

ASBESTOS ASSESSMENT

Prepared for the:



**NPS – HAFE
HARPERS FERRY, WV**

**HARPERS FERRY NATIONAL HISTORICAL PARK
BUILDING #BA-02-01 – SITE CODE HFTS – BA-02-01**



Prepared by:



**UNITED STATES PUBLIC HEALTH SERVICE
DIVISION OF FEDERAL OCCUPATIONAL HEALTH
PHILADELPHIA OFFICE
TASK ORDER NO. BA-02-01**

September 9, 2002

4821 D-276

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IAG NO. D8H02 IN3 3201
TASK ORDER NO. BA-02-01

Introduction

Enclosed for your review is the FINAL ASBESTOS ASSESSMENT, which serves to address the request made by your office for assistance with an asbestos survey at the Harpers Ferry National Historical Park, Harpers Ferry National Historical Park, in Harpers Ferry, WV. The Division of Federal Occupational Health (DFOH), in accordance with the Memorandum of Agreement and Specification between the (BA-02-01) and DFOH (IAG No. D8H02 IN3 3201 / TASK ORDER # BA-02-01), conducted these services from July 2, 2002 to the present.

Description of Structure

One story with crawlspace, attic, wood frame and shingled roof.

Materials Containing Asbestos

Thirty-three (33) homogeneous materials were sampled. Eleven (11) of these were found to be asbestos-containing materials (ACM), i.e. containing more than 1% asbestos fibers. For quality control samples reference the Base Sample and Quality Control Sample chart.

Zero (0) materials were assumed in the assessment to contain asbestos.

The chart below shows the homogeneous material identifier (HID), material types, material descriptions, type of asbestos, percent of asbestos, conditions, sample location, and sample numbers of all sampled and assumed ACM found during the survey period (See next page).

Harpers Ferry National Historical Park

List of All Positive Building Material Ordered By Sample Number For Building #BA-02-01Site Code #HFTS

HID#/ Drawing ID	Sample Number	Material Type/Floor	Description/ Room Number/Name	Type of Asbestos / Functional Space	Percent Asbestos/ Condition
0900	HFTS-0A-006-0900	Block Pipe Insulation	White block pipe insulation	Chrysotile	50 %
		1	Attic	1003	Damaged
		1	Boiler Room	1008	Damaged
2000	HFTS-01-007-2000	Floor Tiles	9" x 9" red floor tile	Chrysotile	15 %
		1	Waiting Room	1004	Damaged
		1	Ticket Office	1007	Damaged
2001	HFTS-01-008-2001	Floor Tiles	9" x 9" black floor tile	Chrysotile	5 %
		1	Waiting Room	1004	Damaged
		1	Ticket Office	1007	Damaged
2300	HFTS-01-035-2300	Transite	Grey Transite Panels	Chrysotile	45 %
	HFTS-01-027-2300				
		1	Storage Room	1009	Damaged
2603	HFTS-01-004-2603	Other Miscellaneous	9" x 9" red floor Tile debris	Chrysotile	5 %
		1	Baggage Room	1001	Undamaged
2604	HFTS-01-005-2604	Other Miscellaneous	9" x 9" black floor tile debris	Chrysotile	5 %
		1	Baggage Room	1001	Undamaged
2607	HFTS-01-012-2607	Other Miscellaneous	Shingles	Chrysotile	15 %
		1	Roof	1011	Undamaged

Harpers Ferry National Historical Park

List of All Positive Building Material Ordered By Sample Number For Building #BA-02-01Site Code #HFTS

HID#/ Drawing ID	Sample Number	Material Type/Floor	Description/ Room Number/Name	Type of Asbestos / Functional Space	Percent Asbestos/ Condition
2609	HFTS-01-014-2609	Other Miscellaneous	Mastic under green wallboard	Chrysotile	5 %
		1	Men's Restroom	1005	Undamaged
		1	Women's Restroom	1006	Damaged
2615	HFTS-01-024-2615	Other Miscellaneous	White Debris	Chrysotile	45 %
		1	Crawlspace	1002	Damaged
2620	HFTS-01-031-2620	Other Miscellaneous	White Cementitious Debris	Chrysotile, Crocidolite	40 %
		1	Crawlspace	1002	Damaged
2621	HFTS-01-032-2621	Other Miscellaneous	Grey Debris	Chrysotile	40 %
		1	Crawlspace	1002	Damaged

Materials Containing No Asbestos

HID# 2002	12" X 12" White Floor Tile Floor Tiles
HID# 2600	Black Paper-like Debris Other Miscellaneous
HID# 2601	White Debris Other Miscellaneous
HID# 2602	Black Floor Material Other Miscellaneous
HID# 2605	Flue Mud Other Miscellaneous
HID# 2606	Debris Under Floor Other Miscellaneous
HID# 2608	Roof Felt Other Miscellaneous
HID# 2610	Cream-colored Filler Other Miscellaneous
HID# 2611	Cream-colored Filler (corner) Other Miscellaneous
HID# 2612	Red & Black Paper Other Miscellaneous
HID# 2613	Black Window Glazing (old) Other Miscellaneous
HID# 2614	White Window Glazing Other Miscellaneous
HID# 2616	White Cementitious Debris Other Miscellaneous
HID# 2617	Black 1" Diameter Wire Cloth Other Miscellaneous
HID# 2618	Black 1/2" Diameter Wire Cloth Other Miscellaneous
HID# 2619	Brown Paper Debris Other Miscellaneous
HID# 2622	Black Tar Paper Other Miscellaneous
HID# 2623	Grey Miscellaneous Material Other Miscellaneous
HID# 2624	White Paper-like Other Miscellaneous

Homogeneous Material Codes (HID)

A distinct homogenous material code (HID) was assigned to each identified homogeneous material.

Homogeneous Material I.D. Code (HID) Reference List

Surfacing

0100 to 0199 - Sprayed-On
0200 to 0299 - Troweled-On
0300 to 0399 - Blown-In
0400 to 0499 - Other Surfacing
1900 to 1999 - Plaster Walls and Ceilings

Thermal

0500 to 0599 - Lagging
0600 to 0699 - Breeching
0700 to 0799 - Duct Insulation
0800 to 0899 - Tank Insulation
0900 to 0999 - Block Pipe Insulation
1000 to 1099 - Joints associated with Block Pipe Insulation
1100 to 1199 - Corrugated/Air Cell Pipe Insulation
1200 to 1299 - Joints associated with Corrugated Pipe Insulation
1300 to 1399 - Compressed Pipe Insulation
1400 to 1499 - Joints associated with Compressed Pipe Insulation
1500 to 1599 - Joints associated with Fibrous Glass Pipe Insulation
1600 to 1699 - Other Thermal

Miscellaneous

1700 to 1799 - Lay-In Ceiling Tiles
1800 to 1899 - Spline Ceiling Tiles
2000 to 2099 - Floor Tiles
2100 to 2199 - Drywall
2200 to 2299 - Linoleum
2300 to 2399 - Transite
2400 to 2499 - Expansion Joints
2500 to 2599 - Mastic Floor Tiles
2600 to 2699 - Other Miscellaneous
2700 to 2799 - Mastic Linoleum

Homogeneous Materials Identified

Appendices H and I list all homogenous materials identified during the inspection of the building with corresponding estimated quantities of each material both by specific location and throughout the building. In addition, the data for all asbestos-containing material is presented in a variety of ways in Appendices C-G to show sample number, location, condition, risk assessment (RAC) and functional space.

Functional Areas

Appendix B lists the numbers, which are used to represent functional space descriptions in the Appendices. This appendix also lists floors and rooms for each functional space.

Recommendations

White block pipe insulation Block Pipe Insulation - HID# 0900

Immediate patch & repair and clean-up of debris on floor by a licensed asbestos abatement contractor recommended.

9" x 9" red floor tile Floor Tiles - HID# 2000

Removal or repair of damaged floor tiles by a licensed asbestos abatement contractor recommended.

9" x 9" black floor tile Floor Tiles - HID# 2001

Removal or repair of damaged floor tiles by a licensed asbestos abatement contractor recommended.

12" x 12" white floor tile Floor Tiles - HID# 2002

Non-asbestos material - no recommendation.

Grey Transite Panels Transite - HID# 2300

Removal by a licensed asbestos abatement contractor recommended.

Mastic a/w red floor tile Mastic (for Floor Tiles) - HID# 2500

Analyzed as part of tile - refer to 9" x 9" red floor tile.

Mastic a/w black floor tile Mastic (for Floor Tiles) - HID# 2501

Analyzed as part of tile - refer to 9" x 9" black floor tile.

Mastic a/w white floor tile Mastic (for Floor Tiles) - HID# 2502

Analyzed as part of tile - refer to 12" x 12" white floor tile.

Recommendations (Con't)

Black paper-like debris Other Miscellaneous - HID# 2600

Non-asbestos material - no recommendation.

White debris Other Miscellaneous - HID# 2601

Non-asbestos material - no recommendation.

Black floor material Other Miscellaneous - HID# 2602

Non-asbestos material - no recommendation.

9" x 9" red floor Tile debris Other Miscellaneous - HID# 2603

Removal by a licensed asbestos abatement contractor recommended.

9" x 9" black floor tile debris Other Miscellaneous - HID# 2604

Removal by a licensed asbestos abatement contractor recommended.

Flue mud Other Miscellaneous - HID# 2605

Non-asbestos material - no recommendation.

Debris under floor Other Miscellaneous - HID# 2606

Non-asbestos material - no recommendation.

Shingles Other Miscellaneous - HID# 2607

Inspect every 3-years - manage in place.

Roof felt Other Miscellaneous - HID# 2608

Non-asbestos material - no recommendation.

Mastic under green wallboard Other Miscellaneous - HID# 2609

Inspect every 3-years - manage in place.

Cream-colored filler Other Miscellaneous - HID# 2610

Non-asbestos material - no recommendation.

Cream-colored filler (corner) Other Miscellaneous - HID# 2611

Non-asbestos material - no recommendation.

Red & Black Paper Other Miscellaneous - HID# 2612

Non-asbestos material - no recommendation.

Recommendations (Con't)

Red & Black Paper Other Miscellaneous - HID# 2612

Non-asbestos material - no recommendation.

Black Window Glazing (Old) Other Miscellaneous - HID# 2613

Non-asbestos material - no recommendation.

White Window Glazing Other Miscellaneous - HID# 2614

Non-asbestos material - no recommendation.

White Debris Other Miscellaneous - HID# 2615

Removal by a licensed asbestos abatement contractor recommended.

White Cementitious Debris Other Miscellaneous - HID# 2616

Removal by a licensed asbestos abatement contractor recommended.

Black 1" Diameter Wire Cloth Other Miscellaneous - HID# 2617

Non-asbestos material - no recommendation.

Black 1/2" Diameter Wire Cloth Other Miscellaneous - HID# 2618

Non-asbestos material - no recommendation.

Brown Paper Debris Other Miscellaneous - HID# 2619

Non-asbestos material - no recommendation.

White Cementitious Debris Other Miscellaneous - HID# 2620

Removal by a licensed asbestos abatement contractor recommended.

Grey Debris Other Miscellaneous - HID# 2621

Removal by a licensed asbestos abatement contractor recommended.

Black Tar Paper Other Miscellaneous - HID# 2622

Non-asbestos material - no recommendation.

Grey Miscellaneous Material Other Miscellaneous - HID# 2623

Non-asbestos material - no recommendation.

White Paper-like Other Miscellaneous - HID# 2624

Non-asbestos material - no recommendation.

Base Sample and Quality Control Sample Discrepancies

One (1)

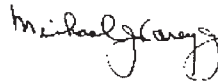
Sample Number	HID	Lab Company	Result
HFTS-01-010-2605-QC1	2605	Criterion Laboratories	Below Limit of Detection

If you have any questions regarding this Asbestos Assessment, please feel free to contact me at your earliest convenience at (215) 861-4107, otherwise, this survey report will become final after 45 days.



Captain Paul Pryor, MS, CIH

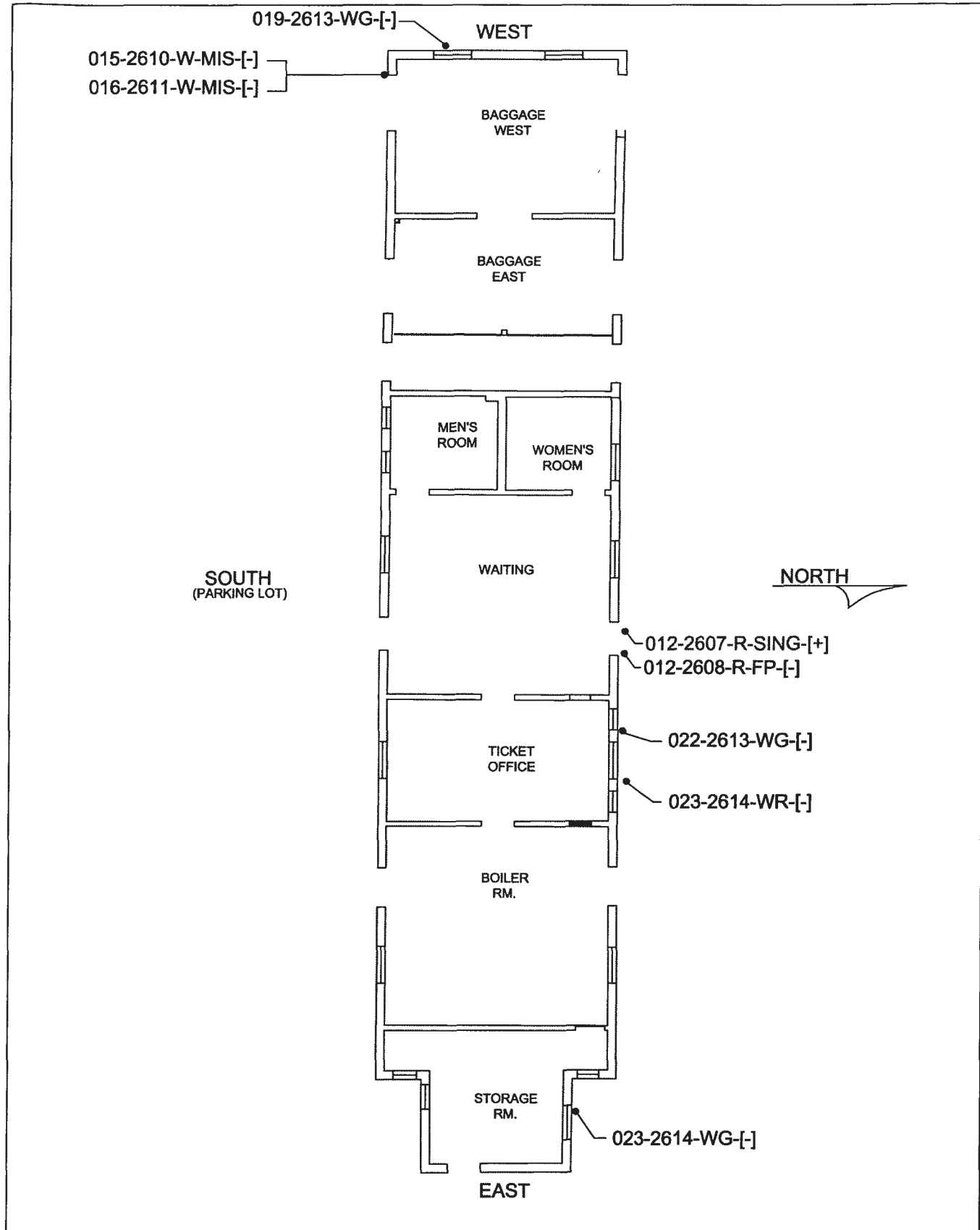
Federal Occupational Health, Senior Project
Manager



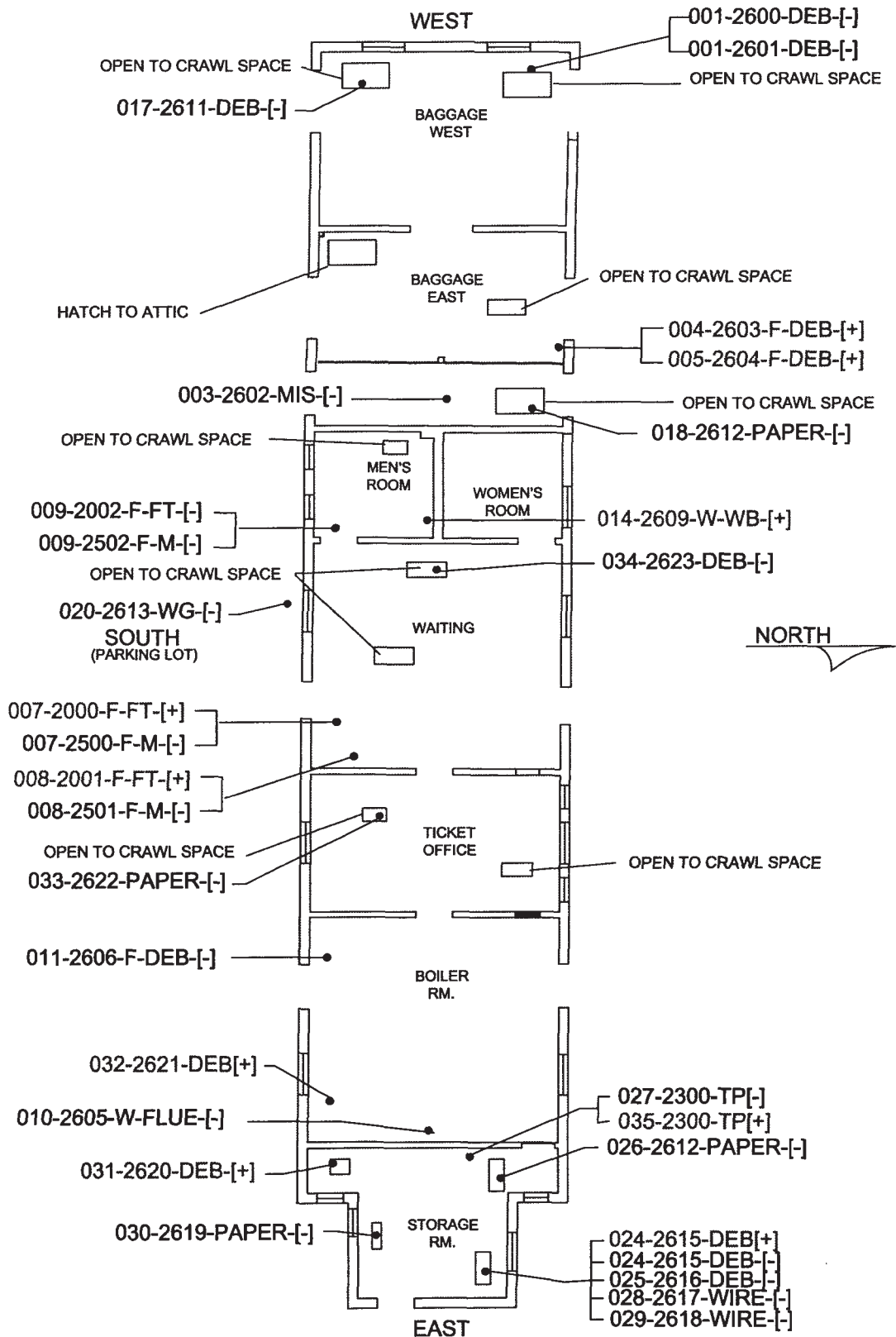
Michael J. Carey, Jr.

Project Coordinator

Floor Plans Showing All Sample Locations
With Sample Results and Laboratory Bulk
Asbestos Sample Results.....Appendix A



HARPERS FERRY NATIONAL HISTORICAL PARK	HARPERS FERRY TRAIN STATION		EXTERIOR
BLDG# N/A SITE CODE BA-02-01	DATE: AUGUST 5, 2002 DRAWN BY: TJT	ASBESTOS BULK SAMPLE LOCATIONS	DWG# HFTS-03



HARPERS FERRY NATIONAL
HISTORICAL PARK

HARPERS FERRY TRAIN STATION

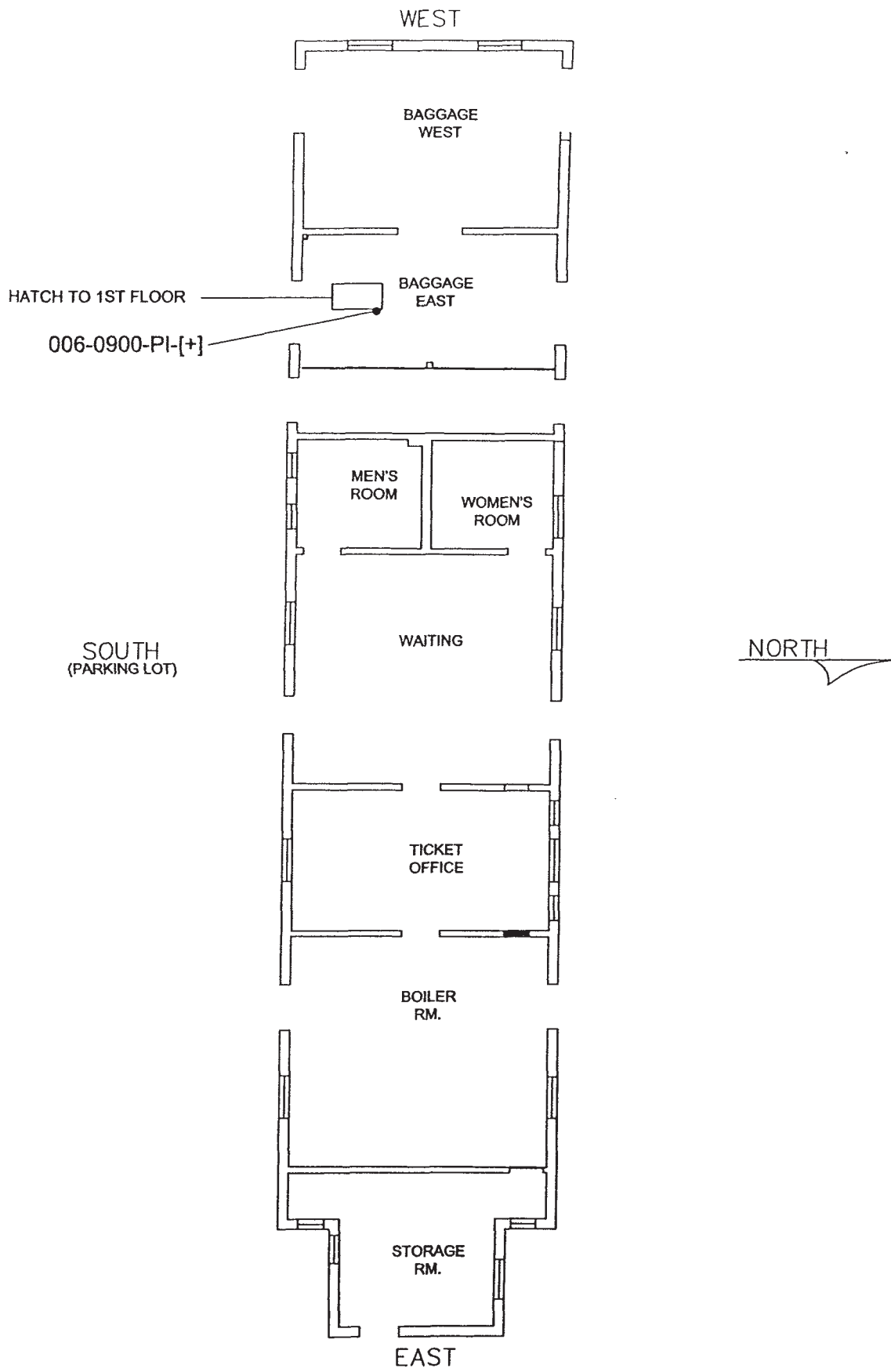
1ST FLOOR

BLDG# N/A
SITE CODE BA-02-01

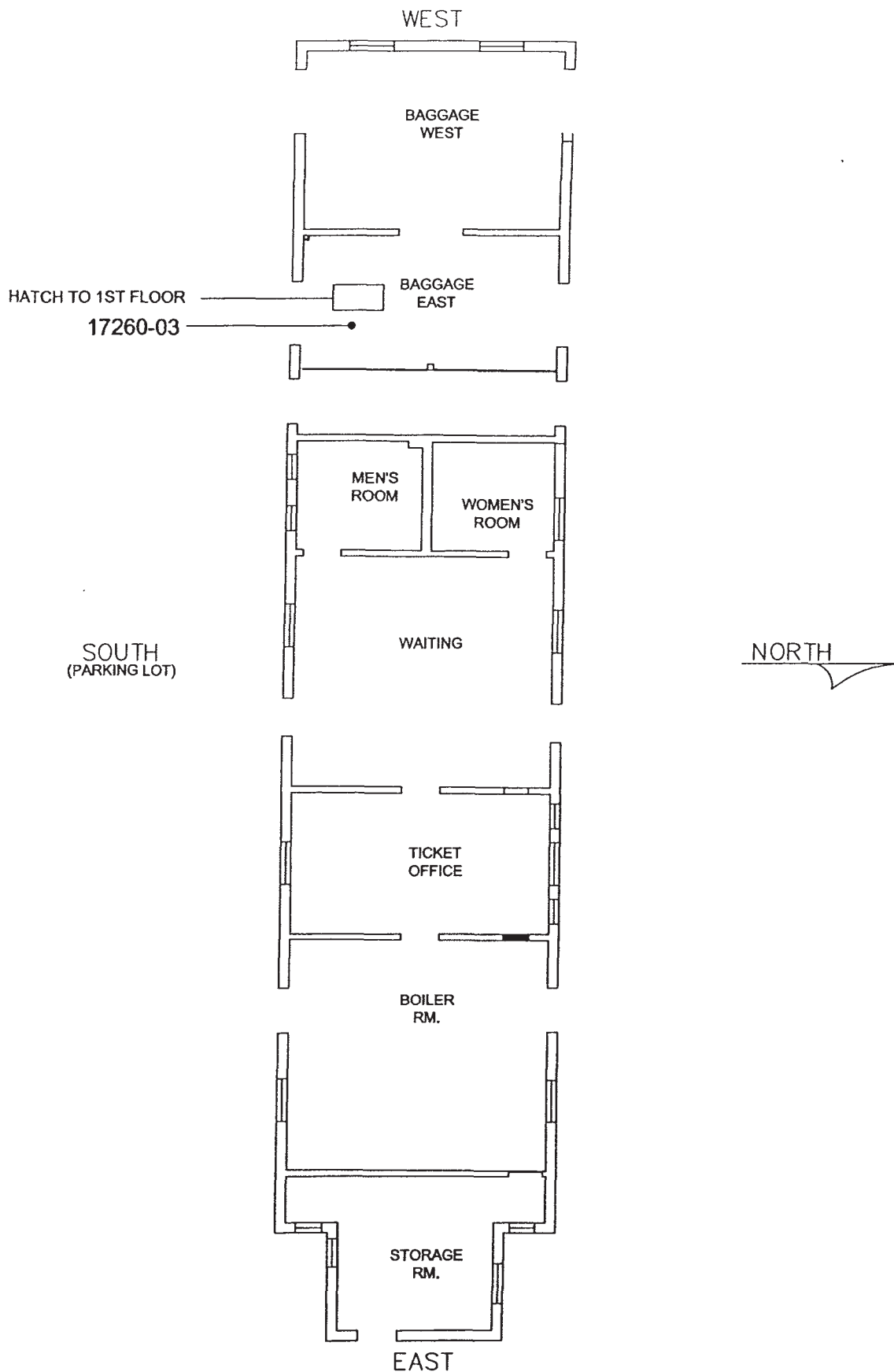
DATE: AUGUST 5, 2002
DRAWN BY: TJT

ASBESTOS BULK
SAMPLE LOCATIONS

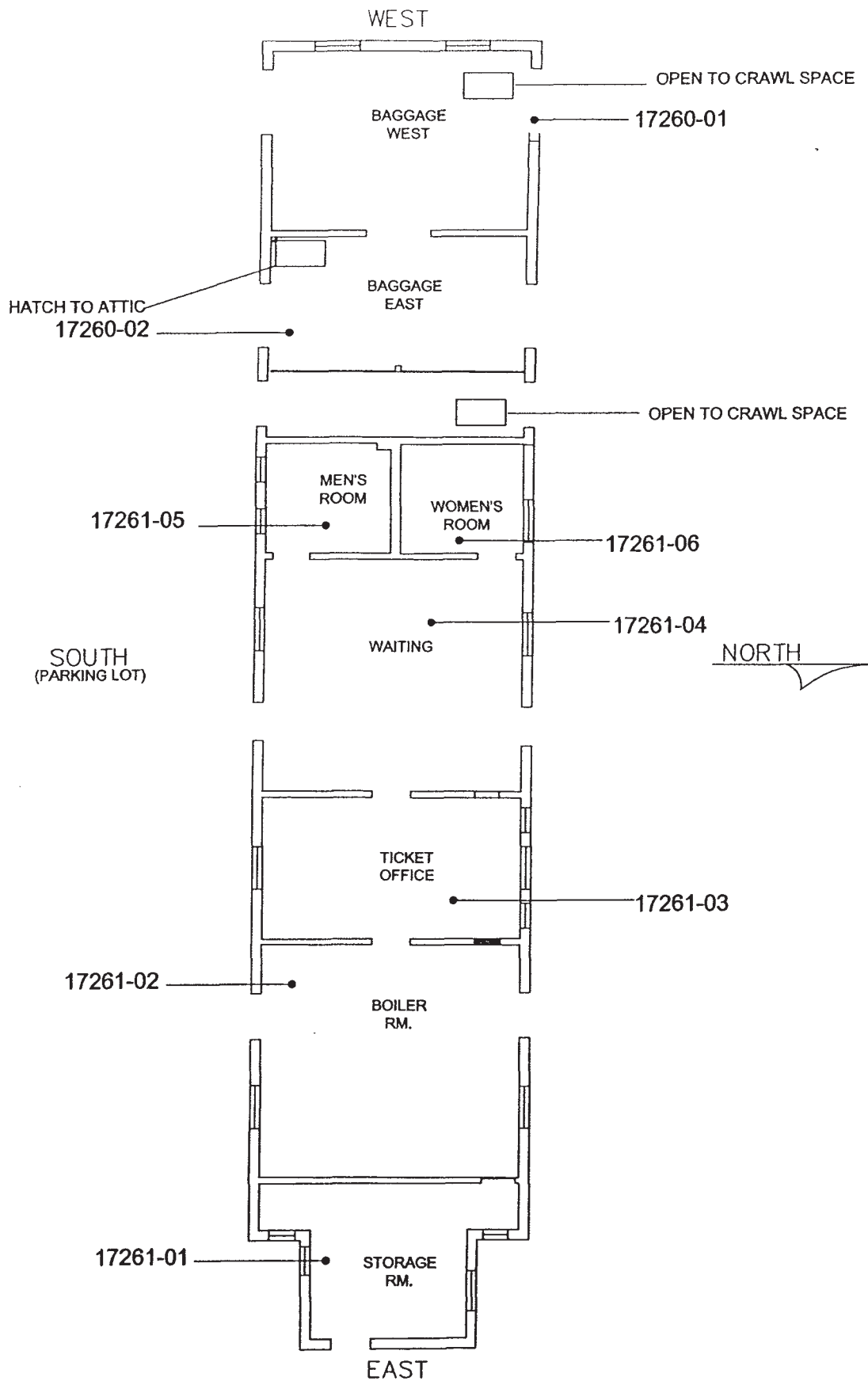
DWG# HFTS-04



HARPERS FERRY NATIONAL HISTORICAL PARK	HARPERS FERRY TRAIN STATION		ATTIC
BLDG# N/A SITE CODE BA-02-01	DATE: AUGUST 5, 2002 DRAWN BY: TJT	ASBESTOS BULK SAMPLE LOCATIONS	DWG# HFTS-05



HARPERS FERRY NATIONAL HISTORICAL PARK	HARPERS FERRY TRAIN STATION		ATTIC FLOOR
BLDG# N/A SITE CODE BA-02-01	DATE: AUGUST 5, 2002 DRAWN BY: TJT	ASBESTOS AIR SAMPLE LOCATIONS	DWG# HFTS-01



HARPERS FERRY NATIONAL HISTORICAL PARK	HARPERS FERRY TRAIN STATION		1ST FLOOR
BLDG# N/A SITE CODE BA-02-01	DATE: AUGUST 5, 2002 DRAWN BY: TJT	ASBESTOS AIR SAMPLE LOCATIONS	DWG# HFTS-02

**Functional Space Number / List of Rooms
and Floors for Functional Spaces.....**

Appendix B

Harpers Ferry National Historical Park

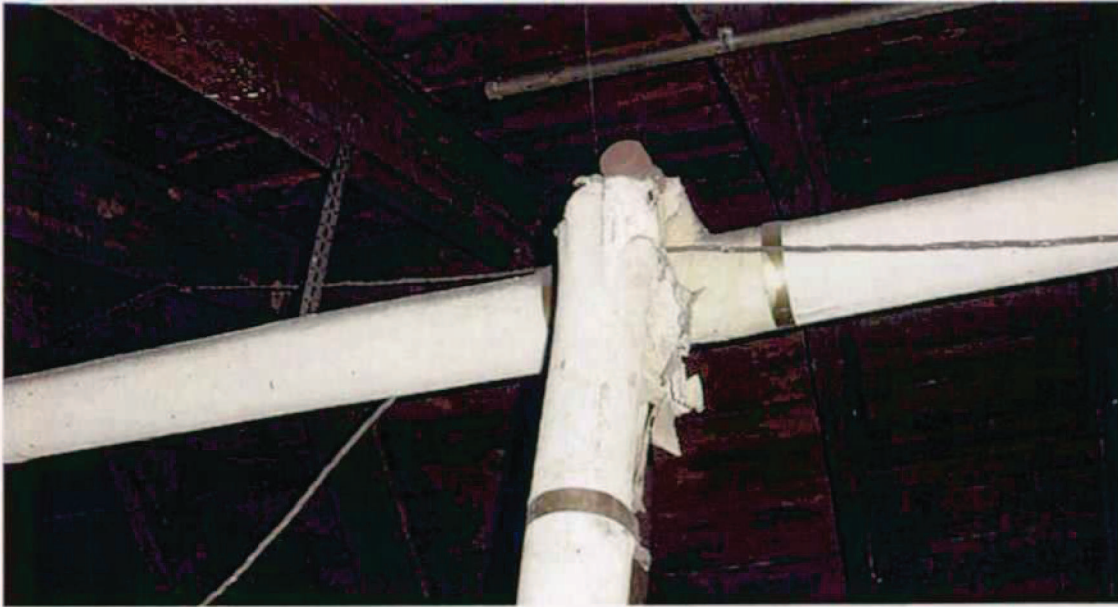
List of Rooms and Floors for Functional Spaces for Building #BA-02-01Site Code #HFTS

<u>Floor</u>	<u>FS#</u>	<u>Room Number/Name</u>
1	1001	Baggage Room
1	1002	Crawlspace
1	1003	Attic
1	1004	Waiting Room
1	1005	Men's Restroom
1	1006	Women's Restroom
1	1007	Ticket Office
1	1008	Boiler Room
1	1009	Storage Room
1	1010	Exterior
1	1011	Roof

Selected Material Photographs.....	Appendix C
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Harpers Ferry National Historical Park

Selected Material Photographs for Building #BA-02-01, Site Code #HFTS



HM: 0900

White block pipe insulation Block Pipe Insulation Pipe Insulation



HM: 2000

9" x 9" red floor tile Floor Tiles

Harpers Ferry National Historical Park

Selected Material Photographs for Building #BA-02-01, Site Code #HFTS



HM: 2500

Mastic a/w red floor tile Mastic (for Floor Tiles)



HM: 2501

Mastic a/w black floor tile Mastic (for Floor Tiles)

Harpers Ferry National Historical Park

Selected Material Photographs for Building #BA-02-01, Site Code #HFTS



HM: 2502

Mastic a/w white floor tile Mastic (for Floor Tiles)



HM: 2600

Black paper-like debris Other Miscellaneous

Harpers Ferry National Historical Park

Selected Material Photographs for Building #BA-02-01, Site Code #HFTS



HM: 2601

White debris Other Miscellaneous



HM: 2605

Flue mud Other Miscellaneous

Harpers Ferry National Historical Park

Selected Material Photographs for Building #BA-02-01, Site Code #HFTS



HM: 2607
Shingles Other Miscellaneous



HM: 2608
Roof felt Other Miscellaneous

Harpers Ferry National Historical Park

Selected Material Photographs for Building #BA-02-01, Site Code #HFTS



HM: 2609

Mastic under green wallboard Other Miscellaneous

Asbestos-Containing Building Material

Quantities by Homogeneous Material.....Appendix D

Harpers Ferry National Historical Park

Asbestos-Containing Building Material Quantities By Homogeneous Material For Building #BA-02-01, Site Code #HFTS

HID#	Material Type	Description	Floor	Room Number/Name	Remaining Quantity	Pos/Neg
0900	Block Pipe Insulation	White Block Pipe Insulation				Pos
			1	Attic	250 Linear Feet	
			1	Boiler Room	30 Linear Feet	
2000	Floor Tiles	9" X 9" Red Floor Tile				Pos
			1	Ticket Office	180 Square Feet	
			1	Waiting Room	180 Square Feet	
2001	Floor Tiles	9" X 9" Black Floor Tile				Pos
			1	Ticket Office	180 Square Feet	
			1	Waiting Room	180 Square Feet	
2300	Transite	Grey Transite Panels				Pos
			1	Storage Room	28 Square Feet	
2603	Other Miscellaneous	9" X 9" Red Floor Tile Debris				Pos
			1	Baggage Room	6 Square Feet	
2604	Other Miscellaneous	9" X 9" Black Floor Tile Debris				Pos
			1	Baggage Room	6 Square Feet	
2607	Other Miscellaneous	Shingles				Pos
			1	Roof	4,000 Square Feet	
2609	Other Miscellaneous	Mastic Under Green Wallboard				Pos
			1	Men's Restroom	900 Square Feet	
			1	Women's Restroom	900 Square Feet	
2615	Other Miscellaneous	White Debris				Pos
			1	Crawlspace	3 Square Feet	
2620	Other Miscellaneous	White Cementitious Debris				Pos
			1	Crawlspace	3 Square Feet	
2621	Other Miscellaneous	Grey Debris				Pos
			1	Crawlspace	4 Square Feet	

Asbestos-Containing Building Material

Quantities by Location.....Appendix E

Asbestos-Containing Building Material

Quantities by Location.....Appendix E

Harpers Ferry National Historical Park

Asbestos-Containing Building Material Quantities By Location For Building #BA-02-01, Site Code #HFTS

Floor	Room Number/Name	FS#	Material Type	Description	HID#	RAC Code#	Total Material
1	Attic	1003	Block Pipe Insulation	White Block Pipe Insulation	0900	1 250	Linear Feet
1	Baggage Room	1001	Other Miscellaneous	9" X 9" Red Floor Tile Debris	2603	5 6	Square Feet
			Other Miscellaneous	9" X 9" Black Floor Tile Debris	2604	5 6	Square Feet
1	Boiler Room	1008	Block Pipe Insulation	White Block Pipe Insulation	0900	1 30	Linear Feet
1	Crawlspace	1002	Other Miscellaneous	White Debris	2615	1 3	Square Feet
			Other Miscellaneous	White Cementitious Debris	2620	1 3	Square Feet
			Other Miscellaneous	Grey Debris	2621	1 4	Square Feet
1	Men's Restroom	1005	Other Miscellaneous	Mastic Under Green Wallboard	2609	8 900	Square Feet
1	Roof	1011	Other Miscellaneous	Shingles	2607	8 4000	Square Feet
1	Storage Room	1009	Transite	Grey Transite Panels	2300	1 28	Square Feet

Harpers Ferry National Historical Park

Asbestos-Containing Building Material Quantities By Location For Building #BA-02-01, Site Code #HFTS

Floor	Room Number/Name	FS#	Material Type	Description	HID#	RAC Code#	Total Material
1	Ticket Office	1007	Floor Tiles	9" X 9" Red Floor Tile	2000	5 180	Square Feet
			Floor Tiles	9" X 9" Black Floor Tile	2001	5 180	Square Feet
1	Waiting Room	1004	Floor Tiles	9" X 9" Red Floor Tile	2000	5 180	Square Feet
			Floor Tiles	9" X 9" Black Floor Tile	2001	5 180	Square Feet
1	Women's Restroom	1006	Other Miscellaneous	Mastic Under Green Wallboard	2609	7 900	Square Feet

List of All Positive Asbestos Homogeneous Areas by Homogenous Material.....	Appendix F
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Harpers Ferry National Historical Park
LIST OF ALL POSITIVE ASBESTOS HOMOGENEOUS AREAS
By Homogeneous Material for Building #BA-02-01, Site Code #HFTS

HID#	Material Type	Description	RAC Code#	FS#	Room Number/Name	Response
0900	Block Pipe Insulation	White Block Pipe Insulation				
			1	1003	Attic	Remove
			1	1008	Boiler Room	Remove
2000	Floor Tiles	9" X 9" Red Floor Tile				
			5	1007	Ticket Office	Remove
			5	1004	Waiting Room	Remove
2001	Floor Tiles	9" X 9" Black Floor Tile				
			5	1007	Ticket Office	Remove
			5	1004	Waiting Room	Remove
2300	Transite	Grey Transite Panels				
			1	1009	Storage Room	Remove
2603	Other Miscellaneous	9" X 9" Red Floor Tile Debris				
			5	1001	Baggage Room	Remove
2604	Other Miscellaneous	9" X 9" Black Floor Tile Debris				
			5	1001	Baggage Room	Remove
2607	Other Miscellaneous	Shingles				
			8	1011	Roof	Manage in Place
2609	Other Miscellaneous	Mastic Under Green Wallboard				
			8	1005	Men's Restroom	Manage in Place
			7	1006	Women's Restroom	Manage in Place

Harpers Ferry National Historical Park
LIST OF ALL POSITIVE ASBESTOS HOMOGENEOUS AREAS
By Homogeneous Material for Building #BA-02-01, Site Code #HFTS

HID#	Material Type	Description	RAC Code#	FS#	Room Number/Name	Response
2615	Other Miscellaneous	White Debris				
			1	1002	Crawlspace	Remove
2620	Other Miscellaneous	White Cementitious Debris				
			1	1002	Crawlspace	Remove
2621	Other Miscellaneous	Grey Debris				
			1	1002	Crawlspace	Manage in Place

List of All Positive Asbestos Homogeneous

Materials by RAC Code.....Appendix G

Harpers Ferry National Historical Park
LIST OF ALL POSITIVE ASBESTOS HOMOGENEOUS MATERIALS
By RAC Code For Building #BA-02-01, Site Code #HFTS

RAC Code#	HID#	Material Type	Description	FS#	Floor	Room Number/Name	Assessment
1							
	0900	Block Pipe Insulation	White Block Pipe Insulation	1003	1	Attic	Remove
	0900	Block Pipe Insulation	White Block Pipe Insulation	1008	1	Boiler	Remove
	2300	Transite	Grey Transite Panels	1009	1	Storage	Remove
	2615	Other Miscellaneous	White Debris	1002	1	Crawlspace	Remove
	2620	Other Miscellaneous	White Cementitious Debris	1002	1	Crawlspace	Remove
	2621	Other Miscellaneous	Grey Debris	1002	1	Crawlspace	Manage in Place
5							
	2000	Floor Tiles	9" X 9" Red Floor Tile	1004	1	Waiting	Remove
	2000	Floor Tiles	9" X 9" Red Floor Tile	1007	1	Ticket	Remove
	2001	Floor Tiles	9" X 9" Black Floor Tile	1004	1	Waiting	Remove
	2001	Floor Tiles	9" X 9" Black Floor Tile	1007	1	Ticket	Remove
	2603	Other Miscellaneous	9" X 9" Red Floor Tile Debris	1001	1	Baggage	Remove

Harpers Ferry National Historical Park
LIST OF ALL POSITIVE ASBESTOS HOMOGENEOUS MATERIALS
By RAC Code For Building #BA-02-01, Site Code #HFTS

RAC Code#	HID#	Material Type	Description	FS#	Floor	Room Number/Name	Assessment
	2604	Other Miscellaneous	9" X 9" Black Floor Tile Debris	1001	1	Baggage	Remove
7							
	2609	Other Miscellaneous	Mastic Under Green Wallboard	1006	1	Women's	Manage in Place
8							
	2607	Other Miscellaneous	Shingles	1011	1	Roof	Manage in Place
	2609	Other Miscellaneous	Mastic Under Green Wallboard	1005	1	Men's	Manage in Place

List of Homogeneous Materials.....Appendix H

Harpers Ferry National Historical Park

List Of Homogeneous Materials For Building #BA-02-01, Site Code #HFTS

Material Type	Description	HID#	Total Material Quantity	Pos/Neg
Block Pipe Insulation				
	White Block Pipe Insulation	0900	280 Linear Feet	Pos
Floor Tiles				
	12" X 12" White Floor Tile	2002	170 Square Feet	Neg
	9" X 9" Black Floor Tile	2001	360 Square Feet	Pos
	9" X 9" Red Floor Tile	2000	360 Square Feet	Pos
Mastic (for Floor Tiles)				
	Mastic A/w Black Floor Tile	2501	360 Square Feet	Neg
	Mastic A/w Red Floor Tile	2500	360 Square Feet	Neg
	Mastic A/w White Floor Tile	2502	170 Square Feet	Neg
Other Miscellaneous				
	9" X 9" Black Floor Tile Debris	2604	6 Square Feet	Pos
	9" X 9" Red Floor Tile Debris	2603	6 Square Feet	Pos
	Black 1" Diameter Wire Cloth	2617	15 Square Feet	Neg
	Black 1/2" Diameter Wire Cloth	2618	15 Square Feet	Neg
	Black Floor Material	2602	10 Square Feet	Neg
	Black Paper-like Debris	2600	10 Square Feet	Neg
	Black Tar Paper	2622	360 Square Feet	Neg
	Black Window Glazing (old)	2613	17 Square Feet	Neg
	Brown Paper Debris	2619	5 Square Feet	Neg
	Cream-colored Filler	2610	2 Square Feet	Neg
	Cream-colored Filler (corner)	2611	2 Square Feet	Neg
	Debris Under Floor	2606	4 Square Feet	Neg
	Flue Mud	2605	2 Square Feet	Neg
	Grey Debris	2621	4 Square Feet	Pos

Harpers Ferry National Historical Park

List Of Homogeneous Materials For Building #BA-02-01, Site Code #HFTS

Material Type	Description	HID#	Total Material Quantity	Pos/Neg
	Grey Miscellaneous Material	2623	1 Square Feet	Neg
	Mastic Under Green Wallboard	2609	1800 Square Feet	Pos
	Red & Black Paper	2612	2000 Square Feet	Neg
	Roof Felt	2608	4000 Square Feet	Neg
	Shingles	2607	4000 Square Feet	Pos
	White Cementitious Debris	2616	3 Square Feet	Neg
	White Cementitious Debris	2620	3 Square Feet	Pos
	White Debris	2601	15 Square Feet	Neg
	White Debris	2615	3 Square Feet	Pos
	White Paper-like	2624	3 Square Feet	Neg
	White Window Glazing	2614	1 Square Feet	Neg
Transite				
	Grey Transite Panels	2300	28 Square Feet	Pos

**List of Homogeneous Materials by Floor
and Room Name / Number.....Appendix I**

Harpers Ferry National Historical Park
LIST OF HOMOGENEOUS MATERIALS BY FLOOR AND ROOM NAME/NUMBER
For Building #BA-02-01, Site Code #HFTS

HID#	Floor	Room Number	Material Type	Description	FSID#	Quantity	Friability	Sample Number/QA	Pos/Neg
0900			Block Pipe Insulation	White block pipe insulation				HFTS-0A-006-0900	Pos
	1	Attic			1003	250 Linear Feet	Highly Friable		
	1	Boiler Room			1008	30 Linear Feet	Highly Friable		
2000			Floor Tiles	9" x 9" red floor tile				HFTS-01-007-2000	Pos
	1	Ticket Office			1007	180 Square Feet	Non-Friable		
	1	Waiting Room			1004	180 Square Feet	Non-Friable		
2001			Floor Tiles	9" x 9" black floor tile				HFTS-01-008-2001	Pos
	1	Ticket Office			1007	180 Square Feet	Non-Friable		
	1	Waiting Room			1004	180 Square Feet	Non-Friable		
2002			Floor Tiles	12" x 12" white floor tile				HFTS-01-009-2002	Neg
	1	Men's Restroom			1005	85 Square Feet	Non-Friable		
	1	Women's Restroom			1006	85 Square Feet	Non-Friable		
2300			Transite	Grey Transite Panels				HFTS-01-035-2300 HFTS-01-027-2300	Pos
	1	Storage Room			1009	28 Square Feet	Non-Friable		

Harpers Ferry National Historical Park
LIST OF HOMOGENEOUS MATERIALS BY FLOOR AND ROOM NAME/NUMBER
For Building #BA-02-01, Site Code #HFTS

HID#	Floor	Room Number	Material Type	Description	FSID#	Quantity	Friability	Sample Number/QA	Pos/Neg
2500			Mastic (for Floor Tiles)	Mastic a/w red floor tile					Neg
	1	Ticket Office			1007	180 Square Feet	Non-Friable		
	1	Waiting Room			1004	180 Square Feet	Non-Friable		
2501			Mastic (for Floor Tiles)	Mastic a/w black floor tile					Neg
	1	Ticket Office			1007	180 Square Feet	Non-Friable		
	1	Waiting Room			1004	180 Square Feet	Non-Friable		
2502			Mastic (for Floor Tiles)	Mastic a/w white floor tile					Neg
	1	Men's Restroom			1005	85 Square Feet	Non-Friable		
	1	Women's Restroom			1006	85 Square Feet	Non-Friable		
2600			Other Miscellaneous	Black paper-like debris				HFTS-01-001-2600	Neg
	1	Crawlspace			1002	10 Square Feet	Medium Friability		
2601			Other Miscellaneous	White debris				HFTS-01-002-2601	Neg
	1	Crawlspace			1002	15 Square Feet	Medium Friability		
2602			Other Miscellaneous	Black floor material				HFTS-01-003-2602	Neg
	1					Square Feet	Non-Friable		

Harpers Ferry National Historical Park
LIST OF HOMOGENEOUS MATERIALS BY FLOOR AND ROOM NAME/NUMBER
For Building #BA-02-01, Site Code #HFTS

HID#	Floor	Room Number	Material Type	Description	FSID#	Quantity	Friability	Sample Number/QA	Pos/Neg
	1	Baggage Room			1001	10 Square Feet	Non-Friable		
2603			Other Miscellaneous	9" x 9" red floor Tile debris				HFTS-01-004-2603	Pos
	1					Square Feet	Non-Friable		
	1	Baggage Room			1001	6 Square Feet	Non-Friable		
2604			Other Miscellaneous	9" x 9" black floor tile debris				HFTS-01-005-2604	Pos
	1					Square Feet	Non-Friable		
	1	Baggage Room			1001	6 Square Feet	Non-Friable		
2605			Other Miscellaneous	Flue mud				HFTS-01-010-2605 HFTS-01-010-2605-QC	Neg
	1	Boiler Room			1008	2 Square Feet	Medium Friability		
2606			Other Miscellaneous	Debris under floor				HFTS-01-011-2606	Neg
	1	Boiler Room			1008	4 Square Feet	Medium Friability		
2607			Other Miscellaneous	Shingles				HFTS-01-012-2607	Pos
	1	Roof			1011	4000 Square Feet	Non-Friable		
2608			Other Miscellaneous	Roof felt				HFTS-01-013-2608	Neg
	1	Roof			1011	4000 Square Feet	Non-Friable		

Harpers Ferry National Historical Park
LIST OF HOMOGENEOUS MATERIALS BY FLOOR AND ROOM NAME/NUMBER
For Building #BA-02-01, Site Code #HFTS

HID#	Floor	Room Number	Material Type	Description	FSID#	Quantity	Friability	Sample Number/QA	Pos/Neg
2609			Other Miscellaneous	Mastic under green wallboard				HFTS-01-014-2609	Pos
	1	Men's Restroom			1005	900 Square Feet	Non-Friable		
	1	Women's Restroom			1006	900 Square Feet	Medium Friability		
2610			Other Miscellaneous	Cream-colored filler				HFTS-01-015-2610	Neg
	1	Exterior			1010	2 Square Feet	Non-Friable		
2611			Other Miscellaneous	Cream-colored filler (corner)				HFTS-01-016-2611	Neg
	1	Exterior			1010	2 Square Feet	Non-Friable		
2612			Other Miscellaneous	Red & Black Paper				HFTS-01-026-2613 HFTS-01-018-2612	Neg
	1	Crawlspace			1002	2000 Square Feet	Medium Friability		
2613			Other Miscellaneous	Black Window Glazing (Old)				HFTS-OE-019-2613 HFTS-OE-020-2613 HFTS-OE-021-2613 HFTS-OE-022-2613	Neg
	1	Exterior			1010	17 Square Feet	Low Friability		
2614			Other Miscellaneous	White Window Glazing				HFTS-OE-023-2614	Neg
	1	Exterior			1010	1 Square Feet	Low Friability		

Harpers Ferry National Historical Park
LIST OF HOMOGENEOUS MATERIALS BY FLOOR AND ROOM NAME/NUMBER
For Building #BA-02-01, Site Code #HFTS

HID#	Floor	Room Number	Material Type	Description	FSID#	Quantity	Friability	Sample Number/QA	Pos/Neg
2615			Other Miscellaneous	White Debris				HFTS-01-024-2615	Pos
	1	Crawlspace			1002	3 Square Feet	Medium Friability		
2616			Other Miscellaneous	White Cementitious Debris				HFTS-01-025-2616	Neg
	1	Crawlspace			1002	3 Square Feet	Medium Friability		
2617			Other Miscellaneous	Black 1" Diameter Wire Cloth				HFTS-01-028-2617	Neg
	1	Crawlspace			1002	15 Square Feet	Highly Friable		
2618			Other Miscellaneous	Black 1/2" Diameter Wire Cloth				HFTS-01-029-2618	Neg
	1	Crawlspace			1002	15 Square Feet	Highly Friable		
2619			Other Miscellaneous	Brown Paper Debris				HFTS-01-030-2619	Neg
	1	Crawlspace			1002	5 Square Feet	Medium Friability		
2620			Other Miscellaneous	White Cementitious Debris				HFTS-01-031-2620	Pos
	1	Crawlspace			1002	3 Square Feet	Medium Friability		
2621			Other Miscellaneous	Grey Debris				HFTS-01-032-2621	Pos
	1	Crawlspace			1002	4 Square Feet	Medium Friability		

Harpers Ferry National Historical Park
LIST OF HOMOGENEOUS MATERIALS BY FLOOR AND ROOM NAME/NUMBER
For Building #BA-02-01, Site Code #HFTS

HID#	Floor	Room Number	Material Type	Description	FSID#	Quantity	Friability	Sample Number/QA	Pos/Neg
2622			Other Miscellaneous	Black Tar Paper				HFTS-03-033-2622	Neg
	1	Ticket Office			1007	360 Square Feet	Non-Friable		
2623			Other Miscellaneous	Grey Miscellaneous Material				HFTS-01-034-2600	Neg
	1	Waiting Room			1004	1 Square Feet	Medium Friability		
2624			Other Miscellaneous	White Paper-like				HFTS-01-017-2624	Neg
	1	Crawlspace			1002	3 Square Feet	Medium Friability		

Rac #1 & Rac #2 - Asbestos Materials Identified As Rac #1 Are In Need Of Immediate Action. The Situation Is Such That In Terms Of Both Damage And Exposure Potential, Immediate Isolation Of The Space Is Warranted And The Material Should Be Removed As Soon As Possible By A Certified Abatement Contractor. All Access To These Areas Of The Building Should Be Limited Until Corrective Action Is Complete.

Rac #3 - The Asbestos Materials Identified As Rac #3 Are Also Areas Where Repair Or Removal Is Necessary. However, Removal May Be Conducted As Part Of The Normal Maintenance And Repair Cycle Of The Facility, By An Asbestos Trained And Certified Abatement Contractor.

Rac #4 & #5 - The Asbestos Materials Identified As Rac #4 Or #5 Should Be Patched And Repaired Or Removed By An Asbestos Trained And Certified Abatement Contractor. If Patched And Repaired, The Materials Should Then Be Periodically Monitored To Verify The Integrity Of The Materials' Condition. Number Indicates Priority If All Repairs Cannot Be Completed Immediately. (eg: Rac #4 Materials Should Be Addressed Before Rac #5 Materials).

Rac #6, #7 & #8 - The Asbestos Materials Identified As Rac #6, #7 Or #8 Are In Good Condition. The Materials Show Little Or No Damage And Minimal Exposure. These Materials Should Be Monitored To Verify The Integrity Of The Materials' Condition And Their Protective Coverings. The Associated Number Indicates Priority For Removal.

Certificates of Analysis (Asbestos Bulk).....	Appendix K
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LABORATORY ANALYSIS REPORT

6601 Kirkville Road
E. Syracuse, NY 13057-0369
Phone: (315) 432-5227
Fax: (315) 437-0571
www.galsonlabs.com

Client : Criterion Laboratories, Inc.
Site : HFNHP
Project No. : BA-02-01
Date Sampled : 02-JUL-02
Date Received : 15-JUL-02
Date Analyzed : 22-JUL-02

Account No.: 15044
Login No. : L83696

Bulk Asbestos Analysis

Sample ID	Lab ID	Color	%Asb.	Type 1	%Asb.	Type 2	%Asb.	Type 3	%/Type Other Fibers
HFTS-01-001-2600	1	Off Wt/Brn	ND	NA	ND	NA	ND	NA	1-5 CE
HFTS-01-002-2601	2	Off Wt/Brn	ND	NA	ND	NA	ND	NA	65 CE
HFTS-01-003-2602	3	Brown/Red	ND	NA	ND	NA	ND	NA	50 CE
+ HFTS-01-004-2603	4	Brown/Red	1-5	CH	ND	NA	ND	NA	TR CE
+ HFTS-01-005-2604	5	Off Wt/Blk	1-5	CH	ND	NA	ND	NA	ND
HFTS-01-006-0900	6	Wt/Off Wt	50	CH	ND	NA	ND	NA	10 CE
+ HFTS-01-007-2000	7	Black/Red	15	CH	ND	NA	ND	NA	ND
+ HFTS-01-008-2001	8	Black	1-5	CH	ND	NA	ND	NA	TR CE
HFTS-01-009-2002	9	Tan/Gray	ND	NA	ND	NA	ND	NA	TR CE
HFTS-01-010-2605	10	Off Wt/Gry	ND	NA	ND	NA	ND	NA	TR CE
HFTS-01-011-2606	11	Black/Tan	ND	NA	ND	NA	ND	NA	10 CE
= HFTS-01-012-2607	12	Black/Brn	15	CH	ND	NA	ND	NA	35 CE
HFTS-01-013-2608	13	Black	ND	NA	ND	NA	ND	NA	80 CE
* HFTS-01-014-2609	14	Various	1-5	CH	ND	NA	ND	NA	80 CE
HFTS-01-015-2610	15	Off Wt/Tan	ND	NA	ND	NA	ND	NA	30 CE
HFTS-01-016-2611	16	Off Wt/Tan	ND	NA	ND	NA	ND	NA	10 CE

COMMENTS: Off Wt-Off White Brn-Brown Blk-Black Wt-White Gry-Gray
Various-Sample exhibits three or more colors.
+Chrysotile was found in tile.
= Chrysotile was found in tar.
*Chrysotile was found in green tile-like layer.
Field sampling was not performed by GALSON Laboratories.
Results are based on the sampling data provided by the client.

Analytical Method : Polarized light microscopy/
dispersion staining.
EPA 40 CFR Ch. 1 (7-1-87 Ed.)
Part 763, Subpart F, App. A.

Submitted by : MS/PW
Approved by : MS
Date : 22-JUL-02 QC by: *PWave*
NYSDOH # : 11626

TR- Trace(< 1%)
CE- Cellulose
FG- Fibrous Glass
SY- Synthetic

AC- Actinolite
AM- Amosite
AN- Anthophyllite
CH- Chrysotile

CR- Crocidolite
TM- Tremolite

NA- Not Applicable
NS- Not Specified
ND- Not Detected
> - Greater than

Results relate only to items analyzed, and may not be used to claim product endorsement by NVLAP or any US government agency. Laboratory accredited under NYS ELAP(#11626) and NVLAP(#101375-0). Measurement uncertainty records based on interlab analysis are on file, and are available upon request.



Asbestos Bulk Sample Chain of Custody Form v5.1

Date Collected: 7/02/02

Project Number: BA-02-01
 Site ID: HFNHP
 Building ID: HFTS
 Building Name: HARPERS FERRY TRAIN STATION

Page: 1 of 3

Sampled By: MJC

Building Serial Code: BA-02-01

Sample ID			Space Code	Post Sample Location	Floor	Comments	Results		
HM #	Material Code	Sample Number							
2600	2600	HFTS- 01- 001- 2600	1001	BAGGAGE ROOM - WEST END- FROM CRAW SPACE IN NORTHWEST CORNER (DEBRIS)	1 ST				
2601	2601	HFTS- 01- 002- 2601	1001	BAGGAGE ROOM - WEST END- FROM CRAW SPACE IN NORTHWEST CORNER (DEBRIS)	1 ST				
2602	2602	HFTS- 01- 003- 2602	1001	BAGGAGE ROOM - EAST END FROM TILE DEBRIS ALONG EAST WALL	1 ST				
2603	2603	HFTS- 01- 004- 2603	1001	BAGGAGE ROOM - EAST END - FROM TILE DEBRIS ALONG NORTH WALL (RED)	1 ST				
2604	2604	HFTS- 01- 005- 2604	1001	BAGGAGE ROOM - EAST END FROM TILE DEBRIS ALONG NORTH WALL (BLACK)	1 ST				
0900	0900	HFTS- 01- 006- 0900	1003	ATTIC - PIPE INSULATION - HATCH IN BAGGAGE ROOM - EAST END - SOUTHWEST CORNER	ATTIC				
2000	2000	HFTS- 01- 007- 2000	1004	WAITING ROOM - EAST SIDE BY WATER COOLER - RED TILE WITH WHITE SPECK	1 ST				
*2500	2500	HFTS- 01- 007- 2500	1004	WAITING ROOM - EAST SIDE - BY WATER COOLER - MASTIC UNDER RED TILE WITH WHITE SPECK	1 ST				
2001	2001	HFTS- 01- 008- 2001	1004	WAITING ROOM - EAST SIDE BY WATER COOLER - BACK TILE WITH WHITE SPECK	1 ST				

*2500 not rec'd

Turn Around Time: 8-5 Day hr 12hr 24hr 48hr Ex Relinquished By:

Method: PLM Standard PLM Point Count TEM Qual TEM Quar Date/Time:

Analyze to 1st Positive: Yes No

Transfer Results Electronically? Yes No

Courier Name:

Attention:

Special Instructions:

Received By:

Date/Time:

Laboratory:

Sealed Condition:

For Lab Use

7/15 @ 10:30

Gulson Labs

Yes No

Asbestos Bulk Sample Chain of Custody Form v5.1

Date Collected: 7/02/02

Project Number: BA-02-01
Site ID: HFNHP
Building ID: HFTS
Building Name: HARPERS FERRY TRAIN STATION

Page: 2 of 3
Sampled By: MJC
Building Serial Code: BA-02-01

Sample ID			Space Code	Post Sample Location	Floor	Comments	Results		
HM #	Material Code	Sample Number							
*2501	2501	HFTS-01-008 2501	1004	WAITING ROOM - EAST SIDE BY WATER COOLER - MASTIC UNDER BLACK TILE WITH WASTE STACK	1 st				
2002	2002	HFTS-01-009 2002	1005	MEN'S REST ROOM - 10'x10' WHITE FT - FROM SOUTH SIDE BY DOORWAY	1 st				
*2502	2502	HFTS-01-009 2502	1005	MEN'S REST ROOM - 10'x10' WHITE FT - FROM SOUTH SIDE BY DOORWAY - (MASTIC UNDER)	1 st				
2605	2605	HFTS-01-010 - 2605	1008	BOILER ROOM - EXHAUST FLUE MUD	1 st				
~~2605~~	~~2605~~	~~HFTS-01-010 - 2605-QC1~~	~~1008~~	~~BOILER ROOM - EXHAUST FLUE MUD~~	~~1st~~				
~~2605~~	~~2605~~	~~HFTS-01-010 - 2605-QC2~~	~~1008~~	~~BOILER ROOM - EXHAUST FLUE MUD~~	~~1st~~				
2606	2606	HFTS-01-011 - 2606	1008	BOILER ROOM - DESCRIBES FROM UNDER FLOOR SPACE	1 st				
2607	2607	HFTS-01-012 - 2607	1010	ROOF - BLACK SHINGLES FROM NORTH SIDE - ABOVE WAITING ROOM DOORWAY	External				
2608	2608	HFTS-01-013 - 2608	1010	ROOF - FLET PAPER UNDER BLACK SHINGLES - ABOVE WAITING ROOM DOORWAY	External				

*2501 + 2502
*NOT RECD

Turn Around Time: hr 12hr 24hr 48hr Ext. 3-5 Day Relinquished By:

Method: PLM Standard PLM Point Count TEM Qual TEM Qual Date/Time:

Analyze to 1st Positive: Yes No

Transfer Results Electronically? Yes No

Courier Name:

M. X. Carey
7/10/02 1130 (V2)
For Lab Use
Received By: [Signature]
Date/Time: 7/15 @ 10:30
Laboratory: Galson Labs

Attention:

Special Instructions:

Sealed Condition: Yes No

Asbestos Bulk Sample Chain of Custody Form v5.1

Date Collected: 7/02/02

Project Number: BA-02-01
Site ID: HFNHP
Building ID: HFTS
Building Name: HARPERS FERRY TRAIN STATION

Page: 3 of 3
Sampled By: MJC
Building Serial Code: BA-02-01

Sample ID			Space Code	Post Sample Location	Floor	Comments	Results		
HM #	Material Code	Sample Number							
2609	2609	HFTS- 01-014- 2609	1005	MEN'S RESTROOM - GREEN TILE LIKE WALL BOARD - FROM NORTH WALL IN EAST CORNER	1st				
2610	2610	HFTS- 01-015- 2610	1010	EXTENSION WALL - WOOD FILLER FROM SOUTH SIDE DOOR TO BAGGAGE ROOM	EXTEN				
2611	2611	HFTS- 01-016 - 2611	1010	EXTENSION WALL - WOOD FILLER CORNER - FROM SOUTH SIDE DOOR TO BAGGAGE ROOM	EXTEN				
		HFTS-							
		HFTS-							
		HFTS-							
		HFTS-							
		HFTS-							
		HFTS-							

Turn Around Time: ☐ hr ☐ 12hr ☐ 24hr ☐ 48hr Ext 3.5 Day Relinquished By: W. Carey

Method: PLM Standard PLM Point Count TEM Qual TEM Quar Date/Time: 7/10/02 1130HRS

Analyze to 1st Positive: ☒ Yes ☐ No

Transfer Results Electronically? ☒ Yes ☐ No

Courier Name: _____

Received By: Brian Bates

Date/Time: 7/15 @ 10:30

Laboratory: Gabson Labs

Sealed Condition: ☐ Yes ☐ No

Attention: _____

Special Instructions: _____

Asbestos Bulk Sample Report

Project #: BA-02-01

Building: Harper's Ferry Train Station

Site ID: HFNHP

Sample Date: 07/02/2002

Building ID: HFTS

Building Serial Code: BA-02-01

Sample #	Floor	Location/Description	Comments	Asbestos Type	%
01-010-2605-QC1	1st	Boiler room - exhaust flue mud		None Detected	

Asbestos Bulk Sample Chain of Custody Form v5.1

Date Collected: 7/02/02

Project Number: BA-02-01
 Site ID: HFNHP
 Building ID: HFTS
 Building Name: HARPERS FERRY TRAIN STATION

Page: 2 of 3
 Sampled By: MJC
 Building Serial Code: BA-02-01

Sample ID			Space Code	Post Sample Location	Floor	Comments	Results		
HM #	Material Code	Sample Number							
2501	2501	HFTS-01-008 2501	1004	WAITING ROOM - EAST SIDE BY WATER COOLER - MASTIC UNDER BLACK TILE WITH WHITE SPACK	1 st				
2002	2002	HFTS-01-009 2002	1005	MEN'S REST ROOM - 12'X10" WHITE FT - FROM SOUTH SIDE BY DOOR WAY	1 st				
2502	2502	HFTS-01-009 2502	1005	MEN'S REST ROOM - 12'X10" WHITE FT - FROM SOUTH SIDE BY DOOR WAY - (MASTIC UNDER)	1 st				
2605	2605	HFTS-01-010 - 2605	1008	BOILER ROOM - EXHAUST FLOE MUD	1 st				
2605	2605	HFTS-01-010 - 2605-QC1	1008	BOILER ROOM - EXHAUST FLOE MUD	1 st		off white compound Negative	black compound Negative	
2605	2605	HFTS-01-010 - 2605-QC2	1008	BOILER ROOM - EXHAUST FLOE MUD	1 st				
2606	2606	HFTS-01-011 - 2606	1008	BOILER ROOM - DEGRIDES FROM UNDER FLOOR SPACE	1 st				
2607	2607	HFTS-01-012 - 2607	1010	ROOF - BLACK SHINGLES FROM NORTH SIDE - ABOVE WAITING ROOM DOORWAY	Exterior				
2608	2608	HFTS-01-013 - 2608	1010	ROOF - FLET PAPER UNDER BLACK SHINGLES - ABOVE WAITING ROOM DOORWAY	Exterior				

Turn Around Time: 3-5 Day hr 12hr 24hr 48hr Ext

Method: PLM Standard PLM Point Count TEM Qual TEM Qual Date/Time: 7/10/02

Analyze to 1st Positive: Yes No

Transfer Results Electronically? Yes No

Courier Name: _____

Relinquished By: M. J. Carey

Received By: [Signature]

Date/Time: 7/15/02

Laboratory: Criterion Laboratories, Inc.

Sealed Condition: Yes No

Attention: _____

Special Instructions: _____



LABORATORY ANALYSIS REPORT

6601 Kirkville Road
E. Syracuse, NY 13057-0369
Phone: (315) 432-5227
Fax: (315) 437-0571
www.galsonlabs.com

Client : Criterion Laboratories, Inc.
Site : HFNHP/HFTS
Project No. : 020159 BA-02-01

Date Sampled : 26-FEB-03 Account No.: 15044
Date Received : 03-MAR-03 Login No. : L90635
Date Analyzed : 07-MAR-03 - 11-MAR-03

Bulk Asbestos Analysis

Sample ID	Lab ID	Color	%Asb.	Type 1	%Asb.	Type 2	%Asb.	Type 3	% / Type	
									Other	Fibers
HFTS-01-017-2611	1	Brn/Off Wt	ND	NA	ND	NA	ND	NA	95	CE
HFTS-01-018-2612	2	Brown/Red	ND	NA	ND	NA	ND	NA	90	CE
* HFTS-0E-019-2613	3	Brown/Blk	ND	NA	ND	NA	ND	NA	TR	CE
* HFTS-0E-020-2613	4	Various	ND	NA	ND	NA	ND	NA	TR	CE
* HFTS-0E-021-2613	5	Various	ND	NA	ND	NA	ND	NA	5	CE
* HFTS-0E-022-2613	6	Brown/Blk	ND	NA	ND	NA	ND	NA	TR	CE
* HFTS-0E-023-2614	7	White	ND	NA	ND	NA	ND	NA	ND	
HFTS-01-024-2615	8	Off Wt/Gry	45	CH	ND	NA	ND	NA	20	CE;FG
HFTS-01-025-2616	9	Various	ND	NA	ND	NA	ND	NA	5	CE;FG
HFTS-01-026-2612	10	Brown/Red	ND	NA	ND	NA	ND	NA	95	CE
* HFTS-01-027-2300	11	Gray	>1	CH	ND	NA	ND	NA	ND	
* HFTS-01-028-2617	12	Brown/Blk	ND	NA	ND	NA	ND	NA	70	CE
* HFTS-01-029-2618	13	Brown/Blk	ND	NA	ND	NA	ND	NA	65	CE
HFTS-01-030-2619	14	Brown	ND	NA	ND	NA	ND	NA	95	CE
HFTS-01-031-2620	15	Off Wt/Gry	40	CH	10	CR	ND	NA	10	CE;FG
HFTS-01-032-2621	16	Gray	40	CH	ND	NA	ND	NA	ND	

COMMENTS: Brn-Brown Off Wt-Off White Blk-Black Gry-Gray
Various-Sample exhibits three or more colors.
*Non-friable sample.
Field sampling was not performed by GALSON Laboratories.
Results are based on the sampling data provided by the client.
This report should not be reproduced, except in full, without the written approval of Galson Laboratories.

Analytical Method : Polarized light microscopy/
dispersion staining.
EPA 40 CFR Ch. 1 (7-1-87 Ed.)
Part 763, Subpart F, App. A.

Submitted by : SW/PAW

Approved by : SW

Date : 07-MAR-03 QC by: *PWeave*

NYSDOH # : 11626

TR- Trace(< 1%)

CE- Cellulose

FG- Fibrous Glass

SY- Synthetic

AC- Actinolite

AM- Amosite

AN- Anthophyllite

CH- Chrysotile

CR- Crocidolite

TM- Tremolite

NA- Not Applicable

NS- Not Specified

ND- Not Detected

> - Greater than

Results relate only to items analyzed, and may not be used to claim product endorsement by NVLAP or any US government agency. Laboratory accredited under NYS ELAP(#11626) and NVLAP(#101375-0). Measurement uncertainty records based on interlab analysis are on file, and are available upon request.



Asbestos Bulk Sample Chain of Custody Form v5.1

Project Number: BA-03-01
 Site ID: HFNH
 Building ID: HFTS
 Building Name: HARPER'S FERRY STRAIN STATION

Date Collected: 02/26/03
 Page: 1 of 2
 Sampled By: MJ
 Building Serial Code: BA-03-01

Sample ID			Space Code	Post Sample Location	Floor	Comments	Results		
HM #	Material Code	Sample Number							
2611	2611	HFTS-01-017- ~~2012~~	1002	FROM IN CRAW SPACE IN SOUTH WEST CORNER OF BAGGAGE AREA	1 st				
2612	2612	HFTS-01-018- 2612	1002	FROM CRAW SPACE ALONG WALL OF EAST BAGGAGE AREA - BETWEEN FLOOR	1 st	PAPER BOTTOM FLOOR BOARD JOISTS			
2613	2613	HFTS-0E-019- 2613	1010	FROM WEST EXTERIOR WALL WINDOW ON SOUTH END	EXTERIOR	WINDOW GLAZE OLD			
2613	2613	HFTS-0E-020- 2613	1010	FROM SOUTH EXTERIOR WALL WINDOW - MEN'S ROOM	EXTERIOR				
2613	2613	HFTS-0E-021- 2613	1010	FROM NORTH EXTERIOR WALL WINDOW OF SWITCH ROOM EAST	EXTERIOR				
2613	2613	HFTS-0E-022- 2613	1010	FROM NORTH EXTERIOR WALL - WINDOW OF TICKET OFFICE	EXTERIOR				
2614	2614	HFTS-0E-023- 2614	1010	FROM NORTH EXTERIOR WALL - WINDOW OF TICKET OFFICE	EXTERIOR	WINDOW GLAZE NEW			
2615	2615	HFTS-01-024- 2615	1002	FROM UNDER CRAW SPACE OF SWITCH ROOM - NORTH SIDE	1 st	DEBRIS - WASTE SOFT			
2616	2616	HFTS-01-025- 2616	1002	FROM UNDER CRAW SPACE OF SWITCH ROOM - NORTH WEST CORNER	1 st	WASTE			

Turn Around Time: 3 Day hr 12hr 24hr 48hr Ex

Method: R.M. Standard PIM Point Count TEM Qal EM Qan Date/Time:

Analyze to 1st Positive: Yes No

Transfer Results Electronically? Yes No

Courier Name: UPS 2nd Day

Relinquished By:

Received By:

Date/Time:

Laboratory:

Sealed Condition:

M. J. Kelly
Margaret Kelly 3:50pm
 For Lab Use

BA-03-03 10:13 RCVD

Yes No

Attention:

Special Instructions:

Asbestos Bulk Sample Chain of Custody Form v5.1

Project Number: BA-02-01
 Site ID: HFNHP
 Building ID: HFTS
 Building Name: HARPER'S FERRY TRAIN STATION

Date Collected: 02/26/03
 Page: 2 of 2
 Sampled By: MJC
 Building Serial Code: BA-02-01

Sample ID			Space Code	Post Sample Location	Floor	Comments	Results		
HM #	Material Code	Sample Number							
2617	2612	HFTS-01-026 2612	1002 1002	FROM IN CRAW SPACE IN SWITCH ROOM - NORTHWEST CORNER	1 st	RED PAPER BETWEEN FLOOR BOARD LAYERS			
2300	2300	HFTS-01-027 2300	1009	FROM BATTERY RACK	1 st	BACKING & SHEET.			
2617	2617	HFTS-01-028 2617	1002 1002	FROM IN CRAW SPACE IN SWITCH ROOM - NORTH SIDE	1 st	1" Dim. WIRE CLOTH			
2618	2618	HFTS-01-029 2618	1002 1002	FROM IN CRAW SPACE IN SWITCH ROOM - NORTH SIDE	1 st	1/2" Dim WIRE CLOTH			
2619	2619	HFTS-01-030 2619	1002 1002	FROM IN CRAW SPACE IN SWITCH ROOM - SOUTH SIDE	1 st	BROWN PAPER			
2620	2620	HFTS-01-031 2620	1002 1002	FROM IN CRAW SPACE IN SWITCH ROOM - SOUTH SIDE	1 st	DEBRIS			
2621	2621	HFTS-01-032- 2621	1002 1002	FROM IN CRAW SPACE IN BUILDING RM - SOUTH SIDE	1 st	DEBRIS			

Turn Around Time: 3 DAY Relinquished By:

Method: REM Standard PM Point Count EM Qual EM Qan Date/Time:

Analyze to 1st Positive: Yes No

Transfer Results Electronically? Yes No

Courier Name: U.P.S 2nd Day

Received By:

Date/Time:

Laboratory:

Sealed Condition:

M. J. Carey
Margaret Slippy 3:50 PM
 For Lab Use
Brian Smith
03-03-03 10:13 RCVD
03-03-03 10:13 RCVD
 Yes No

Attention: _____

Special Instructions: _____



LABORATORY ANALYSIS REPORT

6601 Kirkville Road
E. Syracuse, NY 13057-0369
Phone: (315) 432-5227
Fax: (315) 437-0571
www.galsonlabs.com

Client : Criterion Laboratories, Inc.
Site : HF NHP
Project No. : 020159
Date Sampled : 18-MAR-03
Date Received : 26-MAR-03
Date Analyzed :

Account No.: 15044
Login No. : L91389

Bulk Asbestos Analysis

Sample ID	Lab ID	Color	%Asb.	Type 1	%Asb.	Type 2	%Asb.	Type 3	%/Type Other Fibers
HFTS 01-033-2622	1	Brown/Blk	ND	NA	ND	NA	ND	NA	50 CE
HFTS 01-035-2623	2	Brown/Grn	ND	NA	ND	NA	ND	NA	10 CE
HFTS 01-035-2300	3	Brown/Gray	45	CH	ND	NA	ND	NA	1-5 CE

COMMENTS: Blk-Black Grn-Green

Field sampling was not performed by GALSON Laboratories.
Results are based on the sampling data provided by the client.
This report should not be reproduced, except in full, without the written approval of Galson Laboratories.

Analytical Method : Polarized light microscopy/
dispersion staining.
EPA 40 CFR Ch. 1 (7-1-87 Ed.)
Part 763, Subpart F, App. A.

Submitted by : SW/PAW

Approved by : PAW

Date : 28-MAR-03 QC by: *PWave*

NYSDOH # : 11626

TR- Trace(< 1%)

CE- Cellulose

FG- Fibrous Glass

SY- Synthetic

AC- Actinolite

AM- Amosite

AN- Anthophyllite

CH- Chrysotile

CR- Crocidolite

TM- Tremolite

NA- Not Applicable

NS- Not Specified

ND- Not Detected

> - Greater than

Results relate only to items analyzed, and may not be used to claim product endorsement by NVLAP or any US government agency. Laboratory accredited under NYS ELAP(#11626) and NVLAP(#101375-0). Measurement uncertainty records based on interlab analysis are on file, and are available upon request.



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Page: 1 of 1

Sampled By: M. J. Conry

Building Serial Code:

BA-03-01

HF NHP

14 FTS

HARPER'S FERRY TRAIN STATION

Turn Around Time: 12hr 12hr 24hr 48hr Ext

Method: PLM Standard PLM Point Count TEM Qual TEM Quant

Analyze to 1st Positive: Yes No

Transfer Results Electronically? Yes No

Attention: _____

Special Instructions: _____

Courier Name: Federal Express

Relinquished By: M. Carey M. Carey

Date/Time: 3/24/03 11:00 AM

For Lab Use

Received By: M. Krause AM

Date/Time: 3/26/03 10:15

Laboratory: GALSON Labs

Sealed Condition: Yes No

Special Instructions:

Sealed Condition:

No

1A, 28A

Certificates of Analysis (Asbestos Air Samples).....Appendix L



LABORATORY ANALYSIS REPORT

6601 Kirkville Road
E. Syracuse, NY 13057-0369
Phone: (315) 432-5227
Fax: (315) 437-0571
www.galsonlabs.com

Client : Criterion Laboratories, Inc.
Site : Harpers Ferry Train Station
Project No. : 020159
Date Sampled : 01-JUL-02 - 02-JUL-02 Account No.: 15044
Date Received : 15-JUL-02 Login No. : L83692
Date Analyzed : 18-JUL-02

Total Fiber Count

Sample ID	Lab ID	Fibers/ Fields	Fibers/ mm2	Fibers/ Filter	Air Volume (cc)	Fibers/ cc
17260-01	L83692-1	16.5/100	21	8085	1,267,720	0.006
17260-02	L83692-2	7/100	<13	<5000	1,283,180	<0.004
17260-03	L83692-3	4/100	<13	<5000	1,298,640	<0.004
17260-04 BLANK	L83692-4	0/100	<13	<5000	NA	NA
17261-01	L83692-5	1.5/100	<13	<5000	1,579,200	<0.003
17261-02	L83692-6	3/100	<13	<5000	1,565,100	<0.003
17261-03	L83692-7	1/100	<13	<5000	1,536,900	<0.003
17261-04	L83692-8	0/100	<13	<5000	1,494,600	<0.003
17261-05	L83692-9	2.5/100	<13	<5000	1,438,200	<0.003
17261-06	L83692-10	5.5/100	<13	<5000	1,424,100	<0.004
17261-07 BLANK	L83692-11	0/100	<13	<5000	NA	NA

COMMENTS: Field sampling was not performed by GALSON Laboratories.
Results are based on the sampling data provided by the client.

Sample Matrix : Air
Analytical Method : NIOSH 7400; PCM
Limit of Quantitation : 10 Fibers/ 100 Fields
Microscope field area : 0.00785 mm2
Filter collection area: 385 mm2

Submitted by : SKS
Approved by : PAW
Date : 18-JUL-02
QC by: *PW*
NYSDOH # : 11626

< -Less Than > -Greater Than ND -Not Detected
NA -Not Applicable cc -Cubic Centimeters NS -Not Specified
mm2 -Square millimeters

Intralaboratory & Interlaboratory relative standard deviation
records are on file and can be provided upon request.



Criterion Laboratories, Inc.

Asbestos Air Sample Log

Client Name: FOH
 Site Address: POTOMAC ST.
HARPER'S FERRY, WV.
 Site Location: HARPER'S FERRY TRAIN STATION

Sample No: 017200
 Project No.: 020159
 Date: 01-JULY-2002
 Day: MON

Sample Number	Type	Location	Pump Number	TIME			Flow Rate (L/Min)	Volume (L)	Fibers Per Fields	Fibers Per CC
				Start	Stop	Total Min.				
17260-01	2	BAGGAGE ROOM EAST SIDE IN NORTHWEST CORNER - ON NORTH WALL	62480	1720	1842	082	15.46 15.46	1267.72		
17260-02	2	BAGGAGE ROOM EAST SIDE IN MIDDLE OF ROOM	61749	1721	1844	083	15.46 15.46	1283.18		
17260-03	2	ATTIC AREA - ABOVE EAST AREA ROOM OF BAGGAGE IN NORTH EAST CORNER	62441	1732	1856	084	15.46 15.46	1298.64		
17260-04	5	QUALITY CONTROL BLANK								

TYPE...1 Area Sample 2 Pre-Test 3 Post-Test 4 Personal 5 Field Blank

FIELD TECH

M. J. Carey



CRITERION
LABORATORIES, INC.

Chain of Custody

Client Name: FOH Date Sampled: 01-July-2002
Sampling Location: Potomac Sp. Technician: M. J. Carey Jr
HARPERS FERRY WV. Project #: 020159
Material: Asbestos

HARPERS FERRY TRAIN Station

Type of Sample: (Air (PCM)) Bulk (PLM) Air (TEM) Other (3-5 Day)
Turnaround: On-Site 6 Hour 12 Hour 24 Hour 48 Hour

Sample #	Condition	Sample #	Condition	Sample #	Condition
<u>17260-01</u>	<u>Good</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>17260-02</u>	<u>Good</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>17260-03</u>	<u>Good</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>17260-04</u>	<u>Blank</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>

Total Number of Samples: 04

Results Reported To: M. J. Carey, Jr Fax (215) Phone #: 244-4349 By: 15-July-2002

Reports Sent To: AT END OF PROJECT

Samples Taken By: <u>M. J. Carey Jr</u>	Signature: <u>M. J. Carey Jr</u>	Date: <u>01-July-2002</u>
Transported By: <u>M. J. Carey Jr</u>	Signature: <u>M. J. Carey Jr</u>	Date: <u>03-July-2002</u>
Relinquished By: <u>M. J. Carey Jr</u>	Signature: <u>M. J. Carey Jr</u>	Date: <u>08-July-2002</u>
Received By: _____	Signature: _____	Date: _____
Relinquished By: <u>M. SLEPPY</u>	Signature: <u>M. Sleppy</u>	Date: <u>7/11/02</u>
Received By: <u>Prue Baxter</u>	Signature: <u>Prue Baxter</u>	Date: <u>7/15@10:30am</u>
Analyzed By: _____	Signature: _____	Date: _____

Comments: _____

Criterion Laboratories, Inc.

Asbestos Air Sample Log

Client Name: FOH
 Site Address: POTOMAC ST.
HARPER FERRY, WV.
 Site Location: HARPERS FERRY TRAIN STATION

Sample No: 17261
 Project No.: 020159
 Date: 02-JULY-2002
 Day: TUE

Sample Number	Type	Location	Pump Number	TIME			Flow Rate L/Min	Volume (L)	Fibers Per Fields	Fibers Per CC
				Start	Stop	Total Min.				
17261-01	2	STORAGE ROOM IN MIDDLE OF ROOM	62493	0843	1035	112	14.10 14.10	1579.20		
17261-02	2	BOILER ROOM IN MIDDLE OF ROOM	62439	0845	1036	111	14.10 14.10	1565.10		
17261-03	2	TICKET OFFICE IN NORTH EAST CORNER - ON EAST WALL	64477	0847	1036	109	14.10 14.10	1536.90		
17261-04	2	~~MALE RESTROOM~~ WAITING ROOM IN MIDDLE OF ROOM	61749	0851	1037	106	14.10 14.10	1494.60		
17261-05	2	~~WOMEN'S RESTROOM~~ MEN'S RESTROOM IN MIDDLE OF ROOM	62441	0855	1037	102	14.10 14.10	1438.20		
17261-06	2	~~WOMEN'S RESTROOM~~ IN MIDDLE OF ROOM	62480	0856	1037	101	14.10 14.10	1424.10		
17261-07	5	QUALITY CONTROL BLANK								

TYPE...1 Area Sample 2 Pre-Test 3 Post-Test 4 Personal 5 Field Blank

FIELD TECH

M. J. Carey



CRITERION

LABORATORIES, INC.

Chain of Custody

Client Name: FOH

Sampling Location: POTOMAC ST.

HARPERS FERRY WV,

Date Sampled: 02-July-2002

Technician: M.J. Carey Jr

Project #: 020159

Material: Asbestos

HARPERS FERRY TRAIN Station

Type of Sample: Air (PCM) Bulk (PLM) Air (TEM) Other

Turnaround: On-Site 6 Hour 12 Hour 24 Hour 48 Hour 3-5 Day

Sample #	Condition	Sample #	Condition	Sample #	Condition
17261-01	Good				
17261-02	Good				
17261-03	Good				
17261-04	Good				
17261-05	Good				
17261-06	Good				
17261-07	Blank				

Total Number of Samples: 07

Results Reported To: M.J. Carey Jr Phone #: FAX (215) 244-4349 By: 15-July-2002

Reports Sent To: AT END OF PROJECT

Samples Taken By:	<u>M.J. Carey Jr</u>	Signature:	<u>M.J. Carey Jr</u>	Date:	<u>02-July-2002</u>
Transported By:	<u>M.J. Carey Jr</u>	Signature:	<u>M.J. Carey Jr</u>	Date:	<u>03-July-2002</u>
Relinquished By:	<u>M.J. Carey Jr</u>	Signature:	<u>M.J. Carey Jr</u>	Date:	<u>08-July-2002</u>
Received By:		Signature:		Date:	
Relinquished By:	<u>M. Sleppy</u>	Signature:	<u>M. Sleppy</u>	Date:	<u>7/11/02</u>
Received By:	<u>Bruce Baxter</u>	Signature:	<u>Bruce Baxter</u>	Date:	<u>7/15 @ 10:30</u>
Analyzed By:		Signature:		Date:	

Comments: _____

Section 5 Removal Cost Estimate Summary

Asbestos:

These estimates are for budgeting purposes only and should not be used as a quote for removal of the materials. It is not our recommendation to remove these materials unless they are beyond repair, or planned demolition or renovation activities will disturb the materials. Estimates are based on recent pricing we have received from contractors performing similar work and may vary from actual prices obtained due to the actual scope of work, quantity of material removed, control measures specified and contractor work loads, etc. **Note: All footages need to be verified by the abatement contractor. Lead and Hazardous Materials:** A table such as you see below does not exist for these materials.

Building Harpers Ferry National Historical Park

1001

EPA Category	Suspect Material	HM	QTY.	Units	Removal Costs (low to high)
Category I	9" x 9" red floor Tile debris Other Miscellaneous	2603	6	Square Feet	\$500
Category I	9" x 9" black floor tile debris Other Miscellaneous	2604	6	Square Feet	\$500

Space Removal Costs: \$1,000 to \$1,000

1002

EPA Category	Suspect Material	HM	QTY.	Units	Removal Costs (low to high)
Category I	White Debris Other Miscellaneous	2615	3	Square Feet	\$500
Category I	White Cementitious Debris Other Miscellaneous	2620	3	Square Feet	\$500
Category I	Grey Debris Other Miscellaneous	2621	4	Square Feet	\$500

Space Removal Costs: \$1,500 to \$1,500

1003

EPA Category	Suspect Material	HM	QTY.	Units	Removal Costs (low to high)
Friable	White block pipe insulation BlockPipe Insulation	0900	250	Linear Feet	\$6250 to \$12500

Space Removal Costs: \$6,250 to \$12,500

Building Harpers Ferry National Historical Park**1004**

EPA Category	Suspect Material	HM	QTY.	Units	Removal Costs (low to high)
Category II	9" x 9" red floor tile Floor Tiles	2000	180	Square Feet	\$1080 to \$2160
Category II	9" x 9" black floor tile Floor Tiles	2001	180	Square Feet	\$1080 to \$2160
Space Removal Costs:					\$2,160 to \$4,320

1005

EPA Category	Suspect Material	HM	QTY.	Units	Removal Costs (low to high)
Category I	Mastic under green wallboard Other Miscellaneous	2609	900	Square Feet	\$5400 to \$10800
Space Removal Costs:					\$5,400 to \$10,800

1006

EPA Category	Suspect Material	HM	QTY.	Units	Removal Costs (low to high)
Category I	Mastic under green wallboard Other Miscellaneous	2609	900	Square Feet	\$5400 to \$10800
Space Removal Costs:					\$5,400 to \$10,800

1007

EPA Category	Suspect Material	HM	QTY.	Units	Removal Costs (low to high)
Category II	9" x 9" red floor tile Floor Tiles	2000	180	Square Feet	\$1080 to \$2160
Category II	9" x 9" black floor tile Floor Tiles	2001	180	Square Feet	\$1080 to \$2160
Space Removal Costs:					\$2,160 to \$4,320

1008

EPA Category	Suspect Material	HM	QTY.	Units	Removal Costs (low to high)
Friable	White block pipe insulation BlockPipe Insulation	0900	30	Linear Feet	\$750 to \$1500
Space Removal Costs:					\$750 to \$1,500

Building Harpers Ferry National Historical Park**1009**

EPA Category	Suspect Material	HM	QTY.	Units	Removal Costs (low to high)
Category II	Grey Transite Panels Transite	2300	28	Square Feet	\$500 to \$560

Space Removal Costs: \$500 to \$560

1011

EPA Category	Suspect Material	HM	QTY.	Units	Removal Costs (low to high)
Category I	Shingles Other Miscellaneous	2607	4,000	Square Feet	\$24000 to \$48000

Space Removal Costs: \$24,000 to \$48,000

Total Removal Costs: \$49,120 to \$95,300