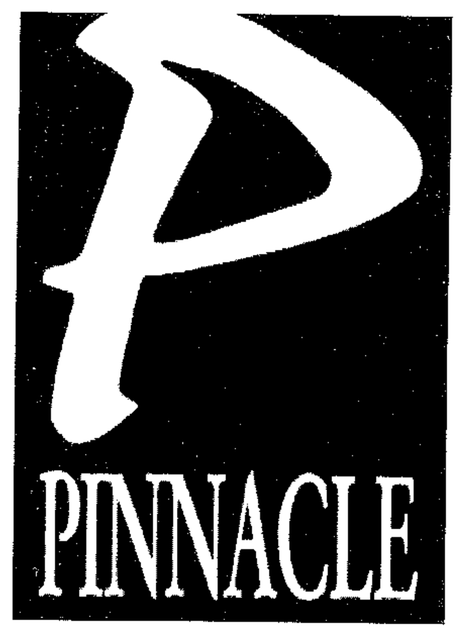
Asbestos Inspection Report
For a structure of approximately 1,040 sf
Located at 2003 Wilson Street
Dunbar, West Virginia 25064

125 sf of Asbestos Tar Material
2,000 sf of Asbestos Joint Compound Material
115 sf of Asbestos Yellow Linoleum Material

Pinnacle Project No. 15W-0161
Prepared for

City of Dunbar
210 12th Street
Dunbar, West Virginia 25064
(304) 742-7807
Prepared by



Pinnacle Environmental Consultants
400 D Prestige Park
Hurricane, West Virginia 25526
(304) 539-2954

Josh Fields

Josh Fields
Asbestos Inspection License # AI008215

August 28, 2015

On August 26, 2015 Mr. Josh Fields of Pinnacle Environmental Consultants, Inc. (see Attachment 1 for certifications) visited an approximately 1,040 square foot dwelling located at 2003 Wilson Street, in Dunbar, WV per your request. The purpose of this visit was to collect bulk samples of materials suspect for containing asbestos prior to planned demolition of the structure for compliance with the National Emission Standards for Hazardous Air Pollutants (NESHAP). Specifically, **Eighteen (18)** bulk samples were collected from **six (6)** homogeneous areas. Analytical results show that **three (3)** homogeneous areas were identified with asbestos content greater than one percent (>1%). Please reference the *PLM Bulk Sample Data Summary Table* in Attachment 2 for complete sample location and description information.

Sampling Methodology

For friable Surfacing Materials, three (3) bulk samples were collected for each homogeneous area less than or equal to one thousand square feet (1,000 ft^2). If the homogeneous area was greater than one thousand square feet (1,000 ft^2) but less than five thousand square feet (5,000 ft^2), five (5) bulk samples were collected. For homogeneous areas that were greater than five thousand square feet (5,000 ft^2), seven (7) bulk samples were collected. Random sample locations for each homogeneous area of suspect friable surfacing materials were determined by Pinnacle's inspector in the field.

Three (3) samples were randomly collected from homogeneous areas of Thermal System Insulation such as pipe insulation. Miscellaneous Material and non-friable suspected ACBM were sampled "in a manner sufficient to determine" whether the material in question contained asbestos.

To avoid disturbing the material more than necessary and potentially cause the release of asbestos fibers, Pinnacle performed bulk sampling of suspect materials in accordance with generally accepted procedures outlined in the Asbestos Hazard Emergency Response Act (AHERA). Each sample was collected and placed in a clean, sealable vial and labeled with a unique sample identification number. This sample number was recorded on a Bulk Sample Log Sheet, the sample vial, and at the sample location to permit easy identification of the sampled materials in the future.

Supplemental information was also recorded on the Bulk Sample Log Sheet, including date of inspection, name of Pinnacle's inspector, the building name (or number), a brief description and location of the sample, and type of material sampled (e.g. thermal insulation, fireproofing, hard plaster, etc.).

Analysis of Samples

The bulk samples were submitted to Pinnacle's Analytical Laboratory (see Attachment 3 for a copy of West Virginia laboratory license and NVLAP accreditation) and analyzed for asbestos content by PLM and dispersion staining (Method Reference: EPA-600/R-93/116). This analytical method, which the EPA currently recommends for the determination of asbestos in bulk samples of suspect materials, can be used for qualitative identification of six (6) morphologically different types of asbestos fibers: Chrysotile, Amosite, Crocidolite, Anthophyllite, Tremolite, and Actinolite asbestos. The method specified that the asbestos content in a bulk sample will be estimated and reported as a finite percentage (rounded to the nearest percentage) within the range of zero to one hundred percent (0% to 100%).

The results of the bulk sample analysis are reported in a standard laboratory report. This report includes Pinnacle's project number, the laboratory identification number and the field number assigned to the bulk sample upon collection at the site. If a bulk sample contains more than one distinct layer of material, each layer is analyzed separately.

The composition of the bulk sample is reported in percentages of asbestos (i.e., Chrysotile, Amosite or other) and non-asbestos (i.e., cellulose, fiberglass or other) components.

If a bulk sample of friable material has less than ten percent (<10%) asbestos content, the EPA recommends the sample be analyzed by the point count method reference PLM, EPA 600/R-93/116. This analytical method is a more accurate way of determining the actual asbestos percentage. For this project, **zero (0)** samples were analyzed using point count methods. A copy of the original laboratory report and sample chain-of-custody for PLM analysis can be found in Attachment 4.

Results and Conclusions

The asbestos inspection identified **three (3)** homogeneous area that will require removal prior to traditional demolition activities. The locations and quantities of materials known or assumed to contain >1% asbestos can be found on the *Inventory of Asbestos-Containing Material Table* in Attachment 5 with this letter. Current asbestos laws and regulations require removal of asbestos-containing materials (ACM) prior to initiation of
demolition activities. Since removal of ACM is necessary, a West Virginia Bureau for Public Health licensed asbestos abatement contractor should be contracted to perform the removal work and submit necessary regulatory notifications.

Based on the limited access of the bulk sampling survey (i.e., nondestructive inspection), caution should be exercised during the demolition project in the event materials known or suspected to contain asbestos are exposed during the demolition work. In the event additional material suspected to contain asbestos is discovered during this project, work with the potential for disturbance should be stopped until sampling and analysis has been performed. A professional consultant licensed by the West Virginia Bureau for Public Health as an asbestos inspector should conduct all asbestos bulk sampling. Laboratories licensed by the West Virginia Bureau for Public Health and accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) or the American Industrial Hygiene Association (AIHA) should perform analysis of all bulk samples collected.

Pinnacle greatly appreciates the opportunity to offer our services to City of Dunbar for this most important project. Should you have any questions or require additional information, please feel free to contact me at your earliest convenience (304) 757-5204.

Sincerely,
Pinnacle Environmental Consultants, Inc.
Josh Fields
Josh Fields

Attachments (6)

PINNACLE
ENVIRONMENTAL
OH 513-533-1823
WV 304-757-5204

Pinnacle Environmental Consultar

400-D Prestige Park
Hurricane, WV 25526
www.pinnacleinc.biz

JOSHUA FIELDS

Has successfully completed the Asbestos Inspector Refresher Course with of score of seventy percent
This course is West Virginia (*WV*) and Environmental Protection Agency (*EPA*) approved and meets the
CFR part 763 Asbestos Hazard Emergency Response Act (*AHERA*) for purposes of accreditation require
II. This class was conducted at the Pinnacle Training Facility located in Hurricane, WV

Training Dates	***Training Hours***	***Certificate Identificati***
04-17-15	4	AIR-041715-005
Exam Date	***Expiration Date***	
04-17-15	04-17-16	

Instructor

Attachment 2

PLM BULK SAMPLE DATA SUMMARY TABLE

PINNACLE ENVIRONMENTAL
OH 513-533-1823
WV 304-757-5204

DATE: 8/26/2015
INSPECTOR: Josh Fields
LOCATION: 2003 Wilson
Dunbar, WV 25064
PROJECT NUMBER: 15W-0161

Sample # / Lab ID #	Sample Location	Sample Description	H.A. #	Quantity	Results
15WB-13795	Roof	Shingle	1	N/A	None Detected
0161-1					
15WB-13796					
0161-2					
15WB-13797					
0161-3					
15WB-13798	***Roof***	***Tar***	***2***	***125 SF***	***2% Chrysotile***
0161-4					
15WB-13799					***2% Chrysotile***
0161-5					
15WB-13800					***2% Chrysotile***
0161-6					
15WB-13801a	Living Room	Drywall	3	N/A	None Detected
0161-7					
15WB-13801b	***Living Room***	***Drywall***		***960 SF***	***2% Chrysotile***
0161-7					
15WB-13802a	Kitchen	Drywall		N/A	None Detected
0161-8					
15WB-13802b	***Kitchen***	***Drywall***		***1040 SF***	***2% Chrysotile***
0161-8					
15WB-13803	Bedroom	Yellow Linoleum	4	N/A	None Detected
0161-9					
15WB-13804	***Bedroom***	***Yellow Linoleum***	***4***	***115 SF***	***9% Chrysotile***
0161-10					
15WB-13805					***10% Chrysotile***
0161-11					
15WB-13806	***Hallway***				***10% Chrysotile***
0161-12					
15WB-13807	Kitchen	White and Green Linoleum	5	N/A	None Detected
0161-13					
15WB-13808					
0161-14					
15WB-13809					
0161-15					
15WB-13810	Outside Home Front	Shingle Siding	6		
0161-16					
15WB-13811	Inside Front				
0161-17					
15WB-13812	Above Front Door				
0161-18					

Attachment 3

WV LABORATORY LICENSE AND NVLAP ACCREDITATION

MICA

certifies that

Jamell N. Hart

has successfully completed an intensive course of instruction in

Asbestos Identification Using Polarized Light M

given by Microscopy Instruction, Consultation & Analysis

presented this 14th day of November, 2014

MICA

License #
Issued:
Expires:

State of West Virginia

Bureau for Public Health
Office of Environmental Health Services
Radiation, Toxics and Indoor Air Division
This is to certify that

Pinnacle Environmental Consultants, Inc.

400-D Prestige Park

Hurricane, WV 25526

Has complied with Chapter 16, Article 32, of the Asbestos Abatement Licensing Rules and Regulations and is hereby licensed as an Asbestos Air and Bulk Sample Analytical Laboratory.

Asbestos Laboratory License Number::
LT000499

Issued: **11/25/2014** ***Expires:***

Walter M. Ivey, Directo
Office of Environmenta

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17(

NVLAP LAB CODE: 200718-0

Pinnacle Environmental Consultants, Inc.

Hurricane, WV

is accredited by the National Voluntary Laboratory Accreditation Program for specific ser
listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO.
This accreditation demonstrates technical competence for a defined scope and the operation c
management system (refer to joint ISO-ILAC-IAF Communique dated January 2

2015-06-22 through 2016-06-30

Effective Dates

DEPARTMENT OF COMMERCE * UNITED STATES OF AMERICA *

For the National Voluntary Labor

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Pinnacle Environmental Consultants, Inc.
400D Prestige Park
Hurricane, WV 25526-8420
Ms. Jamell Hart
Phone: 304-757-5204 Fax: 304-757-5205
Email: jhart@pinnacleinc.biz
http://www.pinnacleinc.biz

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 200718-0

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA 600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

Effective 2015-06-22 through 2016-06-30

Attachment 4

LABORATORY REPORT AND SAMPLE CHAIN-OF-CUSTODY

Asbestos Identification by Polarized Light Microscopy
Analysis Report

400-D Prestige Park
Hurricane, West Virginia 25526
Phone: 304-757-5204
Fax: 304-757-5205

NVLAP LAB CODE: 200718-0

WV License #: LT000499

VA License #: 333 000241

Attn: Mark Samples
Pinnacle Environmental Consultants, INC. - WV
400D Prestige Park
Hurricane, WV 25526

Received Date: 8/26/2015
Analysis Date: 8/27-28/2015
RE: **2003 Wilson Street, Dunbar, WV**

PEC Project #: 15W-0161
Client Project/PO #:

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13795	0161-1		Black/Green

Texture/Description: Solid/
TOTAL ASBESTOS: 0 %
Chrysotile: 0% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 4% Fiber Glass: 0% Others: 5% Filler/Binder: 91 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13796	0161-2		Black/Green

Texture/Description: Solid/
TOTAL ASBESTOS: 0 %
Chrysotile: 0% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 4% Fiber Glass: 0% Others: 4% Filler/Binder: 92 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13797	0161-3		Black/Green

Texture/Description: Solid/
TOTAL ASBESTOS: 0 %
Chrysotile: 0% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 4% Fiber Glass: 0% Others: 5% Filler/Binder: 91 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13798	0161-4		Black/Brown

Texture/Description: Solid/
TOTAL ASBESTOS: 2 %
Chrysotile: 2% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 3% Fiber Glass: 0% Others: 6% Filler/Binder: 89 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13799	0161-5		Black/Brown

Texture/Description: Solid/
TOTAL ASBESTOS: 2 %
Chrysotile: 2% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 3% Fiber Glass: 0% Others: 5% Filler/Binder: 90 %

RE: **2003 Wilson Street, Dunbar, WV**

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13800	0161-6		Black/Brown

Texture/Description: Solid/
TOTAL ASBESTOS: 2 %
Chrysotile: 2% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 4% Fiber Glass: 0% Others: 5% Filler/Binder: 89 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13801a	0161-7		White

Texture/Description: Solid/
TOTAL ASBESTOS: 0 %
Chrysotile: 0% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 6% Fiber Glass: 0% Others: 0% Filler/Binder: 94 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13801b	0161-7		Beige/Pink

Texture/Description: Solid/
TOTAL ASBESTOS: 2 %
Chrysotile: 2% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 0% Fiber Glass: 0% Others: 0% Filler/Binder: 98 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13802a	0161-8		White

Texture/Description: Solid/
TOTAL ASBESTOS: 0 %
Chrysotile: 0% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 6% Fiber Glass: 0% Others: 0% Filler/Binder: 94 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13802b	0161-8		Beige

Texture/Description: Solid/
TOTAL ASBESTOS: 2 %
Chrysotile: 2% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 0% Fiber Glass: 0% Others: 0% Filler/Binder: 98 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13803	0161-9		White

Texture/Description: Solid/
TOTAL ASBESTOS: 0 %
Chrysotile: 0% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 5% Fiber Glass: 0% Others: 0% Filler/Binder: 95 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13804	0161-10		Yellow/Beige

Texture/Description: Solid/
TOTAL ASBESTOS: 9 %
Chrysotile: 9% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 2% Fiber Glass: 0% Others: 0% Filler/Binder: 89 %

RE: **2003 Wilson Street, Dunbar, WV**

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13805	0161-11		Yellow/Beige

Texture/Description: Solid/
TOTAL ASBESTOS: 10 %
Chrysotile: 10% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 0% Fiber Glass: 0% Others: 2% Filler/Binder: 88 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13806	0161-12		Yellow/Beige

Texture/Description: Solid/
TOTAL ASBESTOS: 10 %
Chrysotile: 10% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 0% Fiber Glass: 0% Others: 2% Filler/Binder: 88 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13807	0161-13		Beige/Green

Texture/Description: Solid/
TOTAL ASBESTOS: 0 %
Chrysotile: 0% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 16% Fiber Glass: 0% Others: 7% Filler/Binder: 77 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13808	0161-14		Beige/Green

Texture/Description: Solid/
TOTAL ASBESTOS: 0 %
Chrysotile: 0% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 15% Fiber Glass: 0% Others: 7% Filler/Binder: 78 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13809	0161-15		Beige/Green

Texture/Description: Solid/
TOTAL ASBESTOS: 0 %
Chrysotile: 0% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 16% Fiber Glass: 0% Others: 7% Filler/Binder: 77 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13810	0161-16		Black/Orange

Texture/Description: Solid/
TOTAL ASBESTOS: 0 %
Chrysotile: 0% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 9% Fiber Glass: 0% Others: 5% Filler/Binder: 86 %

PEC LAB #:	CLIENT ID #:	LOCATION:	COLOR:
15WB-13811	0161-17		Black/Orange

Texture/Description: Solid/
TOTAL ASBESTOS: 0 %
Chrysotile: 0% Tremolite: 0% Anthophyllite: 0%
Amosite: 0% Actinolite: 0% Crocidolite: 0%
Cellulose: 10% Fiber Glass: 0% Others: 5% Filler/Binder: 85 %

RE: **2003 Wilson Street, Dunbar, WV**

PEC LAB #:	**CLIENT ID #:**	**LOCATION:**	**COLOR:**
15WB-13812	0161-18		**Black/Orange**

Texture/Description: Solid/

TOTAL ASBESTOS: 0 %

Chrysotile: 0% Tremolite: 0% Anthophyllite: 0%

Amosite: 0% Actinolite: 0% Crocidolite: 0%

Cellulose: 10% Fiber Glass: 0% Others: 6% Filler/Binder: 84 %

Analytical Method: Polarized light microscopy using dispersion staining (EPA-600/M4-82-020). PLM should not be used to demonstrate the absence of asbestos in floor tiles. All samples will be held for sixty (60) days unless otherwise requested. This report relates only to items tested and makes no statement as to the contents of surrounding materials. Multi-layered material which have distinct and separable layers shall be reported separately. This report shall not be reproduced, except in full, without written permission. The results of this report should not be used as an endorsement for NVLAP or any other government agency.

Analyzed by: Jamell Hart

Chain of Custody Form

PINNACLE

PINNACLE ENVIRONMENTAL CONSULTANTS, INC.

☒ 400D Prestige Park, Hurricane, WV 25526 P: (304) 757-5204 F: (304) 757-5205

☐ 486 Old ST RT 74, Cincinnati, OH 45244 P: (513) 533-1823 F: (513) 533-1859

NAME: Josh Fields
COMPANY:
ADDRESS:
CITY, STATE, ZIP:
TELEPHONE: ( ) FAX: ( )
EMAIL:

REQUEST FOR ANALYTICAL LA

DATE RESULTS REQUIRED:
RUSH CHARGES AUTHORIZED: ☒
NAME: Mark Samples
COMPANY:
ADDRESS:
CITY, STATE, ZIP:
PURCHASE ORDER #:
CLIENT JOB #: 15W-0161

*Point Counts performed per client re

DATE SAMPLED			TIME SAMPLED	PLM*	PCM	TEM	OTHER:
8/26/15	0161-1	Misc Building material		X			
	~~0161-17~~ 0161-18						

RE:

COLLECTED BY: Josh Fields (print) DATE/TIME 8/26/15

RELINQUISHED BY: Josh Fields 8/26/15

RELINQUISHED BY: 8/26/15

RECEIVED AT LAB BY: 8/26/15

ANALYZE TO THE POSITIVE? ☐ YES

Collector's Signature: Josh Fiel

RECEIVED BY:

RECEIVED BY:

Sample Condition Upon Receipt: ☐ Accep

* Samples will be held for sixty (60) days after analysis date, unless otherwise requested by the client*

WVPEC-10/Revision 05

Attachment 5

INVENTORY OF ASBESTOS-CONTAINING MATERIAL TABLE

INVENTORY OF ASBESTOS-CONTAINING MATERIAL AT
2003 Wilson Street
Dunbar, WV 25064

Material Location	Material Description	Homogenous Area #	Type ACM	Estimated Quantity*	Category-Friable/ Nonfriable
Roof	Tar	2	Misc	125 SF	Categoryl
Living Room	Joint Compound	3		960 SF	
Kitchen				1040 SF	
Bedroom	Yellow Linoleum	4		115 SF	
Hallway					

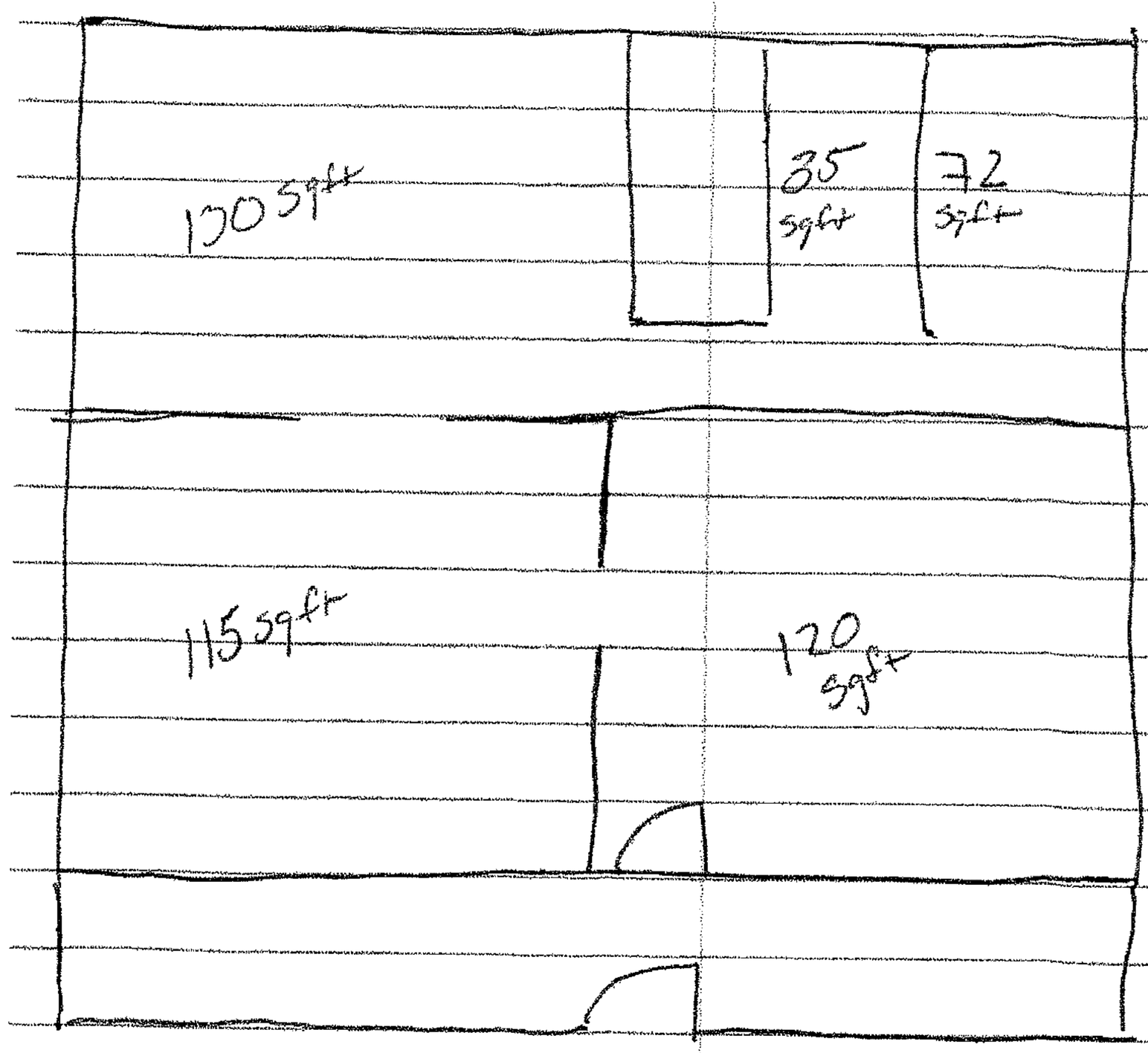
NOTES:
ftgs = fittings
lf = linear feet
sf = square feet
Surf = Surfacing
TSI = Thermal System Insulation
Misc = Miscellaneous
* = Quantities have been estimated for known or assumed ACM that was accessible during the site inspection.
Actual quantities may vary during demolition or renovation work that may expose additional materials.
† = material assumed to contain asbestos

EPA Categories
RACM - Regulated Asbestos-Containing Materials (Friable)
Category I Nonfriable - resilient flooring, roofing products, gaskets, packings
Category II Nonfriable - all other nonfriable asbestos-containing materials

Attachment 6

SCHEMATIC

2003 Wilson st

Dunbar, WV

Roof 1,000 sqft