Lead-Based Paint Risk Assessment Report

For the Dwelling Located at:

Curtis Ball
3630 N Detroit Ave.
Tulsa, OK 74106
36.2070 N, 95.9918 W
Built in: 1970

Prepared For:

Cherokee Nation Housing Rehabilitation
Using ODEQ, EPA and CN Work Practice Standards
Established in 40 CFR 745-227

Lab Analysis by Quantem Laboratories
AIHA-ELLAP 101352
2033 Heritage Park Dr.
Oklahoma City, OK
(405) 775-7272

By:

C. Nick Clark, Certified Risk Assessor
P.O. Box 948
Tahlequah, OK 74465
(918) 316-7451
Heuresis Pb200i
SN: 2312

Signature: C. Nick Clark Date: 10-28-21

OK Firm No.:	OKFIRM11198	OK License No.:	OKRASR13910
CN Firm No.:	CNFIRM00001	CN License No.:	CNRASR00036

Table of Contents

Part IV: Appendix

Part I: Identifying Information

Curtis Ball
3630 N Detroit Ave. Tulsa, OK 74106
918-430-0420
36.2070 N, -95.9918 W
Built in: 1970

Part II: Results

List of location and type of identified lead hazards:

Deteriorated Lead-Based Paint (Hazards):

Read	Conc	Units	3 SD	Result	Nom Secs	Date	Time	Room	-->Room	Choice	Structure	-->Membe	Substrate	Wall	Cond
61	1.5	mg/cm2	0.2	Positive	2	10/20/2021	13:58:46	Exterior	House		Garage	Casing	Wood4	A5	Intact
65	1.7	mg/cm2	0.2	Positive	2	10/20/2021	14:01:44	Exterior	House		Soffit		Wood3	B4	Intact
66	2	mg/cm2	0.2	Positive	2	10/20/2021	14:02:03	Exterior	House		Fascia		Wood4	B5	Intact
67	1.7	mg/cm2	0.2	Positive	2	10/20/2021	14:02:50	Exterior	House		Fascia		Wood5	A1	Intact
68	1.7	mg/cm2	0.2	Positive	2	10/20/2021	14:03:08	Exterior	House		Soffit		Wood6	A2	Intact
69	1.2	mg/cm2	0.1	Positive	5	10/20/2021	14:03:25	Exterior	House		Soffit		Wood7	D1	Intact
70	1.4	mg/cm2	0.2	Positive	2	10/20/2021	14:03:44	Exterior	House		Fascia		Wood8	D2	Intact
71	1.2	mg/cm2	0.1	Positive	5	10/20/2021	14:04:18	Exterior	House		Fascia		Wood9	C1	Intact
72	1.5	mg/cm2	0.2	Positive	2	10/20/2021	14:04:40	Exterior	House		Soffit		Wood10	C2	Intact

Lead in Dust Hazards:

- No Hazards Exist

Lead in Soil Hazards:

- No Hazards Exist

A few other painted surfaces that have not been tested for lead are in "poor" condition and should be repainted within the next year before further deterioration occurs. However, these surfaces are not considered to be immediate "hazards," using criteria in the 2012 *HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.* Those surfaces are:

NA

There has not been any previous lead-based paint testing at this dwelling, although a lead-based paint inspection of all painted surfaces is recommended so that potential lead problems can be monitored before they become hazardous.

Soil lead levels were all below 400 ug/g. Current EPA and HUD Guidance for soil is 400ug/g for bare play areas and 1,200 ug/g for other areas. Using these criteria, soil is not a hazard at this property.

The owner has decided to select the following hazard control measures, which are all acceptable based on HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*:

Reevaluation: Standard Reevaluation Schedule 3 contained in the HUD Guidelines does apply to this property, since one of the rooms had a dust lead level greater that the standard. Therefore, the dwelling should be reevaluated in ___NA_____ (12 months from now). If no lead-based paint hazards are identified at this 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.

Resident Questionnaire

Children/Children's Habits

1. (a) Do you have any children that live in your home? Yes___ ___ No__X__

   (b) If yes, how many? _____ Ages? ____ _____ _____ _____

   (c) Record blood lead levels, if known_____ _____ ____ _____ _____ _____

IF NO CHILDREN, SKIP TO Q.5

2. Locate the rooms/areas where each child sleeps, eats, and plays.

Name of Child	Location of Bedroom	Location of All Rooms Where Child Eats	Primary Location Where Child Plays Indoors	Primary Location Where Child Plays Outdoors

3. Where are toys stored/kept? ___ _____

4. Is there any visible evidence of chewed or peeling paint on the wood work, furniture, or toys?
   Yes_____ No_____

Family Use Patterns

5. Which entrances are used most frequently?_____A entrance_____

6. Which windows are opened most frequently? ___none_____

7. Do you use window air conditioners? If yes, where?__ _____ No___X___

   (Condensation often causes paint deterioration)

8. (a) Do any household member engage in gardening? Yes_____ No__X_____

   (b) Record the location of any vegetable garden._____

   (c) Are you planning any landscaping activities that will remove grass or ground covering?
   Yes_____ No__X_____

9. (a) How often is the household cleaned? __weekly_____

   (b) What cleaning methods do you use?___soap/water _____

10. (a) Did you recently complete any building renovations? Yes_____ No___x ____

(b) If yes, where? _____

(c) Was building debris stored in the yard? If yes, where?_____

11. Are you planning any building renovations? Where?_Exterior and interior___

12. (a) Do any household members work in a lead-related industry? Yes____ No__X__

(b) If yes, where are dirty work clothes placed and cleaned?_____

Building Condition Form

CONDITION	YES	NO
Roof Missing Parts of Surfaces (tiles, boards, etc.)		X
Roof Has Holes or Large Cracks		X
Gutter or Downspouts Broken	X	
Chimney Masonry cracked, bricks loose or missing, obviously out of plumb		X
Exterior or interior walls have obvious large cracks or holes, requiring more than routine painting		X
Exterior siding has missing boards or shingles	X	
Water stains on interior walls or ceilings		X
Plaster walls 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, structural leans, or visibly unsound		X
Total	2	9

If the "Yes" column has 2 or more checks, the dwelling is considered to be in poor condition for the purposes of a risk assessment. However, specific conditions and extenuating circumstances should be considered before determining final condition of the building and the appropriateness of a lead hazard screen.

Notes:

Overall, the home is in <u>poor</u> condition.

8. Dwelling Selection Process N/A

9. Analysis of Previous XRF Testing Report N/A

Field Sampling Form for Deteriorated Paint

Name of Risk Assessor ___Nick Clark_____

Name of Property Owner___Curtis Ball_____

Property Address _____

Sampling Protocol___Single Family_____

Target Dwelling Criteria (Check All That Apply)

_____ Code Violations

__X__ Judged to be in Poor Condition

_____ Presence of two or More Children between Ages of 6 Months and 6 Years

_____ Serves as Day-Care Facility

_____ Recently Prepared for Reoccupancy

_____ Random Sampling **XRF SN 2312**

____ None of the above

Read	Conc	Units	3 SD	Result	Nom Secs	Date	Time	Room	-->RoomChoice	Structure	-->Membe	Substrate	Wall	Cond
61	1.5	mg/cm2	0.2	Positive	2	10/20/2021	13:58:46	Exterior	House	Garage	Casing	Wood4	A5	Intact
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68	1.7	mg/cm2	0.2	Positive	2	10/20/2021	14:03:08	Exterior	House	Soffit		Wood6	A2	Intact
69	1.2	mg/cm2	0.1	Positive	5	10/20/2021	14:03:25	Exterior	House	Soffit		Wood7	D1	Intact
70	1.4	mg/cm2	0.2	Positive	2	10/20/2021	14:03:44	Exterior	House	Fascia		Wood8	D2	Intact
71	1.2	mg/cm2	0.1	Positive	5	10/20/2021	14:04:18	Exterior	House	Fascia		Wood9	C1	Intact
72	1.5	mg/cm2	0.2	Positive	2	10/20/2021	14:04:40	Exterior	House	Soffit		Wood10	C2	Intact

Sample <u>all</u> layers of paint, not just deteriorated paint layers

Total Number of Samples This Page___9_____

Page_____1_____ of _____1_____

Date of Sample Collection __10/20/2021_____

Field Sampling

Form for Dust

Sample Number	Room (Record Name of Room Used by the Owner or Resident)	Surface Type	Is Surface Smooth and Cleanable?	Dimension[1] of Sample Area (inches x inches)	Area (in^2)	Result of Lab Analysis (ug/ft^2)
01	Enclosed Porch	Floor	Yes	12x12	144	<5.0
02	Living Room	WS	Yes	4.50 x 39	175.50	<4.2
03	Living Room	WT	Yes	1.50 x 39	58.50	63
04	Kitchen	Floor	Yes	12x12	144	<5.0
05	Kitchen	WS	Yes	3 x 35.25	105.75	<6.8
06	Kitchen	WT	Yes	1.25 x 31.25	39.06	37
07	Bath	Floor	Yes	12 x 12	144	<5.0
08	Bath	WS	Yes	4 x 34.25	137	<5.3
09	Bath	WT	Yes	1.25 x 31	38.75	60

[1] Measure to the nearest 1/16 inch

Total Number of Samples This Page 9

Page 1 of 1

Date of Sample Collection 10/20/2021 Date shipped to lab 10/22/2021

Shipped by C. Nick Clark (signature) Received by EMSL Analytical Staff C. Nick Clark (signature)

HUD Standards: 10 ug/ft^2 (floors), 100 ug/ft^2 (interior window sills), 100 ug/ft^2 (window troughs)

Field Sampling Form For Soil

(Composite Sampling Only)

Name of Risk Assessor C. Nick Clark

Name of Property Owner Curtis Ball

Property Address 3630 N Detroit Ave. Tulsa, OK 74106

SAMPLE NO.	LOCATION	BARE OR COVERED	**LAB RESULTS ug/g**
10	Drip Line	Bare	49

Collect only the ½" of soil

Total Number of Samples This Page 1

Page 1 of 1

Date of Sample Collection 10/20/2021 Date Shipped to lab 10/20/2021

Shipped by C. Nick Clark (signature) Received by EMSL Analytical C. Nick Clark (signature)

13. Other Sampling Results N/A

Part III: Lead Hazard Control Options

14. Lead-Based Paint Policy Statement

On file CNEP and Cherokee Nation Housing Rehab

15. Name of Individual in Charge of Lead-Based Paint Hazard Control Program:

Cherokee Nation Housing Rehab - George Hubbard: 918-456-5482 ext. 1263

16. Recommended Changes to Work Order System and Property Management

The existing work order system is an informal verbal one. If painted surfaces will be disturbed during a particular repair job, the painted surface should be tested to determine if it has lead-based paint on it. If it does (or if testing is not completed), the maintenance worker should take the necessary precautions by wetting down the surface and performing cleanup. If the surface area is large or if the work will generate a significant amount of dust, clearance testing should be completed before residents move back into the room. The table below can be used as a general guide in determining whether maintenance jobs are likely to be high risk or low risk.

When work is assigned, the owner or worker should determine whether the job is low or high risk and adopt protective measures as needed.

Table 17.1 (Taken from HUD Guidelines)
Summary of Low-and High-Risk Job Designations for Surfaces Known or Suspected to Have Lead-Based Paint

Job Description	Low Risk	High Risk
Repainting (includes surface Preparation)		√
Plastering or wall repair		√
Window repair		√
Water or moisture damage repair (repainting and plumbing)		√
Door repair	√	
Building component replacement		√
Welding on Painted Surfaces		√
Door lock repair or replacement	√	
Electrical fixture repair	√	
Floor refinishing		√
Carpet replacement		√
Groundskeeping	√	
Radiator leak repair	√	

Baluster repair (metal)		√
Demolition		√

- **High-risk jobs typically disturb more than 2 square feet per room. If these jobs disturb less than 2 square feet, then they can be considered low-risk jobs.**

Table 17.2

	Low Risk	High Risk
Worksite preparation with plastic sheeting (6 mil thick)	Plastic sheet no less than 5 feet immediately underneath work area	Whole floor, plus simple airlock at door or tape door shut
Children kept out of work area	Yes	Yes
Resident relocation during work	No	Yes
Respirators	Probably not necessary*	Recommended
Protective clothing Note: Protective shoe coverings are not to be worn on ladders, scaffolds, etc.	Probably not necessary*	Recommended
Personal hygiene (enforced hand washing after job)	Required	Required
Showers	Probably not necessary	Recommended
Work practices	Use wet methods, except near electrical circuits	Use wet methods, except near electrical circuits
Cleaning	Wet cleaning with lead-specific detergent trisodium phosphate or other suitable detergent around the work area only (2 linear feet beyond plastic)	HEPA vacuum/wet wash/HEPA vacuum the entire work area
Clearance	Visual examination only	Dust sampling during the preliminary phase of the maintenance program and periodically thereafter (not required for every job)

- **Employers must have objective data showing that worker exposures are less than the OSHA Permissible Exposure Limit of 50ug/m3 if respirators and protective clothing will not be provided.**

17. Interim Control Options and Estimated Costs

The costs shown below include labor, materials, worker protection, site containment and cleanup. These are only very rough estimates that may not be accurate; a precise estimate should be obtained from a certified lead-based paint abatement contractor. I would be pleased to perform clearance testing after this work has been completed at your request.

Lead-Based Paint Hazards:

Hazards –

Read	Conc	Units	3 SD	Result	Nom Secs	Date	Time	Room	-->Room	Choice	Structure	-->Memb	Substrate	Wall	Cond
61	1.5	mg/cm2	0.2	Positive	2	10/20/2021	13:58:46	Exterior	House		Garage	Casing	Wood4	A5	Intact
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71	1.2	mg/cm2	0.1	Positive	5	10/20/2021	14:04:18	Exterior	House		Fascia		Wood9	C1	Intact
72	1.5	mg/cm2	0.2	Positive	2	10/20/2021	14:04:40	Exterior	House		Soffit		Wood10	C2	Intact

Garage door casing, soffits and fascias - Wet scrape and Repaint

Lead Dust Hazards:

Hazard A. No Hazards exist

Lead Soil Hazards:

Hazard A. Dripline – No Hazards Exist

18. Acceptable Abatement Options

Lead-Based Paint Hazards

Hazard A: Garage Door Casing	Remove and Replace, Enclose or Encapsulate
Hazard B: Soffits	Remove and Replace, Enclose or Encapsulate
Hazard C: Fascia	Remove and Replace, Enclose or Encapsulate

Lead Dust Hazards:

Hazard A. No Hazards Exist	HEPA Vacuum/Wet Mop/HEPA Vacuum

Lead Soil Hazards:

Hazard A. Dripline – No Hazards Exist

19. Reevaluation 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 long run 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.

Reevaluation: Standard Reevaluation 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 ___10/20/2022_____(12 months from now). If no lead-based paint hazards are identified at that time, another reevaluation should be conducted in ___10/20/2023___ (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.

2033 Heritage Park Dr, Oklahoma City, OK 73120 | 1.800.822.1650

Environmental Chemistry Analysis Report

QuanTEM Set ID: 340499
Date Received: 10/25/21
Received By: Cyonne Harrod
Date Sampled:
Time Sampled:
Analyst: CR
Date of Report: 10/27/21

AIHA LAP, LLC: 101352

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

Acct. No.: C162

Project: Curtis Ball
Location: Tulsa
Project No.: N/A

QuanTEM ID	Client ID	Matrix	Parameter	Results	Reporting Limits	Units	Date/Time Analyzed	Method
001	01	Wipe	Lead	<5.0	5	ug/sq. Ft.	10/27/21 12:01	NIOSH 7082
002	02	Wipe	Lead	<4.2	4.2	ug/sq. Ft.	10/27/21 12:01	NIOSH 7082
003	03	Wipe	Lead	63	12	ug/sq. Ft.	10/27/21 12:01	NIOSH 7082
004	04	Wipe	Lead	<5.0	5	ug/sq. Ft.	10/27/21 12:01	NIOSH 7082
005	05	Wipe	Lead	<6.8	6.8	ug/sq. Ft.	10/27/21 12:01	NIOSH 7082
006	06	Wipe	Lead	37	19	ug/sq. Ft.	10/27/21 12:01	NIOSH 7082
007	07	Wipe	Lead	<5.0	5	ug/sq. Ft.	10/27/21 12:01	NIOSH 7082
008	08	Wipe	Lead	<5.3	5.3	ug/sq. Ft.	10/27/21 12:01	NIOSH 7082
009	09	Wipe	Lead	60	19	ug/sq. Ft.	10/27/21 12:01	NIOSH 7082
010	10	Soil	Lead	49	38	mg/kg	10/26/21 11:17	Soil EPA 7000B (1)

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: 19726 **Date:** 10/26/2021 **Lab Number:** 340499
Test: Lead **Matrix:** Soil **Approved By:** Cherry Rossen
Date Approved: 10/26/2021

Notes:

Blank Data:

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

Standards Data:

Standard	Low Limit	Obtained	High Limit
FCV	2.2	2.3	2.8
CCV	2.2	2.4	2.8
ICV	0.9	1	1.1
RLVS	0.08	0.18	0.24

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
340493-002	0.000	2.000	1.730	86.5			
LCS-S1	0.000	2.431	2.217	91.2	2.328	95.8	4.9

Authorized Signature: Cherry Rossen

Cherry Rossen, Technical Manager

Supplemental Report
QAQC Results

QA ID: 19730 **Date:** 10/27/2021 **Lab Number:** 340499
Test: Lead **Matrix:** Wipe **Approved By:** Cherry Rossen
Date Approved: 10/27/2021

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
ICV	0.9	1	1.1
RLVS	0.05	0.05	0.15

Duplicate Data:

Recovery Data:

Sample Number	Result	Spike Level	Result + Spike	% Recovery	Dup. Result + Spike	% Dup. Recovery	% Spike RPD
MS-W1	0.000	2.431	2.381	97.9	2.366	97.3	0.6

Authorized Signature: Cherry Rossen

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. 340499
(Accept) Reject

Contact Information				Project Information		Report Results (☑ one box)
Company: Cherokee Nation Environmental Programs	Phone:	(918) 453-5000		Project Name: Curtis Ball		○ QuanTEM Website
Contact: C. Nicolas Clark	Cell Phone:	(918) 316-7451		Project Location: Tulsa		◉ Email carlton-clark@cherokee.org
Account #: C162	E-mail:	carlton-clark@cherokee.org		Project ID:		○ Other
SAMPLED BY: Name: C. Nicolas Clark	Date:	10/21/2021		P.O. Number: 272279		

RELINQUISHED BY	DATE & TIME	VIA	RECEIVED BY	DATE & TIME
C. Nicolas Clark	10/22/21 10 am	Fed Ex	cdh	10/25/21 @ 9:45

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	Enclosed Porch Floor	144 sq in				✓					
2	02	Living Room WS	175.50 sq in				✓					
3	03	Living Room WT	58.50 sq in				✓					
4	04	Kitchen Floor	144 sq in				✓					
5	05	Kitchen WS	105.75 sq in				✓					
6	06	Kitchen WT	39.06 sq in				✓					
7	07	Bath Floor	144 sq in				✓					
8	08	Bath WS	137 sq in				✓					
9	09	Bath WT	38.75 sq in				✓					
10	10	Soil				✓						
11												

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

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