CHEROKEE NATION Environmental Programs



Asbestos Sampling Report

PARTICIPANT: GOUDEAU, CHARLES

TIMOTHY MILLER, ENVIRONMENTAL SPECIALIST I

REQUESTED BY: HACN HOUSING REHABILITATION –

JAMIE WALTERS

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I. Site Inspection/Description

Cherokee Nation Environmental Programs (CNEP) has conducted asbestos sampling for the presence of asbestos containing materials (ACM) for the following site:

Charles Goudeau 5023 Osage Dr. Tulsa, OK 74126 918-645-8667 Coordinates: 36.22643, -96.00092

The sampling was performed to determine the presence of all ACM from within the affected parts of the structure for EPA's National Emissions of Hazardous Air Pollutants (NESHAP) compliance as well as OSHA worker protection.

The inspector responsible for this project was:

Timothy Miller, AHERA Inspector

The sampling was conducted on August 15, 2025 at the request of the Cherokee Nation Housing Rehabilitation Department.

The site is a single family home built in 1980. Sampling was limited to areas that would be affected by the project scope of work (Appendix A) provided by the housing rehabilitation department.

ACM was found at this site. See Section IV for locations.

II. BACKGROUND

The Oklahoma Department of Environmental Quality (ODEQ) has adopted EPA's NESHAP regulation under OAC252:100, 41-15 and has been delegated authority in the state of Oklahoma for its enforcement. Section 61.145(a) of Federal EPA regulation states that prior to commencement of the demolition or renovation of a facility a thorough inspection of the affected part or parts of a facility is required to determine the presence of all asbestos including Category I and Category II non-friable, and friable ACM. ACM is defined by EPA and OSHA as any material that contains greater than 1% asbestos.

III. FIELD PROCEDURES AND ANALYTICAL METHODS

During the on-site inspection, we visually assessed the physical characteristics of suspect asbestos-containing materials (SACM) based on homogeneous areas. Homogeneous areas are areas of asbestos similar in color, texture, and construction, date of application, and in general

appearance. For purposes of renovation and demolition, homogeneous areas of SACM can be further classified according to NESHAPs rules by whether the material is friable, Category I non-friable, or Category II non-friable.

<u>Friable ACM</u> is defined by NESHAPs rules as any material containing more than 1% asbestos as determined by Polarized Light Microscopy (PLM), that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure.

<u>Category I Non-friable ACM</u> is defined by NESHAPs rules as any asbestos-containing packings, gaskets, construction mastics, resilient floor covering (i.e. floor tiles, roll sheet flooring) or asphalt roofing products that contain more than 1% asbestos as determined by PLM.

<u>Category II Non-friable ACM</u> is defined by NESHAPs rules as any material, excluding Category I non-friable ACM, containing more than 1% asbestos as determined by PLM, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Typically, non-friable materials, such as transite (cementious products) and vinyl floor tiles are not regulated by the State of Oklahoma provided they do not become friable. General deterioration, machine grinding, drilling, sanding, and dry-buffing are all ways of causing non-friable materials to become classified as Regulated Asbestos Containing Materials (RACM). All friable materials are classified RACM. Please note that the following materials, even though classified as non-friable are fully regulated by Oklahoma Department of Labor for removal purposes as friable material: ceiling tiles, roll sheet flooring (linoleum), and joint wall compound when deemed friable

In addition to classification of suspect material into friable and non-friable materials, a determination of current condition was conducted as part of the physical assessment. The condition noted is the representative of the material at the time of inspection. Conditions of materials can change very quickly when disturbed. All suspect material was placed in one of the following categories of condition.

Significantly damaged: Material that is damaged, blistered, deteriorated, water stained over at least 10% of its total area.

<u>Damaged</u>: Material that is damaged, blistered, deteriorated, water stained less than 10% of its total area.

Good: Material that has no visible damage or deterioration.

Guidelines used for the number of samples collected per homogeneous area were determined using the Asbestos Hazard Emergency Response Act (AHERA) protocol promulgated in 40 CFR 763, Appendix E as follows:

Surfacing materials – material that is sprayed or troweled on wall, ceilings, or support columns for fireproofing, acoustical, or even decorative purpose.

- Less than 1000 ft2 Minimum 3 samples
- From 1000-5000 ft2 Minimum 5 samples
- Greater than 5000 ft2 Minimum 7 samples

Thermal System Insulation (TSI) materials – thermal system insulation material applied to tanks, boiler, pipes or other structural component for an insulating purpose.

- May omit areas of fibrous glass, foam glass, rubber, and Styrofoam form sampling. Areas that have mastic on seams or outer jacketing will be sampled.
- At least three samples must be collected from each homogeneous area of TSI.
- Plus an additional sample from each patched area of less than 6 linear feet.
- Fittings require a sufficient amount to determine positive or negative nature.
- Inspector will first collect samples from damaged areas, exposed ends, or areas missing jacketing first.

Miscellaneous materials – all other material that are not thermal system insulation or surfacing materials. This includes gaskets, packings, joint wall compound, cementious asbestos materials, ceiling tiles resilient flooring materials, construction mastics, etc..

- May assume and document as such
- A sufficient amount of samples to determine negative or positive nature. A minimum or one per suspect homogeneous area.
- Collect samples from inconspicuous locations.
- Material such as cementious asbestos or vibration dampening cloths should not be sampled and will be assumed ACM unless instructed by client to collect these samples.

Bulk samples of suspect ACM were analyzed by Polarized Light Microscopy (PLM) in accordance with EPA Methods 600R-93/116. All samples were sent to a NVLAP accredited laboratory for analysis. QuanTEM Laboratories, LLC (NVLAP # 101959-0) in Oklahoma City, OK analyzed the samples. A copy of the full laboratory report and chain of custody can be found in Appendix B.

IV. SUMMARY OF FINDINGS

A total of 26 samples were analyzed from 8 homogeneous areas due to multi-layers of material within some homogeneous sample areas. All accessible and observable areas within the renovation area were sampled for ACM. Samples were not taken of suspect materials that may have placed the inspector at risk of injury (i.e. electrical panel boxes). Any suspect ACM that have not been tested and/or found positive for asbestos must be assumed ACM until they are analyzed. Upon review of laboratory analysis, the following asbestos containing materials can be found in Table 1. All suspect ACM samples that were analyzed and did not contain asbestos can be found in Table 2.

04-01 through	Material Description	Locations	Friability (Friable, NF Cat I NF Cat II)	Condition	Sample Results (% Asbestos)
03-01	Green/Yellow Flooring	Bathroom 2	NF Cat I	Damaged	20
through	White Joint Compound/Wall Texture	Bathroom 2 and Adjacent Walls	Friable	Damaged	2

Material Description	Locations	Condition	Sample Results (% Asbestos)
Black Vinyl Tile	Master Bedroom	Good	None Detected
Striped Wallpaper	Master Bedroom and Bathroom 2	Good	None Detected
White Shower Caulk	Bathroom 2	Damaged	None Detected
Ceiling Texture	Master Bedroom and Bathroom 2	Damaged	None Detected
Beige Wallpaper	Master Bedroom and Bathroom 2	Damaged	None Detected
Black Brick	Exterior	Damaged	None Detected
	Black Vinyl Tile Striped Wallpaper White Shower Caulk Ceiling Texture Beige Wallpaper	Black Vinyl Tile Striped Wallpaper White Shower Caulk Ceiling Texture Beige Wallpaper Master Bedroom and Bathroom 2 Master Bedroom and Bathroom 2 Master Bedroom and Bathroom 2	Black Vinyl Tile Master Bedroom Good Striped Wallpaper Bathroom 2 Good White Shower Caulk Bathroom 2 Damaged Ceiling Texture Master Bedroom and Bathroom 2 Damaged Beige Wallpaper Master Bedroom and Bathroom 2 Damaged

V. CONCLUSIONS

Asbestos is not always an immediate hazard. Intact and undisturbed ACM does not pose a health risk. They may, however become a health hazard if they are damaged, disturbed, or deteriorate over time and release fibers into the air. There are no federal, state, or Tribal laws mandating asbestos removal. It is only when the material can no longer be maintained in good condition and/or airborne concentrations of asbestos are measured and found to be above a permissible exposure limit (PEL), or when the building is to be demolished or renovated, that removal may become necessary. Any renovation/demolition work which may impact these positive materials should be conducted in accordance with all applicable Federal, state, and local regulations.



Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 382163

Account Number:

C162

Date Received:

08/20/2025

Received By:

Charlie Johnson

Date Analyzed:

08/20/2025

Analyzed By:

003c

Tanner Smith

Project: Charles Goudeau

Asbestos Not Present

Client: Cherokee Nation Environmental Programs

Timothy Miller

Project Location: Tulsa

Project Number: NA EPA/600/R-93/116 Methodology: Non Fibrous Non-Asbestos Color / Client QuanTEM Fiber (%) Description Asbestos (%) Sample ID Sample ID Composition Asbestos Not Present NA Vinyl Black 001 01-01 Layered CaCO3 Floor Tile Glue NA Asbestos Not Present Yellow 001a Layered Mastic Cellulose 80 Binder Asbestos Not Present Multi-Color 02-01 Homogeneous 002 Wall Paper Synthetic 90 Binder Asbestos Not Present 003 03-01 Layered Brown Carpet NA Glue Asbestos Not Present Cream Layered 003a Mastic Binder Cellulose Asbestos Present Yellow/Green Layered 003b 20 Chrysotile

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

Flooring

Tan

Mastic

Layered

QuanTEM is a NVLAP accredited Testing PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA—40 CFR Appendix E to Subpart E of Part 763 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

Glue

NA



Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 382163

C162

Account Number:

08/20/2025

Date Received: Received By:

Charlie Johnson

Date Analyzed:

08/20/2025

Analyzed By:

006a

Tanner Smith

Methodology:

EPA/600/R-93/116

Client: Cherokee Nation Environmental Programs

Timothy Miller

Project: Charles Goudeau

Project Location: Tulsa

Project Number: NA

Methodology:	EPA/600	0/R-93/116	Project Nur	nber: NA			
QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
004	04-01	Layered	White Texture	Asbestos Not Present	NA		CaCO3 Paint
004a		Layered	White Sheetrock	Asbestos Not Present	Cellulose	10	Gypsum
005	04-02	Layered	White Texture	Asbestos Not Present	NA		CaCO3 Paint
005a		Layered	White Sheetrock	Asbestos Not Present	Cellulose	10	Gypsum
006	04-03	Layered	White Texture	Asbestos Not Present	NA		CaCO3 Paint

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

White

Joint Compound

Layered

Asbestos Present

Chrysotile

2

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Gypsum

NA



Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 382163

Account Number:

C162

Date Received:

08/20/2025

Received By:

Charlie Johnson

Date Analyzed:

08/20/2025

Analyzed By: Methodology: Tanner Smith EPA/600/R-93/116

Project: Charles Goudeau

Project Location: Tulsa

Project Number: NA

Client: Cherokee Nation Environmental Programs

Timothy Miller

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QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
006b		Layered	White Sheetrock	Asbestos Not Present	Cellulose 10	Gypsum
007	05-01	Layered	White Caulk	Asbestos Not Present	NA	Glue Binder
007a		Layered	White Texture	Asbestos Not Present	NA	CaCO3 Paint
008	06-01	Layered	White Texture	Asbestos Not Present	NA	CaCO3 Paint
008a		Layered	White Sheetrock	Asbestos Not Present	Cellulose 10	Gypsum
009	06-02	Layered	White Texture	Asbestos Not Present	NA	CaCO3 Paint
009a		Layered	White Joint Compound	Asbestos Not Present	NA	CaCO3

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

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Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 382163

Cherokee Nation Environmental Programs

Timothy Miller

Account Number:

C162

Date Received:

08/20/2025

Received By:

Charlie Johnson

Date Analyzed: Analyzed By:

08/20/2025

Tanner Smith

EPA/600/R-93/116

Project: Charles Goudeau

Project Number: NA

Project Location: Tulsa

Methodology: QuanTEM Sample ID

Client

Color / Description

Asbestos (%)

Non-Asbestos Fiber (%)

Non Fibrous

CaCO3 Paint

10 Gypsum

Binder

CaCO3

Clay Sand

Binder

010

Sample ID

06-03

Composition

Layered

Layered

White

Texture

White

Sheetrock

Asbestos Not Present

Asbestos Not Present

Asbestos Not Present

NA

Cellulose

Cellulose

NA

010a

011

012

012a

012b

07-01

Homogeneous

08-01 Layered

Layered

Layered

Beige Wall Paper

Black

Gray

Mortar

Asbestos Not Present Brick

Asbestos Not Present

NA CaCO3 Sand

60

White Coating Asbestos Not Present

NA

CaCO3

Unless otherwise noted, upon receipt the condition of the sample was acceptable for analysis.

OuanTEM is a NVLAP accredited Testing PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA-40 CFR Appendix E to Subpart E of Part 763 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.



Project Location: Tulsa

Project Number: NA

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 382163

C162

Account Number: Date Received:

08/20/2025

Received By:

Charlie Johnson

Date Analyzed:

Methodology:

QuanTEM

Sample ID

08/20/2025

Analyzed By:

Tanner Smith

EPA/600/R-93/116

Sample ID

Client

Composition

Color /

Description

Asbestos (%)

Project: Charles Goudeau

Non-Asbestos

Non Fibrous

Fiber (%)

Client: Cherokee Nation Environmental Programs

Timothy Miller

Tanner Smith, Laboratory Analyst

8/20/2025

Date of Report



ASBESTOS CHAIN OF CUSTODY

7021 W. Wilshire Blvd, Suite B, Oklahoma City, OK 73132 (800) 822-1650 • (405) 755-7272 • Fax: (405) 755-2058

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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

Ceiling Texture

White

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06-03 06-02 06-01

Master Bed/Bath Master Bed/Bath Master Bed/Bath



ASBESTOS CHAIN OF CUSTODY

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LEGAL DOCUMENT - PLEASE PRINT LEGIBLY

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		Comments / Notes	Master Bedroom	Exterior Walls (Add-on)																		The state of the s
	Project Location: Tulsa	Volume / Area (as applicable)		3																		
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