Asbestos Sampling Report

For the dwelling located at:

Willie Vann Rt. #1 Box 852 Watts, OK 74964 918-723-5960 Built In: 1970's

Prepared For:

Cherokee Nation Housing Rehabilitation
Using ODEQ, EPA and CN Work Practice Standards
Established in 40 CFR 763.85, 40 CFR 763.86, and 40 CFR 763.87

Lab Analysis by Quantem Labs NVLAP 101959-0 2033 Heritage Park Drive Oklahoma City, OK 73120 (405) 755-7272

Ву:

Jeremy Freise
EPA Accredited Asbestos Inspector
Expiration: March 1, 2011

Cherokee Nation Environmental Programs
P.O. Box 948
Tahlequah, OK 74465
(918) 453-5370

Signature: Jeren J. Freise

Date: 10-13-10

Section | - Introduction

This report is an abbreviated National Emission Standard for Hazardous Air Pollutants (NESHAP) inspection based on the scope of work determined by Cherokee Nation Housing Rehabilitation Department. Although not necessary for this type of report, the AHERA guidelines for asbestos sampling are followed. See Attachment A for scope of work to be performed.

'Friable' is used to describe asbestos that can be reduced to dust by hand pressure. 'Non-friable' means asbestos that is too hard to be reduced to dust by hand. Typical 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 or can be classified as Regulated Asbestos Containing Materials (RACM). Machine grinding, drilling, sanding, and dry-buffing are all ways of causing non-friable materials to become RACM.

In addition, asbestos is not always an immediate hazard. 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 the 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.

Definitions:

<u>Friable Asbestos Containing Material (ACM)</u> is defined by NESHAPS rules as any material containing more than one percent (1%) asbestos as determined by Polarized Light Microscopy 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 or asphalt roofing products that contain more than one percent (1%) asbestos as determined by Polarized Light Microscopy. Resilient floor covering includes floor tiles and roll sheet flooring.

Category II Non-friable ACM is defined by NESHAPS rules as any material, excluding Category I non-friable ACM, containing more than one percent (1%) asbestos as determined by Polarized Light Microscopy, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

In addition to classification of suspect materials into friable and non-friable materials, a determination of current condition was conducted as part of the physical assessment. Please note that the classification of condition by the inspector is representative of the material as viewed only during the on-site inspection. The condition of said materials can change very quickly when disturbed by contact, air erosion, or vibration damage after said inspection has been completed. All suspect material was placed in one of the following three categories of condition:

Significantly damaged: Material damaged, blistered, deteriorated, waster stained over at least one tenth (10%) of its total area.

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

Good: No visible damage or deterioration.

Sampling Protocol:

The number or samples collected per suspect homogeneous area was determined using the AHERA protocol promulgated in 40 CFR 763, Appendix E as follows:

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

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

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 materials 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 of one per suspect homogeneous area.
- · Collect samples from inconspicuous locations.
- Materials such as cementious asbestos or vibration dampening cloths should not be sampled and will be assumed asbestos containing materials unless instructed by client to collect these samples.

SECTION II - INSPECTION DESCRIPTION

Participant Information:

Willie Vann Rt. #1 Box 852 Watts, OK 74964 918-723-5960 Built In: 1970's

Date of Sampling:

12/8/2010

Sampled by:

Jeremy Freise

Section III - Sampling Results

Samples were collected from each homogeneous area according to protocol listed in section I. All samples were analyzed using Polarized Light Microscopy (PLM) in accordance with EPA Method 600R-93/116. If the presence of asbestos was confirmed, the percentage of asbestos containing material versus non-asbestos containing material was visually estimated by a combination of Polarized Light and Stereo Microscopy.

See Attachment B for photographs of homogeneous areas containing asbestos.

See Attachment C for Chain of Custody.

See Attachment D for Laboratory Results.

See Attachment E for Summary of Results.

Attachment A.

Scope of Work from Cherokee Nation Housing Rehabilitation

Date: 18 - 8 - 10

Project: WILLIE VANN

Inspector: JJF

Sample #	Description	Location	Mat. Type	Friability	Condition
01-01	VINYE SHEET FLOOR	KITCHEN	Misc	NON	6
08-01	VINYL SHEET FLOOR	LIVING ROOM	Misc	NON	6
08-01	CEILING TEXTURE	KITCHEN	SUR	FRI	G
03-00	CEILING TEXTURE	BATHROOM	SUR	FRI	6
03-03	CEILING TEXTURE	BEOROUM #/	SUR	FRI	6
04-01	VINYL SHEET FLOOR	BATHROOM	Misc	NON	6
05-01	WALL TEXTUEE	BEDROOM #1	SUR	FRI	6
<u> 65-69</u>	WALL TEXTURE	BED ROOM # 2	Sur	FRI	6
80-60	WALL TEXTURE	BEDROUM # 3	SUR	FRI	6
06-01	INSULATION	Ame	Plisc	NON	6
07-01	SIDING	EXTERIOR	MISC	NON	6
08-01	SHINGLES	Roof	misc	NON	G

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Environmental Review Request

Environmental Review X Lead-Based Paint X Asbestos X

Requesting Program: Housing Rehab

Program Contact Name/Phone: Shannon Noisey/453-5685

Funding Source (NAHASDA, ICDBG, RHED, etc.): NAHASDA

Date of Request: 11/22/10

Name of Participant: Willie Vann

Participant Phone Number: (918) 723-5960

Specific Project Description (rehab, replacement, demolition, emergency-if emergency please detail the work) Rehab

Does the Project include any ground disturbing activities? Yes

is there a structure currently located on site? Yes

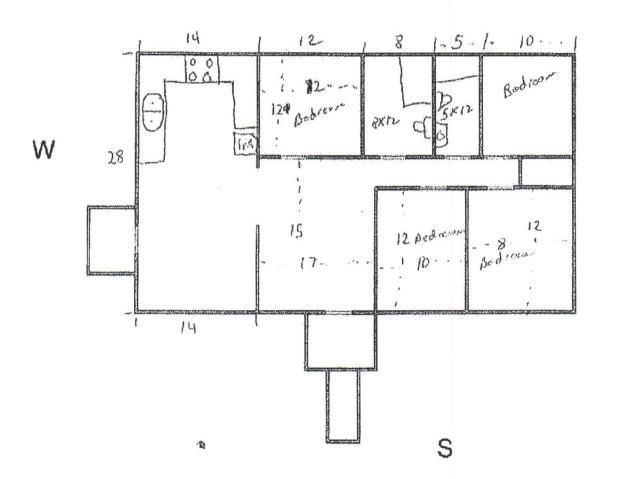
Age of the Structure: Built in 1970's

Physical Address/Legal Description of site: Rt. # 1 Box 852, Watts, OK 74964 SE SE NE & S2 NE SE less the east 132 feet thereof of Section 9, Township 19 North, Range 24 East, Adair County, Oklahoma

Driving Directions/Site Distinctions (color of house, mobile home, etc.): Starting from the Cherokee Nation Complex. Left go 15 turn right on 62 to 51E. turn on hwy 10 go 10 miles turn on Chewey Road turn left at store go 3 miles turn left on dirt road home on right in field.

Send to:
Wayne Isaacs
Cherokee Nation
Environmental Programs
wisaacs@cherokee.org
Office: 918-453-5359
Fax: 918-453-2904

Willie Vann N



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Attachment C. Chain of Custody

Asbestos Chain-of-Custody

2033 Heritage Park Orha, Okiahoma City, OK 73120-7502 (800) 822-1550 (405) 755-7272 Fax (405) 755-2058 Whyw.guantem.com

190186 This Box for Lab Use Only Lab No.

Project Name: LILLIE

Acet#: B

Company Name: CHEROKEE NATION

Project Location. WATTS OKUA

Project Number:

LEGAL DOCHMENT	Please Print Legibly		744	Ar-Atera	AIC-NIOBH 7400	Belk - OutStadve [Yes. + RO] - EPA SOCK-barrie	Buff - Cuantitains femigie 16; - Chatteid	Gust- Qualitative [Yes / No.]	Dust - Duandadive (Germany ord - ASTA) D3783	Destrict Water - EPA 100.3	WARRING MAKET - EPA 400% \$3-043	Ober	CONTACT INFORMATION	Name:	JEREMY J. FREISE	Phone: 918 -453-5097	Report Results VIA (CHOCISE ONE):	FAX:	A QuenTEM WebSite	E-Mag	L	A new p
TEG	Pleas		PLM	Bulk Analysis utter storeuser in	400 Point Czurt	1000 Point Court	Grivensthe Preparatus Feb	Chee		PCM	MOSH 7470	Other	TURNARGUND TIME	Rush	Same Day	X24 Hour	3-Day	5-Day			Surpose By	79
Comments	VITTUEL	Wine Room	CTOBELL	BATHROOM	BEDROOM#	BATHROOM	BEDROOM#	BEDROOM#O	BEDROOM#3	Arric	EXTERIOR	ROOF									2 00:01 olar	
Yolema / Area				e e	92		Ğ	æ	gu.					-							d 12/10	
Cofor / Description	VINSTE SHEET FLOOR	VINYL SHEET FLOOR	CELLING TEXTURE	CEILING TEXTURE	CELLING TEXTWRE	VINYL SHEET HOOR	WALL TEXTURE	WALL TEXTURE	WALL TEXTURE	INSULATION	Siding	SHINGLES								1:30 Pm	13.8.10 Stille	4
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Sample Number	01-01	03-01	63-01	60-50	03-03	04-01	10-50	60-90	05-03	06-01	07-01	08-01	A COLUMN TO THE PARTY OF THE PA			مدة والمساورة		essessing and the same of the		K. C.	ing 9. trus	10

DA

Saturday FedEx Shipping - CALL TO SCHEDULE
Use this address for Seturday FedEx only: 4220 N. Santa Fe Ave., Oklahoma City, OK 73105-8517.
Mark Package: HQLD FOR SATURDAY PICKUP

Raveace: May 2008

Attachment D. Laboratory Results



2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 190186

B191 Account Number:

Date Received:

Received By:

Methodology:

12/10/2010

Sherrie Leftwich 12/13/2010

Date Analyzed: Analyzed By:

Sandy Baker

EPA/600/R-93/116

Client:

Cherokee Nation

P.O. Box 948

Tahlequah, OK. 74465

Project:

Willie Vann

Project Location:

Watts, OK

Project Number:

N/A

QuanTEM Sample ID	Client Sample ID	Composition	Color/ Description	Asbestos (%)	Non-Asbestos Fiber (%)	a femilia de la composição de la composi	Non Fibrous
001	01-01	Homogeneous	Beige Sheet Vinyl	Asbestos Not Present	Cellulose Glass Fiber	15	Vinyl CaCO3
002	02-01	Homogeneous	Beige Sheet Vinyl	Asbestos Not Present	Cellulose Glass Fiber Synthetic	15 3 3	Vinyl CaCO3
003	03-01	Layered	White Celling Texture	Asbestos Not Present	Celiulose	<1	CaCO3 Binder
003a		Layered	White Sheetrock	Asbestos Not Present	Cellulose Glass Fiber	30	Gypsun CaCO3
004	03-02	Layered .	White Ceiling Texture	Asbestos Not Present	Cellulosc	<1	CaCO3 Binder
004a		Layered	White Sheetrock	Asbestos Not Present	Cellulose Glass Fiber	33	Gypsum CaCO3

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

QuanTEM is a NVLAP accredited TEM and PLM laboratory (Lab Code: 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the written approval of the Informatory.



2033 Heritage Park Drive / Oklahoma City, OK 73120 / (406) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 190186

Account Number:

B191

05-02

008

Layered

12/10/2010

Date Received: Received By:

Sherrie Leftwich

Date Analyzed: Analyzed By: Methodology:

12/13/2010

Sandy Baker EPA/600/R-93/116 Client:

Cherokee Nation

P.O. Box 948

Tahlequah, OK 74465

Project:

Willie Vann

Project Location:

Watts, OK

Project Number:

N/A

Asbestos Present

Chrysotile

<1

Non-Asbestos Non Fibrous

Cellulose

<1

Binder

Color/ Client QuanTEM Fiber (%) Asbestos (%) Description Sample ID Sample ID Composition Cellulose CaCO3 White Asbestos Not Present 03-03 Layered 005 Binder Ceiling Texturo Cellulose 30 Gypsum Asbestos Not Present White Layered 005a Glass Fiber CaCO3 Sheetrock Vinyl Cellulose Asbestas Not Present 04-01 Homogeneous Tan 006 Glass Fiber CaCO3 Sheet Vinyl CaCO3 Cellulose 21 Asbestos Not Present 05-01 Layered White 007 Binder Texture Ashestos Not Present Cellulose 35 Gypsum White Layered 007a 3 CaCO3 Glass Fiber Sheetrock CaCO3

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

White

Texture

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2033 Heritage Park Drive / Olvahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 190186

Account Number:

BIST

Date Received:

12/10/2010 Sherrie Leftwich

Received By: Date Analyzed:

12/13/2010 . Sandy Baker

Analyzed By: Methodology:

EPA/600/R-93/116

Client:

Cherokee Nation

P.O. Box 948

Tahlequah, OK 74465

Project:

Willie Vann

Project Location:

Watts, OK

Project Number:

NA

QuanTEM Sample ID	Client Sample ID	Composition	Cotor / Description	Asbestos (%)	Non-Asbestos Fiber (%)		Non Fibrous
008a	The state of the s	Layered	White Sheetrock	Asbestos Not Present	Celluloss Glass Fiber	30 4	Gypsum CaCO3
009	05-03	Layered	White Texture	Asbestos Present Chrysotile <1	Celluloso	<1	CaCO3 Binder
009a		Layered	White Sheetrock	Asbestos Not Present	Cellulose Glass Fiber	35	Gypsum CaCO3
010	06-01	Homogeneous	Brown Insulation	Asbestos Not Present	Cellulose	99	Binder
011	07-01	Homogeneous	Brown Siding	Asbestos Not Present	Cellulose	95	Binder
012	08-01	Layered	White Shingle	Asbestos Not Present	Cellulose	30	Quartz Tar

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

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2033 Heritage Park Drive / Oklahoma City, OK 73120 / (405) 755-7272 / Fax (405) 755-2058

Polarized Light Microscopy Asbestos Analysis Report

QuanTEM Lab No. 190186

Account Number:

B191

Date Received:

12/10/2010

Received By:

Sherrie Leftwich 12/13/2010

Date Analyzed: Analyzed By:

Methodology:

Sandy Baker

EPA/600/R-93/116

Client:

Cherukee Nation

P.O. Box 948

Tahlequah, OK 74465

Project:

Willie Vann

Project Location:

Watts, OK

Project Number:

N/A

QuanTEM Sample ID

012a

Client

Sample ID

Composition

Layered

Color / Description

Asbestos (%)

Non-Asbestos Fiber (%)

Non Fibrous

Black Shingle Asbestos Not Present

Cellulose

Quartz Tar

12/13/2010 Date of Report

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

QuantEM is a NVLAP accredited TEM and PLM laboratory (Lab Code; 101959-0). This report relates only to the specific items tested. NVLAP accreditation applies only to analysis performed utilizing EPA/600/M4-82-020 and EPA/600/R-93/116 methods. This report may not be used to claim product endorsement by NVLAP or any other agency of the US Government. This report may not be reproduced except in full, without the written approval of the laboratory.

Attachment E. Summary of Results

Area Not Layered or Area Not Layered	ald in the second secon	(size, color, material etc.)	Non Friable Cat. I or II	Condition	Sample Location	Content	Classification
Not	01-01	Beige Vinyl Sheet Floor	Non-Friable	Ð	Kitchen	N/A	N/A
Not	02-01	Beige Vinyl Sheet Floor	Non-Friable	Ö	Living Room	N/A	N/A
Layered	03-01	White Ceiling Texture/White Sheetrock	Friable	Ð	Kitchen	N/A; N/A	N/A, N/A
Layered	03-02	White Ceiling Texture/White Sheetrock	Friable	Ŋ	Bathroom	N/A, N/A	N/A, N/A
Layered	03-03	White Ceiling Texture/White Sheetrock	Friable	Ð	Bedroom #1	N'A, N'A	N/A, N/A
Not	04-01	Tan Vinyl Sheet Floor	Non-Friable	9	Bathroom	N/A	N/A
Layered	05-01	White Wall Texture/White Sheetrock	Friable	Ð	Bedroom #1	N'A, N'A	N/A, N/A
Layered	05-02	White Wall Texture/White Sheetrock	Friable	D	Bedroom #2	Less Than 1%, N/A	N/A, N/A
Layered	05-03	White Wall Texture/White Sheerock	Friable	Ö	Bedroom #3	Less Than 1%, N/A	N/A, N/A
Not	0-90	Brown Insulation	Non-Friable	Ġ	Attic	N/A	N/A
Not	07-01	Brown Siding	Non-Friable	Ð	Exterior	N/A	N/A
Layered	10-80	White Shingle/Black Shingle	Non-Friable	Ö	Roof	NA	N/A
		THE PROPERTY OF THE PROPERTY O					

Cat. I = Category I non-friable materials
Cat. II = Category II non friable materials
RACM = Regulated asbestos containing materials
D = Damaged condition
G = Good Condition
S = Significantly damaged condition
N/A = Not applicable
Assumed = Assumed asbestos containing material