



December 18, 2018

Limited Asbestos Survey
For



BC Grammar School #1

Prepared for: Lexington County School District 2 Phone: (803) 822-5667
Attn: Bill McPherson
1631 Walterboro Street
West Columbia, SC 29170

Prepared by: ABS Environmental, Inc. Phone: (803) 345-3833
1416 Chapin Road
Chapin, SC 29036
ABS Job 6150.18009

Inspection Performed by: Matthew Fore SCDHEC # BI - 00579 Lic Exp Date 8/1/19

Report Prepared by: Matthew Fore SCDHEC # BI - 00579 Lic Exp Date 8/1/19

Report Reviewed by: Lee Capell SCDHEC # MP - 00072 Lic Exp Date 8/8/19

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1.0 EXECUTIVE SUMMARY

ABS Environmental, Inc. (ABS) was retained by Lexington County School District 2 to perform a limited asbestos survey at BC Grammar School #1 located at 114 Hook Avenue in West Columbia, SC. The primary objective of this survey was to identify, sample and physically assess asbestos-containing building materials (ACBM) associated with the floor tile in the Cafeteria, Main Office and Classrooms 10-22.

Six (6) suspect materials were identified, sampled and analyzed for the presence of asbestos. Samples were delivered by overnight courier service to EMSL Analytical, Inc. for analysis using Polarized Light Microscopy (PLM). As indicated by laboratory analysis, the suspect materials containing asbestos > 1% include approximately 13,384 ft² of bottom layer floor tile and mastic.

All layers of vinyl flooring located above the bottom layer floor tile and mastic are assumed to contain asbestos > 1%.

Limitations

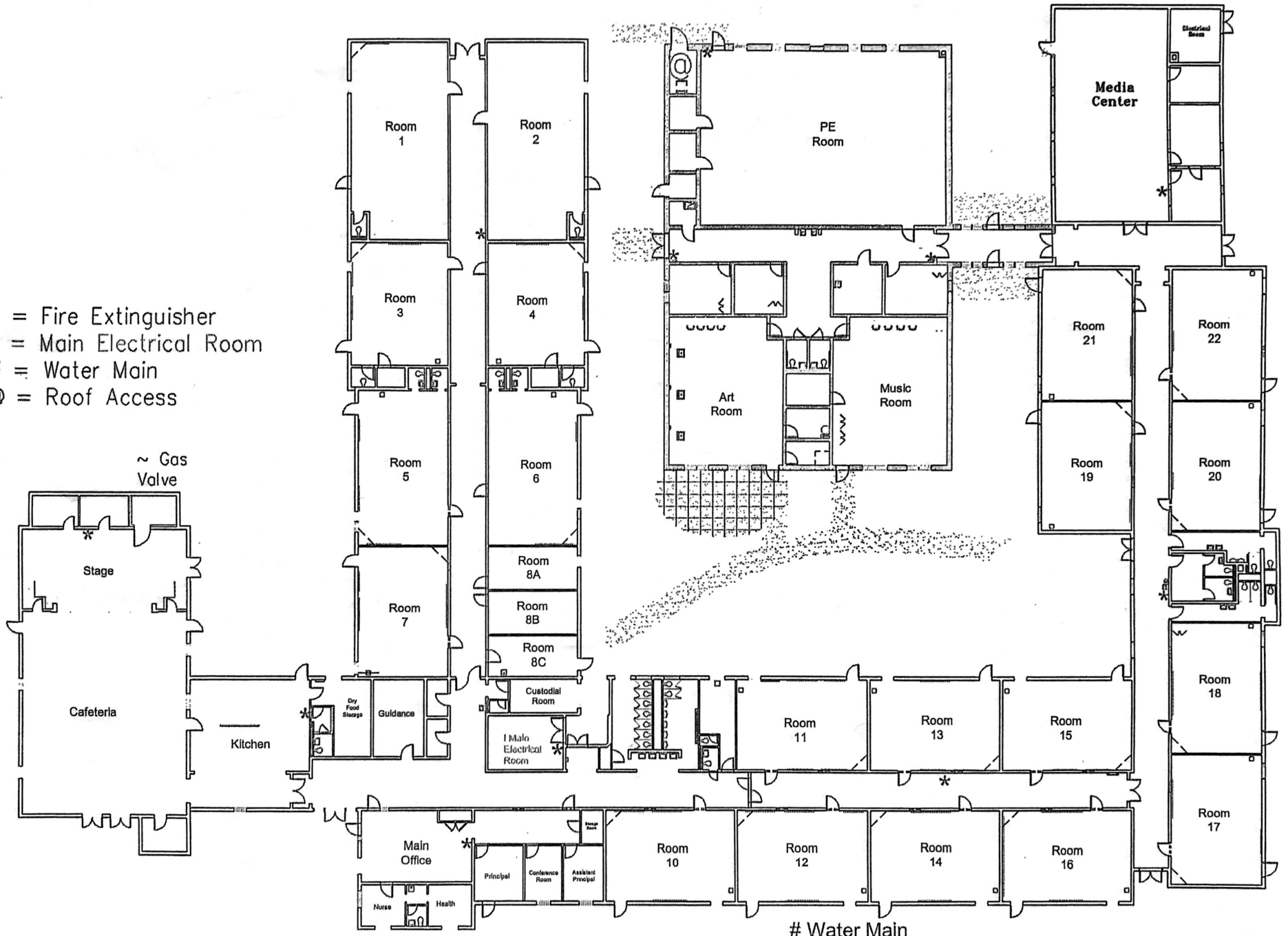
This survey and report have been executed at the request of Mr. Bill McPherson and Lexington County School Two and are intended solely for their use. All work related to this project has been conducted in keeping with accepted standards of environmental consulting as practiced in the State of South Carolina. No unnecessary destructive measures were undertaken during this survey. Additional suspect and/or asbestos containing materials may be present. If at any time during the course of renovation or demolition a suspect material is observed that is not identified in this report, stop work immediately until the material can be sampled and analyzed for the presence of asbestos. **ABS** has relied, in part, on information derived from secondary sources, and except as set forth herein, **ABS** has made no independent investigation as to the accuracy or completeness of the information derived from such secondary sources. No warranty is expressed or implied.

*BC Grammar School #1
Limited Asbestos Survey*

*ABS Environmental, Inc.
ABS Job # 6150.18009*

DRAWING

- * = Fire Extinguisher
- ! = Main Electrical Room
- # = Water Main
- ⊙ = Roof Access



Water Main

Lexington County School District Two
 "BC Grammar School #1"

SITE MAP



TABLES

Table #1
Asbestos Containing Building Material (ACBM)

Project Name: BC Grammar School #1
Project Address: 114 Hook Ave., West Columbia, SC **Date:** 18-Dec-18

* Assumed to Contain Asbestos > 1%

Observed ACBM		
Material	EPA AHERA Category	Quantity
12" Top Layer Floor Tile* & Mastic*	Miscellaneous	13,384 ft ²
12" Middle Layer Floor Tile* & Mastic*	Miscellaneous	13,384 ft ²
9" Bottom Layer Floor Tile & Mastic	Miscellaneous	13,384 ft ²

Table #2
Non-Friable ACBM

Project Name: BC Grammar School #1
Project Address: 114 Hook Ave., West Columbia, SC **Date:** 18-Dec-18

* Assumed to Contain Asbestos > 1%

Non-Friable ACBM	
Material	Quantity
12" Top Layer Floor Tile* & Mastic*	13,384 ft ²
12" Middle Layer Floor Tile* & Mastic*	13,384 ft ²
9" Bottom Layer Floor Tile/Mastic	13,384 ft ²

**Table #3
Asbestos - Suspect Material Data Sheet**

Project Name: BC Grammar School #1

Project Address: 114 Hook Ave., West Columbia, SC

Date: 18-Dec-18

Asbestos Finding: Asbestos Containing Material (ACM) contains > 1% asbestos by definition

P = Positive via PLM

N = Negative: does not meet definition of ACM

PTP = Previously tested Positive

P = Positive via TEM

A = Assumed to be ACM; no samples collected

PTN = Previously tested Negative

Present Condition

F = Friable

NF= Non Friable

D = Damaged (Damage less than 10 distributed and less than 25 % localized)

G = Good (Very localized damage)

SD = Significantly Damaged (Damage equal to or greater than 10 % distributed/ 25 % localized)

Potential for Future Disturbance by Contact, Vibration or Air Erosion Mechanisms

LPD = Low Potential for Disturbance (All Three Mechanisms of Low Concern)

PSD = Potential for Significant Damage (One Mechanism

PD = Potential for Damage (Any One Mechanism of Moderate Concern)

of High Concern or More Than One of Moderate Concern)

EPA AHERA Asbestos Category

T = Thermal System Insulation (Inhibits heat transfer or prohibits condensation)

S = Surfacing Material (Spray-applied or trowel applied)

M = Miscellaneous Materials (Refer to as "Other" materials by OSHA)

Hazard Ranking = 7 thru 1; (7 being the worst i.e. significantly damaged material)


Suspect Material #	Material Description	Category (S, T, M)	# Samples	Quantity	Present Condition	Disturbance Potential	P or N PLM	P or N TEM	P or N Point Count	Hazard Ranking
HM-01	Vinyl Floor Tile	M	3	13,384 ft ²	NF/G	PD	A			2
HM-02	Mastic below HM-01	M	3	13,384 ft ²	NF/G	LPD	A			1
HM-03	Vinyl Floor Tile	M	3	13,384 ft ²	NF/G	LPD	A			1
HM-04	Mastic below HM-03	M	3	13,384 ft ²	NF/G	LPD	A			1
HM-05	Vinyl Floor Tile	M	3	13,384 ft ²	NF/G	LPD	P			1
HM-06	Mastic below HM-03	M	3	13,384 ft ²	NF/G	LPD	P			1

Table #4
Asbestos - Bulk Sample Data Sheet


Project Name: BC Grammar School #1

Project Address: 114 Hook Ave., West Columbia, SC

Date: 18-Dec-18

 Positive; meets definition of Asbestos Containing Material (ACM) (i.e.>1%asbestos) via PLM

 Positive; meets definition of Asbestos Containing Material (ACM) (i.e.>1%asbestos) via TEM

 Assumed to contain Asbestos > 1%

* **Chry = Chrysotile** **Amos = Amosite** **Croc = Crocidolite** **Anth = Anthophyllite** **NAD = No Asbestos Detected** **DNA = Did Not Analyze**

Laboratory Sample #	ABS Sample #	Suspect Material #	Material Description	Location	Type * Asbestos	Percent PLM	Percent TEM	Percent Point Count
021808618-0001	BC-01	HM-01/02	Vinyl Floor Tile/Mastic (Top Layer)	Cafeteria		DNA		
021808618-0002	BC-02			Room 10		DNA		
	BC-03			Room 13		DNA		
021808618-0003	BC-04	HM-03/04	Vinyl Floor Tile/Mastic (Middle Layer)	Cafeteria		DNA		
021808618-0004	BC-05			Room 10		DNA		
	BC-06			Room 13		DNA		
021808618-0005	BC-07	HM-05	Vinyl Floor Tile (Bottom Layer)	Cafeteria	Chry	10%		
021808618-0006	BC-08			Room 10	Chry	10%		
	BC-09			Room 13		DNA		
021808618-0005A	BC-07	HM-06	Mastic below HM-03	Cafeteria	Chry	8%		
021808618-0006A	BC-08			Room 10	Chry	8%		
	BC-09			Room 13		DNA		

* NAD = No Asbestos Detected
Amos = Amosite

DNA = Did Not Analyze
Croc = Crocidolite

Chry = Chrysotile
Anth = Anthophyllite

*BC Grammar School #1
Limited Asbestos Survey*

*ABS Environmental, Inc.
ABS Job # 6150.18009*

LABORATORY RESULTS



EMSL Analytical, Inc.

706 Gralin Street Kernersville, NC 27284

Tel/Fax: (336) 992-1025 / (336) 992-4175

<http://www.EMSL.com> / greensborolab@emsl.com

EMSL Order: 021808618

Customer ID: ESE52

Customer PO:

Project ID:

Attention: Matthew Fore
ABS Environmental
1416 Chapin Road
Chapin, SC 29036

Phone: (803) 345-3833

Fax: (803) 345-2823

Received Date: 11/16/2018 10:45 AM

Analysis Date: 11/17/2018 - 11/19/2018

Collected Date: 11/15/2018

Project: BC Grammar

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
BC-01 <small>021808618-0001</small>	12" Top Layer Floor Tile/Mastic				Positive Stop (Not Analyzed)
BC-02 <small>021808618-0002</small>	12" Top Layer Floor Tile/Mastic				Positive Stop (Not Analyzed)
BC-04 <small>021808618-0003</small>	12" Middle Layer Floor Tile/Mastic				Positive Stop (Not Analyzed)
BC-05 <small>021808618-0004</small>	12" Middle Layer Floor Tile/Mastic				Positive Stop (Not Analyzed)
BC-07-Floor Tile <small>021808618-0005</small>	9" Bottom Layer Floor Tile/Mastic	Brown/Tan Non-Fibrous Homogeneous		15% Quartz 75% Non-fibrous (Other)	10% Chrysotile
BC-07-Mastic <small>021808618-0005A</small>	9" Bottom Layer Floor Tile/Mastic	Black Non-Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
BC-08-Floor Tile <small>021808618-0006</small>	9" Bottom Layer Floor Tile/Mastic	Tan Fibrous Homogeneous		15% Quartz 75% Non-fibrous (Other)	10% Chrysotile
BC-08-Mastic <small>021808618-0006A</small>	9" Bottom Layer Floor Tile/Mastic	Black Fibrous Homogeneous	<1% Cellulose	92% Non-fibrous (Other)	8% Chrysotile

Analyst(s)

Nicole Shutts (2)

Scott Combs (2)

Stephen Bennett, 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. Kernersville, NC NVLAP Lab Code 102104-0, CA ELAP 2689, Virginia 3333-000228, West Virginia LT000321

Initial report from: 11/19/2018 08:11:12



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only):

8618

EMSL ANALYTICAL, INC.
706 GRALIN STREET
KERNERSVILLE, NC 27284
PHONE: 336-992-1025
FAX: 336-992-4175

Company : ABS Environmental, Inc.		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>	
Street: 1416 Chapin Road		<i>Third Party Billing requires written authorization from third party</i>	
City: Chapin	State/Province: SC	Zip/Postal Code: 29036	Country:
Report To (Name): Matthew Fore		Fax #: (803) 345-2823	
Telephone #: (803) 345-3833		Email Address: mfore@absenv.com	
Project Name/Number: <i>BC Grammar</i>			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order:	U.S. State Samples Taken:

Turnaround Time (TAT) Options* - Please Check

3 Hours
 6 Hours
 24 Hrs
 48 Hrs
 3 Days
 4 Days
 5 Days
 10 Days

*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

<p>PCM - Air</p> <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <p>PLM - Bulk (reporting limit)</p> <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	<p>TEM - Air</p> <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <p>TEM - Bulk</p> <input checked="" type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <p>TEM - Water: EPA 100.2</p> Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	<p>TEM- Dust</p> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <p>Soil/Rock/Vermiculite</p> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) <p>Other:</p> <input type="checkbox"/>
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Check For Positive Stop - Clearly Identify Homogenous Group

Samplers Name: Lee Capell	Samplers Signature:
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Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
<i>BC/01-03</i>	<i>12" Top Layer Floor Tile/Mastic</i>		
<i>04-06</i>	<i>12" Middle Layer Floor Tile/Mastic</i>		
<i>07-09</i>	<i>9" Bottom Layer Floor Tile/Mastic</i>		

Client Sample # (s): <i>BC-01</i> - <i>BC-09</i>	Total # of Samples: <i>9</i>
Relinquished (Client): <i>Jill Rin</i>	Date: <i>11/15/18</i> Time: <i>1730</i>
Received (Lab): <i>ONA</i>	Date: <i>11/16/18</i> Time: <i>10:45</i>

Comments/Special Instructions: *Analyze samples 7-9 first. If positive, do not analyse samples 1-6.*