iATL INTERNATIONAL
ASBESTOS TESTING LABORATORIES

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: Synertech Inc.
228 Moore Street
Philadelphia PA 19148

Client: SYN177

Report Date: 11/26/2019
Report No.: 605121 - TEM AHERA
Project: Benjamin Franklin HS
Project No.: 010-4507

TEM AIR SAMPLE ANALYSIS SUMMARY

Lab No.: 6926814
Client No.: ATS-11-26-01
Volume: 1800.0 L
Location: 19A Music Rm West
Date Sampled: 11/26/19
Density (s/mm²): <19.2
Concentration (s/cc): <0.0041
Asbestos Type(s): None Detected

Lab No.: 6926815
Client No.: ATS-11-26-02
Volume: 1800.0 L
Location: 19B Music Rm West
Date Sampled: 11/26/19
Density (s/mm²): <19.2
Concentration (s/cc): <0.0041
Asbestos Type(s): None Detected

Lab No.: 6926816
Client No.: ATS-11-26-03
Volume: 1800.0 L
Location: 19C Music Rm West
Date Sampled: 11/26/19
Density (s/mm²): <19.2
Concentration (s/cc): <0.0041
Asbestos Type(s): None Detected

Lab No.: 6926817
Client No.: ATS-11-26-04
Volume: 1800.0 L
Location: In Containment Outside Music Rms South
Date Sampled: 11/26/19
Density (s/mm²): <19.2
Concentration (s/cc): <0.0041
Asbestos Type(s): None Detected

Lab No.: 6926818
Client No.: ATS-11-26-05
Volume: 1800.0 L
Location: In Containment Outside Music Rm North
Date Sampled: 11/26/19
Density (s/mm²): <19.2
Concentration (s/cc): <0.0041
Asbestos Type(s): None Detected

Note: Phila. Regulations Clearance Criteria is 0.00554 s/cc based on 5 samples.
Geometric Mean = 0.0041 Structures/cc

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/26/2019
Date Analyzed: 11/26/2019
Signature:
Analyst: Jhoon Jeon

Approved By:
Frank E. Ehrenfeld, III
Laboratory Director

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client:	Synertech Inc.	Report Date:	11/26/2019
	228 Moore Street	Report No.:	605121 - TEM AHERA
	Philadelphia PA 19148	Project:	Benjamin Franklin HS
		Project No.:	010-4507
Client:	SYN177		

Appendix to Analytical Report:

Customer Contact: Jacqueline McMahon
Method: 40 CFR 763 Final Rule

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com
iATL Office Manager:wchampion@iatl.com
iATL Account Representative: Shirley Clark
Sample Matrix: Air Cassettes

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and ir our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

Information Pertinent to this Report:

Analysis by 40 CFR 763 Final Rule

Certifications:
- NIST-NVLAP No. 101165-0
- NYSDOH-ELAP No. 11021

All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.

Detection Limit (Reporting Limit) is dependent upon the volume of air sampled. AHERA guidelines recommend a minimum of 1200 L (0.0049 s/cc).

Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation.

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: Synertech Inc.
228 Moore Street
Philadelphia PA 19148

Client: SYN177

Report Date: 11/26/2019
Report No.: 605121 - TEM AHERA
Project: Benjamin Franklin HS
Project No.: 010-4507

TEM AIR SAMPLE ANALYSIS DETAILS

Lab No.: 6926814
Client No.: ATS-11-26-01

Volume (L): 1800.0 L
Date Sampled: 11/26/19
Location: 19A Music Rm West

Filter Type: MCE
Filter Size (mm²): 385
Pore Size (µm): 0.45

Grid Openings: 4
Opening Area (mm²): 0.013
Area Analyzed (mm²): 0.0520
Sensitivity (s/mm²): 19.2
Detection Limit (s/cc): 0.0041

Micrograph Number:
EDXA Spectrum ID:

Asbestos Structures: None Detected

Structures 0.5 µm to <5.0 µm: None Detected
Structures ≥ 5.0 µm: None Detected
Structure Density (s/mm²): ≤19.2
Structure Concentration (s/cc): ≤0.0041
Asbestos Type(s): None Detected

Non-Asbestos Structures: None Detected

Structure Density (s/mm²): <19.2
Structure Concentration (s/cc): <0.0041
Non-Asbestos Type(s): None Detected

Lab No.: 6926815
Client No.: ATS-11-26-02

Volume (L): 1800.0 L
Date Sampled: 11/26/19
Location: 19B Music Rm West

Filter Type: MCE
Filter Size (mm²): 385
Pore Size (µm): 0.45

Grid Openings: 4
Opening Area (mm²): 0.013
Area Analyzed (mm²): 0.0520
Sensitivity (s/mm²): 19.2
Detection Limit (s/cc): 0.0041

Micrograph Number:
EDXA Spectrum ID:

Asbestos Structures: None Detected

Structures 0.5 µm to <5.0 µm: None Detected
Structures ≥ 5.0 µm: None Detected
Structure Density (s/mm²): ≤19.2
Structure Concentration (s/cc): ≤0.0041
Asbestos Type(s): None Detected

Non-Asbestos Structures: None Detected

Structure Density (s/mm²): <19.2
Structure Concentration (s/cc): <0.0041
Non-Asbestos Type(s): None Detected

Lab No.: 6926816
Client No.: ATS-11-26-03

Volume (L): 1800.0 L
Date Sampled: 11/26/19
Location: 19C Music Rm West

Filter Type: MCE
Filter Size (mm²): 385
Pore Size (µm): 0.45

Grid Openings: 4
Opening Area (mm²): 0.013
Area Analyzed (mm²): 0.0520
Sensitivity (s/mm²): 19.2
Detection Limit (s/cc): 0.0041

Micrograph Number:
EDXA Spectrum ID:

Asbestos Structures: None Detected

Structures 0.5 µm to <5.0 µm: None Detected
Structures ≥ 5.0 µm: None Detected
Structure Density (s/mm²): ≤19.2
Structure Concentration (s/cc): ≤0.0041
Asbestos Type(s): None Detected

Non-Asbestos Structures: None Detected

Structure Density (s/mm²): <19.2
Structure Concentration (s/cc): <0.0041
Non-Asbestos Type(s): None Detected

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/26/2019
Date Analyzed: 11/26/2019
Signature:
Analyst: Jhoon Jeon

Approved By:
Frank E. Ehrenfeld, III
Laboratory Director

iATL INTERNATIONAL
ASBESTOS TESTING LABORATORIES

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: Synertech Inc.
228 Moore Street
Philadelphia PA 19148

Client: SYN177

Report Date: 11/26/2019
Report No.: 605121 - TEM AHERA
Project: Benjamin Franklin HS
Project No.: 010-4507

TEM AIR SAMPLE ANALYSIS DETAILS

Lab No.: 6926817
Client No.: ATS-11-26-04

Volume (L): 1800.0 L
Date Sampled: 11/26/19
Location: In Containment Outside Music Rms South

Filter Type: MCE
Filter Size (mm²): 385
Pore Size (µm): 0.45

Grid Openings: 4
Opening Area (mm²): 0.013
Area Analyzed (mm²): 0.0520
Sensitivity (s/mm²): 19.2
Detection Limit (s/cc): 0.0041

Micrograph Number:
EDXA Spectrum ID:

Asbestos Structures: None Detected

Structures 0.5 µm to <5.0 µm: None Detected
Structures ≥ 5.0 µm: None Detected
Structure Density (s/mm²): <19.2
Structure Concentration (s/cc): <0.0041
Asbestos Type(s): None Detected

Non-Asbestos Structures: None Detected

Structure Density (s/mm²): <19.2
Structure Concentration (s/cc): <0.0041
Non-Asbestos Type(s): None Detected

Lab No.: 6926818
Client No.: ATS-11-26-05

Volume (L): 1800.0 L
Date Sampled: 11/26/19
Location: In Containment Outside Music Rm North

Filter Type: MCE
Filter Size (mm²): 385
Pore Size (µm): 0.45

Grid Openings: 4
Opening Area (mm²): 0.013
Area Analyzed (mm²): 0.0520
Sensitivity (s/mm²): 19.2
Detection Limit (s/cc): 0.0041

Micrograph Number:
EDXA Spectrum ID:

Asbestos Structures: None Detected

Structures 0.5 µm to <5.0 µm: None Detected
Structures ≥ 5.0 µm: None Detected
Structure Density (s/mm²): <19.2
Structure Concentration (s/cc): <0.0041
Asbestos Type(s): None Detected

Non-Asbestos Structures: None Detected

Structure Density (s/mm²): <19.2
Structure Concentration (s/cc): <0.0041
Non-Asbestos Type(s): None Detected

Note: Phila. Regulations Clearance Criteria is 0.00554 s/cc based on 5 samples.
Geometric Mean = 0.0041 Structures/cc

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/26/2019
Date Analyzed: 11/26/2019
Signature:
Analyst: Jhoon Jeon

Approved By:
Frank E. Ehrenfeld, III
Laboratory Director

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: Synertech Inc.
228 Moore Street
Philadelphia PA 19148

Client: SYN177

Report Date: 11/26/2019
Report No.: 605121 - TEM AHERA
Project: Benjamin Franklin HS
Project No.: 010-4507

Synertech Inc.
ENVIRONMENTAL CONSULTING
228 Moore Street • Philadelphia, Pennsylvania 19148
Phone 215-755-2305 • Fax 215-755-2405
www.gosynertech.com

Project: Benjamin Franklin HS Date: 11-26-19
Project Number: 010-4507 Rotometer No.: HVR 1 LVR
Laboratory: IATL Analysis: TEM Phila. Requirements: ☒ YES ☐ NO

AIR SAMPLE LOG & CHAIN OF CUSTODY

SAMPLES			TIME			CALIBRATION			ANALYTICAL	
No.	Location	Code	On	Off	Total	Start	Finish	Liters	Laboratory # Fibers/Fields	Results
ATS-11-26-01	19A Music Room West	3A	10:26 AM	1:26 PM	180	10	10	1800	6926814	
ATS-11-26-02	19B Music Room West	3A	10:26 AM	1:26 PM	180	10	10	1800	6926815	
ATS-11-26-03	19C Music Room West	3A	10:26 AM	1:26 PM	180	10	10	1800	6926816	
ATS-11-26-04	IN containment outside Music Rooms South	3A	10:26 AM	1:26 PM	180	10	10	1800	6926817	
ATS-11-26-05	IN Containment outside Music Room North	3A	10:26 AM	1:26 PM	180	10	10	1800	6926818	
ATS-11-26-06	outside decon IN Hallway near South Stair	3N	10:21 AM	1:21 PM	180	10	10	1800	6926819	
ATS-11-26-07	outside near Room 16 South Door	3N	10:21 AM	1:21 PM	180	10	10	1800	6926820	
ATS-11-26-08	Outside near 16 between North & South Door	3N	10:21 AM	1:21 PM	180	10	10	1800	6926821	

Sampling Codes

1 Diagnostic
2 Preliminary
3 Clearance/Final
4 Personnel Work Area
5 Environmental Work Area
6 Personnel Clean Area
7 Environmental Clean Area

A Aggressive
N Normal
E Excursion
T TWA
R Representative

Turnaround Time (TAT): ☐ Immediate ☒ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ Other

6 Hour TAT Contact: Eric Belfi at: EBelfi@GOsynertech
Samples Collected By: Justin Tyrell Date: 11-26-19
Transmitted to Lab By: Justin Tyrell Date: 11-26-19
Received in Lab By: Date:
Samples Analyzed By: JJ 11/26/19 Date:
@ 11/26/19

Synertech Inc.
ENVIRONMENTAL CONSULTING
228 Moore Street • Philadelphia, Pennsylvania 19148
Phone 215-755-2305 • Fax 215-755-2405
www.gosynertech.com

Project: Benjamin Franklin HS Date: 11-26-19

Project Number: 010-4507 Rotometer No.: HVR 1 LVR ____

Laboratory: IATL Analysis: PCM Phila. Requirements: ☒ YES ☐ NO

AIR SAMPLE LOG & CHAIN OF CUSTODY

SAMPLES			TIME			CALIBRATION			ANALYTICAL	
No.	Location	Code	On	Off	Total	Start	Finish	Liters	Laboratory # Fibers/Fields	Results
ATS-11-26-09	Outside containment near Room 16 Door North	3N	10:21 AM	1:21 PM	180	10	10	1800	6926822	
ATS-11-26-10	Outside containment near poly Barrier to HEPA Unit	3N	10:21 AM	1:21 PM	180	10	110	1800	6926823	
ATS-11-26-11	QC Blank Field Do not analyze								6926824	
ATS-11-26-12	QC Blank Field Do not analyze								6926825	
ATS-11-26-13	QC Blank Sealed Do not analyze								6926826	
- -										
- -										
- -										

Sampling Codes

1 Diagnostic
2 Preliminary
3 Clearance/Final
4 Personnel Work Area
5 Environmental Work Area
6 Personnel Clean Area
7 Environmental Clean Area

A Aggressive
N Normal
E Excursion
T TWA
R Representative

Turnaround Time (TAT): ☐ Immediate ☒ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ Other ____

6 Hour TAT Contact: Eric Belfi at: ____

Samples Collected By: Cutty Lee Hill Date: 11-26-19

Transmitted to Lab By: Cutty Lee Hill Date: 11-26-19

Received in Lab By: ____ Date: ____

Samples Analyzed By: ____ Date: ____

iATL INTERNATIONAL
ASBESTOS TESTING LABORATORIES

9000 Commerce Parkway, Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

PRELIMINARY RESULTS
Airborne Asbestos Analysis
TEM AHERA

Client:	Synertech Inc.	Batch No.:	605121
	228 Moore Street	Project:	Benjamin Franklin HS
	Philadelphia, PA 19148	Project No.:	010-4507
Client No.:	SYN177	Philly Regs:	Y
		Turn-Around Time:	6 Hour Rush

Client Contacts:		**Laboratory Contacts:**	
Contacts:		Contacts:	Frank E. Ehrenfeld III
Phone:		Phone:	(856) 231-9449
Fax:		Fax:	(856) 231-9818
Cell/Pager:		Cell/Pager:	(609) 929-4211
E-Mail:		E-Mail:	frankehrenfeld@iatl.com

Chain of Custody:					
Samples Taken in Field:	Client	Date:	11/26/2019	Time:	
Samples Rec'd at Laboratory:	L. D'Ornellas	Date:	11/26/2019	Time:	
Samples Analyzed:	J. Jeon	Date:	11/26/2019	Time:	
Preliminary Results Faxed:		Date:		Time:	
Preliminary Results E-Mail:		Date:		Time:	

Summary Data
Transmission Electron Microscopy
AHERA 40CFR 763

Client Sample ID #	IATL Sample ID #	Volume (L)	Comments	Results s/mm²	Results s/cc
ATS-1126-01	6926814	1800	None Detected	< 19.2	< 0.0041
ATS-1126-02	6926815	1800	None Detected	< 19.2	< 0.0041
ATS-1126-03	6926816	1800	None Detected	< 19.2	< 0.0041
ATS-1126-04	6926817	1800	None Detected	< 19.2	< 0.0041
ATS-1126-05	6926818	1800	None Detected	< 19.2	< 0.0041

AHERA Clerance Criteria is **70** s/mm². Average (s/mm²) = 19.2
Phila. Regulations Clearance Criteria is 0.00554 s/cc Geo = 0.0041
Z Test Reults (see attached, if applicable)

Grid Box #: 1794

Instrument (I, II, III **III**

These preliminary results are issued by IATL to expedite procedures by the clients based upon the above data. IATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificates of Analysis will follow these preliminary results. The signed COAs are to be considered the official results.

IATL International Asbestos Testing Laboratories

TEM Air Sample Worksheet

Client Name:	Synertech Inc.	**Analysis Date:** 11/26/19	**IATL Sample #:** 6926814
Client Project #:	010-4507		**Client Sample #:** ATS-1126-01
Sample Type:	**AHERA -Philly Regulations**		IATL Grid Box #: 1794
QC Submittal			Grid Archive ID #: L3L5

Electron Microscope ID:		Filter Dia. (mm):	25	Magnification:	20,000X
		Effective Area (mm):	385		
III	JEOL, JEM-1230, EM18440033	Filter Type:	MCE	Accelerating Voltage:	100KeV
	EVEX	Filter Pore Size (µm):	0.45		

Grid Opening:	0.115 mm	Volume of Air Sampled:	1800 Liters
Grid opening Area:	0.013 mm^2		
Grid Openings Read/Required:	4 4	Analytical Sensitivity:	19.2 mm^2
Total Area Analyzed:	0.0520 mm^2	Minimum Detection Limit:	0.0041 s/cc

Total **Asbestos** Structures:	NSD	Non-Asbestos Structures:	NSD
0.5µm - 5.0µm:	NSD		
>5.0µm:			
Asbestos:	< 19.2 s/mm^2	Non-Asbestos:	< 19.2 s/mm^2
Asbestos:	< 0.0041 s/cc	Non-Asbestos:	< 0.0041 s/cc

Analysis Data:

Grid Opening ID	Structure Number	Structure Type F/B/C/M	[1] Length 0.5 -5.0 µm	[2] Length > 5.0 µm	* Chrysotile	**Amphibole	***Non-Asbestos	Micrograph / EDS ID
L3 D4		NSD						
D5		NSD						
L5 D3		NSD						
D4		NSD						
Total:	NSD	NSD	0	0	0	0	0	

* Must confirm by Morphology, SAED, and EDXA for each suspect asbestos fiber
Record visible prominent Chrysotile DP reflections (002 ,004, 110, 130, 220, 200)

** Define Amphibole (DP obtained Y/N). Print-out EDS and attach.

*** Characterize by EDS

1, 2 Record Structure Length & Width (µm)

SEE REVERSE: FIBER ORIENTATION MAP

Prep Quality:	
Dissolution	Good
Carbon Film	Good
Loading	2%

Comments:

Analyzed By: J. Jeon

Reviewed By:

IATL International Asbestos Testing Laboratories

TEM Air Sample Worksheet

Client Name:	Synertech Inc.	**Analysis Date:** 11/26/19	**IATL Sample #:** 6926815
Client Project #:	010-4507		**Client Sample #:** ATS-1126-02
Sample Type:	**AHERA -Philly Regulations**		IATL Grid Box #: 1794
QC Submittal			Grid Archive ID #: L7L9

Electron Microscope ID:		Filter Dia. (mm):	25	Magnification:	20,000X
		Effective Area (mm):	385		
III	JEOL, JEM-1230, EM18440033	Filter Type:	MCE	Accelerating Voltage:	100KeV
	EVEX	Filter Pore Size (µm):	0.45		

Grid Opening:	0.115 mm		Volume of Air Sampled:	1800	Liters
Grid opening Area:	0.013 mm^2				
Grid Openings Read/Required:	4	4	Analytical Sensitivity:	19.2	mm^2
Total Area Analyzed:	0.0520 mm^2		Minimum Detection Limit:	0.0041	s/cc

Total **Asbestos** Structures:	NSD		Non-Asbestos Structures:	NSD	
0.5µm - 5.0µm:	NSD				
>5.0µm:					
Asbestos:	< 19.2	s/mm^2	Non-Asbestos:	< 19.2	s/mm^2
Asbestos:	< 0.0041	s/cc	Non-Asbestos:	< 0.0041	s/cc

Analysis Data:

Grid Opening ID	Structure Number	Structure Type F/B/C/M	[1] Length 0.5 -5.0 µm	[2] Length > 5.0 µm	* Chrysotile	**Amphibole	***Non-Asbestos	Micrograph / EDS ID
L7 E5		NSD						
E6		NSD						
L9 F6		NSD						
F7		NSD						
Total:	NSD	NSD	0	0	0	0	0	

* Must confirm by Morphology, SAED, and EDXA for each suspect asbestos fiber
Record visible prominent Chrysotile DP reflections (002 ,004, 110, 130, 220, 200)

** Define Amphibole (DP obtained Y/N). Print-out EDS and attach.

*** Characterize by EDS

1, 2 Record Structure Length & Width (µm)

SEE REVERSE: FIBER ORIENTATION MAP

Prep Quality:	
Dissolution	Good
Carbon Film	Good
Loading	2%

Comments:

Analyzed By: J. Jeon

Reviewed By:

IATL International Asbestos Testing Laboratories

TEM Air Sample Worksheet

Client Name:	Synertech Inc.	**Analysis Date:** 11/26/19	**IATL Sample #:** 6926816
Client Project #:	010-4507		**Client Sample #:** ATS-1126-03
Sample Type:	**AHERA -Philly Regulations**		IATL Grid Box #: 1794
QC Submittal			Grid Archive ID #: M2M4

Electron Microscope ID:	Filter Dia. (mm): 25	Magnification:	20,000X
	Effective Area (mm): 385		
III JEOL, JEM-1230, EM18440033	Filter Type: MCE	Accelerating Voltage:	100KeV
EVEX	Filter Pore Size (µm): 0.45		

Grid Opening:	0.115 mm	Volume of Air Sampled:	1800 Liters
Grid opening Area:	0.013 mm^2		
Grid Openings Read/Required:	4 4	Analytical Sensitivity:	19.2 mm^2
Total Area Analyzed:	0.0520 mm^2	Minimum Detection Limit:	0.0041 s/cc

Total **Asbestos** Structures:	NSD	Non-Asbestos Structures:	NSD
0.5µm - 5.0µm:	NSD		
>5.0µm:			
Asbestos:	< 19.2 s/mm^2	Non-Asbestos:	< 19.2 s/mm^2
Asbestos:	< 0.0041 s/cc	Non-Asbestos:	< 0.0041 s/cc

Analysis Data:

Grid Opening ID	Structure Number	Structure Type F/B/C/M	[1] Length 0.5 -5.0 µm	[2] Length > 5.0 µm	* Chrysotile	**Amphibole	***Non-Asbestos	Micrograph / EDS ID
M2 E4		NSD						
E5		NSD						
M4 F6		NSD						
F7		NSD						
Total:	NSD	NSD	0	0	0	0	0	

* Must confirm by Morphology, SAED, and EDXA for each suspect asbestos fiber
Record visible prominent Chrysotile DP reflections (002 ,004, 110, 130, 220, 200)

** Define Amphibole (DP obtained Y/N). Print-out EDS and attach.

*** Characterize by EDS

1, 2 Record Structure Length & Width (µm)

SEE REVERSE: FIBER ORIENTATION MAP

Prep Quality:	
Dissolution	Good
Carbon Film	Good
Loading	2%

Comments:

Analyzed By: J. Jeon

Reviewed By:

IATL International Asbestos Testing Laboratories

TEM Air Sample Worksheet

Client Name:	Synertech Inc.	**Analysis Date:** 11/26/19	**IATL Sample #:** 6926817
Client Project #:	010-4507		**Client Sample #:** ATS-1126-04
Sample Type:	**AHERA -Philly Regulations**		IATL Grid Box #: 1794
QC Submittal			Grid Archive ID #: M6M8

Electron Microscope ID:	Filter Dia. (mm): 25	Magnification:	20,000X
	Effective Area (mm): 385		
III JEOL, JEM-1230, EM18440033	Filter Type: MCE	Accelerating Voltage:	100KeV
EVEX	Filter Pore Size (µm): 0.45		

Grid Opening:	0.115 mm	Volume of Air Sampled:	1800 Liters
Grid opening Area:	0.013 mm^2		
Grid Openings Read/Required:	4 4	Analytical Sensitivity:	19.2 mm^2
Total Area Analyzed:	0.0520 mm^2	Minimum Detection Limit:	0.0041 s/cc

Total **Asbestos** Structures:	NSD	Non-Asbestos Structures:	NSD
0.5µm - 5.0µm:	NSD		
>5.0µm:			
Asbestos:	< 19.2 s/mm^2	Non-Asbestos:	< 19.2 s/mm^2
Asbestos:	< 0.0041 s/cc	Non-Asbestos:	< 0.0041 s/cc

Analysis Data:

Grid Opening ID	Structure Number	Structure Type F/B/C/M	[1] Length 0.5 -5.0 µm	[2] Length > 5.0 µm	* Chrysotile	**Amphibole	***Non-Asbestos	Micrograph / EDS ID
M6 F3		NSD						
F4		NSD						
M8 F5		NSD						
F6		NSD						
Total:	NSD	NSD	0	0	0	0	0	

* Must confirm by Morphology, SAED, and EDXA for each suspect asbestos fiber
Record visible prominent Chrysotile DP reflections (002 ,004, 110, 130, 220, 200)

** Define Amphibole (DP obtained Y/N). Print-out EDS and attach.

*** Characterize by EDS

1, 2 Record Structure Length & Width (µm)

SEE REVERSE: FIBER ORIENTATION MAP

Prep Quality:	
Dissolution	Good
Carbon Film	Good
Loading	2%

Comments: _____

Analyzed By: J. Jeon

Reviewed By: _____

IATL International Asbestos Testing Laboratories

TEM Air Sample Worksheet

Client Name:	Synertech Inc.	**Analysis Date:** 11/26/19	**IATL Sample #:** 6926818
Client Project #:	010-4507		**Client Sample #:** ATS-1126-05
Sample Type:	**AHERA -Philly Regulations**		IATL Grid Box #: 1794
QC Submittal			Grid Archive ID #: M10N1

Electron Microscope ID:		Filter Dia. (mm):	25	Magnification:	20,000X
		Effective Area (mm):	385		
III	JEOL, JEM-1230, EM18440033	Filter Type:	MCE	Accelerating Voltage:	100KeV
	EVEX	Filter Pore Size (µm):	0.45		

Grid Opening:	0.115 mm	Volume of Air Sampled:	1800 Liters
Grid opening Area:	0.013 mm^2		
Grid Openings Read/Required:	4 4	Analytical Sensitivity:	19.2 mm^2
Total Area Analyzed:	0.0520 mm^2	Minimum Detection Limit:	0.0041 s/cc

Total **Asbestos** Structures:	NSD	Non-Asbestos Structures:	NSD
0.5µm - 5.0µm:	NSD		
>5.0µm:			
Asbestos:	< 19.2 s/mm^2	Non-Asbestos:	< 19.2 s/mm^2
Asbestos:	< 0.0041 s/cc	Non-Asbestos:	< 0.0041 s/cc

Analysis Data:

Grid Opening ID	Structure Number	Structure Type F/B/C/M	[1] Length 0.5 -5.0 µm	[2] Length > 5.0 µm	* Chrysotile	**Amphibole	***Non-Asbestos	Micrograph / EDS ID
M10 D4		NSD						
D5		NSD						
N1 E4		NSD						
E5		NSD						
Total:	NSD	NSD	0	0	0	0	0	

* Must confirm by Morphology, SAED, and EDXA for each suspect asbestos fiber
Record visible prominent Chrysotile DP reflections (002 ,004, 110, 130, 220, 200)

** Define Amphibole (DP obtained Y/N). Print-out EDS and attach.

*** Characterize by EDS

1, 2 Record Structure Length & Width (µm)

SEE REVERSE: FIBER ORIENTATION MAP

Prep Quality:	
Dissolution	Good
Carbon Film	Good
Loading	2%

Comments: _____

Analyzed By: J. Jeon

Reviewed By: _____

iATL INTERNATIONAL
ASBESTOS TESTING LABORATORIES

9000 Commerce Parkway, Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

PRELIMINARY RESULTS
Airborne Asbestos Analysis
TEM AHERA

Client:	OHCS Inc.	Batch No.:	605122
	209 Catharine St.	Project:	Ben Franklin
	Philadelphia, PA 19147	Project No.:	Music Rooms 19A 19B 19C
Client No.:	OHC164	Philly Regs:	Y
		Turn-Around Time:	12 Hour

Client Contacts:		**Laboratory Contacts:**	
Contacts:		Contacts:	Frank E. Ehrenfeld III
Phone:		Phone:	(856) 231-9449
Fax:		Fax:	(856) 231-9818
Cell/Pager:		Cell/Pager:	(609) 929-4211
E-Mail:		E-Mail:	frankehrenfeld@iatl.com

Chain of Custody:

Samples Taken in Field:	Client	Date:	11/26/2019	Time:	
Samples Rec'd at Laboratory:	L. D'Ornellas	Date:	11/26/2019	Time:	
Samples Analyzed:	J. Jeon	Date:	11/26/2019	Time:	
Preliminary Results Faxed:		Date:		Time:	
Preliminary Results E-Mail:		Date:		Time:	

Summary Data
Transmission Electron Microscopy
AHERA 40CFR 763

Client Sample ID #	IATL Sample ID #	Volume (L)	Comments	Results s/mm²	Results s/cc
112619BEN01	6926827	1800	None Detected	< 19.2	< 0.0041
112619BEN02	6926828	1800	None Detected	< 19.2	< 0.0041
112619BEN03	6926829	1800	None Detected	< 19.2	< 0.0041
112619BEN04	6926830	1800	None Detected	< 19.2	< 0.0041
112619BEN05	6926831	1800	None Detected	< 19.2	< 0.0041

AHERA Clerance Criteria is **70** s/mm². Average (s/mm²) = 19.2
Phila. Regulations Clearance Criteria is 0.00554 s/cc Geo = 0.0041
Z Test Reults (see attached, if applicable)

Grid Box #: 1794

Instrument (I, II, III) **III**

These preliminary results are issued by IATL to expedite procedures by the clients based upon the above data. IATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificates of Analysis will follow these preliminary results. The signed COAs are to be considered the official results.

IATL INTERNATIONAL
ASBESTOS TESTING LABORATORIES

9000 Commerce Parkway, Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

PRELIMINARY RESULTS
Airborne Asbestos Analysis
TEM AHERA

Client:	OHCS Inc.	Batch No.:	605122
	209 Catharine St.	Project:	Ben Franklin
	Philadelphia, PA 19147	Project No.:	Music Rooms 19A 19B 19C
Client No.:	OHC164	Philly Regs:	Y
		Turn-Around Time:	12 Hour

Client Contacts:		**Laboratory Contacts:**	
Contacts:		Contacts:	Frank E. Ehrenfeld III
Phone:		Phone:	(856) 231-9449
Fax:		Fax:	(856) 231-9818
Cell/Pager:		Cell/Pager:	(609) 929-4211
E-Mail:		E-Mail:	frankehrenfeld@iatl.com

Chain of Custody:

Samples Taken in Field:	Client	Date:	11/26/2019	Time:	
Samples Rec'd at Laboratory:	L. D'Ornellas	Date:	11/26/2019	Time:	
Samples Analyzed:	J. Jeon	Date:	11/26/2019	Time:	
Preliminary Results Faxed:		Date:		Time:	
Preliminary Results E-Mail:		Date:		Time:	

Summary Data
Transmission Electron Microscopy
AHERA 40CFR 763

Client Sample ID #	IATL Sample ID #	Volume (L)	Comments	Results s/mm²	Results s/cc
112619BEN06	6926832	1800	None Detected	< 19.2	< 0.0041
112619BEN07	6926833	1800	None Detected	< 19.2	< 0.0041
112619BEN08	6926834	1800	None Detected	< 19.2	< 0.0041
112619BEN09	6926835	1800	None Detected	< 19.2	< 0.0041
112619BEN10	6926836	1800	None Detected	< 19.2	< 0.0041

AHERA Clerance Criteria is **70** s/mm². Average (s/mm²) = 19.2
Phila. Regulations Clearance Criteria is 0.00554 s/cc Geo = 0.0041
Z Test Reults (see attached, if applicable)

Grid Box #: 1794

Instrument (I, II, III) **III**

These preliminary results are issued by IATL to expedite procedures by the clients based upon the above data. IATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificates of Analysis will follow these preliminary results. The signed COAs are to be considered the official results.

OHCS Inc.
Occupational Health Consultation Services
209 Catharine Street; Philadelphia, PA 19147
Cell: 215-407-3900 Office: 215-925-3870 Fax: 215-925-3872
JRoseman@ohcs.net jeralene@icloud.com

CHAIN OF CUSTODY--Air Samples

CLIENT: PFT	SITE: BEN FRANKLIN
PROJECT #: MUSIC ROOMS 19A 19B 19C	PAGE #: 1 OF 1
SAMPLED BY: TIM DALEY	DATE: 11.26.19
CONTAMINANTS: ASBESTOS	ANALYSIS NEEDED BY: 12 HOUR

ASBESTOS IN LEAF BLOWN. 2 AFD'S

	SAMPLE #	VOLUME	TYPE	(5) COMMENTS	10 LPM	
1026	1	112619BEN01	1800	TEM	INSIDE CONTAINMENT MUSIC ROOM 19A	1326 6926827
1027	2	112619BEN02	1800		INSIDE CONTAINMENT MUSIC ROOM 19B	1327 6926828
1028	3	112619BEN03	1800		INSIDE CONTAINMENT MUSIC ROOM 19C	1328 6926830
1028	4	112619BEN04	1800		INSIDE CONTAINMENT MUSIC ROOM	1328 6926831
1028	5	112619BEN05	1800		INSIDE CONTAINMENT MUSIC ROOM	1328 6926832
1021	6	112619BEN06	1800		OUT SIDE MUSIC ROOM DECON: CLEAN ROOM	1321 6926833
1021	7	112619BEN07	1800		OUT SIDE MUSIC ROOM. HALL WAY	1321 6926834
1022	8	112619BEN08	1800		OUT SIDE MUSIC ROOMS HALLWAY. POLY. BARRIER	1322 6926835
1023	9	112619BEN09	1800		OUT SIDE ROOM 16 ENTRANCE	1323 6926836
1023	10	112619BEN10	1800		OUT SIDE ROOM 16 CENTER.	1323

SAMPLE PACKAGED AND SEALED BY: Tim Daley DATE: 11.26.19 TIME:

SENT TO: INTL

CONDITION UPON RECEIPT (DAMAGED / UNDAMAGED)