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ASBESTOS CONTAINING MATERIAL RE-INSPECTION BUILDING 4 VOLUME 1 CNC
CHARLESTON SC
2/15/2000
BAT ASSOCIATES, INC.

Volume 1

**Asbestos-Containing Material Re-inspection
For Building 4
Charleston Naval Shipyard
Charleston, South Carolina**

Contract No. N2467-96-D-0998
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Prepared for:

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1.0 EXECUTIVE SUMMARY

BAT Associates, Inc. (BAT) was retained by the U.S. Department of the Navy, Southern Division (SouthDiv), Naval Facilities Engineering Command (NAVFACENGCOM) to perform an asbestos-containing material (ACM) re-inspection of Building 4 located at the Charleston Naval Shipyard (CNS) in Charleston, South Carolina.

A list of ACM identified in Building 4 is summarized in Table 1.0.

Table 1.0
Summary of Identified ACM

HA No.	Material Description	Sample Analysis Results	Approx. Quantity of ACM	NESHAP Category
4	Floor Tile, 9" x 9" dark green with white and gray w/ black mastic	Tile = 7-10% chrysotile, Mastic = 8-10% chrysotile	6,980 SF	Category I, non-friable
6	Floor Tile, 12" x 12" gold with yellow, brown and white w/ black mastic	Tile = NAD, Mastic = 8-10% chrysotile	2,020 SF	Category I, non-friable
7	Joint Sealer Compound, on drywall walls	1-2% chrysotile	3,200 SF	Category I, non-friable
8	Pipe Insulation, 6" white with canvas wrap	15-20% chrysotile, 15-20% amosite	320 LF	Regulated, friable
10	Pipe Insulation, 3" white with canvas wrap	15-35% chrysotile, 15-20% amosite	320 LF	Regulated, friable
11	Pipe Fitting Insulation, 3" white with canvas wrap	10-20% chrysotile, 10-20% amosite	31 EA	Regulated, friable
12	Pipe Insulation, 2" white with canvas wrap	15-20% chrysotile, 15% amosite	320 LF	Regulated, friable
13	Pipe Fitting Insulation, 2" white with canvas wrap	7-10% chrysotile, 10-15% amosite	31 EA	Regulated, friable
14	Pipe Insulation, 3" white with canvas wrap	10-15% chrysotile, 15-20% amosite	320 LF	Regulated, friable
15	Pipe Fitting Insulation, 3" white with canvas wrap	15-20% chrysotile, 10-20% amosite	31 EA	Regulated, friable
17	Pipe Fitting Insulation, 3" white with canvas wrap	5-20% chrysotile, 20-25% amosite	31 EA	Regulated, friable
18	Pipe Insulation, 3" white with canvas wrap	10-20% chrysotile, 20-25% amosite	320 LF	Regulated, friable
19	Pipe Fitting Insulation, 3" white with canvas wrap	2% amosite	10 EA	Regulated, friable
20	Pipe Fitting Insulation, 3" white with canvas wrap and black mastic	Insulation = 1-2% amosite, Mastic = 5% chrysotile	16 EA	Regulated, friable
21	Pipe Fitting Insulation, 3" white with canvas wrap	1-3% chrysotile, 30-35% amosite	30 EA	Regulated, friable
22	Floor Tile, 9" x 9" green with dark green w/ black mastic	Tile = 1-3% chrysotile, Mastic = 3-5% chrysotile	6,480 SF	Regulated, friable

HA No.	Material Description	Sample Analysis Results	Approx. Quantity of ACM	NESHAP Category
23	Floor Tile, 9" x 9" light brown w/ black mastic	Tile = 5-6% chrysotile, Mastic = 3-5% chrysotile	240 SF	Regulated, friable
25	Floor Tile, 9" x 9" black with white streaks w/ black mastic	Tile = 7-10% chrysotile, Mastic = < 1% chrysotile	320 SF	Regulated, friable
27	Floor Tile, 9" x 9" cream with brown w/ black mastic	Tile = 8-10% chrysotile, Mastic = 4-5% chrysotile	7,600 SF	Regulated, friable
30	Floor Tile, 9" x 9" black and brown checkered w/ black mastic	Tile = 4-5% chrysotile, Mastic = NAD	2,300 SF	Regulated, friable
31	Ceiling Tile, 2' x 2' white with pinholes	3-5% amosite	130 SF	Regulated, friable
32	Floor Tile, 12" x 12" white with blue w/ brown mastic	Tile = 15-20% chrysotile, Mastic = 1-2% chrysotile	780 SF	Regulated, friable
33	Spray-Applied Popcorn-Type Ceiling Finish	5-7% chrysotile	760 SF	Regulated, friable
34	Pipe Insulation, 3" white with canvas wrap	20-25% chrysotile	225 LF	Regulated, friable
35	Pipe Insulation, 3" white with canvas and aluminum wrap	15-20% chrysotile, 10-20% amosite	225 LF	Regulated, friable
36	Pipe Insulation, 6" white with canvas wrap	10-15% chrysotile, 15-20% amosite	225 LF	Regulated, friable

- NOTES:** HA = Homogeneous Area SF = Square Feet
- One percent or less asbestos content is considered a non-asbestos-containing material by EPA and the State of South Carolina.
 - Federal and state regulations require a minimum of three non-asbestos-containing analysis results per homogeneous area (material) to classify that material as being a non-asbestos-containing material. However, one "positive" asbestos-containing analysis result would classify that material as being an asbestos-containing material.
 - No Quality Control discrepancies were noted.

BAT recommends the following management actions for the identified ACM in Building 4 in Table 2.0.

**Table 2.0
 Recommended Response Actions**

HA No.	Material Description	Recommended Response Action
4	Floor Tile, 9" x 9" dark green with white and gray w/ black mastic	Repair and O&M Plan
6	Floor Tile, 12" x 12" gold with yellow, brown and white w/ black mastic	O&M Plan
7	Joint Sealer Compound, on drywall walls	Repair and O&M Plan
8	Pipe Insulation, 6" white with canvas wrap	Repair and O&M Plan
10	Pipe Insulation, 3" white with canvas wrap	Repair and O&M Plan
11	Pipe Fitting Insulation, 3" white with canvas wrap	Repair and O&M Plan
12	Pipe Insulation, 2" white with canvas wrap	Repair and O&M Plan

HA No.	Material Description	Recommended Response Action
13	Pipe Fitting Insulation, 2" white with canvas wrap	Repair and O&M Plan
14	Pipe Insulation, 3" white with canvas wrap	Repair and O&M Plan
15	Pipe Fitting Insulation, 3" white with canvas wrap	Repair and O&M Plan
17	Pipe Fitting Insulation, 3" white with canvas wrap	Repair and O&M Plan
18	Pipe Insulation, 3" white with canvas wrap	Repair and O&M Plan
19	Pipe Fitting Insulation, 3" white with canvas wrap	Repair and O&M Plan
20	Pipe Fitting Insulation, 3" white with canvas wrap and black mastic	Repair and O&M Plan
21	Pipe Fitting Insulation, 3" white with canvas wrap	Repair and O&M Plan
22	Floor Tile, 9" x 9" green with dark green w/ black mastic	Repair and O&M Plan
23	Floor Tile, 9" x 9" light brown w/ black mastic	Repair and O&M Plan
25	Floor Tile, 9" x 9" black with white streaks w/ black mastic	Repair and O&M Plan
27	Floor Tile, 9" x 9" cream with brown w/ black mastic	Repair and O&M Plan
30	Floor Tile, 9" x 9" black and brown checkered w/ black mastic	Repair and O&M Plan
31	Ceiling Tile, 2' x 2' white with pinholes	Repair and O&M Plan
32	Floor Tile, 12" x 12" white with blue w/ brown mastic	Repair and O&M Plan
33	Spray-Applied Popcorn-Type Ceiling Finish	O&M Plan
34	Pipe Insulation, 3" white with canvas wrap	Repair and O&M Plan
35	Pipe Insulation, 3" white with canvas and aluminum wrap	Repair and O&M Plan
36	Pipe Insulation, 6" white with canvas wrap	Repair and O&M Plan

Other suspect ACM not identified could be present in areas of the building inaccessible to the asbestos building inspectors. For example, materials could exist in walls and other locations where access could only be gained by demolition of the building. Also, other materials currently not recognized by the asbestos building inspection industry could exist.

The total estimated cost for the removal of the identified and/or assumed ACM in Building 4 is approximately \$173,500. See Section 10.0 for a break down of the preliminary cost estimate for the removal of the identified or assumed ACM.

2.0 BUILDING INSPECTION INFORMATION FORM

Building Name: Administrative Office
Building Number: 4
Facility: Charleston Naval Shipyard
Building Area (square footage): 96,000
Year Built: 1918
Building Type: Offices
No. of Floors in Building: Five
Purpose of ACM Survey: Re-Inspection
Facility Unit Identification Code (UIC): N/A

Building Contact: Mr. Matthew Humphrey
Contact's Telephone No.: (843) 743-9985 ext.29
Building Survey Date(s): October 26, 1999

Asbestos Inspector's Name: Mr. Jason McGlashan
Asbestos Inspector's Accreditation No: GA2594
Inspection Company: BAT Associates, Inc.
Company Telephone No. (770) 242-3908

3.0 INTRODUCTION

BAT Associates, Inc. (BAT) was retained by the U.S. Department of the Navy, Southern Division (SouthDiv), Naval Facilities Engineering Command (NAVFACENGCOM) to perform an asbestos-containing material (ACM) re-inspection of all buildings located at the Charleston Naval Shipyard in Charleston, South Carolina. The purpose of this re-inspection was to:

1. Perform a comprehensive ACM re-inspection of 34 buildings in accordance with Federal and U.S. Navy requirements;
2. Assess the condition of previously identified friable and non-friable ACM; and
3. Provide a preliminary cost estimate for the removal of identified ACM.

The re-inspection was performed in accordance with the Navy's Asbestos Facility Inventory/Assessment Protocol (NEESA 70.2-010) and the U.S. Environmental Protection Agency's (USEPA) Asbestos Hazard Emergency Response Act (AHERA) and the Asbestos School Hazard Abatement Reauthorization Act (ASHARA).

The results of the re-inspection survey are presented in 23 separate volume reports. This report describes the results for Building 4.

This re-inspection survey was performed by Mr. Jason McGlashan, under the direct supervision of Mr. Douglas J. Milton, CIH, on October 26, 1999. Mr. McGlashan is an accredited asbestos building inspectors. Mr. Milton, a Certified Industrial Hygienist, is an accredited asbestos inspector, management planner, and project designer.

This report discusses the sampling methodology used during the re-inspection and assessment (Section 4.0); a list of all identified suspect materials (Section 5.0); a summary of the bulk sample analysis results (Section 6.0); results of quality control sampling; (Section 7.0); physical assessments of the identified ACM (Section 8.0); a hazard assessment of the identified ACM (Section 9.0); preliminary cost estimates for removal (Section 10.0); and conclusions (Section 11.0). Appendix A contains drawings identifying the location of previous and recently collected bulk samples and the locations of identified ACM. Appendix B contains photographic documentation of identified ACM. Appendix C contains personnel and laboratory accreditations. Appendix D contains laboratory analysis results.

The assessment protocol for ACM involved three distinct steps:

1. Performed preliminary walk-through of the building to identify suspect ACM and to determine the amount of suspect ACM, to define the number of samples to be collected, to identify access problems (e.g., collection of samples in a limited access pipe chase below the building), and to determine the degree of personal protection necessary for the bulk sample collection.

2. Visually inspected the building for ACM to identify the location of the suspect ACM and to determine if the material was friable or non-friable. Suspect materials were then categorized according to the EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) for asbestos as: Category I non-friable materials, Category II non-friable materials, and Regulated (friable) Asbestos-Containing Materials (RACM).
3. Collected bulk samples for the analysis for asbestos content (see Section 4.0, *Sampling Methodology*, for details).

4.0 SAMPLE METHODOLOGY

Representative, randomly selected bulk samples were collected in accordance with the Navy's and AHERA sampling protocol, as described in 40 CFR 763.86, and in accordance with BAT's contract requirements. Bulk samples were collected from homogenous areas (materials) in a manner that minimized any release of airborne asbestos fibers. A homogeneous area (material) is defined as a material uniform in size, color and texture.

The minimum number of samples collected from each homogeneous area was as follows:

1. *Friable Spray-Applied or Trowel-Applied Material (including plaster)*
 - a. Less than or equal to 1,000 Square Feet (S.F.) = 3 samples
 - b. Greater than 1,000 S.F. and less than or equal to 5,000 S.F. = 5 samples
 - c. Greater than 5,000 = 7 samples
2. *Pipe and Duct Insulation*
 - a. Three samples per homogeneous area of insulation.
3. *Elbows, Valves, Fittings, and Connection Mud*

Three representative samples from each type of insulated elbow, valve, fitting, and connection mud.
4. *Boiler, Tanks, and Furnaces*

A minimum of 3 samples per unit.
5. *Patchwork*

Patchwork is defined as a patch or repair to existing material based on the following quantities:

 - a. Surfacing material patches are limited to a maximum of 6 S.F.

- b. Pipe and duct insulation patches are limited to a maximum of 6 Linear Feet (L.F.) or 6 S.F.
- c. Boiler, tank, and furnace patches are limited to 6 S.F.

If the patchwork exceeded the limits prescribed above, it was sampled according to the homogeneous area protocol in items 1 to 4 above. If a material qualifies as patchwork, a single sample was collected per patch.

6. *Ceiling or Acoustical Tile*

3 samples

7. *Miscellaneous Friable Material*

3 samples

8. *Non-Friable Material*

Non-friable materials for purpose of this survey included Transite-type panels, floor tiles, floor tile mastic, and other miscellaneous materials.

Minimum of 3 samples.

The procedures followed for collection of each bulk sample is outlined briefly below:

1. The accredited inspector collecting the sample was equipped with the appropriate personal protective equipment. This included a half-mask air-purifying respirator, protective gloves and protective eyewear.
2. The surface of the material being sampled was wetted with amended water (containing a surfactant to aid penetration) mist to lessen the risk of fiber release during sampling.
3. Each sample was extracted using the appropriate equipment, (e.g., a sample container, knife, core borer). Care was taken to insure that all layers of the suspect materials, down to the substrate, were included in the sample.
4. Each sample was placed in an individual container which was then sealed and labeled with a unique identification number which was also recorded on the sample data log-in sheet.
5. After each sample was collected, the area immediately surrounding the sampling location was inspected for debris and wet-cleaned as necessary to lessen the risk of an airborne fiber release.

6. All necessary data were recorded on the BAT Suspect Material Inventory Form including sample number, sample location, type of suspect material, name of inspector collecting the sample and other relevant information.
7. Samples were then transported to Cape Environmental Management Inc. (CAPE) Asbestos Laboratories in Atlanta, Georgia, for Polarized Light Microscopy (PLM) analysis. The CAPE Asbestos Laboratory participates in the National Voluntary Laboratory Assurance Program (NVLAP) for the analysis of asbestos content in suspect materials. CAPE's NVLAP Laboratory Code is 102111-0.
8. BAT collected duplicate samples during the collection of primary bulk sampling for quality control (QC) purposes. QC samples were collected at ten percent of the bulk sample locations. They were assigned unrelated sample identification numbers and analyzed by Analytical Environmental Services, Inc. (AES). AES participates in the National Voluntary Laboratory Assurance Program (NVLAP) for the analysis of asbestos content in suspect materials. AES's NVLAP Laboratory Code is 102033-0.
9. Upon receipt by the laboratory, the samples were logged in and assigned a unique laboratory identification number. The laboratory analyzed the samples in accordance with 40 CFR 763.87 subpart F. Copies of the laboratory accreditations for both laboratories may be found in Appendix D.

5.0 ASBESTOS INVENTORY AND ASSESSMENT

Table 3.0 describes the suspect ACM identified in and around Building 4.

**Table 3.0
 Summary of Identified Suspect ACM**

HA No.	Description of Suspect ACM	Location of Suspect ACM	AHERA Category of Material
1	Ceiling Tile, 1' x 1' beige with pinholes	First floor, southeast end of building; third floor, south side of building	N/A
2	Ceiling Tile, 1' x 1' gray with random fissures	First floor, southeast end of building	N/A
3	Floor Tile, 12" x 12" cream with black, gray and white w/ yellow mastic	Second floor, southeast end of building	N/A
4	Floor Tile, 9" x 9" dark green with white and gray w/ black mastic	First floor, middle to west end of building	Misc.
5	Floor Tile, 12" x 12" gold with yellow, brown and white w/ black mastic	Throughout the building	N/A
6	Floor Tile, 12" x 12" gold with yellow, brown and white w/ black mastic	First floor, southwest end of building	Misc.
7	Joint Sealer Compound, on drywall walls	Throughout the building	Misc.
8	Pipe Insulation, 6" white with canvas wrap	First floor, along north side of building	TSI
9	Pipe Fitting Insulation, 6" white with canvas wrap	First floor, along north side of building	N/A
10	Pipe Insulation, 3" white with canvas wrap	First floor, along south side of building	TSI
11	Pipe Fitting Insulation, 3" white with paper wrap	First floor, along south side of building	TSI
12	Pipe Insulation, 2" white with canvas wrap	Second floor, along north side of building	TSI
13	Pipe Fitting Insulation, 2" white with canvas wrap	Second floor, along north side of building	TSI
14	Pipe Insulation, 3" white with canvas wrap	Second floor, along south side of building	TSI
15	Pipe Fitting Insulation, 3" white with canvas wrap	Second floor, along north, east and west sides of building	TSI
16	Pipe Insulation, 3" white with paper wrap	Not identified during re-inspection	N/A
17	Pipe Fitting Insulation, 3" white with canvas wrap	Third floor, along north side of building	TSI
18	Pipe Insulation, 3" white with canvas wrap	Third floor, along north side of building	TSI

HA No.	Description of Suspect ACM	Location of Suspect ACM	AHERA Category of Material
19	Pipe Fitting Insulation, 3" white with canvas wrap	Second floor, mechanical room	TSI
20	Pipe Fitting Insulation, 3" white with canvas wrap and black mastic	First floor, mechanical room	TSI
21	Pipe Fitting Insulation, 3" white with canvas wrap	Third floor, along south side of building	TSI
22	Floor Tile, 9" x 9" green with dark green w/ black mastic	First floor, mechanical room, and rooms in Zone 1 and Zone 2	Misc.
23	Floor Tile, 9" x 9" light brown w/ black mastic	First floor, east end corridor below HA #4	Misc.
24	Floor Tile, 12" x 12" dark green with white w/ black mastic	First floor, by northeast exit	N/A
25	Floor Tile, 9" x 9" black with white streaks w/ black mastic	First floor, southeast end	Misc.
26	Floor Tile, 9" x 9" cream with pink and white w/ brown mastic	Second floor, northeast end below HA #4	N/A
27	Floor Tile, 9" x 9" cream with brown w/ black mastic	Third floor, corridors	Misc.
28	Floor Tile, 12" x 12" white with brown w/ brown mastic	Second floor, Room 210	N/A
29	Floor Tile, 12" x 12" off-white with white and gray w/ black mastic	Third floor, room 12	N/A
30	Floor Tile, 9" x 9" black and brown checkered w/ black mastic	Third floor, center and west rooms	Misc.
31	Ceiling Tile, 2' x 2' white with pinholes	Third floor, southwest end of building	Misc.
32	Floor Tile, 12" x 12" white with blue w/ brown mastic	Third floor, southwest end of building	Misc.
33	Spray-Applied Popcorn-Type Ceiling Finish	Second floor, rooms 217 and 217A	S
34	Pipe Insulation, 3" white with canvas wrap	Exterior of the building	TSI
35	Pipe Insulation, 3" white with canvas and aluminum wrap	Exterior of the building	TSI
36	Pipe Insulation, 6" white with canvas wrap	Exterior of the building	TSI

Notes: Misc. = Miscellaneous Material N/A = Not Applicable S = Surfacing Material

6.0 SUMMARY OF SAMPLE ANALYSIS RESULTS

Table 4.0 contains a summary of the bulk sample analysis results for suspect ACM identified in this building.

All thermal system insulation (TSI) if present, was classified as friable material. As long as the outer covering remains intact and is in good condition the TSI can be considered non-friable (29 CFR 763.85). Ceiling tile, if asbestos is present was considered a friable material. However, if non-friable materials are drilled, sawed, ground or otherwise physically or

mechanically disturbed, they may release asbestos fibers to the environment and therefore would be considered a friable material.

According to AHERA protocol, all samples within a homogeneous area must have an asbestos content of one percent or less by weight using Polarized Light Microscopy (PLM) analysis before the material can be categorized as non-asbestos-containing. If one sample is determined as asbestos-containing using PLM analysis, the entire homogeneous area must be classified asbestos-containing.

Table 4.0
Summary of Sample Analysis Results

HA No.	Sample ID No.	Suspect Material Description	Asbestos Content	Friability
1	4-1-1, 4-1-2, 4-1-3	Ceiling Tile, 1' x 1' beige with pinholes	NAD	N/A
2	4-2-1, 4-2-2, 4-2-3	Ceiling Tile, 1' x 1' gray with random fissures	NAD	N/A
3	4-3-1, 4-3-2, 4-3-3	Floor Tile, 12" x 12" cream with black, gray and white w/ yellow mastic	NAD	N/A
4	4-4-1, 4-4-2, 4-4-3	Floor Tile, 9" x 9" dark green with white and gray w/ black mastic	Tile = 7-10% chrysotile, Mastic = 8-10% chrysotile	Non
5	4-5-1, 4-5-2, 4-5-3	Floor Tile, 12" x 12" gold with yellow, brown and white w/ black mastic	NAD	N/A
6	4-6-1, 4-6-2, 4-6-3	Floor Tile, 12: x 12" gold with yellow, brown and white w/ black mastic	Tile = NAD, Mastic = 8-10% chrysotile	Non
7	4-7-1, 4-7-2, 4-7-3	Joint Sealer Compound, on drywall walls	1-2% chrysotile	Non
8	4-8-1, 4-8-2, 4-8-3	Pipe Insulation, 6" white with canvas wrap	15-20% chrysotile, 15-20% amosite	Friable
9	4-9-1, 4-9-2, 4-9-3	Pipe Fitting Insulation, 6" white with canvas wrap	NAD	N/A
10	4-10-1, 4-10-2, 4-10-3	Pipe Insulation, 3" white with canvas wrap	15-35% chrysotile, 15-20% amosite	Friable
11	4-11-1, 4-11-2, 4-11-3	Pipe Fitting Insulation, 3" white with paper wrap	10-20% chrysotile, 10-20% amosite	Friable
12	4-12-1, 4-12-2, 4-12-3	Pipe Insulation, 2" white with canvas wrap	15-20% chrysotile, 15% amosite	Friable
13	4-13-1, 4-13-2, 4-13-4	Pipe Fitting Insulation, 2" white with canvas wrap	7-10% chrysotile, 10-15% amosite	Friable
14	4-14-1, 4-14-2, 4-14-3	Pipe Insulation, 3" white with canvas wrap	10-15% chrysotile, 15-20% amosite	Friable
15	4-15-1, 4-15-2, 4-15-3	Pipe Fitting Insulation, 3" white with canvas wrap	15-20% chrysotile, 10-20% amosite	Friable
16	N/A	Pipe Insulation, 3" white with paper wrap	N/A	N/A
17	4-17-1, 4-17-2, 4-17-3	Pipe Fitting Insulation, 3" white with canvas wrap	5-20% chrysotile, 20-25% amosite	Friable

HA No.	Sample ID No.	Suspect Material Description	Asbestos Content	Friability
18	4-18-1, 4-18-2, 4-18-3	Pipe Insulation, 3" white with canvas wrap	10-20% chrysotile, 20-25% amosite	Friable
19	4-19-1, 4-19-2, 4-19-3	Pipe Fitting Insulation, 3" white with canvas wrap	2% amosite	Friable
20	4-20-1, 4-20-2, 4-20-3	Pipe Fitting Insulation, 3" white with canvas wrap and black mastic	Insulation = 1-2% chrysotile, Mastic = 5% chrysotile	Friable
21	4-21-1, 4-21-2, 4-21-3	Pipe Fitting Insulation, 3" white with canvas wrap	1-3% chrysotile, 30-35% amosite	Friable
22	4-22-1, 4-22-2, 4-22-3	Floor Tile, 9" x 9" green with dark green w/ black mastic	Tile = 1-3% chrysotile, Mastic = 3-5% amosite	Friable
23	4-23-1, 4-23-2, 4-23-3	Floor Tile, 9" x 9" light brown w/ black mastic	Tile = 5-6% chrysotile, Mastic = 3-5% chrysotile	Friable
24	4-24-1, 4-24-2, 4-24-3	Floor Tile, 12" x 12" dark green with white w/ black mastic	NAD	N/A
25	4-25-1, 4-25-2, 4-25-3	Floor Tile, 9" x 9" black with white streaks w/ black mastic	Tile = 7-10% chrysotile, Mastic = <1% chrysotile	Friable
26	4-26-1, 4-26-2, 4-26-3	Floor Tile, 9" x 9" cream with pink and white w/ brown mastic	NAD	N/A
27	4-27-1, 4-27-2, 4-27-3	Floor Tile, 9" x 9" cream with brown w/ black mastic	Tile = 8-10% chrysotile, Mastic = 4-5% chrysotile	Friable
28	4-28-1, 4-28-2, 4-28-3	Floor Tile, 12" x 12" white with brown w/ brown mastic	NAD	N/A
29	4-29-1, 4-29-2, 4-29-3	Floor Tile, 12" x 12" off-white with white and gray w/ black mastic	NAD	N/A
30	4-30-1, 4-30-2, 4-30-3	Floor Tile, 9" x 9" black and brown checkered w/ black mastic	Tile = 4-5% chrysotile, Mastic = NAD	Friable
31	4-31-1, 4-31-2, 4-31-3	Ceiling Tile, 2' x 2' white with pinholes	3-5% amosite	Friable
32	4-32-1, 4-32-2, 4-32-3	Floor Tile, 12" x 12" white with blue w/ brown mastic	Tile = 15-20% chrysotile, Mastic = 1-2% amosite	Friable
33	4-33-1, 4-33-2, 4-33-3	Spray-Applied Popcorn-Type Ceiling Finish	5-7% chrysotile	Friable
34	4-34-1, 4-34-2, 4-34-3	Pipe Insulation, 3" white with canvas wrap	20-25% chrysotile	Friable
35	4-35-1, 4-35-2, 4-35-3	Pipe Insulation, 3" white with canvas and aluminum wrap	15-20% chrysotile, 10-20% amosite	Friable
36	4-36-1, 4-36-2, 4-36-3	Pipe Insulation, 6" white with canvas wrap	10-15% chrysotile, 15-20% amosite	Friable

Notes: NAD = No Asbestos Detected N/A = Not Applicable

7.0 RESULTS OF QUALITY CONTROL SAMPLING

The purpose of quality control (QC) sampling was to ensure reproducibility of the primary laboratory analysis results. Duplicate samples were collected for ten percent of the total building samples for QC purposes.

Table 5.0
Validation of Quality Control Sampling

Sample I.D. No.	Primary Laboratory Analysis Results	QC Laboratory Analysis Results
4-2-1	NAD	NAD
4-4-1	Tile = 10% chrysotile, Mastic = 10% chrysotile	NAD
4-6-1	Tile = NAD, Mastic = 10% chrysotile	Tile = <1% chrysotile, Mastic = 5% chrysotile
4-14-1	10% chrysotile, 15% amosite	5% chrysotile, 15% amosite
4-18-1	10% chrysotile, 25% amosite	Layer 1 = 10% chrysotile, 10% amosite, Layer 2 = NAD
4-20-1	1% amosite	NAD
4-31-1	4% amosite	5% amosite
4-33-1	5% chrysotile	10% chrysotile
4-34-1	25% chrysotile	10% chrysotile
4-35-1	20% chrysotile, 10% amosite	20% chrysotile, 5% amosite

Notes: QC = Quality Control NAD = No Asbestos Detected

No discrepancies between primary laboratory and quality control laboratory bulk sample analysis were noted.

8.0 PHYSICAL ASSESSMENT OF IDENTIFIED ACM

The following sections contain a summary of the methodology BAT specialists used to conduct the physical assessment for this building. This methodology was developed in accordance with USEPA AHERA re-inspection requirements contained in 40 CFR Part 763.85.

1. Physical Assessment for Friable ACM.

A. **Condition.** Friable ACM were assigned to one of the following categories based on a visual inspection and touch test:

1) **Significantly Damaged Condition.** Material which met one or both of the following characteristics:

- a. Ten percent (10%) or more of the material in the functional space is crumbled, blistered, or is hanging from the surface, deteriorated, showing adhesive failure, water stained, gouged or marred, and the damage is evenly distributed.
- b. Twenty-five percent (25%) or more of the material in the functional space is crumbled, blistered, or is hanging from the surface, deteriorated, showing adhesive failure, water stained, gouged or marred, and the damage is localized.

2) **Damaged Condition.** Material which met one or both of the following characteristics:

- a. The surface is crumbling, blistered, water stained, gouged or marred, or otherwise damaged on less than ten percent (10%) of the material in the functional space (but material is too damaged to be characterized as good condition) and the damage is evenly distributed.
- a. The surface is crumbling, blistered, water stained, gouged or marred, or otherwise damaged on twenty-five percent (25%) or more of the material in the functional space (but material is too damaged to be characterized as good condition) and the damage is localized.

3) **Good Condition.** Material with very limited, or no visible damage or deterioration.

B. **Potential for Disturbance.** Friable ACM were assigned to one of the following categories based on a visual inspection and assessment of surroundings:

- 1) **Potential for Significant Damage.** Material which met one or more of the following conditions:
 - a. **High potential for Contact.** Service workers are in the vicinity of the material more than once each week or the material is in a public area and is accessible to building occupants.
 - b. **High Potential for Vibration.** Loud motors or engines present in the vicinity of the material or there are intrusive noises or easily sensed vibrations from surrounding area, such as nearby highways or airports.
 - c. **High Potential for Air Erosion.** High velocity air moving across or against material.

- 2) **Potential for Damage.** Material which met one or more of the following conditions for potential for significant damage:
 - a. **Moderate Potential for Contact.** Service workers are in the vicinity of the material at least once each month, but less than once each week or the material is in a room or office and is accessible to the occupants.
 - b. **Moderate Potential for Vibration.** Motors or engines present but not obtrusive or occasional loud noise in the vicinity of the material.
 - c. **Moderate potential for Air Erosion.** Noticeable movement of air across or against material, but not high in velocity.

- 3) **Low Potential for Damage.** Material which met one or more of the following conditions and met none of the conditions for potential for significant damage or potential for damage:
 - a. **Low Potential for Contact.** Service workers are in the vicinity of the material less than once each month or the material is visible but not accessible to the building occupants in the course of normal activity.
 - b. **Low Potential for Vibration.** None of the conditions for high or moderate potential for vibration are met.
 - c. **Low Potential for Air Erosion.** None of the conditions for high or moderate potential for air erosion are met.

2. Physical Assessment for Thermal ACM.

A. **Condition.** Thermal ACMs were assigned to one of the following categories based on a visual inspection:

1) **Significantly Damaged Condition.** Material which met one or both of the following characteristics:

- a. Missing jackets, crushed, heavily gouged, or punctured insulation on equal to or greater than ten percent (10%) of the material in the functional space, and the damage is evenly distributed.
- b. Missing jackets, crushed, heavily gouged, or punctured insulation on equal to or greater than twenty-five percent (25%) of the material in the functional space, and the damage is localized.

2) **Damaged Condition.** Material which met one or both of the following characteristics:

- a. Missing jackets, crushed, heavily gouged, or punctured insulation on less than ten percent (10%) of the material in the functional space, and the damage is evenly distributed.
- b. Missing jackets, crushed, heavily gouged, or punctured insulation on greater than twenty-five percent (25%) of the material in the functional space, and the damage is localized.

3) **Good Condition.** Material with very limited, or no visible damage or deterioration.

B. **Potential for Disturbance.** Thermal ACMs were assigned to one of the following categories based on a visual inspection and assessment of surroundings:

1) **Potential for Significant Damage.** Material which met one or more of the following conditions:

- a. **High Potential for Contact.** Service workers are in the vicinity of the material more than once each week or the material is in a public area and is accessible to building occupants.
- b. **High Potential for Vibration.** Loud motors or engines present in the vicinity of the material or there are intrusive noises or easily sensed vibrations from surrounding area, such as a nearby highway or airport.

- c. High Potential for Air Erosion. High velocity air moving across or against the material.
- 2) **Potential for Damage.** Material which met one or more of the following conditions and met none of the conditions for potential for significant damage.
- a. Moderate Potential for Contact. Service workers are in the vicinity of the material at least once each month but less than once each week or the material is in a room or office and is accessible to the occupants.
 - b. Moderate Potential for Vibration. Motors or engines present but not obtrusive or occasional loud noise in the vicinity of the material.
 - c. Moderate Potential for Air Erosion. Noticeable movement of air across or against material, but not high in velocity.
- 3) **Low Potential for Damage.** Material which met one or more of the following conditions and met none of the conditions for potential for significant damage or potential for damage:
- a. Low Potential for Contact. Service workers are in the vicinity of the material less than once per month or the material is visible but not accessible to the building occupants in the course of normal activity.
 - b. Low Potential for Vibration. None of the conditions for high or moderate potential for vibration are met.
 - c. Low Potential for Air Erosion. None of the conditions for high or moderate potential for air erosion are met.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-7-1, 4-7-2, and 4-7-3

HOMOGENEOUS AREA No.: 7

TYPE OF MATERIAL: Surfacing TSI X Other

Description: Joint Sealer Compound, on drywall walls

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 3,200 SF

CONDITION:

Percent Damage: 2 % Damage Localized X Distributed

Type of Damage: X Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good X Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: X High Moderate Low

Description: Material is located in high traffic areas.

Influence of Vibration: High Moderate X Low

Description: None identified.

Potential for Air Erosion: High Moderate X Low

Description: None identified.

OVERALL RATING: X Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-8-1, 4-8-2, and 4-8-3

HOMOGENEOUS AREA No.: 8

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Insulation, 6" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 320 LF

CONDITION:

Percent Damage: 4 % Damage Localized Distributed

Type of Damage: Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: High Moderate Low

Description: None identified.

Influence of Vibration: High Moderate Low

Description: None identified.

Potential for Air Erosion: High Moderate Low

Description: None identified.

OVERALL RATING: Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-10-1, 4-10-2, and 4-10-3

HOMOGENEOUS AREA No.: 10

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Insulation, 3" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 320 LF

CONDITION:

Percent Damage: 5 % Damage Localized Distributed

Type of Damage: Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: High Moderate Low

Description: None identified.

Influence of Vibration: High Moderate Low

Description: None identified.

Potential for Air Erosion: High Moderate Low

Description: None identified.

OVERALL RATING: Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-11-1, 4-11-2, and 4-11-3

HOMOGENEOUS AREA No.: 11

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Fitting Insulation, 3" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 31 EA

CONDITION:

Percent Damage: 8 % Damage Localized Distributed

Type of Damage: Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: High Moderate Low

Description: None identified.

Influence of Vibration: High Moderate Low

Description: None identified.

Potential for Air Erosion: High Moderate Low

Description: None identified.

OVERALL RATING: Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-12-1, 4-12-2, and 4-12-3

HOMOGENEOUS AREA No.: 12

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Insulation, 2" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 320 LF

CONDITION:

Percent Damage: 9 % Damage Localized Distributed

Type of Damage: Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: High Moderate Low

Description: None identified.

Influence of Vibration: High Moderate Low

Description: None identified.

Potential for Air Erosion: High Moderate Low

Description: None identified.

OVERALL RATING: Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-13-1, 4-13-2, and 4-13-3

HOMOGENEOUS AREA No.: 13

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Fitting Insulation, 2" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 31 EA

CONDITION:

Percent Damage: 6 % Damage Localized Distributed

Type of Damage: Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: High Moderate Low

Description: None identified.

Influence of Vibration: High Moderate Low

Description: None identified.

Potential for Air Erosion: High Moderate Low

Description: None identified.

OVERALL RATING: Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-14-1, 4-14-2, and 4-14-3

HOMOGENEOUS AREA No.: 14

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Insulation, 3" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 320 LF

CONDITION:

Percent Damage: 7 % Damage Localized Distributed

Type of Damage: Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: High Moderate Low

Description: None identified.

Influence of Vibration: High Moderate Low

Description: None identified.

Potential for Air Erosion: High Moderate Low

Description: None identified.

OVERALL RATING: Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-15-1, 4-15-2, and 4-15-3

HOMOGENEOUS AREA No.: 15

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Fitting Insulation, 3" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 31 EA

CONDITION:

Percent Damage: 6 % Damage Localized Distributed

Type of Damage: Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: High Moderate Low

Description: None identified.

Influence of Vibration: High Moderate Low

Description: None identified.

Potential for Air Erosion: High Moderate Low

Description: None identified.

OVERALL RATING: Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-18-1, 4-19-2, and 4-19-3

HOMOGENEOUS AREA No.: 19

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Fitting Insulation, 3" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 10 EA

CONDITION:

Percent Damage: 5-7 % Damage Localized Distributed

Type of Damage: Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: High Moderate Low

Description: None identified.

Influence of Vibration: High Moderate Low

Description: None identified.

Potential for Air Erosion: High Moderate Low

Description: None identified.

OVERALL RATING: Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-20-1, 4-20-2, and 4-20-3

HOMOGENEOUS AREA No.: 20

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Fitting Insulation, 6" white with canvas and black mastic

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 16 EA

CONDITION:

Percent Damage: 5-7 % Damage Localized Distributed

Type of Damage: Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: High Moderate Low

Description: None identified.

Influence of Vibration: High Moderate Low

Description: None identified.

Potential for Air Erosion: High Moderate Low

Description: None identified.

OVERALL RATING: Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-21-1, 4-21-2, and 4-21-3

HOMOGENEOUS AREA No.: 21

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Fitting Insulation, 3" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 30 EA

CONDITION:

Percent Damage: 5-7 % Damage Localized Distributed

Type of Damage: Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: High Moderate Low

Description: None identified.

Influence of Vibration: High Moderate Low

Description: None identified.

Potential for Air Erosion: High Moderate Low

Description: None identified.

OVERALL RATING: Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-22-1, 4-22-2, and 4-22-3

HOMOGENEOUS AREA No.: 22

TYPE OF MATERIAL: Surfacing TSI Other

Description: Floor Tile, 9" x 9" green with dark green w/ black mastic

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 6,480 SF

CONDITION:

Percent Damage: 5-7 % Damage Localized Distributed

Type of Damage: Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: High Moderate Low

Description: Material is located in high traffic areas.

Influence of Vibration: High Moderate Low

Description: None identified.

Potential for Air Erosion: High Moderate Low

Description: None identified.

OVERALL RATING: Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-25-1, 4-25-2, and 4-25-3

HOMOGENEOUS AREA No.: 25

TYPE OF MATERIAL: Surfacing TSI Other

Description: Floor Tile, 9" x 9" black with white streaks w/ black mastic

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 320 SF

CONDITION:

Percent Damage: 5-7 % Damage Localized Distributed

Type of Damage: Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: High Moderate Low

Description: Material is located in high traffic areas.

Influence of Vibration: High Moderate Low

Description: None identified.

Potential for Air Erosion: High Moderate Low

Description: None identified.

OVERALL RATING: Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-34-1, 4-34-2, and 4-34-3

HOMOGENEOUS AREA No.: 34

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Insulation, 3" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 225 LF

CONDITION:

Percent Damage: 5-7 % Damage Localized Distributed

Type of Damage: Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: High Moderate Low

Description: Material is located outside.

Influence of Vibration: High Moderate Low

Description: Possible vibration from cavitation.

Potential for Air Erosion: High Moderate Low

Description: Air erosion from weathering.

OVERALL RATING: Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-35-1, 4-35-2, and 4-35-3

HOMOGENEOUS AREA No.: 35

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Insulation, 3" white with canvas and aluminum wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 225 LF

CONDITION:

Percent Damage: 5-7 % Damage Localized Distributed

Type of Damage: Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: High Moderate Low

Description: Material is located outside.

Influence of Vibration: High Moderate Low

Description: Possible vibration from cavitation.

Potential for Air Erosion: High Moderate Low

Description: Air erosion from weathering.

OVERALL RATING: Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

PHYSICAL ASSESSMENT DATA FOR IDENTIFIED ACM

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-36-1, 4-36-2, and 4-36-3

HOMOGENEOUS AREA No.: 36

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Insulation, 6" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 225 LF

CONDITION:

Percent Damage: 5-7 % Damage Localized Distributed

Type of Damage: Deterioration Water Physical

DESCRIPTION:

Overall Rating: Good Fair Poor

POTENTIAL FOR DISTURBANCE:

Frequency of Potential Contact: High Moderate Low

Description: Material is located outside.

Influence of Vibration: High Moderate Low

Description: Possible vibration from cavitation.

Potential for Air Erosion: High Moderate Low

Description: Air erosion from weathering.

OVERALL RATING: Potential for Significant Damage Potential for Damage Low Potential for Damage

COMMENTS: Material should be repaired and included in the facility O&M Plan until removal is accomplished.

9.0 HAZARD ASSESSMENT OF IDENTIFIED ACM

AHERA describes a hazard assessment as "the means of collecting and considering whatever data were necessary for the management planner to make an informed, responsible recommendation to the LEA [Local Education Agency] consistent with response action requirements". As stated in AHERA, there is no single assessment method that is required in the regulations.

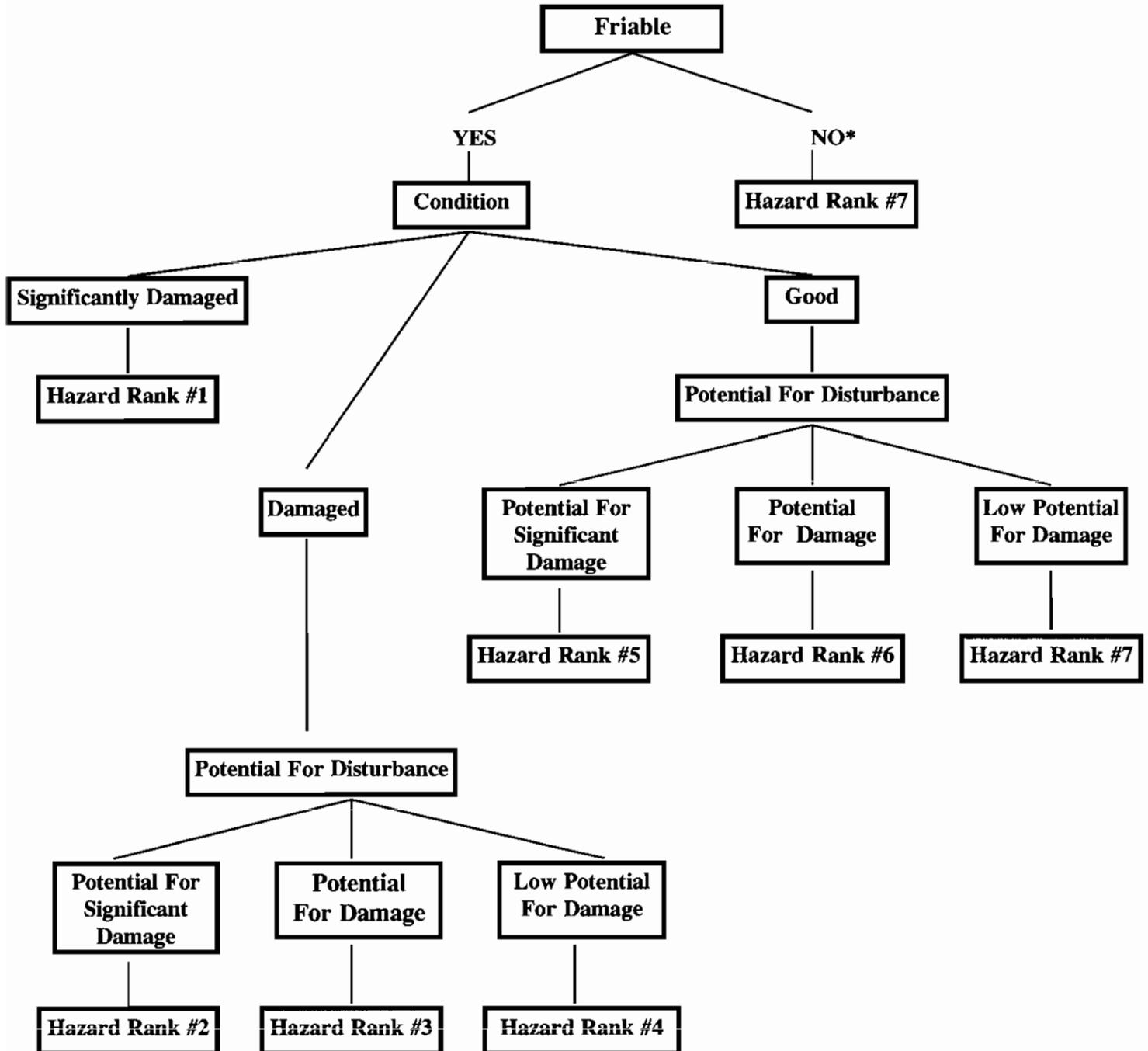
BAT adopted for this re-inspection one of the four general classes of hazard assessment models considered during the AHERA rule-making process. This method for hazard assessment is a modified decision tree as detailed in the USEPA, *Guidance for Assessing and Managing Exposure to Asbestos in Buildings*, or the *Pink Book*. Based on the physical assessment responses documented in the field, the BAT Management Planner proceeded through the decision tree process depicted in Figure 1.0 on the following page.

Only the identified and/or assumed asbestos-containing materials were assessed for hazards.

All of the identified and/or assumed asbestos-containing materials observed in this building were in good condition on the day of the survey.

Figure 1.0 Decision Tree Diagram For Hazard Assessment

Hazard rank #1 are materials of highest concern, and hazard rank #7 are the materials least likely to release asbestos fibers to the work area.



*Miscellaneous materials that are considered non-friable were placed in the Hazard Rank #8 category, which is in good condition with a low potential for damage.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-4-1, 4-4-2, and 4-4-3

HOMOGENEOUS AREA No.: 4

TYPE OF MATERIAL: Surfacing TSI Other

Description: Floor Tile, 9" x 9" dark green with white and gray w/ black mastic

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 6,980 SF

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|--|--|
| (1) Significantly damaged | (1) Removal |
| (2) Damaged plus potential for significant damage | (2) Encapsulation |
| (3) Damaged plus potential for damage | (3) Enclosure |
| (4) Damaged plus low potential for damage | <input checked="" type="checkbox"/> (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| <input checked="" type="checkbox"/> (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-6-1, 4-6-2, and 4-6-3

HOMOGENEOUS AREA No.: 6

TYPE OF MATERIAL: Surfacing TSI Other

Description: Floor Tile, 9" x 9" gold with yellow, brown, and white w/ black mastic

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 2,020 SF

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|--|--|
| (1) Significantly damaged | (1) Removal |
| (2) Damaged plus potential for significant damage | (2) Encapsulation |
| (3) Damaged plus potential for damage | (3) Enclosure |
| (4) Damaged plus low potential for damage | (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| <input checked="" type="checkbox"/> (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-7-1, 4-7-2, and 4-7-3

HOMOGENEOUS AREA No.: 7

TYPE OF MATERIAL: Surfacing TSI Other

Description: Joint Sealer Compound, on drywall walls

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 3,200 SF

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|--|--|
| (1) Significantly damaged | (1) Removal |
| (2) Damaged plus potential for significant damage | (2) Encapsulation |
| (3) Damaged plus potential for damage | (3) Enclosure |
| (4) Damaged plus low potential for damage | <input checked="" type="checkbox"/> (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| <input checked="" type="checkbox"/> (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-8-1, 4-8-2, and 4-8-3

HOMOGENEOUS AREA No.: 8

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Insulation, 6" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 320 LF

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|---|--|
| (1) Significantly damaged | (1) Removal |
| (2) Damaged plus potential for significant damage | (2) Encapsulation |
| (3) Damaged plus potential for damage | (3) Enclosure |
| <input checked="" type="checkbox"/> (4) Damaged plus low potential for damage | <input checked="" type="checkbox"/> (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-10-1, 4-10-2, and 4-10-3

HOMOGENEOUS AREA No.: 10

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Insulation, 3" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 320 LF

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|---|--|
| (1) Significantly damaged | (1) Removal |
| (2) Damaged plus potential for significant damage | (2) Encapsulation |
| (3) Damaged plus potential for damage | (3) Enclosure |
| <input checked="" type="checkbox"/> (4) Damaged plus low potential for damage | <input checked="" type="checkbox"/> (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-11-1, 4-11-2, and 4-11-3

HOMOGENEOUS AREA No.: 11

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Fitting Insulation, 3" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 31 EA

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|---|--|
| (1) Significantly damaged | (1) Removal |
| (2) Damaged plus potential for significant damage | (2) Encapsulation |
| (3) Damaged plus potential for damage | (3) Enclosure |
| <input checked="" type="checkbox"/> (4) Damaged plus low potential for damage | <input checked="" type="checkbox"/> (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-12-1, 4-12-2, and 4-12-3

HOMOGENEOUS AREA No.: 12

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Insulation, 2" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 320 LF

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|---|--|
| (1) Significantly damaged | (1) Removal |
| (2) Damaged plus potential for significant damage | (2) Encapsulation |
| (3) Damaged plus potential for damage | (3) Enclosure |
| <input checked="" type="checkbox"/> (4) Damaged plus low potential for damage | <input checked="" type="checkbox"/> (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-13-1, 4-13-2, and 4-13-3

HOMOGENEOUS AREA No.: 13

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Fitting Insulation, 2" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 31 EA

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|---|--|
| (1) Significantly damaged | (1) Removal |
| (2) Damaged plus potential for significant damage | (2) Encapsulation |
| (3) Damaged plus potential for damage | (3) Enclosure |
| <input checked="" type="checkbox"/> (4) Damaged plus low potential for damage | <input checked="" type="checkbox"/> (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-15-1, 4-15-2, and 4-15-3

HOMOGENEOUS AREA No.: 15

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Fitting Insulation, 3" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 31 EA

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|---|--|
| (1) Significantly damaged | (1) Removal |
| (2) Damaged plus potential for significant damage | (2) Encapsulation |
| (3) Damaged plus potential for damage | (3) Enclosure |
| <input checked="" type="checkbox"/> (4) Damaged plus low potential for damage | <input checked="" type="checkbox"/> (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-17-1, 4-17-2, and 4-17-3

HOMOGENEOUS AREA No.: 17

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Fitting Insulation, 3" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 31 EA

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|---|--|
| (1) Significantly damaged | (1) Removal |
| (2) Damaged plus potential for significant damage | (2) Encapsulation |
| (3) Damaged plus potential for damage | (3) Enclosure |
| <input checked="" type="checkbox"/> (4) Damaged plus low potential for damage | <input checked="" type="checkbox"/> (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-18-1, 4-18-2, and 4-18-3

HOMOGENEOUS AREA No.: 18

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Insulation, 3" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 320 LF

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|---|--|
| (1) Significantly damaged | (1) Removal |
| (2) Damaged plus potential for significant damage | (2) Encapsulation |
| (3) Damaged plus potential for damage | (3) Enclosure |
| <input checked="" type="checkbox"/> (4) Damaged plus low potential for damage | <input checked="" type="checkbox"/> (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-19-1, 4-19-2, and 4-19-3

HOMOGENEOUS AREA No.: 19

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Fitting Insulation, 3" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 10 EA

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|---|--|
| (1) Significantly damaged | (1) Removal |
| (2) Damaged plus potential for significant damage | (2) Encapsulation |
| <input checked="" type="checkbox"/> (3) Damaged plus potential for damage | (3) Enclosure |
| (4) Damaged plus low potential for damage | <input checked="" type="checkbox"/> (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-20-1, 4-20-2, and 4-20-3

HOMOGENEOUS AREA No.: 20

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Fitting Insulation, 6" white with canvas wrap and black mastic

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 16 EA

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|---|--|
| (1) Significantly damaged | (1) Removal |
| (2) Damaged plus potential for significant damage | (2) Encapsulation |
| <input checked="" type="checkbox"/> (3) Damaged plus potential for damage | (3) Enclosure |
| (4) Damaged plus low potential for damage | <input checked="" type="checkbox"/> (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-21-1, 4-21-2, and 4-21-3

HOMOGENEOUS AREA No.: 21

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Fitting Insulation, 3" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 30 EA

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|---|--|
| (1) Significantly damaged | (1) Removal |
| (2) Damaged plus potential for significant damage | (2) Encapsulation |
| (3) Damaged plus potential for damage | (3) Enclosure |
| <input checked="" type="checkbox"/> (4) Damaged plus low potential for damage | <input checked="" type="checkbox"/> (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-33-1, 4-33-2, and 4-33-3

HOMOGENEOUS AREA No.: 33

TYPE OF MATERIAL: Surfacing TSI Other

Description: Spray-Applied Popcorn-Type Ceiling Finish

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 760 SF

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|--|--|
| (1) Significantly damaged | (1) Removal |
| (2) Damaged plus potential for significant damage | (2) Encapsulation |
| (3) Damaged plus potential for damage | (3) Enclosure |
| (4) Damaged plus low potential for damage | (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| <input checked="" type="checkbox"/> (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-34-1, 4-34-2, and 4-34-3

HOMOGENEOUS AREA No.: 34

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Insulation, 3" white with canvas wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 225 LF

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|---|--|
| (1) Significantly damaged | (1) Removal |
| <input checked="" type="checkbox"/> (2) Damaged plus potential for significant damage | (2) Encapsulation |
| (3) Damaged plus potential for damage | (3) Enclosure |
| (4) Damaged plus low potential for damage | <input checked="" type="checkbox"/> (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| (8) Non-friable ACM | |

COMMENTS: None.

**HAZARD ASSESSMENT AND RESPONSE ACTION DATA
FOR IDENTIFIED ACM**

BUILDING: Charleston Naval Shipyard, Building Number 4

SAMPLE NUMBER(S): 4-35-1, 4-35-2, and 4-35-3

HOMOGENEOUS AREA No.: 35

TYPE OF MATERIAL: Surfacing TSI Other

Description: Pipe Insulation, 3" white with canvas and aluminum wrap

Approximate Amount of Asbestos-Containing Material (Linear or Square Foot): 225 LF

Approximate Recommended Response Action Cost:

HAZARD ASSESSMENT

RESPONSE ACTION RECOMMENDATION

- | | |
|---|--|
| (1) Significantly damaged | (1) Removal |
| <input checked="" type="checkbox"/> (2) Damaged plus potential for significant damage | (2) Encapsulation |
| (3) Damaged plus potential for damage | (3) Enclosure |
| (4) Damaged plus low potential for damage | <input checked="" type="checkbox"/> (4) Repair |
| (5) ACM (good condition) with potential for significant damage | <input checked="" type="checkbox"/> (5) Operations and Maintenance Program |
| (6) ACM (good condition) with potential for damage | |
| (7) Any remaining friable ACM or friable suspect ACM | |
| (8) Non-friable ACM | |

COMMENTS: None.

10.0 PRELIMINARY COST ESTIMATE FOR REMOVAL OF IDENTIFIED ACM

The following is a preliminary cost estimate for the abatement (removal) of identified ACM in Building 4. This estimate is based on removing all of the materials during the same project. It does not include the cost of replacement materials. The cost estimate includes, project surveillance, air monitoring, and disposal of materials. These costs are estimates only; BAT made no attempt to obtain bids from removal contractors for this work, however, the average unit costs of three asbestos abatement contractors were used to develop the preliminary removal costs. Additionally, quantities noted are based upon engineering measurements. BAT recommends the use of architectural measurements for more accurate quantification.

Material Description	Unit Cost (\$)	Quantity	Total Abatement Cost (\$)
Floor Tile with Mastic	1.78	26,720 SF	47,562
Pipe and Pipe Fitting Insulation	14.85	2,275 LF	33,784
Pipe Fitting Insulation	23.21	180 EA	4,178
Joint sealer Compound on drywall walls	4.25	3,200 SF	13,600
Ceiling Tile	2.17	130 SF	282
Spray-Applied Ceiling Finish	4.27	760 SF	3,245
Handling Cost	25.00	202 EA	5,050
Mobilization	300.00	3 EA	900
Waste Disposal Cost	50.00	128 CY	<u>6,400</u>
Removal Subtotal			\$115,001
IH Supervision and Monitoring			<u>13,500</u>
Project Subtotal			128,501
Contingency (35%)			<u>44,975</u>
Project Total			173,476

SF = Square Feet LF= Linear Feet EA = Each CY = Cubic Yard

11.0 CONCLUSIONS

Inspection of Building 4 and confirmatory laboratory bulk sample analysis of selected samples identified the following materials with asbestos concentrations greater than one percent.

<u>Identified ACM</u>	<u>Quantity</u>	<u>NESHAP Category</u>
Floor Tile, 9" x 9" dark green with white and gray w/ black mastic	6,980 SF	Category I, non-friable
Floor Tile, 12" x 12" gold with yellow, brown and white w/ black mastic	2,020 SF	Category I, non-friable
Joint Sealer Compound, on drywall walls	3,200 SF	Category I, non-friable
Pipe Insulation, 6" white with canvas wrap	320 LF	Regulated, friable
Pipe Insulation, 3" white with canvas wrap	320 LF	Regulated, friable
Pipe Fitting Insulation, 3" white with canvas wrap	31 EA	Regulated, friable
Pipe Insulation, 2" white with canvas wrap	320 LF	Regulated, friable
Pipe Fitting Insulation, 2" white with canvas wrap	31 EA	Regulated, friable
Pipe Insulation, 3" white with canvas wrap	320 LF	Regulated, friable
Pipe Fitting Insulation, 3" white with canvas wrap	31 EA	Regulated, friable
Pipe Fitting Insulation, 3" white with canvas wrap	31 EA	Regulated, friable
Pipe Insulation, 3" white with canvas wrap	320 LF	Regulated, friable
Pipe Fitting Insulation, 3" white with canvas wrap	10 EA	Regulated, friable
Pipe Fitting Insulation, 3" white with canvas wrap with black mastic	16 EA	Regulated, friable
Pipe Fitting Insulation, 3" white with canvas wrap	30 EA	Regulated, friable
Floor Tile, 9" x 9" green with dark green w/ black mastic	6,480 SF	Regulated, friable
Floor Tile, 9" x 9" light brown w/ black mastic	240 SF	Regulated, friable
Floor Tile, 9" x 9" black with white streaks w/ black mastic	320 SF	Regulated, friable
Floor Tile, 9" x 9" cream with brown w/ black mastic	7,600 SF	Regulated, friable
Floor Tile, 9" x 9" black and brown checkered w/ black mastic	2,300 SF	Regulated, friable
Ceiling Tile, 2' x 2' white with pinholes	130 SF	Regulated, friable
Floor Tile, 12" x 12" white with blue w/ brown mastic	780 SF	Regulated, friable
Spray-Applied Popcorn-Type Ceiling Finish	760 SF	Regulated, friable
Pipe Insulation, 3" white with canvas wrap	225 LF	Regulated, friable
Pipe Insulation, 3" white with canvas and aluminum wrap	225 LF	Regulated, friable
Pipe Insulation, 6" white with canvas wrap	225 LF	Regulated, friable

The following materials were not sampled in order to avoid disrupting their integrity, and they were assumed to contain asbestos:

<u>Assumed ACM</u>	<u>Quantity</u>	<u>NESHAP Category</u>
--------------------	-----------------	------------------------

None.

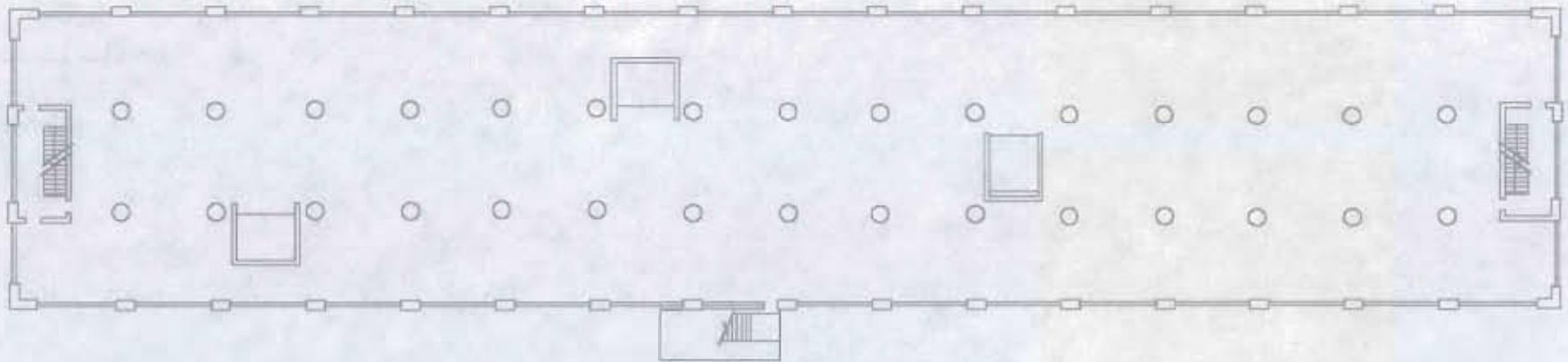
Other suspect ACM not identified could be present in areas of the building inaccessible to the asbestos building inspectors. For example, material could exist in walls and other locations where access could only be gained by demolition of the building. Also, other materials currently not recognized as ACM by the asbestos building inspection industry could exist.

Rooms that were inaccessible to the asbestos building inspectors have been identified on the drawings of the building in Appendix B, *Sample and ACM Location Drawings*.

EPA rules governing the application, removal and disposal of ACM were promulgated under NESHAP [40 CFR 61 Part M]. NESHAP requires the building owner or asbestos removal contractor to notify EPA when a building containing ACM is to be renovated, ACM is to be removed, or the building is to be demolished. At least 20 days notification is required "...if less than 260 linear feet of asbestos pipe covering or 160 square feet of asbestos material are removed during building renovation". Ten days notification is required when the amount is greater than 260 linear feet or 160 square feet of friable ACM.

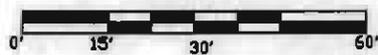
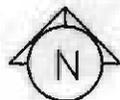
APPENDIX A

SAMPLE AND ACM LOCATION DRAWINGS

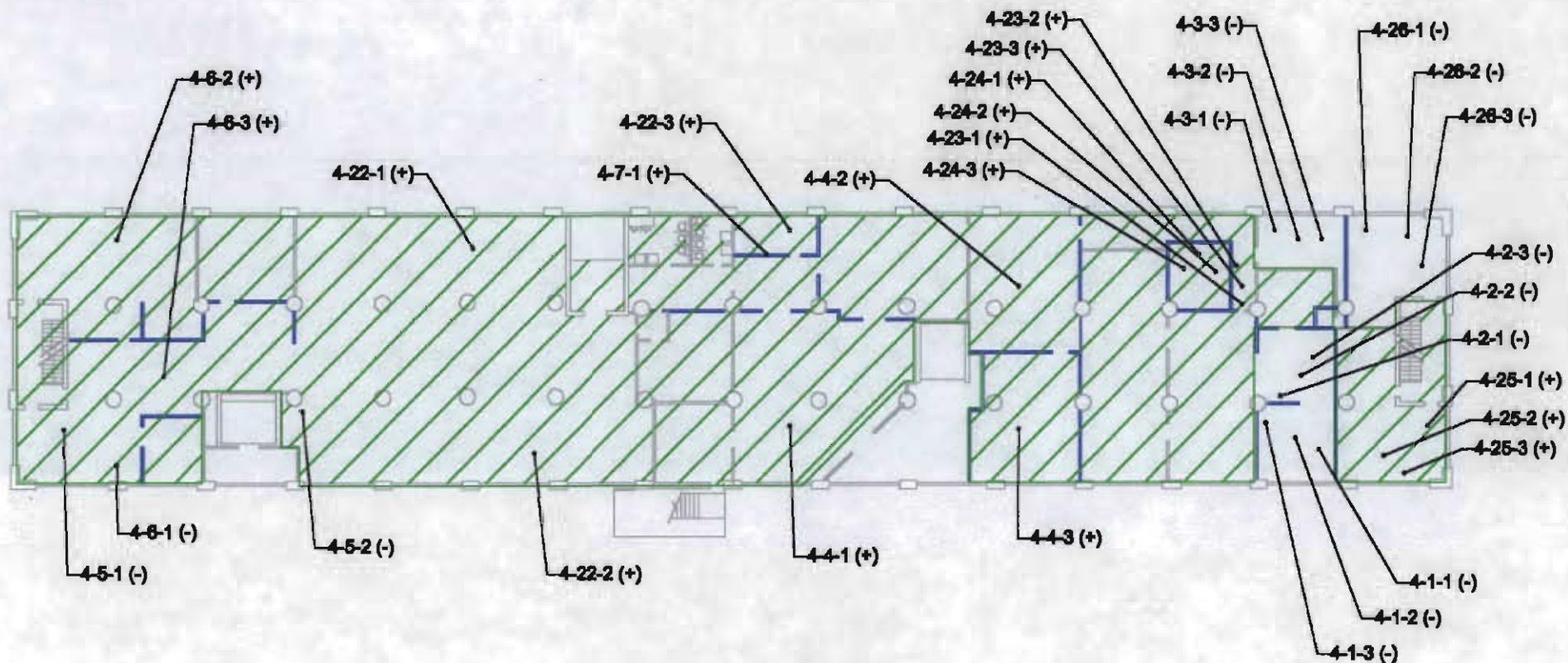


BUILDING 4 - BASEMENT

**NOTE: No Asbestos-Containing
Materials Identified in the Basement.**



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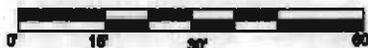
BUILDING 4 - FLOOR 1

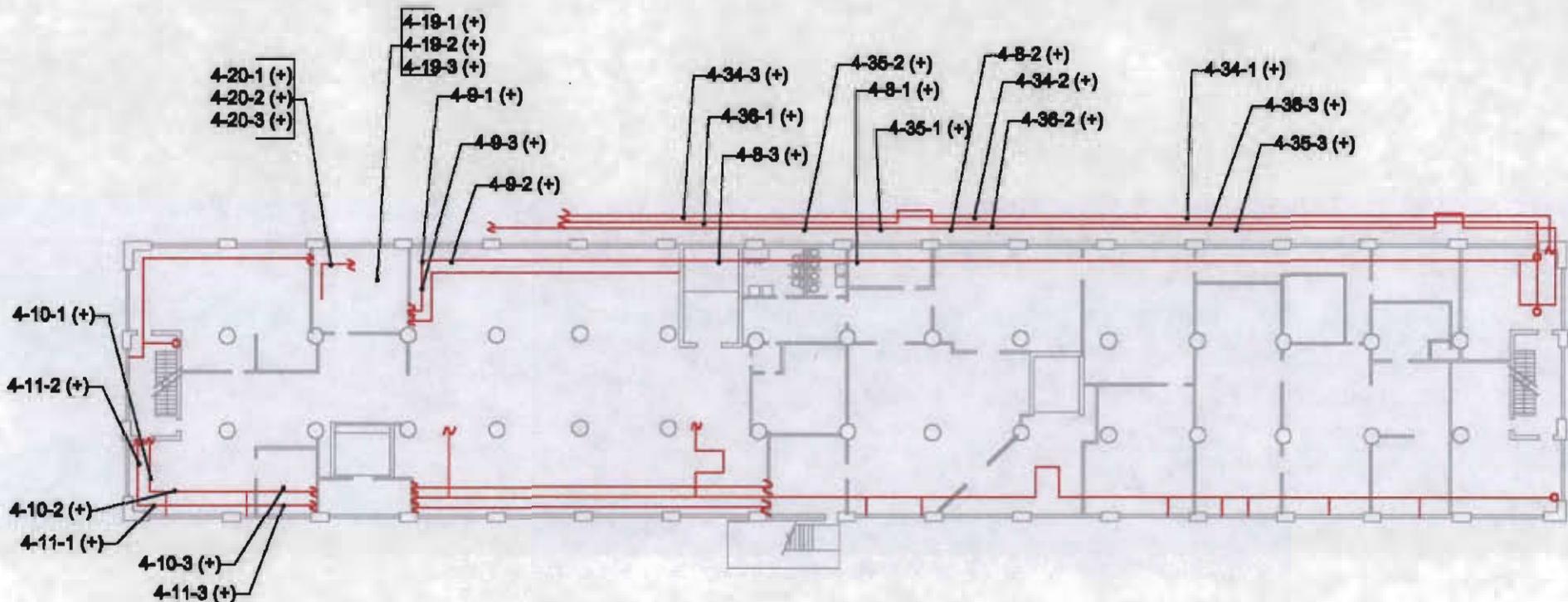
Floors, Walls and Ceilings

**Sample and Asbestos-Containing
Material Locations**

LEGEND

- - Sample Location
- (-) - Non-Asbestos-Containing Sample Location
- (+) - Asbestos-Containing Sample Location
- Asbestos-Containing Floor Tile and Mastic
- Asbestos-Containing Joint Compound on Drywall





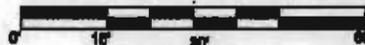
BUILDING 4 - FLOOR 1

Thermal

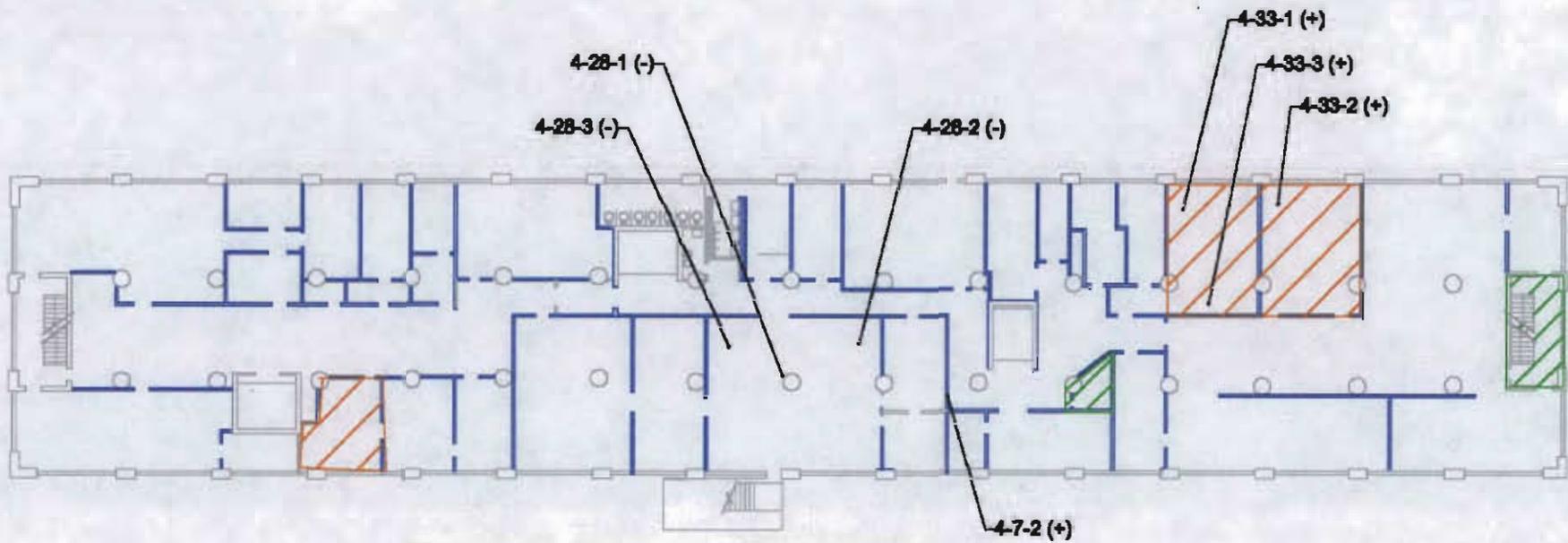
**Sample and Asbestos-Containing
Material Locations**

LEGEND

- - Sample Location
- (+) - Asbestos-Containing Sample Location
- - Asbestos-Containing Pipe and Pipe Filling Insulation
- - Pipe Turns Up
- ↔ - Asbestos-Containing Pipe Insulation Stops, Pipe Continues



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BUILDING 4 - FLOOR 2

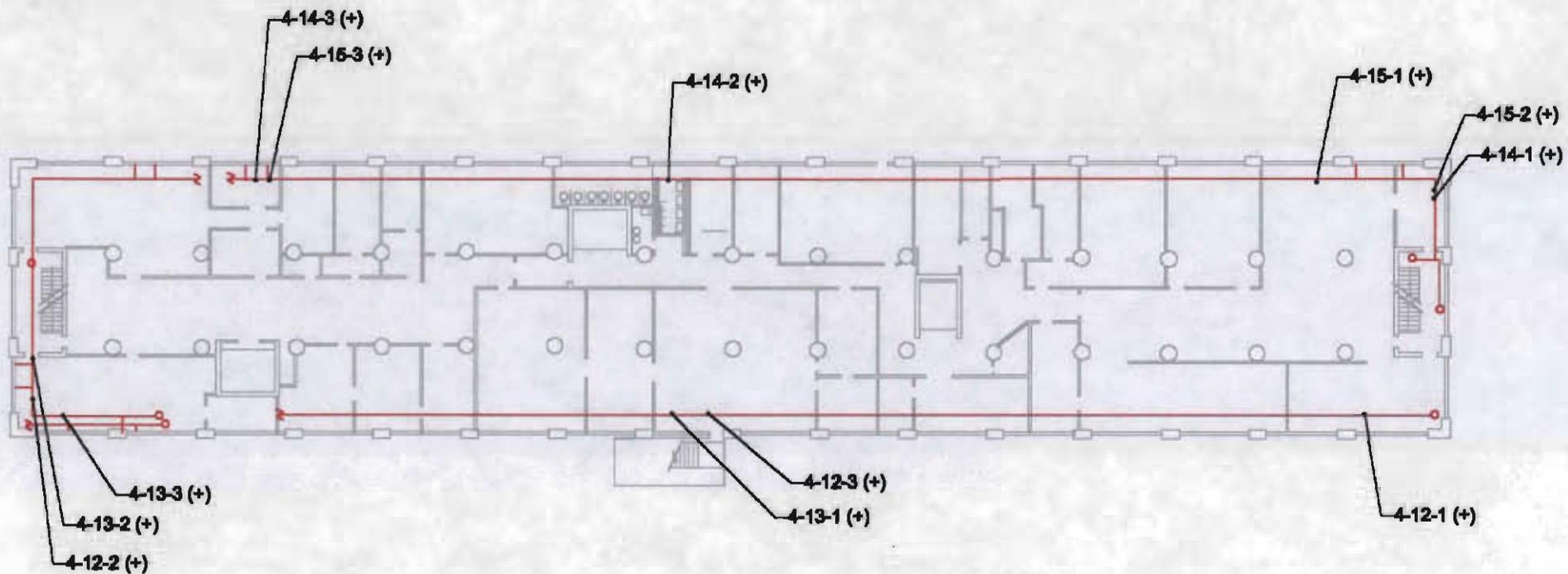
Floors, Walls and Ceilings

Sample and Asbestos-Containing
Material Locations

LEGEND

- - Sample Location
- (-) - Non-Asbestos-Containing Sample Location
- (+) - Asbestos-Containing Sample Location
-  - Asbestos-Containing Floor Tile and Mastic
-  - Asbestos-Containing Popcorn Ceiling Finish
-  - Asbestos-Containing Joint Compound on Drywall

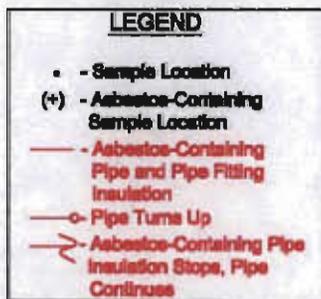




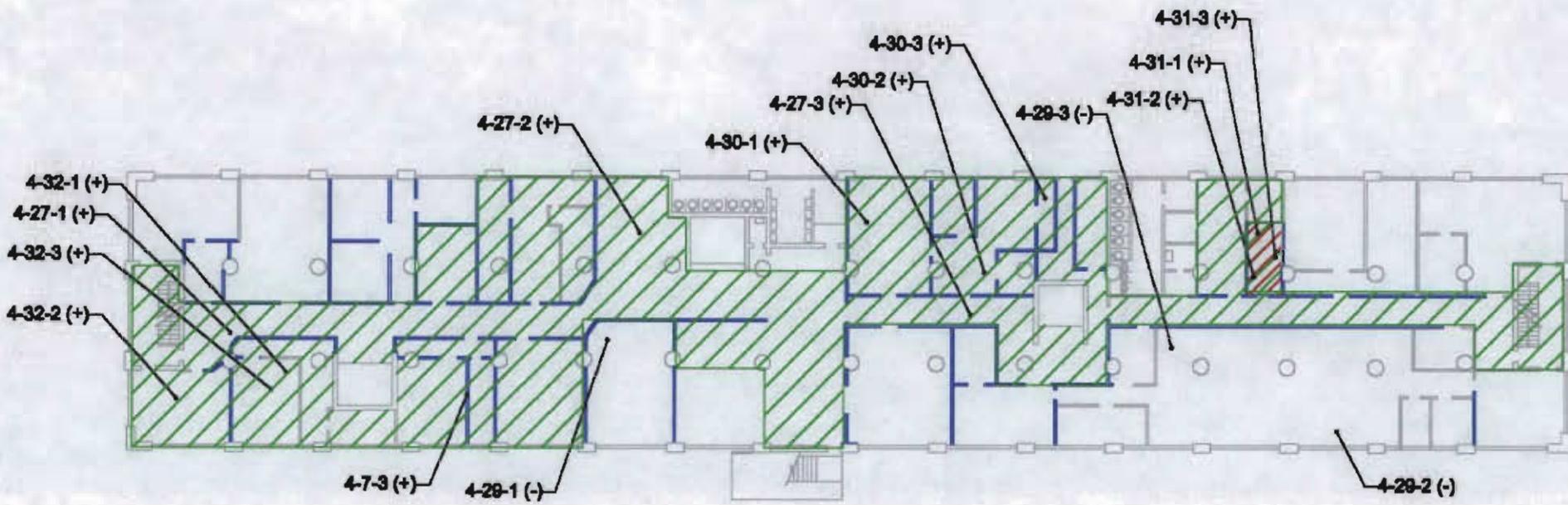
BUILDING 4 - FLOOR 2

Thermal

Sample and Asbestos-Containing
Material Locations



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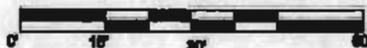
BUILDING 4 - FLOOR 3

Floors, Walls and Ceilings

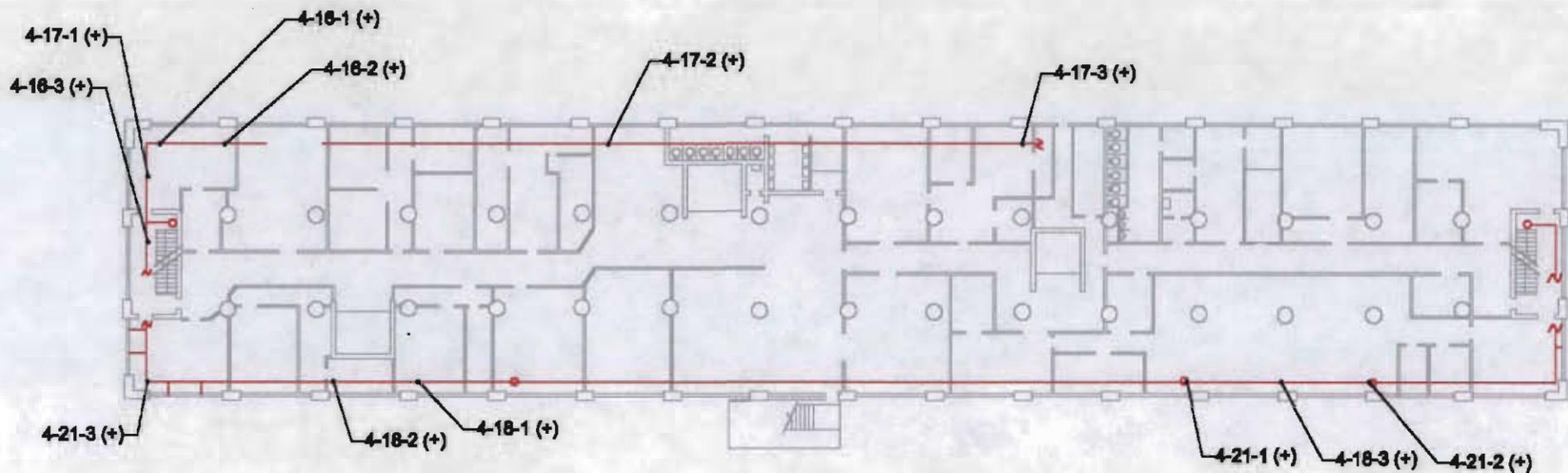
Sample and Asbestos-Containing
Material Locations

LEGEND

- - Sample Location
- (-) - Non-Asbestos-Containing Sample Location
- (+) - Asbestos-Containing Sample Location
-  - Asbestos-Containing Floor Tile and Mastic
-  - Asbestos-Containing Ceiling Tile
-  - Asbestos-Containing Joint Compound on Drywall



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 NORCROSS, GA 30071



BUILDING 4 - FLOOR 3

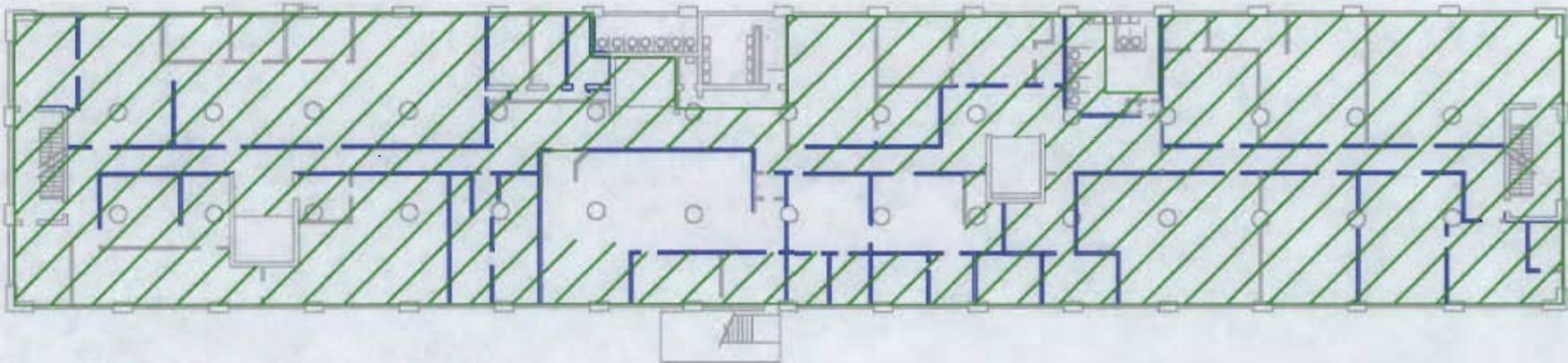
Thermal

Sample and Asbestos-Containing
Material Locations

LEGEND	
•	- Sample Location
(+)	- Asbestos-Containing Sample Location
—	- Asbestos-Containing Pipe and Pipe Fitting Insulation
○	- Pipe Turns Up
↗	- Asbestos-Containing Pipe Insulation Stops, Pipe Continues



BAT Associates, Inc.
ENVIRONMENTAL, HEALTH & SAFETY SERVICES
5151 BROOK HOLLOW PARKWAY, SUITE 250
NORCROSS, GA 30071



BUILDING 4 - FLOOR 4

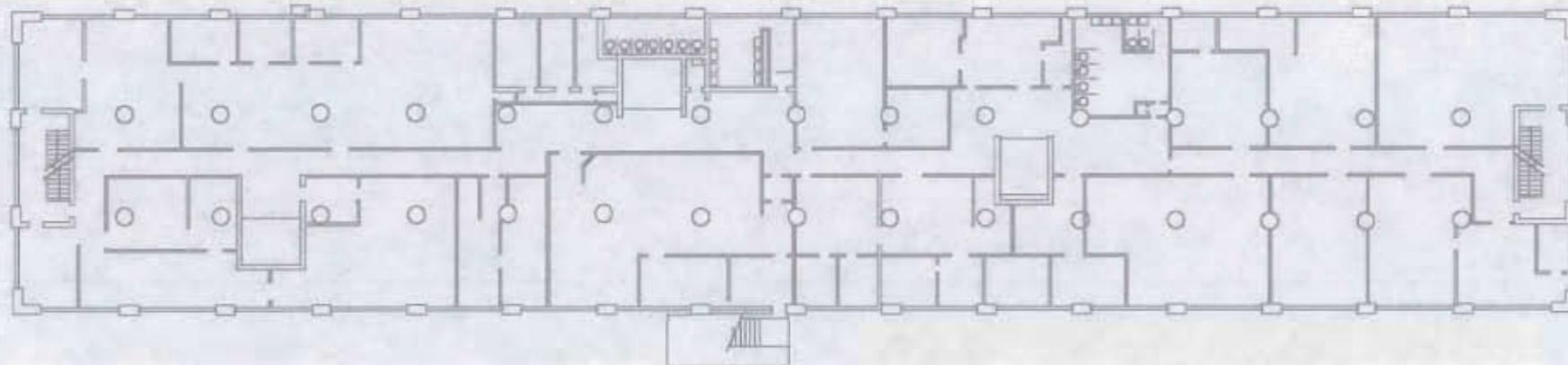
Floors, Walls and Ceilings

**Asbestos-Containing
Material Locations**

LEGEND

-  - Asbestos-Containing Floor Tile and Mastic
-  - Asbestos-Containing Joint Compound on Drywall





BUILDING 4 - FLOOR 4

**NOTE: No Suspect Thermal
Insulation Identified on this
Floor.**

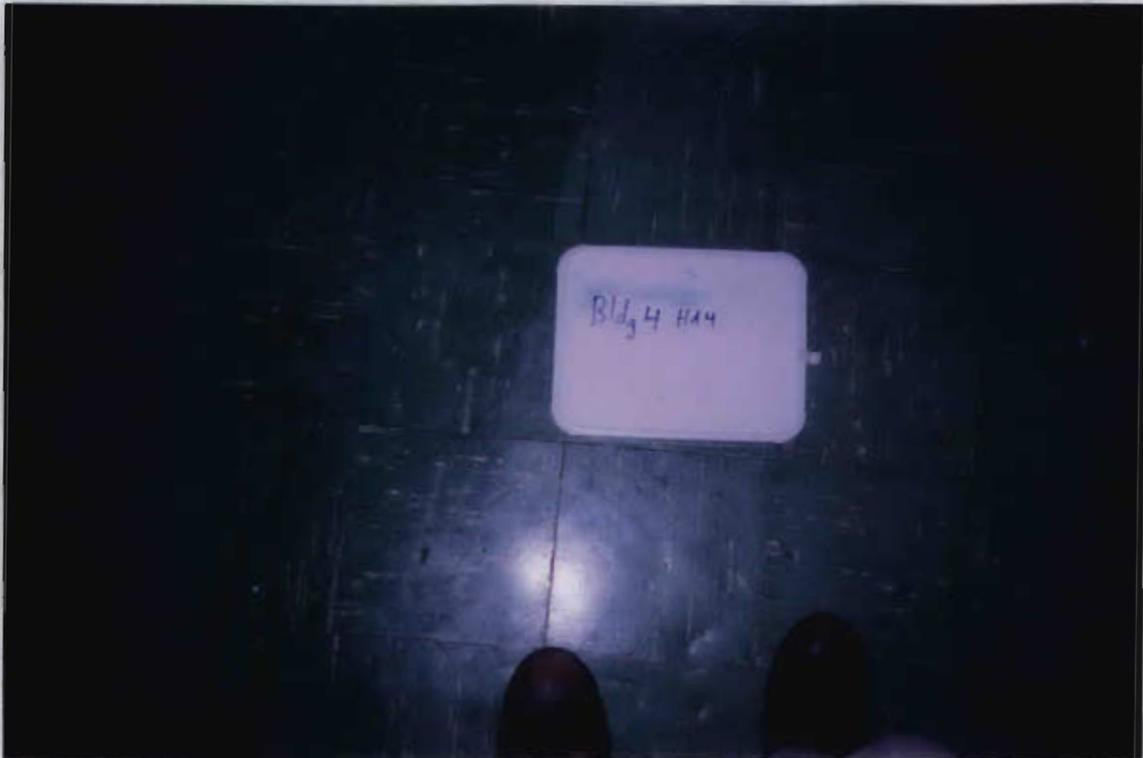
Thermal

**Asbestos-Containing
Material Locations**



BAT Associates, Inc.
ENVIRONMENTAL, HEALTH & SAFETY SERVICES
5181 BROOK HOLLOW PARKWAY, SUITE 200
NORCROSS, GA 30071

APPENDIX B
PHOTOGRAPHIC DOCUMENTATION
OF IDENTIFIED ACM



Floor Tile, 9" x 9" dark green with white and gray w/ black mastic, HA # 4



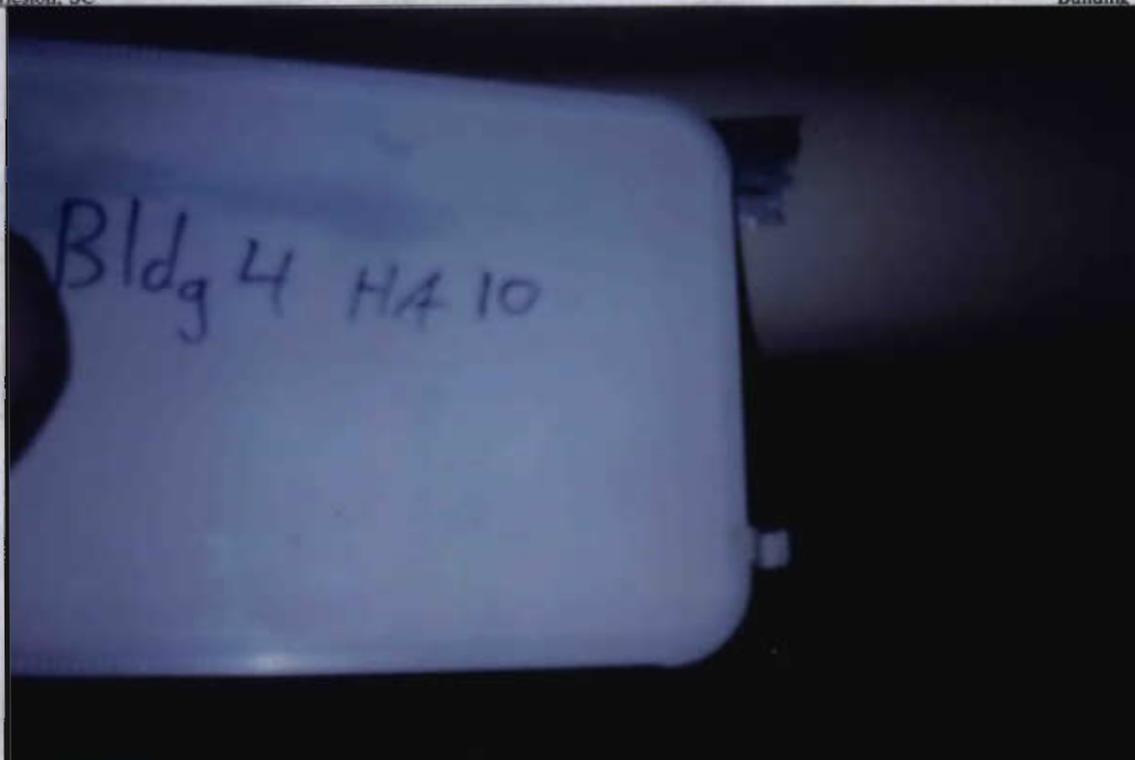
Floor Tile, 12" x 12" gold with yellow, brown and white w/ black mastic, HA #6



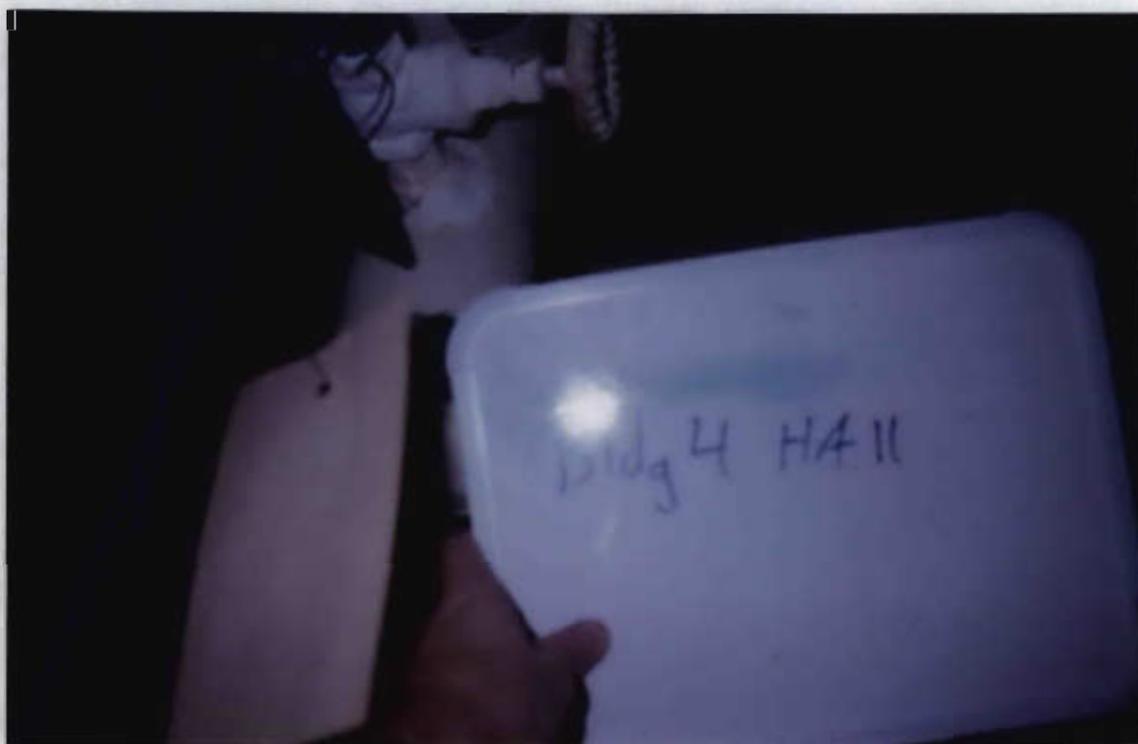
Joint Sealer Compound, on drywall walls, HA # 7



Pipe Insulation, 6" white with canvas wrap, HA #8



Pipe Insulation, 3" white with canvas wrap, HA # 10



Pipe Insulation, 3" white with canvas wrap, HA #11

Pipe Insulation, 2" white with canvas wrap, HA # 12



Pipe Fitting Insulation, 2" white with canvas wrap, HA #13

SEE PREVIOUS PHOTOGRAPH

Pipe Insulation, 3" white with canvas wrap, HA # 14

SEE PREVIOUS PHOTOGRAPH

Pipe Fitting Insulation, 3" white with canvas wrap, HA #15



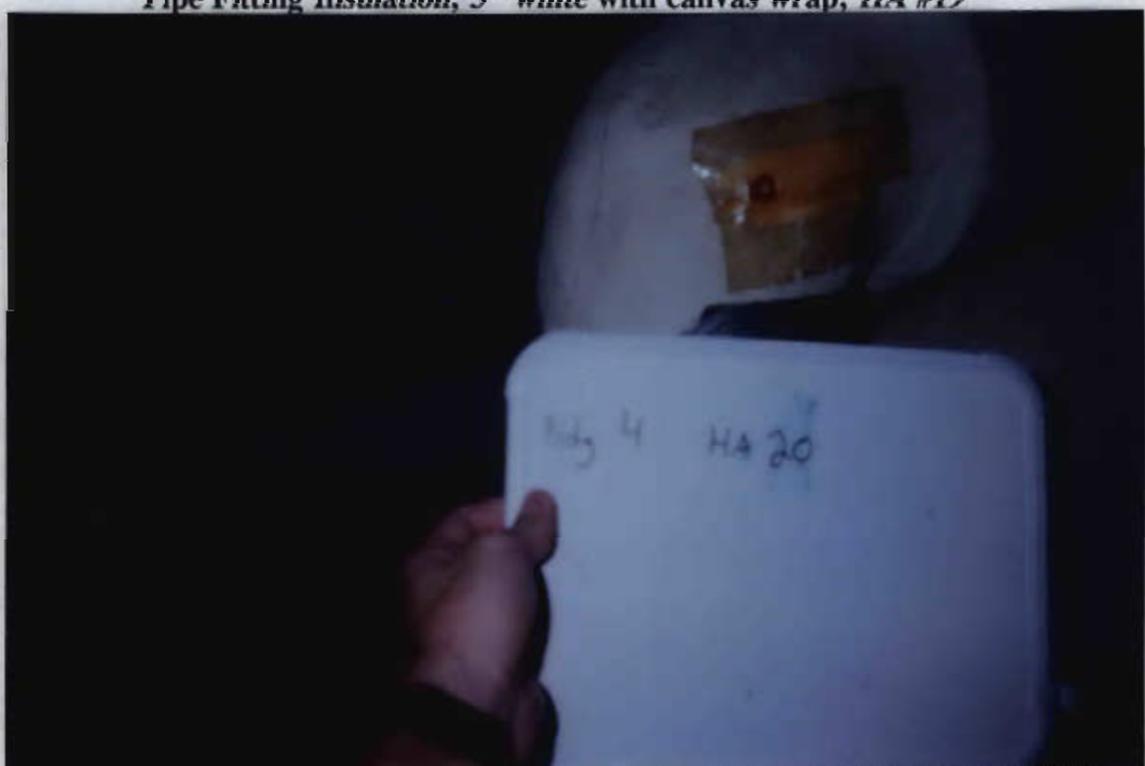
Pipe Fitting Insulation, 3" white with canvas wrap, HA #17



Pipe Insulation, 3" white with canvas wrap, HA # 18



Pipe Fitting Insulation, 3" white with canvas wrap, HA #19



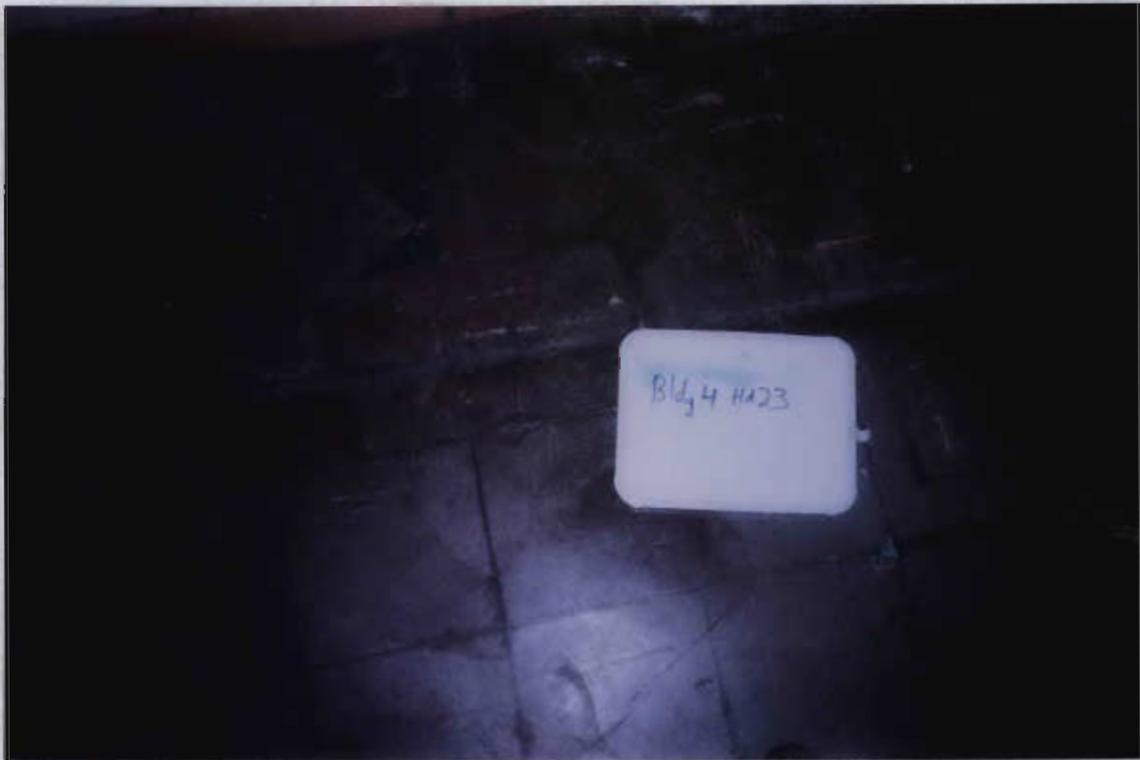
Pipe Fitting Insulation, 3" white with canvas wrap and black mastic, HA # 20

SEE HA #13 PHOTOGRAPH

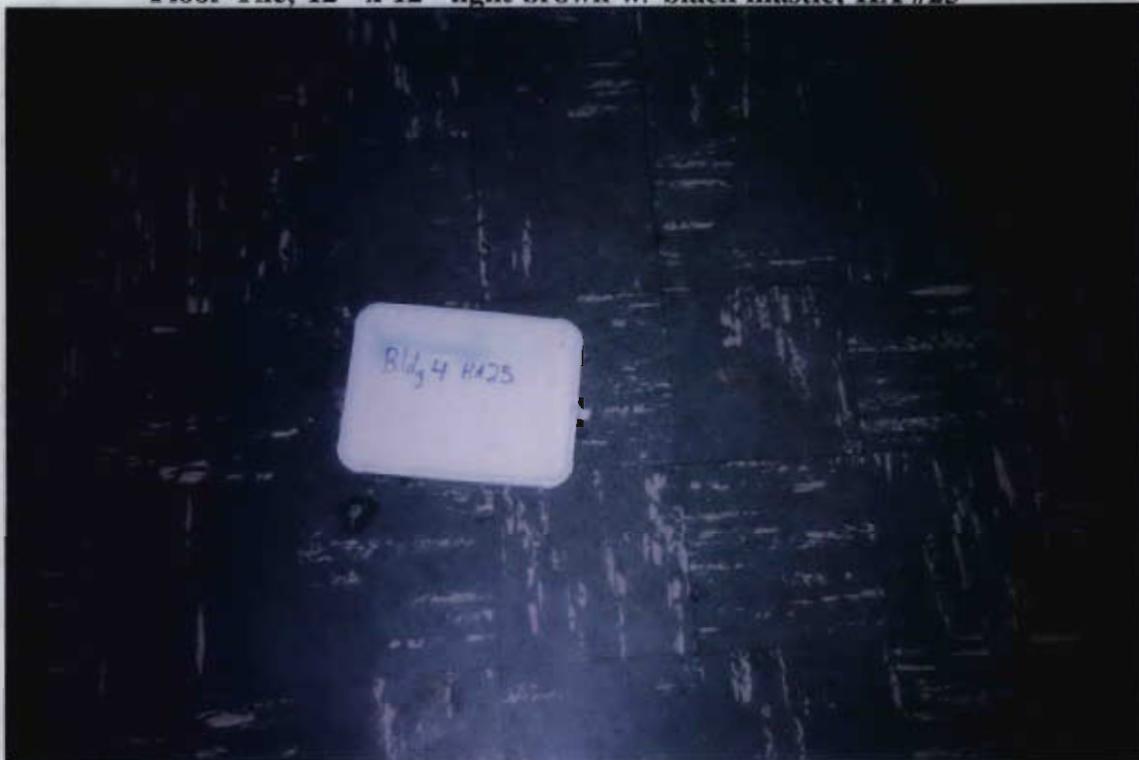
Pipe Fitting Insulation, 3" white with canvas wrap, HA #21



Floor Tile, 9" x 9" green with dark green w/ black mastic, HA # 22



Floor Tile, 12" x 12" light brown w/ black mastic, HA #23



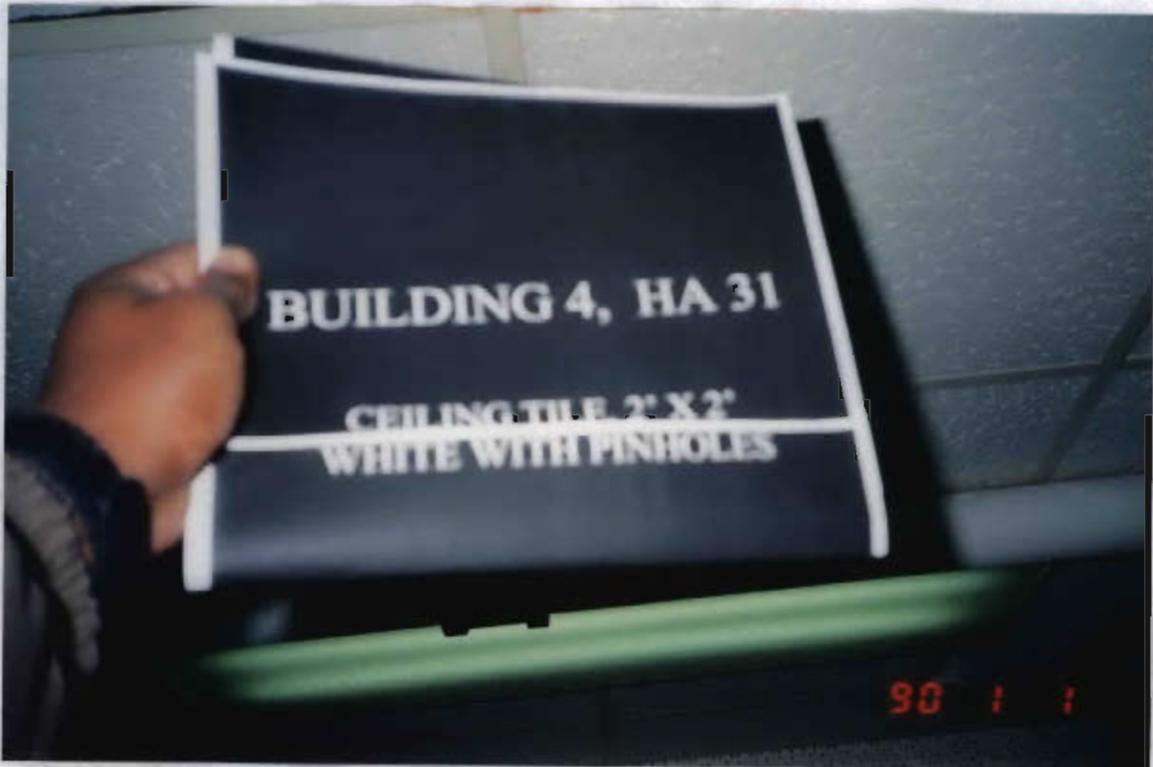
Floor Tile, 9" x 9" black with white streaks w/ black mastic, HA # 25



Floor Tile, 9" x 9" cream with brown w/ black mastic, HA #27



Floor Tile, 9" x 9" black and brown checkered w/ black mastic, HA # 30



Ceiling Tile, 2' x 2' white with pinholes, HA #31



Floor Tile, 12" x 12" white with blue w/ black mastic, HA # 32



Spray-Applied Popcorn-Type Ceiling Finish, HA #33

SEE HA #13 PHOTOGRAPH

Pipe Insulation, 3" white with canvas wrap w/ black mastic, HA # 34

APPENDIX C

PERSONNEL AND LABORATORY ACCREDITATIONS

The Environmental Institute

Jason McGlashan

Social Security Number - 137-62-0377

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

Asbestos in Buildings: Inspection and Assessment

June 21-23, 1999

Course Date

2594

Certificate Number

June 23, 1999

Examination Date

June 22, 2000

Expiration Date

R. A. Short

Ronald A. Short - Course Director

Rachel G. McCain

Rachel G. McCain - Exam Administrator



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



The Georgia Institute of Technology

This is to certify that

Foshie Bell

has attended an EPA-approved half-day Continuing Education Course entitled:

Inspecting Buildings for Asbestos Containing Materials (Annual Refresher Course for Building Inspectors)

*as required by the Federal EPA AHERA Model Accreditation Plan for
re-accreditation as a Building Inspector for Asbestos (TSCA Title II).*

Georgia Tech Research Institute
Electro-Optics, Environment and Materials Laboratory
Atlanta, GA 30332
Phone: (404) 894-7430; FAX: (404) 894-1267

August 26, 1998

Dates of Attendance

August 26, 1999

Expiration Date

149-64-0385

Social Security Number

Myrtle I. Turner, CET
Course Director
2900

Certificate Number

The Environmental Institute

Douglas J. Milton

Social Security Number - 266-55-7179

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 & Management

Planner Refresher

December 15, 1999

Course Date

6398

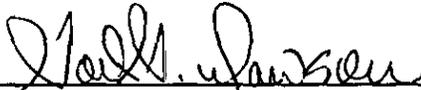
Certificate Number

December 15, 1999

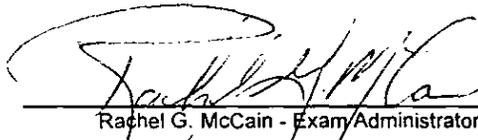
Examination Date

December 14, 2000

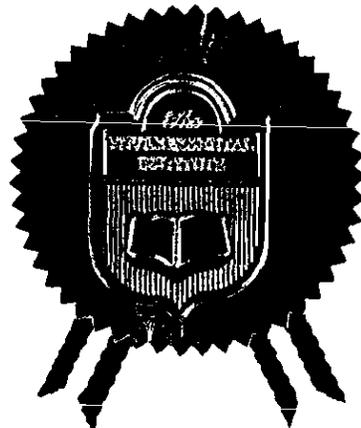
Expiration Date



Tod A. Dawson - Course Director

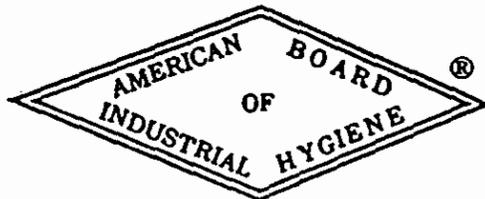


Rachel G. McCain - Exam Administrator



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

The
American Board of Industrial Hygiene®
ABIH®



organized to improve the practice of Industrial Hygiene
proclaims that

Douglas J. Milton

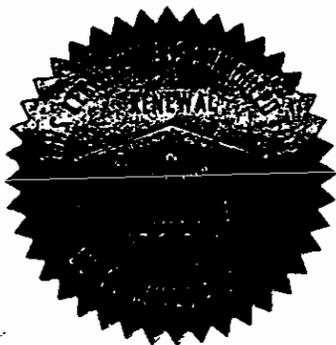
having met all requirements through
education, experience and examination,
is hereby certified in the

COMPREHENSIVE PRACTICE
of
INDUSTRIAL HYGIENE

and has the right to use the designations

CERTIFIED INDUSTRIAL HYGIENIST

CIH



November 12, 1997

date

J. Kenneth Conner

Chair ABIH

CP 7612

certificate
number

Ray T. Conner

Secretary ABIH



ASBESTOS ABATEMENT LICENSE

No. 22860

This certifies that

Douglas J Milton

266-NEB-7179

doing business as *B A T Associates, Inc*

has satisfactorily completed the training required by South Carolina Regulation No. 61-86.1 and the EPA Model Accreditation Plan, 40 CFR 763 Subpart E Appendix C, for the category of

Consultant/Management Planner

The holder of this license shall comply with all the requirements of said Regulation.

This License, License Number, or any Representation thereof, is not transferable to any other licensee or company. Use of this License is only authorized for the licensee and Company whose name appears hereon and shall expire one year from

09/24/98.

The holder of this license is qualified in accordance with requirements of the Asbestos Hazard Emergency Response Act of 1986 (AHERA) to perform as an abatement Building Inspector.

07/28/99

ORIGINAL

07/28/99 14:31



Richard D. Sharpe

Richard D. Sharpe, Director
Air Compliance Management Division
Bureau of Air Quality
South Carolina Department of Health & Environmental Control
CR-001126



ASBESTOS ABATEMENT LICENSE

No. 22859

This certifies that

Douglas J Milton

266-BCJ-7179

doing business as *B A T Associates, Inc*

has satisfactorily completed the training required by South Carolina Regulation No. 61-86.1 and the EPA Model Accreditation Plan, 40 CFR 763 Subpart E Appendix C, for the category of

Consultant/Building Inspector

The holder of this license shall comply with all the requirements of said Regulation.

This License, License Number, or any Representation thereof, is not transferable to any other licensee or company. Use of this License is only authorized for the licensee and Company whose name appears hereon and shall expire one year from

09/23/98.

07/28/99

ORIGINAL

07/28/99 14:28



Richard D. Sharpe

Richard D. Sharpe, Director
Air Compliance Management Division
Bureau of Air Quality
South Carolina Department of Health & Environmental Control
CR-001126



United States Department of Commerce
National Institute of Standards and Technology

NVLAP[®]

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation



CAPE ENVIRONMENTAL MANAGEMENT, INC.
ATLANTA, 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

June 30, 2000

Effective through

A handwritten signature in black ink, appearing to read "James L. Galt".

For the National Institute of Standards and Technology

NVLAP Lab Code: 102111-0

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

ISO/IEC GUIDE 25:1990
ISO 9002:1987

Certificate of Accreditation



ANALYTICAL ENVIRONMENTAL SERVICES, INC.
ATLANTA, 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

September 30, 2000

Effective through

A handwritten signature in black ink, appearing to read "James L. Galt".

For the National Institute of Standards and Technology

NVLAP Lab Code: 102033-0

APPENDIX D
LABORATORY ANALYSIS RESULTS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-1-1 LAB ID: 920762
SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: BROWN SOFT FIBROUS WITH PAINT

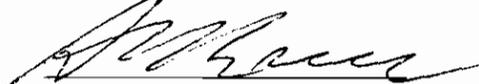
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE		CELLULOSE	90	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	10

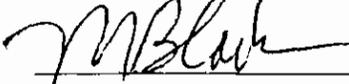
COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-1-2 LAB ID: 920763
SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: BROWN SOFT FIBROUS WITH PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS	NONASBESTOS FIBERS		NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYCOTILE	CELLULOSE	90	VERMICULITE/MICA	BITUMEN/TAR	
AMOSITE	GLASS FIBERS		PERLITE	SAND/AGGR.	
CROCIDOLITE	SYNTHETICS		EXPANDED GLASS	GLUE/CAULK	
TREMOLITE	WOLLASTONITE		SYNTHETIC FOAM	VINYL	
ACTINOLITE	TALC		ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	10

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-1-3 LAB ID: 920764
SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: BROWN SOFT FIBROUS WITH PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE		CELLULOSE	85	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	15

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-2-1 LAB ID: 920765
 SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY SOFT FIBROUS WITH PAINT

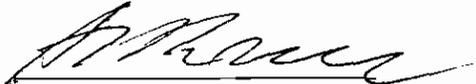
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE		CELLULOSE	2	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS	75	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	23

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME:	BAT ASSOCIATES	LAB JOB NO:	B9286-2
PROJECT NAME:	CHARLESTON NSY / 971001-13.03	DATE RECEIVED:	10/28/99
PROJECT NO:	L802Z.000.000	REPORT ISSUED:	11/30/99
SAMPLE FIELD ID:	4-2-2	LAB ID:	920766
SAMPLE INFO:		DATE ANALYZED:	11/19/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: NOT RECEIVED

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS	NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS
CHRYSTOTILE	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR
AMOSITE	GLASS FIBERS	PERLITE	SAND/AGGR.
CROCIDOLITE	SYNTHETICS	EXPANDED GLASS	GLUE/CAULK
TREMOLITE	WOLLASTONITE	SYNTHETIC FOAM	VINYL
ACTINOLITE	TALC	ALUMINUM/METAL	CORK
ANTHOPHYLLITE		FOAM RUBBER	LATEX/RUBBER
			PAINT/OTHER
			100

COMMENTS: NOT RECEIVED

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST

QUALITY CONTROL

ALEKSEY REZNIK

MICHAEL BLACK

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-2-3 LAB ID: 920767
SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: GRAY SOFT FIBROUS WITH PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE		CELLULOSE	2	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS	80	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	18

COMMENTS:

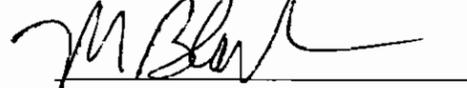
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-3-1 LAB ID: 920768
 SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: BROWN HARD RESILIENT TO GRANULAR WITH MASTIC

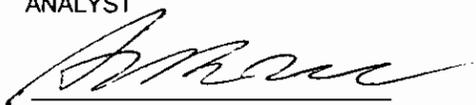
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSOTILE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	3
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	67

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-3-2 LAB ID: 920769
SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: BROWN HARD RESILIENT TO GRANULAR WITH YELLOW GUMMY MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	35
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	3
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	62

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-3-3 LAB ID: 920770
 SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: BROWN HARD RESILIENT TO GRANULAR WITH YELLOW GUMMY MASTIC

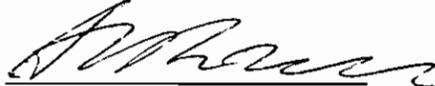
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYCOTILE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	35
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	5
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	60

COMMENTS:

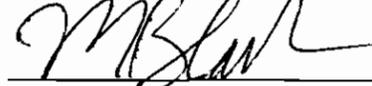
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-4-1 LAB ID: 920771
SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GREEN HARD RESILIENT TO GRANULAR WITH FIBERS AND BLACK MASTIC

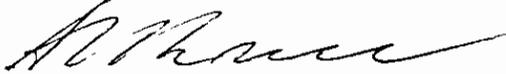
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSTILE	10	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	3
AMOSITE		GLASS FIBERS	PERLITE	SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	57

COMMENTS: **10% CHRYSTILE IN BLACK MASTIC**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L80ZZ.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-4-2 LAB ID: 920772
SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: GREEN HARD RESILIENT TO GRANULAR WITH FIBERS AND BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSTOTILE	8	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	3
AMOSITE		GLASS FIBERS	PERLITE	SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	59

COMMENTS: **8% CHRYSTOTILE IN BLACK MASTIC**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-4-3 LAB ID: 920773
 SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GREEN HARD RESILIENT TO GRANULAR WITH FIBERS AND BLACK MASTIC

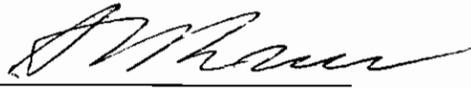
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSTOLE	<u>7</u>	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	<u>3</u>
AMOSITE		GLASS FIBERS	PERLITE	SAND/AGGR.	<u>30</u>
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	<u>60</u>

COMMENTS: 10% CHRYSTOLE IN BLACK MASTIC

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-5-1 LAB ID: 920774
SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY SOFT FIBROUS TO GRANULAR TO POWDERY WITH PAINT

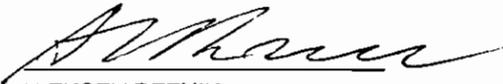
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE		CELLULOSE	30	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS	30	PERLITE	30	SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	10

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-5-2 LAB ID: 920775
 SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY SOFT FIBROUS TO GRANULAR TO POWDERY WITH PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE		CELLULOSE	30	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS	30	PERLITE	30	SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	10

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 783, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-5-3 LAB ID: 920776
 SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: GRAY SOFT FIBROUS TO GRANULAR TO POWDERY WITH PAINT

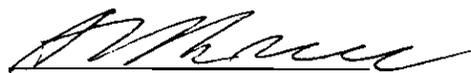
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSOTILE		CELLULOSE	40	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS	20	PERLITE	30	SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	10

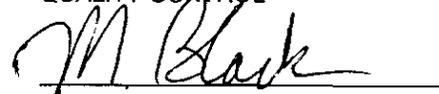
COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS. EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


 MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-6-1 LAB ID: 920777-1
SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 1 NO. OF LAYERS: 2
APPEARANCE: YELLOW HARD RESILIENT TO GRANULAR

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYCOTILE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	70

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-6-1 LAB ID: 920777-2
 SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 2 NO. OF LAYERS: 2
 APPEARANCE: BLACK SOFT BITUMINOUS WITH FIBERS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSTOLE	10	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	80
AMOSITE		GLASS FIBERS	PERLITE	SAND/AGGR.	
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
			PAINT/OTHER	10	

COMMENTS:

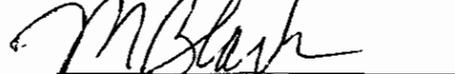
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED)

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-6-2 LAB ID: 920778
 SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: BROWN-YELLOW HARD RESILIENT TO GRANULAR WITH YELLOW MASTIC

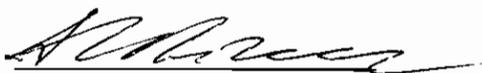
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	3
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	67

COMMENTS:

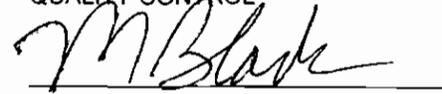
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-6-3 LAB ID: 920779-1
 SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 1 NO. OF LAYERS: 2
 APPEARANCE: BROWN-YELLOW HARD RESILIENT TO GRANULAR

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	35
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	65

COMMENTS:

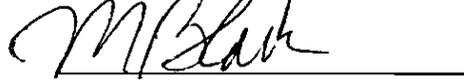
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEQUUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-6-3 LAB ID: 920779-2
 SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 2 NO. OF LAYERS: 2
 APPEARANCE: BLACK SOFT BITUMINOUS WITH FIBERS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	5	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	90
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	5

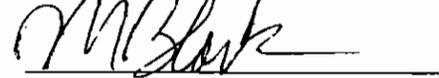
COMMENTS:

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ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


 MICHAEL BLACK

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-7-1 LAB ID: 920780
 SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: NOT RECEIVED

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLITE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	100

COMMENTS: **NOT RECEIVED**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST

QUALITY CONTROL

 ALEKSEY REZNIK

 MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-7-2 LAB ID: 920781
SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 1+2 NO. OF LAYERS: 2
APPEARANCE: 1. WHITE HARD SILTY WITH MICA (J/C); 2. GRAY SOFT FIBROUS (TAPE)

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTILE	<1	CELLULOSE	50	VERMICULITE/MICA	10	BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	40

COMMENTS: 1-2% CHRYSTILE IN JOINT COMPOUND

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS. EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-7-3 LAB ID: 920782
SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 1+2+3 NO. OF LAYERS: 3
APPEARANCE: 1. WHITE HARD SILTY WITH MICA (J/C); 2. GRAY SOFT FIBROUS; 3. LIGHT GRAY HARD SILTY WITH FIBERS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOTILE	<1	CELLULOSE	25	VERMICULITE/MICA	2	BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	73

COMMENTS: <1% CHRYSTOTILE IN JOINT COMPOUND

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-8-1 LAB ID: 920783
SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS
CHRYCOTILE	20	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR
AMOSITE	15	GLASS FIBERS	PERLITE	SAND/AGGR.
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL
ACTINOLITE		TALC	ALUMINUM/METAL	CORK
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER
				PAINT/OTHER
				65

COMMENTS:

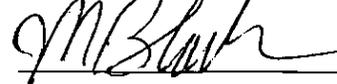
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ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-8-2 LAB ID: 920784
 SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSOTILE	15	CELLULOSE	15	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	20	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	50

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME:	BAT ASSOCIATES	LAB JOB NO:	B9286-2
PROJECT NAME:	CHARLESTON NSY / 971001-13.03	DATE RECEIVED:	10/28/99
PROJECT NO:	L802Z.000.000	REPORT ISSUED:	11/30/99
SAMPLE FIELD ID:	4-8-3	LAB ID:	920785
SAMPLE INFO:		DATE ANALYZED:	11/19/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSTOLE	20	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	
AMOSITE	20	GLASS FIBERS	PERLITE	SAND/AGGR.	
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	60

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-9-1 LAB ID: 920786
 SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: LT GRAY SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOTILE		CELLULOSE	35	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS	3	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	62

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


 MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-9-2 LAB ID: 920787
SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: LT GRAY SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE		CELLULOSE	35	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	65

COMMENTS:

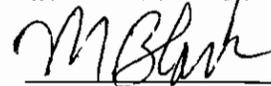
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REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-9-3 LAB ID: 920788
 SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: LT GRAY SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLITE		CELLULOSE	40	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS	1	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	59

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-10-1 LAB ID: 920789
SAMPLE INFO: _____ DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	15	CELLULOSE	15	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	25	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	45

COMMENTS:

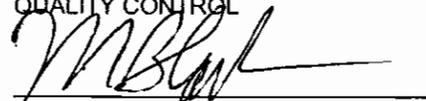
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ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-2
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-10-2 LAB ID: 920790
 SAMPLE INFO: DATE ANALYZED: 11/19/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS	OTHER COMPONENTS
CHRYBOTILE	35	CELLULOSE	15	VERMICULITE/MICA	BITUMEN/TAR
AMOSITE	1	GLASS FIBERS		PERLITE	SAND/AGGR.
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS	GLUE/CAULK
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM	VINYL
ACTINOLITE		TALC		ALUMINUM/METAL	CORK
ANTHOPHYLLITE				FOAM RUBBER	LATEX/RUBBER
					PAINT/OTHER
					49

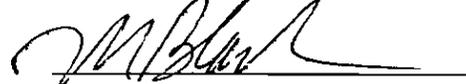
COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


 MICHAEL BLACK

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME:	BAT ASSOCIATES	LAB JOB NO:	B9286-2
PROJECT NAME:	CHARLESTON NSY / 971001-13.03	DATE RECEIVED:	10/28/99
PROJECT NO:	L802Z.000.000	REPORT ISSUED:	11/30/99
SAMPLE FIELD ID:	4-10-3	LAB ID:	920791
SAMPLE INFO:		DATE ANALYZED:	11/19/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

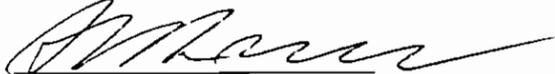
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	35	CELLULOSE	15	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	50

COMMENTS:

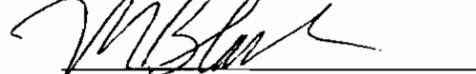
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/19/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-11-1 LAB ID: 920791
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH PAPER

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOTILE	15	CELLULOSE	15	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	15	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	55

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-11-2 LAB ID: 920792
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSOPILE	20	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	10	GLASS FIBERS	10	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	60

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-11-3 LAB ID: 920793
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS

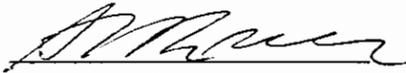
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	10	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	20	GLASS FIBERS	15	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	55

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-12-1 LAB ID: 920793A
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOTILE	15	CELLULOSE	10	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	15	GLASS FIBERS	10	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	50

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763. SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-12-2 LAB ID: 920794
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	15	CELLULOSE	10	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	15	GLASS FIBERS	10	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	50

COMMENTS:

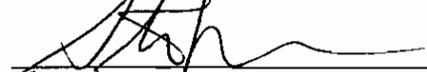
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME:	BAT ASSOCIATES	LAB JOB NO:	B9286-3
PROJECT NAME:	CHARLESTON NSY / 971001-13.03	DATE RECEIVED:	10/28/99
PROJECT NO:	L802Z.000.000	REPORT ISSUED:	11/30/99
SAMPLE FIELD ID:	4-12-3	LAB ID:	920795
SAMPLE INFO:		DATE ANALYZED:	11/22/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	20	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	15	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	65

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-13-1 LAB ID: 920796
 SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: NOT RECEIVED

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYTOSILE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	100

COMMENTS: NOT RECEIVED

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST

QUALITY CONTROL

ALEKSEY REZNIK

STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-13-2 LAB ID: 920797
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

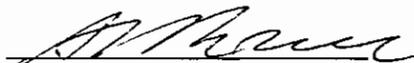
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	10	CELLULOSE	20	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	10	GLASS FIBERS	10	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	50

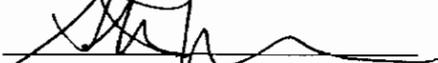
COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME:	BAT ASSOCIATES	LAB JOB NO:	B9286-3
PROJECT NAME:	CHARLESTON NSY / 971001-13.03	DATE RECEIVED:	10/28/99
PROJECT NO:	L802Z.000.000	REPORT ISSUED:	11/30/99
SAMPLE FIELD ID:	4-13-3	LAB ID:	920798
SAMPLE INFO:		DATE ANALYZED:	11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOTILE	7	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	15	GLASS FIBERS	20	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	58

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 783, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-14-1 LAB ID: 920799
 SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

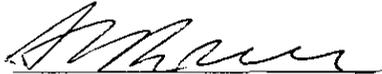
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	10	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	15	GLASS FIBERS	20	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	55

COMMENTS:

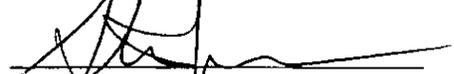
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99
 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-14-2 LAB ID: 920800
 SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: WHITE SOFT POWDERY TO FIBROUS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYBOTILE	15	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	
AMOSITE	20	GLASS FIBERS	PERLITE	SAND/AGGR.	
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	65

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-14-3 LAB ID: 920801
 SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: NOT RECEIVED

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS	NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS
CHRYSTOTILE	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR
AMOSITE	GLASS FIBERS	PERLITE	SAND/AGGR.
CROCIDOLITE	SYNTHETICS	EXPANDED GLASS	GLUE/CAULK
TREMOLITE	WOLLASTONITE	SYNTHETIC FOAM	VINYL
ACTINOLITE	TALC	ALUMINUM/METAL	CORK
ANTHOPHYLLITE		FOAM RUBBER	LATEX/RUBBER
			PAINT/OTHER
			100

COMMENTS: NOT RECEIVED

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST

QUALITY CONTROL

 ALEKSEY REZNIK

 STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-15-1 LAB ID: 920802
 SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH PAPER AND PAINT

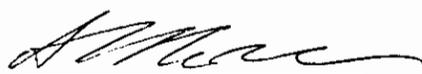
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	15	CELLULOSE	15	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	15	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	55

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


 STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-15-2 LAB ID: 920803
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS, PAPER AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSTOLITE	20	CELLULOSE	10	VERMICULITE/MICA	BITUMEN/TAR	
AMOSITE	10	GLASS FIBERS	10	PERLITE	SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS	GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL	CORK	
ANTHOPHYLLITE				FOAM RUBBER	LATEX/RUBBER	
					PAINT/OTHER	50

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-15-3 LAB ID: 920804
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS, PAPER AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOTILE	17	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	20	GLASS FIBERS	20	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	43

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 12/9/99
SAMPLE FIELD ID: 4-16-1 LAB ID: 920805
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH PAPER AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	20	CELLULOSE	15	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	15	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	50

COMMENTS:

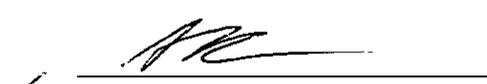
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-16-2 LAB ID: 920806
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: WHITE SOFT POWDERY TO FIBROUS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSTILE	15	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	
AMOSITE	15	GLASS FIBERS	PERLITE	SAND/AGGR.	
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	70

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92)PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST

ALEKSEY REZNIK

QUALITY CONTROL

STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-16-3 LAB ID: 920807
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH PAPER AND PAINT

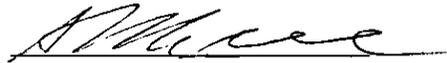
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	20	CELLULOSE	15	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	15	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	50

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-17-1 LAB ID: 920808
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

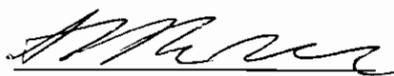
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	20	CELLULOSE	20	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	20	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	40

COMMENTS:

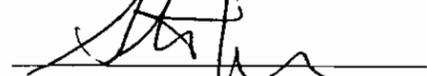
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-17-2 LAB ID: 920809
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: WHITE SOFT POWDERY TO FIBROUS

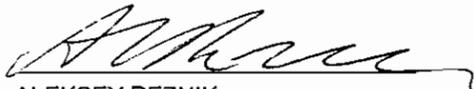
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS
CHRYBOTILE	10	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR
AMOSITE	25	GLASS FIBERS	PERLITE	SAND/AGGR.
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL
ACTINOLITE		TALC	ALUMINUM/METAL	CORK
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER
				PAINT/OTHER
				65

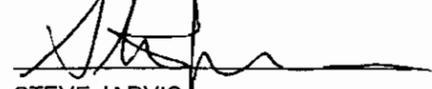
COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-17-3 LAB ID: 920810
 SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	5	CELLULOSE	15	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	25	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	55

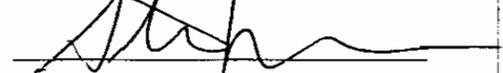
COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


 STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-18-1 LAB ID: 920811
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	10	CELLULOSE	15	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	25	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	50

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-18-2 LAB ID: 920812
 SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: WHITE SOFT POWDERY TO FIBROUS

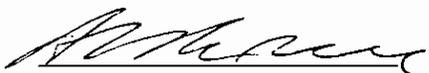
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYBOTILE	10	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	
AMOSITE	25	GLASS FIBERS	PERLITE	SAND/AGGR.	
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	65

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


 STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME:	BAT ASSOCIATES	LAB JOB NO:	B9286-3
PROJECT NAME:	CHARLESTON NSY / 971001-13.03	DATE RECEIVED:	10/28/99
PROJECT NO:	L802Z.000.000	REPORT ISSUED:	11/30/99
SAMPLE FIELD ID:	4-18-3	LAB ID:	920813
SAMPLE INFO:		DATE ANALYZED:	11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	20	CELLULOSE	15	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	20	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	45

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-19-1 LAB ID: 920814
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

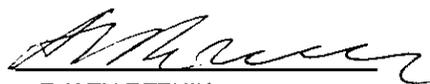
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE		CELLULOSE	10	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS	30	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	60

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-19-2 LAB ID: 920815
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

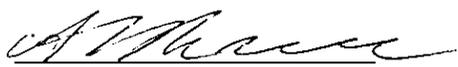
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE		CELLULOSE	20	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	2	GLASS FIBERS	20	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	58

COMMENTS:

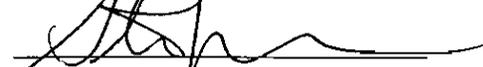
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME:	BAT ASSOCIATES	LAB JOB NO:	B9286-3
PROJECT NAME:	CHARLESTON NSY / 971001-13.03	DATE RECEIVED:	10/28/99
PROJECT NO:	L802Z.000.000	REPORT ISSUED:	11/30/99
SAMPLE FIELD ID:	4-19-3	LAB ID:	920816
SAMPLE INFO:		DATE ANALYZED:	11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: GRAY SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

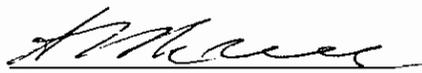
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYCOTILE		CELLULOSE	2	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS	30	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	68

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-20-1 LAB ID: 920817
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE		CELLULOSE	20	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	1	GLASS FIBERS	20	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	59

COMMENTS:

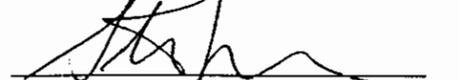
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-20-2 LAB ID: 920818
 SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: GRAY SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

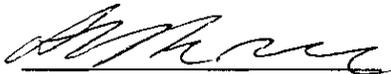
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOTILE		CELLULOSE	7	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	2	GLASS FIBERS	25	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	66

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-3
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-20-3 LAB ID: 920819
SAMPLE INFO: DATE ANALYZED: 11/22/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: GRAY SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT AND BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	<1	CELLULOSE	20	VERMICULITE/MICA		BITUMEN/TAR	3
AMOSITE	<1	GLASS FIBERS	20	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	57

COMMENTS: **TOTAL ASBESTOS CONTENT <1%**
5% CHRYSTOLE IN BLACK MASTIC

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/22/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-21-1 LAB ID: 920820
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

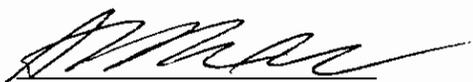
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	1	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	30	GLASS FIBERS	15	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	54

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L80ZZ.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-21-2 LAB ID: 920821
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

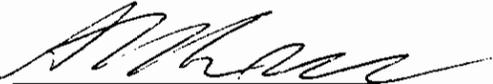
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	3	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	30	GLASS FIBERS	15	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	52

COMMENTS:

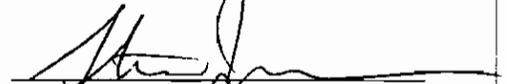
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99

SAMPLE FIELD ID: 4-21-3 LAB ID: 920822
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	2	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	35	GLASS FIBERS	15	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	48

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


 STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-22-1 LAB ID: 920823
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GREEN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSTOLE	2	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	3
AMOSITE		GLASS FIBERS	PERLITE	SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	65

COMMENTS: **5% CHRYSTOLE IN BLACK MASTIC**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 783, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME:	BAT ASSOCIATES	LAB JOB NO:	B9286-4
PROJECT NAME:	CHARLESTON NSY / 971001-13.03	DATE RECEIVED:	10/28/99
PROJECT NO:	L802Z.000.000	REPORT ISSUED:	11/30/99
SAMPLE FIELD ID:	4-22-2	LAB ID:	920824
SAMPLE INFO:		DATE ANALYZED:	11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GREEN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOTILE	1	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	3
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	66

COMMENTS: **3% CHRYSTOTILE IN BLACK MASTIC**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-22-3 LAB ID: 920825
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: GREEN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	3	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	3
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	64

COMMENTS: **5% CHRYSTOLE IN BLACK MASTIC**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-23-1 LAB ID: 920826
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: BROWN HARD RESILIENT TO GRANULAR WITH TRACE OF BLACK MASTIC

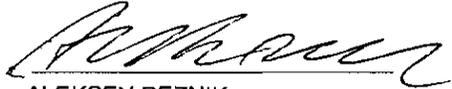
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSTOLE	5	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	0.1
AMOSITE		GLASS FIBERS	PERLITE	SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	65

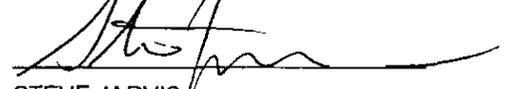
COMMENTS: NOT ENOUGH BLACK MASTIC

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


 STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-23-2 LAB ID: 920827
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: BROWN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	5	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	2
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	63

COMMENTS: **NO ASBESTOS DETECTED IN BLACK MASTIC**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-23-3 LAB ID: 920828
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: BROWN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSOITILE	<u>6</u>	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	<u>2</u>
AMOSITE		GLASS FIBERS	PERLITE	SAND/AGGR.	<u>30</u>
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	<u>62</u>

COMMENTS: **NO ASBESTOS DETECTED IN BLACK MASTIC**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-24-1 LAB ID: 920829
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: GREEN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

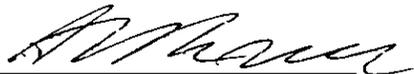
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYCOTILE		CELLULOSE	3	VERMICULITE/MICA		BITUMEN/TAR	3
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	64

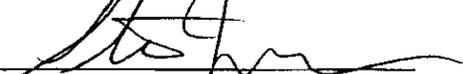
COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFIBRIL MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-24-2 LAB ID: 920830
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GREEN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSOTILE		CELLULOSE	4	VERMICULITE/MICA	BITUMEN/TAR	5	
AMOSITE		GLASS FIBERS		PERLITE	SAND/AGGR.	30	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS	GLUE/CAULK		
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM	VINYL		
ACTINOLITE		TALC		ALUMINUM/METAL	CORK		
ANTHOPHYLLITE				FOAM RUBBER	LATEX/RUBBER		
					PAINT/OTHER	61	

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92)PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


 STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NON-FIBRILE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-24-3 LAB ID: 920831
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: GREEN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSOTILE		CELLULOSE	5	VERMICULITE/MICA		BITUMEN/TAR	5
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	60

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-25-1 LAB ID: 920832
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GREEN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSOTILE	7	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	5
AMOSITE		GLASS FIBERS	PERLITE	SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	58

COMMENTS: **<1% CHRYSOTILE IN BLACK MASTIC**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


 STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME:	BAT ASSOCIATES	LAB JOB NO:	B9286-4
PROJECT NAME:	CHARLESTON NSY / 971001-13.03	DATE RECEIVED:	10/28/99
PROJECT NO:	L802Z.000.000	REPORT ISSUED:	11/30/99
SAMPLE FIELD ID:	4-25-2	LAB ID:	920833
SAMPLE INFO:		DATE ANALYZED:	11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GREEN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

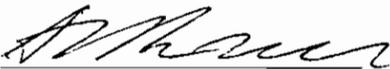
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTILE	10	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	5
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	55

COMMENTS: **<1% CHRYSTILE IN BLACK MASTIC**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-25-3 LAB ID: 920834
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GREEN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSTOTILE	8	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	5
AMOSITE		GLASS FIBERS	PERLITE	SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	57

COMMENTS: <1% CHRYSTOTILE IN BLACK MASTIC

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-26-1 LAB ID: 920835
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: GRAY-BROWN HARD RESILIENT TO GRANULAR WITH YELLOW MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS	NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS
CHRYCOTILE	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR
AMOSITE	GLASS FIBERS	PERLITE	SAND/AGGR. 30
CROCIDOLITE	SYNTHETICS	EXPANDED GLASS	GLUE/CAULK 3
TREMOLITE	WOLLASTONITE	SYNTHETIC FOAM	VINYL
ACTINOLITE	TALC	ALUMINUM/METAL	CORK
ANTHOPHYLLITE		FOAM RUBBER	LATEX/RUBBER
			PAINT/OTHER 67

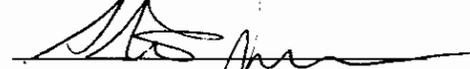
COMMENTS:

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ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


 STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-26-2 LAB ID: 920836
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY-BROWN HARD RESILIENT TO GRANULAR WITH YELLOW MASTIC

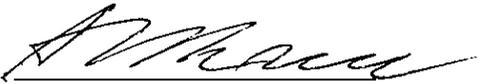
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLITE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	20
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	3
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	77

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-26-3 LAB ID: 920837
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY-BROWN HARD RESILIENT TO GRANULAR WITH YELLOW MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYTOSILE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	2
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	68

COMMENTS:

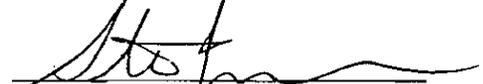
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-27-1 LAB ID: 920838
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: BROWN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	10	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	3
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	57

COMMENTS: **4% CHRYSTOLE IN BLACK MASTIC**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


 STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-27-2 LAB ID: 920839
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: BROWN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

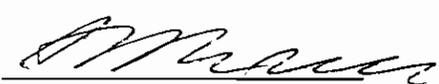
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	8	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	3
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	25
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	64

COMMENTS: 5% CHRYSTOLE IN BLACK MASTIC

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-27-3 LAB ID: 920840
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: BROWN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	8	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	3
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	20
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	69

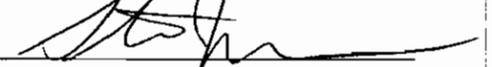
COMMENTS: **5% CHRYBOTILE IN BLACK MASTIC**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


 STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-28-1 LAB ID: 920841
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: BROWN HARD RESILIENT TO GRANULAR WITH TRACE OF BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS	NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSTOLE	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	0.1
AMOSITE	GLASS FIBERS	PERLITE	SAND/AGGR.	20
CROCIDOLITE	SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	
TREMOLITE	WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE	TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE		FOAM RUBBER	LATEX/RUBBER	
			PAINT/OTHER	80

COMMENTS:

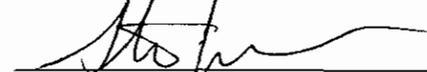
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-28-2 LAB ID: 920842
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: BROWN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE		CELLULOSE	3	VERMICULITE/MICA		BITUMEN/TAR	2
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	20
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	75

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
 REPORT 1 OF 1

ANALYST

ALEKSEY REZNIK

QUALITY CONTROL

STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-28-3 LAB ID: 920843
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: NOT RECEIVED

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	100

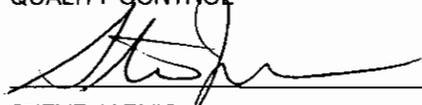
COMMENTS: **NOT RECEIVED**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST

ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-29-1 LAB ID: 920844
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY HARD RESILIENT TO GRANULAR

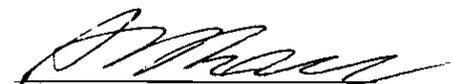
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSOTILE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	70

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-29-2 LAB ID: 920845
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY HARD RESILIENT TO GRANULAR WITH TRACE OF GLUE

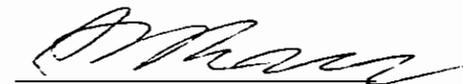
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	30
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	1
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	69

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-29-3 LAB ID: 920846
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY HARD RESILIENT TO GRANULAR WITH TRACE OF GLUE

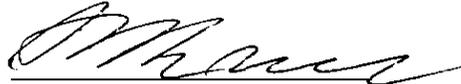
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	25
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	1
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	74

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 783, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME:	BAT ASSOCIATES	LAB JOB NO:	B9286-4
PROJECT NAME:	CHARLESTON NSY / 971001-13.03	DATE RECEIVED:	10/28/99
PROJECT NO:	L802Z.000.000	REPORT ISSUED:	11/30/99
SAMPLE FIELD ID:	4-30-1	LAB ID:	920847
SAMPLE INFO:		DATE ANALYZED:	11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: BROWN HARD RESILIENT TO GRANULAR WITH BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOTILE	4	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	3
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	20
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	73

COMMENTS: **NO ASBESTOS DETECTED IN BLACK MASTIC**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


 STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-30-2 LAB ID: 920848
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: BLACK HARD BITUMINOUS TO SILTY TO GRANULAR WITH FIBERS AND BLACK MASTIC

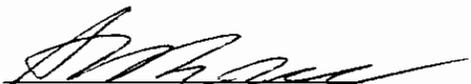
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS
CHRYBOTILE	5	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR 70
AMOSITE		GLASS FIBERS	PERLITE	SAND/AGGR. 10
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL
ACTINOLITE		TALC	ALUMINUM/METAL	CORK
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER
				PAINT/OTHER 15

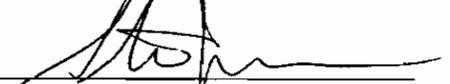
COMMENTS: **NO ASBESTOS DETECTED IN BLACK MASTIC**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


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PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L80ZZ.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-30-3 LAB ID: 920849
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: BROWN HARD RESILIENT TO GRANULAR WITH FIBERS AND BLACK MASTIC

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	4	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	3
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	20
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	73

COMMENTS: **NO ASBESTOS DETECTED IN BLACK MASTIC**

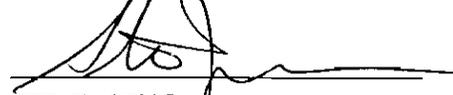
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NON-FRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-31-1 LAB ID: 920850
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: GRAY SOFT FIBROUS WITH PAINT

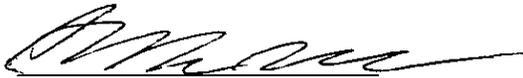
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE		CELLULOSE	2	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	4	GLASS FIBERS	80	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	14

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-31-2 LAB ID: 920851
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: GRAY SOFT FIBROUS WITH PAINT

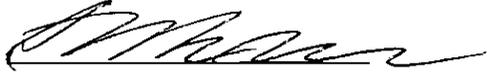
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE		CELLULOSE	2	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	3	GLASS FIBERS	70	PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	25

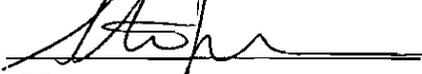
COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-31-3 LAB ID: 920852
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: GRAY SOFT FIBROUS WITH PAINT

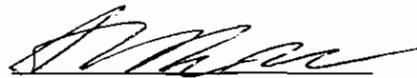
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS	OTHER COMPONENTS
CHRYCOTILE		CELLULOSE	1	VERMICULITE/MICA	BITUMEN/TAR
AMOSITE	5	GLASS FIBERS	70	PERLITE	SAND/AGGR.
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS	GLUE/CAULK
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM	VINYL
ACTINOLITE		TALC		ALUMINUM/METAL	CORK
ANTHOPHYLLITE				FOAM RUBBER	LATEX/RUBBER
					PAINT/OTHER
					24

COMMENTS:

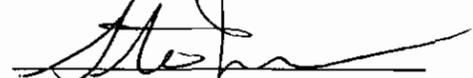
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ANALYST



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PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFIBRILE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME:	BAT ASSOCIATES	LAB JOB NO:	B9286-4
PROJECT NAME:	CHARLESTON NSY / 971001-13.03	DATE RECEIVED:	10/28/99
PROJECT NO:	L802Z.000.000	REPORT ISSUED:	11/30/99
SAMPLE FIELD ID:	4-32-1	LAB ID:	920853-1
SAMPLE INFO:		DATE ANALYZED:	11/23/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 1 NO. OF LAYERS: 2
APPEARANCE: BLUE HARD RESILIENT TO GRANULAR

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE		CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	20
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	80

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L80ZZ.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-32-1 LAB ID: 920853-2
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 2 NO. OF LAYERS: 2
APPEARANCE: BROWN-YELLOW GUMMY MASTIC WITH PIECES OF GREEN FLOOR TILE

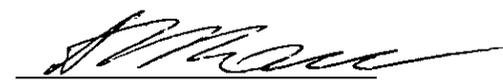
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSTOLE	2	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	
AMOSITE		GLASS FIBERS	PERLITE	SAND/AGGR.	5
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	80
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	13

COMMENTS: **20% CHRYSTOLE IN GREEN F/T PIECES**

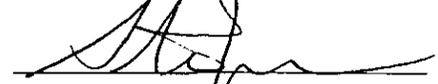
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST



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QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-32-2 LAB ID: 920854-1
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 1 NO. OF LAYERS: 2
APPEARANCE: BLUE HARD RESILIENT TO GRANULAR

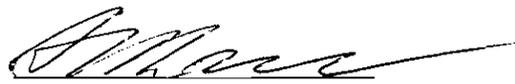
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE		CELLULOSE	1	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	20
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	79

COMMENTS:

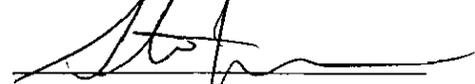
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

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**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-32-2 LAB ID: 920854-2
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 2 NO. OF LAYERS: 2
APPEARANCE: YELLOW GUMMY MASTIC WITH PIECES OF GREEN FLOOR TILE

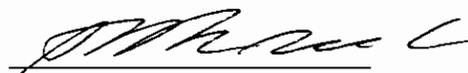
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSTILE	1	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	
AMOSITE		GLASS FIBERS	PERLITE	SAND/AGGR.	2
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	80
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	17

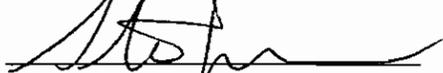
COMMENTS: **15% CHRYSTILE IN FLOOR TILE PIECES**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME:	BAT ASSOCIATES	LAB JOB NO:	B9286-4
PROJECT NAME:	CHARLESTON NSY / 971001-13.03	DATE RECEIVED:	10/28/99
PROJECT NO:	L802Z.000.000	REPORT ISSUED:	11/30/99
SAMPLE FIELD ID:	4-32-3	LAB ID:	920855-1
SAMPLE INFO:		DATE ANALYZED:	11/23/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 1 NO. OF LAYERS: 2
APPEARANCE: BLUE HARD RESILIENT TO GRANULAR

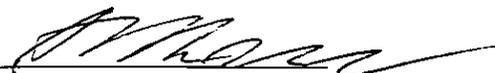
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	<1	CELLULOSE	1	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	20
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	79

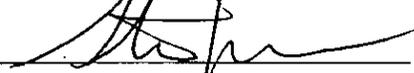
COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-32-3 LAB ID: 920855-2
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: YES LAYER NO: 2 NO. OF LAYERS: 2
APPEARANCE: YELLOW GUMMY MASTIC WITH GREEN FLOOR TILE PIECES

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS	
CHRYSTOLE	<u>2</u>	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR	
AMOSITE		GLASS FIBERS	PERLITE	SAND/AGGR.	<u>5</u>
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK	<u>70</u>
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL	
ACTINOLITE		TALC	ALUMINUM/METAL	CORK	
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER	
				PAINT/OTHER	<u>23</u>

COMMENTS: 15% CHRYSTOLE IN FLOOR TILE PIECES

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99
FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-33-1 LAB ID: 920856
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: CREAM SOFT POWDERY TO GRANULAR WITH FIBERS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSOTILE	5	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE	25	SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	70

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

QUALITY CONTROL


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PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-33-2 LAB ID: 920857
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
 APPEARANCE: CREAM SOFT POWDERY TO GRANULAR WITH FIBERS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	5	CELLULOSE		VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE	25	SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	70

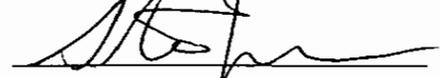
COMMENTS:

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 REPORT 1 OF 1

ANALYST


 ALEKSEY REZNIK

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PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-33-3 LAB ID: 920858
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: CREAM SOFT POWDERY TO GRANULAR WITH FIBERS AND PAINT

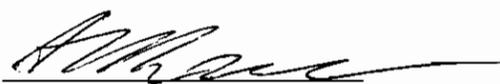
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS	NONFIBROUS COMPONENTS	OTHER COMPONENTS
CHRYCOTILE	7	CELLULOSE	VERMICULITE/MICA	BITUMEN/TAR
AMOSITE		GLASS FIBERS	PERLITE	25 SAND/AGGR.
CROCIDOLITE		SYNTHETICS	EXPANDED GLASS	GLUE/CAULK
TREMOLITE		WOLLASTONITE	SYNTHETIC FOAM	VINYL
ACTINOLITE		TALC	ALUMINUM/METAL	CORK
ANTHOPHYLLITE			FOAM RUBBER	LATEX/RUBBER
				PAINT/OTHER 68

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME:	BAT ASSOCIATES	LAB JOB NO:	B9286-4
PROJECT NAME:	CHARLESTON NSY / 971001-13.03	DATE RECEIVED:	10/28/99
PROJECT NO:	L802Z.000.000	REPORT ISSUED:	11/30/99
SAMPLE FIELD ID:	4-34-1	LAB ID:	920859
SAMPLE INFO:		DATE ANALYZED:	11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	25	CELLULOSE	15	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	60

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-34-2 LAB ID: 920860
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	20	CELLULOSE	15	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	65

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-34-3 LAB ID: 920861
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: WHITE SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

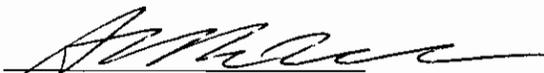
RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	20	CELLULOSE	20	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE		GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	60

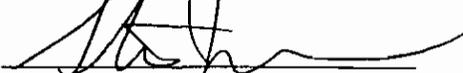
COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-35-1 LAB ID: 920862
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: GRAY SOFT POWDERY TO FIBROUS WITH CANVAS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	20	CELLULOSE	10	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	10	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	60

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.
REPORT 1 OF 1

ANALYST


ALEKSEY REZNIK

QUALITY CONTROL


STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-35-2 LAB ID: 920863
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY SOFT POWDERY TO FIBROUS WITH ALUMINUM FOIL

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	15	CELLULOSE	10	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	15	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL	10	CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	50

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS. EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-35-3 LAB ID: 920864
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY SOFT POWDERY TO FIBROUS WITH CANVAS

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	15	CELLULOSE	10	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	20	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL	10	CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	45

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME:	BAT ASSOCIATES	LAB JOB NO:	B9286-4
PROJECT NAME:	CHARLESTON NSY / 971001-13.03	DATE RECEIVED:	10/28/99
PROJECT NO:	L802Z.000.000	REPORT ISSUED:	11/30/99
SAMPLE FIELD ID:	4-36-1	LAB ID:	920865
SAMPLE INFO:		DATE ANALYZED:	11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYSTOLE	10	CELLULOSE	20	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	20	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	50

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS. EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

PLM IS NOT CONSISTENTLY RELIABLE IN DETECTING SMALL CONCENTRATION OF ASBESTOS IN FLOOR TILES AND SIMILAR NONFRIABLE MATERIALS. QUANTITATIVE TEM IS CURRENTLY THE ONLY METHOD THAT CAN BE USED TO GET THE CONCLUSIVE ASBESTOS CONTENT. THIS REPORT RELATES ONLY TO THE ITEMS TESTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, AND NOT WITHOUT WRITTEN APPROVAL OF THE LABORATORY. THIS REPORT SHALL NOT BE USED TO CLAIM ENDORSEMENT BY NVLAP OR ANY AGENCY OF U.S. GOVERNMENT.

**POLARIZED LIGHT MICROSCOPY (PLM)
BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
SAMPLE FIELD ID: 4-36-2 LAB ID: 920866
SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO
APPEARANCE: GRAY SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYBOTILE	15	CELLULOSE	20	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	20	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	45

COMMENTS:

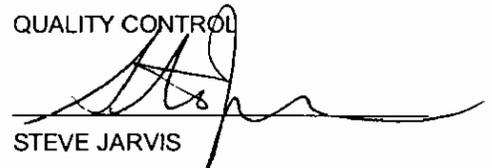
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

**POLARIZED LIGHT MICROSCOPY (PLM)
 BULK SAMPLE ANALYSIS REPORT**

CLIENT NAME: BAT ASSOCIATES LAB JOB NO: B9286-4
 PROJECT NAME: CHARLESTON NSY / 971001-13.03 DATE RECEIVED: 10/28/99
 PROJECT NO: L802Z.000.000 REPORT ISSUED: 11/30/99
 SAMPLE FIELD ID: 4-36-3 LAB ID: 920867
 SAMPLE INFO: DATE ANALYZED: 11/23/99

SAMPLE DESCRIPTION

LAYERED: NO

APPEARANCE: GRAY SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

ASBESTOS FIBERS		NONASBESTOS FIBERS		NONFIBROUS COMPONENTS		OTHER COMPONENTS	
CHRYCOTILE	15	CELLULOSE	15	VERMICULITE/MICA		BITUMEN/TAR	
AMOSITE	15	GLASS FIBERS		PERLITE		SAND/AGGR.	
CROCIDOLITE		SYNTHETICS		EXPANDED GLASS		GLUE/CAULK	
TREMOLITE		WOLLASTONITE		SYNTHETIC FOAM		VINYL	
ACTINOLITE		TALC		ALUMINUM/METAL		CORK	
ANTHOPHYLLITE				FOAM RUBBER		LATEX/RUBBER	
						PAINT/OTHER	55

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/23/99 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. REPORT 1 OF 1

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



STEVE JARVIS

BAT

BAT Associates, Inc.
ENGINEERS • SCIENTISTS • PLANNERS

5151 Brook Hollow Pkwy., Suite 250
Norcross, GA 30071
Phone: (770) 242-3908
Fax: (770) 242-3912

CHAIN OF CUSTODY FORM

1 of 4

BAT PROJECT CONTACT DOUGLAS J. MILTON	
BAT JOB NAME Charleston Naval Shipyard	BAT JOB NO. 971001 TASK NO. 13.03
ANALYSIS REQUESTED <input checked="" type="checkbox"/> PLM <input type="checkbox"/> PCM <input type="checkbox"/> AAS For Lead Content <input type="checkbox"/> OTHER _____	
CHECK ONE: <input type="checkbox"/> ROUTINE <input checked="" type="checkbox"/> ROUTINE - FAX (HANDWRITTEN) AS SOON AS POSSIBLE <input type="checkbox"/> RUSH - FAX (HANDWRITTEN) AS SOON AS POSSIBLE	
SAMPLE ID	SAMPLE ID
1. 4-1-1 <i>FB</i>	16. 4-6-1 <i>FB</i>
2. 4-1-2 <i>FB</i>	17. 4-6-2 <i>FB</i>
3. 4-1-3 <i>FB</i>	18. 4-6-3 <i>FB</i>
4. 4-2-1 <i>FB</i>	19. 4-7-1 <i>FB</i>
5. 4-2-2 <i>FB</i>	20. 4-7-2 <i>FB</i>
6. 4-2-3 <i>FB</i>	21. 4-7-3 <i>FB</i>
7. 4-3-3 <i>FB</i>	22. 4-8-1 <i>FB</i>
8. 4-3-2 <i>FB</i>	23. 4-8-2 <i>FB</i>
9. 4-3-1 <i>FB</i>	24. 4-8-3 <i>FB</i>
10. 4-4-1 <i>FB</i>	25. 4-9-1 <i>FB</i>
11. 4-4-2 <i><NOT SUBMITTED></i>	26. 4-9-2 <i>FB</i>
12. 4-4-3 <i>FB</i>	27. 4-9-3 <i>FB</i>
13. 4-5-1 <i>FB</i>	28. 4-10-1 <i>FB</i>
14. 4-5-2 <i>FB</i>	29. 4-10-2 <i>FB</i>
15. 4-5-3 <i>FB</i>	30. 4-10-3 <i>FB</i>
SPECIAL INSTRUCTIONS: Navy Project Rates	
Relinquished by: <i>Lashie Bell</i>	Received by: <i>Mrs. Dai Williams</i>
Date: <i>10/27/99</i> Time: <i>0500</i>	Date: _____ Time: _____

LS

1345 (FB)

AR 10/28/99 14:00

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Norcross, GA 30071
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CHAIN OF CUSTODY FORM

2 of 4

BAT PROJECT CONTACT DOUGLAS J. MILTON	
BAT JOB NAME Charleston Naval Shipyard	BAT JOB NO. 971001 TASK NO. 13.03
ANALYSIS REQUESTED <input checked="" type="checkbox"/> PLM <input type="checkbox"/> PCM <input type="checkbox"/> AAS For Lead Content <input type="checkbox"/> OTHER _____	
CHECK ONE: <input type="checkbox"/> ROUTINE <input checked="" type="checkbox"/> ROUTINE - FAX (HANDWRITTEN) AS SOON AS POSSIBLE <input type="checkbox"/> RUSH - FAX (HANDWRITTEN) AS SOON AS POSSIBLE	
SAMPLE ID	SAMPLE ID
1. 4-11-1	16. 4-12-1
2. 4-11-2	17. 4-16-2
3. 4-11-3	18. 4-16-3
4. 4-12-1 <NOT SUBMITTED>	19. 4-17-1
5. 4-12-2	20. 4-17-2
6. 4-12-3	21. 4-17-3
7. 4-13-1	22. 4-18-1
8. 4-13-2	23. 4-18-2
9. 4-13-3	24. 4-18-3
10. 4-14-1	25. 4-19-1
11. 4-14-2	26. 4-19-2
12. 4-14-3	27. 4-19-3
13. 4-15-1	28. 4-20-1
14. 4-15-2	29. 4-20-2
15. 4-15-3	30. 4-20-3
SPECIAL INSTRUCTIONS: Navy Project Rates	
Relinquished by: <i>Fohie Bell</i>	Received by: <i>Mr. Ori Wilkins</i>
Date: <i>10/27/99</i> Time: <i>0500</i>	Date: _____ Time: _____

25

1350 FB

AK 10/22/99 1400

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Norcross, GA 30071
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CHAIN OF CUSTODY FORM

394

BAT PROJECT CONTACT DOUGLAS J. MILTON	
BAT JOB NAME Charleston Naval Shipyard	BAT JOB NO. 971001 TASK NO. 13.03
ANALYSIS REQUESTED <input checked="" type="checkbox"/> PLM <input type="checkbox"/> PCM <input type="checkbox"/> AAS For Lead Content <input type="checkbox"/> OTHER _____	
CHECK ONE: <input type="checkbox"/> ROUTINE <input checked="" type="checkbox"/> ROUTINE - FAX (HANDWRITTEN) AS SOON AS POSSIBLE <input type="checkbox"/> RUSH - FAX (HANDWRITTEN) AS SOON AS POSSIBLE	
SAMPLE ID	SAMPLE ID
1. 4-21-1 <i>FB</i>	16. 4-26-1 <i>FB</i>
2. 4-21-2 <i>FB</i>	17. 4-26-2 <i>FB</i>
3. 4-21-3 <i>FB</i>	18. 4-26-3 <i>FB</i>
4. 4-22-1 <i>FB</i>	19. 4-27-1 <i>FB</i>
5. 4-22-2 <i>FB</i>	20. 4-27-2 <i>FB</i>
6. 4-22-3 <i>FB</i>	21. 4-27-3 <i>FB</i>
7. 4-23-1 <i>FB</i>	22. 4-28-1 <i>FB</i>
8. 4-23-2 <i>FB</i>	23. 4-28-2 <i>FB</i>
9. 4-23-3 <i>FB</i>	24. 4-28-3 <i>FB</i>
10. 4-24-1 <i>FB</i>	25. 4-29-1 <i>FB</i>
11. 4-24-2 <i>FB</i>	26. 4-29-2 <i>FB</i>
12. 4-24-3 <i>FB</i>	27. 4-29-3 <i>FB</i>
13. 4-25-1 <i>FB</i>	28. 4-30-1 <i>FB</i>
14. 4-25-2 <i>FB</i>	29. 4-30-2 <i>FB</i>
15. 4-25-3 <i>FB</i>	30. 4-30-3 <i>FB</i>
SPECIAL INSTRUCTIONS: Navy Project Rates	
Relinquished by: <i>Joshua Bell</i>	Received by: <i>Mrs. Chi Williams</i>
Date: <i>10/27/99</i> Time: <i>0500</i>	Date: _____ Time: _____

28

1350 (FB)

AK 10/28/99 1400

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Norcross, GA 30071
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Fax: (770) 242-3912

CHAIN OF CUSTODY FORM

4 of 4

BAT PROJECT CONTACT DOUGLAS J. MILTON	
BAT JOB NAME Charleston Naval Shipyard	BAT JOB NO. 971001 TASK NO. 13.03
ANALYSIS REQUESTED <input checked="" type="checkbox"/> PLM <input type="checkbox"/> PCM <input type="checkbox"/> AAS For Lead Content <input type="checkbox"/> OTHER _____	
CHECK ONE: <input type="checkbox"/> ROUTINE <input checked="" type="checkbox"/> ROUTINE - FAX (HANDWRITTEN) AS SOON AS POSSIBLE <input type="checkbox"/> RUSH - FAX (HANDWRITTEN) AS SOON AS POSSIBLE	
SAMPLE ID	SAMPLE ID
1. 4-31-1 <i>FB</i>	16. 4-36-1 <i>FB</i>
2. 4-31-2 <i>FB</i>	17. 4-36-2 <i>FB</i>
3. 4-31-3 <i>FB</i>	18. 4-36-3 <i>FB</i>
4. 4-32-1 <i>FB</i>	19.
5. 4-32-2 <i>FB</i>	20.
6. 4-32-3 <i>FB</i>	21.
7. 4-33-1 <i>FB</i>	22.
8. 4-33-2 <i>FB</i>	23.
9. 4-33-3 <i>FB</i>	24.
10. 4-34-1 <i>FB</i>	25.
11. 4-34-2 <i>FB</i>	26.
12. 4-34-3 <i>FB</i>	27.
13. 4-35-1 <i>FB</i>	28.
14. 4-35-2 <i>FB</i>	29.
15. 4-35-3 <i>FB</i>	30.
SPECIAL INSTRUCTIONS: Navy Project Rates	
Relinquished by: <i>Forbie Bell</i>	Received by: <i>Mr. R. De Williams</i>
Date: <i>10/27/99</i> Time: <i>0500</i>	Date: _____ Time: _____

28

1350 *FB*

AK 10/27/99 1400

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : BAT ASSOCIATES, INC. DATE : 11/1/99

PROJECT NAME: CHARLESTON NAVAL SHIPYARD / 971001 TASK # 13.03

SAMPLE ID : 4-6-QC1 AES LAB NO : 140286 AES JOB NO : B9372

SAMPLE LOCATION :

SAMPLE - BROWN HARD COMPACT PARTLY GRANULAR WITH FIBERS & BITUMEN.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSOTILE	< 1	VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	45
ACTINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	1	ALUMINUM	
MINERAL WOOL		BITUMEN	3
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	
ANIMAL HAIR		BINDERS	50
ANTIGORITE			

COMMENTS : BITUMEN CONTAINS 5% CHRYSOTILE.
 FLOOR TILE DOES NOT CONTAIN ASBESTOS.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MICROANALYST : *A. Gendlin*

QUALITY CONTROL BY : *S. Arkhipov*

ARKADIY GENDLIN

SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : BAT ASSOCIATES, INC. DATE : 11/1/99

PROJECT NAME: CHARLESTON NAVAL SHIPYARD / 971001 TASK # 13.03

SAMPLE ID : 4-20-QC2 AES LAB NO : 140287 AES JOB NO : B9372

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) GRAY SEMI-HARD RESILIENT TO WOVEN;
 DESCRIPTION 2) GRAY SOFT SILTY TO FIBROUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
ACTINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	10	ALUMINUM	
MINERAL WOOL	15	BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	20
CELLULOSE	25	GLUE	
ANIMAL HAIR		BINDERS	30
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

TCROANALYST : A. Gendlin

QUALITY CONTROL BY : Svetlana Arkhipov
 SVETLANA ARKHIPOV

ARKADIY GENDLIN

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : BAT ASSOCIATES, INC. DATE : 11/1/99

PROJECT NAME: CHARLESTON NAVAL SHIPYARD / 971001 TASK # 13.03

SAMPLE ID : 4-2-QC3 AES LAB NO : 140288 AES JOB NO : B9372

SAMPLE LOCATION :

SAMPLE - GRAY SEMI-HARD FIBROUS TO SILTY WITH PAINT.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
ACTINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL	60	BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE		GLUE	
ANIMAL HAIR		BINDERS	40
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MICROANALYST : A. Gendlin

QUALITY CONTROL BY : S. Arkhipov

ARKADIY GENDLIN

SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : BAT ASSOCIATES, INC. DATE : 11/1/99

PROJECT NAME: CHARLESTON NAVAL SHIPYARD / 971001 TASK # 13.03

SAMPLE ID : 4-4-QC4 AES LAB NO : 140289 AES JOB NO : B9372

SAMPLE LOCATION :

SAMPLE - GRAY SOFT SILTY TO FIBROUS.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
ACTINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS	15	ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	5	GLUE	
ANIMAL HAIR		BINDERS	80
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MICROANALYST : A. Gendlin

QUALITY CONTROL BY : S. Arkhipov

ARKADIY GENDLIN

SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : BAT ASSOCIATES, INC. DATE : 11/1/99

PROJECT NAME: CHARLESTON NAVAL SHIPYARD / 971001 TASK # 13.03

SAMPLE ID : 4-14-QC5 AES LAB NO : 140290 AES JOB NO : B9372

SAMPLE LOCATION :

SAMPLE - LIGHT GRAY SOFT SILTY TO FIBROUS.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE	5	VERMICULITE	
AMOSITE	15	BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
ACTINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE		GLUE	
ANIMAL HAIR		BINDERS	80
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

TCROANALYST :

A. Gendlin

QUALITY CONTROL BY :

S. Arkhipov

ARKADIY GENDLIN

SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : BAT ASSOCIATES, INC. DATE : 11/1/99

PROJECT NAME: CHARLESTON NAVAL SHIPYARD / 971001 TASK # 13.03

SAMPLE ID : 4-31-QC6 AES LAB NO : 140291 AES JOB NO : B9372

SAMPLE LOCATION :

SAMPLE - GRAY SOFT FIBROUS TO SILTY WITH PAINT.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE		VERMICULITE	
AMOSITE	5	BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
ACTINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL	60	BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE		GLUE	
ANIMAL HAIR		BINDERS	35
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MICROANALYST : A. Gray

QUALITY CONTROL BY : J. Arkhipov

ARKADIY GENDLIN

SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : BAT ASSOCIATES, INC. DATE : 11/1/99

PROJECT NAME: CHARLESTON NAVAL SHIPYARD / 971001 TASK # 13.03

SAMPLE ID : 4-16-QC7 AES LAB NO : 140292 AES JOB NO : B9372

SAMPLE LOCATION :

SAMPLE - GRAY SOFT SILTY TO FIBROUS.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTOTILE	10	VERMICULITE	
AMOSITE	10	BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
ACTINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE		GLUE	
ANIMAL HAIR		BINDERS	80
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MICROANALYST : A. Gendlin

QUALITY CONTROL BY : S. Arkhipov
 SVETLANA ARKHIPOV

ARKADIY GENDLIN

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : BAT ASSOCIATES, INC. DATE : 11/1/99

PROJECT NAME: CHARLESTON NAVAL SHIPYARD / 971001 TASK # 13.03

SAMPLE ID : 4-18-QC8 AES LAB NO : 140293 AES JOB NO : B9372

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) GRAY SEMI-HARD WOVEN WITH PAINT;
 DESCRIPTION 2) LIGHT GRAY SOFT SILTY TO FIBROUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE	5	VERMICULITE	
AMOSITE	5	BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
ACTINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	10	GLUE	
ANIMAL HAIR		BINDERS	80
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.
 LAYER #2 CONTAINS 10% CHRYBOTILE & 10% AMOSITE.
 LAYER #1 DOES NOT CONTAIN ASBESTOS.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ICROANALYST : A. Gendlin

QUALITY CONTROL BY S. Arkhipov

ARKADIY GENDLIN

SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : BAT ASSOCIATES, INC. DATE : 11/1/99

PROJECT NAME: CHARLESTON NAVAL SHIPYARD / 971001 TASK # 13.03

SAMPLE ID : 4-33-OC9 AES LAB NO : 140294 AES JOB NO : B9372

SAMPLE LOCATION :

SAMPLE - GRAY SOFT SILTY TO PERLITIC WITH FIBERS.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYBOTILE	10	VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	30
TREMOLITE		AGGREGATE/SAND	
ACTINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE	1	GLUE	
ANIMAL HAIR		BINDERS	59
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ICROANALYST : A. Gur

QUALITY CONTROL BY : J. Arkhipov

ARKADIIY GENDLIN

SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : BAT ASSOCIATES, INC. DATE : 11/1/99

PROJECT NAME: CHARLESTON NAVAL SHIPYARD / 971001 TASK # 13.03

SAMPLE ID : 4-34-QC10 AES LAB NO : 140295 AES JOB NO : B9372

SAMPLE LOCATION :

SAMPLE - LIGHT GRAY SOFT SILTY TO FIBROUS.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTOLE	10	VERMICULITE	
AMOSITE		BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
ACTINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE		GLUE	
ANIMAL HAIR		BINDERS	90
ANTIGORITE			

COMMENTS :

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

MICROANALYST : A. Gendlin

QUALITY CONTROL BY : S. Arkhipov

ARKADIY GENDLIN

SVETLANA ARKHIPOV

Analytical Environmental Services, Inc.
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340
 TEL: (770)457-8177 FAX: (770)457-8188

CLIENT NAME : BAT ASSOCIATES, INC. DATE : 11/1/99

PROJECT NAME: CHARLESTON NAVAL SHIPYARD / 971001 TASK # 13.03

SAMPLE ID : 4-36-QC11 AES LAB NO : 140296 AES JOB NO : B9372

SAMPLE LOCATION :

SAMPLE - LIGHT GRAY SOFT SILTY TO FIBROUS WITH PAINT.
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)			
ASBESTOS FIBERS		NONFIBROUS COMPONENTS	
CHRYSTILE	20	VERMICULITE	
AMOSITE	5	BIOTITE	
CROCIDOLITE		MICA	
ANTHOPHYLLITE		PERLITE	
TREMOLITE		AGGREGATE/SAND	
ACTINOLITE		STYROFOAM	
NONASBESTOS FIBERS		OTHER COMPONENTS	
SYNTHETICS		ALUMINUM	
MINERAL WOOL		BITUMEN	
FIBERGLASS		RESILIENT MATERIAL	
CELLULOSE		GLUE	
ANIMAL HAIR		BINDERS	75
ANTIGORITE			

COMMENTS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033. Test report relates only to the items tested.

ICROANALYST : A. Gendlin

QUALITY CONTROL BY : S. Arkhipov

ARKADIY GENDLIN

SVETLANA ARKHIPOV

BAT

BAT Associates, Inc.
ENGINEERS • SCIENTISTS • PLANNERS

5151 Brook Hollow Pkwy., Suite 250
Norcross, GA 30071
Phone: (770) 242-3908
Fax: (770) 242-3912

CHAIN OF CUSTODY FORM

BAT PROJECT CONTACT DOUGLAS J. MILTON	
BAT JOB NAME Charleston Naval Shipyard	BAT JOB NO. 971001 TASK NO. 13.03
ANALYSIS REQUESTED <input checked="" type="checkbox"/> PLM <input type="checkbox"/> PCM <input type="checkbox"/> AAS For Lead Content <input type="checkbox"/> OTHER _____	
CHECK ONE: <input type="checkbox"/> ROUTINE <input checked="" type="checkbox"/> ROUTINE - FAX (HANDWRITTEN) AS SOON AS POSSIBLE <input type="checkbox"/> RUSH - FAX (HANDWRITTEN) AS SOON AS POSSIBLE	
SAMPLE ID	SAMPLE ID
1. 4-6-QC1 <i>FB</i>	16.
2. 4-20-QC2 <i>FB</i>	17.
3. 4-2-QC3 <i>FB</i>	18.
4. 4-4-QC4 <i>FB</i>	19.
5. 4-14-QC5 <i>FB</i>	20.
6. 4-31-QC6 <i>FB</i>	21.
7. 4-16-QC7 <i>FB</i>	22.
8. 4-18-QC8 <i>FB</i>	23.
9. 4-33-QC9 <i>FB</i>	24.
10. 4-34-QC10 <i>FB</i>	25.
11. 4-36-QC11 <i>FB</i>	26.
12.	27.
13.	28.
14.	29.
15.	30.
SPECIAL INSTRUCTIONS: Navy Project Rates	
Relinquished by: <i>Latie Bell</i>	Received by:
Date: <i>10/27/97</i> Time: <i>0500</i>	Date: Time: