CHEROKEE NATION Environmental Programs



Asbestos Sampling Report

PARTICIPANT: HILL, ANNA

PREPARED BY: Logan Girty DATE: 4/29/2025

LOGAN GIRTY. ENVIRONMENTAL SPECIALIST III

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:

Anna Hill 332 N Sycamore, Nowata, OK 74048 918-440-6260 Coordinates: 36,7043 / -95,6326

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:

Logan Girty, AHERA Inspector

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

The site is a single family home built in 1960. 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.

<u>Significantly damaged</u>: 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.

<u>Good</u>: 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 29 samples were analyzed from 24 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.

Sample #	Material Description	Locations	Friability (Friable, NF Cat I NF Cat II)	Condition	Sample Results (% Asbestos)
24-01	Transite Siding	Exterior	NF Cat II	Damaged	20% Chrysotile

Table 2.	Non – Asbestos Containing M	laterials		
Sample #	Material Description	Locations	Condition	Sample Results (% Asbestos)
	See Attached Lab Report			

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. 378531

C162

Account Number:

Date Received: Received By:

04/23/2025

Charlie Johnson

Date Analyzed:

04/25/2025

Analyzed By: Methodology: Cassie Sanborn

EPA/600/R-93/116

Client: Cherokee Nation Environmental Programs

Logan Girty

PO Box 948

Tahlequah, OK 74464

Project: Anna Hill Project Location: Nowata

Project Number: NA

moundable By.	221200	0,11,70,110					
QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
001	01-01	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose	90	Paint
002	02-01	Homogeneous	White Ceiling Tile	Asbestos Not Present	Cellulose Glass Fiber	50 30	Perlite Paint
003	03-01	Layered	White Texture	Asbestos Not Present	NA		CaCO3 Paint
003a		Layered	White Joint Compound	Asbestos Not Present	NA		CaCO3
003b		Layered	White Drywall	Asbestos Not Present	Cellulose	10	Gypsum
004	03-02	Layered	White Joint Compound	Asbestos Not Present	NA		CaCO3 Paint
004a		Layered	White Drywall	Asbestos Not Present	Cellulose	10	Gypsum

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



Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 378531

Account Number:

C162

Date Received:

04/23/2025

Received By:

Charlie Johnson

Date Analyzed:

04/25/2025

Analyzed By:

Cassie Sanborn

EPA/600/R-93/116

Client: Cherokee Nation Environmental Programs

Logan Girty

PO Box 948

Tahlequah, OK 74464

Project: Anna Hill Project Location: Nowata

Project Number: NA

Methodology: Non Fibrous Non-Asbestos QuanTEM Client Color / Fiber (%) Sample ID Sample ID Composition Description Asbestos (%) CaCO3 005 04-01 White Asbestos Not Present NA Layered Paint Texture Asbestos Not Present Cellulose 10 Gypsum 005a Layered White Drywall CaCO3 Asbestos Not Present NA 006 04-02 Homogeneous White Gypsum Texture Paint CaCO3 White Asbestos Not Present NA 04-03 Layered 007 Paint Texture Gypsum Cellulose 10 Asbestos Not Present 007a Layered White Drywall NA CaCO3 Asbestos Not Present Green 05-01 Homogeneous 008 Paint Ceiling Texture

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Analyzed By:

Cassie Sanborn FPA/600/R-93/116

Client: Cherokee Nation Environmental Programs

Logan Girty PO Box 948

Tahlequah, OK 74464

Project: Anna Hill Project Location: Nowata

Methodology:	EPA/600	0/R-93/116	Project Num	ber: NA			
QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
009	05-02	Homogeneous	Tan Ceiling Texture	Asbestos Not Present	NA		CaCO3 Paint
010	05-03	Homogeneous	Green Ceiling Texture	Asbestos Not Present	NA		CaCO3 Paint
011	06-01	Layered	White Sheet Vinyl	Asbestos Not Present	Cellulose	20	CaCO3 Vinyl
011a		Layered	Black Tar Paper	Asbestos Not Present	Cellulose	60	Tar
012	07-01	Layered	Gray Sheet Vinyl	Asbestos Not Present	Cellulose Glass Fiber	15 5	CaCO3 Vinyl
012a		Layered	Yellow Mastic	Asbestos Not Present	NA		Glue
013	08-01	Homogeneous	White Caulk	Asbestos Not Present	NA		Silicone

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EPA/600/R-93/116

Client: Cherokee Nation Environmental Programs

Logan Girty

PO Box 948

Tahlequah, OK 74464

Project: Anna Hill

Project Location: Nowata

Project Number: NA

wiethodology.	DI I I O O	0/11/0/11/0					
QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
014	09-01	Homogeneous	White Caulk	Asbestos Not Present	NA		CaCO3 Binder
015	10-01	Layered	Brown Formica	Asbestos Not Present	Cellulose	80	Binder
015a		Layered	Green Mastic	Asbestos Not Present	NA		Glue
016	11-01	Layered	White Wainscot	Asbestos Not Present	Cellulose	90	Paint
016a		Layered	White Caulk	Asbestos Not Present	NA		CaCO3 Binder
017	12-01	Homogeneous	White Caulk	Asbestos Not Present	NA		CaCO3 Binder

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Analyzed By: Methodology: Cassie Sanborn

EPA/600/R-93/116

Client: Cherokee Nation Environmental Programs

Logan Girty PO Box 948

Tahlequah, OK 74464

Project: Anna Hill

Project Location: Nowata

Project Number: NA

wiethodology.	Director	73/110	2.203.2.2.				
QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
018	13-01	Layered	White Joint Compound	Asbestos Not Present	NA		CaCO3 Paint
018a		Layered	White Drywall	Asbestos Not Present	Cellulose	10	Gypsum
019	14-01	Layered	Tan Sheet Vinyl	Asbestos Not Present	Cellulose Glass Fiber	15 5	CaCO3 Vinyl
019a		Layered	White Caulk	Asbestos Not Present	NA		CaCO3 Binder
019b		Layered	Yellow Mastic	Asbestos Not Present	NA		Glue
020	15-01	Layered	White Wainscot	Asbestos Not Present	Cellulose	90	Paint
020a		Layered	White Caulk	Asbestos Not Present	NA		CaCO3 Binder

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Polarized Light Microscopy Asbestos Analysis Report

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04/25/2025

Analyzed By: Methodology: Cassie Sanborn EPA/600/R-93/116

Client: Cherokee Nation Environmental Programs

Logan Girty PO Box 948

Tahlequah, OK 74464

Project: Anna Hill

Project Location: Nowata Project Number: NA

Non-Ashestos

Non Fibrous

QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)	Non Fibrous
021	16-01	Homogeneous	White Caulk	Asbestos Not Present	NA	CaCO3 Binder
022	17-01	Homogeneous	White Texture	Asbestos Not Present	NA	CaCO3 Paint
023	17-02	Layered	White Texture	Asbestos Not Present	NA	Gypsum Paint
023a		Layered	Beige Joint Compound	Asbestos Not Present	NA	CaCO3
023b		Layered	White Drywall	Asbestos Not Present	Cellulose 1	0 Gypsum
024	17-03	Layered	White	Asbestos Not Present	NA	Gypsum

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Texture



Polarized Light Microscopy Asbestos Analysis Report

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Date Analyzed: Analyzed By:

04/25/2025

Cassie Sanborn

EPA/600/R-93/116

Client: Cherokee Nation Environmental Programs

Logan Girty

PO Box 948

Tahlequah, OK 74464

Project: Anna Hill

Project Location: Nowata

Methodology:	EPA/600	0/R-93/116	Project Num	iber: NA			
QuanTEM Sample ID	Client Sample ID	Composition	Color / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
024a		Layered	Beige Joint Compound	Asbestos Not Present	NA		CaCO3
024b		Layered	White Drywall	Asbestos Not Present	Cellulose	10	Gypsum
025	18-01	Homogeneous	White Caulk	Asbestos Not Present	NA		CaCO3 Binder
026	20-01	Layered	Black/Brown Shingle	Asbestos Not Present	Glass Fiber	20	Tar Sand CaCO3
026a		Layered	Black Tar	Asbestos Not Present	NA		Tar
027	21-01	Homogeneous	Gray Mortar	Asbestos Not Present	NA		CaCO3 Sand
028	23-01	Homogeneous	Gray Mortar	Asbestos Not Present	NA		CaCO3 Sand

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04/23/2025 Charlie Johnson

Received By: Date Analyzed:

04/25/2025

Analyzed By: Methodology: Cassie Sanborn

EPA/600/R-93/116

Project: Anna Hill Project Location: Nowata

Project Number: NA

QuanTEM Sample ID

Client Sample ID

Composition

Color / Description

Non-Asbestos Fiber (%)

Client: Cherokee Nation Environmental Programs

Logan Girty

PO Box 948

20

Tahlequah, OK 74464

Non Fibrous

029

24-01

Homogeneous

Green Siding Asbestos Present

Asbestos (%)

Chrysotile

NA

CaCO3 Sand

Paint

Cassie Sanboy

Cassie Sanborn, Laboratory Analyst

4/25/2025

Date of Report



ASBESTOS CHAIN OF CUSTODY

2 of

Page 1

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LABORATORIES	(800) 822-1650 • (405)	7-/2/2 • Fax: (4U5) /35-2U50	Lab No. 378531	
www.QuanTEM.com	LEGAL DOCUMENT -	LEGAL DOCUMENT - PLEASE PRINT LEGIBLY	Accept Reject	
Contact Information		Project Information	Report Results (☑ one box)	
Company: Cherokee Nation Environmental Programs Phone:		(918) 453-6140 Project Name: Anna Hill	QuanTEM Website	
Contact: Logan Girty	Cell Phone: (918) 772-8346	(918) 772-8346 Project Location: Nowata	Email logan-girty@cherokee.org	
Account #: C 162	E-mail: logan-girty@cherokee.org Project ID:	Project ID:	Other	
SAMPLED BY: Name: Logan Girty	Date: 4/15/2025	P.O. Number: 896007		

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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



ASBESTOS CHAIN OF CUSTODY

2033 Heritage Park Drive, Oklahoma City, OK 73120-7502 (800) 822-1650 • (405) 755-2072 • Fax: (405) 755-2058

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Page 2 of 2

For Lab Use Only
Lab No. 37454

					2	Cityota
Company:		on Environn	Cherokee Nation Environmental Programs	Project Name: Anna HIII	Project Location: NOWala	Nowala
ON	Sample ID (10 Characters Max)	☑ To Be Analyzed	Color	Description	Volume / Area (as applicable)	Comments / Notes
=	06-01	>	White	RS Vinyl Floor		Laundry
12	07-01	>	Grey	RS Vinyl Floor		Kitchen/Bath
13	08-01	\triangleright	White	Shower Caulk		Bath
14	09-01	>	White	Door Trim Caulk		Bath
15	10-01	>	Brown	Formica		Kitchen
16	11-01	>	White	Wainscot		Kitchen
17	12-01	>	White	Window Caulk	and the state of t	Throughout
18	13-01	>	White	Drywall Joint Compound		HVAC Closet
10	14-01	>	Tan	RS Vinyl Floor	- Historica Andrews	Entry
20	15-01	>	White	Wainscot		Bath
21	16-01	>	White	Caulk (crown molding)		Bath
22	17-01	>	Beige	Drywall Texture		Bath/Utility
23	17-02	>	Beige	Drywall Texture		Bath/Utility
24	17-03	>	Beige	Drywall Texture	and Advances of the Advances o	Bath/Utility
25	18-01	>	White	Window Caulk		Exterior
26	20-01	>	Black/Brown	Shingle		Roof
27	21-01	>	Grey	Brick Mortar		Exterior
28	23-01	>	Grey	Mortar Patch		Exterior
29	24-01	5	Green	Transite Siding		Exterior
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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