



US Army Corps
of Engineers
Savannah District

Hunter Army Airfield Georgia

Solicitation Number
DACA21-03-R-0026
Upgrade Saber Hall
FY-03, Line Item 52067
Volume IV of IV – Environmental Site Assessment Data
May 2003

**THIS SOLICITATION IS UNRESTRICTED PURSUANT TO THE
"BUSINESS OPPORTUNITY DEVELOPMENT REFORM ACT OF 1988"
(PUBLIC LAW 100-656)**

**U.S. ARMY ENGINEER DISTRICT, SAVANNAH
CORPS OF ENGINEERS
100 WEST OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3640**



U.S. Army Corps
of Engineers
Savannah District

U.S. ARMY CORPS OF ENGINEERS
ENVIRONMENTAL & MATERIALS UNIT
200 NORTH COBB PARKWAY
BUILDING 400, SUITE 404
MARIETTA, GA 30062

SUPPLEMENTAL ASBESTOS **SURVEY REPORT**

**BUILDING NO. 8661, SABRE HALL
HUNTER ARMY AIR FIELD, GEORGIA**



**SUPPLEMENTAL ASBESTOS INSPECTION REPORT
HUNTER ARMY AIR FIELD, GEORGIA
BUILDING NUMBER 8661, SABRE HALL**

INTRODUCTION

1. This report documents the asbestos inspection and survey of Building No. 8661, Sabre Hall at Hunter Army Air Field, Georgia conducted between 24-26 July 2002 by USACE Savannah District employees Tim Jones and Jack Ford. The survey was conducted in general accordance with the regulatory guidelines in the Asbestos Hazard Emergency Response Act (AHERA) (40 CFR Part 763 Subpart E Sections 763.80-763.88) and "Guidance for Controlling Asbestos-Containing Materials in Buildings" (Purple Book) (EPA publication number 560/5-85-024). Although not required by the AHERA guidelines, roof and other exterior miscellaneous materials were also inspected and sampled.
2. All accessible areas of Building No. 8661 were visually inspected to verify materials identified in the original asbestos report compiled by Air-Safe Environmental, Inc. dated 27 September 1999. In addition, an accredited inspector sampled roofing materials and other suspect materials omitted in the original inspection.
3. Building No. 8661 was built in the 1940s time frame and is a two-story structure of concrete masonry block construction. The floor system is concrete covered generally with vinyl asbestos tile. The original roof systems were flat multi-layer built up roofing of tar and felt. The lower roofs were then covered with single layer rubberized membrane over insulation. New gable type standing seam metal roofs have been recently added over all major roof systems. Interior wall systems are mostly constructed of concrete masonry block.
4. All accessible areas of Building No. 8661 were visually inspected for suspected Asbestos Containing Materials (ACM) by an accredited inspector. Bulk samples of all suspected ACM's not identified by the previous inspection were collected. Samples were taken from inconspicuous locations when possible. This report details ACM as identified at the time of inspection only.
5. The bulk samples were analyzed by Hygeia Laboratories, Inc. Hygeia is accredited by the National Voluntary Laboratory Accredited Program (NVLAP Accreditation sponsored by the National Institute of Standards and Technology (NIST)). The samples were analyzed by the accepted method of polarized light microscopy (PLM) using EPA's "Method for the Determination of Asbestos in Bulk Building Materials", EPA/600/R-93/116. Hygeia's analytical report is

included in Appendix 1 and their NVLAP accreditation is in the Certifications section.

6. In compliance with the AHERA regulations, material is considered an Asbestos Containing Material when it contains greater than 1 (one) percent asbestos. Likewise, in this report, any material containing concentrations greater than 1 percent asbestos will be considered “positive”. A narrative discussion of the AHERA ACM types (i.e., thermal systems insulation, miscellaneous and surfacing materials) found in Building No. 8661 is included in this report when relevant. Bulk sample information appears on Table 1. Estimated quantities of individual asbestos containing materials appear on Table 2. Material characterization of samples identified as asbestos containing appears as Table 3. Photographs of the positive materials, when available, appear as Figures. The specific location where each bulk sample was obtained is shown on the building floor plans, which appear as Plates. Positive ACM samples are highlighted on the floor plan Plates and, where possible, locations of similar positive ACM are identified. It is reasonable to assume that all materials similar to those testing positive, also contain positive amounts of asbestos and should be treated as such.

DISCUSSION

7. **Thermal Systems Insulation (TSI)** – TSI is insulation material applied to pipes, fittings, boilers, tanks, ducts, or to other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes (Refer to Tables 1-3 and Plates 1 & 2 for specific information and sample locations).

No TSI was found to be asbestos containing.

8. **Miscellaneous Materials** – Miscellaneous materials include building material on structural components, structural members or fixtures, such as floor and ceiling tiles, and do not include surfacing or TSI.

In the past, there were a great number of miscellaneous building materials that had asbestos fibers added to them during the manufacturing process to increase durability and fireproofing qualities. The following suspect miscellaneous materials were sampled at Building No. 8661 and found to contain asbestos.

Floor Materials – (Refer to Tables 1-3 and Plates 1 & 2 for specific information and sample locations).

In addition to the flooring materials identified in the original report, the brown 12” X 12” floor tiles on the lower level were found to contain asbestos.

Roofing Materials – (Refer to Tables 1-3 and Plate 3 for specific information and sample locations).

Troweled on roofing cement used as patching and flashing material around metal roof vents and roof access scuttle was found to contain positive amounts of asbestos. Flashing felt around these locations was also found to be asbestos containing.

Asbestos Cement Board - (Refer to Tables 1-3 and Plate 1 for specific information and sample locations).

2' X 2' perforated asbestos cement board used as wall covering on three walls of the mechanical room on the lower level contains asbestos. The material is attached to wood furring strips with nails or screws.

Caulking material - (Refer to Tables 1-3 and Plate 2 for specific information and sample locations).

Caulking material around the frame of one entry door on the west wall was found to be asbestos containing. Several other samples were found to be non-asbestos.

9. **Surfacing** – Surfacing material is friable material that is sprayed on, troweled on, or otherwise applied to surfaces for decorative or other purposes.

No surfacing materials were identified as asbestos containing.

Summary

10. In summary, the following materials in building 8661 were found to contain or are assumed to contain asbestos:

All vinyl floor tiles and associated mastic in the building contain asbestos

Troweled on roofing cement used for flashing and patching on the original built up roof contains positive amounts of asbestos.

Flashing felts around roof penetrations on the original built up roof contain asbestos.

2' X 2' perforated asbestos cement board used as wall covering in the lower level mechanical room contains asbestos.

Gasket materials in the mechanical piping flanges and within the boiler are assumed to contain asbestos.

Caulking material around exterior doorframe on west side of building contains asbestos.

Blue painted drywall joint compound, Room 202 south wall, partition behind stage, 3% chrysotile.

Prepared by: _____
TIMOTHY A. JONES

Tables

- Table 1** Suspect ACM Samples
- Table 2** ACM Quantity Summary
- Table 3** Material Characterization and Assessment

TABLE 1
SUSPECT ACM SAMPLES
HUNTER ARMY AIR FIELD, BUILDING 8661

FIELD ID	DESCRIPTION	LOCATION	ASBESTOS TYPE & %
8661-M-1	2' X 2' perforated ACM board	Mechanical room walls	30 % chrysotile
8661-M-2	2' X 2' perforated ACM board	Mechanical room walls	30 % chrysotile
8661-M-3	Wall batt insulation	Mechanical room walls	None
8661-M-4	White mastic on pipe insulation jacket	Mechanical room, joints in chill water piping insulation at air handling unit	None
8661-M-5	Water heater burner gasket material	Mechanical room	None
8661-M-6	TSI duct liner	Mechanical room, inside return ductwork	None
8661-M-7	TSI duct liner	Mechanical room, inside return ductwork	None
8661-M-8	TSI felt paper backed duct wrap	Mechanical room, supply duct above large air handling unit	None
8661-M-9	TSI black mastic duct wrap joint sealer	Mechanical room, supply duct above large air handling unit	None
8661-M-10	Duct flex joint	Mechanical room, several places between air handling units and ductwork	None
8661-M-11	2' X 2' perforated ACM board	Mechanical room walls	30 % chrysotile
8661-M-12	Insulation block scrap	Mechanical room, near switch panels at east wall	None
8661-B-13PE	TSI molded mud pipe elbow, 2" OD, no jacket	Lower level, ceiling above room 115 at corridor wall	None
8661-B-14	TSI black mastic duct wrap joint sealer	Lower level, east corridor, near door to room 110	None
8661-B-15PE	TSI molded mud pipe elbow, 3" OD, cloth jacket	Lower level, east corridor, near door to room 116	None
8661-B-16PE	TSI molded mud pipe elbow, 3" OD, cloth jacket	Lower level, room 116, in wall access at toilet	None
8661-B-17PV	TSI molded mud pipe valve, 3" OD, no jacket	Lower level, room 132, in ceiling above urinal	None
8661-B-18	Ceiling plaster	Lower level, room 148, ceiling	None
8661-B-19	12" X 12" random pattern ceiling tile	Lower level, room 139, ceiling	None
8661-B-20	12" X 12" perforated ceiling tile	Lower level, room 140, ceiling	None
8661-B-21	12" X 12" brown floor tile & mastic	Lower level, south corridor at stairwell	Tile 3 % chrysotile, Mastic 5 % chrysotile
8661-B-22	12" X 12" brown floor tile & mastic	Lower level, east corridor, near room 107	Tile 3 % chrysotile, Mastic 5 % chrysotile
8661-B-23	12" X 12" brown floor tile & mastic	Lower level, east corridor, at room 125 door	Tile 4 % chrysotile, Mastic 5 % chrysotile

FIELD ID	DESCRIPTION	LOCATION	ASBESTOS TYPE & %
8661-B-24	6" vinyl cove base & mastic	Lower level, west corridor, at room 138	None
8661-B-25PT	TSI molded mud pipe elbow, 4" OD, wrapped	Lower level, east corridor, at room 120 door	None
8661-1-26PE	TSI molded mud pipe elbow, 3" OD, wrapped	Upper level, above ceiling in kitchen pantry	None
8661-1-27PE	TSI molded mud pipe elbow, 4" OD, wrapped	Upper level, above ceiling in kitchen pantry	None
8661-1-28	Roof decking material	Upper level, above ceiling, room 208	None
8661-1-29	12" X 12" random pattern wall tile	Upper level, walls, room 222	None
8661-1-30	12" X 12" random pattern wall tile	Upper level, walls, small unnumbered room in room 222	None
8661-1-31	12" X 12" random pattern wall tile	Upper level, walls, room 223	None
8661-1-32	Wall tile adhesive	Upper level, walls, room 223	< 1 % chrysotile
8661-1-33	Wall tile adhesive	Upper level, walls, room 222	< 1 % chrysotile
8661-1-34	TSI black mastic duct wrap joint sealer	Upper level, corridor ceiling, at north stairwell	None
8661-R-35	Roofing cement	Old roof, at roof access opening above north stairwell	7 % chrysotile
8661-R-36	Multi layer built up roofing felt and tar	Old roof, above room 202	None
8661-R-37	Roof insulation/deck material	Old roof, above room 202	None
8661-R-38	Multi layer built up roofing felt and tar	Old roof, above room 208	None
8661-R-39	Multi layer built up roofing felt and tar	Old roof, above room 216	None
8661-R-40	Roofing cement and flashing felt	Old roof, above room 205	10 % chrysotile in cement, 5 % chrysotile in felt, 8 % chrysotile in total sample
8661-1-41	Random pattern ceiling tile	Upper level, north stairwell ceiling	None
8661-R-42	Granular roof insulation	Old north east roof section, under metal roof	None
8661-R-43	Multi layer built up roofing felt and tar	Old north east roof section, under metal roof	None
8661-R-44	Granular roof insulation	Old north west roof section, under metal roof	None
8661-R-45	Multi layer built up roofing felt and tar	Old north west roof section, under metal roof	None
8661-R-46	Granular roof insulation	Old south east roof section, under metal roof	None
8661-R-47	Multi layer built up roofing felt and tar	Old south east roof section, under metal roof	None
8661-E-48	Caulking material	Exterior, west wall, north end entry door, upper layer	2 % chrysotile
8661-E-49	Caulking material	Exterior, west wall, north end entry door, lower layer	4 % chrysotile
8661-M-50	Caulking material	Upper mechanical room, north wall, around joint between duct and wall	None

FIELD ID	DESCRIPTION	LOCATION	ASBESTOS TYPE & %
8661-E-51	Caulking material	Exterior, east wall at intake air louver	None
8661-E-52	Caulking material	Exterior, east wall, main entry door	< 1 % chrysotile
8661-B-53	Ceiling Plaster	Room 150 Ceiling	None
8661-B-54	Drywall Joint Compound	Room 134 Ceiling	None
8661-B-55	Plaster/Joint Compound?	Room 157 Ceiling	None
8661-B-56	Plaster/Joint Compound?	Room108 Ceiling	None
8661-B-57	Blue painted Drywall	Room 202 South Wall, Partition	3% Chrysotile
8661-B-58	Caulking Material	Entryway C05	None

Samples testing positive for asbestos in **BOLD** type

**TABLE 2
ACM QUANTITY SUMMARY
HUNTER ARMY AIR FIELD BUILDING 8661**

Material Descriptions	Units	Area Descriptions							Totals
		ROOF	MECHANICAL ROOM	UPPER LEVEL	LOWER LEVEL	EXTERIOR	Room 202		
Roofing Cement	S.F.	50							50
Flashing felt	S.F.	200							200
Floor Tile and Mastic	S.F.			12,000	16,000				28,000
ACM Board Wall Covering	S.F.		1000						1000
Caulking Material	L.F.					40			40
Gasket Material	S.F.		20						20
Blue Painted Drywall Joint Compound	S.F.						40		40

S.F. = Square Foot, L.F. = Linear Foot.

TABLE 3
MATERIAL CHARACTERIZATION AND ASSESSMENT
HUNTER ARMY AIR FIELD BUILDING 8661

MATERIAL		CHARACTERISTICS			ASSESSMENT	
Type	Description	Asbestos Yes/no/assumed	Quantity (If ACM)	Friable / Non-friable	Condition	Disturbance Potential
Miscellaneous	Roofing cement	Yes 10 %	50 S.F.	Non-friable	Good	Low
Miscellaneous	Roof flashing felt	Yes 5 %	200	Non-friable	Good	Low
Miscellaneous	Floor tile and mastic	Yes 2-10%	28,000 S.F.	Non-friable	Damaged	Moderate disturbance potential from normal wear
Miscellaneous	Hard ACM board wall covering	Yes 30%	1,000 S.F.	Non-friable	Good	Moderate disturbance potential from maintenance operations
Miscellaneous	Gasket material	Assumed	20 S.F.	Unknown	Unknown	Low
Miscellaneous	Caulking material	Yes 2-4%	40 L.F.	Non-friable	Good	Low
Miscellaneous	Mud, Sheet Rock	Yes 3%	40 S.F.	Non-friable	Good	Log

Plates

(See Contract Drawings)

Lower Level Sampling Locations
Upper Level Sampling Locations
Roof Sampling Locations

Figures

Figure 1. Perforated ACM Board

Figure 2. Roofing Cement

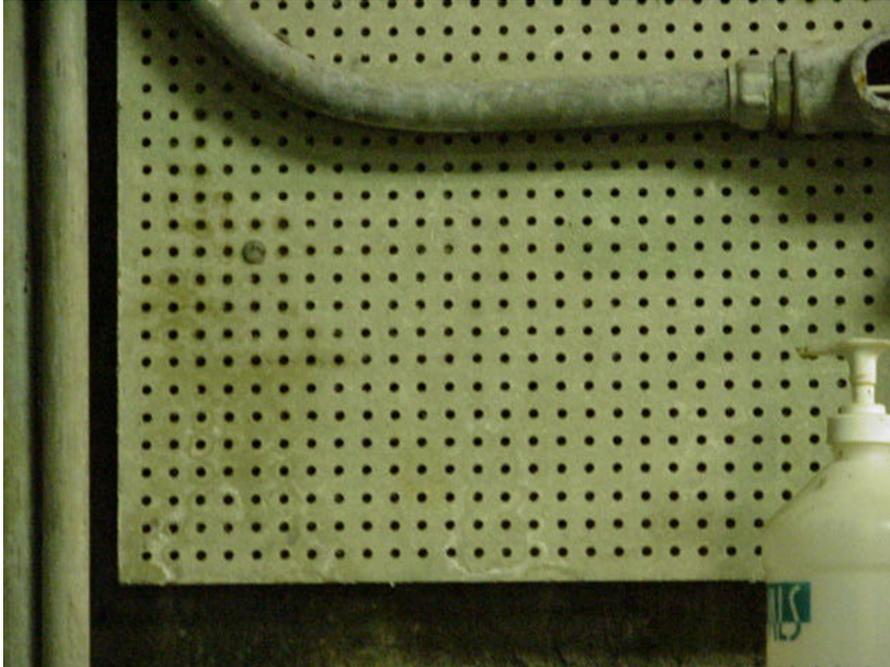


Figure 1. 2' X 2' perforated ACM board on mechanical room walls



Figure 2. Troweled on roofing cement around roof access door at old flat roof contains asbestos.

Appendix 1



HYGEIA LABORATORIES, INC.

us Army Corp of Engineers Environmental & Materials Unit 200 North Gobb Parkway Bldg. 400, Ste. 404 Marietta, GA 30062

Subject:

713012002

Hygeia Project Number- AO207067

Client Project Number/Name: Job #7565 /Hunter MF Bldg 8661

Dear Mr. **Tim** Jones.

Enclosed are the analytical results of bulk samples submitted by you to this laboratory on 712912002. All analyses were performed by polarized light microscopy (PLM) in accordance with the EPA method as defined in Perkins and Harvey, July 1993, "Methods for the Determination of Asbestos in Bulk Materials" 61 pp. (EPA/600IR-931116). The reported percentages are volume estimates obtained by calibrated visual estimation. The results in this report apply only to the items tested.

The EPA defines an asbestos containing material (ACM) as a material that is reported to contain greater than one percent asbestos. HYGEIA is only responsible for the accuracy of the analytical results provided in this report and cannot be held responsible for the errors resulting from improper sample collection techniques. This report may not be used to claim product endorsement by NVLAP or any other U.S. Government agency.

For nonhomogeneous samples, each layer was analyzed separately and the results combined to form the reported value except where otherwise noted. Vinyl floor tile samples with negative results by PLM should be submitted for confirmation by transmission electron microscopy (TEM). Friable samples containing less than 10% asbestos as determined by PLM may be resubmitted for point counting at your discretion.

Thank you for using our analytical services. HYGEIA Laboratories has been NVLAP accredited since 1988. Our current NVLAP code is 102087-0. We will keep a copy of this report on file for three years. We will dispose of your samples in 60 days unless you request that we return them. This report may be reproduced only in its entirety with the consent of Hygeia Laboratories, Inc. If you have any questions, please call us at (770) -514-6933.

Sincerely,

~ 10 '1 C-J-fj Clayton Call

Asbestos Laboratory Manager

NVLAP# 102087-0 Texas Dept. of Health # 30-0232

Commonwealth of Virginia # 3333-000210

An ATC Group Services Inc. Company

PLM Analysis Summary

Hygeia Laboratories Inc.
 1300 Williams Drive, Suite A
 Marietta, GA 30066
 (770) 514-6933

Hygeia Project Number: A0207067
 Client Project Number/Name: Job #7565 / Hunter AAF Bldg 8661

Page: 1 of 11
 Analyzed: 7/29/2002 by JC

Client #	Hygeia #	Sample Description				Asbestos Percent				Other Fibers				Non - Fibers	
		Color	Texture	Homog.	Chr.	Am.	Cro.	An.	T/A	Cell.	Glass	OF	B/E	ONF	
8661-M-1	A0207067-01	Gray	Cons.	Yes	30%					10%			60%		
Comment: Asbestos Detected.															
8661-M-2	A0207067-02	Gray	Cons.	Yes	30%					10%			60%		
Comment: Asbestos Detected.															
8661-M-3	A0207067-03	Tan	Fibrous	No						10%			40%		
Comment: No Asbestos Detected.															
8661-M-4	A0207067-04	White	Rubbery	No									60%		
Comment: No Asbestos Detected.															
8661-M-5	A0207067-05	Multi	Fibrous	No						30%			50%		
Comment: No Asbestos Detected.															

Hygeia Project Number: A0207067 Page: 2 of 11
 Client Project Number/Name: Job #7565 / Hunter AAF Bldg 8661 Analyzed: 7/29/2002 by JC

Sample ID	Sample Description				Asbestos Percent						Other Fibers			Non - Fibers		
	Client #	Hygeia #	Color	Texture	Homog.	Chr.	Am.	Cro.	An.	T/A	Cell.	Glass	OF	B/F	ONE	
8661-M-6		A0207067-06	Black	Fibrous	No							80%		20%		
Comment: No Asbestos Detected.																
8661-M-7		A0207067-07	Black	Fibrous	No							80%		20%		
Comment: No Asbestos Detected.																
8661-M-8		A0207067-08	Black	Gummy	No							10%	20%	70%		
Comment: No Asbestos Detected.																
8661-M-9		A0207067-09	Black	Layered	No							20%	5%	75%		
Comment: No Asbestos Detected.																
8661-M-10		A0207067-10	Black	Fibrous	No							60%		40%		
Comment: No Asbestos Detected.																

Page: 3 of 11
Analyzed: 7/29/2002 by JC

Hygeia Project Number: A0207067		Asbestos Percent										Other Fibers			Non - Fibers	
Client Project Number/Name: Job #7565 / Hunter AAF Bldg 8661		Sample Description					Asbestos Percent					Other Fibers			Non - Fibers	
Client #	Hygeia #	Color	Texture	Homog.	Chr.	Am.	Cr.	Ad.	T/A	Cell.	Glass	OF	B/F	ONF		
8661-M-11	A0207067-11	Gray	Cons.	Yes	30%									70%		
Comment: Asbestos Detected.																
8661-M-12	A0207067-12	White	Flaky	Yes										100%		
Comment: No Asbestos Detected.																
8661-B-13PE	A0207067-13	Gray	Powdery	No										85%		
Comment: No Asbestos Detected.																
8661-B-14	A0207067-14	Black	Gummy	No										85%		
Comment: No Asbestos Detected.																
8661-B-15PE	A0207067-15	Gray	Powdery	Yes										85%		
Comment: No Asbestos Detected.																

Hygeia Project Number: A0207067
 Client Project Number/Name: Job #7565 / Hunter AAF Bldg 8661

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Analyzed: 7/29/2002 by JC

Client #	Hygeia #	Sample Description				Asbestos Percent					Other Fibers			Non - Fibers		
		Color	Texture	Homog.	Chr.	Am.	Cro.	An.	T/A	Cell.	Glass	OF	B/E	ONF		
8661-B-16PE	A0207067-16	Gray	Fibrous	No								20%	20%		60%	
Comment: No Asbestos Detected.																
8661-B-17PV	A0207067-17	Gray	Powdery	Yes												
Comment: No Asbestos Detected.																
8661-B-18	A0207067-18	White	Flaky	Yes												
Comment: No Asbestos Detected.																
8661-B-19	A0207067-19	White	Fibrous	No								70%			30%	
Comment: No Asbestos Detected.																
8661-B-20	A0207067-20	White	Fibrous	No								40%			50%	
Comment: No Asbestos Detected.																

Hygeia Project Number: A0207067
 Client Project Number/Name: Job #7565 / Hunter AAF Bldg 8661

Page: 5 of 11

Analyzed: 7/29/2002 by JC

Sample ID		Sample Description				Asbestos Percent				Other Fibers			Non - Fibers		
Client #	Hygeia #	Color	Texture	Homog.	Chr.	Am.	Cro.	An.	T/A	Cell.	Glass	OF	B/F	ONF	
8661-B-21	A0207067-21	Black	Cons.	No	3%								97%		
Comment: Tile: 3% Chrysotile. Mastic: 5% Chrysotile. Asbestos Detected.															
8661-B-22	A0207067-22	Black	Cons.	No	3%								97%		
Comment: Tile: 3% Chrysotile. Mastic: 5% Chrysotile. Asbestos Detected.															
8661-B-23	A0207067-23	Black	Cons.	No	4%								96%		
Comment: Tile: 4% Chrysotile. Mastic: 5% Chrysotile. Asbestos Detected.															
8661-B-24	A0207067-24	Black	Rubbery	No									100%		
Comment: Covebase and mastic: NAD. No Asbestos Detected.															
8661-B-25PT	A0207067-25	Gray	Powdery	Yes									40%		
Comment: No Asbestos Detected.															

Hygeia Project Number: A0207067
 Client Project Number/Name: Job #7565 / Hunter AAF Bldg 8661

Page: 6 of 11

Analyzed: 7/29/2002 by JC

Client #	Hygeia #	Sample Description				Asbestos Percent					Other Fibers			Non - Fibers		
		Color	Texture	Homog.	Chr.	Am.	Cr.	An.	T/A	Cell	Glass	OE	B/F	ONE		
8661-1-26PE	A0207067-26	Gray	Fibrous	No								25%	35%		40%	
Comment: No Asbestos Detected.																
8661-1-27PE	A0207067-27	Gray	Powdery	Yes									60%		40%	
Comment: No Asbestos Detected.																
8661-1-28	A0207067-28	Gray	Fibrous	No								35%	25%		40%	
Comment: No Asbestos Detected.																
8661-1-29	A0207067-29	White	Fibrous	No								35%	15%		50%	
Comment: No Asbestos Detected.																
8661-1-30	A0207067-30	White	Fibrous	No								60%			40%	
Comment: No Asbestos Detected.																

Page: 7 of 11
 Analyzed: 7/29/2002 by JC

Hygeia Project Number: A0207067
 Client Project Number/Name: Job #7565 / Hunter AAF Bldg 8661

Client #	Hygeia #	Sample Description				Asbestos Percent				Other Fibers			Non - Fibers		
		Color	Texture	Homog.	Chr.	Am.	Cro.	An.	T/A	Cell.	Glass	OF	B/F	ONF	
8661-1-31	A0207067-31	White	Fibrous	No								70%		30%	
Comment: No Asbestos Detected.															
8661-1-32	A0207067-32	Brown	Layered	No	<1%							30%		70%	
Comment: Brown mastic: <1% Chrysotile. Rest: NAD. Asbestos Detected.															
8661-1-33	A0207067-33	Brown	Layered	No	<1%									100%	
Comment: Brown mastic: <1% Chrysotile. Rest: NAD. Asbestos Detected.															
8661-1-34	A0207067-34	Black	Layered	No									25%		75%
Comment: No Asbestos Detected.															
8661-R-35	A0207067-35	Black	Gummy	Yes	7%										93%
Comment: Asbestos Detected.															

Hygeia Project Number: A0207067
 Client Project Number/Name: Job #7565 / Hunter AAF Bldg 8661

Page: 8 of 11

Analyzed: 7/30/2002 by CC

Sample ID		Sample Description				Asbestos Percent					Other Fibers			Non - Fibers	
Client #	Hygeia #	Color	Texture	Homog.	Chr.	Am.	Cro.	An.	T/A	Cell.	Glass	OF	B/F	ONE	
8661-R-36	A0207067-36	Black	Gummy	No						40%			60%		
Comment: No Asbestos Detected.															
8661-R-37	A0207067-37	Gray	Powdery	Yes									100%		
Comment: No Asbestos Detected.															
8661-R-38	A0207067-38	Black	Gummy	No						30%			70%		
Comment: No Asbestos Detected.															
8661-R-39	A0207067-39	Black	Gummy	No						40%			60%		
Comment: No Asbestos Detected.															
8661-R-40	A0207067-40	Black	Gummy	No	8%					22%			70%		

Comment: Cement: 10% Chrysotile. Gummy layer: 10% Chrysotile. Felt: 5% Chrysotile. Asbestos Detected.

Page: 9 of 11
 Analyzed: 7/30/2002 by JC

Hygeia Project Number: A0207067
 Client Project Number/Name: Job #7565 / Hunter AAF Bldg 8661

Client #	Hygeia #	Sample Description				Asbestos Percent				Other Fibers			Non - Fibers		
		Color	Texture	Homog.	Chr.	Am.	Cro.	An.	T/A	Cell.	Glass	OF	B/F	ONF	
8661-1-41	A0207067-41	White	Fibrous	No								40%	10%	45%	5%

Comment: Material labeled as "Other Non-Fibers" is Perlite. No Asbestos Detected.

Client #	Hygeia #	Color	Texture	Homog.	Chr.	Am.	Cro.	An.	T/A	Cell.	Glass	OF	B/F	ONF
8661-R-42	A0207067-42	Tan	Powdery	Yes									100%	

Comment: No Asbestos Detected.

Client #	Hygeia #	Color	Texture	Homog.	Chr.	Am.	Cro.	An.	T/A	Cell.	Glass	OF	B/F	ONF
8661-R-43	A0207067-43	Black	Layered	No						30%	10%		60%	

Comment: No Asbestos Detected.

Client #	Hygeia #	Color	Texture	Homog.	Chr.	Am.	Cro.	An.	T/A	Cell.	Glass	OF	B/F	ONF
8661-R-44	A0207067-44	Tan	Powdery	Yes									100%	

Comment: No Asbestos Detected.

Client #	Hygeia #	Color	Texture	Homog.	Chr.	Am.	Cro.	An.	T/A	Cell.	Glass	OF	B/F	ONF
8661-R-45	A0207067-45	Black	Layered	No						30%			70%	

Comment: No Asbestos Detected.

Hygeia Project Number: A0207067
 Client Project Number/Name: Job #7565 / Hunter AAF Bldg 8661

Sample ID		Sample Description				Asbestos Percent					Other Fibers			Non - Fibers	
Client #	Hygeia #	Color	Texture	Homog.	Chr.	Am.	Cro.	An.	T/A	Cell.	Glass	OF	B/E	ONF	
8661-R-46	A0207067-46	Brown	Fibrous	Yes						10%			90%		
Comment: No Asbestos Detected.															
8661-R-47	A0207067-47	Black	Fibrous	Yes						60%			40%		
Comment: No Asbestos Detected.															
8661-E-48	A0207067-48	Gray	Cons.	Yes	2%										
Comment: Asbestos Detected.															
8661-E-49	A0207067-49	Gray	Cons.	Yes	4%										
Comment: Asbestos Detected.															
8661-M-50	A0207067-50	White	Cons.	Yes											
Comment: No Asbestos Detected.															

Page: 11 of 11
 Analyzed: 7/30/2002 by JC

Hygeia Project Number: A0207067
 Client Project Number/Name: Job #7565 / Hunter AAF Bldg 8661

Client #	Hygeia #	Sample Description				Asbestos Percent				Other Fibers			Non - Fibers	
		Color	Texture	Homog.	Chr.	Am.	Cro.	Am.	T/A	Cell.	Glass	OE	B/F	ONF
8661-E-51	A0207067-51	White	Caulky	Yes										100%
8661-E-52	A0207067-52	Blue	Cons.	No	<1%							3%		97%

Comment: No Asbestos Detected.

Comment: Asbestos Detected.

abbreviations:

- Chr. = chrysotile
- Am. = amosite
- Cro. = crocidolite
- An. = anthophyllite
- T/A = tremolite/actinolite

- cell = cellulose
- glass = fibrous glass
- syn = synthetic
- sty = styrene foam
- det = detected
- per = perlite
- ver = vermiculite
- MF = Mineral filler
- B/F = Binder / filler
- NAD = No asbestos detected
- OF = Other Fibers
- ONF = Other Non-Fibers
- Cons = Consolidated

Sample Chain of Custody

A0207067

ASBESTOS CHAIN OF CUSTODY - US ARMY CORPS OF ENGINEERS

Project: Hunter AAF Bldg 8661	Job No.: 7565
Sampler: Tim Jones	Analysis: PLM

	DATE	FIELD ID	EMU ID	COMPONENTS/NOTES
1A	7/24/2002	8661-M-1	44068	2' x 2' Perforated board
2A	7/24/2002	8661-M-2	44069	2' x 2' Perforated board
3A	7/24/2002	8661-M-3	44070	Batt insulation
4A	7/24/2002	8661-M-4	44071	Mastic
5A	7/24/2002	8661-M-5	44072	Gasket material
6A	7/24/2002	8661-M-6	44073	TSI duct liner
7A	7/24/2002	8661-M-7	44074	TSI duct liner
8A	7/24/2002	8661-M-8	44075	Felt paper
9A	7/24/2002	8661-M-9	44046	Black mastic
10A	7/24/2002	8661-M-10	44077	Flex joint
11A	7/24/2002	8661-M-11	44078	2' x 2' Perforated board
12A	7/24/2002	8661-M-12	44079	Insulation scrap
13A	7/24/2002	8661-B-13PE	44080	TSI pipe elbow
14A	7/24/2002	8661-B-14	44081	Black mastic
15A	7/24/2002	8661-B-15PE	44082	TSI pipe elbow
16A	7/24/2002	8661-B-16PE	44083	TSI pipe elbow
17A	7/24/2002	8661-B-17PV	44084	TSI pipe valve
18A	7/24/2002	8661-B-18	44085	Plaster
19A	7/24/2002	8661-B-19	44086	Ceiling tile
20A	7/24/2002	8661-B-20	44087	Ceiling tile
21A	7/24/2002	8661-B-21	44088	Floor tile & mastic
22A	7/24/2002	8661-B-22	44089	Floor tile & mastic

Relinquished By	Date	Time	Received By	Date	Time
<i>Tim Jones</i>	7-29-02	0955	<i>C. Cell</i>	7/29/02	9:55A

Comments: Fax results ASAP to Tim Jones @ 678-354-0330

JUL 29 AM 10:56

ASBESTOS CHAIN OF CUSTODY - US ARMY CORPS OF ENGINEERS

Project: Hunter AAF Bldg 8661	Job No.: 7565
Sampler: Tim Jones	Analysis: PLM

	DATE	FIELD ID	EMU ID	COMPONENTS/NOTES
23A	7/24/2002	8661-B-23	44090	Floor tile & mastic
24A	7/24/2002	8661-B-24	44091	Cove base & mastic
25A	7/24/2002	8661-B-25PT	44092	TSI pipe tee
26A	7/24/2002	8661-1-26PE	44093	TSI pipe elbow
27A	7/24/2002	8661-1-27PE	44094	TSI pipe elbow
28A	7/24/2002	8661-1-28	44095	Roof deck material
29A	7/24/2002	8661-1-29	44096	Wall tile
30A	7/24/2002	8661-1-30	44097	Wall tile
31A	7/24/2002	8661-1-31	44098	Wall tile
32A	7/24/2002	8661-1-32	44099	Wall tile adhesive
33A	7/24/2002	8661-1-33	44100	Wall tile
34A	7/24/2002	8661-1-34	44101	Mastic
35A	7/24/2002	8661-R-35	44102	Roofing cement
36A	7/24/2002	8661-R-36	44103	Multi layer built up roofing
37A	7/24/2002	8661-R-37	44104	Roof deck material/insulation
38A	7/24/2002	8661-R-38	44105	Multi layer built up roofing
39A	7/24/2002	8661-R-39	44106	Multi layer built up roofing
40A	7/24/2002	8661-R-40	44107	Roofing cement & felt
41A	7/24/2002	8661-1-41	44108	Ceiling tile
42A	7/25/2002	8661-R-42	44109	Roof insulation, granular
43A	7/25/2002	8661-R-43	44110	Multi layer built up roofing
44A	7/25/2002	8661-R-44	44111	Roof insulation, granular

Relinquished By	Date	Time	Received By	Date	Time
<i>Tim Jones</i>	7-29-02	0955	<i>C. Cell</i>	7/29/02	9:55

Comments: Fax results ASAP to Tim Jones @ 678-354-0330

JUL 29 AM 10:56

Certifications

The Environmental Institute

Tim Jones

*Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA / AHERA (TSCA Title II) Approved Accreditation
and NESHAP Regulations Training*

Asbestos in Buildings: Inspection and Assessment

February 10-12, 1997
Course Date

2360
Certificate Number

February 12, 1997
Examination Date

February 11, 1998
Expiration Date

William H. Spain
William H. Spain - Course Director

Rachel G. McCain
Rachel G. McCain - Exam Administrator



TEI - 1300 Williams Drive, Suite E - Marietta, Georgia 30066 - (770) 427-3600

The Environmental Institute

Tim Jones

*Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA/AHERA/ASHARA (TSCA Title II) Approved Reaccreditation
and NESHAP Regulations Training*

Asbestos in Buildings: Inspector Refresher

February 26, 2002

Course Date

7283

Certificate Number

February 26, 2002

Examination Date

February 25, 2003

Expiration Date

Thomas G. Maubenthal

Thomas G. Maubenthal - Course Director

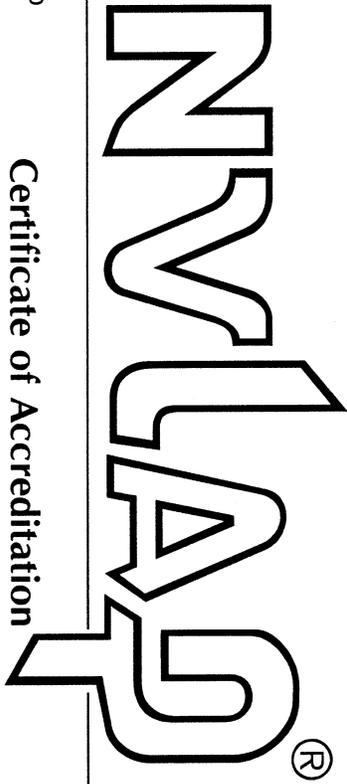
Rachel G. McCain

Rachel G. McCain - Exam Administrator



TEI - 1300 Williams Drive, Suite E - Marietta, Georgia 30066 - (770) 427-3600

United States Department of Commerce
National Institute of Standards and Technology



ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation

HYGELA LABORATORIES, INC.
MARIETTA, GA



is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results. Accreditation is awarded for specific services, listed on the Scope of Accreditation for:

BULK ASBESTOS FIBER ANALYSIS

March 31, 2003

Effective through

David T. Alderman

For the National Institute of Standards and Technology
NVLAP Lab Code: 102087-0



ISO/IEC GUIDE 25:1990
ISO 9002:1987

Scope of Accreditation



Page: 1 of 1

BULK ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 102087-0

HYGEIA LABORATORIES, INC.

1300 Williams Drive, Suite A

Marietta, GA 30066-6299

Mr. Clayton Call

Phone: 770-514-6933 Fax: 770-514-6966

E-Mail: call67@atc-enviro.com

NVLAP Code

Designation

18/A01

EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples

March 31, 2003

Effective through

David F. Alderman

For the National Institute of Standards and Technology



U.S. Army Corps
of Engineers
Savannah District

U.S. ARMY CORPS OF ENGINEERS
ENVIRONMENTAL & MATERIALS UNIT
200 NORTH COBB PARKWAY
BUILDING 400, SUITE 404
MARIETTA, GA 30062

HAZARDOUS BUILDING MATERIALS SURVEY REPORT

**BUILDING NO. 8661, SABRE HALL
HUNTER ARMY AIR FIELD, GEORGIA**



HAZARDOUS BUILDING MATERIALS REPORT HUNTER ARMY AIR FIELD, GEORGIA BUILDING 8661, SABRE HALL

INTRODUCTION

1. This report documents the hazardous building materials survey of Building No. 8661 at Hunter Army Air Field, Georgia conducted between 24-26 July 2002 by USACE Savannah District employees Tim Jones and Jack Ford. This survey was conducted in general accordance with the Statement of Services developed by Ray Willingham, USACE Savannah District.
2. The survey consists of a count of florescent and mercury lights, a search for mercury containing equipment, a search for lead building components, a search for evidence of past or present underground storage tanks and a search for any other hazardous building materials excluding asbestos. In addition, paint scrape samples were taken from five door/frame units on each floor for analysis for lead-based paint content.
3. Hygeia Laboratories using EPA method 6010B for analysis analyzed the paint scrape samples. Hygeia's analytical report is included in Appendix 1.
4. Building No. 8661 was built in the 1940s time frame and is a two-story structure of concrete masonry block construction. The floor system is concrete covered generally with vinyl asbestos tile. The original roof systems were flat multi-layer built up roof membranes. The lower built up roof areas on the north and south ends of the building had been covered with a rubberized single ply roofing membrane. New gable type standing seam metal roofs have been recently installed over all the major roof areas. Interior wall systems are mostly constructed of concrete masonry block. No physical sampling of possible hazardous components was performed, other than the paint scrapes, only a visual estimation was performed.

SUMMARY

5. The florescent and mercury vapor light count results are presented in Table 1. Included also are numbers of battery backup emergency lights and exit lights.

6. Paint scrape field sampling data including component type, color, substrate and approximate sampling location are presented in Table 3. Sampling locations are indicated on plates 1 & 2.
7. Inspection of the building turned up lead in the plumbing drain and vent piping system. Details are included in Table 2.
8. Two confirmed and several suspected mercury-containing switches were located on the boiler. Evidence of an outside air temperature sensor for the mechanical equipment was seen in the mechanical room, however no sensor bulb was located. Many times these sensor bulbs contain mercury. No suspect mercury-containing thermostats were located in Building 8661.
9. Evidence (fuel fired boiler, tank filler and vent piping) of the existence of one or more (possibly three) underground storage tanks was found on the east side of Building 8661 adjacent to the mechanical room. The approximate location of the USTs is indicated on Plate 3. Fuel piping and fuel filters lead from the tanks to the boiler and the water heater. (Two #2 fuel oil tanks; one storm water tank.)
10. Refrigerant from one central air conditioning system should be recovered prior to building demolition. The system consists of an outside chiller/package unit on the east side of Building 8661 adjacent to the mechanical room. The approximate location of the chiller is indicated on Plate 3.
11. A transformer and switch gear is located on the eastern side of the building. The approximate location of the equipment is indicated on Plate 3.
12. A grease trap is located outside the building near the exit door from the kitchen. The location is indicated on Plate 3.
13. A fire suppression system including two compressed media bottles containing “Karbaly” suppressant and associated piping to the exhaust hoods in the kitchen may be considered hazardous. Copies of MSDS sheet for this suppressant is available from Badger Fire Protection, Inc., 4251 Seminole Trail, Charlottesville, VA 22911 phone 800-424-9300 or online. A copy is included as Appendix 2.
14. Smoke detectors were identified in various locations; two in the return air ducts at the air handlers, twenty-three attached to the ceilings in the lower level and nine attached to the ceilings on the upper level. These detectors may contain hazardous materials.

**Building 8661, Sabre Hall, Hunter AAF
Paint Scrape Samples**

8 November 2002

Sample Number		Location	Lead Result In PPM
	Tan Wall		
8661-B-11S	Black Handrail	South Stairwell	30,900
8661-B-12S	Black Stair Riser	South Stairwell	5,100
8661-B-13S	Black Stair Stringer	South Stairwell	41,400
8661-B-14S	Tan Wall	Room 146 North Wall	494
8661-B-15S	Tan Wall	Room 116 East Wall	308
8661-B-16S	Tan Wall	Corridor By South Stairwell, Exterior of Room 117, North Wall	507
8661-B-17S	Tan Wall	Room 117 North Wall	961
8661-B-18S	White Ceiling	Room 149	<100
8661-B-19S	Tan Wall	Room 150 West Wall	674
8661-B-20S	Tan Wall	Room 134 West Wall	159
8661-B-21S	Tan Wall	Room 133 West Wall	555
8661-B-22S	White Ceiling	Room 133	1,390
8661-B-23S	Tan Wall	Room 130 North Wall	<100
8661-B-24S	Black Handrail	North Stairwell	16,200
8661-B-25S	Black Stair Stringer	North Stairwell	17,100
8661-B-26S	Black Stair Riser	North Stairwell	7,500
8661-B-27S	Tan Wall	Room 101 North Wall	213
8661-B-28S	Tan Wall	Room 122 East Wall	242
8661-1-29S	White Wall	Room 202 North Wall	102
8661-1-30S	White Wall	Entryway Near C01, East Wall	2,580
8661-1-31S	White Wall	Room 229 West Wall	124
8661-1-32S	Blue Drywall	Room 202 South Wall	<100
8661-1-33S	Tan Wall	Entryway C05 East Wall	195
8661-1-34S	White Wall	Room 222 West Wall	336
8661-1-35S	White Wall	Kitchen Store Room East Wall	848
8661-1-36S	White Wall	Kitchen Near Exterior Door, East Wall	2,840
8661-1-37S	White Wall	Room 208 West Wall	857
8661-1-38S	White Wall	Room 216 East Wall	734
8661-1-39S	White Wall	Room 213 West Wall	194
8661-1-40S	White Wall	Corridor C10 South Wall	<100
8661-1-41S	Green Wall	Room 207 North Wall	266

Sample Numbers With Center Position: B = Lower Level, 1 = Upper Level

Samples Greater Than The HUD Level Of 0.5% (5000 ppm) Are In **Bold** Type

Prepared by: _____
TIMOTHY A. JONES

Tables

TABLE 1
HUNTER ARMY AIR FIELD BUILDING 8661
FLORESCENT AND MERCURY LIGHT FIXTURES

AREA IDENTIFICATION	# & TYPE LIGHTS PRESENT	DESCRIPTION OF LIGHTS
Interior	15	1 foot square, 1 bulb exit lights
Interior	28	2 foot square, 2 bulb florescent fixtures
Interior	57	4 foot long, 4 bulb florescent fixtures
Interior	206	4 foot long, 2 bulb florescent fixtures
Interior	23	Battery back-up emergency fixtures
Exterior	5	1 foot square mercury vapor lamp
Interior, Store Room	24	4 foot loose florescent bulbs

TABLE 2
HUNTER ARMY AIR FIELD BUILDING 8661
LEAD BUILDING COMPONENTS

BUILDING COMPONENT	DESCRIPTION	LOCATION	ESTIMATED NUMBER
Hot poured lead pipe joint	In plumbing drainage, waste and vent piping	Throughout building	400-600
Lead Flashing	On plumbing vent pipe system	Roof	9

TABLE 3
HUNTER ARMY AIR FIELD BUILDING 8661
LEAD SCRAPE SAMPLES

SAMPLE IDENTIFICATION	LOCATION	BUILDING COMPONENT	% LEAD
8661-1-1S	Upper level, Room 216	Blue metal door frame	0.14%
8661-1-2S	Upper level, corridor	Blue wood door	0.06%
8661-1-3S	Upper level, janitor's room	Blue wood door	0.05%
8661-1-4S	Upper level, corridor	Blue metal door	0.09%
8661-1-5S	Upper level, Room 231	Blue metal door frame	0.09%
8661-B-6S	Lower level, Room 110	Brown metal door frame	0.10%
8661-B-7S	Lower level, Room 137	Brown metal door	0.05%
8661-B-8S	Lower level, Room 128	Brown wood door	<0.01%
8661-B-9S	Lower level, Room 148	Brown metal door frame	0.12%
8661-B-10S	Lower level, Corridor	Brown wood door	0.03%

Floor Plan And Sampling Locations

(See Contract Drawings)

Lower Level Paint Scrape Locations

Upper Level Paint Scrape Locations

Exterior Hazard Locations

Appendix 1



HYGELA LABORATORIES, INC.

1300 Williams Drive, Suite A - Marietta, Georgia 30066-6299 - (770) 514-6933, FAX (770) 514-6966

Lab Project No. **M0207247** Report Date: 8/01/02 1 of 3

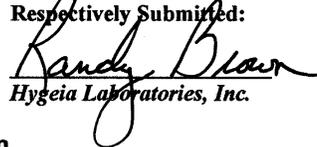
Client Name: **US Army Corp of Engineers - Atlanta**
 Contact: **Tim Jones**
 Address: **Environmental & Materials Unit**
200 North Cobb Parkway
Bldg. 400, Ste. 404
Marietta, GA 30062

Project Name: **Hunter Army Airfield Building 8661**
 Project ID: **7570**
 Receipt Date: **7/29/2002**

Case Narrative

1. The sample holding times were met for all analyses.
2. Where applicable, results & reporting limits are based on wet weight; dry weight calculations available.
3. The temperature of the sample cooler as received by the laboratory was room temperature.
4. The MS and MSD was performed on samples not shown in this report. The QC data was within acceptable limits. A written report will be furnished upon request of MS and MSD data.

Approved By: AWS

Respectively Submitted:

 Hygeia Laboratories, Inc.

Sample Identification

<u>Lab Sample #</u>	<u>Client Sample ID</u>	<u>Sample Supply</u>	<u>Collected</u>
M0207247-01	8661-1-1S	Other	7/24/2002
M0207247-02	8661-1-2S	Other	7/24/2002
M0207247-03	8661-1-3S	Other	7/24/2002
M0207247-04	8661-1-4S	Other	7/24/2002
M0207247-05	8661-1-5S	Other	7/24/2002
M0207247-06	8661-B-6S	Other	7/24/2002
M0207247-07	8661-B-7S	Other	7/24/2002
M0207247-08	8661-B-8S	Other	7/24/2002
M0207247-09	8661-B-9S	Other	7/24/2002
M0207247-10	8661-B-10S	Other	7/24/2002

Lab Project No. **M0207247**

Report Date: 8/01/02 2 of 3

Total Lead	CAS #: 7439-92-1	Units: Percent by Weight(%)	Method #: EPA_7420A(MOD)
Matrix: Paint Chips		Prep Date: 7/29/2002	Analyst: SR

Lab Project #	Client ID:	Result	Report Limit	Flag Code
M0207247-01	8661-1-1S	0.14	0.01	
M0207247-02	8661-1-2S	0.06	0.01	
M0207247-03	8661-1-3S	0.05	0.01	
M0207247-04	8661-1-4S	0.09	0.01	
M0207247-05	8661-1-5S	0.09	0.01	
M0207247-06	8661-B-6S	0.10	0.01	
M0207247-07	8661-B-7S	0.05	0.01	
M0207247-08	8661-B-8S	BRL	0.01	
M0207247-09	8661-B-9S	0.12	0.01	
M0207247-10	8661-B-10S	0.03	0.01	

BatchID: H020730031 **Prep Analyst:** MR/JL
Department: Metals **Prep Date:** 7/29/02 16:45
Prep Method: EPA_7420A(MOD) **Analyst:** SR
Analysis Method: EPA_7420A(MOD) **Analysis Date:** 7/30/02 16:27

H020730031-MB							
AnalyteName	Result	Unit	RDL				
Total Lead	0	%	0.01000				
H020730031-LCS							
AnalyteName	Result	Unit	%Recovery	Ctl Limits			
Total Lead	0.65530	%	89	80 - 120			
H020730031-LCSD							
AnalyteName	Result	Unit	%Recovery	Ctl Limits	RPD	RPD Limits	
Total Lead	0.65240	%	88	80 - 120	0.44	0 - 20	

Lab Project No. **M0207247**

Report Date: 8/01/02 3 of 3

Notes:

- Results relate only to the samples tested as received (See Chain-of-Custody).
- BRL = "Below Reporting Limit"
- RL = "Reporting Limit"
- Dates are presented in the format "month/day/year"

Certifications

Alabama - Lab ID 40970; Arkansas; Connecticut - No. PH 0208; Delaware - GA040; Georgia - No. 804; Indiana - Lab ID C-GA-01
Kentucky - Lab ID 90053, UST - No. 0005; Louisiana; Maryland - No. 293; Massachusetts No. M - GA040; North Carolina - No. 409
Rhode Island, License No. 245; South Carolina - No. 98012001; Tennessee - Lab ID 02827; Virginia - Lab ID 00024
South Carolina - No. 98012; Tennessee - Lab ID 02827 (DW), UST Program; Virginia - Lab ID 0024

Accreditations

American Association for Laboratory Accreditation, A2LA - No. 330.01;
American Industrial Hygiene Association, AIHA - Lab ID 100649; NELAC - State of Florida DOH, No. E87257

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Chain of Custody Record

110207247



US Army Corps of Engineers
Savannah District
Environmental & Materials Unit

Project Name		Job #		Site Code/Sample Number		No. of Containers		Matrix	
Hunter Army Air Field Bldg 8661 Sampler Tim Jones		7570						Paint Scrape	
Date	Time	Pres.	Gr	Cm				LAB #	TAT
7-24-02	1615	✓			8661-1-1 S	1	✓	1A	44139
	1645	✓			8661-1-2 S	1	✓	2A	44140
	1655	✓			8661-1-3 S	1	✓	3A	44141
	1700	✓			8661-1-4 S	1	✓	4A	44142
	1705	✓			8661-1-5 S	1	✓	5A	44143
	1625	✓			8661-B-6 S	1	✓	6A	44144
	1712	✓			8661-B-7 S	1	✓	7A	44145
	1720	✓			8661-B-8 S	1	✓	8A	44146
	1725	✓			8661-B-9 S	1	✓	9A	44147
	1730	✓			8661-B-10 S	1	✓	10A	44148
Sampler	Tim Jones								
Relinquisher by: (sig)									
Relinquished by: (sig)									
Relinquished by: (sig)									
Date/Time	7-29-02	Date/Time	1005	Date/Time	7-29-02	Date/Time	10:05	Remarks: Fax results As Ap to Tim Jones 678-354-0330	
Received by: (sig)		Received by: (sig)		Received by: (sig)		Received by: (sig)			
Received by: (sig)		Received by: (sig)		Received by: (sig)		Received by: (sig)			

Appendix 2



BADGER FIRE PROTECTION, INC.

MATERIAL SAFETY DATA SHEET

Emergency # (800) 424-9300
4251 Seminole Trail
Charlottesville, VA 22911 (804) 973-4361
Date: April, 1996

SECTION 1 NAME & HAZARD SUMMARY

Material name: Range Guard Karboloy Fire Extinguisher Suppression Agent
Manufacturer: Badger Fire Protection, Inc. • Phone (804) 973-4361

SECTION 2 INGREDIENTS

OSHA PEL: Non Established **ACGIH TLV:** None Established **Other Exposure Limits:** None
CAS No: 584-08-7

The recharge packages contain an aqueous solution of Potassium Carbonate >40%, which acts as a fire suppression agent.

SECTION 3 PHYSICAL DATA

Boiling point: 228 deg.C. @ 760 mm Hg **Specific gravity:** (H₂O=1):1.445
Vapor Pressure (mm Hg): 12 @ 20 deg.C **Vapor density:** (Air = 1): NA **Solubility in water:** 100%
Reactivity in Water: None **Appearance and odor:** Clear liquid, no distinct odor
Melting Point: -20 deg. F. (-29 deg. C.)

SECTION 4 FIRE AND EXPLOSION HAZARD DATA

Flash point : NA **Method Used:** NA **Flammable Limits in Air % by Volume:** LEL Lower: NA UEL Upper: NA
Auto-Ignition Temp.: NA **Extinguisher Media:** NA This is a fire extinguishing agent.
Special Fire Fighting Procedures: Avoid direct heat and severe impact to pressurized cylinders.
Unusual Fire and Explosion Hazards: See Sections 2 and 7.

SECTION 5 REACTIVITY DATA

Stability: Stable **Conditions to Avoid:** Direct heat and severe impact to pressurized cylinders.
Incompatibility (Materials to Avoid): Lime dust (CAO) and any material reactive with water.
Hazardous polymerization: Will not occur. **Conditions to Avoid:** NA

SECTION 6 HEALTH HAZARD ASSESSMENT

Acute: May be irritating to body tissue. **Chronic:** The effect of chronic over-exposure may consist of multiple areas of superficial irritation. Prolonged contact may result in primary irritant dermatitis and possible destruction of tissue. Similarly, chronic over-exposure to the inhalation of dust, spray or mist may result in varying degrees of irritation to the respiratory tract tissue and an increased susceptibility to respiratory illness.

Signs and Symptoms of Exposure: Prolonged contact may be irritating to skin, eyes and mucous membrane.

Medical Conditions Generally Aggravated by Exposure: Prolonged contact may cause chemical burns.

Chemical Listed as Carcinogen or Potential Carcinogen: National Toxicology Program : No

Monographs: No **I.A.R.C.:** No **OSHA:** No

Emergency and First Aid Procedures: If exposed to the fire suppression agent, flush and irrigate eyes with water for 15 minutes while holding eyelids open. For skin contact, wash thoroughly with soap and water. For inhalation seek fresh air. For ingestion, dilute by drinking large quantities of water. If irritation persists, seek medical attention.

In the event of physical injury, due to exposure to the compressed gas hazard, take appropriate first aid or medical measures.

Routes Of Entry: 1. Inhalation: Yes 2. Eyes: Yes 3. Skin: Yes 4. Ingestion: Yes

**Range Guard Karbaloy Fire Suppression Agent *continued*****SECTION 7 SPILL OR LEAK PROCEDURES**

Precautions to be Taken in Handling and Storage: Handle, transport and store carefully and securely to avoid accidental knocking over or other severe physical impacts. Do not expose to direct heat sources. Do not over-pressurize.

Other Precautions: Cylinders should be recharged only by trained and qualified personnel.

Steps to be Taken in Case Material is Released or Spilled: Contain any spill. Place in closed container for proper disposal. Wash spill areas liberally with water to remove traces.

Waste Disposal Methods: Dispose of in accordance with local, state and federal regulations.

SECTION 8 SPECIAL PROTECTION INFORMATION

Respiratory Protection: For acute exposure, no respiratory protection is necessary. For chronic exposure to spray or mist use of a NIOSH/MSHA approved respirator is recommended.

Ventilation: Good Ventilation **Local Exhaust:** Yes **Mechanical (General):** Not Required **Special:** None

Other: None

Gloves: Rubber gloves recommended during spill/ leak procedures and during recharging operations.

Eye Protection: Chemical goggles recommended during spill/leak procedures and during recharging operations.

Other Protective Clothing or Equipment: Safety shoes are recommended when handling cylinders.

Work/Hygienic Practices: None established.

The information herein is given in good faith but no warranty, expressed or implied, is made.



BADGER FIRE PROTECTION, INC.

MATERIAL SAFETY DATA SHEET

Emergency # (800) 424-9300
4251 Seminole Trail
Charlottesville, VA 22911 (804) 973-4361
Date: April, 1996

SECTION 1 NAME & HAZARD SUMMARY

Material name: Range Guard Karboloy Fire Extinguisher Suppression Agent
Manufacturer: Badger Fire Protection, Inc. • Phone (804) 973-4361

SECTION 2 INGREDIENTS

OSHA PEL: Non Established **ACGIH TLV:** None Established **Other Exposure Limits:** None
CAS No: 584-08-7

The recharge packages contain an aqueous solution of Potassium Carbonate >40%, which acts as a fire suppression agent.

SECTION 3 PHYSICAL DATA

Boiling point: 228 deg.C. @ 760 mm Hq **Specific gravity:** (H₂O=1):1.445
Vapor Pressure (mm Hq): 12 @ 20 deg.C **Vapor density:** (Air = 1): NA **Solubility in water:** 100%
Reactivity in Water: None **Appearance and odor:** Clear liquid, no distinct odor
Melting Point: -20 deg. F. (-29 deg. C.)

SECTION 4 FIRE AND EXPLOSION HAZARD DATA

Flash point : NA **Method Used:** NA **Flammable Limits in Air % by Volume:** LEL Lower: NA UEL Upper: NA
Auto-Ignition Temp.: NA **Extinguisher Media:** NA This is a fire extinguishing agent.
Special Fire Fighting Procedures: Avoid direct heat and severe impact to pressurized cylinders.
Unusual Fire and Explosion Hazards: See Sections 2 and 7.

SECTION 5 REACTIVITY DATA

Stability: Stable **Conditions to Avoid:** Direct heat and severe impact to pressurized cylinders.
Incompatibility (Materials to Avoid): Lime dust (CAO) and any material reactive with water.
Hazardous polymerization: Will not occur. **Conditions to Avoid:** NA

SECTION 6 HEALTH HAZARD ASSESSMENT

Acute: May be irritating to body tissue. **Chronic:** The effect of chronic over-exposure may consist of multiple areas of superficial irritation. Prolonged contact may result in primary irritant dermatitis and possible destruction of tissue. Similarly, chronic over-exposure to the inhalation of dust, spray or mist may result in varying degrees of irritation to the respiratory tract tissue and an increased susceptibility to respiratory illness.

Signs and Symptoms of Exposure: Prolonged contact may be irritating to skin, eyes and mucous membrane.

Medical Conditions Generally Aggravated by Exposure: Prolonged contact may cause chemical burns.

Chemical Listed as Carcinogen or Potential Carcinogen: National Toxicology Program : No

Monographs: No **I.A.R.C.:** No **OSHA:** No

Emergency and First Aid Procedures: If exposed to the fire suppression agent, flush and irrigate eyes with water for 15 minutes while holding eyelids open. For skin contact, wash thoroughly with soap and water. For inhalation seek fresh air. For ingestion, dilute by drinking large quantities of water. If irritation persists, seek medical attention.

In the event of physical injury, due to exposure to the compressed gas hazard, take appropriate first aid or medical measures.

Routes Of Entry: 1. **Inhalation:** Yes 2. **Eyes:** Yes 3. **Skin:** Yes 4. **Ingestion:** Yes



Range Guard Karbaloy Fire Suppression Agent *continued*

SECTION 7 SPILL OR LEAK PROCEDURES

Precautions to be Taken in Handling and Storage: Handle, transport and store carefully and securely to avoid accidental knocking over or other severe physical impacts. Do not expose to direct heat sources. Do not over-pressurize.

Other Precautions: Cylinders should be recharged only by trained and qualified personnel.

Steps to be Taken in Case Material is Released or Spilled: Contain any spill. Place in closed container for proper disposal. Wash spill areas liberally with water to remove traces.

Waste Disposal Methods: Dispose of in accordance with local, state and federal regulations.

SECTION 8 SPECIAL PROTECTION INFORMATION

Respiratory Protection: For acute exposure, no respiratory protection is necessary. For chronic exposure to spray or mist use of a NIOSH/MSHA approved respirator is recommended.

Ventilation: Good Ventilation **Local Exhaust:** Yes **Mechanical (General):** Not Required **Special:** None

Other: None

Gloves: Rubber gloves recommended during spill/ leak procedures and during recharging operations.

Eye Protection: Chemical goggles recommended during spill/leak procedures and during recharging operations.

Other Protective Clothing or Equipment: Safety shoes are recommended when handling cylinders.

Work/Hygienic Practices: None established.



U.S. Army Corps
of Engineers
Savannah District

U.S. ARMY CORPS OF ENGINEERS
ENVIRONMENTAL & MATERIALS UNIT
200 NORTH COBB PARKWAY
BUILDING 400, SUITE 404
MARIETTA, GA 30062

SUPPLEMENTAL ASBESTOS **SURVEY REPORT**

**BUILDING NO. 8658, NOSE DOCK
HUNTER ARMY AIR FIELD, GEORGIA**



**SUPPLEMENTAL ASBESTOS INSPECTION REPORT
HUNTER ARMY AIR FIELD, GEORGIA
BUILDING NUMBER 8658, NOSE DOCK**

INTRODUCTION

1. This report documents the asbestos inspection and survey of Building No. 8658 at Hunter Army Air Field; Georgia conducted 25 July 2002 by USACE Savannah District employees Tim Jones and Jack Ford. The survey was conducted in general accordance with the regulatory guidelines in the Asbestos Hazard Emergency Response Act (AHERA) (40 CFR Part 763 Subpart E Sections 763.80-763.88) and "Guidance for Controlling Asbestos-Containing Materials in Buildings" (Purple Book) (EPA publication number 560/5-85-024). Although not required by the AHERA guidelines, roof and other exterior miscellaneous materials were also inspected and sampled.
2. Building No 8658 was built in the 1940s time frame and is of metal frame construction with corrugated metal siding and a metal roof. The floor system is a bare concrete slab. Within the building there are two wooden workstations used as offices.
3. All accessible areas of Building No. 8658 were visually inspected to verify materials identified in the original asbestos report compiled by Air-Safe Environmental, Inc. dated 23 May 2001. In addition, an accredited inspector sampled other suspect materials omitted in the original inspection. This report details ACM as identified at the time of inspection only.
4. The bulk samples were analyzed by Hygeia Laboratories, Inc. Hygeia is accredited by the National Voluntary Laboratory Accredited Program (NVLAP Accreditation sponsored by the National Institute of Standards and Technology (NIST)). The samples were analyzed by the accepted method of polarized light microscopy (PLM) using EPA's "Method for the Determination of Asbestos in Bulk Building Materials", EPA/600/R-93/116. Hygeia's analytical report is included in Appendix 1 and their NVLAP accreditation is in the Certifications section.
5. In compliance with the AHERA regulations, material is considered an Asbestos Containing Material when it contains greater than one percent asbestos. Likewise, in this report, any material containing concentrations greater than 1 percent asbestos will be considered "positive". A narrative discussion of the AHERA ACM types (i.e., thermal systems insulation, miscellaneous and surfacing materials) found in Building No. 8658 is included in this report when relevant. Bulk sample information appears on Table 1. Estimated quantities of

individual asbestos containing materials appear on Table 2. Material characterization of samples identified as asbestos containing appears as Table 3. The specific location where each bulk sample was obtained is shown on the building floor plans, which appear as Plates. Positive ACM samples are highlighted on the floor plan Plates and, where possible, locations of similar positive ACM are identified. It is reasonable to assume that all materials similar to those testing positive, also contain positive amounts of asbestos and should be treated as such.

DISCUSSION

- 6. Thermal Systems Insulation (TSI)** – TSI is insulation material applied to pipes, fittings, boilers, tanks, ducts, or to other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes

No suspect TSI was located in Building 8658.

- 7. Miscellaneous Materials** – Miscellaneous materials include building material on structural components, structural members or fixtures, such as floor and ceiling tiles, and do not include surfacing or TSI.

In the past, there were a great number of miscellaneous building materials that had asbestos fibers added to them during the manufacturing process to increase durability and fireproofing qualities. The following suspect miscellaneous materials were sampled at Building No. 8658 and found to contain asbestos.

Floor Materials

No suspect flooring materials were located in Building 8658.

Roofing Materials – (Refer to Tables 1-3 and Plate 1 for specific information and sample locations).

Roofing cement on the seams of the rolled roofing and at joints between the rolled roofing and steel structural members contains asbestos. These materials are located on a roof section on one of the workstations that is within the main building.

Calking Material– (Refer to Tables 2-3 and Plate 1 for specific information and sample locations).

Window caulking material was identified by Air Safe Environmental INC.'s report to contain asbestos.

Gasket Materials – (Refer to Tables 2-3 and Plate 1 for specific information and sample locations).

The burner gaskets in the three forced air furnaces were identified by Air Safe Environmental INC.'s report to contain asbestos. Other gaskets that may be within the furnaces are assumed to contain asbestos.

8. **Surfacing** – Surfacing material is friable material that is sprayed on, troweled on, or otherwise applied to surfaces for decorative or other purposes.

No suspect surfacing materials were identified.

Summary

9. In summary, the following materials in building 8658 were found to contain or are assumed to contain asbestos:

Roofing cement on the rolled roofing contains asbestos.

Gasket materials in the three forced air furnaces contain or assumed to contain asbestos.

Window caulking material contains asbestos.

Prepared by: _____
TIMOTHY A. JONES

Tables

Table 1 Suspect ACM Samples

Table 2 ACM Quantity Summary

Table 3 Material Characterization and Assessment

**TABLE 1
SUSPECT ACM SAMPLES
HUNTER ARMY AIRFIELD, BUILDING 8658**

FIELD ID	DESCRIPTION	LOCATION	ASBESTOS TYPE & %
8658-R-1	Duct flex joint	On roof of work stations	None
8658-R-2	Rolled roofing and roofing cement	On roof of the west work station	4% chrysotile in the roofing cement, Remainder NAD

Samples testing positive for asbestos in **BOLD** type

**TABLE 2
ACM QUANTITY SUMMARY
HUNTER ARMY AIRFIELD, BUILDING 8658**

Material Descriptions	Units	Area Descriptions							Totals
		FORCED AIR FURNACES	WEST WORKSTATION ROOF	EXTERIOR					
Gasket Material	S.F.	10							10
Roofing Cement	S.F.		150						150
Window Caulk	L.F.			80					80

S.F. = Square Foot, L.F. = Linear Foot.

**TABLE 3
MATERIAL CHARACTERIZATION AND ASSESSMENT
HUNTER ARMY AIRFIELD, BUILDING 8658**

MATERIAL		CHARACTERISTICS			ASSESSMENT	
Type	Description	Asbestos Yes/no/assumed	Quantity (If ACM)	Friable / Non- friable	Condition	Disturbance Potential
Miscellaneous	Gasket material	Yes 30% chrysotile	10 S.F.	Unknown	Unknown	Low
Miscellaneous	Roofing cement	Yes 4-15% chrysotile	150 S.F.	Non-friable	Good	Low
Miscellaneous	Window caulk	Yes 3% chrysotile	80 L.F.	Non-friable	Fair	Low

Plates

Sampling Locations (See contract drawings)

Appendix 1



HYGEIA LABORATORIES, INC.

1300 Williams Drive, Suite A - Marietta, Georgia 30066-6299 - (770) 514-6933, FAX (770) 514-6966

US Army Corp of Engineers
Environmental & Materials Unit
200 North Cobb Parkway
Bldg. 400, Ste. 404
Marietta, GA 30062

7/30/2002

Subject:

Hygeia Project Number: A0207069
Client Project Number/Name: Job # 7567 /Hunter AAF Bldg 8658

Dear Mr. Tim Jones:

Enclosed are the analytical results of bulk samples submitted by you to this laboratory on 7/29/2002. All analyses were performed by polarized light microscopy (PLM) in accordance with the EPA method as defined in Perkins and Harvey, July 1993, "Methods for the Determination of Asbestos in Bulk Materials" 61pp. (EPA/600/R-93/116). The reported percentages are volume estimates obtained by calibrated visual estimation. The results in this report apply only to the items tested.

The EPA defines an asbestos containing material (ACM) as a material that is reported to contain greater than one percent asbestos. HYGEIA is only responsible for the accuracy of the analytical results provided in this report and cannot be held responsible for the errors resulting from improper sample collection techniques. This report may not be used to claim product endorsement by NVLAP or any other U.S. Government agency.

For nonhomogeneous samples, each layer was analyzed separately and the results combined to form the reported value except where otherwise noted. Vinyl floor tile samples with negative results by PLM should be submitted for confirmation by transmission electron microscopy (TEM). Friable samples containing less than 10% asbestos as determined by PLM may be resubmitted for point counting at your discretion.

Thank you for using our analytical services. HYGEIA Laboratories has been NVLAP accredited since 1988. Our current NVLAP code is 102087-0. We will keep a copy of this report on file for three years. We will dispose of your samples in 60 days unless you request that we return them. This report may be reproduced only in its entirety with the consent of Hygeia Laboratories, Inc. If you have any questions, please call us at (770) - 514-6933.

Sincerely,

Clayton Call
Asbestos Laboratory Manager

NVLAP# 102087-0
Texas Dept. of Health # 30-0232
Commonwealth of Virginia # 3333-000210

PLM Analysis Summary

Hygeia Laboratories Inc.
 1300 Williams Drive, Suite A
 Marietta, GA 30066
 (770) 514-6933

Hygeia Project Number: A0207069
 Client Project Number/Name: Job # 7567 / Hunter AAF Bldg 8658

Page: 1 of 1
 Analyzed: 7/29/2002 by CC

Client #	Hygeia #	Sample Description				Asbestos Percent				Other Fibers			Non - Fibers		
		Color	Texture	Homog.	Chr.	Am.	Cro.	An.	T/A	Cell.	Glass	OF	B/F	ONE	
8658-R-1	A0207069-01	Black	Gummy	Yes						10%			90%		
8658-R-2	A0207069-02	Black	Gummy	No	<1%					10%			90%		

Comment: No Asbestos Detected.

Comment: Top layer: 4% Chrysotile. Rest: NAD. Asbestos Detected.

abbreviations:

- Chr. = chrysotile
- Am. = amosite
- Cro. = crocidolite
- An. = anthophyllite
- T/A = tremolite/actinolite
- cell = cellulose
- glass = fibrous glass
- syn = synthetic
- sty = styrene foam
- det = detected
- per = perlite
- ver = vermiculite
- MF = Mineral filler
- B/F = Binder / filler
- NAD = No asbestos detected
- OF = Other Fibers
- ONF = Other Non-Fibers
- Cons = Consolidated

Sample Chain of Custody

Certifications

The Environmental Institute

Tim Jones

*Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA / AHERA (TSCA Title II) Approved Accreditation
and NESHAP Regulations Training*

Asbestos in Buildings: Inspection and Assessment

February 10-12, 1997
Course Date

2360
Certificate Number

February 12, 1997
Examination Date

February 11, 1998
Expiration Date

William H. Spain
William H. Spain - Course Director

Rachel G. McCain
Rachel G. McCain - Exam Administrator



TEI - 1300 Williams Drive, Suite E - Marietta, Georgia 30066 - (770) 427-3600

The Environmental Institute

Tim Jones

*Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA/AHERA/ASHARA (TSCA Title II) Approved Reaccreditation
and NESHAP Regulations Training*

Asbestos in Buildings: Inspector Refresher

February 26, 2002

Course Date

7283

Certificate Number

February 26, 2002

Examination Date

February 25, 2003

Expiration Date

Thomas G. Maubenthal

Thomas G. Maubenthal - Course Director

Rachel G. McCain

Rachel G. McCain - Exam Administrator



TEI - 1300 Williams Drive, Suite E - Marietta, Georgia 30066 - (770) 427-3600

United States Department of Commerce
National Institute of Standards and Technology



ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation

HYGIEIA LABORATORIES, INC.
MARIETTA, GA

is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results. Accreditation is awarded for specific services, listed on the Scope of Accreditation for:

BULK ASBESTOS FIBER ANALYSIS

March 31, 2003

Effective through

David T. Alderman

For the National Institute of Standards and Technology
NVLAP Lab Code: 102087-0

NVLAP-01C (11-95)



ISO/IEC GUIDE 25:1990
ISO 9002:1987

Scope of Accreditation



Page: 1 of 1

BULK ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 102087-0

HYGEIA LABORATORIES, INC.

1300 Williams Drive, Suite A
Marietta, GA 30066-6299

Mr. Clayton Call

Phone: 770-514-6933 Fax: 770-514-6966

E-Mail: call67@atc-enviro.com

NVLAP Code

Designation

18/A01

EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples

March 31, 2003

Effective through

David F. Alderman

For the National Institute of Standards and Technology



U.S. Army Corps
of Engineers
Savannah District

U.S. ARMY CORPS OF ENGINEERS
ENVIRONMENTAL & MATERIALS UNIT
200 NORTH COBB PARKWAY
BUILDING 400, SUITE 404
MARIETTA, GA 30062

HAZARDOUS BUILDING MATERIALS SURVEY REPORT

**BUILDING NO. 8658, NOSE DOCK
HUNTER ARMY AIR FIELD, GEORGIA**



**HAZARDOUS BUILDING MATERIALS REPORT
HUNTER ARMY AIR FIELD, GEORGIA
BUILDING 8658, NOSE DOCK**

INTRODUCTION

1. This report documents the hazardous building materials survey of Building No. 8658 at Hunter Army Air Field; Georgia conducted on 25 July 2002 by USACE Savannah District employees Tim Jones and Jack Ford. This survey was conducted in general accordance with the Statement of Services developed by Ray Willingham, USACE Savannah District, which includes the USAEHA guidance for demolition debris characterization by TCLP sampling.
2. The survey consists of a count of florescent and metal halide lights, a search for mercury containing equipment, a search for lead building components, a search for evidence of past or present underground storage tanks and a search for any other hazardous building materials excluding asbestos. The report also documents results of composite sampling of building materials for demolition debris characterization by analysis of TCLP lead.
3. Building No 8658 was built in the 1940s time frame and is of metal frame construction with corrugated metal siding and a metal roof. The floor system is a bare concrete slab. Within the building there are two wooden workstations used as offices. Due to the construction of the building, the TCLP sampling was performed in accordance with composite sample estimated percentages for Metal structures in the USAEHA guidance. No physical sampling of other hazardous components was performed, only a visual counting was performed.
4. The sampled components for identification of TCLP lead, in their proper percentages, were analyzed by Hygeia Laboratories using EPA methods 1311 for extraction followed by 6010B analysis. Hygeia's analytical report is included in Appendix 1.

SUMMARY

5. The florescent and metal halide light count results are presented in Table 1.
6. Sampling of building components was performed as required and components were processed and mixed in the proper percentages and given a sample identification of B8658 TCLP. Painted corrugated metal siding was substituted for painted exterior wood due to the very small amount of exterior wood present. TCLP analysis by Hygeia Laboratories indicates that lead is not present above the regulatory limit of 5mg/L. Field sampling data including component type, color, TCLP mix percentage and approximate sampling location is presented in Table 2. Approximate locations of material sub-samples are indicated on the floor plan.
7. Three mercury-containing thermostats were located in Building 8658. One is located in each workstation and the third is in the main building to operate the large heater on the mezzanine. Their locations are indicated on the floor plan.
8. Evidence of a fuel storage tank was found (oil fired furnaces), however no tank was located.
9. Four window air conditioners were located in the workstations and should be removed and their refrigerant recovered prior to demolition.
10. No lead building components were located in Building 8658.

Prepared by: _____
TIMOTHY A. JONES

Tables

TABLE 1
HUNTER ARMY AIR FIELD, BLDG. 8658
FLORESCENT LIGHT FIXTURES

AREA IDENTIFICATION	# & TYPE LIGHTS PRESENT	DESCRIPTION OF LIGHTS
Interior	30	4 foot long, 2 bulb florescent fixtures
Interior	37	18 inch round mercury light fixtures
Interior	4	4 foot long, 4 bulb florescent fixtures
Exterior	5	18 inch square mercury light fixtures

TABLE 2
HUNTER ARMY AIR FIELD, BLDG. 8658
TCLP COMPOSITE SAMPLE COMPONENTS

BUILDING COMPONENT	DESCRIPTION	LOCATION	PERCENTAGE OF SAMPLE
Unpainted Wood	Work station framing	Work Station	7%
Interior wall covering	White wood	Work Station	40%
Roofing Components	White painted sheet steel	Roof	7%
Interior Floor Coverings	Grey painted wood	Work Station	12%
Block, Brick, Concrete	White painted block	Foundation	7%
Ceiling Material	White painted fiberboard	Work Station	25%
Painted Wood-Interior	Grey painted stairs	Work Station	1%
Painted Metal-Exterior	White painted corrugated siding	Exterior Siding	1%

Floor Plan And Sampling Locations

See contract drawings.

Appendix 1



HYGEIA LABORATORIES, INC.

1300 Williams Drive, Suite A - Marietta, Georgia 30066-6299 - (770) 514-6933, FAX (770) 514-6966

Lab Project No. **M0207246** Report Date: 8/01/02 1 of 5

Client Name: **US Army Corp of Engineers - Atlanta**

Contact: **Tim Jones**

Address: **Environmental & Materials Unit**

200 North Cobb Parkway

Bldg. 400, Ste. 404

Marietta, GA 30062

Project Name: **Hunter AAF - Sabre Hall Complex**

Project ID: **7571**

Receipt Date: **7/29/2002**

Case Narrative

1. The sample holding times were met for all analyses.
2. Where applicable, results & reporting limits are based on wet weight; dry weight calculations available.
3. The temperature of the sample cooler as received by the laboratory was room temperature.

Approved By: _____

AWS

Respectively Submitted:

Kandy Brown
Hygeia Laboratories, Inc.

Sample Identification

<u>Lab Sample #</u>	<u>Client Sample ID</u>	<u>Sample Supply</u>	<u>Collected</u>
M0207246-01	B8672 TCLP	Bulk	7/28/2002
M0207246-02	B8658 TCLP	Bulk	7/28/2002
M0207246-03	B8659 TCLP	Bulk	7/28/2002
M0207246-04	Guard Shocks TCLP	Bulk	7/28/2002
M0207246-05	B8675 TCLP	Bulk	7/28/2002
M0207246-06	B8676 TCLP	Bulk	7/28/2002
M0207246-07	B8677 TCLP	Bulk	7/28/2002
M0207246-08	B8658-1-S	Other	7/28/2002
M0207246-09	B8659-1-S	Other	7/28/2002

Lab Project No. M0207246

Report Date: 8/01/02 2 of 5

Lead	CAS #: 7439-92-1	Units: mg/L (ppm)	Method #: EPA_1311/7420A
Matrix: Leachate		Prep Date: 7/29/2002	Analyst: SR

Lab Project #	Client ID:	Result	Report Limit	Flag Code
M0207246-01	B8672 TCLP	BRL	0.5	
M0207246-02	B8658 TCLP	BRL	0.5	
M0207246-03	B8659 TCLP	BRL	0.5	
M0207246-04	Guard Shocks TCLP	BRL	0.5	
M0207246-05	B8675 TCLP	BRL	0.5	
M0207246-06	B8676 TCLP	BRL	0.5	
M0207246-07	B8677 TCLP	BRL	0.5	

Total Lead	CAS #: 7439-92-1	Units: Percent by Weight(%)	Method #: EPA_7420A(MOD)
Matrix: Paint Chips		Prep Date: 7/29/2002	Analyst: SR

Lab Project #	Client ID:	Result	Report Limit	Flag Code
M0207246-08	B8658-1-S	0.17	0.01	
M0207246-09	B8659-1-S	0.11	0.01	

Lab Project No. **M0207246**

Report Date: 8/01/02 3 of 5

BatchID: H020730030
 Department: Metals
 Prep Method: EPA_1311/7420A
 Analysis Method: EPA_1311/7420A

Prep Analyst: JL/MR/AE
 Prep Date: 7/29/02 15:12
 Analyst: SR
 Analysis Date: 7/30/02 16:10

M0207246-05A								
AnalyteName	Result	Unit						
Lead	0.075	mg/L (ppm)						
H020730030-MB								
AnalyteName	Result	Unit	RDL					
Lead	0	mg/L (ppm)	0.500					
H020730030-LCS								
AnalyteName	Result	Unit	%Recovery	Ctl Limits				
Lead	0.990	mg/L (ppm)	99	80 - 120				
H020730030-LCSD								
AnalyteName	Result	Unit	%Recovery	Ctl Limits	RPD	RPD Limits		
Lead	0.904	mg/L (ppm)	90	80 - 120	9.08	0 - 20		
M0207246-05A-DUP								
AnalyteName	Result	Parent Result	Unit			RPD	RPD Limits	
Lead	0.0660	BRL	mg/L (ppm)			12.77	0 - 20	
M0207246-05A-MS								
AnalyteName	Result	Parent Result	Unit	%Recovery	Ctl Limits			
Lead	1.08	BRL	mg/L (ppm)	101	75 - 125			
M0207246-05A-MSD								
AnalyteName	Result	Parent Result	Unit	%Recovery	Ctl Limits	RPD	RPD Limits	
Lead	1.06	BRL	mg/L (ppm)	99	75 - 125	1.87	0 - 20	

Lab Project No. M0207246

Report Date: 8/01/02 4 of 5

BatchID: H020730031

Prep Analyst: MR/JL

Department: Metals

Prep Date: 7/29/02 16:45

Prep Method: EPA_7420A(MOD)

Analyst: SR

Analysis Method: EPA_7420A(MOD)

Analysis Date: 7/30/02 16:27

H020730031-MB							
AnalyteName	Result	Unit	RDL				
Total Lead	0	%	0.01000				
H020730031-LCS							
AnalyteName	Result	Unit	%Recovery	Cti Limits			
Total Lead	0.65530	%	89	80 - 120			
H020730031-LCSD							
AnalyteName	Result	Unit	%Recovery	Cti Limits	RPD	RPD Limits	
Total Lead	0.65240	%	88	80 - 120	0.44	0 - 20	



Lab Project No. **M0207246**

Report Date: 8/01/02 5 of 5

Notes:

- Results relate only to the samples tested as received (See Chain-of-Custody).
- BRL = "Below Reporting Limit"
- RL = "Reporting Limit"
- Dates are presented in the format "month/day/year"

Certifications

Alabama - Lab ID 40970; Arkansas; Connecticut - No. PH 0208; Delaware - GA040; Georgia - No. 804; Indiana - Lab ID C-GA-01
Kentucky - Lab ID 90053, UST - No. 0005; Louisiana; Maryland - No. 293; Massachusetts No. M - GA040; North Carolina - No. 409
Rhode Island, License No. 245; South Carolina - No. 98012001; Tennessee - Lab ID 02827; Virginia - Lab ID 00024
South Carolina - No. 98012; Tennessee - Lab ID 02827 (DW), UST Program; Virginia - Lab ID 0024

Accreditations

American Association for Laboratory Accreditation, A2LA - No. 330.01;
American Industrial Hygiene Association, AIHA - Lab ID 100649; NELAC - State of Florida DOH, No. E87257

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U.S. Army Corps
of Engineers
Savannah District

U.S. ARMY CORPS OF ENGINEERS
ENVIRONMENTAL & MATERIALS UNIT
200 NORTH COBB PARKWAY
BUILDING 400, SUITE 404
MARIETTA, GA 30062

SUPPLEMENTAL ASBESTOS **SURVEY REPORT**

**BUILDING NO. 8659, NOSE DOCK
HUNTER ARMY AIR FIELD, GEORGIA**



**SUPPLEMENTAL ASBESTOS INSPECTION REPORT
HUNTER ARMY AIR FIELD, GEORGIA
BUILDING NUMBER 8659, NOSE DOCK**

INTRODUCTION

1. This report documents the asbestos inspection and survey of Building No. 8659 at Hunter Army Air Field; Georgia conducted 25 July 2002 by USACE Savannah District employees Tim Jones and Jack Ford. The survey was conducted in general accordance with the regulatory guidelines in the Asbestos Hazard Emergency Response Act (AHERA) (40 CFR Part 763 Subpart E Sections 763.80-763.88) and “Guidance for Controlling Asbestos-Containing Materials in Buildings” (Purple Book) (EPA publication number 560/5-85-024). Although not required by the AHERA guidelines, roof and other exterior miscellaneous materials were also inspected and sampled.
2. Building No 8658 was built in the 1940s time frame and is of metal frame construction with corrugated metal siding and a metal roof. The floor system is a bare concrete slab. Within the building there are two wooden workstations used as offices.
3. All accessible areas of Building No. 8659 were visually inspected to verify materials identified in the original asbestos report compiled by Air-Safe Environmental, Inc. dated 6 June 2001. In addition, an accredited inspector sampled other suspect materials omitted in the original inspection. This report details ACM as identified at the time of inspection only.
4. The bulk samples were analyzed by Hygeia Laboratories, Inc. Hygeia is accredited by the National Voluntary Laboratory Accredited Program (NVLAP Accreditation sponsored by the National Institute of Standards and Technology (NIST)). The samples were analyzed by the accepted method of polarized light microscopy (PLM) using EPA’s “Method for the Determination of Asbestos in Bulk Building Materials”, EPA/600/R-93/116. Hygeia’s analytical report is included in Appendix 1 and their NVLAP accreditation is in the Certifications section.
5. In compliance with the AHERA regulations, material is considered an Asbestos Containing Material when it contains greater than one percent asbestos. Likewise, in this report, any material containing concentrations greater than 1 percent asbestos will be considered “positive”. A narrative discussion of the AHERA ACM types (i.e., thermal systems insulation, miscellaneous and surfacing materials) found in Building No. 8659 is included in this report when relevant. Bulk sample information appears on Table 1. Estimated quantities of

individual asbestos containing materials appear on Table 2. Material characterization of samples identified as asbestos containing appears as Table 3. The specific location where each bulk sample was obtained is shown on the building floor plans, which appear as Plates. Positive ACM samples are highlighted on the floor plan Plates and, where possible, locations of similar positive ACM are identified. It is reasonable to assume that all materials similar to those testing positive, also contain positive amounts of asbestos and should be treated as such.

DISCUSSION

- 6. Thermal Systems Insulation (TSI)** – TSI is insulation material applied to pipes, fittings, boilers, tanks, ducts, or to other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes

No suspect TSI was located in Building 8659.

- 7. Miscellaneous Materials** – Miscellaneous materials include building material on structural components, structural members or fixtures, such as floor and ceiling tiles, and do not include surfacing or TSI.

In the past, there were a great number of miscellaneous building materials that had asbestos fibers added to them during the manufacturing process to increase durability and fireproofing qualities. The following suspect miscellaneous materials were sampled at Building No. 8659 and found to contain asbestos.

Floor Materials

No suspect flooring materials were located in Building 8659.

Roofing Materials – (Refer to Tables 1-3 and Plate 1 for specific information and sample locations).

Roofing cement on the seams of the rolled roofing and at joints between the rolled roofing and steel structural members contains asbestos. These materials are located on a roof section on one of the workstations that is within the main building.

Gasket Materials – (Refer to Tables 2-3 and Plate 1 for specific information and sample locations).

The burner gaskets in the three forced air furnaces were identified by Air Safe Environmental INC.'s report to contain asbestos. Other gaskets that may be within the furnaces are assumed to contain asbestos.

- 8. Surfacing** – Surfacing material is friable material that is sprayed on, troweled on, or otherwise applied to surfaces for decorative or other purposes.

No suspect surfacing materials were identified.

Summary

9. In summary, the following materials in building 8659 were found to contain or are assumed to contain asbestos:

Roofing cement on the rolled roofing contains asbestos.

Gasket materials in the three forced air furnaces contain or assumed to contain asbestos.

Prepared by: _____
TIMOTHY A. JONES

Tables

Table 1 Suspect ACM Samples

Table 2 ACM Quantity Summary

Table 3 Material Characterization and Assessment

**TABLE 1
SUSPECT ACM SAMPLES
HUNTER ARMY AIRFIELD, BUILDING 8659**

FIELD ID	DESCRIPTION	LOCATION	ASBESTOS TYPE & %
8658-R-1	Rolled roofing and roofing cement	On roof of the west work station	5% chrysotile in the roofing cement, Remainder NAD

Samples testing positive for asbestos in **BOLD** type

**TABLE 2
ACM QUANTITY SUMMARY
HUNTER ARMY AIRFIELD, BUILDING 8659**

Material Descriptions	Units	Area Descriptions							Totals
		FORCED AIR FURNACES	NORTH WORKSTATION ROOF						
Gasket Material	S.F.	10							10
Roofing Cement	S.F.		150						150

S.F. = Square Foot, L.F. = Linear Foot.

**TABLE 3
MATERIAL CHARACTERIZATION AND ASSESSMENT
HUNTER ARMY AIRFIELD, BUILDING 8659**

MATERIAL		CHARACTERISTICS			ASSESSMENT	
Type	Description	Asbestos Yes/no/assumed	Quantity (If ACM)	Friable / Non- friable	Condition	Disturbance Potential
Miscellaneous	Gasket material	Yes 30% chrysotile	10 S.F.	Unknown	Unknown	Low
Miscellaneous	Roofing cement	Yes 5-15% chrysotile	150 S.F.	Non-friable	Good	Low

Plates

Sampling Locations (See contract drawings)

Appendix 1



HYGEIA LABORATORIES, INC.

1300 Williams Drive, Suite A - Marietta, Georgia 30066-6299 - (770) 514-6933, FAX (770) 514-6966

US Army Corp of Engineers
Environmental & Materials Unit
200 North Cobb Parkway
Bldg. 400, Ste. 404
Marietta, GA 30062

7/30/2002

Subject:

Hygeia Project Number: A0207070
Client Project Number/Name: Job # 7568 /Hunter AAF Bldg 8659

Dear Mr. Tim Jones:

Enclosed are the analytical results of bulk samples submitted by you to this laboratory on 7/29/2002. All analyses were performed by polarized light microscopy (PLM) in accordance with the EPA method as defined in Perkins and Harvey, July 1993, "Methods for the Determination of Asbestos in Bulk Materials" 61pp. (EPA/600/R-93/116). The reported percentages are volume estimates obtained by calibrated visual estimation. The results in this report apply only to the items tested.

The EPA defines an asbestos containing material (ACM) as a material that is reported to contain greater than one percent asbestos. HYGEIA is only responsible for the accuracy of the analytical results provided in this report and cannot be held responsible for the errors resulting from improper sample collection techniques. This report may not be used to claim product endorsement by NVLAP or any other U.S. Government agency.

For nonhomogeneous samples, each layer was analyzed separately and the results combined to form the reported value except where otherwise noted. Vinyl floor tile samples with negative results by PLM should be submitted for confirmation by transmission electron microscopy (TEM). Friable samples containing less than 10% asbestos as determined by PLM may be resubmitted for point counting at your discretion.

Thank you for using our analytical services. HYGEIA Laboratories has been NVLAP accredited since 1988. Our current NVLAP code is 102087-0. We will keep a copy of this report on file for three years. We will dispose of your samples in 60 days unless you request that we return them. This report may be reproduced only in its entirety with the consent of Hygeia Laboratories, Inc. If you have any questions, please call us at (770) - 514-6933.

Sincerely,

Clayton Call
Asbestos Laboratory Manager

NVLAP# 102087-0
Texas Dept. of Health # 30-0232
Commonwealth of Virginia # 3333-000210

PLM Analysis Summary

Hygeia Laboratories Inc.
 1300 Williams Drive, Suite A
 Marietta, GA 30066
 (770) 514-6933

Hygeia Project Number: A0207070
 Client Project Number/Name: Job # 7568 / Hunter AAF Bldg 8659

Page: 1 of 1
 Analyzed: 7/29/2002 by CC

Client #	Hygeia #	Sample Description				Asbestos Percent				Other Fibers			Non - Fibers	
		Color	Texture	Homog.	Chr.	Am.	Cro.	An.	T/A	Cell.	Glass	OF	B/F	ONF
8659-R-1	A0207070-01	Black	Gummy	No	<1%					20%	5%		75%	

Comment: Top layer contains 5% Chrysotile. Rest: NAD. Asbestos Detected.

abbreviations:

- Chr.** = chrysotile
- Am.** = amosite
- Cro.** = crocidolite
- An.** = anthophyllite
- T/A** = tremolite/actinolite
- cell** = cellulose
- glass** = fibrous glass
- syn** = synthetic
- sty** = styrene foam
- det** = detected
- per** = perlite
- ver** = vermiculite
- MF** = Mineral filler
- B/F** = Binder / filler
- NAD** = No asbestos detected
- OF** = Other Fibers
- ONF** = Other Non-Fibers
- Cons** = Consolidated

Sample Chain of Custody

PLM Analysis Summary

Hygeia Laboratories Inc.
 1300 Williams Drive, Suite A
 Marietta, GA 30066
 (770) 514-6933

Hygeia Project Number: A0207070
 Client Project Number/Name: Job # 7568 / Hunter AAF Bldg 8659

Page: 1 of 1
 Analyzed: 7/29/2002 by CC

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- NAD** = No asbestos detected
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Certifications

The Environmental Institute

Tim Jones

*Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA / AHERA (TSCA Title II) Approved Accreditation
and NESHAP Regulations Training*

Asbestos in Buildings: Inspection and Assessment

February 10-12, 1997
Course Date

2360
Certificate Number

February 12, 1997
Examination Date

February 11, 1998
Expiration Date

William H. Spain
William H. Spain - Course Director

Rachel G. McCain
Rachel G. McCain - Exam Administrator



TEI - 1300 Williams Drive, Suite E - Marietta, Georgia 30066 - (770) 427-3600

The Environmental Institute

Tim Jones

*Has completed coursework and satisfactorily passed
an examination that meets all criteria required for
EPA/AHERA/ASHARA (TSCA Title II) Approved Reaccreditation
and NESHAP Regulations Training*

Asbestos in Buildings: Inspector Refresher

February 26, 2002

Course Date

7283

Certificate Number

February 26, 2002

Examination Date

February 25, 2003

Expiration Date

Thomas G. Maubenthal - Course Director

Rachel G. McCain - Exam Administrator



TEI - 1300 Williams Drive, Suite E - Marietta, Georgia 30066 - (770) 427-3600

United States Department of Commerce
National Institute of Standards and Technology



ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation

HYGIEIA LABORATORIES, INC.
MARIETTA, GA

is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance with criteria established in Title 15, Part 285 Code of Federal Regulations. These criteria encompass the requirements of ISO/IEC Guide 25 and the relevant requirements of ISO 9002 (ANSI/ASQC Q92-1987) as suppliers of calibration or test results. Accreditation is awarded for specific services, listed on the Scope of Accreditation for:

BULK ASBESTOS FIBER ANALYSIS

March 31, 2003

Effective through

David T. Alderman

For the National Institute of Standards and Technology
NVLAP Lab Code: 102087-0

NVLAP-01C (11-95)

National Institute
of Standards and Technology



National Voluntary
Laboratory Accreditation Program

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Scope of Accreditation



Page: 1 of 1

BULK ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 102087-0

HYGEIA LABORATORIES, INC.

1300 Williams Drive, Suite A
Marietta, GA 30066-6299

Mr. Clayton Call

Phone: 770-514-6933 Fax: 770-514-6966

E-Mail: call67@atc-enviro.com

NVLAP Code

Designation

18/A01

EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples

March 31, 2003

Effective through

For the National Institute of Standards and Technology



U.S. Army Corps
of Engineers
Savannah District

U.S. ARMY CORPS OF ENGINEERS
ENVIRONMENTAL & MATERIALS UNIT
200 NORTH COBB PARKWAY
BUILDING 400, SUITE 404
MARIETTA, GA 30062

HAZARDOUS BUILDING **MATERIALS SURVEY REPORT**

**BUILDING NO. 8659, NOSE DOCK
HUNTER ARMY AIR FIELD, GEORGIA**



**HAZARDOUS BUILDING MATERIALS REPORT
HUNTER ARMY AIR FIELD, GEORGIA
BUILDING 8659, NOSE DOCK**

INTRODUCTION

1. This report documents the hazardous building materials survey of Building No. 8659 at Hunter Army Air Field; Georgia conducted on 25 July 2002 by USACE Savannah District employees Tim Jones and Jack Ford. This survey was conducted in general accordance with the Statement of Services developed by Ray Willingham, USACE Savannah District, which includes the USAEHA guidance for demolition debris characterization by TCLP sampling.
2. The survey consists of a count of florescent and metal halide lights, a search for mercury containing equipment, a search for lead building components, a search for evidence of past or present underground storage tanks and a search for any other hazardous building materials excluding asbestos. The report also documents results of composite sampling of building materials for demolition debris characterization by analysis of TCLP lead.
3. Building No 8659 was built in the 1940s time frame and is of metal frame construction with corrugated metal siding and a metal roof. The floor system is a bare concrete slab. Within the building there are two wooden workstations used as offices. Due to the construction of the building, the TCLP sampling was performed in accordance with composite sample estimated percentages for Metal structures in the USAEHA guidance. No physical sampling of other hazardous components was performed, only a visual counting was performed.
4. The sampled components for identification of TCLP lead, in their proper percentages, were analyzed by Hygeia Laboratories using EPA methods 1311 for extraction followed by 6010B analysis. Hygeia's analytical report is included in Appendix 1.

SUMMARY

5. The florescent and metal halide light count results are presented in Table 1.
6. Sampling of building components was performed as required and components were processed and mixed in the proper percentages and given a sample identification of B8659 TCLP. Painted corrugated metal siding was substituted for painted exterior wood since no painted exterior wood was present. TCLP analysis by Hygeia Laboratories indicates that lead is not present above the regulatory limit of 5mg/L. Field sampling data including component type, color, TCLP mix percentage and approximate sampling location is presented in Table 2. Approximate locations of material sub-samples are indicated on the floor plan.
7. Two mercury-containing thermostats were located in Building 8659 and one is suspected but not located. One is located in each workstation and the third should be in the main building near the fan switch to operate the large heater on the mezzanine. Their locations are indicated on the floor plan.
8. An above ground fuel storage tank was found to the rear of the building and is indicated on the floor plan.
9. One window air conditioner was located in one of the workstations and should be removed and the refrigerant recovered prior to demolition.
10. No lead building components were located in Building 8659.

Prepared by: _____
TIMOTHY A. JONES

Tables

TABLE 1
HUNTER ARMY AIR FIELD, BLDG. 8659
FLORESCENT LIGHT FIXTURES

AREA IDENTIFICATION	# & TYPE LIGHTS PRESENT	DESCRIPTION OF LIGHTS
Interior	27	4 foot long, 2 bulb florescent fixtures
Interior	36	18 inch round mercury light fixtures
Exterior	5	18 inch square mercury light fixtures

TABLE 2
HUNTER ARMY AIR FIELD, BLDG. 8659
TCLP COMPOSITE SAMPLE COMPONENTS

BUILDING COMPONENT	DESCRIPTION	LOCATION	PERCENTAGE OF SAMPLE
Unpainted Wood	Window trim	Work Station	7%
Interior wall covering	Tan painted drywall	Work Station	40%
Roofing Components	White painted sheet steel	Roof	7%
Interior Floor Coverings	Grey painted plywood	Work Station Storeroom	12%
Block, Brick, Concrete	White painted block	Foundation	7%
Ceiling Material	White painted fiberboard	Work Station	25%
Painted Wood-Interior	Brown painted stairs	Work Station	1%
Painted Metal-Exterior	White painted corrugated siding	Exterior Siding	1%

Floor Plan And Sampling Locations

See contract drawings

Appendix 1



HYGEIA LABORATORIES, INC.

1300 Williams Drive, Suite A - Marietta, Georgia 30066-6299 - (770) 514-6933, FAX (770) 514-6966

Lab Project No. **M0207246** Report Date: 8/01/02 1 of 5

Client Name: **US Army Corp of Engineers - Atlanta**
 Contact: **Tim Jones**
 Address: **Environmental & Materials Unit**
 200 North Cobb Parkway
 Bldg. 400, Ste. 404
 Marietta, GA 30062

Project Name: **Hunter AAF - Sabre Hall Complex**
 Project ID: **7571**
 Receipt Date: **7/29/2002**

Case Narrative

1. The sample holding times were met for all analyses.
2. Where applicable, results & reporting limits are based on wet weight; dry weight calculations available.
3. The temperature of the sample cooler as received by the laboratory was room temperature.

Approved By: AWJ

Respectively Submitted:

Kandy Brown
 Hygeia Laboratories, Inc.

Sample Identification

<u>Lab Sample #</u>	<u>Client Sample ID</u>	<u>Sample Supply</u>	<u>Collected</u>
M0207246-01	B8672 TCLP	Bulk	7/28/2002
M0207246-02	B8658 TCLP	Bulk	7/28/2002
M0207246-03	B8659 TCLP	Bulk	7/28/2002
M0207246-04	Guard Shocks TCLP	Bulk	7/28/2002
M0207246-05	B8675 TCLP	Bulk	7/28/2002
M0207246-06	B8676 TCLP	Bulk	7/28/2002
M0207246-07	B8677 TCLP	Bulk	7/28/2002
M0207246-08	B8658-1-S	Other	7/28/2002
M0207246-09	B8659-1-S	Other	7/28/2002

Lab Project No. M0207246

Report Date: 8/01/02 2 of 5

Lead	CAS #: 7439-92-1	Units: mg/L (ppm)	Method #: EPA_1311/7420A
Matrix: Leachate		Prep Date: 7/29/2002	Analyst: SR

Lab Project #	Client ID:	Result	Report Limit	Flag Code
M0207246-01	B8672 TCLP	BRL	0.5	
M0207246-02	B8658 TCLP	BRL	0.5	
M0207246-03	B8659 TCLP	BRL	0.5	
M0207246-04	Guard Shocks TCLP	BRL	0.5	
M0207246-05	B8675 TCLP	BRL	0.5	
M0207246-06	B8676 TCLP	BRL	0.5	
M0207246-07	B8677 TCLP	BRL	0.5	

Total Lead	CAS #: 7439-92-1	Units: Percent by Weight(%)	Method #: EPA_7420A(MOD)
Matrix: Paint Chips		Prep Date: 7/29/2002	Analyst: SR

Lab Project #	Client ID:	Result	Report Limit	Flag Code
M0207246-08	B8658-1-S	0.17	0.01	
M0207246-09	B8659-1-S	0.11	0.01	

Lab Project No. **M0207246**

Report Date: 8/01/02 3 of 5

BatchID: H020730030
 Department: Metals
 Prep Method: EPA_1311/7420A
 Analysis Method: EPA_1311/7420A

Prep Analyst: JL/MR/AE
 Prep Date: 7/29/02 15:12
 Analyst: SR
 Analysis Date: 7/30/02 16:10

M0207246-05A								
AnalyteName	Result	Unit						
Lead	0.075	mg/L (ppm)						
H020730030-MB								
AnalyteName	Result	Unit	RDL					
Lead	0	mg/L (ppm)	0.500					
H020730030-LCS								
AnalyteName	Result	Unit	%Recovery	Ctl Limits				
Lead	0.990	mg/L (ppm)	99	80 - 120				
H020730030-LCSD								
AnalyteName	Result	Unit	%Recovery	Ctl Limits	RPD	RPD Limits		
Lead	0.904	mg/L (ppm)	90	80 - 120	9.08	0 - 20		
M0207246-05A-DUP								
AnalyteName	Result	Parent Result	Unit			RPD	RPD Limits	
Lead	0.0660	BRL	mg/L (ppm)			12.77	0 - 20	
M0207246-05A-MS								
AnalyteName	Result	Parent Result	Unit	%Recovery	Ctl Limits			
Lead	1.08	BRL	mg/L (ppm)	101	75 - 125			
M0207246-05A-MSD								
AnalyteName	Result	Parent Result	Unit	%Recovery	Ctl Limits	RPD	RPD Limits	
Lead	1.06	BRL	mg/L (ppm)	99	75 - 125	1.87	0 - 20	

Lab Project No. M0207246

Report Date: 8/01/02 4 of 5

BatchID: H020730031

Prep Analyst: MR/JL

Department: Metals

Prep Date: 7/29/02 16:45

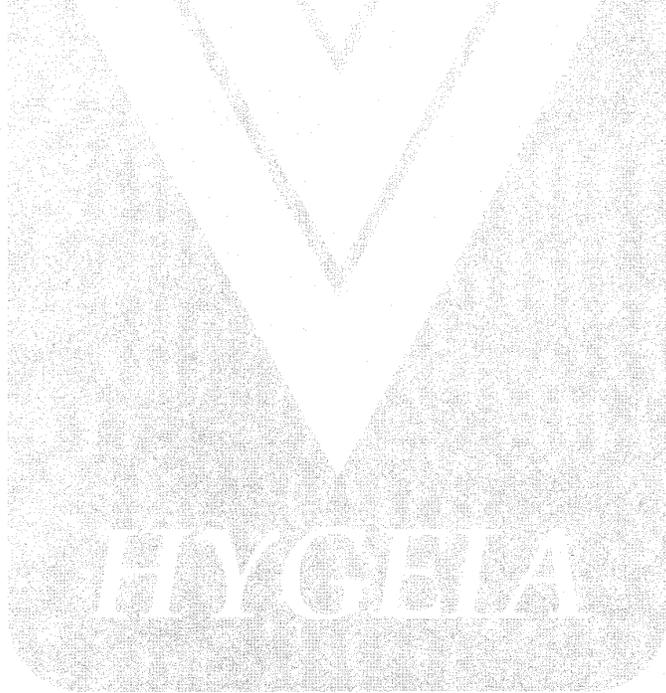
Prep Method: EPA_7420A(MOD)

Analyst: SR

Analysis Method: EPA_7420A(MOD)

Analysis Date: 7/30/02 16:27

H020730031-MB							
AnalyteName	Result	Unit	RDL				
Total Lead	0	%	0.01000				
H020730031-LCS							
AnalyteName	Result	Unit	%Recovery	Cti Limits			
Total Lead	0.65530	%	89	80 - 120			
H020730031-LCSD							
AnalyteName	Result	Unit	%Recovery	Cti Limits	RPD	RPD Limits	
Total Lead	0.65240	%	88	80 - 120	0.44	0 - 20	



Lab Project No. **M0207246**

Report Date: 8/01/02 5 of 5

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