 | 5 | ug/sq. Ft. | 04/17/23 11:52 | NIOSH 7082 |
| 008 | 08 | Wipe | Lead | 490 | 17 | ug/sq. Ft. | 04/17/23 11:52 | NIOSH 7082 |
| 009 | 09 | Wipe | Lead | <5.0 | 5 | ug/sq. Ft. | 04/17/23 11:52 | NIOSH 7082 |
| 010 | 10 | Wipe | Lead | 19 | 17 | ug/sq. Ft. | 04/17/23 11:52 | NIOSH 7082 |
| 011 | 11 | Soil | Lead | 330 | 40 | mg/kg | 04/17/23 11:52 | 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

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

# Environmental Chemistry Analysis Report

**QuanTEM Set ID:** 357470
**Date Received:** 04/14/23
**Received By:** Baylie Longstreth
**Date Sampled:**
**Time Sampled:**
**Analyst:** CR
**Date of Report:** 04/18/23

AIHA LAP, LLC: 101352

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

**Acct. No.:** C162

**Project:** Jed Scrapper
**Location:** Sallisaw
**Project No.:** N/A

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

**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:** 20632
**Test:** Lead

**Date:** 4/17/2023
**Matrix:** Soil

**Lab Number:** 357470
**Approved By:** Cherry Rossen
**Date Approved:** 4/17/2023

**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 | 2.6 | 2.8 |
| FCV | 2.2 | 2.4 | 2.8 |
| RLVS | 0.08 | 0.14 | 0.24 |
| ICV | 0.9 | 1 | 1.1 |

**Duplicate Data:**

| Sample Number | Result | Duplicate | % RPD |
|---|---|---|---|
| 357469-005 | 1.713 | 1.637 | 4.6 |

**Recovery Data:**

| Sample Number | Result | Spike Level | Result + Spike | % Recovery | Dup. Result + Spike | % Dup. Recovery | % Spike RPD |
|---|---|---|---|---|---|---|---|
| LCS-S1 | 0.000 | 2.428 | 2.541 | 104.7 | 2.348 | 96.7 | 7.9 |
| 357469-005 | 1.713 | 2.000 | 3.754 | 102.0 | | | |

Cherry Rossen

**Authorized Signature:** _____

Cherry Rossen, Technical Manager

# Supplemental Report
# QAQC Results

**QA ID:** 20633
**Test:** Lead
**Date:** 4/17/2023
**Matrix:** Wipe
**Lab Number:** 357470
**Approved By:** Cherry Rossen
**Date Approved:** 4/17/2023

**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 | 2.6 | 2.8 |
| FCV | 2.2 | 2.4 | 2.8 |
| RLVS | 0.05 | 0.1 | 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 | 2.664 | 109.7 | 2.294 | 94.5 | 14.9 |

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

**LEGAL DOCUMENT - PLEASE PRINT LEGIBLY**



For Lab Use Only
Lab No. 357470
(Accept) Reject

| Contact Information | | | Project Information | | Report Results (☑ one box) |
|---|---|---|---|---|---|
| Company: Cherokee Nation Environmental Programs | Phone: (918) 453-5000 | | Project Name: Jed Scrapper | | ○ QuanTEM Website |
| Contact: Logan Girty | Cell Phone: (918) 772-8346 | | Project Location: Sallisaw | | ◉ Email logan-girty@cherokee.org |
| Account #: C 162 | E-mail: logan-girty@cherokee.org | | Project ID: | | ○ Other |
| SAMPLED BY: Name: Logan Girty | Date: 04/12/2023 | | P.O. Number: 289269 | | |

| RELINQUISHED BY | DATE & TIME | VIA | RECEIVED BY | DATE & TIME |
|---|---|---|---|---|
| Logan T. Girty | 4/12/2023 | FedEx | | 4/14/23 10:15 |
| | 5 PM | | | |

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 | Porchhhh Floor | 144 sq in | | | | ✓ | | | | | |
| 2 | 02 | Living Rm Window Sill | 157.625 sq in | | | | ✓ | | | | | |
| 3 | 03 | Living Rm Window Trough | 168 sq in | | | | ✓ | | | | | |
| 4 | 04 | Bath Floor | 144 sq in | | | | ✓ | | | | | |
| 5 | 05 | Bath Window Sill | 78 sq in | | | | ✓ | | | | | |
| 6 | 06 | Bath Window Trough | 114.75 sq in | | | | ✓ | | | | | |
| 7 | 07 | Kitchen Floor | 144 sq in | | | | ✓ | | | | | |
| 8 | 08 | Kitchen Window Trough | 42.5 sq in | | | | ✓ | | | | | |
| 9 | 09 | Den Floor | 144 sq in | | | | ✓ | | | | | |
| 10 | 10 | Den Window Sill | 42 | | | | ✓ | | | | | |
| 11 | 11 | Soil | | | | ✓ | | | | | | |

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