# EXHIBIT "C"

COMPREHENSIVE ASBESTOS SURVEYS
ASBESTOS ABATEMENT REMOVAL
1242 YEAMANS HALL ROAD
1240 YEAMANS HALL ROAD
5902 HOWARD STREET

# COMPREHENSIVE ASBESTOS SURVEY

# COMMERCIAL BUILDING 1240 YEAMANS HALL ROAD HANAHAN, SC 29410



Prepared For:

CITY OF HANAHAN Attn: Mrs. Katherine Farias 1255 Yeamans Hall Road Hanahan, SC 29410 (843) 576-5254

Performed By:



Trident Environmental Services, Inc.

Consultants in Industrial Hygiene and Safety 500 Oakbrook Lane, Suite E Summerville, SC 29485 (843) 873-3648

# COMPREHENSIVE ASBESTOS SURVEY

Commercial Building 1240 Yeamans Hall Road Hanahan, SC 29410

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## **EXECUTIVE SUMMARY**

The comprehensive asbestos survey performed by Trident Environmental Services, Inc. on September 18, 2018 of the Commercial Building located at 1240 Yearnans Hall Road in Hanahan, South Carolina did reveal the presence of asbestos containing building materials. The following summary exhibits the asbestos containing building materials (ACBM) that were identified in the inspection.

## **Asbestos**

Description	Туре
Transite Siding	Category II – Non Friable
Exterior Caulk	Category I – Non Friable
9" Floor Tile (beige)	RACM – Friable
Floor Tile Mastic (black)	Category I – Non Friable
Vinyl Sheet Flooring (yellow squares)	RACM – Friable
Vinyl Mastic (black)	Category I – Non Friable
Drywall/Joint Compound	RACM – Friable

RACM - Regulated Asbestos Containing Material

The identified ACBM includes the item(s) listed above. All removal work of the identified ACBM should be performed by a properly trained and licensed abatement contractor prior to the planned renovation/demolition activities.



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## **BACKGROUND**

Trident Environmental Services, Inc. was contracted by City of Hanahan to perform a comprehensive asbestos survey of the Commercial Building located at 1240 Yeamans Hall Road in Hanahan, South Carolina. The survey was performed in order to satisfy the NESHAP requirements for renovation and/or demolition. The structure is a one bedroom, one bathroom duplex constructed on foundation and consisting of approximately 800 square feet. Interior walls and ceilings are drywall with joint compound applied at the seams and patches. Floor finishes include vinyl floor tiles, vinyl sheet flooring, hardwood and carpet. Roofing material consists of asphalt shingles and felt paper. Exterior construction is wood, with wood trim, soffits, eaves doors/windows and transite siding,

## **Asbestos**

The inspection was conducted to identify asbestos-containing building materials (ACBM) which may be disturbed during the renovation/demolition activities. The identification of ACBM will aid in the prevention of occupational exposures and/or environmental releases of airborne asbestos fibers. Identification of ACBM also complies with Title 40 Code of the Federal Regulations, Part 61, and South Carolina Department of Health and Environmental Control (SCDHEC) Regulation 61-86.1, along with Title 29 Code of Federal Regulations, Part 1926 enforced by the Occupational Safety and Health Administration (OSHA). The Asbestos Survey describes the investigative procedures utilized, results of the suspect ACBM sampled/analyzed, and recommendations regarding the structures as related to asbestos.

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## **ASBESTOS SURVEY**

## **Asbestos Investigative Procedures**

Trident Environmental Services, Inc. conducted an inspection for suspect ACBM on September 18, 2018 of the Commercial Building located at 1240 Yeamans Hall Road in Hanahan, South Carolina. It is our understanding that the subject structure will undergo renovation or demolition activities in the near future. The asbestos survey was performed by observing and sampling suspect building materials. Significant destructive testing was not utilized during the inspection. There is a possibility that suspect materials exist in inaccessible areas such as wall cavities and pipe chases. If any additional suspect ACBM are discovered during the course of demolition activities, bulk samples should be extracted to identify the presence, or absence, of asbestos prior to continuation of work activities.

A sampling strategy was developed to provide representative samples for analysis. Samples were then extracted from a variety of suspect ACBM. Bulk samples collected were—recorded on a Chain-of-Custody record and submitted to Trident Environmental Service Center, Inc. (TESC) a Polarized Light Microscopy (PLM) laboratory. The laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), which is administered by the National Institute of Standards and Technology (NIST). TESC is accredited by NVLAP for the analysis of bulk asbestos by PLM (NVLAP Lab Code: 200794-0).

The suspect materials were analyzed by trained microscopists utilizing PLM techniques coupled with dispersion staining in accordance with EPA Test Method Title 40 Code of Federal Regulations, Chapter 1 (1-1-87 edition), Part 763, Subpart F- Appendix A. This method identifies asbestos mineral fibers based on six optical characteristics: morphology, birefringence, refractive index, extinction angle, sign of elongation and dispersion staining colors. The laboratory analysis reports the specific type of asbestos identified (there are six asbestos minerals) and the percentage of asbestos present. The EPA and OSHA defines materials as asbestos containing if an asbestos content of greater than one percent (>1%) is detected in a representative sample.

Non-Friable Organically Bound (NOB) samples were submitted to AmeriSci Richmond Laboratory for analyses by Transmission Electron Microscopy (TEM). SCDHEC requires NOB materials with negative or trace results by PLM to be analyzed by at least one TEM. SCDHEC in accordance with ASTM E 2356-04 defines NOB materials as "materials that are not friable and that consist of fibers and other particulate matter embedded in a solid matrix of asphalt, vinyl or other organic substances." Examples of NOB materials include but are not limited to flooring materials such as vinyl floor tiles, vinyl sheet flooring, adhesives, mastics, asphalt shingles, roofing materials, glazing, caulks, and cove base.



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The EPA classifies ACBM into two categories, friable and non-friable. A friable material creates a greater health hazard due to the fact that it may be "crumbled, pulverized or reduced to powder by the forces expected to act upon it in the course of demolition or renovation operations."

Friable Asbestos material means any material containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763 section 1, Polarized Light Microscopy, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

Category I Non Friable Asbestos-Containing Material (ACM) means asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763, section 1, Polarized Light Microscopy.

Category II Non Friable ACM means any material, excluding Category I non friable ACM, containing more than one percent asbestos as determined using the methods specified in appendix A, subpart F, 40 CFR part 763, section I, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. (cement siding, transite board shingles, etc.)

Regulated Asbestos-Containing Material (RACM) means (a) Friable asbestos material, (b) Category I non friable ACM that has become friable, (c) Category I non friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The following section summarizes the sample numbers, locations, type material, asbestos type, percent of asbestos detected, present condition of the asbestos containing material, potential for disturbance, and hazard assessment ratings. The asbestos sample laboratory analyses and chain of custody records are included at the end of this report.

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## **Asbestos Abbreviations and Hazard Assessment Key**

The EPA and SCDHEC require that confirmed ACBM is given a hazard assessment based on its present condition and potential for future disturbance. This hazard assessment is used as a tool for prioritization in future remedial actions regarding the ACBM. The following key demonstrates the criteria that make up the hazard assessment.

## **Present Condition**

F = Friable

G = Good (very localized limited damage)

NF = Non-friable

D = Damaged (<10% distributed and/or <25% localized)

S = Significantly Damaged (≥10% distributed and/or 25% localized)

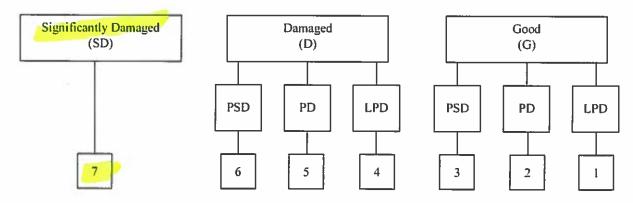
## Potential for Future Disturbance

LPD = Low Potential for Disturbance (Contact, Vibration, and/or Air Erosion – low concern)

PD = Potential for Damage (Contact, Vibration, and/or Air Erosion – moderate concern)

PSD = Potential for Significant Damage (Contact, Vibration and/or Air Erosion – high concern)

## **Hazard Assessment**



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# <u>HOMOGENOUS AREA ESTIMATED FOOTAGE TABLE</u> Commercial Building – 1240 Yeamans Hall Road – Hanahan, SC

HOMOGENOUS AREA ID#	DESCRIPTION	ESTIMATED AMOUNT
01	Transite Siding	1,440 SF
02	Siding Felt	1,400 SF
03	Window Glazing	44 SF
04	Exterior Caulk	80 SF
05	Roof Shingle	960 SF
06	Roof Felt	960 SF
07	Brick Mastic (black)	8 SF
08	16" Self-Stick Floor Tile (gray stone)	100 SF
09	Vinyl Sheet Flooring (gray/white squares)	100 SF
10	12" Self-Stick Floor Tile (slate)	50 SF
11	Vinyl Sheet Flooring (green pebble)	140 SF
12	Vinyl Mastic (black)	140 SF
13	9" Floor Tile (beige)	200 SF
14	Floor Tile Mastic (black)	336 SF
15	Vinyl Sheet Flooring (yellow squares)	50 SF
16	Vinyl Mastic (black)	50 SF
17	Vinyl Sheet Flooring (beige)	50 SF
18	Vinyl Sheet Flooring (beige slate)	100 SF
19	Drywall	3,200 SF
20	Joint Compound	3,200 SF

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## <u>ASBESTOS SUMMARY</u> Commercial Building – 1240 Yeamans Hall Road – Hanahan, SC

DESCRIPTION	ТҮРЕ	ESTIMATED AMOUNT
Transite Siding	Category II - Non Friable	1,440 SF
Exterior Caulk	Category I – Non Friable	80 SF
9" Floor Tile (beige) / Mastic	RACM – Friable	200 SF
Vinyl Sheet Flooring (yellow squares)	RACM – Friable	50 SF
Vinyl Mastic (black)	Category I - Non Friable	50 SF
Drywall/Joint Compound	RACM - Friable	3,200 SF

RACM - Regulated Asbestos Containing Material

\*PACM - Presumed Asbestos Containing Material

SCDHEC requires any non-friable material that is identified in an asbestos inspection report in a condition other than good and non-friable must be handled as a Regulated Asbestos Containing Material (RACM) and identified as friable on the asbestos abatement application. This requirement is reflected in the Asbestos Summary Table listed above.

Asbestos fibers were identified in the Transite Siding. Approximately 1,440 square feet is present and in good condition. This material is considered Category II – Non Friable Asbestos and is located on the exterior walls.

Asbestos fibers were identified in the Exterior Caulk. Approximately 80 square feet is present and in good condition. This material is considered Category I – Non Friable Asbestos and is located around exterior windows and doors.

Asbestos fibers were identified in the 9" Floor Tile (beige) and the associated Floor Tile Mastic (black). Approximately 236 square feet of each is present and is significantly damaged condition. These materials are considered RACM — Friable Asbestos and are located in Bedroom B (layer 2) and Bedroom A (layer 1). Note: Floor Tiles may be located under cabinets, appliance and non-load bearing walls.

Asbestos fibers were identified in the Vinyl Sheet Flooring (yellow squares) and the associated Floor Tile Mastic (black). Approximately 50 square feet is present and in good condition. The materials are considered RACM – Friable Asbestos and is located in Bathroom A. (layer 2) Note: Floor Tiles may be located under cabinets, appliance and non-load bearing walls.

The estimated quantities provided should be verified by contractor and/or building owner. Any discrepancies are to be addressed prior to removal of ACM. Please note that removal costs vary depending on the contractor, the quantity/condition of the ACM, and the accessibility/location of the ACM.



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# **ASBESTOS SAMPLE DATA TABLE** Commercial Building - 1240 Yeamans Hall Road - Hanahan, SC

	DESCRIPTION OF EACH S	AMPLE AREA		LABOR	ATORY	ASSESS OF MAT	
Homogeneous			Friable	Asbestos Present		Condition	Hazard
Area & Sample ID	Description	Location/Room #	(Y/N)	Percent	Asbestos	Assessment Gategory	Assessmen Category
01-01	Transite Panel	Exterior Siding	N	10.0%	CHRY	7	3
01-02	Transite Panel	Exterior Siding	N	NT	PACM	7	3
01-03	Transite Panel	Exterior Siding	N	NT	PACM	7	3
02-04	Siding Felt	Exterior Siding	N	0.0%	ND	7	N/A
02-05	Siding Felt	Exterior Siding	N	0.0%	ND	7	N/A
02-06 T	Siding Felt	Exterior Siding	N	0.0%	ND	7	N/A
03-07	Window Glazing	Window 1	Y	0.0%	ND	7	N/A
03-08	Window Glazing	Window 2	Y	0.0%	ND	7	N/A
03-09 T	Window Glazing	Window 3	Y	0.0%	ND	7	N/A
04-10	Exterior Caulk	Window	N	2.0%	CHRY	7	1
04-11	Exterior Caulk	Door	N	NT	PACM	7	1
04-12	Exterior Caulk	Door	N	NT	PACM	7	1
05-13	Roof Shingle	Exterior Roof	N	0.0%	ND	7	N/A
05-14	Roof Shingle	Exterior Roof	N	0.0%	ND	7	N/A
05-15 T	Roof Shingle	Exterior Roof	N	0.0%	ND	7	N/A
06-16	Roof Felt	Exterior Roof	N	0.0%	ND	7	N/A
06-17	Roof Felt	Exterior Roof	N	0.0%	ND	7	N/A
06-18 T	Roof Felt	Exterior Roof	N	0.0%	ND	7	N/A
07-19	Brick Mastic (black)	Exterior Roof	N	0.0%	ND	7	N/A
07-20	Brick Mastic (black)	Exterior Roof	N	0.0%	ND	7	N/A
07-21 T	Brick Mastic (black)	Exterior Roof	N	0.0%	ND	7	N/A
08-22	16" Self-Stick Floor Tile (gray stone)	Kitchen B – Layer 1	N	0.0%	ND	7	N/A
08-23	16" Self-Stick Floor Tile (gray stone)	Kitchen B – Layer 1	N	0.0%	ND	7	N/A
08-24 T	16" Self-Stick Floor Tile (gray stone)	Kitchen B – Layer 1	N	0.0%	ND	7	N/A
09-25	Vinyl Sheet Flooring (gray/white squares)	Kitchen B – Layer 2	N	0.0%	ND	7	N/A
09-26	Vinyl Sheet Flooring (gray/white squares)	Kitchen B – Layer 2	N	0.0%	ND	7	N/A
09-27 T	Vinyl Sheet Flooring (gray/white squares)	Kitchen B – Layer 2	N	0.0%	ND	7	N/A

- Assessment Categories
  (1) Thermal Systems Insulation Good Condition
- (2) Thermal Systems Insulation Damaged
- (3) Thermal Systems Insulation -Significantly Damaged
- (4) Surfacing Good Condition
- (5) Surfacing Damaged(6) Surfacing Significantly Damaged
- (7) Miscellaneous Good Condition
- (8) Miscellaneous Damaged
- (9) Miscellaneous Significantly Damaged

## Asbestos Present

AMOS – Amosite CIIRY – Chrysotile ACTI - Actinolite ND - None Detected CROC - Crocidolite NT - Not Tested ANTH - Anthophylite PACM - Presumed ACM TREM - Tremolite Asbestos Detected

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# <u>ASBESTOS SAMPLE DATA TABLE</u> Commercial Building – 1240 Yeamans Hall Road – Hanahan, SC

DESCRIPTION OF EACH SAMPLE AREA			LABOR	ATORY	ASSESS OF MAT		
Homogeneous			Friable	Asbestos Present		Condition	Hazard
Area & Sample ID	Description	Location/Room #	(Y/N)	Percent	Asbestos	Assessment Category	Assessmen Category
10-28 12" Self-Stick Floor Tile (slate)		Bathroom B	N	0.0%	ND	7	N/A
10-29	12" Self-Stick Floor Tile (slate)	Bathroom B	N	0.0%	ND	7	N/A
10-30 T	12" Self-Stick Floor Tile (slate)	Bathroom B	N	0.0%	ND	7	N/A
11-31	Vinyl Sheet Flooring (green pebble)	Living Room B	Y	0.0%	ND	7	N/A
11-32	Vinyl Sheet Flooring (green pebble)	Living Room B	Y	0.0%	ND	7	N/A
11-33 T	Vinyl Sheet Flooring (green pebble)	Living Room B	Y	0.0%	ND	7	N/A
12-34	Vinyl Mastic (black)	Living Room B	N	0.0%	ND	7	N/A
12-35	Vinyl Mastic (black)	Living Room B	N	0.0%	ND	7	N/A
12-36 T	Vinyl Mastic (black)	Living Room B	N	<1.0%	CHRY	7	N/A
13-37	9" Floor Tile (beige)	Bedroom B	N	3.0%	CHRY	8	6
13-38	9" Floor Tile (beige)	Bedroom B	N	NT	PACM	8	6
13-39	9" Floor Tile (beige)	Bedroom A	N	NT	PACM	8	6
14-40	Floor Tile Mastic (black)	Bedroom B	N	8.0%	CHRY	7	1
14-41	Floor Tile Mastic (black)	Bedroom B	N	NT	PACM	7	1
14-42	Floor Tile Mastic (black)	Bedroom A	N	NT	PACM	7	1
15-43	Vinyl Sheet Flooring (yellow squares)	Bathroom A Layer 2	Y	20.0%	CHRY	7	t
15-44	Vinyl Sheet Flooring (yellow squares)	Bathroom A Layer 2	Y	NT	PACM	7	1
15-45	Vinyl Sheet Flooring (yellow squares)	Bathroom A Layer 2	Y	NT	PACM	7	1
16-46	Vinyl Mastic (black)	Bathroom A Layer 2	N	5.0%	CHRY	7	1
16-47	Vinyl Mastic (black)	Bathroom A Layer 2	N	NT	PACM	7	1
16-48	Vinyl Mastic (black)	Bathroom A Layer 2	N	NT	PACM	7	1
17-49	Vinyl Sheet Flooring (beige)	Bathroom A Layer 1	Y	0.0%	ND	7	N/A
17-50	Vinyl Sheet Flooring (beige)	Bathroom A Layer 1	Y	0.0%	ND	7	N/A

## Assessment Categories

- (1) Thermal Systems Insulation Good Condition
- (2) Thermal Systems Insulation Damaged
- (3) Thermal Systems Insulation Significantly Damaged
- (4) Surfacing Good Condition
- (5) Surfacing Damaged
- (6) Surfacing Significantly Damaged
- (7) Miscellaneous Good Condition
- (8) Miscellaneous Damaged
- (9) Miscellaneous Significantly Damaged

## Asbestos Present

AMOS – Amosite ACTI – Actinolite
CHRY – Chrysotile ND – None Detect

CROC - Crocidolite

ND – None Detected NT – Not Tested

ANTH - Anthophylite TREM - Tremolite

PACM - Presumed ACM Asbestos Detected



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# **ASBESTOS SAMPLE DATA TABLE** Commercial Building - 1240 Yeamans Hall Road - Hanahan, SC

DESCRIPTION OF EACH SAMPLE AREA			LABOR	ATORY	ASSESS OF MAT		
Homogeneous		I OCSDAN/WOAMS	Friable	Asbestos Present		Condition	Hazard
Area & Sample ID	Description		(Y/N)	Percent	Asbestos	Assessment Category	Assessmen Category
17-51 T	Vinyl Sheet Flooring (beige)	Bathroom A Layer 1	Y	0.0%	ND	7	N/A
18-52	Vinyl Sheet Flooring (beige slate)	Kitchen – Layer 1	N	0.0%	ND	7	N/A
18-53	Vinyl Sheet Flooring (beige slate)	Kitchen – Layer 1	N	0.0%	ND	7	N/A
18-54	Vinyl Sheet Flooring (beige slate)	Kitchen – Layer 1	N	0.0%	ND	7	N/A
19-55	Drywall	Kitchen A	Y	0.0%	ND	7	N/A
19-56	Drywall	Kitchen A	Y	0.0%	ND	7	N/A
19-57	Drywall	Kitchen A	Y	0.0%	ND	7	N/A
20-58	Joint Compound	Bedroom A	Y	2.0%	CHRY	4	3
20-59	Joint Compound	Bedroom A	Y	NT	PACM	4	3
20-60	Joint Compound	Bedroom A	Y	NT	PACM	4	3
20-61	Joint Compound	Bedroom A	Y	NT	PACM	4	3
20-62	Joint Compound	Bedroom A	Y	NT	PACM	4	3

- Assessment Categories
  (1) Thermal Systems Insulation Good Condition
- (2) Thermal Systems Insulation Damaged
- (3) Thermal Systems Insulation -Significantly Damaged
  (4) Surfacing – Good Condition

## (5) Surfacing – Damaged

- (6) Surfacing Significantly Damaged
- (7) Miscellaneous Good Condition (8) Miscellaneous Damaged
- (9) Miscellaneous Significantly Damaged

## Asbestos Present

AMOS - Amosite ACTI - Actinolite CHRY - Chrysotile ND - None Detected CROC - Crocidolite NT - Not Tested ANTH - Anthophylite PACM - Presumed ACM TREM - Tremolite Asbestos Detected

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## **CONCLUSIONS/RECOMMENDATIONS**

## **Asbestos Inspection**

The comprehensive asbestos survey performed by Trident Environmental Services, Inc. on September 18, 2018 of the Commercial Building located at 1240 Yeamans Hall Road in Hanahan, South Carolina did reveal the presence of ACBM. Renovation or demolition activities that will disturb the ACBM will require removal per state and federal regulations. Asbestos materials can become hazardous when, due to damage, disturbance, or deterioration over time, they release asbestos fibers into the air of the building. All areas that contain asbestos should be utilized in a controlled manner to reduce the potential for disturbance. OSHA requires notification to all trades/contractors about the condition of the ACBM to prevent possible occupational exposures.

Demolition activities in public and commercial buildings are regulated by OSHA, EPA, and SCDHEC. Code 40 of Federal Regulations Part 61, Subpart M, Final Rule, "National Emissions Standards for Hazardous Air Pollutants" (NESHAP), and SCDHEC Regulation 61-86.1 require the proper removal and disposal of ACBM that is affected by renovation or demolition. Demolition of the subject structures will require written notification, proper transportation, and disposal per state and federal regulations.

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# <u>PHOTOGRAPHS</u> Commercial Building – 1240 Yeamans Hall Road – Hanahan, SC



HOMOGENEOUS AREA 01 TRANSITE PANEL



HOMOGENEOUS AREA 02 SIDING FELT



HOMOGENEOUS AREA 03 WINDOW GLAZING



HOMOGENEOUS AREA 04 EXTERIOR CAULK



HOMOGENEOUS AREA 05 ROOF SHINGLE



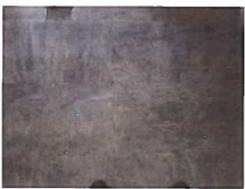
HOMOGENEOUS AREA 06 ROOF FELT

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# PHOTOGRAPHS Commercial Building – 1240 Yeamans Hall Road – Hanahan, SC



HOMOGENEOUS AREA 07 BRICK MASTIC (BLACK)



HOMOGENEOUS AREA 08 16" SELF-STICK FLOOR TILE (GRAY STONE)



HOMOGENEOUS AREA 09 VINYL SHEET FLOORING (GRAY/WHITE SQUARES)



HOMOGENEOUS AREA 10 12" SELF-STICK FLOOR TILE (SLATE)



HOMOGENEOUS AREAS 11, 12 VINYL SHEET FLOORING (GREEN PEBBLE) MASTIC (BLACK)



HOMOGENEOUS AREAS 13, 14 9" FLOOR TILE (BEIGE) MASTIC (BLACK)

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# <u>PHOTOGRAPHS</u> Commercial Building – 1240 Yeamans Hall Road – Hanahan, SC



HOMOGENEOUS AREAS 15, 16 VINYL SHEET FLOORING (YELLOW SQUARES) MASTIC (BLACK)



HOMOGENEOUS AREA 17 VINYL SHEET FLOORING (BEIGE)



HOMOGENEOUS AREA 18 VINYL SHEET FLOORING (BEIGE SLATE)

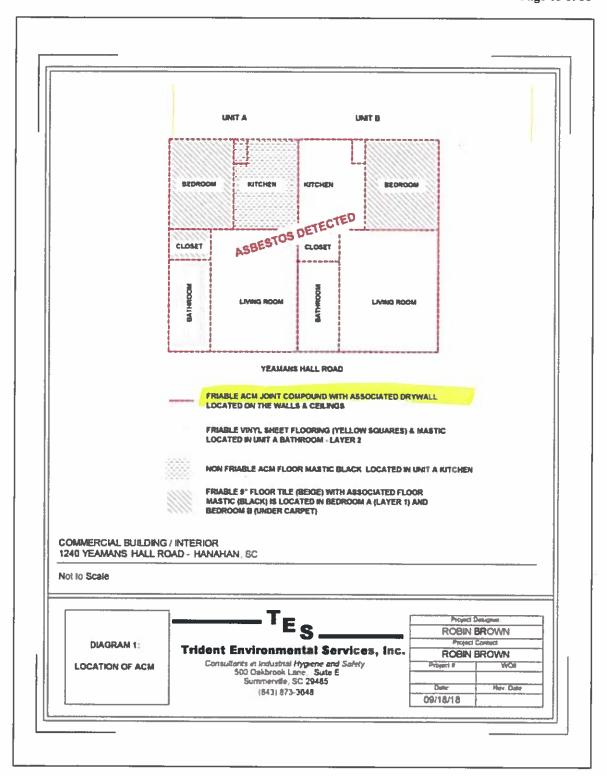


HOMOGENEOUS AREA 19 DRYWALL

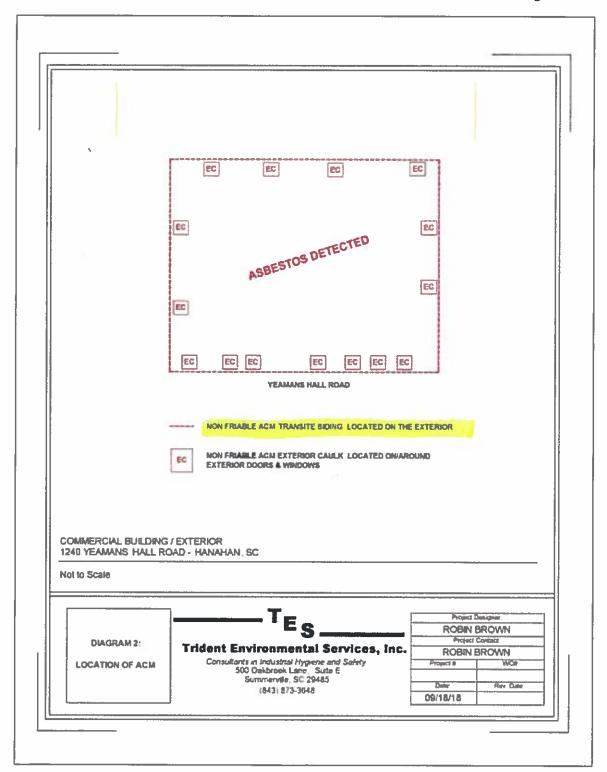


HOMOGENEOUS AREA 20 JOINT COMPOUND

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## **COMPREHENSIVE ASBESTOS SURVEY**

Inspection Date: 09/18/2018

Preparation Date: 09/26/2018

Inspected & Prepared By:

Hunter Hans

Hunter Hanson

S.C. Inspector License BI - 01468

# **SCDHEC ISSUED**

Asbestos ID Card

**Hunter Hanson** 

CONSULTBI **BI-01468** AIRSAMPLER AS-00413

10/28/18 01/06/19

Reviewed By:

FULL Sommer.

Robin A. Brown

S.C. Inspector License BI - 00613

# **SCDHEC ISSUED**

Asbestos ID Card

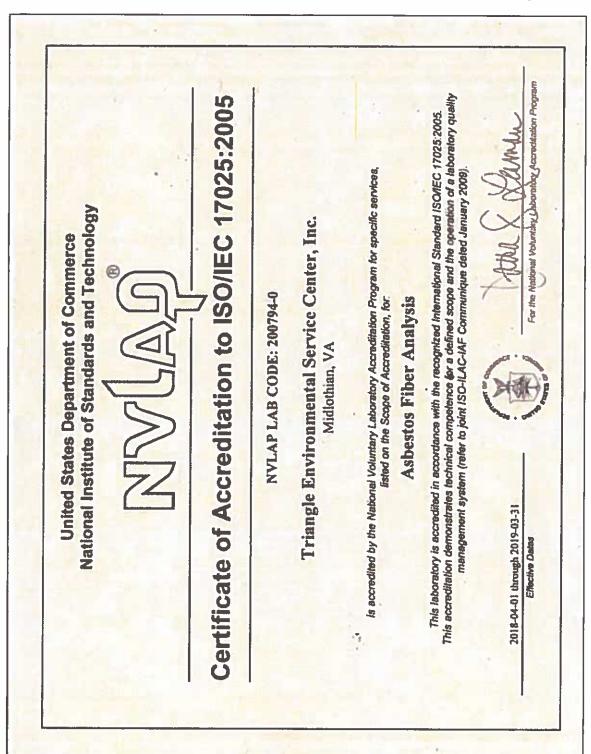
**Robin Brown** 



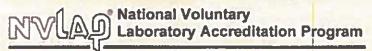
CONSULTPD PD-00176 CONSULTBI BI-00613 AIRSAMPLER AS-00178

Expiration Date 06/14/19 06/26/19

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## SCOPE OF ACCRÉDITATION TO ISO/IEC 17025:2005

Triangle Environmental Service Center, Inc.

13509 East Boundary Road, Suite B Midlothian, VA 23112 Mr. Feng Jiang

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## **ASBESTOS FIBER ANALYSIS**

**NVLAP LAB CODE 200794-0** 

## **Bulk Asbestos Analysis**

Description

INA01

EPA - 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbertos in Bulk Insulation Samples

HI/A03

EPA 600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials

For the National Volunta

Effective 2018-04-01 through 2019-03-31

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United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101904-0

AmeriSci Richmond

Midlothian, VA

is accredited by the National Voluntary Laboratory Accreditation Program for specific services.

Asbestos Fiber Analysis

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009). This laboratory is accredited in accordance with the recognized international Standard ISCAEC 17025,2005.

2018-07-01 through 2019-06-30

Effective Dates



For the National Volumbly Laboratory Accreditation Progr

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## SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

## AmeriSci Richmond

dba AmeriSci Richmond 13635 Genito Road Midlothian, VA 23112 Mr. Thomas B. Keith

Phone: 804-763-1200 Fax: 804-763-1800 Email: bkeith@ameriscl.com http://www.amerisci.com

## ASBESTOS FIBER ANALYSIS

**NVLAP LAB CODE 101904-0** 

## **Bulk Asbestos Analysis**

Code

Description

IUA01

EPA - 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of

Asbestos in Bulk Insulation Samples

11/A03

EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

## Airborne Asbestos Analysis

Code

Description

18/A02

U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mundatory and Normandatory-and Mandatory Section to Determine Completion of Response Actions" as found in

40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

Effective 2018-07-01 through 2019-06-30

Page 1 of 1

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## TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B. Midlothian, VA 23112 804-739-1751 • fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Ein ironmental Services, Inc.

500 Oakbrook Lane, Suite E Summerville, SC 29485

TESC LOGIN #: 180919C

DATE OF RECEIPT: 9/19/2018 DATE OF ANALYSIS 9/19/2018

DATE OF REPORT: 9/19/2018

CLIENT JOB/#:

JOB SITE: 1240 Yearnans Half Rd.

ANALYST B Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIRERS	NON FIBROUS % MATERIALS
1	01-01 / Gray granular, white fibers	10% Chrysotile		90%
2	01-02 /	Positive Stop		100%
1	01-03 /	Positive Stop		100%
4	02-04 / Black fibers	NAD	98% Ccliulose	2%
5	02-05 / Black fibers	NAD	98% Cellulose	2%
6	0246 / Black fibers	NAD	98% Cellulose	2%
7	01407 / White powder	NAD		100%
В	03-08 / White powder	NAD		100%
<b>9</b>	03-09 /	Not Analyzed		100%
10	04-10 / White powder	2% Chrysotile		98%

Samples are unalyzed in accordance with "Interim Method for the Determination of Aubenton in Bulk Insulation Samples", IPA/t/in/R-93-116, July 1993 #FPA-000/M4-R2-020, Dec 1982), or the current US EPA method for the analysis of ashestos in building material. None Detected: not detected at/or below the desected limit of method (Reporting limit 1% Asbestos). Glass fiber is analyzed for quality control blank. LESC recommends by point count or Transmission files from Microscopy (TLM), for materials regulated by the LPA NESTAP (Natural) mission; Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by Polarized Light Microscopy (PLM). Hoth acrysces are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested

NVLAFTab Code: 2007944-0

{LEGEND NAD=No Ashestos [Maseted, Limo = Limoleum, JC = Joint Compound]

Reviewed By Authorized Signatury:

Feng Jiang, MS Senior Geologist, Laboratory Director Inching Fung. Sensor Creshogist

Wednesdey, September 19, 2018

Page 1 of 7

Page 23 of 35

## TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B. Midlathian, VA 23112 804-739-1751 • fax: 804-739-1753

### BÜLK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services, Inc 500 Oakbrook Lane, State E Summerville, SC 29485

TESC LOGIN # 180919C

DATE OF RECEIPT: 9/19/2018 DATE OF ANALYSIS 9/19/2018 DATE OF REPORT: 9/19/2018

CLIENT JOB/#

JOB SITE: 1240 Yearnans Hall Rd.

ANALYST. B Trinunce

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
11	04-11 /	Positive Stop		100%
12	04-12 /	Positive Stop		100%
13	05-13 / Black tar-like	NAD	20% Fiberglass	NP5
[4	05-14 / Black tar-file	NAD	20% Fiberglass	101%
15	05-15 /	Not Analyzed		100%
16	06-16 / Black fibers	NAD	98% Cellulose	2%
17	06-177 Black fibers	NAD	98% Cellulose	2%
1x	06-187	Not Analyzed		10054
19	07-19 / Black adhesive	NAD		100%
20	07-20 / Black adhesive	NAD		100%

Samples are analyzed in accordance with "Interim Method for the Determination of Asbentos in Bulk Institution Samples", FPAR600/R-93-116, July 1993 (EPA-600/M4-82-020), Dec 1982), or the current US EPA method for the analysis of asbestos in building insternal. None Detected: not detected into the detected limit of inethod (Reporting limit, 1% Asbestos) of this fiber is analyzed for quality control blank. LESC recommends by point count or Transmission Electron Microscopy (11/M), for materials regulated by the LPA NESIAP (National Finission Standards for Hazindous Air Pollutants) and found to contain less than ten percent (<10%) adventos by Polarized Light Microscopy (PLM) [Both acrysics are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc., This test report relates only to the item(s) tested

NVLAP Lab Code: 200794-0

[LEGEND NAD=No Ashestos [Astected, I mo =1 moleum, IC=Jumt Compound]

Reviewed By Authorized Signatory:

Frng Jimg, All Senior Geologist, Laboratory Director Inciding Fung, Senior Geologist

Wednesden, September 19, 2818

Page 2 of 7

Page 24 of 35

## TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B. Midhthian, VA 23112 804-739-1751 • fax: 804-739-1753

## BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT Trident Environmental Services, Inc. 500 Oakbrook Line, Suite E Summerville, SC 29485 TESC LÓGIN # 180919C

DATE OF RECEIPT: 9/19/2018
DATE OF ANALYSIS 9/19/2018

DATE OF REPORT: 9/19/2018

gamanat rina da

CLIENT JOB/#

JOB SITE: 1240 Yearnans Hall Rd.

ANALYST B Trinunct

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASSESTOS	NON ASBESTOS	NON FIBROUS % MATERIALS
21	07-217	Not Analyzed		100%
22	08-22 / Beige vinyl	NAD		100%
23	08-23 / Beige vinyl	NAD		100%
24	08-24 /	Not Analyzed		100%
25	09-25 / Gray linu , fibers	NAD	20% Cellulose 5% Fiberglasa	75%
26	09-26 / Gray linu , fibers	NAD	20% Celhilose 5% Fiberglass	75%
27	09-277	Not Analyzed		100%
28	10-287 Brown vinyl	NAD		100%
29	10-29 / Brown งาเลูโ	NAD		100%
30	10-70 /	Not Analyzed		300%

Samples are snalyzed in accordance with "Interim Method for the Determination of Asbestas in Bulk Insulation Samples", EPA/t-04/R-93-116, July 1993 (EPA-604/M-83-020, Dec 1982), or the current US-EPA method for the analysis of asbestos in building insterial. None Detected not detected after below the detected limit of method (Reporting limit. 1% Asbestos) Glass fiber is analyzed for quality control blank. IESC recommends by point count or Imminission Blank of Microscopy (ITM), for materials regulated by the LPA NESTIAP (Naturnal Emission Standards for Busindous Air Pollatants) and found to contain less than ten percent (<10%) arbestos by Polatized Light Microscopy (ITM) Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc., This test report relates only to the item/s) tested

NVLAP Lab Code 20079440

[LEGEND NAD=No Ashestos [Astected, Lino =Linoleum, JC=Joint Compound]

Reviewed By Authorized Signatory:

Fing Jime, AS Sentor Geologist, Laboratory Director Tuesbing Fung, Sentor Geologist

Wednesday, September 19, 2014

Page 1 of T.

Page 25 of 35

## TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B. Midlothian, VA 23112 804-739-1751 • fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Ein ironnental Sen ices, Inc 500 Oakbrook Lane, Suite E Summerville, SC 29485 TESC LOGIN # 180919C

DATE OF RECEIPT: 9/19/2018
DATE OF ANALYSIS 9/19/2018
DATE OF REPORT: 9/19/2018

CLIENT JOB/#

JOB SITE: 1240 Yearnians Hall Rd.

ANALYST: B Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
31	11-31 / Green Imo , black fibers	NAD	20% Cellulose	80%
32	11-32 / Green lino ,, black fibers	NAD	20% Cellulose	80%
33	11-337	Not Analyzed		100%
н	12-34 / Black adhesive	NAD		100%
35	12-35 / Black adhesive	NAD		100%
36	12-36 /	Not Analyzed	AND THE STATE OF LAST	100%
37	13-37 / Brown viny1	3% Chrysotile		97%
38	13-38 /	Positive Stop		100%
19	[1-19]	Positive Stap		107%
40	14-40 / Black adhesive	8% Chrysotile		92%

NVI AP Lah Code: 200794-0

[LEGEND NAD=No Ashestor Detected, I mo \*1 moleum, IC=Joint Compound]

Reviewed By Authorized Signatory:

Feng Jiang, MS Sentor Geologist, Laboratory Director Lucking Fung, Senior Geologist

Wednesday, September 19, 2018

Page 4 of 7

Page 26 of 35

## TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B, Midlothian, VA 23112 804-739-1751 - fax: 804-739-1753

## BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services, Inc 500 Oakbrook Lane. Suite E Summerville, SC 29485

TESC LOGIN # 180919C

DATE OF RECEIPT: 9/19/2018 DATE OF ANALYSIS 9/19/2018 DATE OF REPORT: 9/19/2018

CLIENT JOB/#

JOB SITE 1240 Yearmans Hall Rd.

ANALYST: B Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
41	14-11/	Positive Stop		100%
42	14-42 /	Positive Stop		100%
43	15-41 / Beige vinyl, gray fibers	20% Chry sotile		8076
н	15-44 /	Positive Stop		100%
45	15-15 /	Positive Stop		100%
46	16-46 / Black adhesive	5% Chrysotile		95%
47	16-47 /	Positive Stop		100%
48	16-48 /	Positive Stop		100%
49	17-49 / Beige lino , gray fibers	NAD	20% Cellulose 5% Fiberglasa	75%
50	17-50 / Beige line , gray fibers	NAD	20% Cellulose 5% Fiberglass	75%

Samples are stally and in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", I'PA/(60/R/93-116, July 1993 (FPA-600/M4-82-020), Dec 1982), or the current US EPA method for the analysis of asbestos in building insterial. None Detected not detected after below the detected limit of method (Reporting limit. 1% Asbestos). Obras fiber is analyzed for quality control blank. LSC recommends by point count or imminission Electron Microscopy (TLM), for insterials regulated by the LPA NESDAP (Natural Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) abestos by Polarized Light Microscopy (PLM). Both services are available for an additional less. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc., This test report relates only to the item/s) tested.

NVLAP Lab Code 200794-0

[LEGEND NAD-No Asbestos Datected, I mn #1 moleum, JC#Joint Compound]

Reviewed By Authorized Signatory:

Feng Jiang, MS Senior Geologist, Laboratory Director Lucking Fang, Senior Geologist

Windnesday, September 19, 2018.

Page 5 of 7

Page 27 of 35

## TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B. Midlethien, VA 23112 804-739-1751 \* fax: 864-739-1753

## BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services, Inc.

500 Oakbrook Lane, Suite E Summerville, SC 29485 TESC LOGIN # 180919C

DATE OF RECEIPT: 9/19/2018 DATE OF ANALYSIS 9/19/2018 DATE OF REPORT: 9/19/2018

CLIENT IOB/#:

JOB SITE: 1240 Yeannans Hall Rd.

ANALYST. B. Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
51	17-51 /	Not Analyzed		100%
52	18-52 / Brown hao , gray fibers	NAD	20% Cellulose 5% Fiberglass	75%
53	18-53 / Brown lino , gray fibers	NAD	20% Cellulose	80%
54	18-54 /	Not Analyzed		100%
55	19-55 / White powder, brown fibers	NAD	20% Cellulose	KII%
56	19-56 / White powder, brown fibers	NAD	20% Cellulose	8H76
57	19-57 / White powder, brown fibers	NAD	20% Cellulose	80%
58	20-58 / White powder	2% Chrysotile		98%
59	20-59 /	Positive Stop		100%
60	20-60 /	Positir e Stop		100%

Samples are analyzed in accordance with "Interior Method for the Determination of Ashestos in Bulk Insulation Samples", FPA#600/R-91-116, July 1993 (FPA-600/R-91-82-020, Dec 1982), or the current US-EPA method for the analyze of ashestos in building insterial. None Detected into detected at/or below the detected limit of method (Reporting limit. 1% Ashestos). Oftois fiber is analyzed for quality control blank. 1ESC recommends by point count of Transmission Electron Macroscopy (TLM), for materials regulated by the EPA NESTIAP (National Finission Standards for Illizardous Air Pollutaris) and froud to contain less than (en percent | < 10%) ashestos by Polarized Light Microscopy. (PLM) Both services are available for an additional for. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested.

NVI.AP Lab Code 200794-0

[LEGEND NAD=No Asbestos Detected, I mo #1 moleum, JC#Joint Compound].

Reviewed By Authorized Signatory:

Feng Jime, AS Senior Geologist, Laboratory Director Tuesburg Pang, Senior Geologist

Wednesday, September 19, 2018.

Page Fall 7

Page 28 of 35

## TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B. Midlethian, VA 23112 804-739-1751 • fax: 804-739-1753

## BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services, Inc.

500 Oakbrook Lune, Suite E Summerville, SC 29485

TESC LOGIN # 180919C

DATE OF RECEIPT: 9/19/2018 DATE OF ANALYSIS 9/19/2018

DATE OF REPORT: 9/19/2018

CLIENT JOB/#:

JOB SITE: 1240 Yeamans Hall Rd

ANALYST. B. Trinunct

TESC SAMPLE#		CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS	
61	20-61 /		Positive Stop		100%	
62	20-62 /		Positive Stop		100%	

Total Samples/Layers Analyzed: 35

Samples are analyzed in accordance with "Interim Method for the Determination of Ashestos in Bulk Insulative Samples", IPA/t/00VR-93-116, July 1993 (FPA-600/SH-82-020), Dec 1982), or the current US EPA method for the analysis of ashestos in bulking insterial. None Detected not detected attre below the detected limit of method (Reporting limit, 1% Asbestos). Ohisis fiber is analyzed for quality control blank. LESC recommends by point count or Transmission Electron Microscopy (TEM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) ashestos by Polarized I ight Microscopy (PI M). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. this test report relates only to the item(s) tested

NVEAP Lab Code 200794-0

[LEGEND NAD=No Ashestos Detected, I mo =Linoleum, JC=Joint Compound]

Reviewed By Authorized Signatory:

Fing Jime, AS Senior Geologist, Laboratory Director Inching Fang, Sensor Grologist

Wednesday, Newtorsher 19, 2018.

Page 7 of 7

Page 29 of 35

	MARY OF BL	LK ASBESTOS AN	didenier, va 20112 - frot- ALYSIS BY TRANSM	135891 Earl Boundary Road, Swite B. Middenhun, VA 23112 - 884-799-1781 - 621; 884-739-1783 SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELCTRON MICROSCOPY	প্ল
	Traken Emiromienal Services, Inc 5th Cabbrook Lune, Suite E Summerville, SC 29485	s, Inc		TESC LOGIN # DATE OF RECEIPT.	
CLENT PROJECT #				DATE OF AND 1315	SIS CONTROLLS
XOBSITE: 1240 Yearrans Hall Rd.	ans Hall Rd			ANALYST	J. Tumer
TESC CLIENT SAMPLE 8	SAMPLE WEKCHT (g)	HEAT SENSITIVE ORGANIC %	ACID SOLUBLE INORGANIC %	INSOLUBLE NOW-ASBESTOS INORGANIC %	ASBESTOS% BY TEM
90-60	0.518	7.3	85.7	2	NAD
05-15	0.467	20.8	45	34.2	NAD
06-18	0.623	97.6	1.8	ଷ୍	NAD
07-21	0.421	99.3	ત્ર	7	NAD
06-24	0.551	27.8	69.5	2.7	NAD
ž	Reviewed By Authorized Signatory)		mapme	Jang	
congramment for any at an expensive there are the second to the second t	eed enoept in full wit 	ferring the ferring of the ferring o	Conflictuate statistical fortunation function in the second state of the state of the second second state of the second secon	configuration of the reproduced stageth mild with the approval of TESC, Inc. The test report must not be reproduced stageth mild by the approval of TESC, Inc. The test report relates only to the itematalisated. Thus test was performed by an NVLAP managed, the managest by EPA soft R. 93. The foot covered by NVLAP that accretioned.  [LEGERD PAD - No Asbeston I bestract NA - Not Amalaged, PS - Positive Stop, Truce - 12s, NVA - No Visual Asbeston.	d by an NVIAI

Page 30 of 35

	VINS	MARY OF BU	undary Read, Suther B.	13509 East Boundary Read, Sathe B, Middenhier, VA 23112 • 864-799-1751 • fat; 884-739-1753 RRY OF BULK ASBESTOS ANALYSIS, BY TRANSMISSION ELCTRON MI	1389 East Boundary Rood, Seide B. Midfothier, VA 23112 - 884-739-1751 - fau; 884-739-1753 SUMMARY OF BULK ASBESTOS ANALYSIS, BY TRANSMISSION ELCTRON MICROSCOPY	H
CLJENT	Trakes Em Stit Oakbers Summentik	Traken Emiromeenal Services, Inc 500 Oakbrook Lane, Suite E Summerville, SC 20485	7 . Ti		TESC LOGIN #  DATE OF RECEIPT.	Nettern 1887/0/18
CLENT PROJECT # JOBSITE	)ECT#  240 Yeamurs Hall Rd	ins Hall Rd			DATE OF REPORT ANALYST:	
TESC SAMPLE	CLIENT	SAMPLE WEIGHT (g)	HEAT SENSITIVE ORGANIC %	ACID SOLUBLE INORGANIC %	INSOLUBLE NON-ASBESTOS INORGANIC %	ASBESTOS% BY TEN
60	09-27	0 308	72.2	10.8	11	NAD
_	10:30	0.576	8000	40.8	14.4	NAD
100	11-33	0.366	76.8	52	7	NAD
	12-36	0.432	43.1	12.5	44.4	<1% Chrysotile
01	17.51	0.415	84.8	34.9	e,	NAD
	36	Heviewed By Authorized Signatury 1		Mudou Fores Contraged Istocatory Diere 20	Faug.	
This representation	nd mad and he rependa ad IEM lab. NVLAP I. (I) NAE) = No Ashessan	ced enorge in full wi ab II) + ID1944/4/4/4/4/2/2/2/2/2/2/2/2/2/2/2/2/2/2/	fi the approval of TESC.  F.M analysis by EPA 600.  Analyzed, FS - Pontive	Instructional and be reproduced except in full with the approval of TESC, fur. The test report relates only to the itemats beats according IFM Lib. NVLAP Lab ID * 10194-49. IFM analysis by FFA EGR. ROSE. The (not covered by NVLAP Hult according ILGEND NAD - No Asherston Exercised 18. NVA - No Visual Asherston).	Instructional and be reproduced except in full with the approval of TESC, Inc The best report must not be itematished. This less was performed by an NVLAP and this NVLAP Lab BY ** 10194-4* IEM analysis by FPA 640 R-93. Ho (not covered by NVLAP Bust accreditation).  [LEGEND MAD - No Abbertow Described NA - Mat Analyzed, PS - Positive Stop, Times - 1**, NVA - Na Visual Asbertou).	d be an RVIAP
Spender 24, 2018	. =					720.1 at 1

Page 31 of 35

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# TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Settle B, All-Mothlan, VA 23112 + 804-795-1741 + fat; 884-739-1753

	361213K	8[97/9]/(H)	8102/1260	WINZ/PZ(ta)	J. Turner		00-04-100 /00/14-74-03-74	ASSESSION TO BE LEVE
SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELCTRON MICROSCOPY	TESC LOGIN #	DATE OF RECEIPT	DATE OF ANALYSIS	DATE OF REPORT	ANALYST		INSOLUBLE NON-ASBESTOS	INORGANIC **
ALYSIS BY TRANSMIS							ACID SOLUBLE	INORGANIC %
LK ASBESTOS AN	ı, İnc						HEAT SENSITIVE	ORCANIC %
IMARY OF BU	Tradent Environmental Services, Inc. 500 Oakbrook Lane, State E	Summerville, SC 29485			ns Hall Rd		SAMPLE	WEIGHT to
शास्त्र	Tradent Em.	Summervilk		CT#	1240 Yearnans Hall Rd		CLIENT	SAMPLE
	CLIENT			CLIENT PROJECT #	JOBSITE.	TAT	TESC	SAMPLE

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40.5

51.2

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19:54

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Total Sample(s) Analyzed: 11

Reviewed By Authorized Signatury:

Forg Hang AS Senar Geodoges Laboratory Derestor Lordong Long, Senar Geodoges

This report must not be reporduced except in full with the approval of UESC. Inc. The lost report in tables only this less was performed by an NVLAP and the Lib. NVLAP Lab 13 \* 10 1944 of 18 Manalysis by PPA 640 R-93 (10 time tenered by NVLAP Had accorditation).

[LEGEN] NAD \* No Asherson [America" NA \* Mar Analysed, PS \* Fourtire Stop, Time \* - 1\*, NVA \* No Visual Asherson).

Special 24, 2018

Page 32 of 35

ERVICE CENTER	: 804-739-1753				-S Hay Red			Comments								Z-1/	Way to		78. of
TRIAMGLE ENVIRONIMENTAL SERVICE CENTER	13609 East Boundary Road, Suite 8 - Midlothian • VA • 23112 • Tel; 804-739-1751 • Fax; 804-739-1753	31-81.6	MAME: Robin Brown		PROJECT SITE: 1240 YEARS HAIN	On TESC File		No Volume (L) Mpe Area (M <sup>2</sup> ) Campe Area (cm <sup>2</sup> )								Date/Time:	Date/Time 9/19/1	Date/Time:	Pages
TRIANGLE	A - 23112 - Tel:	DATE		PROJECT #:	PROJECT S	Email: 0	ڲٙٳ	Blocasseria Surface Tape Surface Tape											Bogsast.
	- Midlothian - V				3 Day: 74 105 Day:	2040	Other Motals	TCLP RCRA 8 CAM 17 Welding Fume Foxic Metal Profile								17000	( may		SCONEL Parts for NORY, layer you Reguest
	Road, Sulte B					Fax: 888-266-2040	Lead	Conking Water (Pb) TCLP (Pb) Washer Water Whee		+					H	1	THE WALLES		HON 34
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30919C	13609 E	ontal Services,	e - Suite E	9485	24 Hour Pun	843-873-3648	Asbeston	PLM Point Count 400 PLM Point Count 1000 PLM Gravimetric CARB 435 (Soil only)											stop Jeb
53		vironm	ok I.an	5. SC.			₹	PCM Fiber Count		1	$\Box$	#	$  \uparrow  $	1	F	1700			artistic .
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TESC LOGIN NUMBER:		CHAIN OF CUSTODY FORM LAB CUSTOMER: Trident Environmental Services, Inc	ADORESS:	CITY, BTATE, ZIP: Summerville, SC 29485	TAT: 2 Hour.	CONTACT METHOD: Phone:		sedmun alqme?							6	Reference Dy	Reference by	Received by	Prepared by TESC

TES
Trident Environmental Services, Inc.
Consultants in Industrial Hyperie and Salety 500 Calbrids Laire, Suite E Summeridia, 82 29465 (843) 873-3648

Page 33 of 35

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Trident Environmental Services, Inc.
Consultents in Industrial Hygrene and Salaty
500 Oaktroek Larie, Butte E
Summerville SC 29485
10.101.070.0010

Page 34 of 35

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# COMPREHENSIVE ASBESTOS SURVEY

# COMMERCIAL BUILDING 1242 YEAMANS HALL ROAD HANAHAN, SC 29410



**Prepared For:** 

CITY OF HANAHAN Attn: Mrs. Katherine Farias 1255 Yeamans Hall Road Hanahan, SC 29410 (843) 576-5254

Performed By:



Trident Environmental Services, Inc.

Consultants in Industrial Hygiene and Safety 500 Oakbrook Lane, Suite E Summerville, SC 29485 (843) 873-3648

# COMPREHENSIVE ASBESTOS SURVEY

Commercial Building 1242 Yeamans Hall Road Hanahan, SC 29410

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### **EXECUTIVE SUMMARY**

The comprehensive asbestos survey performed by Trident Environmental Services, Inc. on September 18, 2018 of the Commercial Building located at 1242 Yeamans Hall Road in Hanahan, South Carolina did reveal the presence of asbestos containing building materials. The following summary exhibits the asbestos containing building materials (ACBM) that were identified in the inspection.

### **Asbestos**

Description	Туре
Transite Siding	Category II – Non Friable
Sink Coating (black)	Category I – Non Friable
Ceiling Texture (texture)	RACM – Friable
9" Floor Tile (green)	RACM – Friable
Floor Tile Mastic (black)	Category I – Non Friable

RACM - Regulated Asbestos Containing Material

PACM - Presumed Asbestos Containing Material

The identified ACBM includes the item(s) listed above. All removal work of the identified ACBM should be performed by a properly trained and licensed abatement contractor prior to the planned renovation/demolition activities.



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### **BACKGROUND**

Trident Environmental Services, Inc. was contracted by City of Hanahan. to perform a comprehensive asbestos survey of the Commercial Building located at 1242 Yeamans Hall Road in Hanahan, South Carolina. The survey was performed in order to satisfy the NESHAP requirements for renovation and/or demolition. The Commercial Building is approximately 1,113 square feet and is built slab on grade. Interior walls and ceilings are drywall with joint compound applied at the seams and patches. Flooring material is vinyl floor tile, vinyl sheet flooring, hardwood and carpet. Exterior walls are cementitious paneling with felt paper. Roofing material consists of asphalt roofing shingles and felt paper. Exterior windows and doors are wood.

### <u>Asbestos</u>

The inspection was conducted to identify ACBM which may be disturbed during the renovation/demolition activities. The identification of ACBM will aid in the prevention of occupational exposures and/or environmental releases of airborne asbestos fibers. Identification of ACBM also complies with Title 40 Code of the Federal Regulations, Part 61, and South Carolina Department of Health and Environmental Control (SCDHEC) Regulation 61-86.1, along with Title 29 Code of Federal Regulations, Part 1926 enforced by the Occupational Safety and Health Administration (OSHA). The Asbestos Survey describes the investigative procedures utilized, results of the suspect ACBM sampled/analyzed, and recommendations regarding the structures as related to asbestos.



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### **ASBESTOS SURVEY**

### Asbestos Investigative Procedures

Trident Environmental Services, Inc. conducted an inspection for suspect ACBM on September 18, 2018 of the Commercial Building located at 1242 Yeamans Hall Road in Hanahan, South Carolina. It is our understanding that the subject structure will undergo renovation or demolition activities in the near future. The asbestos survey was performed by observing and sampling suspect building materials. Significant destructive testing was not utilized during the inspection. There is a possibility that suspect materials exist in inaccessible areas such as wall cavities and pipe chases. If any additional suspect ACBM are discovered during the course of demolition activities, bulk samples should be extracted to identify the presence, or absence, of asbestos prior to continuation of work activities.

A sampling strategy was developed to provide representative samples for analysis. Samples were then extracted from a variety of suspect ACBM. Bulk samples collected were—recorded on a Chain-of-Custody record and submitted to Trident Environmental Service Center, Inc. (TESC) a Polarized Light Microscopy (PLM) laboratory. The laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), which is administered by the National Institute of Standards and Technology (NIST). TESC is accredited by NVLAP for the analysis of bulk asbestos by PLM (NVLAP Lab Code: 200794-0).

The suspect materials were analyzed by trained microscopists utilizing PLM techniques coupled with dispersion staining in accordance with EPA Test Method Title 40 Code of Federal Regulations, Chapter I (1-1-87 edition), Part 763, Subpart F- Appendix A. This method identifies asbestos mineral fibers based on six optical characteristics: morphology, birefringence, refractive index, extinction angle, sign of elongation and dispersion staining colors. The laboratory analysis reports the specific type of asbestos identified (there are six asbestos minerals) and the percentage of asbestos present. The EPA and OSHA defines materials as asbestos containing if an asbestos content of greater than one percent (>1%) is detected in a representative sample.

Non-Friable Organically Bound (NOB) samples were submitted to AmeriSci Richmond Laboratory for analyses by Transmission Electron Microscopy (TEM). SCDHEC requires NOB materials with negative or trace results by PLM to be analyzed by at least one TEM. SCDHEC in accordance with ASTM E 2356-04 defines NOB materials as "materials that are not friable and that consist of fibers and other particulate matter embedded in a solid matrix of asphalt, vinyl or other organic substances." Examples of NOB materials include but are not limited to flooring materials such as vinyl floor tiles, vinyl sheet flooring, adhesives, mastics, asphalt shingles, roofing materials, glazing, caulks, and cove base.



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The EPA classifies ACBM into two categories, friable and non-friable. A friable material creates a greater health hazard due to the fact that it may be "crumbled, pulverized or reduced to powder by the forces expected to act upon it in the course of demolition or renovation operations."

Friable Asbestos material means any material containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763 section 1, Polarized Light Microscopy, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

Category I Non Friable Asbestos-Containing Material (ACM) means asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763, section 1, Polarized Light Microscopy.

Category II Non Friable ACM means any material, excluding Category I non friable ACM, containing more than one percent asbestos as determined using the methods specified in appendix A, subpart F, 40 CFR part 763, section I, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. (cement siding, transite board shingles, etc.)

Regulated Asbestos-Containing Material (RACM) means (a) Friable asbestos material, (b) Category I non friable ACM that has become friable, (c) Category I non friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The following section summarizes the sample numbers, locations, type material, asbestos type, percent of asbestos detected, present condition of the asbestos containing material, potential for disturbance, and hazard assessment ratings. The asbestos sample laboratory analyses and chain of custody records are included at the end of this report.

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### **Asbestos Abbreviations and Hazard Assessment Key**

The EPA and SCDHEC require that confirmed ACBM is given a hazard assessment based on its present condition and potential for future disturbance. This hazard assessment is used as a tool for prioritization in future remedial actions regarding the ACBM. The following key demonstrates the criteria that make up the hazard assessment.

### **Present Condition**

F = Friable

G = Good (very localized limited damage)

NF = Non-friable

D = Damaged (<10% distributed and/or <25% localized)

S = Significantly Damaged (≥10% distributed and/or 25% localized)

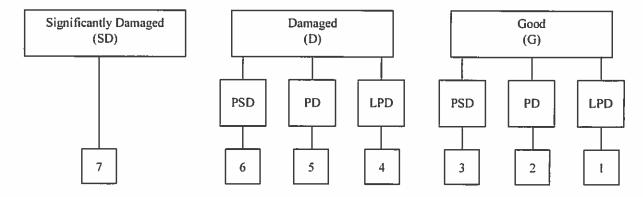
### Potential for Future Disturbance

LPD = Low Potential for Disturbance (Contact, Vibration, and/or Air Erosion - low concern)

PD = Potential for Damage (Contact, Vibration, and/or Air Erosion – moderate concern)

PSD = Potential for Significant Damage (Contact, Vibration and/or Air Erosion – high concern)

### **Hazard Assessment**





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# <u>HOMOGENOUS AREA ESTIMATED FOOTAGE TABLE</u> Commercial Building – 1242 Yeamans Hall Road – Hanahan, SC

HOMOGENOUS AREA ID #	DESCRIPTION	ESTIMATED AMOUNT
01	Transite Siding	1,788 SF
02	Siding Felt	1,788 SF
03	Window Glazing	56 SF
04	Exterior Caulk	90 SF
05	Roof Shingle	960 SF
06	Roof Felt	960 SF
07	Brick Mastic (black)	8 SF
08	Sink Coating (black)	4 SF
09	Drywall	4,452 SF
10	Joint Compound	4,452 SF
11	Ceiling Texture (texture)	170 SF
12	Ceiling Texture (stapled)	100 SF
13	Sink Coating (gray)	4 SF
14	Vinyl Sheet Flooring (green/pink)	100 SF
15	Vinyl Sheet Flooring (green/dark green)	100 SF
16	Vinyl Sheet Flooring (12" slate squares)	100 SF
17	Vinyl Sheet Flooring (9" beige/white square)	130 SF
18	Vinyl Sheet Flooring (beige/green)	120 SF
19	9" Floor Tile (green)	140 SF
20	Floor Tile Mastic (black)	140 SF
20	Vinyl Sheet Flooring (light wood)	120 SF
21	Vinyl Sheet Flooring (stone)	260 SF
22	Floor Felt Paper	370 SF
23	Vinyl Sheet Flooring (dark wood)	210 SF
24	Vinyl Sheet Flooring (beige/green)	120 SF

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Consularly in Industral Hypers and Salely
Summercies SC 28485
BATH STATEMENT

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### <u>ASBESTOS SUMMARY</u> Commercial Building – 1242 Yeamans Hall Road – Hanahan, SC

DESCRIPTION	CRIPTION TYPE		
Transite Siding	Category II – Non Friable	1,788 SF	
Sink Coating (black)	Category I - Non Friable	4 SF	
Ceiling Texture (texture)	RACM – Friable	170 SF	
9" Floor Tile (green)	RACM – Friable	140 SF	
Floor Tile Mastic (black)	Category I – Non Friable	140 SF	

RACM - Regulated Asbestos Containing Material

\*PACM - Presumed Asbestos Containing Material

SCDHEC requires any non-friable material that is identified in an asbestos inspection report in a condition other than good and non-friable must be handled as a Regulated Asbestos Containing Material (RACM) and identified as friable on the asbestos abatement application. This requirement is reflected in the Asbestos Summary Table listed above.

Asbestos fibers were identified in the Transite Siding. Approximately 1,788 square feet is present and in good condition. This material is considered Category II – Non Friable Asbestos and is located on the exterior.

Asbestos fibers were identified in the Sink Coating (black). Approximately 4 square feet is present and in good condition. This material is considered Category I – Non Friable Asbestos and is located in the Unit A Kitchen.

Asbestos fibers were identified in the Ceiling Texture (texture). Approximately 170 square feet is present and is good condition. This material is considered RACM – Friable Asbestos and is located in the Unit B Living Room.

Asbestos fibers were identified in the 9" Floor Tile (beige) and associated Floor Tile Mastic (black). Approximately 140 square feet is present and is significantly damaged. This material is considered RACM – Friable Asbestos and is located in Room 2 (layer 2) and Room 1 Closet (layer 2). Note: Floor Tile may be located under non-load bearing walls and cabinets.

The estimated quantities provided should be verified by contractor and/or building owner. Any discrepancies are to be addressed prior to removal of ACM. Please note that removal costs vary depending on the contractor, the quantity/condition of the ACM, and the accessibility/location of the ACM.



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# ASBESTOS SAMPLE DATA TABLE Commercial Building – 1242 Yeamans Hall Road – Hanahan, SC

	DESCRIPTION OF EACH S	AMPLE AREA		LABOR	ATORY	ASSESS OF MAT		
Homogeneous			Friable	Asbestos Present		Condition	Hazard	
Area & Sample ID	Description	Description Location/Room # (Y/)		Percent	Asbestos	Assessment Category	Assessmen Category	
01-01	Transite Siding	Exterior Siding	N	10.0%	CHRY	7	3	
01-02	Transite Siding	Exterior Siding	N	NT	PACM	7	3	
01-03	Transite Siding	Exterior Siding	N	NT	PACM	7	3	
02-04	Siding Felt	Exterior Siding	N	0.0%	ND	7	N/A	
02-05	Siding Felt	Exterior Siding	N	0.0%	ND	7	N/A	
02-06 T	Siding Felt	Exterior Siding	N	0.0%	ND	7	N/A	
03-07	Window Glazing	Window I	Y	0.0%	ND	7	N/A	
03-08	Window Glazing	Window 2	Y	0.0%	ND	7	N/A	
03-09 T	Window Glazing	Window 3	Y	0.0%	ND	7	N/A	
04-10	Exterior Caulk	Window	N	0.0%	ND	7	N/A	
04-11	Exterior Caulk	Door	N	0.0%	ND	7	N/A	
04-12 T	Exterior Caulk	Door	N	0.0%	ND	7	N/A	
05-13	Roof Shingle	Exterior Roof	N	0.0%	ND	7	N/A	
05-14	Roof Shingle	Exterior Roof	N	0.0%	ND	7	N/A	
05-15 T	Roof Shingle	Exterior Roof	N	0.0%	ND	7	N/A	
06-16	Roof Felt	Exterior Roof	N	0.0%	ND	7	N/A	
06-17	Roof Felt	Exterior Roof	N	0.0%	ND	7	N/A	
06-18 T	Roof Felt	Exterior Roof	N	0.0%	ND	7	N/A	
07-19	Brick Mastic (black)	Exterior Roof	N	0.0%	ND	7	N/A	
07-20	Brick Mastic (black)	Exterior Roof	N	0.0%	ND	7	N/A	
07-21 T	Brick Mastic (black)	Exterior Roof	N	0.0%	ND	7	N/A	
08-22	Sink Coating (black)	Kitchen A	N	3.0%	CHRY	7	1	
08-23	Sink Coating (black)	Kitchen A	N	NT	PACM	7	1	
08-24	Sink Coating (black)	Kitchen A	N	NT	PACM	7	1	
09-25	Drywall	Kitchen A	Y	0.0%	ND	7	N/A	
09-26	Drywall	Kitchen A	Y	0.0%	ND	7	N/A	
09-27	Drywall	Kitchen A	Y	0.0%	ND	7	N/A	
10-28	Joint Compound	Kitchen A	Y	0.0%	ND	4	N/A	
10-29	Joint Compound	Living Room A	Y	0,0%	ND	4	N/A	

### **Assessment Categories**

- (1) Thermal Systems Insulation Good Condition
- (2) Thermal Systems Insulation Damaged
- (3) Thermal Systems Insulation Significantly Damaged
- (4) Surfacing Good Condition
- (5) Surfacing Damaged
- (6) Surfacing Significantly Damaged
- (7) Miscellaneous Good Condition
- (8) Miscellaneous Damaged
- (9) Miscellaneous Significantly Damaged

### Asbestos Present

AMOS – Amosite CHRY – Chrysotile CROC – Crocidolite

ACTI – Actinolite ND – None Detected NT – Not Tested

TREM - Tremolite

ANTH - Anthophylite PACM - Presumed ACM

- Tremolite Asbestos Detected

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### ASBESTOS SAMPLE DATA TABLE Commercial Building - 1242 Yeamans Hall Road - Hanahan, SC

DESCRIPTION OF EACH SAMPLE AREA					ATORY	ASSESS OF MAT	
Homogeneous			Friable	Asbestos	Present	Condition	Hazard Assessment Category
Area & Sample ID	Description	Location/Room #	(Y/N)	Percent	Asbestos	Assessment Gategory	
10-30	Joint Compound	Room 1	Y	0.0%	ND	4	N/A
10-31	Joint Compound	Room 3	Y	0.0%	ND	4	N/A
10-32	Joint Compound	Living Room B	Y	0.0%	ND	4	N/A
11-33	Ceiling Texture (texture)	Living Room B	Y	3.0%	CHRY	4	3
11-34	Ceiling Texture (texture)	Living Room B	Y	NT	PACM	4	3
11-35	Ceiling Texture (texture)	Living Room B	Y	NT	PACM	4	3
12-36	Ceiling Texture (stapled)	Kitchen A	Y	0.0%	ND	4	N/A
12-37	Ceiling Texture (stapled)	Kitchen A	Y	0.0%	ND	4	N/A
12-38	Ceiling Texture (stapled)	Kitchen A	Y	0.0%	ND	4	N/A
13-39	Sink Coating (gray)	Kitchen B	l N	0.0%	ND	7	N/A
13-40	Sink Coating (gray)	Kitchen B	N	0.0%	ND	7	N/A
13-41 T			N	0.0%	ND	7	N/A
14-42	Vinyl Sheet Flooring (green/pink)	Kitchen A Layer 3	Y	0.0%	ND	7	N/A
14-43	Vinyl Sheet Flooring (green/pink)	Kitchen A Layer 3	Y	0.0%	ND	7	N/A
14-44 T	Vinyl Sheet Flooring (green/pink)	Kitchen A Layer 3	Y	0.0%	ND	7	N/A
15-45	Vinyl Sheet Flooring (green/dark green)	Kitchen A Layer 2	Y	0.0%	ND	7	N/A
15-46	Vinyl Sheet Flooring (green/dark green)	Kitchen A Layer 2	Y	0.0%	ND	7	N/A
15-47 T	Vinyl Sheet Flooring (green/dark green)	Kitchen A Layer 2	Y	0.0%	ND	7	N/A
16-48	Vinyl Sheet Flooring (12" slate square)	Kitchen A Layer 1	N	0.0%	ND	7	N/A
16-49	Vinyl Sheet Flooring (12" slate square)	Kitchen A Layer 1	N	0.0%	ND	7	N/A
16-50 T	Vinyl Sheet Flooring (12" slate square)	Kitchen A Layer 1	N	0.0%	ND	7	N/A
17-51	Vinyl Sheet Flooring (9" beige/white square)	Room 1 - Layer 1	N	0.0%	ND	7	N/A
17-52	Vinyl Sheet Flooring (9" beige/white square)	Room 1 – Layer 1	N	0.0%	ND	7	N/A
17-53 T	Vinyl Sheet Flooring (9" beige/white square)	Room I – Layer I	N	0.0%	ND	7	N/A

### Asbestos Present

AMOS - Amosite ACTI - Actinolite ND - None Detected CHRY - Chrysotile CROC - Crocidolite NT - Not Tested ANTH - Anthophylite PACM - Presumed ACM TREM - Tremolite Asbestos Detected

Assessment Categories
(1) Thermal Systems Insulation – Good Condition

<sup>(2)</sup> Thermal Systems Insulation - Damaged

<sup>(3)</sup> Thermal Systems Insulation -Significantly Damaged (4) Surfacing - Good Condition

<sup>(5)</sup> Surfacing – Damaged (6) Surfacing – Significantly Damaged (7) Miscellaneous – Good Condition

<sup>(8)</sup> Miscellaneous - Damaged

<sup>(9)</sup> Miscellaneous - Significantly Damaged

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### ASBESTOS SAMPLE DATA TABLE Commercial Building - 1242 Yeamans Hall Road - Hanahan, SC

Busi	DESCRIPTION OF EACH SAMPLE AREA					ASSESS OF MAT	
Homogeneous			Friable (Y/N)	Asbestos Present		Condition	Hazard
Area & Sample ID	Description	Location/Room #		Percent	Asbestos		Assessmen Category
18-54	Vinyl Sheet Flooring (beige/green)	Room 2 - Layer 3	Y	0.0%	ND	7	N/A
18-55	Vinyl Sheet Flooring (beige/green)	Room 2 – Layer 3	Y	0.0%	ND	7	N/A
18-56 T	Vinyl Sheet Flooring (beige/green)	Room 2 – Layer 3	Y	0.0%	ND	7	N/A
19-57	9" Floor Tile (green)	Room 2 – Layer 2	Y	3.0%	CHRY	9	- 1
19-58	9" Floor Tile (green)	Room 2 – Layer 2	Y	NT	PACM	9	1
19-59	9" Floor Tile (green)	Closet - Layer 2	Y	NT	PACM	9	1
20-60	Floor Tile Mastic (black)	Room 2 – Layer 2	N	8.0%	CHRY	7	1
20-61 Floor Tile Mastic (black) Room 2 - Layer 2		N	NT	PACM	7	1	
20-62 Floor Tile Mastic (black) Clo		Closet - Layer 2	N	NT	PACM	7	1
20-63	Vinyl Sheet Flooring (light wood)	Room 2 – Layer 1	N	0.0%	ND	7	N/A
20-64	Vinyl Sheet Flooring (light wood)	Room 2 – Layer 1	N	0.0%	ND	7	N/A
20-65 T	Vinyl Sheet Flooring (light wood)	Room 2 – Layer 1	N	0.0%	ND	7	N/A
21-66	Vinyl Sheet Flooring (stone)	Living Room B	N	0.0%	ND	7	N/A
21-67	Vinyl Sheet Flooring (stone)	Living Room B	N	0.0%	ND	7	N/A
21-68 T	Vinyl Sheet Flooring (stone)	Kitchen B	N	0.0%	ND	7	N/A
22-69	Floor Felt Paper	Living Room B	N	0.0%	ND	7	N/A
22-70	Floor Felt Paper	Room 3	N	0.0%	ND	7	N/A
22-71 T	Floor Felt Paper	Room 4	N	0.0%	ND	7	N/A
23-72	Vinyl Sheet Flooring (dark wood)	Room 3 – Layer 1	N	0.0%	ND	7	N/A
23-73	Vinyl Sheet Flooring (dark wood)	Room 3 – Layer 1	N	0.0%	ND	7	N/A
23-74 T	Vinyl Sheet Flooring (dark wood)	Room 3 – Layer 1	N	0.0%	ND	7	N/A
24-75	12" Self-Stick Tile (beige stone)	Room 4 – Layer 2	N	0.0%	ND	7	N/A
24-76	12" Self-Stick Tile (beige stone)	Room 4 – Layer 2	N	0.0%	ND	7	N/A
24-77 T	12" Self-Stick Tile (beige stone)	Room 4 – Layer 2	N	0.0%	ND	7	N/A

# Assessment Categories (1) Thermal Systems Insulation - Good Condition

- (2) Thermal Systems Insulation Damaged
- (3) Thermal Systems Insulation -Significantly Damaged
- (4) Surfacing Good Condition
- (5) Surfacing Damaged
- (6) Surfacing Significantly Damaged (7) Miscellaneous Good Condition
- (8) Miscellaneous Damaged
- (9) Miscellaneous Significantly Damaged

#### **Asbestos Present** ACTI - Actinolite

AMOS - Amosite CHRY - Chrysotile CROC - Crocidolite

ND - None Detected NT - Not Tested

TREM - Tremolite

ANTH - Anthophylite PACM - Presumed ACM Asbestos Detected



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### **CONCLUSIONS/RECOMMENDATIONS**

### **Asbestos Inspection**

The comprehensive asbestos survey performed by Trident Environmental Services, Inc. on September 18, 2018 of the Commercial Building located at 1242 Yeamans Hall Road in Hanahan, South Carolina did reveal the presence of ACBM. Renovation or demolition activities that will disturb the ACBM will require removal per state and federal regulations. Asbestos materials can become hazardous when, due to damage, disturbance, or deterioration over time, they release asbestos fibers into the air of the building. All areas that contain asbestos should be utilized in a controlled manner to reduce the potential for disturbance. OSHA requires notification to all trades/contractors about the condition of the ACBM to prevent possible occupational exposures.

Demolition activities in public and commercial buildings are regulated by OSHA, EPA, and SCDHEC. Code 40 of Federal Regulations Part 61, Subpart M, Final Rule, "National Emissions Standards for Hazardous Air Pollutants" (NESHAP), and SCDHEC Regulation 61-86.1 require the proper removal and disposal of ACBM that is affected by renovation or demolition. Demolition of the subject structures will require written notification, proper transportation, and disposal per state and federal regulations.

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HOMOGENEOUS AREA 01 TRANSITE SIDING



HOMOGENEOUS AREA 02 SIDING FELT



HOMOGENEOUS AREA 03 WINDOW GLAZING



HOMOGENEOUS AREA 04 EXTERIOR CAULK



HOMOGENEOUS AREA 05 ROOF SHINGLE



HOMOGENEOUS AREA 06 ROOF FELT

Page 13 of 39



**HOMOGENEOUS AREA 07** BRICK MASTIC (BLACK)



**HOMOGENEOUS AREA 08** SINK COATING (BLACK)



**HOMOGENEOUS AREA 09 DRYWALL** 



**HOMOGENEOUS AREA 10** JOINT COMPOUND



**HOMOGENEOUS AREA 11 CEILING TEXTURE (TEXTURE)** 



**HOMOGENEOUS AREA 12 CEILING TEXTURE (STAPLED)** 

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HOMOGENEOUS AREA 13 SINK COATING (GRAY)



HOMOGENEOUS AREA 14 VINYL SHEET FLOORING (GREEN/PINK)



HOMOGENEOUS AREA 15 VINYL SHEET FLOORING (GREEN/DARK GREEN)



HOMOGENEOUS AREA 16 VINYL SHEET FLOORING (12" SLATE SQUARES)



HOMOGENEOUS AREA 17 VINYL SHEET FLOORING (9" BEIGE/WHITE SQUARES)



HOMOGENEOUS AREA 18 VINYL SHEET FLOORING (BEIGE/GREEN)

Page 15 of 39



HOMOGENEOUS AREAS 19, 20 9" FLOOR TILE (GREEN) MASTIC (BLACK)



HOMOGENEOUS AREA 20 VINYL SHEET FLOORING (LIGHT WOOD)



HOMOGENEOUS AREA 21 VINYL SHEET FLOORING (STONE)



HOMOGENEOUS AREA 22 FLOOR FELT PAPER

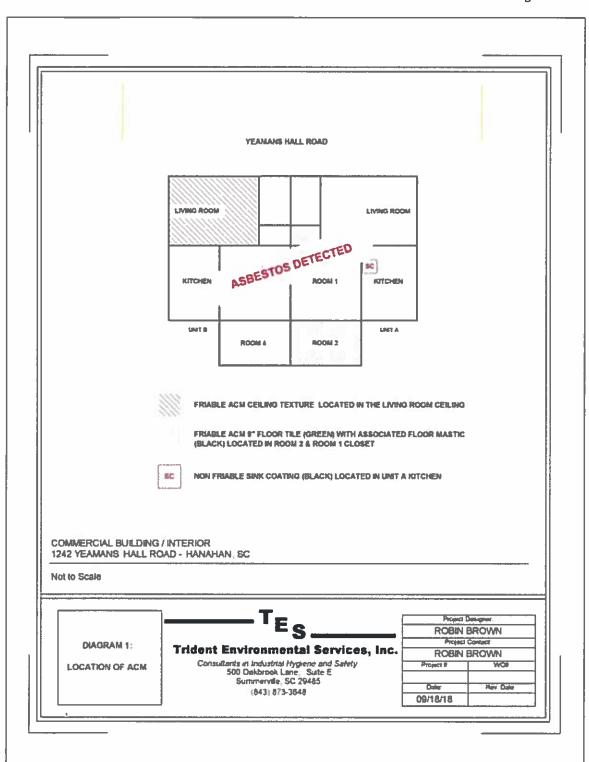


HOMOGENEOUS AREA 23 VINYL SHEET FLOORING (DARK WOOD)

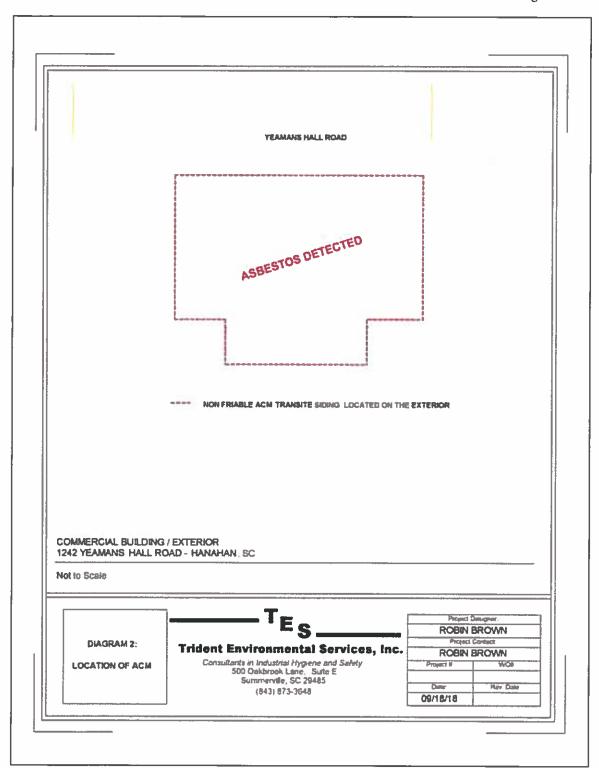


HOMOGENEOUS AREA 24 12" SELF-STICK TILE (BEIGE STONE)

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# COMPREHENSIVE ASBESTOS SURVEY

Inspection Date: 09/18/2018

Preparation Date: 09/26/2018

Inspected & Prepared By:

Hunter Hunor

Hunter Hanson

S.C. Inspector License BI – 01468

# **SCDHEC ISSUED**

Asbestos ID Card

**Hunter Hanson** 

CONSULTBI BI-01468 AIRSAMPLER AS-00413 10/28/18 01/06/19

Reviewed By:

-KARmore

Robin A. Brown
S.C. Inspector License BI – 00613

**SCDHEC ISSUED** 

Asbestos ID Card

**Robin Brown** 

CONSULTPD PD-00176 CONSULTBI BI-00613 AIRSAMPLER AS-00178

Expiration Date: 06/14/19 06/26/19 02/05/19

Page 19 of 39

This accreditation demonstrates facturical competence for a defined scope and the operation of a laboratory quality Certificate of Accreditation to ISO/IEC 17025:2005 This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025;2005. is accredited by the National Voluntary Laboratory Accreditation Program for specific services, management system (rafer to joint ISO-ILAC-IAF Communique dated January 2009) National institute of Standards and Technology Triangle Environmental Service Center, Inc. For the Matternal Voluntary United States Department of Commerce NVLAP LAB CODE: 200794-0 Asbestos Fiber Analysis listed on the Scope of Accreditation, for Midlothian, VA 2018-04-01 through 2019-03-31

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# National Voluntary Laboratory Accreditation Program



### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

### Triangle Environmental Service Center, Inc.

13509 East Boundary Road, Suite B Midlothian, VA 23112 Mr. Feng Jiang Phone: 804-739-1751 Fax: 804-739-1753

Email: info@tesclah.com http://www.tesclab.com

### **ASBESTOS FIBER ANALYSIS**

**NVLAP LAB CODE 200794-0** 

### **Bulk Asbestos Analysis**

Code

Description

IN/A01

EPA - 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbertos in Bulk Insulation Samples

IB/A03

EPA 600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials

For the National ccreditation Program

Effective 2018-04-01 through 2019-03-31

Page 1 of 1

Page 21 of 39

This accreditation demonstrates technical compatence for a defined scope and the operation of a laboratory quality This laboratory is accredited in accordance with the recognized International Standard ISCAEC 17025, 2005. is accredited by the National Voluntary Laboratory Accreditation Program for specific services, management system (refer to joint ISO-ILAC-IAF Communique dated January 2009) National Institute of Standards and Technology Certificate of Accreditation to ISO/IEC 1 For the National Volunting United States Department of Commerce NVLAP LAB CODE: 101904-0 **Asbestos Fiber Analysis** listed on the Scope of Accreditation, for AmeriSci Richmond Midlothian, VA 2018-07-01 through 2019-06-30

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### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

AmeriSci Richmond

dba AmeriSci Richmond 13635 Genito Road Midlothian, VA 23112 Mr. Thomas B. Keith

Phone: 804-763-1200 Fax: 804-763-1800 Email: bkeith@amerisci.com http://www.amerisci.com

### **ASBESTOS FIBER ANALYSIS**

**NVLAP LAB CODE 101904-0** 

### **Bulk Asbestos Analysis**

Code

**Description** 

18/ADL

EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of 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

### Airborne Asbestos Analysis

Code

**Description** 

18/A02

U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

Affective 2018-07-01 through 2019-06-30

Page 1 of 1

Page 23 of 39

### TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B. Midhthian, VA 23112 894-729-1751 • fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services, Inc.

500 Oakbrook Lane, Suite E Summerville, SC 29485 TESC LOGIN # 180919D

DATE OF RECEIPT: 09/19/2018 DATE OF ANALYSIS: 09/19/2018

DATE OF ANALYSIS 09/19/2018 DATE OF REPORT: 09/19/2018

CLIENT 10B/#:

JOB SITE: 1242 Yeamans Hall Rd.

ANALYST. B. Trimmer

TESC SAMPLE #	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
ı	01-01 / Gray granular, white fibers	10% Chrysotile		90%
2	01-02/	Positive Stop		100%
3	01-037	Positive Stop		100%
4	02-04 / Black fibers	NAD	98% Cellulose	2%
5	02-05 / Black fibers	NAD	98% Cellulose	2%
6	02-06 / Black fibers	NAD	98% Cellulose	294
7	01-07 / White posider	NAD		100%
8	03-08 / White powder	NAD		100%
9	03-09 /	Not Analyzed		100%
10	04-10 / Tan, white powder	NAD		100%

Samples are smalyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/SOUR-93-(16, July 1993) (FPA-600MS1-82-020). Dec 1982), or the current US FPA method for the analysis of ashestos in building material. None Detected, not detected infor below the detected limit of method (Reporting limit. 1% Asbestos), Grass fiber is analyzed for quality control blank. LESC recommends by point count to Transamission Electron Microscopy (TLM), for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Art Pollutania) and found to contain less than ten percent (<10%) arbeited by the IPA NESHAP (National Emission Standards for Hazardous Art Pollutania) and found to contain less than ten percent (<10%) arbeited by the Hazardous Art Pollutania (i.e. This test report relates only to the item/s) tested

NVLAF Lab Code 20079440

[LEGEND NAD=No Ashestos Datected, I mn =1 moleum, JC=Joint Compound]

Reviewed By Authorized Signatury:

Feng Jung, AS Senior Geologist, Laboratory Director Yurking Fung, Senior Geologist

September 28, 2018

Page 1 of %

Page 24 of 39

### TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B. Midiothian, VA 23112 804-739-1751 • fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT Trident Environmental Services, Inc.

500 Oakbrook Lane, Suite E Summerville, SC 29485 TESC LOGIN # 180919D

DATE OF RECEIPT: 09/19/2018 DATE OF ANALYSIS 09/19/2018 DATE OF REPORT: 09/19/2018

CLIENT JOB/#:

JOB SITE. 1242 Yeamans Hall Rd.

ANALYST B Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID & GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
11	04-11 / White adhesive	NAD		100%
12	04:127	Not Analyzed		10014
17	05-13 / Black tur-like	NAD	10% Fiberglass	90%
14	05-14 / Black tar-like	NAD	10% Fiberglass	90%
15	05-15 /	Not Analyzed		100%
16	06-16 / Black fibers	NAD	98% Cellulose	294
17	06-17 / Black fibers	NAD	98% Cellulose	2%
18	06-187	Not Analyzed		100%
19	07-19 / Black adhesive	NAD		100%
20	07-20 / Black adhesive	NAD		100%

NVLAP Lab Code 20079440

[LEGEND NAD=No Ashestos Detected, I.mo =I moleum, JC=Joint Compound]

Reviewed By Authorized Signatury:

Fung Jiang, MS Senior Geologist, Laboratory Director Yorking Fang, Senior Geologist

September 23, 20 In

Page 2 of K

Page 25 of 39

### TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B. Midhethian, VA 23112 804-739-1751 • fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services, Inc. 500 Onlybrook Large Suite E

TESC LOGIN # 180919D

500 Oukbrook Lane, Suite E Summerville, SC 29485

DATE OF RECEIPT: 09/19/2018
DATE OF ANALYSIS 09/19/2018
DATE OF REPORT: 09/19/2018

CLIENT IOB/#:

JOB SITE 1242 Yearnams Hall Rd.

ANALYST B Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
21	07-21 /	Not Analyzed		100%
22	08-22 / Black adhesive	3% Chrysutile		97%
23	08-23 /	Positive Stop		100%
24	08-24 /	Positive Stop		100%
25	09-25 / White powder, brown libers	NAD	20% Cellulose	80%
26	09-26 / White powder, brown fibers	NAD	20% Cellulose	10%
27	09-27 / White powder, brown fibers	NAD	20% Cellulose	80%
28	10-28 / White powder	NAD	r karadampan walio na y malika kalikan ilikuwa ilikuwa kata kata kata kata ilikuwa ilikuwa ilikuwa ilikuwa ili	100%
29	10-29 / White powder	NAD		100%
30	10-30 / White powder	NAD		100%

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/6007K-93-126, July 1993 (FPA-6007M-83-920) Dec 1982), or the current US FPA method for the analysis of asbestos in building material. None Detected not detected after below the detected limit of method (Reporting limit, 1% Asbestos). Claim filter is analyzed for quality control blank. IESC recommends by point count to framamenson Flectron Microscopy (FEM), for materials regulated by the EPA NESIDA (National Emission Standards for Hazardous Air Pullatants) and found to contain less than ten percent (<10%) reliented by Polarized Light Microscopy (FEM). Both services are available for an additional lice. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc., This test report relates only to the item(a) tested

NV1.AP Lab Code: 200794-0

[LEGEND NAD=No Ashestos Detected, Line #I moleum, 3C=Joint Compound]

Reviewed By Authorized Signatory:

Feng Jiang, MS Senior Geologist, Laboratory Director Yurdung Fang, Senior Geologist

September 28, 2018

Page 1 of K

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### TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B. Midlothian, VA 23112 884-739-1751 • fax: 884-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT Trident Environmental Services, Inc.

500 Oakbrook Lane, Suite E Summerville, SC 29485

TESC LOGIN #. 180919D

DATE OF RECEIPT: 09/19/2018 DATE OF ANALYSIS 09/19/2018 DATE OF REPORT: 09/19/2018

CLIENT JOB/#

JOB SITE. 1242 Yeamans Hall Rd.

ANALYST B Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
11	10-31 / White powder	NAD		100%
12	10-32 / White powder	NAD		100%
33	11-33 / White powder	3% Chrysotlie		97%
34	11-347	Positive Stop		100%
35	11-35/	Positive Stop	en Paris de la Companya de la Compan	100%
36	12-36 / White powder	NAD		100%
17	12-37 / White powder	NAD		B005%
38	12-38 / White powder	NAD		100%
39	13-39 / Gray adhesive	NAD		100%
40	13-40 / Gray adhesive	NAD		10026
41	11417	Not Analyzed	Philipping Control of the Control of	100%

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (FPA-6000/64-82-020). Dec 1982), or the current US FPA method for the mishvis of ashestoe in building material. Note Detected not detected alloy below the detected limit of method (Reporting limit, 1% Asbestos), Glaus fiber is analyzed for quality control blank. TESC recommends by point count or Transmission Flection Microscopy (TEM), for materials regulated by the LPA NESHAP (National Emission Standards for Hazardous Art Pullulants) and found to contain less than ten percent (<10%) ashestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Iriangle Environmental Service Center, Inc. This test report relates only to the items a tested

NVLAF Lab Code 20079140

[LEGEND NAD-No Ashestos Datocted, I mo =1 moleum, JC=Joint Compound]

Residued By Authorized Signatory:

Feng Jiang, MS Senine Geologist, Laboratory Director

I wedong Fame, Semor Geologist

September 21, 2011

Page 4 of 8

Page 27 of 39

### TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B. Midlothine, VA 23112 804-739-1751 • fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services, Inc. Still Onlyhmoly Lang. Stille F.

500 Oakbrook Lane, Suite E Summerville, SC 29485 TESC LOGIN # 180919D

DATE OF RECEIPT: 09/19/2018 DATE OF ANALYSIS 09/19/2018 DATE OF REPORT: 09/19/2018

CLIENT JOB/#:

JOB SITE. 1242 Yearnans Hall Rd.

ANALYST B Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
42	14-42 / Green line , black fibers	NAD	20% Cellulose	140%
43	14-43 / Green lino_black fibers	NAD	20% Ceitalose	80%
44	14-447	Not Analyzed		100%
45	15-45 / Green lino black fibers	NAD	20% Cellulose	80%
46	15-16 / Green lino , black fibers	NAD	20% Cellulose	HIPS.
47	15-47/	Not Analyzed		100%
48	16-48 / Brown linoleum	NAD	5% Fiberglass	95%
49	16-49 / Brown linoleum	NAD	5% Fiberglass	95%
50	16-30 /	Not Analyzed		100%

Samples are smalyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (FPA-600/M-12-020) Dec 1982), or the current US FPA method for the analysis of asbestos in building material. None Detected; not detected after below the detected limit of method (Reporting limit. 1% Asbestos) (Rass filter is analyzed for quality control blank. LESC recommends by point count or transmission Electron Microscopy (FEM), for materials regulated by the LPA NESHAP (National Emission Standards for Hazindous Air Pollutants) and found to contain less than ten percent (<10%) reheates by Polarized Light Microscopy (FEM) Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc., This test report relates only to the item(s) tested

NVLAP Lab Code 200794-0

[LEGEND NAD=No Asbestos [Selected, I mo #1 moleum, JC#Joint Compound]

Reviewed By Authorized Signatory:

Feng Jiang, MN Senior Geologist, Laboratory Director Yuedong Fang, Senior Geologist

September 2X, 2018

Page 5 of K

Page 28 of 39

### TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B. Midhibian, VA 23112 804-739-1751 • fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT Trident Environmental Services, Inc

500 Oakbrook Line, Suite E Summerville, SC 29485 TESC LOGIN # 180919D

DATE OF RECEIPT: 09/19/2018
DATE OF ANALYSIS 09/19/2018
DATE OF REPORT: 09/19/2018

CLIENT JOB/#:

JOB SITE: 1242 Yearnans Hall Rd.

ANALYST B Trinunce

TESC SAMPLE #	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
51	17-51 / Brown Imo , white fibers	NAD	20% Cellulose	80%
52	17-52 / Brown lino , white fibers	NAD	20% Cellulose	80%
57	17-53 /	Not Analyzed		100%
54	18-54 / Brown lino , black fibers	NAD	20% Cellulose	80%
55	18-55 / Brown lino , black fibers	NAD	20% Cellulose	MI%
56	18-56 /	Not Analyzed		100%
57	19-57 / Green viry	3% Chrysotile		97%
58	19-58 /	Positive Stop	magarangana data shahanakan	100%
59	19-59/	Positive Stop	1999	100%
60	20-60 / Black adhesive	8% Chrysotlic		92%

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (FPA-600/N-93-00), Dec 1982), or the current US FPA method for the malysis of asbestos in building insterial. None Detected: not detected after below the detected limit of method (Reporting Limit, 198 Asbestos), Claus fiber is analyzed for quality control blank. IESC recommends by point count or Transmissional Electron Microscopy (TEM), for insterials regulated by the LPA NESDAP (National Emission Standards for Illiandous Air Pullutants) and found in contain face than ten percent <109% indicates by Polarized Light Microscopy (PLM). Both acroscos are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the items of tested

NVLAP1ab Code 200794-0

[LEGEND NAD=No Ashestos Datected, Lino +Linoleum, JC+Joint Compound]

Reviewed By Authorized Signatory

Fing Jung, MS Senior Geologist, Laboratory Director Furding Fung, Senior Geologist

September 24, 2018

Page 6 of 8

Page 29 of 39

### TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Soundary Road, Suite B, Midhithian, VA 23112 804-739-1751 • fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services, Inc.

500 Oakbrook Lane, Suite E Summerville, SC 29485 TESC LOGIN # 180919D

DATE OF RECEIPT: 09/19/2018
DATE OF ANALYSIS 09/19/2018
DATE OF REPORT: 09/19/2018

CLIENT IOB/#:

JOB SITE: 1242 Yeamans Hall Rd.

ANALYST B Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
61	20-61/	Positive Stop		100%
62	20-62 /	Positive Stop		100%
63	20-63 / Brown linoleum	NAD	5% Fiberglass	95%
64	20-64 / Brown linolcum	NAD	5% Fiberglass	95%
65	20-65 /	Not Analyzed		100%
66	21-66 / Brown linoleum	NAD		100%
67	21-67 / Brown linoleum	NAD		100%
(%	21-68 /	Not Analyzed		100%
69	22-69 / Black fibers	NAD	98% Cellulose	294
70	22+70 / Black fibers	NAD	98% Cellulose	2%

Samples are smalyzed in accordance with "lateran Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/660/R-93-116, July 1993 (EPA-600/M-82-020, Dec 1982), or the current US FPA method for the mishysis of asbestos in building monerial. None Detected: not detected at/or below the detected from the method (Reporting limit, 194 Asbestos). Glass fifter is smaltzed for quality control blank. LESC recommends by point count or Transmission Blectron Microscopy (TEM), for materials regulated by the EPA NESDAP (National Emission Standards for Bazardous Art Pollutants) and found to contain less than ten percent (<0.0%) asbestos by Polarized Light Microscopy (PLM) Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested

NVLAP Lab Code: 200794-0

[LEGEND | NAD=No Ashestos Detected, I mo #I moleum, JC=Joint Compound]

Reviewed By Authorized Signatory:

Feng Jung, AS Senior Geologist, Laboratory Director Yuedang Fang, Senior Geologist

September 21, 2018

Page 7 of %

Page 30 of 39

### TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Rund, Suite B. Midhithian, VA 23112 804-739-1751 • fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services, Inc

TESC LOGIN # 180919D

500 Oakbrook Lane, Suite E Summerville, SC 29485

DATE OF RECEIPT: 09/19/2018
DATE OF ANALYSIS 09/19/2018
DATE OF REPORT: 09/19/2018

CLIENT JOB/#:

JOB SITE: 1242 Yeanians Hall Rd.

ANALYST B Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS 36 MATERIALS
71	22-71 /	Not Analyzed		100%
72	23-72 / Brown Imoleum	NAD		100%
73	23-73 / Brown linoleum	NAD		100%
74	23-74 /	Not Analyzed		Total:
75	24-75 / Gray vinyl	NAD		100%
76	24-76 / Gray viry1	NAD		100%
77	24:77 /	Not Analyzed		100%

Total Samples/Layers Analyzed: 51

Samples are marked in accordance with "Interim Method for the Deterimination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (FPA-600/M-92-020), Dec 1982), or the current US FPA method for the insulysis of asbestos in halding material. None Detected not detected after below the detected kini of method (Reporting limit, 195 Asbestos). Class filter is mail-zed for quality control blank. TESC recommends by point count of Transmission Flectron Microscopy (TEM), for materials regulated by the LPA NUSIIAP (National Emission Standards for Hazardous Ar Pollutins) and found to contain less than ten percent (<10%) arbestos by Polarized I right Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc., This test report relates only to the item(s) tested

NVLAP Lab Code: 200794-0

[LEGEND NATI-No Ashestos Detected, I mn =1 mofeum, JC+Joint Compound]

Reviewed By Authorized Signatory:

Feng Jiang, MS Senior Geologist, Laboratory Director Lucdong Fong, Senior Geologist

September 24, 2018

Page II of K

Page 31 of 39

		TRIANGL	E ENVIRON	MENTAL SERV	TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.	
	SIS	1350° Eau Be MMARY OF BL	under; Reed, Suive B.	13589 Erit Boundary Rood, Seiter B. Middenheim, VA 23112 • 864-799-1751 • fav. 884-799-1753 ARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELCTRON MI	13599 East Boundary Road, Suive B. Middenham, VA 23112 • 804-799-1751 • East BRILTA-1753 UMMARY OF BULLK ASBESTOS ANALYSIS BY TRANSMISSION ELCTRON MICROSCOPY	н
CLIENT	Trident Env SKN Oakbra Summervilk	Tricut Environnental Services, Int 900 Oakbrook Lanc, Suite E Summerville, SC 20485	A fine		TESC LOGIN #  DATE OF RECEIPT:	1889194. C: (99/19/2018
CLIENT PROJECT # JOBSITE		1242 Yeamans Hall Rd.			DATE OF REPORT ANALYST:	2
TAT	i Day					
SAMPLE	SAMPLES	SAMPLE WEIGHT (g)	HEAT SENSITIVE ORGANIC %	ACID SOLUBLE INORGANIC %	INSOLUBLE NON-ASBESTOS INORGANIC %	ASBESTOS% BY TEM
-	03-00	0.465	7.3	96 9	•	NAD
8	05-15	0.463	18.1	40.8	41.3	MAD
е п	06-18	01.013	93.1	2.7	4.2	NAD
4	07-21	0.205	8	2	6	NAD
	13-41	0.243	18.9	37	44.1	NAD
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10	16-50	0.635	72.4	24.6	eg	NAD
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12	21-68	0.355	50.7	45.1	* 2	NAD
13	17:22	0.476	24.55	2.7	2.00	NAD
71	23-74	0.538	22	28.2	80	NAD
15	24.77	0.878	*	66.7	19.3	NAD
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ACID SOLUBLE INORGANIC %

HEAT SENSITIVE ORGANIC %

SAMPLE WEIGHT (g)

TRSC SAMPLE #

TAT

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22.4

0450

04-12

60

Total Sample(s) Analyzed: 16

2

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Page 416 4

## TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

1350 East Boundary Rand, Salte B, Middethian, VA 23112 + 804-739-1751 + fat: 884-739-1753

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		DATE OF ANALYSIS	81112/12/61
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Page 37 of 39

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### COMPREHENSIVE ASBESTOS SURVEY

### COMMERCIAL BUILDING 5902 HOWARD STREET HANAHAN, SC 29410



Prepared For:

CITY OF HANAHAN Attn: Mrs. Katherine Farias 1255 Yeamans Hall Road Hanahan, SC 29410 (843) 576-5254

Performed By:



Trident Environmental Services, Inc.

Consultants in Industrial Hygiene and Safety 500 Oakbrook Lane, Suite E Summerville, SC 29485 (843) 873-3648

### COMPREHENSIVE ASBESTOS SURVEY

Commercial Building 5902 Howard Street Hanahan, SC 29410

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### **EXECUTIVE SUMMARY**

The comprehensive asbestos survey performed by Trident Environmental Services, Inc. on September 19, 2018 of the Commercial Building located at 5902 Howard Street in Hanahan, South Carolina did reveal the presence of asbestos containing building materials. The following summary exhibits the asbestos containing building materials (ACBM) that were identified in the inspection.

### **Asbestos**

Description	Туре
Transite Siding	Category II – Non Friable
Brick Mastic (black)	Category I – Non Friable
Joint Compound	RACM – Friable
Ceiling Panel	RACM – Friable
12" Floor Tile (beige)	RACM – Friable
Floor Tile Mastic (tan)	Category I – Non Friable
Vinyl Sheet Flooring (red/orange)	RACM – Friable

RACM - Regulated Asbestos Containing Material

The identified ACBM includes the item(s) listed above. All removal work of the identified ACBM should be performed by a properly trained and licensed abatement contractor prior to the planned renovation/demolition activities.

Trident Environmental Services, Inc.
Consultants of Industrial Hypere and Safety
200
Summer ride, 2C 2005
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### **BACKGROUND**

Trident Environmental Services, Inc. was contracted by City of Hanahan to perform a comprehensive asbestos survey of the Commercial Building located at 5902 Howard Street in Hanahan, South Carolina. The survey was performed in order to satisfy the NESHAP requirements for renovation and/or demolition. The structure contains three one bedroom, one bathroom apartments constructed on foundation and consisting of approximately 1,900 square feet. Interior walls and ceilings are drywall with joint compound applied at the seams and patches. Floor finishes include vinyl floor tiles, vinyl sheet flooring, hardwood and carpet. Roofing material consists of asphalt shingles and felt paper. Exterior construction is wood, with wood trim, soffits, eaves doors/windows and transite siding.

### **Asbestos**

The inspection was conducted to identify asbestos-containing building materials (ACBM) which may be disturbed during the renovation/demolition activities. The identification of ACBM will aid in the prevention of occupational exposures and/or environmental releases of airborne asbestos fibers. Identification of ACBM also complies with Title 40 Code of the Federal Regulations, Part 61, and South Carolina Department of Health and Environmental Control (SCDHEC) Regulation 61-86.1, along with Title 29 Code of Federal Regulations, Part 1926 enforced by the Occupational Safety and Health Administration (OSHA). The Asbestos Survey describes the investigative procedures utilized, results of the suspect ACBM sampled/analyzed, and recommendations regarding the structures as related to asbestos.

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### **ASBESTOS SURVEY**

### Asbestos Investigative Procedures

Trident Environmental Services, Inc. conducted an inspection for suspect ACBM on September 19, 2018 of the Commercial Building located at 5902 Howard Street in Hanahan, South Carolina. It is our understanding that the subject structure will undergo renovation or demolition activities in the near future. The asbestos survey was performed by observing and sampling suspect building materials. Significant destructive testing was not utilized during the inspection. There is a possibility that suspect materials exist in inaccessible areas such as wall cavities and pipe chases. If any additional suspect ACBM are discovered during the course of demolition activities, bulk samples should be extracted to identify the presence, or absence, of asbestos prior to continuation of work activities.

A sampling strategy was developed to provide representative samples for analysis. Samples were then extracted from a variety of suspect ACBM. Bulk samples collected were—recorded on a Chain-of-Custody record and submitted to Trident Environmental Service Center, Inc. (TESC) a Polarized Light Microscopy (PLM) laboratory. The laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), which is administered by the National Institute of Standards and Technology (NIST). TESC is accredited by NVLAP for the analysis of bulk asbestos by PLM (NVLAP Lab Code: 200794-0).

The suspect materials were analyzed by trained microscopists utilizing PLM techniques coupled with dispersion staining in accordance with EPA Test Method Title 40 Code of Federal Regulations, Chapter 1 (1-1-87 edition), Part 763, Subpart F- Appendix A. This method identifies asbestos mineral fibers based on six optical characteristics: morphology, birefringence, refractive index, extinction angle, sign of elongation and dispersion staining colors. The laboratory analysis reports the specific type of asbestos identified (there are six asbestos minerals) and the percentage of asbestos present. The EPA and OSHA defines materials as asbestos containing if an asbestos content of greater than one percent (>1%) is detected in a representative sample.

Non-Friable Organically Bound (NOB) samples were submitted to AmeriSci Richmond Laboratory for analyses by Transmission Electron Microscopy (TEM). SCDHEC requires NOB materials with negative or trace results by PLM to be analyzed by at least one TEM. SCDHEC in accordance with ASTM E 2356-04 defines NOB materials as "materials that are not friable and that consist of fibers and other particulate matter embedded in a solid matrix of asphalt, vinyl or other organic substances." Examples of NOB materials include but are not limited to flooring materials such as vinyl floor tiles, vinyl sheet flooring, adhesives, mastics, asphalt shingles, roofing materials, glazing, caulks, and cove base.



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The EPA classifies ACBM into two categories, friable and non-friable. A friable material creates a greater health hazard due to the fact that it may be "crumbled, pulverized or reduced to powder by the forces expected to act upon it in the course of demolition or renovation operations."

Friable Asbestos material means any material containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763 section 1, Polarized Light Microscopy, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

Category I Non Friable Asbestos-Containing Material (ACM) means asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than one percent asbestos as determined using the method specified in appendix A, subpart F, 40 CFR part 763, section 1, Polarized Light Microscopy.

Category II Non Friable ACM means any material, excluding Category I non friable ACM, containing more than one percent asbestos as determined using the methods specified in appendix A, subpart F, 40 CFR part 763, section I, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure. (cement siding, transite board shingles, etc.)

Regulated Asbestos-Containing Material (RACM) means (a) Friable asbestos material, (b) Category I non friable ACM that has become friable, (c) Category I non friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

The following section summarizes the sample numbers, locations, type material, asbestos type, percent of asbestos detected, present condition of the asbestos containing material, potential for disturbance, and hazard assessment ratings. The asbestos sample laboratory analyses and chain of custody records are included at the end of this report.

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### Asbestos Abbreviations and Hazard Assessment Key

The EPA and SCDHEC require that confirmed ACBM is given a hazard assessment based on its present condition and potential for future disturbance. This hazard assessment is used as a tool for prioritization in future remedial actions regarding the ACBM. The following key demonstrates the criteria that make up the hazard assessment.

### **Present Condition**

F = Friable

G = Good (very localized limited damage)

NF = Non-friable

D = Damaged (<10% distributed and/or <25% localized)

S = Significantly Damaged (≥10% distributed and/or 25% localized)

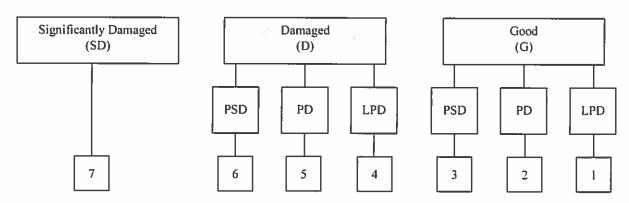
### Potential for Future Disturbance

LPD = Low Potential for Disturbance (Contact, Vibration, and/or Air Erosion – low concern)

PD = Potential for Damage (Contact, Vibration, and/or Air Erosion – moderate concern)

PSD = Potential for Significant Damage (Contact, Vibration and/or Air Erosion – high concern)

### Hazard Assessment



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### HOMOGENOUS AREA ESTIMATED FOOTAGE TABLE Commercial Building – 5902 Howard Street – Hanahan, SC

HOMOGENOUS AREA ID #	DESCRIPTION	ESTIMATED AMOUNT
01	Transite Siding	3,330 SF
02	Siding Felt	3,330 SF
03	Window Glazing	52 SF
04	Exterior Caulk	100 SF
05	Roof Shingle	2,293 SF
06	Roof Felt	2,293 SF
07	Brick Mastie (black)	16 SF
08	MDF Board	280 SF
09	Drywall	4,676 SF
10	Joint Compound	4,956 SF
11	Ceiling Panel	35 SF
12	12" Floor Tile (beige)	189 SF
13	Floor Tile Mastic (tan)	189 SF
14	Vinyl Sheet Flooring (green/red)	329 SF
15	Vinyl Sheet Flooring (gray/red/yellow)	189 SF
16	Vinyl Sheet Flooring (red brick)	50 SF
17	Vinyl Sheet Flooring (blue brick)	160 SF
18	Vinyl Mastic (tan)	160 SF
19	Vinyl Sheet Flooring (12" slate)	194 SF
20	Vinyl Sheet Flooring (9" beige squares)	108 SF
21	Floor Felt Paper	108 SF
22	Vinyl Sheet Flooring (green/beige circle)	108 SF
23	Vinyl Sheet Flooring (green rocks)	108 SF
24	Vinyl Sheet Flooring (red flower)	140 SF
25	Vinyl Sheet Flooring (wood)	290 SF
26	12" Self-Stick Floor Tile (dark slate)	10 SF
27	Vinyl Floor Plank (dark wood)	36 SF
28	Vinyl Sheet Flooring (red/orange)	60 SF

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### <u>ASBESTOS SUMMARY</u> Commercial Building – 5902 Howard Street – Hanahan, SC

DESCRIPTION	ТҮРЕ	ESTIMATED AMOUNT
Transite Siding	Category II - Non Friable	3,330 SF
Brick Mastic (black)	Category I – Non Friable	16 SF
Joint Compound	RACM – Friable	4,956 SF
Ceiling Panel	RACM – Friable	35 SF
12" Floor Tile (beige)	RACM – Friable	189 SF
Floor Tile Mastic (tan)	Category I – Non Friable	189 SF
Vinyl Sheet Flooring (red/orange)	RACM – Friable	60 SF

RACM - Regulated Asbestos Containing Material

\*PACM - Presumed Asbestos Containing Material

SCDHEC requires any non-friable material that is identified in an asbestos inspection report in a condition other than good and non-friable must be handled as a Regulated Asbestos Containing Material (RACM) and identified as friable on the asbestos abatement application. This requirement is reflected in the Asbestos Summary Table listed above.

Asbestos fibers were identified in the Transite Siding. Approximately 3,330 square feet is present and in good condition. This material is considered Category II – Non Friable Asbestos and is located on the exterior.

Asbestos fibers were identified in the Brick Mastic (black). Approximately 16 square feet is present and in good condition. This material is considered Category I – Non Friable Asbestos and is located around the roof.

Asbestos fibers were identified in the Joint Compound. Approximately 4,956 square feet is present and is good condition. This material is considered RACM – Friable Asbestos and is located on the walls and ceilings.

Asbestos fibers were identified in the Ceiling Panel. Approximately 35 square feet is present and is significantly damaged. This material is considered RACM – Friable Asbestos and is located on the Shop ceiling and above the ceiling in Bedroom 4.

Asbestos fibers were identified in the 12" Floor Tile (beige). Approximately 189 square feet is present and in good condition. This material is considered RACM – Friable Asbestos and is located in the Kitchen inside Unit A. (layer 1) Note: Floor Tile Mastic may be located under cabinets or non-load bearing walls.



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Asbestos fibers were identified in the Floor Tile Mastic (tan). Approximately 189 square feet is present and in good condition. This material is considered Category I – Non Friable Asbestos and is located in the Kitchen inside Unit A. (layer 1). Note: Floor Tile Mastic may be located under cabinets or non-load bearing walls.

Asbestos fibers were identified in the Vinyl Sheet Flooring (red/orange). Approximately 60 square feet is present and in good condition. This material is considered RACM — Friable Asbestos and is located in the Bathroom inside Unit C. Note: Floor Tile Mastic may be located under cabinets or non-load bearing walls.

The estimated quantities provided should be verified by contractor and/or building owner. Any discrepancies are to be addressed prior to removal of ACM. Please note that removal costs vary depending on the contractor, the quantity/condition of the ACM, and the accessibility/location of the ACM.

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### **ASBESTOS SAMPLE DATA TABLE** Commercial Building - 5902 Howard Street - Hanahan, SC

	DESCRIPTION OF EACH S	AMPLE AREA		LABOR	ATORY	ASSESS OF MAT	
Homogeneous			Friable	Asbestos	Present	Condition	Hazard
Area & Sample ID	Description	Location/Room #	(Y/N)	Percent	Asbestos	Assessment Category	Assessment Category
01-01	Transite Siding	Exterior Siding	N	20.0%	CHRY	7	3
01-02	Transite Siding	Exterior Siding	N	NT	PACM	7	3
01-03	Transite Siding	Exterior Siding	N	NT	PACM	7	3
02-04	Siding Felt	Exterior Siding	N	0.0%	ND	7	N/A
02-05	Siding Felt	Exterior Siding	N	0.0%	ND	7	N/A
02-06 T	Siding Felt	Exterior Siding	N	0.0%	ND	7	N/A
03-07	Window Glazing	Window 1	Y	0.0%	ND	7	N/A
03-08	Window Glazing	Window 2	Y	0.0%	ND	7	N/A
03-09 T	Window Glazing	Window 3	Y	0.0%	ND	7	N/A
04-10	Exterior Caulk	Window 1	N	0.0%	ND	7	N/A
04-11	Exterior Caulk	Door 1	N	0.0%	ND	7	N/A
04-12 T	Exterior Caulk	Door 2	N	<1.0%	CHRY	7	N/A
05-13	Roof Shingle	Exterior Roof	N	0.0%	ND	7	N/A
05-14	Roof Shingle	Exterior Roof	N	0.0%	ND	7	N/A
05-15 T	Roof Shingle	Exterior Roof	N	0.0%	ND	7	N/A
06-16	Roof Felt	Exterior Roof	N	0.0%	ND	7	N/A
06-17	Roof Felt	Exterior Roof	N	0.0%	ND	7	N/A
06-18 T	Roof Felt	Exterior Roof	N	0.0%	ND	7	N/A
07-19	Brick Mastic (black)	Exterior Roof	N	10.0%	CHRY	7	T.
07-20	Brick Mastic (black)	Exterior Roof	N	NT	PACM	7	1
07-21 T	Brick Mastic (black)	Exterior Roof	N	NT	PACM	7	1
08-22	MDF Board	Living Room B	Y	0.0%	ND	7	N/A
08-23	MDF Board	Living Room B	Y	0.0%	ND	7	N/A
08-24	MDF Board	Living Room B	Y	0.0%	ND	7	N/A
09-25	Drywall	Bedroom A	Y	0.0%	ND	7	N/A
09-26	Drywall	Bedroom A	Y	0.0%	ND	7	N/A
09-27	Drywall	Bedroom A	Y	0.0%	ND	7	N/A
10-28	Joint Compound	Living Room A	Y	2.0%	CHRY	-4	3
10-29	Joint Compound	Living Room A	Y	NT	PACM	- 4	3

- <u>Assessment Categories</u>
  (1) Thermal Systems Insulation Good Condition
- (2) Thermal Systems Insulation Damaged
- (3) Thermal Systems Insulation -Significantly Damaged
- (4) Surfacing Good Condition
- (5) Surfacing Damaged
- (6) Surfacing Significantly Damaged (7) Miscellaneous Good Condition (8) Miscellaneous Damaged

- (9) Miscellaneous Significantly Damaged

### Asbestos Present

TREM - Tremolite

AMOS - Amosite ACTI - Actinolite CHRY - Chrysotile ND - None Detected

CROC - Crocidolite NT = Not Tested ANTH - Anthophylite PACM - Presumed ACM

Asbestos Detected



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### **ASBESTOS SAMPLE DATA TABLE** Commercial Building - 5902 Howard Street - Hanahan, SC

DESCRIPTION OF EACH SAMPLE AREA				LABORATORY		ASSESSMENT OF MATERIALS	
Homogeneous			Friable	Asbestos Present		Condition	Hazard
Area & Sample ID			Percent	Asbestos	Assessment Category	Assessment Category	
10-30	Joint Compound	Bedroom A	Y	NT	PACM	4	3
10-31	Joint Compound	Bedroom 2 B	Y	NT	PACM	4	3
10-32	Joint Compound	Living Room B	Y	NT	PACM	4	3
10-33	Joint Compound	Kitchen B	Ý	NT	PACM	4	3
10-34	Joint Compound	Bedroom 1 B	Y	NT	PACM	4	3
11-35	Ceiling Panel	Shop	Y	98.0%	CHRY	9	7
11-36	Ceiling Panel	Shop	Y	NT	PACM	9	7
11-37	Ceiling Panel	Shop	Y	NΤ	PACM	9	7
12-38	12" Floor Tile (beige)	Kitchen A - Layer 1	Y	2.0%	CHRY	7	1
12-39	12" Floor Tile (beige)	Kitchen A - Layer 1	Y	NT	PACM	7	1
12-40	12" Floor Tile (beige)	Kitchen A - Layer 1	Y	NT	PACM	7	1
13-41	Floor Tile Mastic (tan)	Kitchen A - Layer 1	N	0.0%	ND	7	N/A
13-42	Floor Tile Mastic (tan)	Kitchen A - Layer 1	N	0.0%	ND	7	N/A
13-43	Floor Tile Mastic (tan)	Kitchen A - Layer 1	N	<1.9%	CHRY	7	1
14-44	Vinyl Sheet Flooring (green/red)	Kitchen A – Layer 2	Y	0.0%	ND	7	N/A
14-45	Vinyl Sheet Flooring (green/red)	Living Room A Layer 2	Y	0.0%	ND	7	N/A
14-46 T	Vinyl Sheet Flooring (green/red)	Bedroom 3 Layer 2	Y	0.0%	ND	7	N/A
15-47	Vinyl Sheet Flooring (green/red/yellow)	Kitchen A – Layer 3	Y	0.0%	ND	7	N/A
15-48	Vinyl Sheet Flooring (green/red/yellow)	Kitchen A – Layer 3	Y	0.0%	ND	7	N/A
15-49 T	Vinyl Sheet Flooring (green/red/yellow)	Kitchen A – Layer 3	Υ	0.0%	ND	7	N/A
16-50	Vinyl Sheet Flooring (red brick)	Kitchen A – Layer 1	Y	0.0%	ND	7	N/A
16-51	Vinyl Sheet Flooring (red brick)	Kitchen A – Layer 1	Y	0.0%	ND	7	N/A
16-52 T	Vinyl Sheet Flooring (red brick)	Kitchen A – Layer I	Y	0.0%	ND	7	N/A
17-53	Vinyl Sheet Flooring (blue brick)	Living Room A Layer 1	Y	0.0%	ND	7	N/A

- Assessment Categories
  (1) Thermal Systems Insulation Good Condition
- (2) Thermal Systems Insulation Damaged
- (3) Thermal Systems Insulation -Significantly Damaged
- (4) Surfacing Good Condition -
- (5) Surfacing Damaged
- (6) Surfacing Significantly Damaged (7) Miscellaneous Good Condition (8) Miscellaneous Damaged

- (9) Miscellaneous Significantly Damaged

### Asbestos Present

ANTH - Anthophylite

TREM - Tremolite

AMOS - Amosite ACTI - Actinolite CHRY - Chrysotile ND - None Detected CROC - Crocidolite NT - Not Tested

PACM - Presumed ACM

Asbestos Detected



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### **ASBESTOS SAMPLE DATA TABLE** Commercial Building - 5902 Howard Street - Hanahan, SC

DESCRIPTION OF EACH SAMPLE AREA				LABORATORY		ASSESSMENT OF MATERIALS	
Homogeneous	Description		Friable (Y/N)	Asbestos Present		Condition	Hazard
Area & Sample ID		Location/Room #		Percent	Asbestos	Assessment Category	Assessmen Category
17-54	Vinyl Sheet Flooring (blue brick)	Living Room A Layer 1	Y	0.0%	ND	7	N/A
17-55 T	Vinyl Sheet Flooring (blue brick)	Living Room A Layer 1	Y	0.0%	ND	7	N/A
18-56	Vinyl Mastic (tan)	Living Room A Layer I	N	0.0%	ND	7	N/A
18-57	Vinyl Mastic (tan)	Living Room A Layer I	N	0.0%	ND	7	N/A
18-58 T	Vinyl Mastic (tan)	Living Room A Layer I	N	0.0%	ND	7	N/A
19-59	Vinyl Sheet Flooring (12" slate)	Living Room A Layer 1	Y	0.0%	ND	7	N/A
19-60	Vinyl Sheet Flooring (12" slate)	Living Room A Layer 1	Y	0.0%	ND	7	N/A
19-61 T	Vinyl Sheet Flooring (12" slate)	Kitchen B Layer 1	Y	0.0%	ND	7	N/A
20-62	Vinyl Sheet Flooring (9" beige squares)	Bathroom A Layer 1	Y	0.0%	ND	7	N/A
20-63	Vinyl Sheet Flooring (9" beige squares)	Bathroom A Layer I	Y	0.0%	ND	7	N/A
20-64 Т	Vinyl Sheet Flooring (9" beige squares)	Bathroom A Layer 1	Y	0.0%	ND	7	N/A
21-65	Floor Felt Paper	Bathroom A Layer 2	N	0.0%	ND	7	N/A
21-66	Floor Felt Paper	Bathroom A Layer 2	N	0.0%	ND	7	N/A
21-67 T	Floor Felt Paper	Bathroom A Layer 2	N	0.0%	ND	7	N/A
22-68	Vinyl Sheet Flooring (green/beige circle)	Bathroom A Layer 3	Y	0.0%	ND	7	N/A
22-69	Vinyl Sheet Flooring (green/beige circle)	Bathroom A Layer 3	Y	0.0%	ND	7	N/A
22-70 T	Vinyl Sheet Flooring (green/beige circle)	Bathroom A Layer 3	Y	0.0%	ND	7	N/A
23-71	Vinyl Sheet Flooring (green rocks)	Bathroom A Layer 4	Y	0.0%	ND	7	N/A
23-72	Vinyl Sheet Flooring   Bathroom A		Y	0.0%	ND	7	N/A
23-73 T	Vinyl Sheet Flooring (green rocks)	Bathroom A Layer 4	Y	0.0%	ND	7	N/A

Assessment Categories
(1) Thermal Systems Insulation – Good Condition

(2) Thermal Systems Insulation - Damaged

(3) Thermal Systems Insulation -Significantly Damaged

(4) Surfacing - Good Condition

(5) Surfacing – Damaged(6) Surfacing – Significantly Damaged

(7) Miscellaneous - Good Condition

(8) Miscellaneous - Damaged

(9) Miscellaneous - Significantly Damaged

**Asbestos Present** 

AMOS - Amosite ACTI - Actinolite

CHRY - Chrysotile ND - None Detected CROC - Crocidolite NT - Not Tested

ANTH - Anthophylite PACM - Presumed ACM TREM - Tremolite Asbestos Detected

Trident Environmental Services, Inc.
Considents in Indicated Property and Safety
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Summersite SC 25465

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### ASBESTOS SAMPLE DATA TABLE Commercial Building – 5902 Howard Street – Hanahan, SC

DESCRIPTION OF EACH SAMPLE AREA				LABORATORY		ASSESSMENT OF MATERIALS	
Homogeneous	Description	Location/Room #	Friable (Y/N)	Asbestos Present		Condition	Hazard
Area & Sample ID				Percent	Asbestos	Assessment Category	Assessment Category
24-74	Vinyl Sheet Flooring (red flower)	Bedroom 3 Layer 3	Y	0.0%	ND	7	N/A
24-75	Vinyl Sheet Flooring (red flower)	Bedroom 3 Layer 3	Y	0.0%	ND	7	N/A
24-76 T	Vinyl Sheet Flooring (red flower)	Bedroom 3 Layer 3	Y	0.0%	ND	7	N/A
25-77	Vinyl Sheet Flooring (wood)	Living Room B Layer I	Y	0.0%	ND	7	N/A
25-78	Vinyl Sheet Flooring (wood)	Living Room B Layer 1	Y	0.0%	ND	7	N/A
25-79 T	Vinyl Sheet Flooring (wood)	Living Room B Layer I	Y	0.0%	ND	7	N/A
26-80	12" Self-Stick Floor Tile (dark slate)	Kitchen B Layer I	N	0.0%	ND	7	N/A
26-81	12" Self-Stick Floor Tile (dark slate)	Kitchen B Layer I	N	0.0%	ND	7	N/A
26-82 T	12" Self-Stick Floor Tile (dark slate)	Kitchen B Layer I	N	0.0%	ND	7	N/A
27-83	Vinyl Floor Plank (dark wood)	Bathroom B Layer 1	Y	0.0%	ND	7	N/A
27-84	Vinyl Floor Plank (dark wood)	Bathroom B Layer 1	Y	0.0%	ND	7	N/A
27-85 T	Vinyl Floor Plank (dark wood)	Bathroom B Layer 1	Y	0.0%	ND	7	N/A
28-86	Vinyl Sheet Flooring (red/orange)	Bathroom C Layer 1	Y	20.0%	CHRY	7	3
28-87	Vinyl Sheet Flooring (red/orange)	Bathroom C Layer 1	Y	NT	PACM	7	3
28-88	Vinyl Sheet Flooring (red/orange)	Bathroom C Layer 1	Y	NT	PACM	7	3

### **Assessment Categories**

- (1) Thermal Systems Insulation Good Condition
- (2) Thermal Systems Insulation Damaged
- (3) Thermal Systems Insulation Significantly Damaged
- (4) Surfacing Good Condition

### (5) Surfacing - Damaged

- (6) Surfacing Significantly Damaged
- (7) Miscellaneous Good Condition
- (8) Miscellaneous Damaged
- (9) Miscellaneous Significantly Damaged

### Asbestos Present

TREM - Tremolite

AMOS – Amosite
CIIRY – Chrysotile
CROC – Crocidolite
ANTH – Anthophylite
ANTH – Anthophylite

Asbestos Detected



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### CONCLUSIONS/RECOMMENDATIONS

### **Asbestos Inspection**

The comprehensive asbestos survey performed by Trident Environmental Services, Inc. on September 19, 2018 of the Commercial Building located at 5902 Howard Street in Hanahan, South Carolina did reveal the presence of ACBM. Renovation or demolition activities that will disturb the ACBM will require removal per state and federal regulations. Asbestos materials can become hazardous when, due to damage, disturbance, or deterioration over time, they release asbestos fibers into the air of the building. All areas that contain asbestos should be utilized in a controlled manner to reduce the potential for disturbance. OSHA requires notification to all trades/contractors about the condition of the ACBM to prevent possible occupational exposures.

Demolition activities in public and commercial buildings are regulated by OSHA, EPA, and SCDHEC. Code 40 of Federal Regulations Part 61, Subpart M, Final Rule, "National Emissions Standards for Hazardous Air Pollutants" (NESHAP), and SCDHEC Regulation 61-86.1 require the proper removal and disposal of ACBM that is affected by renovation or demolition. Demolition of the subject structures will require written notification, proper transportation, and disposal per state and federal regulations.

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HOMOGENEOUS AREA 01 TRANSITE SIDING



HOMOGENEOUS AREA 02 SIDING FELT



HOMOGENEOUS AREA 03 WINDOW GLAZING



HOMOGENEOUS AREA 04 EXTERIOR CAULK



HOMOGENEOUS AREA 05 ROOF SHINGLE



HOMOGENEOUS AREA 06 ROOF FELT

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HOMOGENEOUS AREA 07 BRICK MASTIC (BLACK)



HOMOGENEOUS AREA 08 MDF BOARD



HOMOGENEOUS AREA 09 DRYWALL



HOMOGENEOUS AREA 10 JOINT COMPOUND

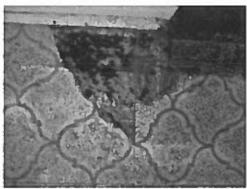


HOMOGENEOUS AREA 11 CEILING PANEL



HOMOGENEOUS AREAS 12, 13 12" FLOOR TILE (BEIGE) MASTIC (TAN)

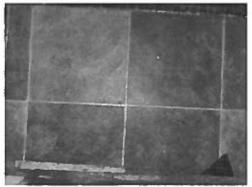
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HOMOGENEOUS AREA 14 VINYL SHEET FLOORING (GREEN/RED)



HOMOGENEOUS AREA 16 VINYL SHEET FLOORING (RED BRICK)



HOMOGENEOUS AREA 19 VINYL SHEET FLOORING (12" SLATE)



HOMOGENEOUS AREA 15 VINYL SHEET FLOORING (GRAY/RED/YELLOW)



HOMOGENEOUS AREAS 17, 18 VINYL SHEET FLOORING (BLUE BRICK) MASTIC (TAN)



HOMOGENEOUS AREA 20 VINYL SHEET FLOORING (9" BEIGE SQUARES)

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HOMOGENEOUS AREA 21 FLOOR FELT PAPER



HOMOGENEOUS AREA 23 VINYL SHEET FLOORING (GREEN ROCKS)



HOMOGENEOUS AREA 25 VINYL SHEET FLOORING (WOOD)



HOMOGENEOUS AREA 22 VINYL SHEET FLOORING (GREEN/BEIGE SQUARES)



HOMOGENEOUS AREA 24 VINYL SHEET FLOORING (RED FLOWER)



HOMOGENEOUS AREA 26 12" SELF-STICK TILE (DARK SLATE)

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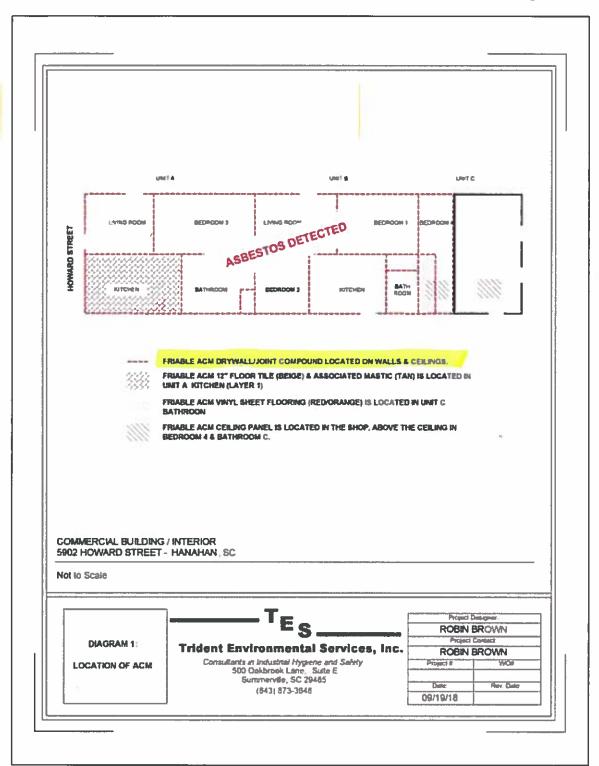


HOMOGENEOUS AREA 27 VINYL FLOOR PLANKS (DARK WOOD)

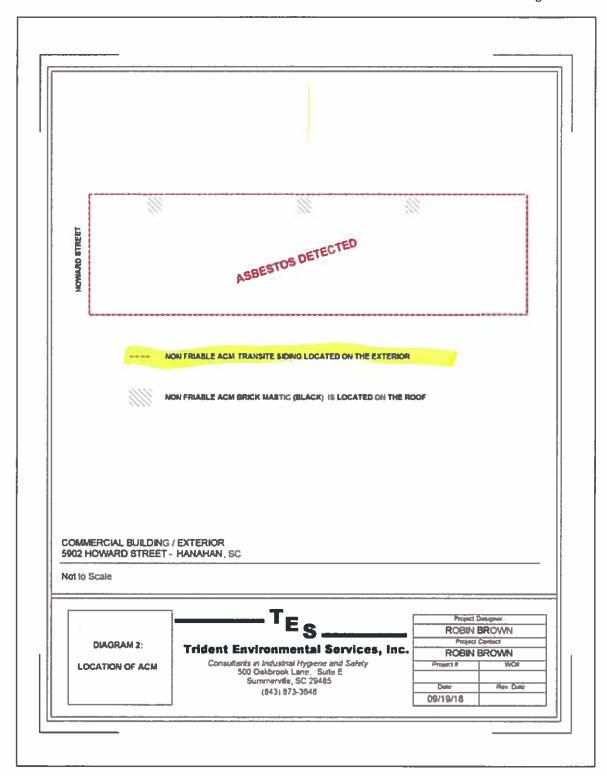


HOMOGENEOUS AREA 28 VINYL SHEET FLOORING (RED/ORANGE)

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ental Services, Inc.

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### **COMPREHENSIVE ASBESTOS SURVEY**

Inspection Date: 09/19/2018

Preparation Date: 10/03/2018

Inspected & Prepared By:

Hunter Hans

Hunter Hanson S.C. Inspector License BI - 01468

### SCDHEC ISSUED

Asbestos ID Card

**Hunter Hanson** 

CONSULTB! B1-01468 AIRSAMPLER AS-00413

10/28/18

Reviewed By:

Hell Brusels.

Robin A. Brown S.C. Inspector License BI – 00613

SCDHEC ISSUED

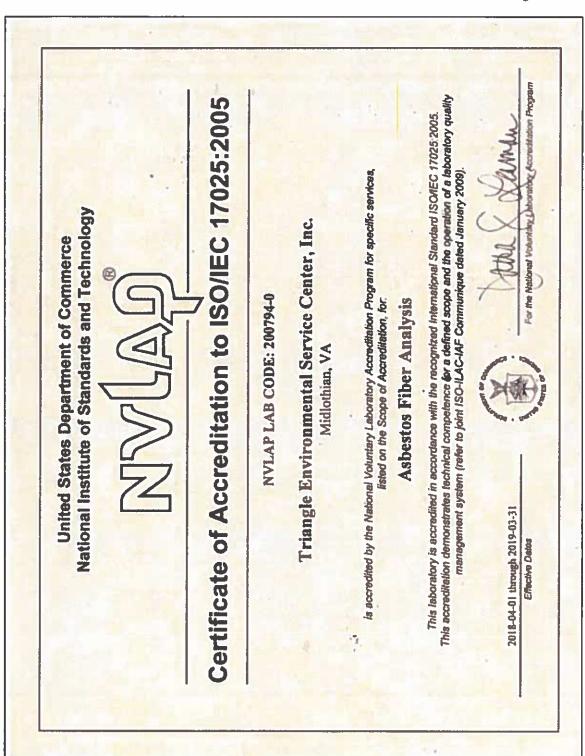
Asbestos ID Card

**Robin Brown** 

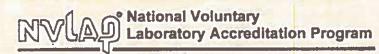
CONSULTPD PD-00176 CONSULTBI BI-00613 AIRSAMPLER AS-00178

06/14/19 06/26/19

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### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Triangle Environmental Service Center, Inc.

13509 East Boundary Road, Suite B Midlothian, VA 23112 Mr. Feng Jinng

Phone: 804-739-1751 Fax: 804-739-1753

Email: info@tesclab.com http://www.tesclab.com

### **ASBESTOS FIBER ANALYSIS**

**NVLAP LAB CODE 200794-0** 

### **Bulk Asbestos Analysis**

Code

Description

18/A01

EPA - 40 CFR Appendix E to Sobpart E of Part 763, Interim Method of the Determination of Asbertos in Bulk Insulation Samples

15/A03

EPA 600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary L

Effective 2018-04-01 through 2019-03-31

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National Institute of Standards and Technology United States Department of Commerce



# Certificate of Accreditation to ISO/IEC 1

NVLAP LAB CODE: 101904-0

### AmeriSci Richmond Midlothian, VA

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

### **Asbestos Fiber Analysis**

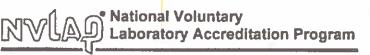
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025-2005. management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).



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2018-07-01 through 2019-06-30

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### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

AmeriSci Richmond dba AmeriSci Richmond 13635 Genito Road Midlothian, VA 23112 Mr. Thomas B. Keith

Phone: 804-763-1200 Fax: 804-763-1800 Email: bkeith@ameriscl.com http://www.amerisci.com

### ASBESTOS FIBER ANALYSIS

**NVLAP LAB CODE 101904-0** 

### **Bulk Asbestos Analysis**

Code

Description

10/401

EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of

Asbestos in Bulk Insulation Samples

14/A03

EPA 600/R-93/116; Method for the Determination of Asbestos in Bulk Building Materials

### Airborne Asbestos Analysis

Code

Description

18/A02

U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in

40 CFR, Part 763, Subpart E, Appendix A

For the National Voluntary Liboratory Accreditation Program

I ffective 2018-07-01 through 2019-06-30

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### TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B. Midlothian, VA 23112 804-739-1751 - fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services, Inc.

500 Oakbrook Lane, Suite E Summerville, SC 29485

TESC LOGIN # 180920T

DATE OF RECEIPT: 09/20/2018 DATE OF ANALYSIS 09/20/2018 DATE OF REPORT: 09/20/2018

CLIENT JOB/#: 5902 Howard Street

JOB SITE Hanaban, SC

ANALYST B Trimunci

TESC SAMPLK#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
I	(01-01) / Gray granular, white fibers	20% Chrysotile		107%
2	01-02 /	Positive Stop		100%
1	01-03 /	Positive Stop		100%
4	02-04 / Black tar-like	NAD	20% Cellulose	30%
5	02-05 / Black tar-like	NAD	20% Cellulose	16U%+
6	D24M6 /	Not Analyzed		100%
7	03-07 / White powder	NAD		100%
8	03-08 / White powder	NAD		100%
9	03-499 /	Not Analyzed		100%
10	04-10 / White adhesive	NAD		100%

Samples are small zed in accordance with "Interior Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/6007k-93-116, July 1993 (FPA-640/M-1-82-020). Dec 1982), or the current US EPA method for the analysis of ashestos in building material. None Detected not detected after helps the detected limit of method (Reporting limit, 1% Abbestos). Class fiber is analyzed for quality control blank. IESC recommends by point count or Transmission Floctron Microscopy (TEM), for insternals regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pullulants) and found to contain less than ten percent (<10%) ashestor by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Iriangle Environmental Service Center, Inc. This test report relates only to the item(s) tested

NVLAP Lab Code: 200794-0

[LEGEND NAD=No Ashestos Detected, I mo =I moleum, JC=Jount Compound]

Reviewed By Authorized Signatory:

Feng Jiang, 48 Senior Geologist, Laboratory Director

Lucking Fame, Senior Geologist

Sentember 25, 2019

Page 1 of 9

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### TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B, Midhithian, VA 23112 804-739-1751 • fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT Indent Environmental Services, Inc.

500 Oakbrook Lane, State E Summerville, SC 29485 TESC LOGIN # 180920T

DATE OF RECEIPT: 09/20/2018
DATE OF ANALYSIS 09/20/2018
DATE OF REPORT: 09/20/2018

CLIENT JOB/#: 5902 Howard Street

JOB SITE Hambun, SC

ANALYST: B Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
13	04-11 / White adhesive	NAD		REMPTS:
12	04-127	Not Analyzed		100%
13	05-13 / Black tur-like	NAD	10% Fiberglass	90%
14	05-14 / Black tar-like	NAD	10% Fiberglass	90%
15	05-157	Not Analyzed		100%
16	06-16 / Black fibers	NAD	98% Celfulose	2%
17	06-17 / Black fibers	NAD	98% Cellulose	2%
18	06-18 /	Not Analyzed	alleratelle district via de disserb librigar variantelebrida	100%
19	07-19 / Black adhesive	10% Chrysotile	5% Cellulose	85%
20	07-20 /	Positive Stop		100%

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (FPA-600/M-82-020, Dec 1982), or the current US FPA method for the analysis of asbestos in building material. None Detected: not detected after below the detected limit of method (Reporting limit: 1% Asbestos), Glass filter is analyzed for quality control blank. IESC recommends by point count to Transmissions Electron Microscopy (TLM), for materials regulated by the EPA NESIAPA (National Emission Standards for Bazardous Art Pollutants) and found in contain less than ten percent (<10%) arbeits by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc., This test report relates only to the item(s) tested.

NVLAF Lab Code: 200794-0

[LEGEND NAD=No Ashestos [Aracted, I mn +1 moleum, JC+Joint Compound]

Reviewed By Authorized Signatory

Feng Jung, MS Senior Geologist, Laboratory Director Yurdong Fang, Senior Geologist

I weckung £ sings September 21, 20 ln

Page 2 rd 9

Page 28 of 45

# TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B, Midlothian, VA 23112 804-739-1751 • fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services. Inc.

500 Oakbrook Lane, Suite E Summerville, SC 29485

DATE OF RECEIPT: 09/20/2018
DATE OF ANALYSIS 09/20/2018
DATE OF REPORT: 09/20/2018

TESC LOGIN # 180920T

CLIENT JOB/# :: 5902 Howard Street

JOB SITE: Hanahan, SC

ANALYST: B Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
21	07-21/	Positive Stop		100%
23	08-22 / Brown fibers	NAD	98% Cellulose	2%
2.3	08-23 / Brown fibers	NAD	98% Cellulose	2%
24	04-24 / Brown fibers	NAD	98% Cellulose	254
25	09-25 / White powder, brown fibers	NAD	20% Cellulose	MISS
26	09-26 / White powder, brown fibers	NAD	20% Cellulose	80%
27	09-27 / White powder, brown fibers	NAD	20% Cellulose	MEG
28	10-28 / White powder	2% Chrysotile		98%
29	10-29 /	Positive Stop		100%
30	10-30 /	Positive Stop		100%

Samples are smalyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/600/R-93-116, July 1993 (EPA-600/R-93-020, Doc 1982), or the current US FPA method for the malysis of asbestos in building material None Detected: not detected into below the detected limit of method (Reporting limit 156 Asbestos). Glain filter is analyzed for quality control blank. IESC recommends by point count of Transmissions Flexton Microscopy (TEM), for materials regulated by the UPA NESHAP (National Emission Standards for Hazardous Art Pollutants) and found to contain less than ten percent extroly indentes by Polarized Light Microscopy (PLM). Both scruces are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item/s) tested

NVLAP Lab Code 200794-0

[LEGEND NAD=No Ashestos Datected, I mo =1 inoleum, JC+Joint Compound]

Reviewed By Anthorized Signatury:

Fing Jiang, MS Senior Geologist, Laboratory Director Yurdong Fang, Senior Geologist

September 23, 2918

Page 1 of 9

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# TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B, Midlothian, VA 23112 804-739-1751 • fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services, Inc.

500 Oakbrook Lane, Suite E

Summerville, SC 29485

TESC LOGIN # 180920T

DATE OF RECEIPT: 09/20/2018 DATE OF ANALYSIS 09/20/2018

DATE OF ANALYSIS 09/20/2018 DATE OF REPORT: 09/20/2018

CLIENT JOB/#: 5902 Howard Street

JOB SITE. Hanaban, SC

ANALYST B Trimmer

TESC SAMPLE #	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
31	10-417	Positive Stop		100%
12	10-32/	Positive Stop		100%
13	10-337	Positive Stop		100%
14	10-347	Positive Stop		100%
35	11-35 / Gray, whate fibers	98% Chrywtile		294
36	H-36/	Positive Stop		100%
37	11-37/	Positive Stop		100%
38	12-38 / Tan viry l	2% Chrysotile		98%
39	12-39 /	Positive Stop		100%
40	12-407	Positive Step		100%
41	13-41 / Brown adhesive	NAD		100%

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/660/R-93-116, July 1993 (EPA-688/MH-82-020, Dec 1982), or the extrent US FPA method for the analysis of asbestos in building material. None Detected not detected attor below the detected limit of method (Reporting limit 198 Asbestos). Claus fiber is analyzed for quality control blank. IESC recommends by point count to runnamension Electron Microscopy (TLM), for materials regulated by the EPA NESIAN (National Emission Standards for Hazindous Air Pullutants) and found to contain less than ten percent (<1094) adventos by Polatized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc., This test report relates only to the stends i tested.

NVLAP Lab Code: 200794-0

[LEGEND NAD-No Ashestos Detected, I mo #1 moleum, JC#Joint Compound]

Reviewed By Authorized Signatury:

Feng Jiang, VS Senior Geologist, Laboratory Director Yurdong Fang, Senior Geologist

September 21, 2018

Page 4 of 9

Page 30 of 45

# TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B, Midlothian, VA 23112 884-739-1751 • fax: 884-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT Trident Environmental Services, Inc

500 Oakbrook Lane, Suite E Summerville, SC 29485

DATE OF RECEIPT: 09/20/2018 DATE OF ANALYSIS 09/20/2018

TESC LOGIN # 180920T

DATE OF REPORT: 09/20/2018

CLIENT JOB/#: 5902 Howard Street

JOB SITE Hamban, SC

ANALYST B Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED 94 ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS 4 MATERIALS
42	13-42 / Brown adhesive	NAD		100%
17	13-417	Not Analyzed		100%
44	14-44 / Black fino , fibers	NAD	20% Cellulose	20176
45	14-45 / Black line., fibers	NAD	20% Cellulose	31/7a
46	14-46 /	Not Analyzed		27001
47	t5-47 / Yellow, red line , black fibers	NAD	20% Cellulose	20175
48	15-48 / Yellow, red line ; black fibers	NAD	20% Cellulose	80%
49	15-49/	Not Analyzed		\$00%
50	16-50 / Brown imo., gray fibers	NAD	20% Cellulose 10% Fiberglass	70%
51	16-51 / Brown lino , gray fibers	NAD	20% Cellulose 10% Fiberglass	7176

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk, Insulation Samples", EP/O600R-93-116, July 1993 (FP/A-080/M-93-2020, Dec 1982), or the current US EPA method for the analysis of asbestos in building interial None Detected not detected after below the detected limit of method (Reporting limit, 1% Asbestos). Glass fiber is malyzed for quality control blank. (EEC recommends by point count of transmission Flectron Microscopy (TFM), for materials regulated by the LPA NESDLAP (National Emission Standards for Houndons Air Pollutants) and found to contain less than ten percent (\*10%) inheritor by Polarized Light Microscopy (FFM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc., This test report relates only to the stem(s) tested.

NVLAP Lab Code: 200794-0

[LEGEND NAD=No Ashestos Detected, I mo =Linoleum, JC=Joint Compound]

Reviewed By Authorized Signatury:

Feng Jiang, MS Senior Geologist, Laboratory Director Furding Fang, Senior Geologist

September 25, 2018

Page 5 of 9

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# TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B, Midiathian, VA 23112 804-739-1751 • fax: 804-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services, Inc

500 Oakbrook Lane, Suite E Summerville, SC 29485 TESC LOGIN 0 180920T

DATE OF RECEIPT: 09/24/2018
DATE OF ANALYSIS 09/20/2018
DATE OF REPORT: 09/20/2018

CLIENT JOB/#; 5902 Howard Street

JOB SITE: Hamiban, SC

ANALYST B Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED 94 ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
52	16-52 /	Not Analyzed		100%
57	17-53 / Blue lino., gray fibers	NAD	20% Cellulose 5% Fiberglass	75%
34	17-54 / Blue lino., gray fibers	NAD	20% Cellulose 5% Fiberglass	75%
55	17-55 /	Not Analyzed		100%
56	18-56 / Yellow adhesive	NAD		100%
57	18-57 / Yellow adhesive	NAD		100%
58	18-58 /	Not Analyzed		100%
59	19-59 / Brown linoleum	NAD		100%
60	19-(a) / Brown linoleum	NAD		1002/
61	19-61 /	Not Analyzed		100%

Samples are analyzed in accordance with "Interim Method for the Determination of Asbestos in Bull, Insulation Samples", EPA-600/M4-82-4(20), Dec 1982), or the current US FPA method for the mishysis of asbestos in building material. None Detected, not detected after below the detected limit of method (Reporting limit; 1% Asbestos). Glass fiber is analyzed for quality control blank. IESC recommends by point count of Transmission Flection Microscopy (TFM), for materials regulated by the LPA NESHAP (National Emission Standards for Hazardous Art Pollutants) and found to contain less than ten percent (<10%) advestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of friungle Linvironmental between Center, Inc. This test report relative only to the item(a) tested

NVLAF Lab Code 20079-1-0

[LEGEND | NAD=No Ashestor [Artected, Lino +1 inoleum, JC+Joint Compound]

Reviewed By Authorized Signatory:

Feng Jiang, MS Senior Geologist, Laboratory Director Funding Fang, Senior Geologist

September 23, 20 R

Page 6 of 9

Page 32 of 45

# TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B, Midlethian, VA 23112 804-739-1751 - fex: 884-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT Trident Environmental Services, Inc.

500 Oakbrook Lane, Suite E

Summerville, SC 29485

TESC LOGIN # 180920T

DATE OF RECEIPT: 09/20/2018 DATE OF ANALYSIS 09/20/2018 DATE OF REPORT: 09/20/2018

CLIENT JOB/#: 5902 Howard Street

JOB SITE Hamban, SC

ANALYST B Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
62	20-62 / Gray Irno , fibers	NAD	20% Cellulose	80%
63	20-63 / Gray lino fibers	NAD	20% Cellulose	805 <sub>6</sub>
64	20-64 /	Not Analyzed		100%
65	21-65 / Black fibers	NAD	98% Cellulose	2%
66	21-66 / Black fibers	NAD	98% Cellulose	2%
67	21-67/	Not Analyzed	the second feet and feet and	100%
68	22-68 / Green, blue lino , black fibers	NAD	20% Cellulose	NU%
69	22-69 / Green, blue lino , black fibers	NAD	20% Cellulose	80%
70	22-70/	Not Analyzed		100%

Samples are snalyzed in accordance with "Interim Method for the Determination of Asbestos in Bull, Insulation Samples", EPA/600/R-93-116, July 1993 (FPA-440/M4-82-020) Dec 1982), or the current US EPA method for the analysis of ashestos in hadding material. None Detected: not detected at/or below the detected limit of method (Reporting limit, 1% Abbestos). Glass fiber is made sed for quality coursed blank. TESC recommends by point count to Fransmission Electron Microscopy (TFM), for materials negulated by the UPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found in contain less than ten percent (<10%) ashestos by Polarized Light Microscopy (FFM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Friangle Environmental Service Center, Inc., This test report relates only to the item(s) tested

NVI AP Lab Code 20079440

[LEGEND NAD=No Ashestos [Artected, I mo =1 moleum, JC=Joint Compound]

Reviewed By Authorized Signatory;

Fing Jung, VS Senior Geologist, Laboratory Director I medang Fame, Senior Geologist

September 25, 2018

Page 7 of 9

Trident Environmental Services, Inc.

Consultants at Industral Prygram and 3 a fery
SOU Cashrook Line, Suth E
Summerville, SC 25465

Page 33 of 45

# TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Rand, Suite B, Midlothian, VA 23112 864-739-1751 • fax: 864-739-1753

### BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services, Inc.

500 Oakbrook Lune, Suite E Summerville, SC 29485

DATE OF RECEIPT: 09/20/2018

DATE OF ANALYSIS: 09/20/2018

DATE OF REPORT: 09/20/2018

TESC LOGIN #: 180920T

CLIENT IOB/#: 5902 Howard Street

JOB SITE... Hanaban, SC.

ANALYST: B Trimmer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASSESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
71	23-71 / Green lino , black fibers	NAD	20% Cellulose	1617ú
72	23-72 / Green lino black fibers	NAD	20% Cellulose	SIP.
73	23-73 /	Not Analyzed		100%
74	24-74 / Red. brown timo black fibers	NAD	20% Cellulose	80%
75	24-75 / Red, brown lino , black fibers	NAD		100%
76	24-76 /	Not Analyzed		100%
77	25-77 / Brown linoleum	NAD	5% Fiberglass	95%
78	25-78 / Brown linoleum	NAD	5% Fiberglass	95%
79	25-79 /	Not Analyzed		100%
\$0 ·	26-80 / Brown vim I	NAD		100%

Samples are smalyzed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/6CO/R-93-116, July 1993 (FPA-600/R-93-02), for the current US FPA method for the mulysis of subsetue in building material. None Detected: not detected into below the detected limit of method (Reporting Hinti: 15% Asbestos). Glass fiber is analyzed for quality control blank. TESC recommends by point count of Transmission Electron Microscopy (TFM), for materials regulated by the EPA NESHAP (National Emission Standards for Bazardous Air Pollutants) and found to control less than ten percent (+10%) inhestors by Polarized Light Microscopy (PLM). Both services are available for an additional for This report must not be reproduced except in full with approval of Triangle Environmental Service Center, Inc. This test report relates only to the item(s) tested

NVLAP Lish Code: 2007/14-0

[LEGEND NAID=No Ashestos Datected, I mo =1.moleum, JC=Joint Compound]

Reviewed By Authorized Signatury:

Feng Jiang, MS Senior Geologist, Laboratory Director

Furding Fung, Sentor Geologist

September 25, 2018

Page 2 of 9

Page 34 of 45

# TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13509 East Boundary Road, Suite B. Midlothian, VA 23112 804-739-1751 • fax: 804-739-1753

## BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: Trident Environmental Services, Inc.

500 Oakbrook Lane, Suite E Summerville, SC 29485

TESC LOGIN # 180920T

DATE OF RECEIPT: 09/20/2018 DATE OF ANALYSIS 09/20/2018 DATE OF REPORT: 09/20/2018

CLIENT IOB/#: 5902 Howard Street

JOB SITE. Hamban, SC

ANALYST B Triminer

TESC SAMPLE#	CLIENT SAMPLE ID A GROSS DESCRIPTION	ESTIMATED % ASBESTOS	NON ASBESTOS % FIBERS	NON FIBROUS % MATERIALS
83	26-81 / Brown vinyl	NAD		100%
R2	26-82 /	Not Analyzed		100%
<b>К</b> 3	27-81 / Brown viryl	NAD		100%
14	27-84 / Brown vim l	NAD		100%
85	27-85 /	Not Analyzed		100%
86	28-86 / Red lino., gray fibers	20% Chry sotlic	20% Cethilose	60%
87	28-87 [	Positive Stop	600 B F000	100%
88	28-88 /	Positive Stop		100%

Total Samples/Layers Analyzed: 52

Samples are mail zed in accordance with "Interim Method for the Determination of Asbestos in Bulk Insulation Samples", EPA/6007R-93-116, July 1993 (FPA-6400A4-82-020 Dec 1982) or the current US FPA method for the malvis of ashestos in hulding maserial. None Detected not detected at/or helps the detected limit of method (Reporting limit 1th Asbestos). Glass fiber is mislived for quality control blank. IESC recommends by point count of Transmission Electron Microscopy (TEM), for insternals regulated by the LPA NUSHAP (National Emission Standards for Hazardous Air Pollutants) and found in contain less than ten percent (<10%) ashestos by Polarized Light Microscopy (PLM). Both services are available for an additional fee. This report must not be reproduced except in full with approval of Trimigle Environmental Service Center, Inc. This test report relates only to the item's) teried

NVI A#1ab Code: 200794-0

[LEGEND NAD=No Ashestos Datected, I mo =Linoleinn, JC=Joint Compound]

Reviewed By Authorized Signatory:

Feng Jiang, MS Senine Geologist, Laboratory Director

Yuedong Fame, Senior Geologist

September 23, 2018

Page 9 of 9

Page 35 of 45

CLIENT Tradent Environmental Services, fire Soft Cabrook Lane. Subje E Summerville, SC 29485 CLIENT PROJECT # 5902 Howard Street JOBSITE: Hanshan, SC ANALYSIS TATE  Tobas  ANALYST: ANALYST:  ANALY	T SAMPLE HEAT SENSITIVE ACID SOLUBLE INSOLUBLE NON-ASBESTOS  E WEIGHT (4) ORGANIC % INORGANIC % INORGANIC %  0.348 50.6 11.2 38.2	0.272 9.2 87.1	0.339 20.9 75.8 3.3	0.42 19.8 44.8 35.4	0.259 96.9 2.7	Reviewed By Authorized Signatury;  Fing Alang, AS Novine Condens of Deve as  I moderng Long, Control of Deve as  I moderng Long, Control of Deve as  I moderng Long, Control of Deve as  I modern of the report of the state of the St., I m. The test report relates only to the recent in tall with the approval of TESC., I m. The test report relates only to the accretication of the state of the sta
DJECT# 1	CLIENT SAMPLE 02-08	03-08	3 04-12 Sample present toy or of old gave	05-15	06-18	n regurt meed me excitod 117M Isl

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	SUM	UNO EN BO	undary Rood, Sette	1350' Ean Boundary Road, Suite B. Milliothian, VA 23112 •804-739-1751 • fat; 884-739-1753 ARY OF BULK ASBESTOS ANALYSIS, BY TRANSMISSION ELCTRON MI	13507 East Boundary Road, Seite B. Middethian, VA 23112 • 804-799-1751 • Int. 1004-779-1753 SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELCTRON MICROSCOPY	
CLIENT	Trident Envir 503 Oalbrook Summen ille,	Tradent Em nomental Services, Inc Stri Oakbrook Lanc, Suite E Summerville, SC 29485	x, Inc		TESC LOGINA DATE OF RECEIPT DATE OF ANALYSIS	X02030X (6)20202018
CLIENT PROJECT # JOBSITE. TAT	ECT # 5903 Howard Street Hamban, SC	d Street			DATE OF REPORT ANALYST:	
TESC SAMPLE	CLIENT SAMPLE #	SAMPLE WEIGHT (g)	HEAT SENSITIVE ORGANG %	TE ACID SOLUBLE INORGANIC %	INSOLUBLE NON-ASBESTOS INORGANIC %	ASBESTOS% BY TEM
6 choble contentions	6 13-43 Probable commences from pressive then tile	0.147	40	29.3	21.7	<1.9% Chrysotile
7	14-46	0,169	692	20.7	2.4	NAD
8 shable commentati	8 15-49 Probable contamentation from black mentic	0.161	75.2	24.2	හු	<1% Chrysotile
g.	16-52	0.219	61.2	14.8	24.2	NAD
10	17-55	0.125	51.2	28.4	224	NAD
	**************************************	Reviewed By Anthorpered Signatury :		Mudory Faug.	Jana Jana	
The reported in the second in	f Trad not be reproduced Tradition (1974) and the Authorities (1974) and Authorities (1974)	cd exoept in full wit [b1]) = 101943.)   [ [benested" NA = Nai	th the approval of TE- EM analysis by \$19. ( Analyzin, 195 – Pen	The report must not be reproduced except in full with the approval of TESC, Inc The test report relates only to the items is refoul. The accordance of ILM Lib., NVLAP Lib 110 to 110	The report must not be reproduced except in full with the approval of TESC, line. The test report relates only to the items is keided. This test was performed by an NVLAP according to the intest. PLM analyses by FPA full R-94 life frost covered by NVLAP Hale accordington) [LEGEND NAD - No Asbessive Descreted' NA - Not Analysed, PS - Pentive Stop. Unive - 1974, NVA - No Visual Asbessive Insecreted' NA - Not Analysed, PS - Pentive Stop. Unive - 1974, NVA - No Visual Asbessive [Assessive Insecreted' NA - Not Analysed, PS - Pentive Stop. Unive - 1974, NVA - No Visual Asbessive [Assessive Insecreted' NA - Not Analysed, PS - Pentive Stop. University of the control	an SVIAP
Squambar 25, 2018	44					S. D. C. Complete

Page 37 of 45

CLIENT PROJECT   Soft Debth Lane, Saig E   Santoce, Inc.		SCH	MMARY OF BL	ILK ASBESTOS ANA	ALYSIS BY TRANSMIS	MMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELCTRON MICBOSCOPY	
NT PROJECT # 5902 Howard Street	TUTT	Tridera Err 500 Oakbri Summervill	Nitomental Service Dols Lane, Suite E le, SC 29483	R		TESC LOGIN #	
Handlan, SC	PLIENT PRO	ECT # 5902 Bows	and Street			DATE OF REPORT	
19-61   SAMPLE   WEKSHT 62   HEAT SENSITIVE   INORGANIC %   INORGANIC	OBSITE	Hanahan, S	ر پر			ANALYST	B. Gjoka
19-61 20-64 20-64 21-67 22-70 22-70 Accredited Will lab. NVIAP		CLIENT SAMPLE#	SAMPLE WEIGHT (g)	HEAT SENSITIVE ORGANIC %	ACID SOLUBLE INORGANIC %	INSOLUBLE NON-ASBESTOS INORGANIC %	ASBESTOS% BY TEM
20-64 20-64 20-64 21-67 22-70 22-70 Accredited WM lab. NVIAP	±	18-58	0.145	50.3	62	10 10	NAD
20-64 21-67 22-70 22-70 accredited WM lab. NVIAP	12	19-61	0.242	78.5	20.2	1.3	NAD
21-67 22-70 22-70 The report must not be report according WA Ish. NVIA!	13	20-64	0.201	25	43.3	P.	NAD
22-70 The report meat not be repord accredited WM lab. NVIAP	1,	21-67	0.175	9.98	<b>8</b> 0	80	NAD
Reviewed By Asthmetical Signatury;  Firing Jiang, A.S. Scatter Good of the Laboratory; Parts ton 1 mediany	15	22.70	0.196	58.7	37.8	10 10	NAD
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		(1912/1920) (1912/1920)		ASBESTOS% BY TEM	CAD	NAD	NAD	NAD	NAD	p an NVIAIP
TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC. 1350 Ent Boundary Road, Suffer B. Middolphan, VA 2313-884-731-7451 (1932)	SUMMARY OF BULK ASBESTOS ANALYSIS BY TRANSMISSION ELCTRON MICROSCOPY	TESC LOGIN #  DATE OF RECEIFT:  DATE OF ANALYSIS:	DATE OF REPORT ANALYST	INSOLUBLE NON-ASBESTOS INORGANIC %	'n	9.0	1,3	2.5	2	Reviewed By Authorized Signatury:  From Alang, A.S. Sentar Cerologist. Laboratory Phore as I mechang. A.S. Sentar Cerologist.  Including Promp. Service Conduction of the Control of TESC. I no. The test report relates only to the nervice labels. NVLAP test to blink and year by EPA 640 R.S. 31 to trust covered by NVLAP tital accordinates.  ILEGERO NAD - No. Asherston Extensive NA - No. Analyzed, FS - Provide Shop, Tence - In., NVA - No. Visual Asherital.
LANGLE ENVIRONMENTAL SERVICE CENTER, 13509 Ent Brendair Road, Suite B. Middelber, VA 2312 - 894-739-1751 - fre: 894-739-175	ALYSIS BY TRANSMIS			ACID SOLUBLE INORGANIC %	23.1	11.1	39.7	88	72.2	Review and By Anthon lacd Signatury    Frog Alasty, A.K. Sentur (Forberg)    Frog Alasty, A.K. Sentur (Forbe
E ENVIRONA	ILK ASBESTOS AN	33.		HEAT SENSITIVE ORGANIC %	764	1.08	59	8.5	27.1	thred Stepmanney 1  Frong    I model  I the approval of TESC, 18  I had analyses by EPA 6400 in EPA 64
TRIANGL	MMARY OF BU	Trident Environnemal Services, Inc 500 Oakbrook Lane, Suite E Summerville, SC 20485	and Street	SAMPLE WEIGHT (g)	0,195	0.171	0.29	0.126	0.268	Reviewed By Authorized Signatory; in the second of the approval of the 110 of 110 of 110 of the second of the seco
	ᇌ	Tridera En Soo Oakbr Sumnervil	BECT# 5902 Howard Street Hanehan, SC	CLIENT SAMPLE	23-73	24-76	25-79	26-62	27-85	urt must not be represe tof 1FM lab. NVLA1* (D. NAD – No Asbes
		CLENT	CLIENT PROJECT # JOBSITE. TAT	TESC SAMPLE	16	11	81	19	20	The report accredited [LEGEN]

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Page 5 of 5

# TRIANGLE ENVIRONMENTAL SERVICE CENTER, INC.

13549 East Boundary Read, Setter B, Midlethian, VA 23113 • 884-739-1751 • fat: 884-737-1753

SHMMARY OF BULK ASBESTOS ANALYSIS BY TRANSHISSION ELCTRON MICROSCOPY

09/20/2018 09/24/2018 MUSS/2018 B. Gjoka NEWSON DATE OF ANALYSIS DATE OF REPORT DATE OF RECEIPT TESC LOGIN • ANALYST Triden Environnemal Services, Inc. 500 Oakbrook Lone, Suite E. Summerville, SC 29485 CLIENT PROJECT # 5902 Howard Street Hanshan, SC JOBSITE

ASBESTOS% BY TEM

INSOLUBLE NON-ASBESTOS
INORGANIC %

ACID SOLUBLE INORCANC %

HEAT SENSITIVE ORGANIC %

SAMPLE WEXCHT (g)

CLIENT SAMPLE #

SAMPLE

Total Sample(s) Analyzed: 20

Residency By Authorities Signatury:

Forg Mang, MS Norton Fershopes, Laboratory Diere ton Lordong Forg, Service Technique

Kepterseber 25, 2018

Page 40 of 45

TRIANGLE ENVIRONMENTAL SERVICE CENTER	• Tel: 804-739-1751 • Fax: 804-739-1753			Hart touch	36			Comments					73-17	3.1 F 10' 00R.			
WIRONMENTAL	04-739-1751 • Fi	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1-(1-1)	5903	H	On TESC File		(1) emuloV MA (1) (1) sanA eqW (ma) senA eqsaS					Date/Time: 3 ~ / 3.	5	Date/Time:	Date/Time.	
TRIANGLE EN	• 23112 • Tet: 8		DATE: 7	PROJECT #:	PROJECT SITE:	Email: On	Aur Quality//Mold			1							
•						Email			Toxic Metal Profile					- 6			
	13609 East Boundary Road, Suits B • Midfothian • VA				3 Day: TCM 6 Day:	888-266-2040	Other Metals	Orthking Water (Pb) TCLP RCRA 8 CAM 17		1.		4 3	the House	K		100	
	Road, Sulta				3 Day	Fax: 888-20	Lead	Scul(PPW) TCLP (Pb) Waster Water		7			3 Hinato		30		
	rt Boundary		90		1 48 Hour		H	TEM Bush Chatsheld Abint(% & PPM) Sellotter	-				Signature	Signaturo	Signaturo	Signature	
809201	13609 Eas		l Services, fi		24 Hour, Pur. 48 Hour.	-3648	100	PLM CHERA Air PLM CHEVINGHIC TEM AHERA Air									
1806		_	Trident Environmental Ser 500 Onkhrook Lane - Suite E	ile, SC 29485		843-873-3648	Asbesto	Buil, 10 by PLM PCM Floer Count 400 PLM Point Count 400				+	Hasta				
UMBER:		TOOY FORM	R: Trident E 500 Oakhe	IP: Summervi	Thomas	HOD: Phone	$\prod$	stad elqring		0			Koder				
TESC LOGIN NUMBER:		CHAIN OF CUSTODY FORM	LAB GUSTOMER: Trident Environmental Services, Inc ADDRESS: 500 Oakhrook Lane - Suite E	CITY, STATE, ZIP: Summerville,	TAT: 2 Hour.	CONTACT METHOD: Phone:		sadmun siqmis						Received by	Released by	Received by	

TES	
Trident Environmental Services,	Inc.
Consultants in Industrial Hygrane and Safety	
500 Osleroek Larie, Suite E	
Summerville: BC 29485	
10.401.070.074	

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1	ct Name	Hanahan, SC	and Street		-	Date	9-17	-48
		DESCRIPTION OF	EACH SAMPLE AREA			ASSESSMENT OF MATERIALS		
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Left c	and the state of	ni Condition Imped referenced	(5) Tremolite				•	



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Project Name: 1902 Location: 11 anah	Howard Street			Date	9-1	7-18	
Homes	IPTION OF EACH SAMPLE AREA			ASSESSMENT OF MATERIALS			
	Description	Principle (+)	Private (-)	Antomias Type	COMS	HAZ	
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CONDITION ASSESSMENT PROPERTY.	Astropica Propert	В	ZIZ A	-	Catamories		
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(4) Surfaces - Cond Gonday (8) Surfaces - Depopul (6) Surfaces - Surfaces Commend	(4) Astrophyths (5) Transfer		Algrida	ntly Dames	ed		



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TES	
Trident Environmental Services Consultants in Industrial Physician and Salely	
Surrinerella SC 29485	
(043) 873-3640	

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Trideset Erretrommental Servines, ton.  Consider to protect the Servines, ton.  Consider to protect the Servines  Project Narrac: 5911 Howa		CHAII	N OF	CUS sbesto	TODY s Bulk	FORM Semples
Location Hanhan 5				Deb	× 9.1	1-14
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CHID TON Assessment Geography	III.					
1) Trained by search 2000/05/20 - Cond Committees 2) Trained By search Insulation - Damaged 3) Trained By search dissulation - Eigniferedly Damaged 4) Sectioning - Good Condition 5) Sectioning - Damaged 6) Sectioning - Damaged 6) Sectioning - Damaged	Antonia Process (1) Arcasta (2) Chrysoria (3) Cracidinata (4) Archaphylia (5) Trivingthylia (5) Technolia	G = D = 6 =	Cont Cor Christian Cynther	editors  by Carrage  surface by C	d	
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ples Received by:	m,			/ Time:	9-19 3-20-15 20/16	

Trident Environmental Services, Inc.
Consultants in Industrial Propries and Solidy
200 Consultants (Capella)
Summercial Capella)
[843)873-3648

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Land State Control Con	0920 Ty CI	HAIN OF	CUSTODY FORM shestoe Bulk Samples
	Conclusion  Viryl Fleve Plank  Cox Mary  Red Many  Market Floring  Market Floring	Principle (-) (*) (*) (*)	ABBESSMENT OF MATERIALS Anterother COND MAZ Type Address
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