

January 20, 2023

American Paradigm Schools 8101 Castor Avenue Philadelphia, PA 19152

Attn: Ms. Jessica Bowers

Re: AHERA Re-Inspection Services

Tacony Academy Charter School 1330 Rhawn Street Philadelphia, PA

**VERTEX Project No: 83459** 

Dear Ms. Bowers:

The Vertex Companies, LLC (VERTEX) is pleased to provide this Letter Report for professional services associated with conducting an Asbestos Hazard Emergency Response Act (AHERA) Re-Inspection for the Tacony Academy Charter School located at 1330 Rhawn Street in Philadelphia, Pennsylvania ("the site").

For the purpose of performing the re-inspection and assessment, VERTEX utilized the 2020 Asbestos Inspection Report performed by VERTEX. American Paradigm Schools own the site. The re-inspection and assessment incorporated no additional bulk sampling. According to building representatives, no significant renovations have occurred since 2020.

VERTEX utilized the School District of Philadelphia's AHERA Three-Year Reinspection 2018-2019 Room by Room Location Log Report to assess current conditions. Onsite services were performed on December 9, 2022 by William Otten, US EPA AHERA Certified Asbestos Building Inspector, Commonwealth of Pennsylvania Licensed Building Inspector (043432) and City of Philadelphia Asbestos Investigator (AIC-0524).

Findings of the AHERA Re-Inspection regarding Asbestos Containing Building Materials (ACBMs) can be found in the attached documents:

Asbestos Inspection Report (April 22, 2020)

#### Conclusion:

The 2023 Assessment services identified similar conditions as in 2020 and no areas of damaged ACBMs were identified that would require asbestos abatement activities.

### **Limitations**

Professional opinions presented in this report are based on information made available either by review of data provided by others or data gained by inspection personnel. VERTEX affirms that data gathered and presented in this report was collected in an appropriate manner in accordance with generally accepted methods and practices. Conditions described in this report were observed at the time of the investigation, unless otherwise stated. No exploratory demolition was performed.

VERTEX appreciates the opportunity to be of service. If you have any questions regarding this report, please do not hesitate to contact me.

Sincerely,

The Vertex Companies, LLC

William Otten

Senior Project Manager







Tacony Academy Charter School 1330 Rhawn Street Philadelphia, Pennsylvania

### **Asbestos Inspection Report**

**APRIL 22, 2020** 

### **PREPARED FOR:**

American Paradigm Schools 8101 Castor Avenue Philadelphia, Pennsylvania

Attn: Ms. Katie Santilli

### **PREPARED BY:**

The Vertex Companies, Inc. 700 Turner Industrial Way, Suite 105 Aston, Pennsylvania 19014 PHONE 610.558.8902

**VERTEX Project No: 61446** 

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- Bulk Sample Analysis Results
- Aerial Photographs (1975, 1980, 1990, and 1995)



#### I. INTRODUCTION

The Vertex Companies, Inc. (VERTEX) was retained by American Paradigm Schools to perform an asbestos facility inspection within the Tacony Academy Charter School located at 1330 Rhawn Street in Philadelphia, Pennsylvania.

This inspection was conducted to confirm/dismiss the presence, locations and quantities of Asbestos Containing Materials (ACM) or Presumed Asbestos Containing Materials (PACM).

This survey was performed on April 2, 2020 and April 8, 2020 by William Otten, a US EPA AHERA Certified Asbestos Building Inspector/Commonwealth of Pennsylvania Licensed Asbestos Building Inspector (#043432)/City of Philadelphia Certified Asbestos Investigator (#AIC-0524).

Based on review of readily available aerial photographs, the original portion of the school building was constructed between 1975 and 1980, the southern addition with partial lower level was constructed between 1990 and 1995, and the gymnasium and adjoining vestibule addition was constructed post 1995. The original building was presumably constructed in 1978 based on a May 1978 manufacturing date label on the electrical transformer/switchgear equipment in the boiler room.

Bulk samples were submitted to and analyzed by EMSL Analytical, Inc. of Cinnaminson, New Jersey in accordance with United States Environmental Protection Agency (USEPA) Method 600/R-93/116 protocol utilizing Polarized Light Microscopy (PLM). EMSL is accredited through the National Voluntary Laboratory Accreditation Program (NVLAP #101048-0).

Note: Polarized Light Microscopy (PLM) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound (NOB) materials. Fiber size (both length & diameter) of NOBs is frequently very small limiting fiber detection by PLM optics. Fibers are also tightly bound in the matrix of NOBs obscuring their detection. The Commonwealth of Pennsylvania does not require confirmatory TEM analysis of NOB samples with negative or "inconclusive" asbestos content by PLM. TEM analysis was not authorized by the client and was not included in the scope of services for this project.

#### II. RESULTS

Results indicate that that the following asbestos containing materials were identified:

- Approximately 280 linear feet of boiler rib gasket material within the two boiler units in the boiler room (Room 181).
- Approximately 20 square feet of transite within the original electrical equipment (transformer/switchgear).



#### RESTRICTIONS

- No inspection/sampling was performed within enclosed walls/ceilings.
- No inspection/sampling was performed inside mechanical equipment.
- No inspection/sampling was performed below finished grade or within confined spaces.
- No inspection/sampling was performed on exterior materials.

A more detailed presentation of the results is found in the attached tables.

### III. SAMPLING METHODOLOGY

Bulk samples were collected and analyzed in order to determine the identity of suspect materials and their composition. The purpose of the survey was to identify all accessible ACMs.

Bulk samples were grouped into homogenous sampling areas. A homogenous sampling area contains suspect asbestos materials that are uniform in texture, appearance, time of installation, and is unlikely to consist of more than one type or formulation of material. Per AHERA protocol, if any sample within the homogenous sampling area has greater than 1% by weight, then the entire sampling area is assumed to containing asbestos.

Bulk samples were collected from both friable and non-friable suspect asbestos containing materials. Representative core samples of each material were collected by penetrating the material to its substrate. Each sample and sample location was incorporated into a sampling log and chain of custody for each sample was documented. All samples were placed in sealed containers and labeled with an identifying code.

Bulk samples were submitted to and analyzed by EMSL Analytical, Inc. of Cinnaminson, New Jersey in accordance with United States Environmental Protection Agency (USEPA) Method 600/R-93/116 protocol utilizing Polarized Light Microscopy (PLM). PLM is the reference method of analysis to demonstrate that presumed asbestos containing materials do not contain asbestos per OSHA's Construction Standard (29 CFR 1926.1101) and EPA's Asbestos Hazard Emergency Response Act (40 CFR 763, Subpart E). The detection limit of the PLM referenced method is one percent (1%) asbestos. EMSL is accredited through the National Voluntary Laboratory Accreditation Program (NVLAP #101048-0).

Polarized Light Microscopy (PLM) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound (NOB) materials. Fiber size (both length & diameter) of NOBs is frequently very small limiting fiber detection by PLM optics. Fibers are also tightly bound in the matrix of NOBs obscuring their detection. The Commonwealth of Pennsylvania does not require confirmatory TEM analysis of NOB samples with negative or "inconclusive" asbestos content by PLM. TEM analysis was not authorized by the client and was not included in the scope of services for this project.



### IV. LIMITATIONS AND SERVICE CONSTRAINTS

Professional opinions presented in this report are based on information made available either by review of data provided by others or data gained by inspection personnel.

VERTEX affirms that data gathered and presented in this report was collected in an appropriate manner in accordance with generally accepted methods and practices. Conditions described in this report were observed at the time of the investigation, unless otherwise stated.

Exploratory demolition was performed in limited locations, to the extent feasible. Please see specific restrictions above.

Reasonable effort was made by inspection personnel to locate and sample suspect materials within the designated areas inspected. However, for any facility, the existence of unique or concealed ACMs and debris is a possibility. VERTEX does not warrant, guarantee or profess to have the ability to locate or identify all ACMs in a facility.

The intent of this report is to be used in planning for potential renovation activity. If ACMs are discovered during renovation related activities, these materials should be removed and disposed of in accordance with all local, state and federal regulations prior to any demolition-related activities. Abatement of ACM must be performed by an accredited/certified/licensed asbestos-abatement contractor.

VERTEX analyzed only the substances, conditions, and locations described in the report at the time indicated. VERTEX retains the right to revise this report if new information is later discovered or made available.

The report must be presented in its entirety.

### V. CONCLUSIONS AND RECOMMENDATIONS

A summary table is provided in the attachments which include the samples collected, locations and analytical results. The laboratory reports are also attached.

Based on the sampling and analysis of suspect materials, ACMs (boiler rib gasket and transite) were identified within the structure. AHERA identifies ACM as any material containing greater than 1% asbestos.

If additional suspect materials are discovered during future renovation activities, VERTEX recommends collecting/analyzing samples of the materials for asbestos content prior to disturbance.



# **Asbestos Containing Materials Table**



### The Vertex Companies, Inc.

### **ASBESTOS CONTAINING MATERIALS TABLE**

CLIENT: American Paradigm Schools
SITE: Tacony Academy Charter School

1330 Rhawn Street

Philadelphia, Pennsylvania

VERTEX PROJECT #: 61446

**DATE:** 4/2/20 and 4/8/20

Location	Material Description	Estimated Quantity	Friable (Y/N)	Conditions (G/F/P)	Debris (Y/N)	Sample #
		Quantity	(1/14)	(6/171)	(1/14)	
Boiler room (Room 181)	Boiler Rib Gasket	280 LF	Ν	G	N	3A,3B
Boiler room (Room 181) -	Transite	20 SF	N	G	N	Assumed
original electrical equipment						
(transformer/switchgear)						

# **Sample Locations and Results Table**



### The Vertex Companies, Inc.

### SAMPLE LOCATIONS AND RESULTS TABLE

**CLIENT:** American Paradigm Schools SITE: Tacony Academy Charter School

1330 Rhawn Street

Philadelphia, Pennsylvania

**VERTEX PROJECT #:** 61446

DATE: 4/2/20 and 4/8/20

Location	Material Description	Estimated Quantity	Friable (Y/N)	Conditions (G/F/P)	Debris (Y/N)	Sample #	Lab Result ACBM (Y/N)
Boiler room (Room 181)	Fitting a/w fiberglass pipe insulation	8 EA	Υ	F	N	1A,1B,1C	N
Boiler room (Room 181)	Breeching	250 SF	Υ	G	N	2A,2B,2C	N
Boiler room (Room 181)	Boiler Rib Gasket	280 LF	N	G	N	3A,3B	Υ
Boiler room (Room 181) -	Transite	20 SF	N	G	N	Assumed	Y
original electrical equipment							
(transformer/switchgear)							
Throughout	12" tan floor tile w/mastic	48,000 SF	N	G	N	4A,4MA,4B,4MB	N
Throughout	2'x4' ceiling tile	50,000 SF	N	G	N	5A,5B,5C,5D,5E	N
Throughout	Mastic a/w vinyl cove base	25,000 LF	N	G	N	6A,6B	N
Room 106 ceiling	Plaster	150 SF	N	G	N	7A,7B,7C	N
Throughout	Drywall/joint compound	75,000 SF	N	G	N	8A,8B,8C,8D,8E,8F,8G	N
Various locations	12" green floor tile w/mastic	4,000 SF	N	G	N	9A,9MA,9B	N
Below carpeted areas	Floor leveler/mastic	7,000 SF	N	G	N	10A,10MA,10B,10MB	N
Kitchen (Rooms 183 & 184)	2'x4' ceiling tile (drywall)	2,000 SF	N	G	N	11A,11B	N
Various locations	2'x4' ceiling tile (3 lines)	10,000 SF	N	G	N	12A,12B	N
Various locations	12" blue floor tile	4,000 SF	N	G	N	13A,13B	N
Various locations	12" gray floor tile	2,000 SF	N	G	N	14A,14B	N
Various locations	12" yellow floor tile	2,000 SF	N	G	N	15A,15B	N
Various locations	Mastic a/w drywall	5,000 SF	N	G	N	16A,16B	N
Rooms 163 & 176	Sink undercoating	24 SF	N	G	N	17A,17B	N
Room 176	Lab top	500 SF	N	G	N	18A,18B	N

# **Bulk Sample Analysis Results**





EMSL Order: 042008692 Customer ID: VRTX78

Customer PO: Project ID:

 Attention:
 William Otten
 Phone:
 (610) 558-8902

 The Vertex Companies, Inc.
 Fax:
 (610) 558-8904

700 Turner Way, Suite 105 Received Date: 04/03/2020 12:25 PM
Aston, PA 19014 Analysis Date: 04/05/2020 - 04/06/2020

Collected Date: 04/02/2020

Project: 61446 Tacony Elem

### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

rous (Other)  None Detected  rous (Other)  None Detected  rous (Other)  None Detected  rous (Other)  None Detected
rous (Other)  None Detected  rous (Other)  None Detected
rous (Other) None Detected
rous (Other) None Detected
ous (Other) None Detected
ous (Other) None Detected
,
rous (Other) None Detected
rous (Other) 65% Chrysotile
Positive Stop (Not Analyzed
rous (Other) None Detected

Initial report from: 04/06/2020 12:55:59



**EMSL Order:** 042008692 **Customer ID:** VRTX78

Customer PO: Project ID:

# Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

		Non-Ashes	Asbestos	
Description	Appearance	% Fibrous	% Non-Fibrous	% Type
Room 106 Ceiling Closet - Plaster	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
Room 106 Ceiling	Gray Non Eibroug	HA: /	100% Non-fibrous (Other)	None Detected
Closet - Flaster	Homogeneous	HA: 7		
Room 106 - Drywall / Joint Compound	Brown/White Fibrous	25% Cellulose	75% Non-fibrous (Other)	None Detected
	Heterogeneous	HA: 8		
Room 106 - 12" Green Floor Tile	Green Non-Fibrous		100% Non-fibrous (Other)	None Detected
		HA: 9		
Room 106 - Mastic	Gray/Black/Yellow Non-Fibrous	3% Cellulose	97% Non-fibrous (Other)	None Detected
P		HA: 9M	000( N 51 (011	Non-Britis
Bays by 106 - 2'x4' Ceiling Tile	Fibrous	40% Cellulose 40% Min. Wool	20% Non-fibrous (Other)	None Detected
		HA: 5		
Room 104 - Drywall / Joint Compound	Fibrous	20% Cellulose	80% Non-fibrous (Other)	None Detected
	Tieterogeneous	HA: 8		
Room 116 - Below Carpet - Floor Leveler	Gray Non-Fibrous	3% Cellulose	97% Non-fibrous (Other)	None Detected
	nomogeneous	HA: 10		
Room 116 - Below Carpet - Mastic	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
	Homogeneous	HA: 10M		
Room 116 - Below Carpet - Floor Leveler	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
	Homogeneous	HA: 10		
Room 116 - Below Carpet - Mastic	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
	Homogeneous	HA: 10M		
Kitchen 183 / 184 - 2'x4' Ceiling Tile -	Brown/White Fibrous	20% Cellulose 3% Glass	77% Non-fibrous (Other)	None Detected
Drywall	Homogeneous	HA: 11		
Kitchen 183 / 184 - 2'x4' Ceiling Tile -	Brown/White Fibrous	15% Cellulose 3% Glass	82% Non-fibrous (Other)	None Detected
Drywall	Homogeneous	HA: 11		
Library Room 180 - 2'x4' Ceiling Tile	Tan/White Fibrous	30% Cellulose 45% Min. Wool	25% Non-fibrous (Other)	None Detected
-	Homogeneous	HA: 5		
	Room 106 Ceiling Closet - Plaster  Room 106 Ceiling Closet - Plaster  Room 106 - Drywall / Joint Compound  Room 106 - 12" Green Floor Tile  Room 106 - Mastic  Bays by 106 - 2'x4' Ceiling Tile  Room 104 - Drywall / Joint Compound  Room 116 - Below Carpet - Floor Leveler  Room 116 - Below Carpet - Mastic  Room 116 - Below Carpet - Mastic  Room 116 - Below Carpet - Mastic  Room 116 - Below Carpet - Floor Leveler  Room 116 - Below Carpet - Mastic	Room 106 Ceiling Closet - Plaster  Room 106 Ceiling Closet - Plaster  Room 106 Ceiling Closet - Plaster  Room 106 - Drywall / Joint Compound  Room 106 - Drywall / Joint Compound  Room 106 - 12" Green Room 106 - Mastic  Room 106 - Mastic  Room 106 - Mastic  Gray/Black/Yellow Non-Fibrous Heterogeneous  Room 106 - 2'x4' Ceiling Tile  Room 104 - Drywall / Joint Compound  Room 104 - Drywall / Joint Compound  Room 116 - Below Carpet - Floor Leveler  Room 116 - Below Carpet - Mastic  Room 116 - Below Carpet - Mastic	Description	Room 106 Ceiling   Closet - Plaster

Initial report from: 04/06/2020 12:55:59



EMSL Order: 042008692 Customer ID: VRTX78

Customer PO: Project ID:

### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbes	<u>Asbestos</u>	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
12A	Hall by 180 - 2'x4' Ceiling Tile - 3 Lines	Tan/White Fibrous	40% Cellulose 40% Min. Wool	20% Non-fibrous (Other)	None Detected
042008692-0022		Homogeneous	HA: 12		
13A	Room 172 - 12" Blue Floor Tile	Blue Non-Fibrous	2	100% Non-fibrous (Other)	None Detected
042008692-0023		Homogeneous	HA: 13		
14A	Hall by Room 176 - 12" Gray Floor Tile	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
042008692-0024	·	Homogeneous	HA: 14		
15A	Hall by Room 185 - 12" Yellow Floor Tile	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
042008692-0025		Homogeneous	HA: 15		
16A	Mastic associated with Drywall Walls	Tan Non-Fibrous		100% Non-fibrous (Other)	None Detected
042008692-0026	•	Homogeneous	HA: 16		

Analyst(s)

Ebony Miller (9) Olufunke Akintunde (21) Samantha Kimphono

Samantha Rundstrom, Laboratory Manager or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367, LA #04127

Initial report from: 04/06/2020 12:55:59



The Vertex Companies, Inc.

700 Turner Way, Suite 105

EMSL Order: 042008996 Customer ID: VRTX78

Customer PO: Project ID:

**Phone:** (610) 558-8902

**Fax:** (610) 558-8904

Received Date: 04/08/2020 1:40 PM

**Analysis Date:** 04/09/2020 **Collected Date:** 04/08/2020

Project: 61446 / Tacony Elem

Aston, PA 19014

Attention: William Otten

### Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

		Asbestos		
Description	Appearance	% Fibrous	% Non-Fibrous	% Type
Room 163 - 2'x4' Ceiling Tile	Gray/White Fibrous	60% Cellulose 30% Min. Wool	10% Non-fibrous (Other)	None Detected
	Homogeneous	HA: 5		
Room 163 - Drywall / Joint Compound	Brown/White Fibrous	12% Cellulose 3% Glass	85% Non-fibrous (Other)	None Detected
	Heterogeneous	HA: 8		
Room 162 - 12" Tan Floor Tile	Tan Non-Fibrous		100% Non-fibrous (Other)	None Detected
	Homogeneous	HA: 4		
Room 162 - Mastic	Yellow Non-Fibrous		100% Non-fibrous (Other)	None Detected
	Homogeneous	на- 4м		
Room 163 - Sink	Gray	1 17%, MIVI	100% Non-fibrous (Other)	None Detected
ondercoating	Homogeneous	HA: 17		
Room 149 - 12" Green Floor Tile	Green Non-Fibrous		100% Non-fibrous (Other)	None Detected
	Homogeneous	HA: 9		
Room 182 - Drywall / Joint Compound	Brown/White Fibrous	12% Cellulose 3% Glass	85% Non-fibrous (Other)	None Detected
	Helelogelleous	HA: 8		
Hall by Room 134 - 12" Blue Floor Tile	Blue Non-Fibrous		100% Non-fibrous (Other)	None Detected
	Homogeneous	HA: 13		
Room 135 - Drywall / Joint Compound	Brown/White Fibrous	12% Cellulose 5% Glass	83% Non-fibrous (Other)	None Detected
·	Heterogeneous	HA: 8		
Room 180.1 - Mastic	Brown Non-Fibrous	3% Fibrous (Other)	97% Non-fibrous (Other)	None Detected
Base	Homogeneous			
		HA: 6		
Boiler Room - Fitting associated with FGPI	Gray Fibrous	35% Min. Wool	65% Non-fibrous (Other)	None Detected
	Homogeneous	HA: 1		
Hall by 183 - Mastic associated with	Tan Non-Fibrous		100% Non-fibrous (Other)	None Detected
Drywall	Homogeneous			
	Room 163 - 2'x4' Ceiling Tile  Room 163 - Drywall / Joint Compound  Room 162 - 12" Tan Floor Tile  Room 163 - Sink Undercoating  Room 149 - 12" Green Floor Tile  Room 182 - Drywall / Joint Compound  Hall by Room 134 - 12" Blue Floor Tile  Room 135 - Drywall / Joint Compound  Room 135 - Drywall / Joint Compound  Room 180.1 - Mastic associated with Cove Base  Boiler Room - Fitting associated with FGPI  Hall by 183 - Mastic associated with	Room 163 - 2'x4' Ceiling Tile  Room 163 - Drywall / Joint Compound  Room 162 - 12" Tan Floor Tile  Room 162 - Mastic  Room 163 - Sink Undercoating  Room 149 - 12" Green Floor Tile  Room 182 - Drywall / Joint Compound  Room 182 - Drywall / Joint Compound  Room 182 - Drywall / Joint Compound  Room 134 - 12" Blue Floor Tile  Room 135 - Drywall / Joint Compound  Room 135 - Drywall / Joint Compound  Room 180.1 - Mastic associated with Cove Base  Room 180 - Fibrous Homogeneous  Room 180.1 - Mastic associated with FGPI  Boiler Room - Fitting associated with FGPI  Hall by 183 - Mastic associated with  Hall by 183 - Mastic associated with  Hall by 183 - Mastic associated with  Tan Non-Fibrous  Homogeneous  Tan Non-Fibrous  Homogeneous	Description	Room 163 - 2'x4'   Gray/White Fibrous   60% Cellulose   30% Min. Wool   Homogeneous   Homogeneous

Initial report from: 04/09/2020 14:36:25

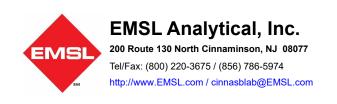
**EMSL Order:** 042008996 **Customer ID:** VRTX78

Customer PO: Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbe	Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
8F-Composite	Hallway by 146 - Drywall / Joint	Brown/White Fibrous	12% Cellulose 3% Glass	85% Non-fibrous (Other)	None Detected
042008996-0012	Compound	Heterogeneous	HA: 8		
3G-Composite	Stage - Drywall / Joint Compound	Brown/White Fibrous	10% Cellulose 3% Glass	87% Non-fibrous (Other)	None Detected
042008996-0013	·	Heterogeneous	HA: 8		
7B-Skim Coat	Room 106 Ceiling - Plaster	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
042008996-0014		Homogeneous	HA: 7		
7B-Base Coat	Room 106 Ceiling - Plaster	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
042008996-0014A		Homogeneous	HA: 7		
7C-Skim Coat	Room 106 Ceiling - Plaster	White Non-Fibrous		100% Non-fibrous (Other)	None Detected
042008996-0015	1 100101	Homogeneous	HA: 7		
7C-Base Coat	Room 106 Ceiling -	Gray Non-Fibrous		100% Non-fibrous (Other)	None Detected
042008996-0015A	Plaster	Homogeneous	HA: 7		
18A	Room 176 - Lab Top	Black	100.7	100% Non-fibrous (Other)	None Detected
042008996-0016		Non-Fibrous Homogeneous	HA: 18		
18B	Room 176 - Lab Top	Black	na. io	100% Non-fibrous (Other)	None Detected
042008996-0017		Non-Fibrous Homogeneous	UA: 40		
17B	Sink Undercoating	Gray	HA: 18	100% Non-fibrous (Other)	None Detected
042008996-0018		Non-Fibrous Homogeneous	HA: 17		
12B	2'x4' Ceiling Tile	Gray/White	50% Cellulose	15% Non-fibrous (Other)	None Detected
042008996-0019		Fibrous Homogeneous	35% Min. Wool		
14B	12" Gray Floor Tile	Gray	HA: 12	100% Non-fibrous (Other)	None Detected
042008996-0020		Non-Fibrous Homogeneous			
15B	12 "Yellow Floor Tile	Yellow	HA: 14	100% Non-fibrous (Other)	None Detected
042008996-0021		Non-Fibrous Homogeneous			
			HA: 15		

Initial report from: 04/09/2020 14:36:25



EMSL Order: 042008996 Customer ID: VRTX78

Customer PO: Project ID:

Analyst(s)

Amy Johnson (19) Ebony Miller (5) Samantha Rundstrom, Laboratory Manager

Samantha Rundstrom, Laboratory Manager or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367, LA #04127

Initial report from: 04/09/2020 14:36:25

# Aerial Photographs (1975,1980, 1990, and 1995)



### Aerial Photo A35 B40

RELATED IMAGES/PLATES: Later Year: A35 B40

(1995) Later Year: <u>A35 B40</u> (1990)

Later Year: <u>A35 B40</u> (1985) Later Year: <u>A35 B40</u> (1980) Earlier Year: <u>A35 B40</u>

Earlier Year: <u>A35 B40</u> (1970) Earlier Year: <u>A35 B40</u> (1965)

WORK TITLE: Aerial Photographs of the Delaware Valley, 1975

CREATOR: Delaware Valley Regional Planning Commission

DATE: 1975

SOURCE:

<u>Delaware Valley</u>

<u>Regional Planning</u>

<u>Commission</u>

GEOGRAPHY (THIS WORK):
BUCKS County, PA
Pennsylvania
Philadelphia, PA
New Jersey
Delaware County, PA
Montgomery County, PA
Burlington County, NJ
Camden County, NJ
Gloucester County, NJ

IMAGE FILE(S): DVRPC1975. PhilaMetroAerials. 0755.A35\_B40



### Aerial Photo A35 B40

RELATED IMAGES/PLATES: Later Year: A35 B40

(1995) Later Year: <u>A35 B40</u> (1990)

Later Year: <u>A35 B40</u> (1985)

Earlier Year: <u>A35 B40</u> (1975) Earlier Year: <u>A35 B40</u> (1970)

(1970) Earlier Year: <u>A35 B40</u> (1965)

WORK TITLE: Aerial Photographs of the Delaware Valley, 1980

CREATOR: Delaware Valley Regional Planning Commission

DATE: 1980

SOURCE:

<u>Delaware Valley</u>

<u>Regional Planning</u>

<u>Commission</u>

GEOGRAPHY (THIS WORK):
Bucks County, PA
Pennsylvania
Philadelphia, PA
New Jersey
Delaware County, PA
Montgomery County, PA
Burlington County, NJ
Camden County, NJ
Gloucester County, NJ

IMAGE FILE(S): DVRPC1980. PhilaMetroAerials. 0750.A35\_B40



South: <u>A35 B39</u>

### Aerial Photo A35 B40

RELATED IMAGES/PLATES: Later Year: A35 B40

(1995) Earlier Year: <u>A35 B40</u>

(1985) Earlier Year: <u>A35 B40</u>

(1980) Earlier Year: <u>A35 B40</u> (1975) Earlier Year: <u>A35 B40</u>

Earlier Year: A35 B40 (1970) Earlier Year: A35 B40

(1965)

WORK TITLE:
Aerial Photographs of the Delaware Valley,

CREATOR: Delaware Valley Regional Planning Commission

DATE: 1990

SOURCE:

<u>Delaware Valley</u>

<u>Regional Planning</u>

<u>Commission</u>

GEOGRAPHY (THIS WORK):
BUCKS County, PA
Pennsylvania
Philadelphia, PA
New Jersey
Delaware County, PA
Montgomery County, PA
Burlington County, NJ
Camden County, NJ
Gloucester County, NJ

IMAGE FILE(S): DVRPC1990. PhilaMetroAerials. 0760.A35\_B40



South: <u>A35 B39</u>

### Aerial Photo A35 B40

RELATED IMAGES/PLATES: Earlier Year: A35 B40

(1990) Earlier Year: <u>A35 B40</u>

(1985) Earlier Year: <u>A35 B40</u> (1980)

Earlier Year: <u>A35 B40</u> (1975) Earlier Year: <u>A35 B40</u>

Earlier Year: <u>A35 B40</u> (1970) Earlier Year: <u>A35 B40</u> (1965)

WORK TITLE: Aerial Photographs of the Delaware Valley, 1995

CREATOR: Delaware Valley Regional Planning Commission

DATE: 1995

SOURCE:

<u>Delaware Valley</u>

<u>Regional Planning</u>

<u>Commission</u>

GEOGRAPHY (THIS WORK): Bucks County, PA Pennsylvania Philadelphia, PA New Jersey Delaware County, PA Montgomery County, PA Burlington County, NJ Camden County, NJ Gloucester County, NJ

IMAGE FILE(S): DVRPC1995. PhilaMetroAerials. 0762.A35\_B40



Journ. <u>A33 D33</u>