## **Roanoke County Schools**

## Three Year AHERA Reinspection

Glenvar Elementary School Facility 018

> Reinspection Dates: April 22, 2008 May 27, 2008

Baratta & Associates, Inc PO Box 293 Vinton, Virginia 24179 540-890-4875

Michael Baratta, PE

Virginia Asbestos Inspector License: 3303-000065

Virginia Asbestos Management Planner License: 3304-000208

#### Baratta & Associates, Inc.

Virginia Department of Education Energy and Facilities Service

LEA Roanoke County Schools
School 018 Glenvar Elementary School
Building Main

#### **SCHOOL BUILDINGS**

Building Name	Location	Chec	Check here for the presence of:			No ACBM	
		AC	ACBM Suspect ACBM				
		Friable	Non- friable	Friable	Non- friable		
Glenvar Elementary	4507 Malus Drive Salem, VA 24153	X		X			
School (018)							

	12-16-			
Inspector:	1/1/1/10		1/1/	
Name: Michael Baratta	_Signature///	Date	6/23/00	
Accreditation Number: 330	03 000065 Agency: Virginia DPOR			

Building 018
Sample Locations
L001
April 22, 2008; May 27, 2008

HA-09 Gypsumboard system, white Sample 09-1; 09-2, 09-3

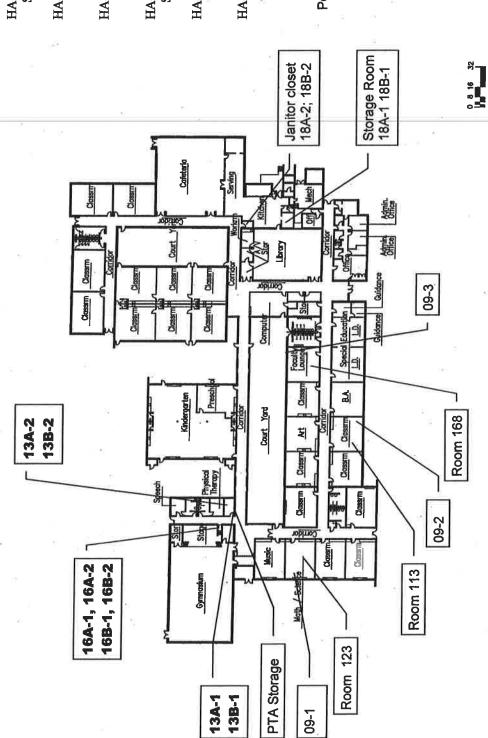
HA-13A Floor tile 12"x12", black and white Samples 13A-1; 13A-2

HA-13B Black mastic for HA-13A Samples 13B-1; 13B-2

HA-16A Floor tile 9"x9", green Samples 16A-1; 16A-2 HA-16B, Black mastic for HA-16A Samples 16B-1; 16B-2

HA-18A Floor tile 12"x12", tan Samples 18A-1; 18A-2 HA-18B Black mastic for HA-18A Samples 18B-1; 18B-2

Positive Samples in Bold



Baratta & Associates, Inc. P.O. Box 293 Vinton, VA 24179

Document E.1

Virginia Department of Education Energy and Facilities Services LEA Roanoke County Schools

School: 018 Glenvar Elementary School

Building: Main

Sample Date: April 22 and May 27, 2008

**BULK SAMPLE ANALYSIS** 

Analysis Date: April 24 and June 2, 2008
Analysis Method: PLM EPA 6000/M4-82-020

Homogeneous Area	Sample Number	Material	Asbestos Content
09	09-1	Gypsumboard system, white	NAD
	09-2		NAD
	09-3		NAD
13A	13A-1	Floor tile 12" x12", white & black	3 % chrysotile
	13A-2		3 % chrysotile
13B	13B-1	Black mastic for HA-13A	4 % chrysotile
	13B-2		4 % chrysotile
16A	16A-1	Floor tile 9"x9", green	4 % chrysotile
	16A-2		4 % chrysotile
16B	16B-1	Black mastic for HA-16A	10 % chrysotile
	16B-2	77.0	10 % chrysotile
18A	18A-1	Floor tile 12" x12", tan	NAD
	18A-2		NAD
18B	18B-1	Black mastic for HA-18A	NAD
	18B-2		NAD

NAD – no asbestos detected

See attached AmeriSci PLM Bulk Asbestos Report Numbers 108041606 & 108051782

Name: Michael Baratta Signature Date C/23/08
Accreditation Number: 3303 000065 Agency: Virginia DPOR



13635 GENITO ROAD MIDLOTHIAN, VA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800

April 24, 2008

Baratta & Associates, Inc. Attn: Michael Baratta 1150 Shady Run Road Vinton, VA 24179

RE: Baratta & Associates, Inc. Job Number 108041606 P.O. #L001 L001: AHERA: Glenvar ELS

Dear Michael Baratta:

Enclosed are the results for PLM asbestos analysis of the following Baratta & Associates, Inc. samples received at AmeriSci on Thursday, April 24, 2008, for a 3 day turnaround:

09-1, 09-2, 09-3, 13A-1, 13A-2, 13B-1, 13B-2, 18A-1, 18A-2, 18B-1, 18B-2

The 11 samples contained in zip lock bag were shipped to AmeriSci via Fed Ex 8621 8375 0530 B. These samples were prepared and analyzed according to the EPA Interim Method (EPA 600/M4-82-020 per 40 CFR 763, subpt F, App. A). The required analytical information, analysis results, analyst signature and laboratory identification is contained in the Analyst's Report.

This report relates ONLY to the sample analysis expressed as percent asbestos. AmeriSci assumes no responsibility for customer supplied data such as "sample type", "location", or "area sampled". This report must not be used to claim product endorsement by AmeriSci, NVLAP or any agency of the U. S. Government. The National Institute of Standards and Technology Accreditation requirements, mandates that this report must not be reproduced, except in full without the written approval of the laboratory. This report may contain specific data not covered by NVLAP or ELAP accreditations respectively, if so identified in relevant footnotes.

AmeriSci appreciates this opportunity to serve your organization. Please contact us for any further assistance or with any questions.

Sincerely,

T. Brian Keith

**Asbestos Laboratory Director** 

Wayes for Tok



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800

## **PLM Bulk Asbestos Report**

Baratta & Associates, Inc. Attn: Michael Baratta 1150 Shady Run Road

**Date Received** 

04/24/08

AmeriSci Job #

108041606

Date Examined 04/24/08

P.O. # Page

of

RE: L001; AHERA; Glenvar ELS

Vinton, VA 24179

Client No. / HGA	Lab No.	<b>Asbestos Present</b>	Total % Asbestos
09-1  Location: Gypsu	108041606-01 ım Board System	No	NAD (by CVES) by C. David Mintz
Analyst Description: Off White, He Asbestos Types:		lk Material	on 04/24/08
Other Material: Cellulose 4 %			
09-2  Location: Gypsu	108041606-02 m Board System	No	NAD (by CVES) by C. David Mintz on 04/24/08
Analyst Description: Off White, Hei Asbestos Types: Other Material: Cellulose 8 %	•	lk Material	
09-3 <b>Location</b> : Gypsu	·	No	NAD (by CVES) by C. David Mintz on 04/24/08
Analyst Description: Off White, Het Asbestos Types: Other Material: Cellulose 7 %,		k Material	
I3A-1 Location: Floor T	108041606-04 ile	Yes	3 % (by CVES) by C. David Mintz on 04/24/08
Analyst Description: Beige/Gray, Ho Asbestos Types: Chrysotile 3.0 Other Material: Non-fibrous 97	%	lk Material	
3A-2	108041606-05	Yes	3 %
Location: Floor Ti	le <sub>9</sub>		(by CVES) by C. David Mintz on 04/24/08
Analyst Description: Beige/Gray, Ho Asbestos Types: Chrysotile 3.0 Other Material: Non-fibrous 97	%	lk Material	

Client Name: Baratta & Associates, Inc.

## **PLM Bulk Asbestos Report**

L001; AHERA; Glenvar ELS

•	/ HGA Lab No.	<b>Asbestos Present</b>	Total % Asbestos
13B-1	108041606-06  Location: Floor Tile Mastic  escription: Black, Heterogeneous, Non-Fibrous, Bulk Ma	Yes	4 % (by CVES) by C. David Mintz on 04/24/08
Asbes	tos Types: Chrysotile 4.0 %  r Material: Non-fibrous 96 %	eterial	
13B-2	108041606-07  Location: Floor Tile Mastic	Yes	4 % (by CVES) by C. David Mintz
Asbest	escription: Black, Heterogeneous, Non-Fibrous, Bulk Matos Types: Chrysotile 4.0 % r Material: Non-fibrous 96 %	aterial	on 04/24/08
18A-1	108041606-08	No	NAD
)	Location: Floor Tile		(by CVES) by C. David Mintz on 04/24/08
Asbest	scription: Off White, Homogeneous, Non-Fibrous, Bulk	Material	
- Other	* Material: Non-fibrous 100 %		
	* Material: Non-fibrous 100 %  108041606-09  Location: Floor Tile	No	NAD (by CVES) by C. David Mintz on 04/24/08
18A-2 Analyst Des Asbesto	108041606-09		(by CVES) by C. David Mintz
18A-2 Analyst Des Asbesto	108041606-09  Location: Floor Tile  scription: Off White, Homogeneous, Non-Fibrous, Bulk os Types:		(by CVES) by C. David Mintz on 04/24/08  NAD (by CVES) by C. David Mintz
Analyst Des Asbesto Other 8B-1	108041606-09 Location: Floor Tile scription: Off White, Homogeneous, Non-Fibrous, Bulk os Types: Material: Non-fibrous 100 %	Material <b>No</b>	(by CVES) by C. David Mintz on 04/24/08  NAD (by CVES)
Analyst Des Asbesto Other 8B-1	108041606-09 Location: Floor Tile  scription: Off White, Homogeneous, Non-Fibrous, Bulk os Types: Material: Non-fibrous 100 %  108041606-10 Location: Floor Tile Mastic  scription: Black, Heterogeneous, Non-Fibrous, Bulk Maps Types:	Material <b>No</b>	(by CVES) by C. David Mintz on 04/24/08  NAD (by CVES) by C. David Mintz

AmeriSci Job #: 108041606

Page 3 of 3

Client Name: Baratta & Associates, Inc.

## **PLM Bulk Asbestos Report**

L001; AHERA; Glenvar ELS

1 1
Reporting Notes:
Analyzed by: C. David Mintz Date Date
*NAD = no asbestos detected, Detection Limit < %, Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No
Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos
Analysis by EPA 600/M4-82-020 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples
(198.6 for NOB samples)(NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor
poverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine it
his material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970,
8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This
PLM report relates QNLY to the items tested.
Reviewed By:



13635 GENITO ROAD MIDLOTHIAN, VA 23112

TEL: (804) 763-1200 • FAX: (804) 763-1800

June 2, 2008

Baratta & Associates, Inc. Attn: Michael Baratta 1150 Shady Run Road Vinton, VA 24179

RE:

Baratta & Associates, Inc. Job Number 108051782

P.O. # L001

L001; AHERA; Glenvar E/S

Dear Michael Baratta:

Enclosed are the results for PLM asbestos analysis of the following Baratta & Associates, Inc. samples received at AmeriSci on Friday, May 30, 2008, for a 3 day turnaround:

1GA-1, 1GA-2, 1GB-1, 1GB-2

The 4 samples contained in zip lock bag were shipped to AmeriSci via Fed Ex 8621 8375 0367 B. These samples were prepared and analyzed according to the EPA Interim Method (EPA 600/M4-82-020 per 40 CFR 763, subpt F, App. A). The required analytical information, analysis results, analyst signature and laboratory identification is contained in the Analyst's Report.

This report relates ONLY to the sample analysis expressed as percent asbestos. AmeriSci assumes no responsibility for customer supplied data such as "sample type", "location", or "area sampled". This report must not be used to claim product endorsement by AmeriSci, NVLAP or any agency of the U. S. Government. The National Institute of Standards and Technology Accreditation requirements, mandates that this report must not be reproduced, except in full without the written approval of the laboratory. This report may contain specific data not covered by NVLAP or ELAP accreditations respectively, if so identified in relevant footnotes.

AmeriSci appreciates this opportunity to serve your organization. Please contact us for any further assistance or with any questions.

Sincerely

T. Brian Keith

Asbestos Laboratory Director



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800

## **PLM Bulk Asbestos Report**

Baratta & Associates, Inc. Attn: Michael Baratta 1150 Shady Run Road Vinton, VA 24179 Date Received 05/30/08

**AmeriSci Job No.** 108051782

Date Examined 06/02/08

**P.O.** # L001

Page 1

- 49

1 **of** 2

RE L001; AHERA; Glenvar E/S

Client No. / Ho	GA Lab No.	<b>Asbestos Present</b>	<b>Total % Asbestos</b>
<del>-1GA-</del> 1	108051782-01	Yes	4 %
16A-1	Location: Floor Tile		(by CVES) by David W. Ralbovsky
Asbestos Type	n: Green, Heterogeneous, Non-Fibrous, B s: Chrysotile 4.0 %	ulk Material	on 06/02/08
Other Materia	al: Non-fibrous 96 %		
1GA 2	108051782-02	Yes	4 %
16 A-2	Location: Floor Tile		(by CVES) by David W. Ralbovsky
Asbestos Type	n: Green, Heterogeneous, Non-Fibrous, Bos: Chrysotile 4.0 % I: Non-fibrous 96 %	ulk Material	on 06/02/08
1GB 1	108051782-03	Yes	10 %
168-1	Location: Floor Tile Mastic		(by CVES) by David W. Ralbovsky
Asbestos Types	n: Black, Heterogeneous, Non-Fibrous, Bu s: Chrysotile 10.0 % l: Non-fibrous 90 %	lk Material	on 06/02/08
<del>1GB-2</del>	108051782-04	Yes	10 %
16 B-Z	Location: Floor Tile Mastic		(by CVES) by David W. Ralbovsky
Asbestos Types	: Black, Heterogeneous, Non-Fibrous, Bul : Chrysotile 10.0 % : Non-fibrous 90 %	k Material	on 06/02/08

See Reporting notes on last page

AmeriSci Job #: 108051782

Client Name: Baratta & Associates, Inc.

Page 2 of 2

## **PLM Bulk Asbestos Report**

L001; AHERA; Glenvar E/S

Client No. / HGA	Ląb No.	Asbestos Present	Total % Asbestos
Reporting Notes:			
Analyzed by: David W. Ralbov		Date 6/2/8	
*NAD = no asbestos detected	, Detection Limit > %, Report	ing Lin its: CVES = 1%, 400 Br Ct = 0.2	5%, 1000 Pt Ct = 0.1%;
"Present" or NVA = "No Visible	e Asbestos are observations	nade fluring a qualitative analysis; NA :	= not analyzed; NA/PS = not
		A 600/M4-82-020 per 40 CFR 763 (NV	
ELAP PLM Analysis Protocol	198.1 for New York friable san	198.6 for NOB samples)(NYSDO	H ELAP Lab # 10984); CA
ELAP Lab # 2508; Note: PLM	is not consistently reliable in o	detecting asbestos in floor coverings and	d similar NOB materials. NAD
		he only method that can be used to dete	
		ork State (also see EPA Advisory for floo	
		report must not be reproduced except in	
the laboratory. This PLM repo	rt relates ONLY to the items to	ested.	
Reviewed By:	Ton	<del>- 4</del>	

#### Baratta & Associates, Inc.

P.O. Box 293 Vinton, Virginia

LEA	Roanoke County Schools
School	018 Glenvar Elementary School
Building	Main

#### **REASSESSMENT OF MATERIALS**

Past or Initial Assessment: Hall-Kimbrell April 1989

Homogeneous	Description	Past	Reassessmen
Area	192	Assessment	Category #
		Category #	
02	Heating water fitting TSI	1	removed 1994
03	Heating water pipe TSI	1	removed 1994
04	Domestic HW fitting TSI	1	6
05	Domestic HW pipe TSI	Non-ACM	-
06	Domestic CW fitting TSI	1	6
07	Domestic CW pipe TSI	Non-ACM	-
08	Heating water fitting TSI (gymnasium mechanical room)	Non-ACM	=
09	Gypsumboard system, white	Not evaluated	Non-ACM
10	LIC all floors	Non-ACM	-
11	LIC all floors	Non-ACM	-
12	LIC all floors	Non-ACM	-
13A	Floor tile 12" x12", white & black	5	5
13B	Black mastic for HA-13A	Not evaluated	5
14	Floor tile, non descript	5	removed
15	Floor tile 9"x9", brown	5	removed
16A	Floor tile 9"x9", green	5	5
16B	Black mastic for HA-16A	5	5
17	Floor tile 9"x9", tan	5	removed
18A	Floor tile 12" x12", beige with tan	Non-ACM	Non-ACM
18B	Black mastic for HA-18A	Not evaluated	Non-ACM
19	Breeching TSI, Main Boiler Room	1	removed 1994
20	Pipe fitting TSI, Main Boiler Room	1	removed 1994
21	Pipe run TSI, Main Boiler Room	1	removed 1994
22	Tank TSI, Main Boiler Room	1	removed 1994
23	Breeching TSI, 5 <sup>th</sup> Grade Boiler Room	1	6
24	Pipe fitting TSI, 5 <sup>th</sup> Grade Boiler Room	1	11

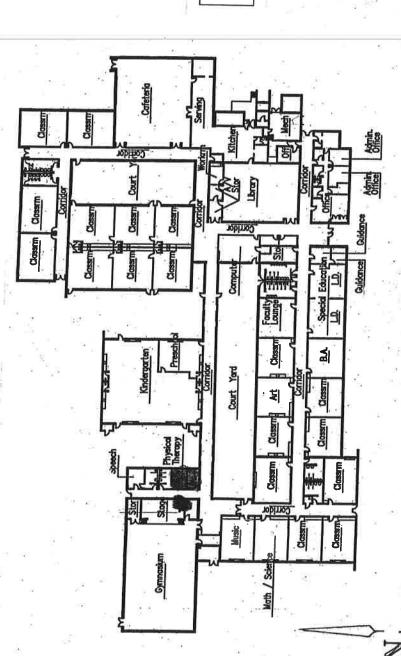
#### AHERA - Physical Assessment Categories - 763.88(a)(2)(b)

- 1 Damaged or significantly damaged TSI-ACBM
- 2 Damaged friable surfacing ACBM
- 3 Significantly damaged friable surfacing ACBM
- 4 Damaged or significantly damaged friable miscellaneous ACBM
- 5 ACBM with potential for damage
- 6 ACBM with potential for significant damage
- 7 Any remaining friable ACBM or friable suspect ACBM

Inspector:	111/1/1/		0/2/06
Name: Michael Baratta	Signature///	Date	61431 6
Accreditation Number: 33	03 000065 Agency: Virginia DPOR		

TSI-ACM (HA-23 & 24) observed in 5<sup>th</sup> Grade Boiler Room

TSI-ACM (HA-04 & 06) observed in Janitor Closet TSI-ACM hidden inside walls and ceiling spaces and other areas - Typical



LOCATION OF ACBMs

Glenvar Elementary School

Scale: see drawing

Reinspection Dates: April 22 & May 27, 2008

Asbestos containing floor tiles and mastics (HA-13 & 16)



#### Document G

Virginia Department of Education Energy and Facilities Service LEA Roanoke County Schools

School 018 Glenvar Elementary School

Building: Main

# RESPONSE ACTIONS RECOMMENDED

Total cost to remove \$22,000

Each Location	Recommended Response Actions	Scheduled To Begin	Scheduled To Be Completed	Est. Cost To Remove
Floor tile and mastic (HA-13A, 13B, 16A & 16B	Maintain floor coverings until other needs require these floor coverings to be removed	none	none	\$2,000
TSI through out building	Place in O & M plan until other needs require the TSI be removed	none	none	20,000

			12.		
Management Planner:			1/1/1/2	12	6/2/00
Name: Michael Baratta	Signature_	//	///	Date	6/23/08
Accreditation Number: 330	04 000208	Age	ncy: Virginia	a DPOR	

#### ASBESTOS MANAGEMENT, OPERATIONS AND MAINTENANCE PLAN

018 Glenvar Elementary School June 23, 2008

This Asbestos Management Operations and Maintenance Plan is based on the Three Year AHERA Reinspection performed by Baratta & Associates, Inc on April 24 and May 27, 2008. It covers procedures to be followed in dealing with the Asbestos-Containing Materials (ACMs) found in the Glenvar Elementary School.

#### SUMMARY

Most of the asbestos containing thermal system insulation (TSI) was removed from this building. Exposed asbestos containing TSIs can be seen in the Fifth Grade Boiler Room and in the janitor closets. Additional ACM-TSI remains inside concealed spaces.

The grey 12"x12" black & white tiles in the PTA Storage Room and the green 9" x 9" floor tiles at the stage steps across the hall tested to be Asbestos Containing Materials. The black mastics associated with these tiles are also deemed ACMs. These floor coverings are in good condition. They do not currently present an asbestos related health risk to building occupants in their current condition.

#### STAFF NOTIFICATION

The School should send all staff members a brief notice stating that Asbestos-Containing Materials exist in the Glenvar Elementary School.

#### **ACM IDENTIFICATION**

The following products were found to be Asbestos-Containing Materials (ACMs):

HA Number	Material			
04	Domestic HW fitting TSI			
06	Domestic CW fitting TSI			
13A	Floor tile 12" x12", white & black			
13B	Black mastic for HA-13A			
16A	Floor tile 9"x9", green			
16B	Black mastic for HA-16A			
23	Breeching TSI, 5 <sup>th</sup> Grade Boiler Room			
24	Pipe fitting TSI, 5 <sup>th</sup> Grade Boiler Room			
We will be a second of the sec				

#### **CARE OF THE FLOOR TILES**

No drilling, sanding, or other abrasive or penetrating activities shall be used on the asbestos containing floor tiles. To do so may release asbestos fibers into the environment.

The flooring is tough and non-friable. It is doubtful anything other than forceful vandalism will deteriorate this material to a point where significant fiber release will occur.

# CARE OF THE THERMAL SYSTEM INSULATION (TSI) EXPOSED IN CLOSETS

In there current condition, these materials do not present an asbestos related health hazard to building occupants. Custodial and maintenance personnel should take care not to damage or disturb these TSIs while performing their duties. Any damaged areas should be reported to the Principal so repairs can be made.

Any patching, repair work or removal should be carried out by a licensed asbestos abatement contractor.

# CARE OF THE THERMAL SYSTEM INSULATION (TSI) IN CONCEALED SPACES

These ACMs are hidden in the walls and ceiling spaces. They do not present an asbestos related health hazard to those occupying the building.

Care should be taken when removing any ceiling tiles as TSI debris may have fallen on top of the tiles.

Should you notice any suspect asbestos containing debris in the ceiling space, please contact the Principal so an evaluation can be made and appropriate action taken,

#### PERMIT REQUIREMENTS

Before any work that may require the disturbance of the noted Asbestos Containing Materials is performed, maintenance personnel or contractors shall obtain an Asbestos Work Area Permit from the School System's Asbestos Program Manager.