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FINAL ASBESTOS INSPECTION REPORT BUILDINGS NS-27, X-54, NS-84, 180, 290, 642, 1177, 1346 AND 1737 WITH TRANSMITTAL CNC CHARLESTON SC
6/1/1998
CHARLESTON ENVIRONMENTAL DETACHMENT

# ASBESTOS INSPECTION REPORT

## BUILDINGS NS-27, X-54, NS-84, 180, 290, 641, 674, 1177, 1346 & 1737

CHARLESTON NAVAL COMPLEX
CHARLESTON, SC

FINAL REPORT

Prepared for:

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAD
CHARLESTON, SC

Prepared by:

Supervisor of Shipbuilding, Conversion
& Repair, USN, (SUPSHIP) Portsmouth Va.,
Environmental Detachment Charleston
Charleston, SC
1899 North Hobson Ave.
North Charleston, SC 29405-2106

JUNE 1998

**DEPARTMENT OF THE NAVY**
SUPERVISOR OF SHIPBUILDING, CONVERSION AND REPAIR, USN
PORTSMOUTH, VIRGINIA, ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE, BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2106

JUN 30 1998

IN REPLY REFER TO:

Ser: 594

# MEMORANDUM

**From:** Director, Supervisor of Shipbuilding, Conversion and Repair, USN, Portsmouth, Va., Environmental Detachment, Charleston, SC (SPORTENVDETCHASN)

**To:** Southern Division Naval Facilities Engineering Command (Mr. Archie Browder)

**Subj:** **ASBESTOS INSPECTION FINAL REPORT**

**Ref:** (a) Statement of Work for Asbestos Survey of 30 Buildings, Project No. C98019

**Encl:** (1) Asbestos Inspection Final Report for first ten buildings (3copies).

1. As requested per reference (a), the Asbestos Inspection Final Report for the first ten buildings of the project is provided for your review/action via enclosure (1). The report includes Buildings NS-27, X-54, NS-84, 180, 290, 641, 674, 1177, 1346 and 1737. Cost estimates for remediation and demolitions are also included. Points of contact concerning this report are Ricky Butler at (843) 743-6777, (ext.236) or Mark Moltzen at ext. 238.

E. R. Dearhart

Copy to (w/o encls.):
File

# ASBESTOS INSPECTION REPORT

## BUILDINGS NS-27, X-54, NS-84, 180, 290, 641, 674, 1177, 1346 & 1737

## CHARLESTON NAVAL COMPLEX
## CHARLESTON, SC

**Engineering Branch Head:** _____ **Date:** 6/29/98

**Asbestos Team Leader:** _____ **Date:** 6/29/98

**Prepared By:** _____ **Date:** 6/29/98


**SURVEY PERFORMED BY:**
**ENVIRONMENTAL DETACHMENT CHARLESTON**
**1899 NORTH HOBSON AVENUE**
**NORTH CHARLESTON, SC 29405**

# CHARLESTON NAVAL COMPLEX

## ASBESTOS INSPECTION REPORT

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# I. EXECUTIVE SUMMARY

## 1. INTRODUCTION

Asbestos Building Inspectors from Environmental Detachment, Charleston, SC conducted a survey to identify asbestos containing material (ACM) at Charleston Naval Complex. The surveys were conducted between May and June of 1998. The results of the survey provide an inventory of ACM in ten buildings; Buildings NS-27, X-54, NS-84, 180, 290, 641, 674, 1177, 1346, & 1737.

All inspectors were certified by an EPA accredited training center under the Asbestos Hazard Emergency Response Act (AHERA), as Building Inspectors. All supervisors and inspectors were employees of Environmental Detachment Charleston. Copies of individual certificates are in the **TRAINING** section of this report.

Suspect ACM was identified and sampled in accordance with AHERA guidelines. Some materials suspected of being ACM were assumed to be ACM and not sampled. Assumed materials included floor tile, sheet flooring, gaskets and ventilation transition boots. Some materials weren't identified as ACM because they were portable and removable (e.g. blackboards, fire hoses, stage curtains), were not safe to sample (e.g. electrical insulation), or sampling would have damaged the material and impaired the normal system operation/integrity (e.g. heating/ventilation/AC systems, furnace, boiler door and pipe gaskets).

Bulk samples were analyzed by the Environmental Detachment, Laboratory Division. The Laboratory participates in the Navy's Asbestos Identification Proficiency Testing Program. The Industrial Hygiene Division of Naval Hospital Charleston analyzed Quality Assurance samples. The QA results were used to verify the accuracy of Environmental Detachment lab analyses. Polarized Light Microscopy (PLM) was used to analyze samples. Materials identified as ACM and either sampled or assumed were designated a homogeneous area by similarity of color, texture and date of application.

Each homogeneous area was assessed in accordance with the "ASBESTOS FACILITY INVENTORY/ASSESSMENT PROTOCOL," NEESA 70.2-010, developed by the NAVAL FACILITIES ENGINEERING SERVICE CENTER (NFESC). The NFESC protocol establishes an algorithm rating for each homogeneous area based on condition, quantity, friability, exposure potential, number of persons exposed, building significance and percentage of asbestos present in the material. The **BUILDING SUMMARY TABLES** list the ratings for each homogeneous area. The rating is heavily weighted by condition, friability, exposure potential and building significance. If the rating system is used to prioritize buildings for abatement, note that buildings occupied at the time of the inspection have homogeneous areas with significantly higher ratings than unoccupied buildings. Ratings are probably more useful to prioritize abatement of homogeneous areas within a building.

## 2. FINDINGS SUMMARY

Of the ten buildings inspected, all contained confirmed asbestos of which three contained friable asbestos (Buildings 180, 1346, & 1737). Buildings X-54, NS-84, 180, 1177 and 1737 contained damaged ACM. See individual **Building Summaries** for specific locations, quantities and conditions. Buildings containing asbestos are required to be included in an Operations and Maintenance (O&M) Program. Any identified asbestos containing material not removed must be maintained following the guidelines of an O&M Plan.

## 3. RENOVATION/DEMOLITION

The National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR Part 61 requires written notification to the Environmental Protection Agency/local Air Quality Management District at least ten working days prior to demolition or renovation of ACM in quantities of 260 linear feet, 160 square feet, 35 cubic feet, or greater, except in cases of emergencies. Contractors are advised to verify most current regulations prior to start of work.

## 4. REPORT ORGANIZATION

Specific, detailed information on each inspected building is noted in *Section II, BUILDING SUMMARIES,* of this report and includes the following:

- Narrative description of the building
- Building Summary Table
- Laboratory Test Results Table
- Operations & Maintenance Table
- Building drawings indicating ACM locations
- Asbestos Abatement & Demolition Estimates

Following the *BUILDING SUMMARIES*, are tabbed sections for *LABORATORY RESULTS, CHAIN OF CUSTODY records and TRAINING documentation.* Copies of individual Inspector's certificates, and QA sample results are included in the appropriate sections.

## 5. ABATEMENT COSTS

Environmental Detachment Charleston inspectors found friable and/or damaged and accessible ACM in Buildings X-54, NS-84, 180, 1177, 1346 and 1737. Confirmed non-friable and non-damaged ACM was found in the remaining buildings. We recommend that the facilities' Asbestos Program Manager initially focus his resources on all ACM assessed as friable. Cost estimates for asbestos removal and/or repair and demolition estimates are included with this report. These estimates are based on current man-hour and disposal rates and may need to be negotiated prior to actual start of work. Individual estimates are located in the *BUILDING SUMMARY* Section for each building.

## 6. DISCLAIMER

A comprehensive and thorough asbestos survey was conducted on these facilities by certified and experienced Environmental Detachment Charleston inspectors. Every effort was made to identify all asbestos containing material (ACM) in the facility, but due to random sampling techniques mandated by EPA regulations, the possibility always exists that some ACM remains undetected.

# II. BUILDING SUMMARIES

The following pages report observations noted and suggest actions required as a result of an Asbestos survey conducted by Environmental Detachment Charleston personnel between May and June 1998. Ten buildings at Charleston Naval Complex were inspected for possible presence of suspect/assumed asbestos. This section provides *Description, Findings, Observations, Recommended Abatement Action, and Recommendations for Operations and Maintenance* for each building inspected.

Materials identified as ACM and either sampled or assumed were designated as homogeneous areas by similarity of color, texture and date of application. Assessment of each homogeneous area was done in accordance with the *ASBESTOS FACILITY INVENTORY/ASSESSMENT PROTOCOL*, NEESA 70.2-010, developed by the NAVAL FACILITIES ENGINEERING SERVICE CENTER (NFESC). The NFESC protocol establishes an algorithm rating for each homogeneous area based on condition, quantity, friability, exposure and potential number of persons exposed, building significance and percentage of asbestos present in the material. The rating is heavily weighted by condition, friability, exposure potential and building significance. If the rating system is used to prioritize buildings for abatement, it should be noted that buildings occupied at the time of the inspection have homogeneous areas with significantly higher ratings than unoccupied buildings. Ratings are probably more useful in setting priorities for abatement of all homogeneous areas within a single building than in ranking the order of abatement of multiple buildings.

The room numbers shown on the CAD drawings and referenced in the report were assigned by the inspectors at the time of inspection. The Room numbering system is as follows:

Basement, B series; Crawlspace, C series; Attic, A series; Entry/exit points, E series; Stairwells, S series; Hallways, H series; 1st floor, 100 series; 2nd floor, 200 series; 3rd floor, 300 series; 4th floor, 400 series, etc.

# BUILDING NS-27: US NAVY INSHORE BOAT

## 1. DESCRIPTION:

Building NS-27 is a 1,374 square-foot building. It is a single story, concrete block structure with red brick exterior, metal windows and a built-up roof. The year built was 1958. The following information was identified during the survey and from the analysis of the samples taken:

- Sixteen homogeneous areas were identified during the initial survey.
- Zero homogeneous areas were assumed to contain asbestos.
- Sixteen of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Two of the suspected homogeneous areas were confirmed to contain asbestos.
- Fourteen of the suspected homogenous areas did not contain asbestos.

## 2. FINDINGS:

Sixteen homogeneous areas with suspected ACM were identified. Thirty-two samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in no homogeneous areas.

**Confirmed ACM.** The following homogeneous areas sampled were confirmed to contain asbestos:

- H-1: MISC, FLOOR TILE, 12" x 12", Beige w/brown & white marble & mastic, was Non-friable and Not Damaged.
- H-15: MISC, SEALER, Black, was Non-friable and Not Damaged.

**Asbestos Free.** Asbestos was not detected in the following homogeneous areas:

- H-2: MISC, SHEETROCK, PLAIN, 4' x 8', White w/vinyl wall-cover
- H-3: MISC, CEILING TILE, 2' x 4', White w/long grooves
- H-4: MISC, CEILING TILE, 2' x 4', White w/tiny grooves
- H-5: MISC, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey
- H-6: MISC, GROUT, CERAMIC TILE, 1" x 1", Grey
- H-7: MISC, COVING MASTIC, Yellow
- H-8: MISC, COVING MASTIC, Brown
- H-9: MISC, SHEETROCK, PAINTED, 4' x 8', White w/mud & tape
- H-10: MISC, GROUT, CERAMIC TILE, 2" x 2", Grey
- H-11: MISC, GROUT, CERAMIC TILE, 4" x 4", White
- H-12: MISC, MORTAR, BRICK, 2" x 4" x 8", Grey

- H-13: MISC, ROOFING, TAR AND GRAVEL, Black w/felt
- H-14: MISC, ROOFING, COMPOSITION SHEET, Grey & white rubber patch material
- H-16: MISC, SEALER, Black & grey w/felt

**Assumed ACM.** The following homogeneous areas were assumed to contain asbestos:

- None.

## 3. OBSERVATIONS:

Other suspect ACM noted, but not sampled, includes valve packing, various piping systems / components gasket material and drain piping joint compound.

## 4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-1: MISC, FLOOR TILE, Beige w/brown & white marble & mastic: O&M
- H-15: MISC, SEALER, Black: O&M

## 5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance recommendations for confirmed and assumed homogeneous areas of ACM are found in the Operations & Maintenance Table of this section. The materials listed below should be maintained following the guidelines in an O & M Plan during regular maintenance and small-scale repair activities until removed.

MISC FLOOR TILE is Confirmed, Non-friable ACM.

- H-1 (FLOOR TILE, Beige w/brown & white marble & mastic) is located in Rooms 100, 101, 102, 105, 106, 107, 108, 109, H-100.

MISC SEALER is Confirmed, Non-friable ACM.

- H-15 (SEALER, Black) is located on the Roof.

# BUILDING SUMMARY TABLE

## CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY

## Building No. NS-27

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Y | **Misc, FLOOR TILE, 12" x 12", Beige w/brown & white marble & mastic** | **1,087 SF** | **10** | **Non** | **PD** | **0.0** | **O&M** | | |
| | | Rooms 100, 101, 102, 105, 106, 107, 108, 109, H-100 | | | | | | | | |
| 2 | N | **Misc, SHEETROCK, PLAIN, 4' x 8', White w/vinyl wall-cover** | **3,125 SF** | **0** | | | | | | |
| | | Rooms 100, 101, 102, 105, 106, 109 | | | | | | | | |
| 3 | N | **Misc, CEILING TILE, 2' x 4', White w/long grooves** | **1,253 SF** | **0** | | | | | | |
| | | Rooms 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, H-100 | | | | | | | | |
| 4 | N | **Misc, CEILING TILE, 2' x 4', White w/tiny grooves** | **107 SF** | **0** | | | | | | |
| | | Rooms 100, 101, 106, 107, 109 | | | | | | | | |
| 5 | N | **Misc, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey** | **1,630 SF** | **0** | | | | | | |
| | | Rooms 100, 101, 102, 104, 105, 106, 107, 109, 110, H-100 | | | | | | | | |
| 6 | N | **Misc, GROUT, CERAMIC TILE, 1" x 1", Grey** | **87 SF** | **0** | | | | | | |
| | | Rooms 103 | | | | | | | | |
| 7 | N | **Misc, COVING MASTIC, Yellow** | **30 LF** | **0** | | | | | | |
| | | Rooms 103 | | | | | | | | |
| 8 | N | **Misc, COVING MASTIC, Brown** | **50 LF** | **0** | | | | | | |
| | | Rooms 103, 107, 108, 111 | | | | | | | | |
| 9 | N | **Misc, SHEETROCK, PAINTED, 4' x 8', White w/mud & tape** | **1,300 SF** | **0** | | | | | | |
| | | Rooms 103, 107, 108, 110, 111 | | | | | | | | |
| 10 | N | **Misc, GROUT, CERAMIC TILE, 2" x 2", Grey** | **96 SF** | **0** | | | | | | |
| | | Rooms 110, 111 | | | | | | | | |
| 11 | N | **Misc, GROUT, CERAMIC TILE, 4" x 4", White** | **120 SF** | **0** | | | | | | |
| | | Rooms 110 | | | | | | | | |
| 12 | N | **Misc, MORTAR, BRICK, 2" x 4" x 8", Grey** | **2,430 SF** | **0** | | | | | | |
| | | Rooms EXT | | | | | | | | |

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 13 | N | Misc, ROOFING, TAR AND GRAVEL, Black w/felt | 1,430 SF | 0 | | | | | | |
| | | Rooms ROOF | | | | | | | | |
| 14 | N | Misc, ROOFING, COMPOSITION SHEET, Grey & white rubber patch material | 100 SF | 0 | | | | | | |
| | | Rooms ROOF | | | | | | | | |
| 15 | Y | Misc, SEALER, Black | 10 SF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms ROOF | | | | | | | | |
| 16 | N | Misc, SEALER, Black & grey w/felt | 16 SF | 0 | | | | | | |
| | | Rooms ROOF | | | | | | | | |

Note: Cost estimates are found in the Building Summary section of each building.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

## Building No. NS-27

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 1 | YES | NS27-001 | 100 | Misc, FLOOR TILE, Beige w/brown & white marble & masti | 04/28/98 | 04/30/98 | Chrysotile | 5% |
| 1 | YES | NS27-002 | 102 | Misc, FLOOR TILE, Beige w/brown & white marble & masti | 04/28/98 | 04/30/98 | Chrysotile | 2% |
| 2 | NO | NS27-003 | 101 | Misc, SHEETROCK, 4' x 8', White w/vinyl wall-cover | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 2 | NO | NS27-004 | 102 | Misc, SHEETROCK, 4' x 8', White w/vinyl wall-cover | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 3 | NO | NS27-005 | 105 | Misc, CEILING TILE, 2' x 4', White w/long grooves | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 3 | NO | NS27-006 | 106 | Misc, CEILING TILE, 2' x 4', White w/long grooves | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 4 | NO | NS27-007 | 100 | Misc, CEILING TILE, 2' x 4', White w/tiny grooves | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 4 | NO | NS27-008 | 101 | Misc, CEILING TILE, 2' x 4', White w/tiny grooves | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 5 | NO | NS27-009 | 105 | Misc, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 5 | NO | NS27-010 | 109 | Misc, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 6 | NO | NS27-011 | 103 | Misc, GROUT, 1" x 1", Grey | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 6 | NO | NS27-012 | 103 | Misc, GROUT, 1" x 1", Grey | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 7 | NO | NS27-013 | 103 | Misc, COVING MASTIC, Yellow | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 7 | NO | NS27-014 | 103 | Misc, COVING MASTIC, Yellow | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 8 | NO | NS27-015 | 103 | Misc, COVING MASTIC, Brown | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 8 | NO | NS27-016 | 108 | Misc, COVING MASTIC, Brown | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 9 | NO | NS27-017 | 108 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 9 | NO | NS27-018 | 107 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 10 | NO | NS27-019 | 110 | Misc, GROUT, 2" x 2", Grey | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 10 | NO | NS27-020 | 110 | Misc, GROUT, 2" x 2", Grey | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 11 | NO | NS27-021 | 110 | Misc, GROUT, 4" x 4", White | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 11 | NO | NS27-022 | 110 | Misc, GROUT, 4" x 4", White | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 12 | NO | NS27-023 | EXT | Misc, MORTAR, 2" x 4" x 8", Grey | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 12 | NO | NS27-024 | EXT | Misc, MORTAR, 2" x 4" x 8", Grey | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 13 | NO | NS27-025 | ROOF | Misc, ROOFING, Black w/felt | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 13 | NO | NS27-026 | ROOF | Misc, ROOFING, Black w/felt | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 14 | NO | NS27-027 | ROOF | Misc, ROOFING, Grey & white rubber patch material | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 14 | NO | NS27-028 | ROOF | Misc, ROOFING, Grey & white rubber patch material | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 15 | YES | NS27-029 | ROOF | Misc, SEALER, Black | 04/28/98 | 04/30/98 | Chrysotile | 2% |
| 15 | YES | NS27-030 | ROOF | Misc, SEALER, Black | 04/28/98 | 04/30/98 | Chrysotile | 2% |

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

## Building No. NS-27

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 16 | NO | NS27-031 | ROOF | Misc, SEALER, Black & grey w/felt | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |
| 16 | NO | NS27-032 | ROOF | Misc, SEALER, Black & grey w/felt | 04/28/98 | 04/30/98 | No Asbestos Detected | 0% |

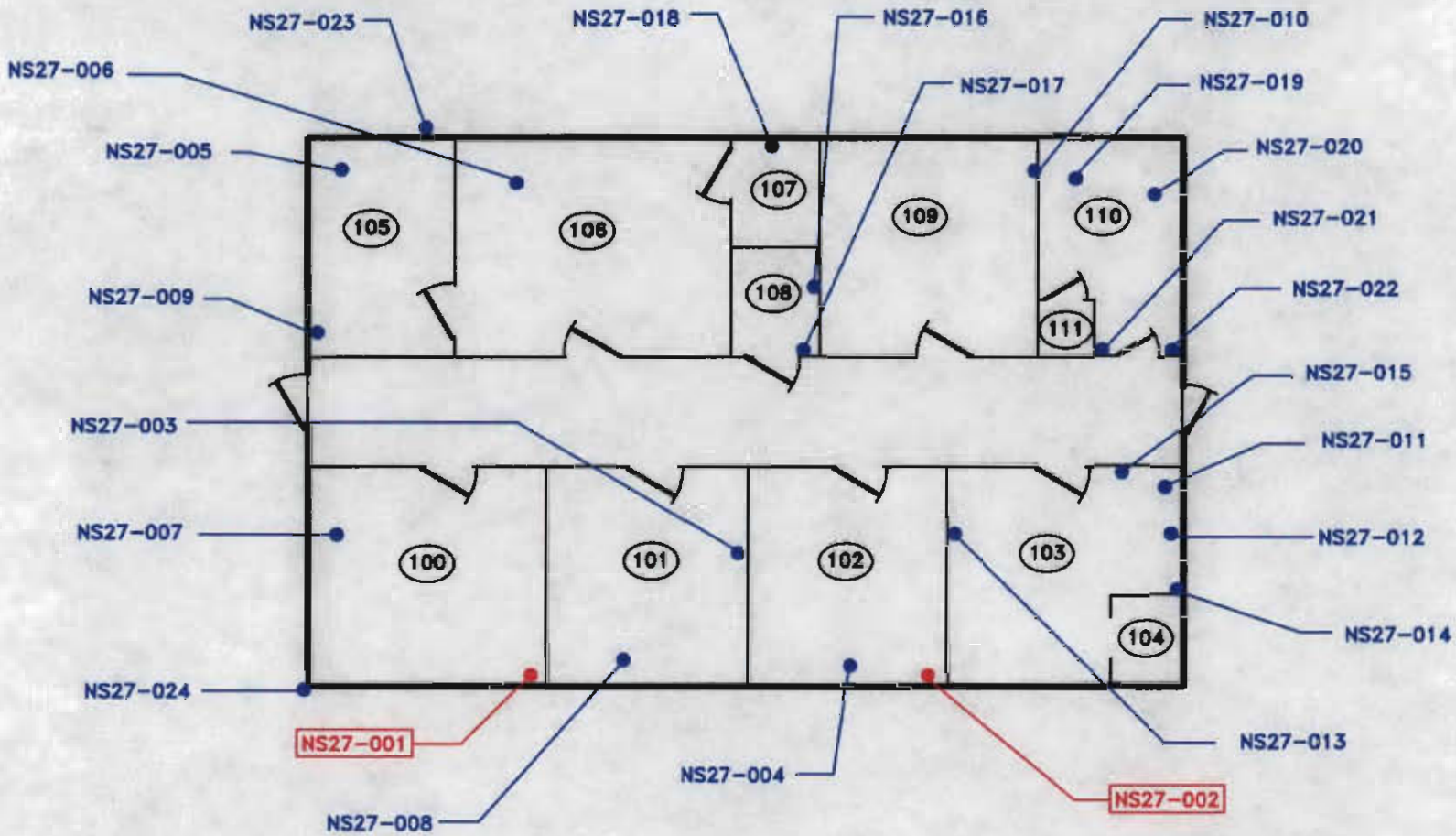
TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY



| Bldg. No. | Homo No. | Material Description | Quantity | Rat-ing | Fria-bility | Condition | % D | Recommended Action |
|---|---|---|---|---|---|---|---|---|
| NS-27 | 1 | Misc, FLOOR TILE, 12" x 12", Beige w/brown & white marble & mastic | 1,087 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: Rooms 100, 101, 102, 105, 106, 107, 108, 109, H-100 | | | | | | | | |
| NS-27 | 15 | Misc, SEALER, Black | 10 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: Rooms ROOF | | | | | | | | |

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.




## LEGEND

(xxx) — Indicates unique room number assigned by inspector

xxxx-xxx — Indicates sample locations which tested positive for asbestos

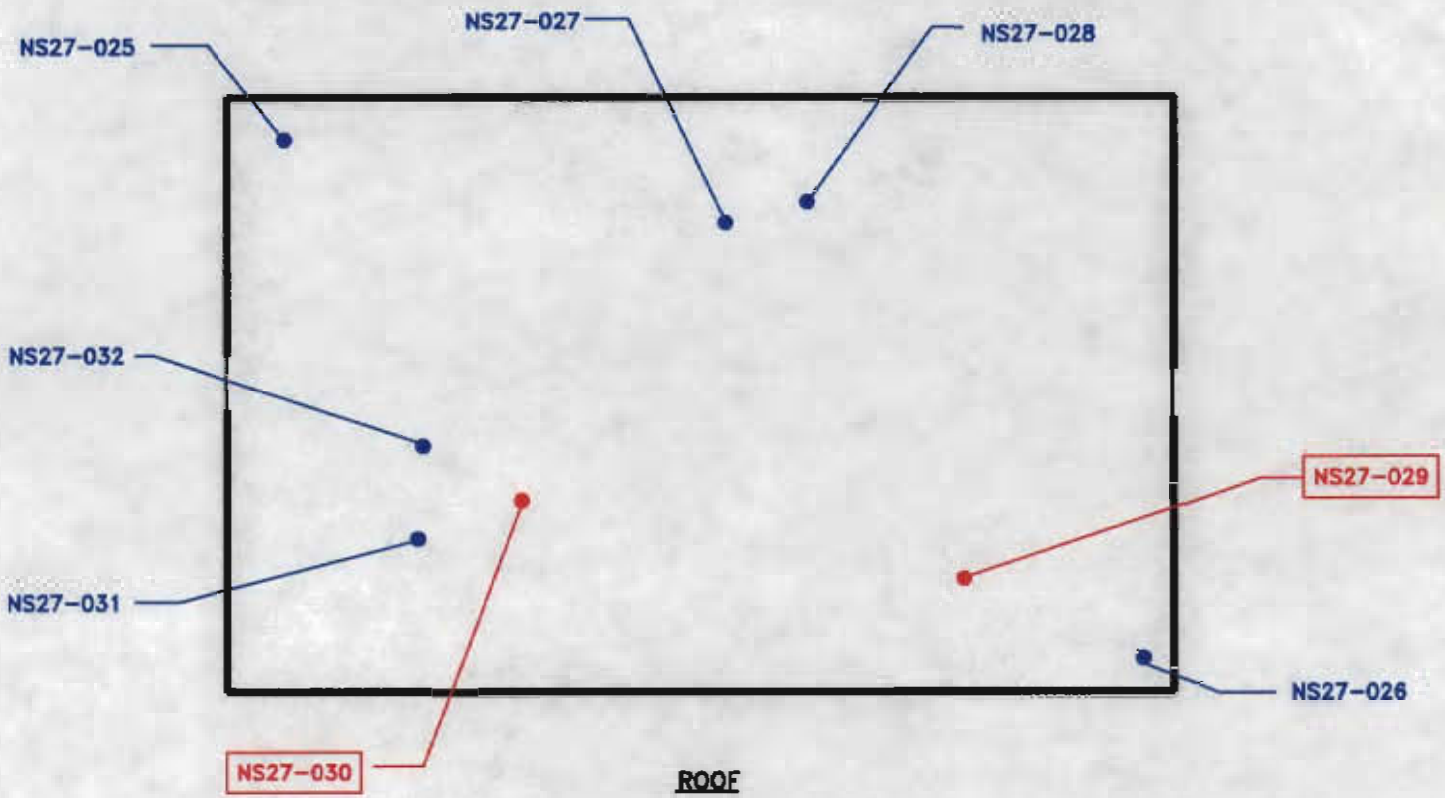
ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE - BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2106

# SAMPLE LOCATIONS
# BUILDING NS 27
# CHARLESTON NAVAL BASE, CHARLESTON, SC

| DATE | PREPARED BY: | REV |
|---|---|---|
| 6-16-98 | B.D. MURRAY | ORIG |

SCALE: NONE

SHEET 1 of 2




LEGEND

XXXX-XXX — Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE - BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2106

SAMPLE LOCATIONS
BUILDING NS 27
CHARLESTON NAVAL BASE, CHARLESTON, SC

| DATE | PREPARED BY: | REV |
|---|---|---|
| 6-15-98 | B.D. MURRAY | ORIG |

SCALE: NONE | SHEET 2 of 2

Charleston Naval Complex
Asbestos Abatement & Demolition Estimates

## Building NS-27

The estimates below reflect costs for removal of all asbestos listed in the Building Summary Table, repair of friable or damaged asbestos only, if applicable, and demolition of building after asbestos removal.

| | Total Removal | | Repair | | Demolition |
|---|---|---|---|---|---|
| Labor costs | $5,827 | - | NA | - | $4,707 |
| Material/equipment costs | $2,340 | - | NA | - | $2,441 |
| Disposal costs | $1,165 | - | NA | - | $2,371 |
| **Total cost** | **$9,332** | **-** | **NA** | **-** | **$9,519** |

The total cost for removal of all asbestos listed in the Building Summary Table is $9,332 and the cost for demolition after asbestos removal is $9,519.

# BUILDING X-54: Correctional Custody Unit

## 1. DESCRIPTION:

Building X-54 is a 3,162 square-foot building. It is a single story, concrete structure with a crawl space and a pitched, asphalt shingle roof. The year built was 1941. The following information was identified during the survey and from the analysis of the samples taken:

- Twenty-four homogeneous areas were identified during the initial survey.
- One homogeneous area was assumed to contain asbestos.
- Twenty-three of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Five of the suspected homogeneous areas were confirmed to contain asbestos.
- Eighteen of the suspected homogenous areas did not contain asbestos.

## 2. FINDINGS:

Twenty-three homogeneous areas with suspected ACM were identified. Fifty-four samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in no homogeneous areas.

**Confirmed ACM.** The following homogeneous areas sampled were confirmed to contain asbestos:

- H-7: MISC, TRANSITE, PANEL, Grey, was Non-friable and Damaged.
- H-9: MISC, MASTIC, Black vent duct, was Non-friable and Not Damaged.
- H-11: MISC, FLOOR TILE, 12" x 12", Brown w/mastic, was Non-friable and Not Damaged.
- H-12: MISC, FLOOR TILE, 12" x 12", Grey w/white marble & mastic, was Non-friable and Not Damaged.
- H-15: TSI, FITTING, CLOTH WRAPPED, White, was Non-friable and Not Damaged.

**Asbestos Free.** Asbestos was not detected in the following homogeneous areas:

- H-1: MISC, FLOOR TILE, 12" x 12", Blue w/streaks & mastic
- H-2: MISC, COVING MASTIC, Black
- H-3: MISC, SHEETROCK, PLAIN, 4' x 8', White w/vinyl wall-cover
- H-4: MISC, SHEETROCK, PAINTED, 4' x 8', White w/mud & tape

- H-5: MISC, CEILING TILE, 2' x 4', White w/long grooves
- H-6: MISC, CEILING TILE, 2' x 4', White w/bird feet
- H-8: MISC, MORTAR, 8" x 8" x 16", Grey
- H-10: MISC, COVING MASTIC, Tan
- H-13: MISC, CAULKING, White
- H-14: MISC, FLOOR TILE, 12" x 12", Cream w/mastic
- H-16: MISC, MASTIC, Grey vent duct tape
- H-18: MISC, GROUT, CERAMIC TILE, 2" x 2", Grey
- H-19: MISC, GROUT, CERAMIC TILE, 6" x 6", Grey
- H-20: MISC, GROUT, CERAMIC TILE, 4" x 4", White
- H-21: MISC, ROOFING, TAR AND GRAVEL, Black w/felt
- H-22: MISC, ROOFING, COMPOSITION SHINGLE, Grey & black w/felt
- H-23: SURFACING, NONSKID, Grey
- H-24: MISC, MORTAR, BRICK, 3" x 3" x 8", Grey

**Assumed ACM.** The following homogeneous areas were assumed to contain asbestos:

- H-17: MISC, VIBRATION JOINT, Black, was Non-friable and Not Damaged.

## 3. OBSERVATIONS:

Other suspect ACM noted, but not sampled, includes valve packing and various piping systems/components gasket material.

## 4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-7: MISC, TRANSITE, Grey: Repair/O&M
- H-9: MISC, MASTIC, Black vent duct: O&M
- H-11: MISC, FLOOR TILE, Brown w/mastic: O&M
- H-12: MISC, FLOOR TILE, Grey w/white marble & mastic: O&M
- H-15: TSI, FITTING, White: O&M
- H-17: MISC, VIBRATION JOINT, Black: O&M

## 5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance recommendations for confirmed and assumed homogeneous areas of ACM are found in the Operations & Maintenance Table of this section. The materials listed below should be maintained following the guidelines in an O & M Plan during regular maintenance and small-scale repair activities until removed.

TSI FITTING is Confirmed, Non-friable ACM.

- H-15 (FITTING, White) is located in Rooms 107, 110, 111.

MISC FLOOR TILE is Confirmed, Non-friable ACM.

- H-12 (FLOOR TILE, Grey w/white marble & mastic) is located in Room 103.
- H-11 (FLOOR TILE, Brown w/mastic) is located in Rooms 102, 105, 107, 108.

MISC MASTIC is Confirmed, Non-friable ACM.

- H-9 (MASTIC, Black vent duct) is located in Room 101.

MISC TRANSITE is Confirmed, Non-friable ACM.

- H-7 (TRANSITE, Grey) is located in Rooms 100, 101, 102, 103, 104, 110, EXT, H-100.

MISC VIBRATION JOINT is Assumed, Non-friable ACM.

- H-17 (VIBRATION JOINT, Black) is located in Room 110.

# BUILDING SUMMARY TABLE

## CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY

## Building No. X-54

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N | **Misc, FLOOR TILE, 12" x 12", Blue w/streaks & mastic** | 2,000 SF | 0 | | | | | | |
| | | Rooms 100, 101, 104, 106, H-100, H-101 | | | | | | | | |
| 2 | N | **Misc, COVING MASTIC, Black** | 312 LF | 0 | | | | | | |
| | | Rooms 100, 101, 104, 106, H-100, H-101 | | | | | | | | |
| 3 | N | **Misc, SHEETROCK, PLAIN, 4' x 8', White w/vinyl wall-cover** | 490 SF | 0 | | | | | | |
| | | Rooms 100, 105, 108 | | | | | | | | |
| 4 | N | **Misc, SHEETROCK, PAINTED, 4' x 8', White w/mud & tape** | 1,776 SF | 0 | | | | | | |
| | | Rooms 100, 102, 103, 104, 109, 111, H-100, H-101 | | | | | | | | |
| 5 | N | **Misc, CEILING TILE, 2' x 4', White w/long grooves** | 1,382 SF | 0 | | | | | | |
| | | Rooms 100, 101, 102, 103, 105, 106, 107, H-100, H-101 | | | | | | | | |
| 6 | N | **Misc, CEILING TILE, 2' x 4', White w/bird feet** | 908 SF | 0 | | | | | | |
| | | Rooms 100, 101, 106, 111, H-100, H-101 | | | | | | | | |
| 7 | Y | **Misc, TRANSITE, PANEL, Grey** | 2,860 SF | 4 | Non | D | 0.9 | Repair/O&M | | |
| | | Rooms 100, 101, 102, 103, 104, 110, EXT, H-100 | | | | | | | | |
| 8 | N | **Misc, MORTAR, 8" x 8" x 16", Grey** | 2,050 SF | 0 | | | | | | |
| | | Rooms 101, 104, 106, 107, 108, 110, 111, 112, EXT, H-100, H-101 | | | | | | | | |
| 9 | Y | **Misc, MASTIC, Black vent duct** | 220 LF | 3 | Non | PD | 0.0 | O&M | | |
| | | Rooms 101 | | | | | | | | |
| 10 | N | **Misc, COVING MASTIC, Tan** | 164 LF | 0 | | | | | | |
| | | Rooms 102, 103, 105, 107, 108, 109 | | | | | | | | |
| 11 | Y | **Misc, FLOOR TILE, 12" x 12", Brown w/mastic** | 196 SF | 3 | Non | PD | 0.0 | O&M | | |
| | | Rooms 102, 105, 107, 108 | | | | | | | | |
| 12 | Y | **Misc, FLOOR TILE, 12" x 12", Grey w/white marble & mastic** | 96 SF | 3 | Non | PD | 0.0 | O&M | | |
| | | Rooms 103 | | | | | | | | |

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

# BUILDING SUMMARY TABLE

## CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY

## Building No. X-54

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 13 | N | Misc, CAULKING, White | 82 LF | 0 | | | | | | |
| | | Rooms 106, 111, EXT | | | | | | | | |
| 14 | N | Misc, FLOOR TILE, 12" x 12", Cream w/mastic | 42 SF | 0 | | | | | | |
| | | Rooms 109 | | | | | | | | |
| 15 | Y | TSI, FITTING, CLOTH WRAPPED, White | 27 LF | 3 | Non | PD | 0.0 | O&M | | |
| | | Rooms 107, 110, 111 | | | | | | | | |
| 16 | N | Misc, MASTIC, Grey vent duct tape | 60 LF | 0 | | | | | | |
| | | Rooms 110 | | | | | | | | |
| 17 | A | Misc, VIBRATION JOINT, Black | 4 LF | 3 | Non | PD | 0.0 | O&M | | |
| | | Rooms 110 | | | | | | | | |
| 18 | N | Misc, GROUT, CERAMIC TILE, 2" x 2", Grey | 256 SF | 0 | | | | | | |
| | | Rooms 111 | | | | | | | | |
| 19 | N | Misc, GROUT, CERAMIC TILE, 6" x 6", Grey | 40 SF | 0 | | | | | | |
| | | Rooms 111 | | | | | | | | |
| 20 | N | Misc, GROUT, CERAMIC TILE, 4" x 4", White | 200 SF | 0 | | | | | | |
| | | Rooms 111 | | | | | | | | |
| 21 | N | Misc, ROOFING, TAR AND GRAVEL, Black w/felt | 98 SF | 0 | | | | | | |
| | | Rooms R-100 | | | | | | | | |
| 22 | N | Misc, ROOFING, COMPOSITION SHINGLE, Grey & black w/felt | 4,340 SF | 0 | | | | | | |
| | | Rooms R-101 | | | | | | | | |
| 23 | N | Surfacing, NONSKID, Grey | 156 SF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |
| 24 | N | Misc, MORTAR, BRICK, 3" x 3" x 8", Grey | 156 SF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

# BUILDING SUMMARY TABLE

# CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY

# Building No. X-54

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|

Note: Cost estimates are found in the Building Summary section of each building.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

## Building No. X-54

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 1 | NO | X54-001 | 100 | Misc, FLOOR TILE, Blue w/streaks & mastic | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 1 | NO | X54-002 | 101 | Misc, FLOOR TILE, Blue w/streaks & mastic | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 2 | NO | X54-003 | 100 | Misc, COVING MASTIC, Black | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 2 | NO | X54-004 | H-100 | Misc, COVING MASTIC, Black | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 3 | NO | X54-005 | 100 | Misc, SHEETROCK, 4' x 8', White w/vinyl wall-cover | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 3 | NO | X54-006 | 105 | Misc, SHEETROCK, 4' x 8', White w/vinyl wall-cover | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 3 | NO | X54-007 | 108 | Misc, SHEETROCK, 4' x 8', White w/vinyl wall-cover | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 4 | NO | X54-008 | 111 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 4 | NO | X54-009 | 104 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 4 | NO | X54-010 | 109 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 5 | NO | X54-011 | 100 | Misc, CEILING TILE, 2' x 4', White w/long grooves | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 5 | NO | X54-012 | H-101 | Misc, CEILING TILE, 2' x 4', White w/long grooves | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 6 | NO | X54-013 | 100 | Misc, CEILING TILE, 2' x 4', White w/bird feet | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 6 | NO | X54-014 | H-101 | Misc, CEILING TILE, 2' x 4', White w/bird feet | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 7 | YES | X54-015 | 110 | Misc, TRANSITE, Grey | 05/13/98 | 05/19/98 | Chrysotile | 80% |
| 7 | YES | X54-016 | EXT | Misc, TRANSITE, Grey | 05/13/98 | 05/19/98 | Chrysotile | 80% |
| 8 | NO | X54-017 | 101 | Misc, MORTAR, 8" x 8" x 16", Grey | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 8 | NO | X54-018 | H-101 | Misc, MORTAR, 8" x 8" x 16", Grey | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 9 | YES | X54-019 | 101 | Misc, MASTIC, Black vent duct | 05/13/98 | 05/19/98 | Chrysotile | 3% |
| 9 | YES | X54-020 | 101 | Misc, MASTIC, Black vent duct | 05/13/98 | 05/19/98 | Chrysotile | 3% |
| 10 | NO | X54-021 | 102 | Misc, COVING MASTIC, Tan | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 10 | NO | X54-022 | 103 | Misc, COVING MASTIC, Tan | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 11 | YES | X54-023 | 102 | Misc, FLOOR TILE, Brown w/mastic | 05/13/98 | 05/19/98 | Chrysotile | 6% |
| 11 | YES | X54-024 | 107 | Misc, FLOOR TILE, Brown w/mastic | 05/13/98 | 05/19/98 | Chrysotile | 6% |
| 12 | YES | X54-025 | 103 | Misc, FLOOR TILE, Grey w/white marble & mastic | 05/13/98 | 05/19/98 | Chrysotile | 2% |
| 12 | YES | X54-026 | 103 | Misc, FLOOR TILE, Grey w/white marble & mastic | 05/13/98 | 05/19/98 | Chrysotile | 2% |
| 13 | NO | X54-027 | 111 | Misc, CAULKING, White | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 13 | NO | X54-028 | 111 | Misc, CAULKING, White | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 14 | NO | X54-029 | 109 | Misc, FLOOR TILE, Cream w/mastic | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 14 | NO | X54-030 | 109 | Misc, FLOOR TILE, Cream w/mastic | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

## Building No. X-54

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 15 | YES | X54-031 | 107 | TSI, FITTING, White | 05/13/98 | 05/19/98 | Chrysotile | 10% |
| 15 | NO | X54-032 | 110 | TSI, FITTING, White | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 15 | NO | X54-033 | 110 | TSI, FITTING, White | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 16 | NO | X54-034 | 110 | Misc, MASTIC, Grey vent duct tape | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 16 | NO | X54-035 | 110 | Misc, MASTIC, Grey vent duct tape | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 18 | NO | X54-036 | 111 | Misc, GROUT, 2" x 2", Grey | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 18 | NO | X54-037 | 111 | Misc, GROUT, 2" x 2", Grey | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 19 | NO | X54-038 | 111 | Misc, GROUT, 6" x 6", Grey | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 19 | NO | X54-039 | 111 | Misc, GROUT, 6" x 6", Grey | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 20 | NO | X54-040 | 111 | Misc, GROUT, 4" x 4", White | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 20 | NO | X54-041 | 111 | Misc, GROUT, 4" x 4", White | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 21 | NO | X54-042 | R-100 | Misc, ROOFING, Black w/felt | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 21 | NO | X54-043 | R-100 | Misc, ROOFING, Black w/felt | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 22 | NO | X54-044 | R-101 | Misc, ROOFING, Grey & black w/felt | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 22 | NO | X54-045 | R-101 | Misc, ROOFING, Grey & black w/felt | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 23 | NO | X54-046 | EXT | Surfacing, NONSKID, Grey | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 23 | NO | X54-047 | EXT | Surfacing, NONSKID, Grey | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 23 | NO | X54-048 | EXT | Surfacing, NONSKID, Grey | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 23 | NO | X54-049 | EXT | Surfacing, NONSKID, Grey | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 23 | NO | X54-050 | EXT | Surfacing, NONSKID, Grey | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 23 | NO | X54-051 | EXT | Surfacing, NONSKID, Grey | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 23 | NO | X54-052 | EXT | Surfacing, NONSKID, Grey | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 24 | NO | X54-053 | EXT | Misc, MORTAR, 3" x 3" x 8", Grey | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |
| 24 | NO | X54-054 | EXT | Misc, MORTAR, 3" x 3" x 8", Grey | 05/13/98 | 05/19/98 | No Asbestos Detected | 0% |

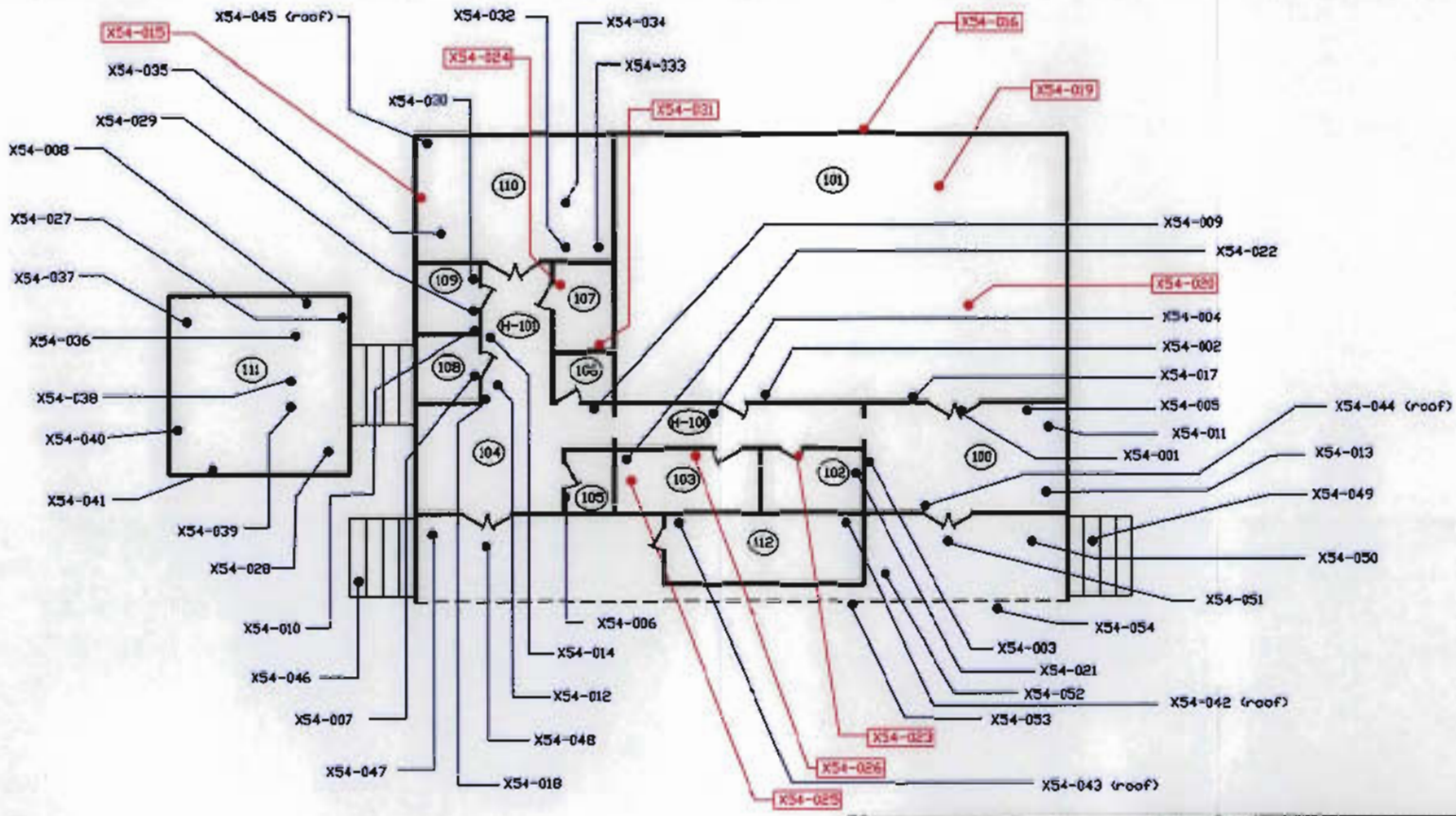
TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY



| Bldg. No. | Homo No. | Material Description | Quantity | Rat-ing | Fria-bility | Condition | % D | Recommended Action |
|---|---|---|---|---|---|---|---|---|
| X-54 | 7 | Misc, TRANSITE, PANEL, Grey | 2,860 SF | 4 | Non | Damaged | 0.90 | Repair/O&M |
| Locations: | | Rooms 100, 101, 102, 103, 104, 110, EXT, H-100 | | | | | | |
| X-54 | 9 | Misc, MASTIC, Black vent duct | 220 LF | 3 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 101 | | | | | | |
| X-54 | 11 | Misc, FLOOR TILE, 12" x 12", Brown w/mastic | 196 SF | 3 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 102, 105, 107, 108 | | | | | | |
| X-54 | 12 | Misc, FLOOR TILE, 12" x 12", Grey w/white marble & mastic | 96 SF | 3 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 103 | | | | | | |
| X-54 | 15 | TSI, FITTING, CLOTH WRAPPED, White | 27 LF | 3 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 107, 110, 111 | | | | | | |
| X-54 | 17 | Misc, VIBRATION JOINT, Black | 4 LF | 3 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 110 | | | | | | |

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.




## LEGEND

(XXX) – Indicates unique room number assigned by inspector

XXX-XXX – Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE – BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2106

SAMPLE LOCATIONS
BLDG X54
CHARLESTON NAVAL BASE, CHARLESTON SC

| DATE | PREPARED BY: | REV |
|---|---|---|
| 6-23-98 | B.D. MURRAY | ORIG |

SCALE: NONE | SHEET 1 OF 1

Charleston Naval Complex
Asbestos Abatement & Demolition Estimates

## Building X-54

The estimates below reflect costs for removal of all asbestos listed in the Building Summary Table, repair of friable or damaged asbestos only, if applicable, and demolition of building after asbestos removal.

| | Total Removal | | Repair | | Demolition |
|---|---|---|---|---|---|
| Labor costs | $10,983 | - | $150 | - | $10,044 |
| Material/equipment costs | $4,145 | - | $175 | - | $5,564 |
| Disposal costs | $1,647 | - | $45 | - | $6,148 |
| **Total cost** | **$16,775** | **-** | **$370** | **-** | **$21,756** |

The total cost for removal of all asbestos listed in the Building Summary Table is $16,775, the total cost for repairs to damaged and/or friable asbestos listed in the Building Summary Table is $370 and the cost for demolition after asbestos removal is $21,756.

# BUILDING NS-84: NAVAL SECURITY GROUP ACTIVITY

## 1. DESCRIPTION:

Building NS-84 is a 6,553 square-foot building. It is a single story, concrete block structure with red brick exterior and a built-up roof. The year built was 1961. The following information was identified during the survey and from the analysis of the samples taken:

- Thirty-three homogeneous areas were identified during the initial survey.
- Zero homogeneous areas were assumed to contain asbestos.
- Thirty-three of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Ten of the suspected homogeneous areas were confirmed to contain asbestos.
- Twenty-three of the suspected homogenous areas did not contain asbestos.

## 2. FINDINGS:

Thirty-three homogeneous areas with suspected ACM were identified. Sixty-seven samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in no homogeneous areas.

**Confirmed ACM.** The following homogeneous areas sampled were confirmed to contain asbestos:

- H-3: MISC, FLOOR TILE, 12" x 12", Pea Green w/yellow marble & mastic, was Non-friable and Not Damaged.
- H-11: MISC, FLOOR TILE, 12" x 12", Chocolate w/white marble & mastic, was Non-friable and Not Damaged.
- H-12: MISC, FLOOR TILE, 9" x 9", Tan w/brown & white marble & mastic, was Non-friable and Not Damaged.
- H-15: MISC, FLOOR TILE, 12" x 12", Tan w/brown marble & mastic, was Non-friable and Not Damaged.
- H-21: MISC, FLOOR TILE, 9" x 9", Grey w/mastic, was Non-friable and Not Damaged.
- H-22: MISC, FLOOR TILE, 12" x 12", Beige w/brown & white marble & mastic, was Non-friable and Not Damaged.
- H-25: MISC, CAULKING, White, was Non-friable and Damaged.
- H-26: MISC, CAULKING, Grey, was Non-friable and Damaged.
- H-31: MISC, SEALER, Silver, was Non-friable and Not Damaged.

- H-32: MISC, SEALER, Black & grey, was Non-friable and Not Damaged.

**Asbestos Free.** Asbestos was not detected in the following homogeneous areas:

- H-1: MISC, FLOOR TILE, 12" x 12", Cream w/grey marble & mastic
- H-2: MISC, FLOOR TILE, 12" x 12", Wood Grain / peel & stick
- H-4: MISC, SHEETROCK, PAINTED, 4' x 8', White w/mud & tape
- H-5: MISC, CEILING TILE, 2' x 4', White w/small holes
- H-6: MISC, MASTIC, Silver vent duct tape
- H-7: MISC, CEILING TILE, 2' x 4', White w/short grooves
- H-8: MISC, CEILING TILE, 2' x 4', White w/large holes
- H-9: MISC, CEILING TILE, 2' x 4', White w/long grooves
- H-10: MISC, CEILING TILE, 2' x 4', White w/bird feet
- H-13: MISC, COVING MASTIC, Yellow
- H-14: MISC, MORTAR, 8" x 8" x 16", Grey
- H-16: MISC, WALLBOARD, 3' x 8', Beige
- H-17: MISC, GROUT, CERAMIC TILE, 1" x 1" / 2" x 2" / 1" x 2", Grey
- H-18: MISC, GROUT, CERAMIC TILE, 4" x 4", White
- H-19: MISC, COVING MASTIC, Black
- H-20: MISC, MORTAR, BRICK, 3" x 3" x 8", Grey
- H-23: MISC, VIBRATION JOINT, Black
- H-24: MISC, ACOUSTICAL TILE, WITHOUT MASTIC, 12" x 12", White
- H-27: MISC, MORTAR, 3' x 6', Grey
- H-28: MISC, CAULKING, Yellow
- H-29: MISC, TAR PAPER, Black
- H-30: MISC, SEALER, Black w/felt
- H-33: MISC, ROOFING, TAR AND GRAVEL, Black w/felt

**Assumed ACM.** The following homogeneous areas were assumed to contain asbestos:

- None.

## 3. OBSERVATIONS:

Other suspect ACM noted, but not sampled, includes valve packing and various piping systems/components gasket material.

## 4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-3: MISC, FLOOR TILE, Pea Green w/yellow marble & mastic: O&M
- H-11: MISC, FLOOR TILE, Chocolate w/white marble & mastic: O&M

- H-12: MISC, FLOOR TILE, Tan w/brown & white marble & mastic: O&M
- H-15: MISC, FLOOR TILE, Tan w/brown marble & mastic: O&M
- H-21: MISC, FLOOR TILE, Grey w/mastic: O&M
- H-22: MISC, FLOOR TILE, Beige w/brown & white marble & mastic: O&M
- H-25: MISC, CAULKING, White: Repair/O&M
- H-26: MISC, CAULKING, Grey: Repair/O&M
- H-31: MISC, SEALER, Silver: O&M
- H-32: MISC, SEALER, Black & grey: O&M

## 5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance recommendations for confirmed and assumed homogeneous areas of ACM are found in the Operations & Maintenance Table of this section. The materials listed below should be maintained following the guidelines in an O & M Plan during regular maintenance and small-scale repair activities until removed.

MISC CAULKING is Confirmed, Non-friable ACM.

- H-26 (CAULKING, Grey) is located on the Exterior.

- H-25 (CAULKING, White) is located on the Exterior.

MISC FLOOR TILE is Confirmed, Non-friable ACM.

- H-3 (FLOOR TILE, Pea Green w/yellow marble & mastic) is located in Rooms 102, 105, 106, 109, 113, E-001, H-100.

- H-15 (FLOOR TILE, Tan w/brown marble & mastic) is located in Rooms 103, 104.

- H-21 (FLOOR TILE, Grey w/mastic) is located in Room 115.

- H-22 (FLOOR TILE, Beige w/brown & white marble & mastic) is located in Room 115.

- H-11 (FLOOR TILE, Chocolate w/white marble & mastic) is located in Rooms 102, 109, 110, 111, 113, 114.

- H-12 (FLOOR TILE, Tan w/brown & white marble & mastic) is located in Room 102.

MISC SEALER is Confirmed, Non-friable ACM.

- H-31 (SEALER, Silver) is located on R-100, R-101, R-102.
- H-32 (SEALER, Black & grey) is located on R-100, R-101, R-102.

# BUILDING SUMMARY TABLE

## CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY

## Building No. NS-84

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N | **Misc, FLOOR TILE, 12" x 12", Cream w/grey marble & mastic** | 180 SF | 0 | | | | | | |
| | | Rooms 106, E-001 | | | | | | | | |
| 2 | N | **Misc, FLOOR TILE, 12" x 12", Wood Grain / peel & stick** | 202 SF | 0 | | | | | | |
| | | Rooms 102, E-001, H-100 | | | | | | | | |
| 3 | Y | **Misc, FLOOR TILE, 12" x 12", Pea Green w/yellow marble & mastic** | 1,716 SF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms 102, 105, 106, 109, 113, E-001, H-100 | | | | | | | | |
| 4 | N | **Misc, SHEETROCK, PAINTED, 4' x 8', White w/mud & tape** | 3,915 SF | 0 | | | | | | |
| | | Rooms 102, 105, 106, 107, 108, 110, 113, 115, E-001, H-100 | | | | | | | | |
| 5 | N | **Misc, CEILING TILE, 2' x 4', White w/small holes** | 146 SF | 0 | | | | | | |
| | | Rooms E-001 | | | | | | | | |
| 6 | N | **Misc, MASTIC, Silver vent duct tape** | 290 LF | 0 | | | | | | |
| | | Rooms 100, 101, 102, 103, 104, 113, 114, E-001 | | | | | | | | |
| 7 | N | **Misc, CEILING TILE, 2' x 4', White w/short grooves** | 2,968 SF | 0 | | | | | | |
| | | Rooms 100, 101, 102, 104, 109, 111, 112, 113, 114, 115, 116, 117, 118, H-100 | | | | | | | | |
| 8 | N | **Misc, CEILING TILE, 2' x 4', White w/large holes** | 1,386 SF | 0 | | | | | | |
| | | Rooms 100, 102, 112, 113, 115, 116, 117, 118, E-002, H-101 | | | | | | | | |
| 9 | N | **Misc, CEILING TILE, 2' x 4', White w/long grooves** | 1,184 SF | 0 | | | | | | |
| | | Rooms 100, 101, 102, 103, 104, 112, 113, 114, 115, 116, 117, 118, H-100 | | | | | | | | |
| 10 | N | **Misc, CEILING TILE, 2' x 4', White w/bird feet** | 100 SF | 0 | | | | | | |
| | | Rooms 101, 102, 103, 104, 114 | | | | | | | | |
| 11 | Y | **Misc, FLOOR TILE, 12" x 12", Chocolate w/white marble & mastic** | 384 SF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms 102, 109, 110, 111, 113, 114 | | | | | | | | |
| 12 | Y | **Misc, FLOOR TILE, 9" x 9", Tan w/brown & white marble & mastic** | 10 SF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms 102 | | | | | | | | |

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 13 | N | Misc, COVING MASTIC, Yellow | 347 LF | 0 | | | | | | |
| | | Rooms 102, 105, 106, 110, 113, 115, H-100 | | | | | | | | |
| 14 | N | Misc, MORTAR, 8" x 8" x 16", Grey | 3,825 SF | 0 | | | | | | |
| | | Rooms 102, 106, 109, 111, 112, 113, 119, 120, H-100 | | | | | | | | |
| 15 | Y | Misc, FLOOR TILE, 12" x 12", Tan w/brown marble & mastic | 260 SF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms 103, 104 | | | | | | | | |
| 16 | N | Misc, WALLBOARD, 3' x 8', Beige | 90 SF | 0 | | | | | | |
| | | Rooms 106 | | | | | | | | |
| 17 | N | Misc, GROUT, CERAMIC TILE, 1" x 1" / 2" x 2" / 1" x 2", Grey | 378 SF | 0 | | | | | | |
| | | Rooms 107, 108 | | | | | | | | |
| 18 | N | Misc, GROUT, CERAMIC TILE, 4" x 4", White | 460 SF | 0 | | | | | | |
| | | Rooms 107, 108 | | | | | | | | |
| 19 | N | Misc, COVING MASTIC, Black | 522 LF | 0 | | | | | | |
| | | Rooms 109, 111, 112, 116, 117, 118, E-002, H-101 | | | | | | | | |
| 20 | N | Misc, MORTAR, BRICK, 3" x 3" x 8", Grey | 7,746 SF | 0 | | | | | | |
| | | Rooms 109, 112, 119, EXT | | | | | | | | |
| 21 | Y | Misc, FLOOR TILE, 9" x 9", Grey w/mastic | 1,856 SF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms 115 | | | | | | | | |
| 22 | Y | Misc, FLOOR TILE, 12" x 12", Beige w/brown & white marble & mastic | 24 SF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms 115 | | | | | | | | |
| 23 | N | Misc, VIBRATION JOINT, Black | 74 LF | 0 | | | | | | |
| | | Rooms 115, 120 | | | | | | | | |
| 24 | N | Misc, ACOUSTICAL TILE, WITHOUT MASTIC, 12" x 12", White | 290 SF | 0 | | | | | | |
| | | Rooms 117, 118 | | | | | | | | |

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Y | Misc, CAULKING, White | 800 LF | 15 | Non | D | 40.0 | Repair/O&M | | |
| | | Rooms EXT | | | | | | | | |
| 26 | Y | Misc, CAULKING, Grey | 30 LF | 15 | Non | D | 10.0 | Repair/O&M | | |
| | | Rooms EXT | | | | | | | | |
| 27 | N | Misc, MORTAR, 3' x 6', Grey | 160 SF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |
| 28 | N | Misc, CAULKING, Yellow | 30 LF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |
| 29 | N | Misc, TAR PAPER, Black | 80 SF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |
| 30 | N | Misc, SEALER, Black w/felt | 142 SF | 0 | | | | | | |
| | | Rooms R-100, R-101, R-102 | | | | | | | | |
| 31 | Y | Misc, SEALER, Silver | 142 SF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms R-100, R-101, R-102 | | | | | | | | |
| 32 | Y | Misc, SEALER, Black & grey | 120 SF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms R-100, R-101, R-102 | | | | | | | | |
| 33 | N | Misc, ROOFING, TAR AND GRAVEL, Black w/felt | 7,504 SF | 0 | | | | | | |
| | | Rooms R-100, R-101, R-102 | | | | | | | | |

Note: Cost estimates are found in the Building Summary section of each building.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

## Building No. NS-84

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 1 | NO | NS84-001 | E-001 | Misc, FLOOR TILE, Cream w/grey marble & mastic | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 1 | NO | NS84-002 | 106 | Misc, FLOOR TILE, Cream w/grey marble & mastic | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 2 | NO | NS84-003 | E-001 | Misc, FLOOR TILE, Wood Grain / peel & stick | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 2 | NO | NS84-004 | 102 | Misc, FLOOR TILE, Wood Grain / peel & stick | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 3 | YES | NS84-005 | E-001 | Misc, FLOOR TILE, Pea Green w/yellow marble & mastic | 05/14/98 | 05/25/98 | Chrysotile | 2% |
| 3 | YES | NS84-006 | 105 | Misc, FLOOR TILE, Pea Green w/yellow marble & mastic | 05/14/98 | 05/25/98 | Chrysotile | 2% |
| 4 | NO | NS84-007 | 102 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 4 | NO | NS84-008 | 105 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 4 | NO | NS84-009 | 102 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 5 | NO | NS84-010 | E-001 | Misc, CEILING TILE, 2' x 4', White w/small holes | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 5 | NO | NS84-011 | E-001 | Misc, CEILING TILE, 2' x 4', White w/small holes | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 6 | NO | NS84-012 | 100 | Misc, MASTIC, Silver vent duct tape | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 6 | NO | NS84-013 | 100 | Misc, MASTIC, Silver vent duct tape | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 7 | NO | NS84-014 | 112 | Misc, CEILING TILE, 2' x 4', White w/short grooves | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 7 | NO | NS84-015 | 112 | Misc, CEILING TILE, 2' x 4', White w/short grooves | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 8 | NO | NS84-016 | 102 | Misc, CEILING TILE, 2' x 4', White w/large holes | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 8 | NO | NS84-017 | 112 | Misc, CEILING TILE, 2' x 4', White w/large holes | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 9 | NO | NS84-018 | 102 | Misc, CEILING TILE, 2' x 4', White w/long grooves | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 9 | NO | NS84-019 | 102 | Misc, CEILING TILE, 2' x 4', White w/long grooves | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 10 | NO | NS84-020 | 102 | Misc, CEILING TILE, 2' x 4', White w/bird feet | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 10 | NO | NS84-021 | 114 | Misc, CEILING TILE, 2' x 4', White w/bird feet | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 11 | YES | NS84-022 | 102 | Misc, FLOOR TILE, Chocolate w/white marble & mastic | 05/14/98 | 05/25/98 | Chrysotile | 2% |
| 11 | YES | NS84-023 | 111 | Misc, FLOOR TILE, Chocolate w/white marble & mastic | 05/14/98 | 05/25/98 | Chrysotile | 2% |
| 12 | YES | NS84-024 | 102 | Misc, FLOOR TILE, Tan w/brown & white marble & mastic | 05/14/98 | 05/25/98 | Chrysotile | 48% |
| 12 | YES | NS84-025 | 102 | Misc, FLOOR TILE, Tan w/brown & white marble & mastic | 05/14/98 | 05/25/98 | Chrysotile | 48% |
| 13 | NO | NS84-026 | 102 | Misc, COVING MASTIC, Yellow | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 13 | NO | NS84-027 | 102 | Misc, COVING MASTIC, Yellow | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 14 | NO | NS84-028 | 111 | Misc, MORTAR, 8" x 8" x 16", Grey | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 14 | NO | NS84-029 | 106 | Misc, MORTAR, 8" x 8" x 16", Grey | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 15 | YES | NS84-030 | 103 | Misc, FLOOR TILE, Tan w/brown marble & mastic | 05/14/98 | 05/25/98 | Chrysotile | 45% |

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

# Building No. NS-84

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 15 | YES | NS84-031 | 104 | Misc, FLOOR TILE, Tan w/brown marble & mastic | 05/14/98 | 05/25/98 | Chrysotile | 45% |
| 16 | NO | NS84-032 | 106 | Misc, WALLBOARD, 3' x 8', Beige | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 16 | NO | NS84-033 | 106 | Misc, WALLBOARD, 3' x 8', Beige | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 17 | NO | NS84-034 | 107 | Misc, GROUT, 1" x 1" / 2" x 2" / 1" x 2", Grey | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 17 | NO | NS84-035 | 107 | Misc, GROUT, 1" x 1" / 2" x 2" / 1" x 2", Grey | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 18 | NO | NS84-036 | 107 | Misc, GROUT, 4" x 4", White | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 18 | NO | NS84-037 | 107 | Misc, GROUT, 4" x 4", White | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 19 | NO | NS84-038 | E-002 | Misc, COVING MASTIC, Black | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 19 | NO | NS84-039 | 116 | Misc, COVING MASTIC, Black | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 20 | NO | NS84-040 | 112 | Misc, MORTAR, 3" x 3" x 8", Grey | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 20 | NO | NS84-041 | EXT | Misc, MORTAR, 3" x 3" x 8", Grey | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 21 | YES | NS84-042 | 115 | Misc, FLOOR TILE, Grey w/mastic | 05/14/98 | 05/25/98 | Chrysotile | 3% |
| 21 | YES | NS84-043 | 115 | Misc, FLOOR TILE, Grey w/mastic | 05/14/98 | 05/25/98 | Chrysotile | 3% |
| 22 | YES | NS84-044 | 115 | Misc, FLOOR TILE, Beige w/brown & white marble & masti | 05/14/98 | 05/25/98 | Chrysotile | 2% |
| 22 | YES | NS84-045 | 115 | Misc, FLOOR TILE, Beige w/brown & white marble & masti | 05/14/98 | 05/25/98 | Chrysotile | 2% |
| 23 | NO | NS84-046 | 115 | Misc, VIBRATION JOINT, Black | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 23 | NO | NS84-047 | 115 | Misc, VIBRATION JOINT, Black | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 24 | NO | NS84-048 | 117 | Misc, ACOUSTICAL TILE, 12" x 12", White | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 24 | NO | NS84-049 | 117 | Misc, ACOUSTICAL TILE, 12" x 12", White | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 25 | YES | NS84-050 | EXT | Misc, CAULKING, White | 05/14/98 | 05/25/98 | Chrysotile | 2% |
| 25 | YES | NS84-051 | EXT | Misc, CAULKING, White | 05/14/98 | 05/25/98 | Chrysotile | 2% |
| 26 | YES | NS84-052 | EXT | Misc, CAULKING, Grey | 05/14/98 | 05/25/98 | Chrysotile | 2% |
| 26 | YES | NS84-053 | EXT | Misc, CAULKING, Grey | 05/14/98 | 05/25/98 | Chrysotile | 2% |
| 27 | NO | NS84-054 | EXT | Misc, MORTAR, 3' x 6', Grey | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 27 | NO | NS84-055 | EXT | Misc, MORTAR, 3' x 6', Grey | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 28 | NO | NS84-056 | EXT | Misc, CAULKING, Yellow | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 28 | NO | NS84-057 | EXT | Misc, CAULKING, Yellow | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 29 | NO | NS84-058 | EXT | Misc, TAR PAPER, Black | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 29 | NO | NS84-059 | EXT | Misc, TAR PAPER, Black | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 30 | NO | NS84-060 | R-100 | Misc, SEALER, Black w/felt | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

## Building No. NS-84

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 30 | NO | NS84-061 | R-102 | Misc, SEALER, Black w/felt | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 31 | YES | NS84-062 | R-100 | Misc, SEALER, Silver | 05/14/98 | 05/25/98 | Chrysotile | 2% |
| 31 | YES | NS84-063 | R-101 | Misc, SEALER, Silver | 05/14/98 | 05/25/98 | Chrysotile | 2% |
| 32 | YES | NS84-064 | R-100 | Misc, SEALER, Black & grey | 05/14/98 | 05/25/98 | Chrysotile | 3% |
| 32 | YES | NS84-065 | R-102 | Misc, SEALER, Black & grey | 05/14/98 | 05/25/98 | Chrysotile | 3% |
| 33 | NO | NS84-066 | R-100 | Misc, ROOFING, Black w/felt | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |
| 33 | NO | NS84-067 | R-101 | Misc, ROOFING, Black w/felt | 05/14/98 | 05/25/98 | No Asbestos Detected | 0% |

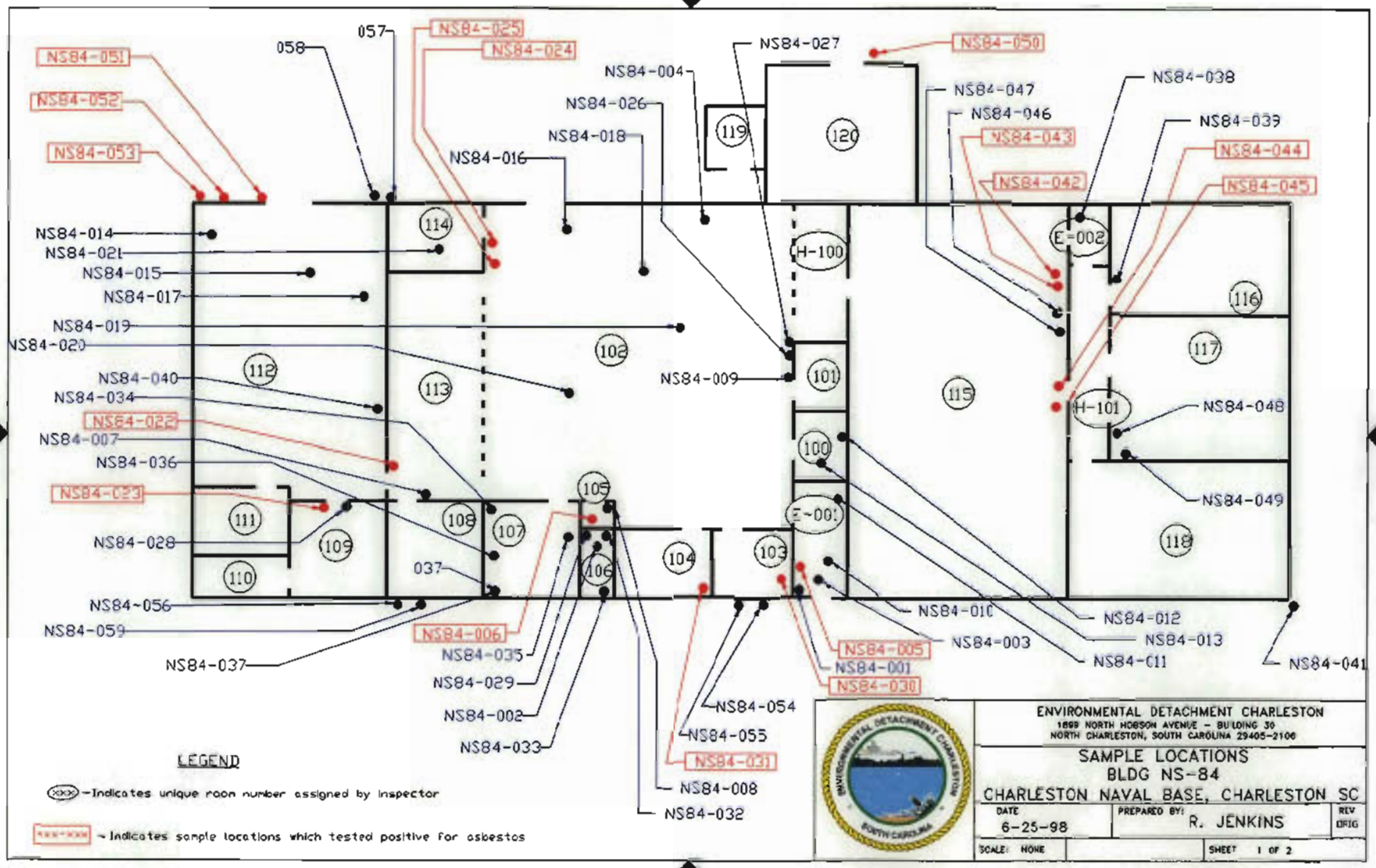
TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY



| Bldg. No. | Homo No. | Material Description | Quantity | Rat-ing | Fria-bility | Condition | % D | Recommended Action |
|---|---|---|---|---|---|---|---|---|
| NS-84 | 3 | Misc, FLOOR TILE, 12" x 12", Pea Green w/yellow marble & mastic | 1,716 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 102, 105, 106, 109, 113, E-001, H-100 | | | | | | |
| NS-84 | 11 | Misc, FLOOR TILE, 12" x 12", Chocolate w/white marble & mastic | 384 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 102, 109, 110, 111, 113, 114 | | | | | | |
| NS-84 | 12 | Misc, FLOOR TILE, 9" x 9", Tan w/brown & white marble & mastic | 10 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 102 | | | | | | |
| NS-84 | 15 | Misc, FLOOR TILE, 12" x 12", Tan w/brown marble & mastic | 260 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 103, 104 | | | | | | |
| NS-84 | 21 | Misc, FLOOR TILE, 9" x 9", Grey w/mastic | 1,856 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 115 | | | | | | |
| NS-84 | 22 | Misc, FLOOR TILE, 12" x 12", Beige w/brown & white marble & mastic | 24 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 115 | | | | | | |
| NS-84 | 25 | Misc, CAULKING, White | 800 LF | 15 | Non | Damaged | 40.00 | Repair/O&M |
| Locations: | | Rooms EXT | | | | | | |
| NS-84 | 26 | Misc, CAULKING, Grey | 30 LF | 15 | Non | Damaged | 10.00 | Repair/O&M |
| Locations: | | Rooms EXT | | | | | | |
| NS-84 | 31 | Misc, SEALER, Silver | 142 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms R-100, R-101, R-102 | | | | | | |
| NS-84 | 32 | Misc, SEALER, Black & grey | 120 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms R-100, R-101, R-102 | | | | | | |

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.


NS84-051
NS84-052
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058
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NS84-005
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NS84-030
NS84-012
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NS84-041
NS84-054
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NS84-031
NS84-008
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120
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H-100
E-002
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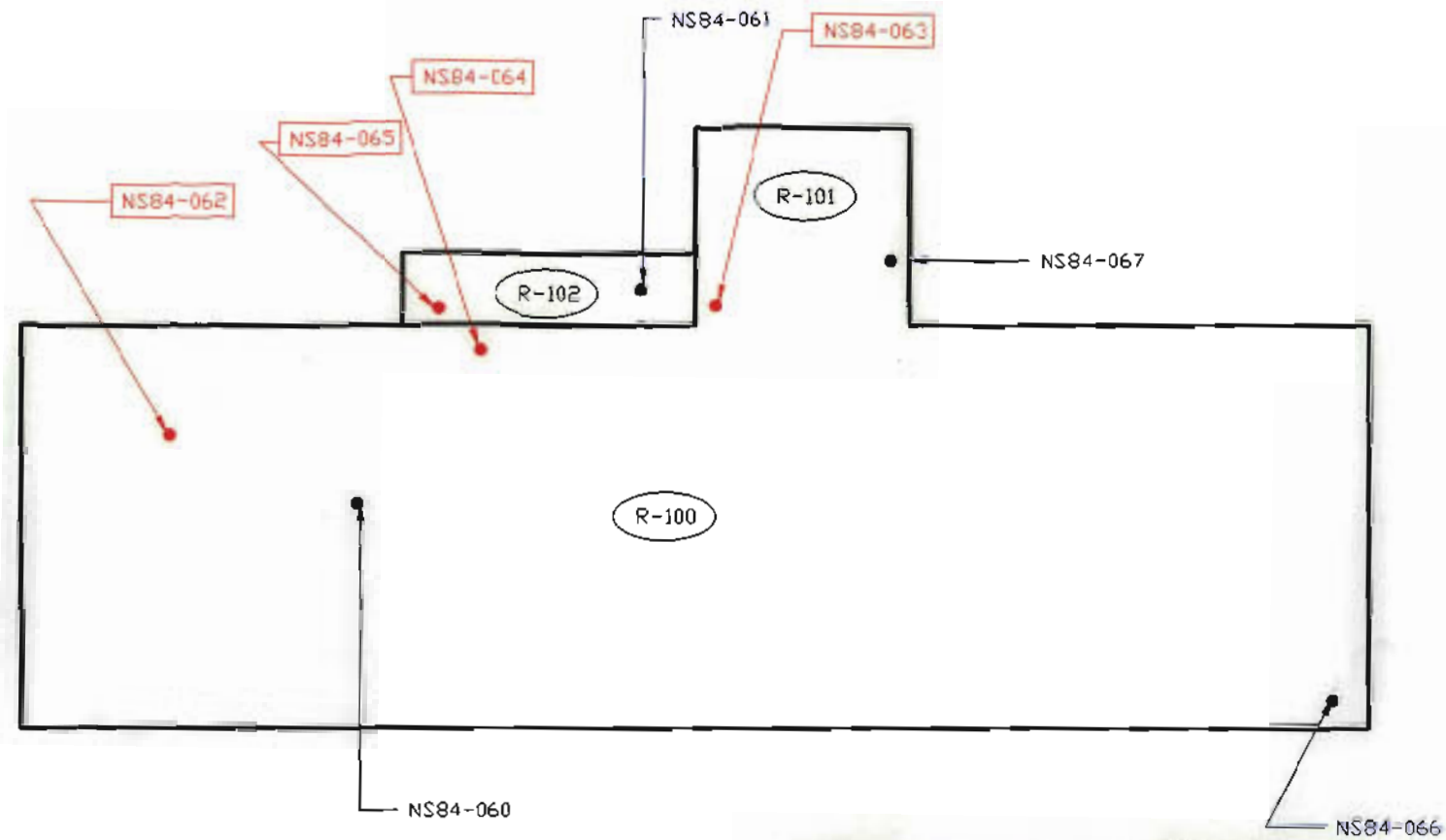
112
113
101
115
H-101
100
105
E-001
118
111
108
107
109
104
103
110
106
LEGEND
(xxx) - Indicates unique room number assigned by inspector
xxx-xxx - Indicates sample locations which tested positive for asbestos
ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE - BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2106
SAMPLE LOCATIONS
BLDG NS-84
CHARLESTON NAVAL BASE, CHARLESTON SC
DATE
6-25-98
PREPARED BY:
R. JENKINS
REV
ORIG
SCALE: NONE
SHEET 1 OF 2




LEGEND

(XXX) - Indicates unique room number assigned by inspector

XXX-XXX - Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE - BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2106

SAMPLE LOCATIONS
BLDG NS-84 (ROOF)
CHARLESTON NAVAL BASE, CHARLESTON SC

| DATE | PREPARED BY: | REV |
|---|---|---|
| 6-26-98 | R. JENKINS | ORIG |

SCALE: NONE

SHEET 2 OF 2

Charleston Naval Complex
Asbestos Abatement & Demolition Estimates

## Building NS-84

The estimates below reflect costs for removal of all asbestos listed in the Building Summary Table, repair of friable or damaged asbestos only, if applicable, and demolition of building after asbestos removal.

| | Total Removal | | Repair | | Demolition |
|---|---|---|---|---|---|
| Labor costs | $24,759 | - | $646 | - | $20,154 |
| Material/equipment costs | $8,965 | - | $424 | - | $11,481 |
| Disposal costs | $3,714 | - | $193 | - | $10,968 |
| **Total cost** | **$37,438** | **-** | **$1,263** | **-** | **$42,603** |

The total cost for removal of all asbestos listed in the Building Summary Table is $37,438, the total cost for repairs to damaged and/or friable asbestos listed in the Building Summary Table is $1,263 and the cost for demolition after asbestos removal is $42,603.

## BUILDING 180: Recreation Building (Sterett Hall)

### 1. DESCRIPTION:

Building 180 is a 37,206 square-foot building. It is a two story, concrete block structure with metal windows and a crawl space. The roof is composed of three different types of construction, that include, asphalt shingles, rolled rubberized sheeting and a built-up roof of tar and gravel. The year built was 1959. The following information was identified during the survey and from the analysis of the samples taken:

- Forty-three homogeneous areas were identified during the initial survey.
- One homogeneous area was assumed to contain asbestos.
- Forty-two of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Eight of the suspected homogeneous areas were confirmed to contain asbestos.
- Thirty-four of the suspected homogenous areas did not contain asbestos.

### 2. FINDINGS:

Forty-two homogeneous areas with suspected ACM were identified. Eighty-four samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in two of the homogeneous areas.

**Confirmed ACM.** The following homogeneous areas sampled were confirmed to contain asbestos:

- H-5: MISC, CAULKING, Yellow/brown, was Non-friable and Not Damaged.
- H-7: MISC, FLOOR TILE, 9" x 9", Dark brown w/mastic, was Non-friable and Not Damaged.
- H-9: TSI, PIPE, CLOTH WRAPPED, White, was Low-friable and Not Damaged.
- H-29: MISC, FLOOR TILE, 9" x 9", Light brown w/white marble & mastic, was Non-friable and Not Damaged.
- H-31: MISC, FLOOR TILE, 12" x 12", White w/black marble & mastic, was Non-friable and Not Damaged.
- H-32: MISC, GLAZING, WINDOW EXTERIOR, Grey, was Non-friable and Damaged.
- H-34: MISC, SEALER, Black, was Non-friable and Not Damaged.
- H-40: TSI, DEBRIS, Grey, was Low-friable and Significantly Damaged.

**Asbestos Free.** Asbestos was not detected in the following homogeneous areas:

- H-1: MISC, MORTAR, 8" x 8" x 16", Grey
- H-2: SURFACING, PLASTER, Grey
- H-3: MISC, FLOOR TILE, 12" x 12", Beige w/white marble & mastic
- H-4: MISC, COVING MASTIC, Brown
- H-6: MISC, CAULKING, White
- H-8: MISC, COVING MASTIC, Black
- H-10: MISC, MORTAR, 8" x 8" x 8", Grey
- H-11: MISC, Grey terrazzo
- H-12: MISC, CEILING TILE, 2' x 2', White w/long grooves
- H-13: MISC, GROUT, CERAMIC TILE, 1" x 1" / 1" x 2" / 2" x 2", Grey
- H-14: MISC, GROUT, CERAMIC TILE, 8" x 15", White
- H-15: TSI, FITTING, CLOTH WRAPPED, White
- H-16: MISC, SHEETROCK, PAINTED, 4' x 8', White w/mud & tape
- H-17: MISC, GROUT, CERAMIC TILE, 6" x 6", Grey
- H-18: MISC, FLOOR TILE, 12" x 12", Cream w/brown & white marble & mastic
- H-19: MISC, MASTIC, Grey on red rubber mat
- H-20: MISC, MASTIC, Grey on black rubber mat
- H-21: MISC, VIBRATION JOINT, Black
- H-22: MISC, MASTIC, White vent duct
- H-23: MISC, MASTIC, Green/black vent duct
- H-24: MISC, CEILING TILE, 12" x 12", Grey
- H-25: MISC, FLOOR TILE, 12" x 12", White w/grey marble & mastic
- H-26: MISC, GROUT, CERAMIC TILE, 8" x 15", Grey
- H-27: MISC, CEILING TILE, 2' x 2', White w/short grooves
- H-28: MISC, SHEETROCK, PLAIN, 4' x 8', White w/vinyl wall-cover
- H-30: MISC, MASTIC, Black stair tread
- H-33: MISC, MORTAR, Grey wall patch
- H-35: MISC, ROOFING, TAR AND GRAVEL, Black w/felt
- H-36: MISC, ROOFING, COMPOSITION SHINGLE, Light brown w/felt
- H-37: TSI, FITTING, CLOTH WRAPPED, Grey
- H-38: MISC, MASTIC, Black pipe insulation
- H-39: MISC, SOIL, Light brown
- H-41: MISC, MASTIC, Yellow on grey rubber mat
- H-42: MISC, VIBRATION JOINT, White

**Assumed ACM.** The following homogeneous areas were assumed to contain asbestos:

- H-43: MISC, EXPANSION JOINT, Black, was Non-friable and Not Damaged.

## 3. OBSERVATIONS:

An asbestos spill was revealed in the gymnasium. SOUTHDIV was notified and the area was abated by Environmental Detachment Charleston personnel. Other suspect ACM noted, but not sampled, includes valve packing, various piping systems/components gasket material and drain piping joint compound.

## 4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-5: MISC, CAULKING, Yellow/brown: O&M
- H-7: MISC, FLOOR TILE, Dark brown w/mastic: O&M
- H-9: TSI, PIPE, White: Repair/O&M
- H-29: MISC, FLOOR TILE, Light brown w/white marble & mastic: O&M
- H-31: MISC, FLOOR TILE, White w/black marble & mastic: O&M
- H-32: MISC, GLAZING, Grey: Repair/O&M
- H-34: MISC, SEALER, Black: O&M
- H-40: TSI, DEBRIS, Grey: Remove/O&M
- H-43: MISC, EXPANSION JOINT, Black: O&M

## 5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance recommendations for confirmed and assumed homogeneous areas of ACM are found in the Operations & Maintenance Table of this section. The materials listed below should be maintained following the guidelines in an O & M Plan during regular maintenance and small-scale repair activities until removed.

MISC CAULKING is Confirmed, Non-friable ACM.

- H-5 (CAULKING, Yellow/brown) is located in Rooms 102, 103, 105, 106, 108, 112, 119, 120, 121, 125, 204, 213, 218, H-100, H-101, H-202, H-204, M-100, M-101.

TSI DEBRIS is Confirmed, Low-friable ACM.

- H-40 (DEBRIS, Grey) is located in C-100.

MISC EXPANSION JOINT is Assumed, Non-friable ACM.

- H-43 (EXPANSION JOINT, Black) is located on the Roof.

MISC FLOOR TILE is Confirmed, Non-friable ACM.

- H-7 (FLOOR TILE, Dark brown w/mastic) is located in Rooms 106, 200, 202, 204, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, H-100, H-101, H-200, H-201, H-202, H-203, H-204, H-205, H-206.

- H-31 (FLOOR TILE, White w/black marble & mastic) is located in S-002.

- H-29 (FLOOR TILE, Light brown w/white marble & mastic) is located in Room 218.

MISC GLAZING is Confirmed, Non-friable ACM.

- H-32 (GLAZING, Grey) is located on the Exterior.

TSI PIPE is Confirmed, Low-friable ACM.

- H-9 (PIPE, White) is located in Rooms 103, 106, 126, M-101, M-102.

MISC SEALER is Confirmed, Non-friable ACM.

- H-34 (SEALER, Black) is located on the Roof.

# BUILDING SUMMARY TABLE

# CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY

# Building No. 180

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N | **Misc, MORTAR, 8" x 8" x 16", Grey** | **65,247 SF** | **0** | | | | | | |
| | | Rooms 100, 101, 102, 103, 104, 105, 106, 107, 108, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 123, 124, 125, 126, 200, 201, 202, 203, 204, 205, 206, 208, 212, 213, 214, 215, 218, 219, EXT, H-100, H-101, H-202, H-203, H-204, M-100, M-101, M-102, S-002 | | | | | | | | |
| 2 | N | **Surfacing, PLASTER, Grey** | **428 LF** | **0** | | | | | | |
| | | Rooms 100, 207, 208 | | | | | | | | |
| 3 | N | **Misc, FLOOR TILE, 12" x 12", Beige w/white marble & mastic** | **4,535 SF** | **0** | | | | | | |
| | | Rooms 101, 104, 106, 109 | | | | | | | | |
| 4 | N | **Misc, COVING MASTIC, Brown** | **542 LF** | **0** | | | | | | |
| | | Rooms 101, 104, 202, 206, 209, 212, 213, 214, 215, 216, 217, H-206 | | | | | | | | |
| 5 | Y | **Misc, CAULKING, Yellow/brown** | **1,270 LF** | **11** | **Non** | **PD** | **0.0** | **O&M** | | |
| | | Rooms 102, 103, 105, 106, 108, 112, 119, 120, 121, 125, 204, 213, 218, H-100, H-101, H-202, H-204, M-100, M-101 | | | | | | | | |
| 6 | N | **Misc, CAULKING, White** | **1,620 LF** | **0** | | | | | | |
| | | Rooms 102, 105, 108, EXT, M-100, M-101 | | | | | | | | |
| 7 | Y | **Misc, FLOOR TILE, 9" x 9", Dark brown w/mastic** | **7,886 SF** | **11** | **Non** | **PD** | **0.0** | **O&M** | | |
| | | Rooms 106, 200, 202, 204, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, H-100, H-101, H-200, H-201, H-202, H-203, H-204, H-205, H-206 | | | | | | | | |
| 8 | N | **Misc, COVING MASTIC, Black** | **1,260 LF** | **0** | | | | | | |
| | | Rooms 106, 109, 200, 204, 207, 208, 213, 218, H-100, H-101, H-200, H-201, H-202, H-203, H-204, S-002 | | | | | | | | |
| 9 | Y | **TSI, PIPE, CLOTH WRAPPED, White** | **323 LF** | **21** | **Mod** | **D** | **1.2** | **Repair/O&M** | | |
| | | Rooms 103, 106, 126, M-101, M-102 | | | | | | | | |
| 10 | N | **Misc, MORTAR, 8" x 8" x 8", Grey** | **560 SF** | **0** | | | | | | |
| | | Rooms 106 | | | | | | | | |
| 11 | N | **Misc, Grey terrazzo** | **1,920 SF** | **0** | | | | | | |
| | | Rooms 108 | | | | | | | | |
| 12 | N | **Misc, CEILING TILE, 2' x 2', White w/long grooves** | **1,920 SF** | **0** | | | | | | |
| | | Rooms 108 | | | | | | | | |

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 13 | N | Misc, GROUT, CERAMIC TILE, 1" x 1" / 1" x 2" / 2" x 2", Grey | 1,404 SF | 0 | | | | | | |
| | | Rooms 110, 111, 116, 122, 124, 201, 205 | | | | | | | | |
| 14 | N | Misc, GROUT, CERAMIC TILE, 8" x 15", White | 2,100 SF | 0 | | | | | | |
| | | Rooms 110, 111, 116, 122, 124, 205 | | | | | | | | |
| 15 | N | TSI, FITTING, CLOTH WRAPPED, White | 130 LF | 0 | | | | | | |
| | | Rooms 103, 106, 112, 126, M-101, M-102 | | | | | | | | |
| 16 | N | Misc, SHEETROCK, PAINTED, 4' x 8', White w/mud & tape | 1,690 SF | 0 | | | | | | |
| | | Rooms 113, 118, 209, 210, 218, H-205 | | | | | | | | |
| 17 | N | Misc, GROUT, CERAMIC TILE, 6" x 6", Grey | 747 SF | 0 | | | | | | |
| | | Rooms 115, 121 | | | | | | | | |
| 18 | N | Misc, FLOOR TILE, 12" x 12", Cream w/brown & white marble & mastic | 208 SF | 0 | | | | | | |
| | | Rooms 119 | | | | | | | | |
| 19 | N | Misc, MASTIC, Grey on red rubber mat | 423 SF | 0 | | | | | | |
| | | Rooms 110, 119, 125 | | | | | | | | |
| 20 | N | Misc, MASTIC, Grey on black rubber mat | 1,625 SF | 0 | | | | | | |
| | | Rooms 125 | | | | | | | | |
| 21 | N | Misc, VIBRATION JOINT, Black | 94 LF | 0 | | | | | | |
| | | Rooms 203, 209, 219, M-102 | | | | | | | | |
| 22 | N | Misc, MASTIC, White vent duct | 130 LF | 0 | | | | | | |
| | | Rooms 219, M-102 | | | | | | | | |
| 23 | N | Misc, MASTIC, Green/black vent duct | 12 LF | 0 | | | | | | |
| | | Rooms M-102 | | | | | | | | |
| 24 | N | Misc, CEILING TILE, 12" x 12", Grey | 580 SF | 0 | | | | | | |
| | | Rooms 202, 204, S-001 | | | | | | | | |

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 25 | N | Misc, FLOOR TILE, 12" x 12", White w/grey marble & mastic | 1,881 SF | 0 | | | | | | |
| | | Rooms 204, 207, 208, H-200, H-201, H-202, H-203, H-204, S-002 | | | | | | | | |
| 26 | N | Misc, GROUT, CERAMIC TILE, 8" x 15", Grey | 240 SF | 0 | | | | | | |
| | | Rooms 201 | | | | | | | | |
| 27 | N | Misc, CEILING TILE, 2' x 2', White w/short grooves | 338 SF | 0 | | | | | | |
| | | Rooms 207, 208 | | | | | | | | |
| 28 | N | Misc, SHEETROCK, PLAIN, 4' x 8', White w/vinyl wall-cover | 1,320 SF | 0 | | | | | | |
| | | Rooms 207, 209, 211 | | | | | | | | |
| 29 | Y | Misc, FLOOR TILE, 9" x 9", Light brown w/white marble & mastic | 20 SF | 11 | Non | PD | 0.0 | O&M | | |
| | | Rooms 218 | | | | | | | | |
| 30 | N | Misc, MASTIC, Black stair tread | 65 LF | 0 | | | | | | |
| | | Rooms S-002 | | | | | | | | |
| 31 | Y | Misc, FLOOR TILE, 12" x 12", White w/black marble & mastic | 200 SF | 11 | Non | PD | 0.0 | O&M | | |
| | | Rooms S-002 | | | | | | | | |
| 32 | Y | Misc, GLAZING, WINDOW EXTERIOR, Grey | 3,160 LF | 16 | Non | D | 10.0 | Repair/O&M | | |
| | | Rooms EXT | | | | | | | | |
| 33 | N | Misc, MORTAR, Grey wall patch | 1 SF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |
| 34 | Y | Misc, SEALER, Black | 300 LF | 11 | Non | PD | 0.0 | O&M | | |
| | | Rooms ROOF | | | | | | | | |
| 35 | N | Misc, ROOFING, TAR AND GRAVEL, Black w/felt | 1,200 SF | 0 | | | | | | |
| | | Rooms ROOF | | | | | | | | |
| 36 | N | Misc, ROOFING, COMPOSITION SHINGLE, Light brown w/felt | 200 SF | 0 | | | | | | |
| | | Rooms ROOF | | | | | | | | |

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 37 | N | TSI, FITTING, CLOTH WRAPPED, Grey | 600 LF | 0 | | | | | | |
| | | Rooms C-100 | | | | | | | | |
| 38 | N | Misc, MASTIC, Black pipe insulation | 600 LF | 0 | | | | | | |
| | | Rooms C-100 | | | | | | | | |
| 39 | N | Misc, SOIL, Light brown | 8,250 SF | 0 | | | | | | |
| | | Rooms C-100 | | | | | | | | |
| 40 | Y | TSI, DEBRIS, Grey | 500 SF | 43 | Low | SD | 50.0 | Remove/O&M | | |
| | | Rooms C-100 | | | | | | | | |
| 41 | N | Misc, MASTIC, Yellow on grey rubber mat | 240 SF | 0 | | | | | | |
| | | Rooms 112 | | | | | | | | |
| 42 | N | Misc, VIBRATION JOINT, White | 36 LF | 0 | | | | | | |
| | | Rooms 112 | | | | | | | | |
| 43 | A | Misc, EXPANSION JOINT, Black | 125 LF | 11 | Non | PD | 0.0 | O&M | | |
| | | Rooms ROOF | | | | | | | | |

Note: Cost estimates are found in the Building Summary section of each building.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

## Building No. 180

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 1 | NO | 180-001 | S-002 | Misc, MORTAR, 8" x 8" x 16", Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 1 | NO | 180-002 | 106 | Misc, MORTAR, 8" x 8" x 16", Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 2 | NO | 180-003 | 207 | Surfacing, PLASTER, Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 2 | NO | 180-004 | 208 | Surfacing, PLASTER, Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 3 | NO | 180-005 | 106 | Misc, FLOOR TILE, Beige w/white marble & mastic | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 3 | NO | 180-006 | 106 | Misc, FLOOR TILE, Beige w/white marble & mastic | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 4 | NO | 180-007 | 213 | Misc, COVING MASTIC, Brown | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 4 | NO | 180-008 | 215 | Misc, COVING MASTIC, Brown | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 5 | YES | 180-009 | 103 | Misc, CAULKING, Yellow/brown | 04/30/98 | 05/07/98 | Actinolite | 2% |
| 5 | YES | 180-010 | 112 | Misc, CAULKING, Yellow/brown | 04/30/98 | 05/07/98 | Actinolite | 2% |
| 6 | NO | 180-011 | EXT | Misc, CAULKING, White | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 6 | NO | 180-012 | EXT | Misc, CAULKING, White | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 7 | YES | 180-013 | H-101 | Misc, FLOOR TILE, Dark brown w/mastic | 04/30/98 | 05/07/98 | Chrysotile | 27% |
| 7 | YES | 180-014 | 218 | Misc, FLOOR TILE, Dark brown w/mastic | 04/30/98 | 05/07/98 | Chrysotile | 27% |
| 8 | NO | 180-015 | 106 | Misc, COVING MASTIC, Black | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 8 | NO | 180-016 | 106 | Misc, COVING MASTIC, Black | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 9 | YES | 180-017 | 106 | TSI, PIPE, White | 04/30/98 | 05/07/98 | Amosite | 40% |
| 9 | YES | 180-017 | 106 | TSI, PIPE, White | 04/30/98 | 05/07/98 | Chrysotile | 10% |
| 9 | YES | 180-018 | 106 | TSI, PIPE, White | 04/30/98 | 05/07/98 | Amosite | 40% |
| 9 | YES | 180-018 | 106 | TSI, PIPE, White | 04/30/98 | 05/07/98 | Chrysotile | 10% |
| 10 | NO | 180-019 | 106 | Misc, MORTAR, 8" x 8" x 8", Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 10 | NO | 180-020 | 106 | Misc, MORTAR, 8" x 8" x 8", Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 11 | NO | 180-021 | 108 | Misc, Grey terrazzo | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 11 | NO | 180-022 | 108 | Misc, Grey terrazzo | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 12 | NO | 180-023 | 108 | Misc, CEILING TILE, 2' x 2', White w/long grooves | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 12 | NO | 180-024 | 108 | Misc, CEILING TILE, 2' x 2', White w/long grooves | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 13 | NO | 180-025 | 111 | Misc, GROUT, 1" x 1" / 1" x 2" / 2" x 2", Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 13 | NO | 180-026 | 201 | Misc, GROUT, 1" x 1" / 1" x 2" / 2" x 2", Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 14 | NO | 180-027 | 110 | Misc, GROUT, 8" x 15", White | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 14 | NO | 180-028 | 205 | Misc, GROUT, 8" x 15", White | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

# Building No. 180

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 15 | NO | 180-029 | 103 | TSI, FITTING, White | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 15 | NO | 180-030 | 106 | TSI, FITTING, White | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 16 | NO | 180-031 | 113 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 16 | NO | 180-032 | 218 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 17 | NO | 180-033 | 115 | Misc, GROUT, 6" x 6", Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 17 | NO | 180-034 | 121 | Misc, GROUT, 6" x 6", Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 18 | NO | 180-035 | 119 | Misc, FLOOR TILE, Cream w/brown & white marble & mas | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 18 | NO | 180-036 | 119 | Misc, FLOOR TILE, Cream w/brown & white marble & mas | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 19 | NO | 180-037 | 119 | Misc, MASTIC, Grey on red rubber mat | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 19 | NO | 180-038 | 119 | Misc, MASTIC, Grey on red rubber mat | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 20 | NO | 180-039 | 125 | Misc, MASTIC, Grey on black rubber mat | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 20 | NO | 180-040 | 125 | Misc, MASTIC, Grey on black rubber mat | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 21 | NO | 180-041 | M-102 | Misc, VIBRATION JOINT, Black | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 21 | NO | 180-042 | M-102 | Misc, VIBRATION JOINT, Black | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 22 | NO | 180-043 | 219 | Misc, MASTIC, White vent duct | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 22 | NO | 180-044 | M-102 | Misc, MASTIC, White vent duct | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 23 | NO | 180-045 | M-102 | Misc, MASTIC, Green/black vent duct | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 23 | NO | 180-046 | M-102 | Misc, MASTIC, Green/black vent duct | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 24 | NO | 180-047 | 202 | Misc, CEILING TILE, 12" x 12", Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 24 | NO | 180-048 | 204 | Misc, CEILING TILE, 12" x 12", Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 25 | NO | 180-049 | H-201 | Misc, FLOOR TILE, White w/grey marble & mastic | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 25 | NO | 180-050 | H-202 | Misc, FLOOR TILE, White w/grey marble & mastic | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 26 | NO | 180-051 | 201 | Misc, GROUT, 8" x 15", Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 26 | NO | 180-052 | 201 | Misc, GROUT, 8" x 15", Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 27 | NO | 180-053 | 207 | Misc, CEILING TILE, 2' x 2', White w/short grooves | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 27 | NO | 180-054 | 208 | Misc, CEILING TILE, 2' x 2', White w/short grooves | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 28 | NO | 180-055 | 209 | Misc, SHEETROCK, 4' x 8', White w/vinyl wall-cover | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 28 | NO | 180-056 | 211 | Misc, SHEETROCK, 4' x 8', White w/vinyl wall-cover | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 29 | YES | 180-057 | 218 | Misc, FLOOR TILE, Light brown w/white marble & mastic | 04/30/98 | 05/07/98 | Chrysotile | 2% |
| 29 | YES | 180-058 | 218 | Misc, FLOOR TILE, Light brown w/white marble & mastic | 04/30/98 | 05/07/98 | Chrysotile | 2% |

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY INDUSTRIAL LABORATORY TEST REPORT

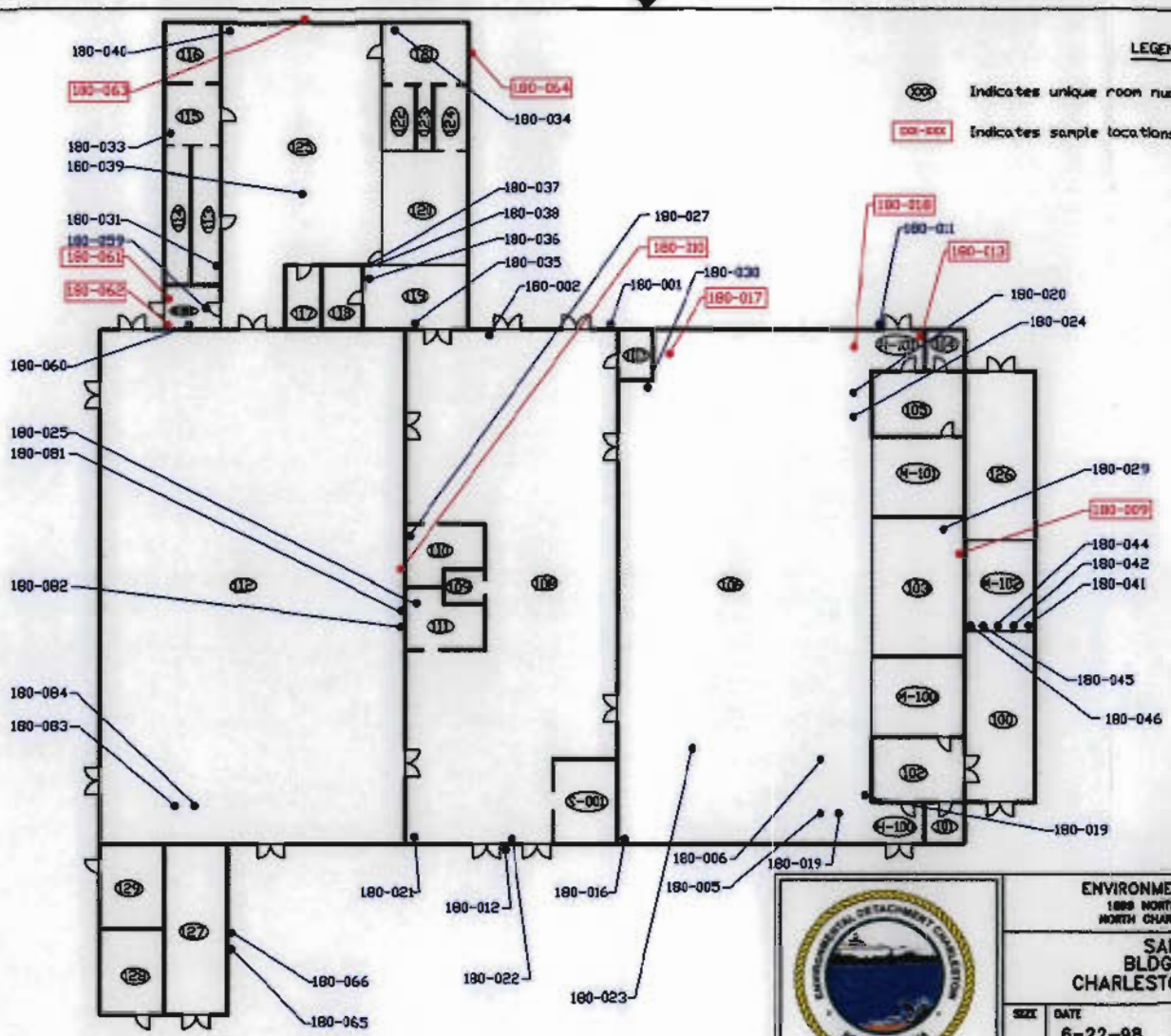
## Building No. 180

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 30 | NO | 180-059 | S-002 | Misc, MASTIC, Black stair tread | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 30 | NO | 180-060 | S-002 | Misc, MASTIC, Black stair tread | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 31 | YES | 180-061 | S-002 | Misc, FLOOR TILE, White w/black marble & mastic | 04/30/98 | 05/07/98 | Chrysotile | 5% |
| 31 | YES | 180-062 | S-002 | Misc, FLOOR TILE, White w/black marble & mastic | 04/30/98 | 05/07/98 | Chrysotile | 5% |
| 32 | YES | 180-063 | EXT | Misc, GLAZING, Grey | 04/30/98 | 05/07/98 | Chrysotile | 2% |
| 32 | YES | 180-064 | EXT | Misc, GLAZING, Grey | 04/30/98 | 05/07/98 | Chrysotile | 2% |
| 33 | NO | 180-065 | EXT | Misc, MORTAR, Grey wall patch | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 33 | NO | 180-066 | EXT | Misc, MORTAR, Grey wall patch | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 34 | YES | 180-067 | ROOF | Misc, SEALER, Black | 04/30/98 | 05/07/98 | Chrysotile | 3% |
| 34 | YES | 180-068 | ROOF | Misc, SEALER, Black | 04/30/98 | 05/07/98 | Chrysotile | 3% |
| 35 | NO | 180-069 | ROOF | Misc, ROOFING, Black w/felt | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 35 | NO | 180-070 | ROOF | Misc, ROOFING, Black w/felt | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 36 | NO | 180-071 | ROOF | Misc, ROOFING, Light brown w/felt | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 36 | NO | 180-072 | ROOF | Misc, ROOFING, Light brown w/felt | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 37 | NO | 180-073 | C-100 | TSI, FITTING, Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 37 | NO | 180-074 | C-100 | TSI, FITTING, Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 38 | NO | 180-075 | C-100 | Misc, MASTIC, Black pipe insulation | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 38 | NO | 180-076 | C-100 | Misc, MASTIC, Black pipe insulation | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 39 | NO | 180-077 | C-100 | Misc, SOIL, Light brown | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 39 | NO | 180-078 | C-100 | Misc, SOIL, Light brown | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 40 | YES | 180-079 | C-100 | TSI, DEBRIS, Grey | 04/30/98 | 05/07/98 | Chrysotile | 2% |
| 40 | NO | 180-080 | C-100 | TSI, DEBRIS, Grey | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 41 | NO | 180-081 | 112 | Misc, MASTIC, Yellow on grey rubber mat | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 41 | NO | 180-082 | 112 | Misc, MASTIC, Yellow on grey rubber mat | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 42 | NO | 180-083 | 112 | Misc, VIBRATION JOINT, White | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |
| 42 | NO | 180-084 | 112 | Misc, VIBRATION JOINT, White | 04/30/98 | 05/07/98 | No Asbestos Detected | 0% |

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

| Bldg. No. | Homo No. | Material Description | Quantity | Rat-ing | Fria-bility | Condition | % D | Recommended Action |
|---|---|---|---|---|---|---|---|---|
| 180 | 5 | Misc, CAULKING, Yellow/brown | 1,270 LF | 11 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 102, 103, 105, 106, 108, 112, 119, 120, 121, 125, 204, 213, 218, H-100, H-101, H-202, H-204, M-100, M-101 | | | | | | |
| 180 | 7 | Misc, FLOOR TILE, 9" x 9", Dark brown w/mastic | 7,886 SF | 11 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 106, 200, 202, 204, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, H-100, H-101, H-200, H-201, H-202, H-203, H-204, H-205, H-206 | | | | | | |
| 180 | 9 | TSI, PIPE, CLOTH WRAPPED, White | 323 LF | .21 | Mod | Damaged | 1.24 | Repair/O&M |
| Locations: | | Rooms 103, 106, 126, M-101, M-102 | | | | | | |
| 180 | 29 | Misc, FLOOR TILE, 9" x 9", Light brown w/white marble & mastic | 20 SF | 11 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 218 | | | | | | |
| 180 | 31 | Misc, FLOOR TILE, 12" x 12", White w/black marble & mastic | 200 SF | 11 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms S-002 | | | | | | |
| 180 | 32 | Misc, GLAZING, WINDOW EXTERIOR, Grey | 3,160 LF | 16 | Non | Damaged | 10.00 | Repair/O&M |
| Locations: | | Rooms EXT | | | | | | |
| 180 | 34 | Misc, SEALER, Black | 300 LF | 11 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms ROOF | | | | | | |
| 180 | 40 | TSI, DEBRIS, Grey | 500 SF | 43 | Low | Significantly Damaged | 50.00 | Remove/O&M |
| Locations: | | Rooms C-100 | | | | | | |
| 180 | 43 | Misc, EXPANSION JOINT, Black | 125 LF | 11 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms ROOF | | | | | | |

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.




LEGEND

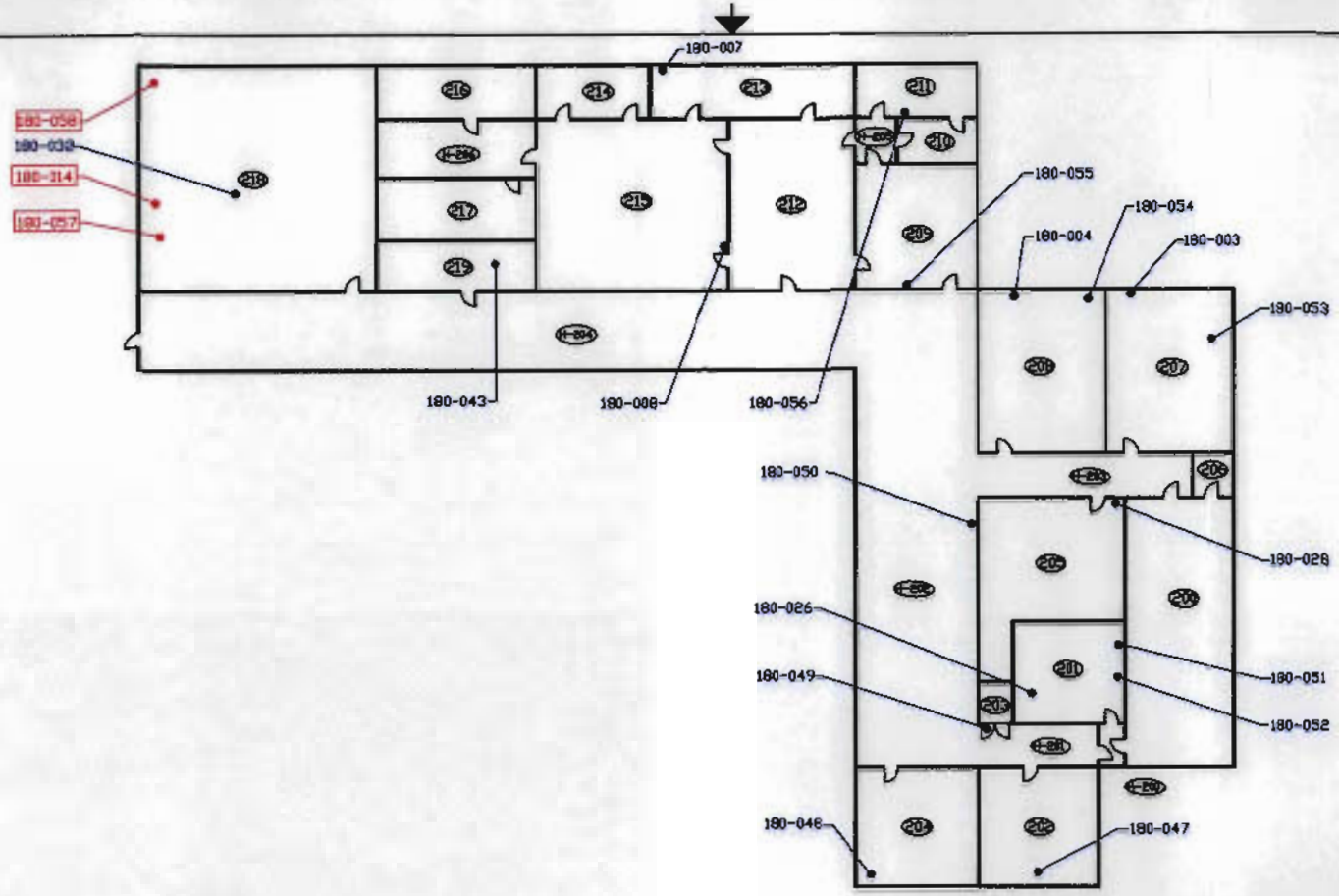
(XXX) Indicates unique room number assigned by inspector

XXX-XXX Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE – BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2106

SAMPLE LOCATIONS
BLDG 180 FIRST FLOOR
CHARLESTON NAVAL COMPLEX, SC

| SIZE | DATE | PREPARED BY: | REV |
|---|---|---|---|
| | 6-22-98 | T. L. GUNTER | — |
| SCALE NONE | | SHEET 1 OF 3 | |




LEGEND

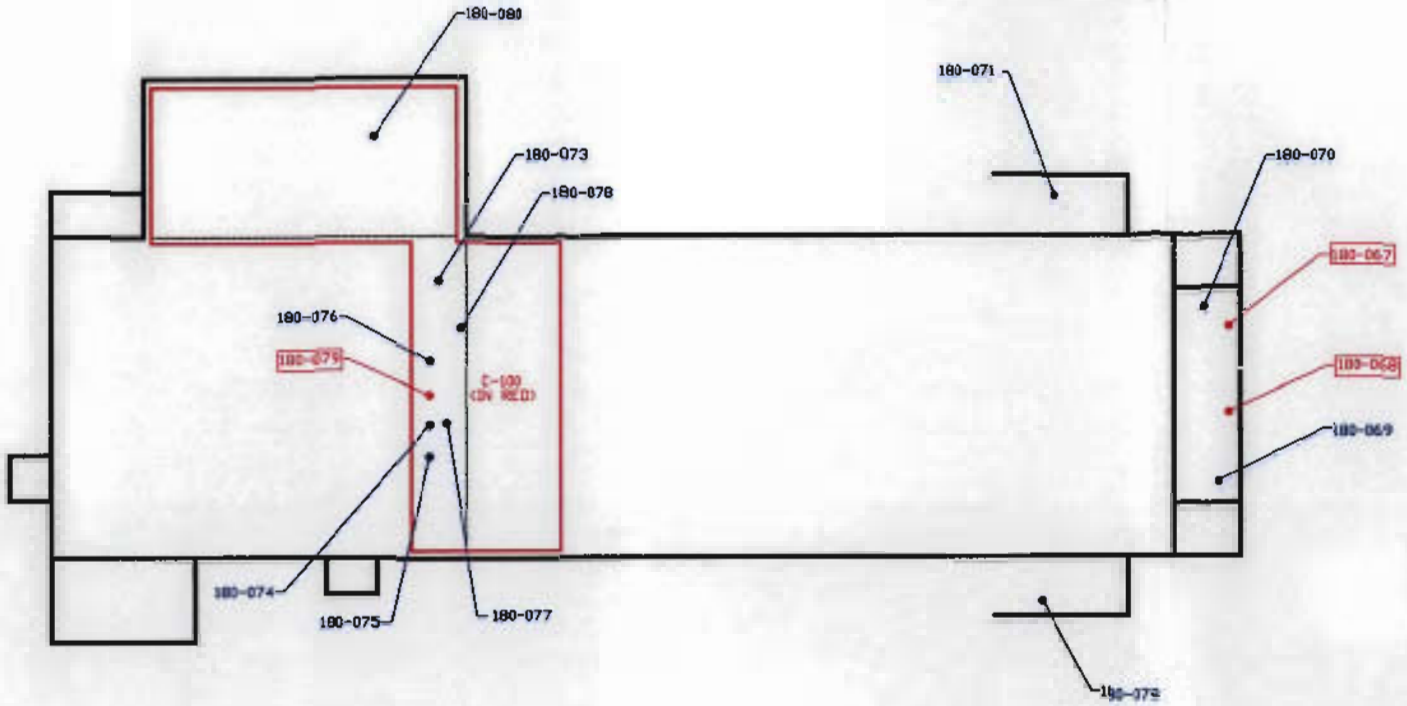
(XXX) Indicates unique room number assigned by Inspector

XXX-XXX Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE – BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2104

SAMPLE LOCATIONS
BLDG 180 SECOND FLOOR
CHARLESTON NAVAL COMPLEX, SC

| SIZE | DATE | PREPARED BY: | REV |
|---|---|---|---|
| | 6-22-98 | T. L. GUNTER | — |
| SCALE NONE | | | SHEET 2 OF 3 |




LEGEND

(180) Indicates unique room number assigned by Inspector

[XXX-XXX] Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL DETACHMENT CHARLESTON
1880 NORTH HOBSON AVENUE – BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29406-2104

SAMPLE LOCATIONS
BLDG 180 (ROOF)
CHARLESTON NAVAL COMPLEX, SC

| SIZE | DATE | PREPARED BY: | REV |
|---|---|---|---|
| | 6-22-98 | T.L. GUNTER | — |
| SCALE NONE | | SHEET 3 OF 3 | |

Charleston Naval Complex
Asbestos Abatement & Demolition Estimates

## Building 180

The estimates below reflect costs for removal of all asbestos listed in the Building Summary Table, repair of friable or damaged asbestos only, if applicable, and demolition of building after asbestos removal.

| | Total Removal | | Repair | | Demolition |
|---|---|---|---|---|---|
| Labor costs | $56,228 | - | $5,070 | - | $111,549 |
| Material/equipment costs | $22,491 | - | $2,635 | - | $32,126 |
| Disposal costs | $5,923 | - | $1,521 | - | $64,501 |
| **Total cost** | **$84,642** | **-** | **$9,226** | **-** | **$208,176** |

The total cost for removal of all asbestos listed in the Building Summary Table is $84,642, the total cost for repairs to damaged and/or friable asbestos listed in the Building Summary Table is $9,226 and the cost for demolition after asbestos removal is $208,176.

## BUILDING 290: Electrical Switch House

### 1. DESCRIPTION:

Building 290 is a 1,209 square-foot building. It is a single story, concrete block structure with red brick exterior and a built-up roof. The year built was 1983. The following information was identified during the survey and from the analysis of the samples taken:

- Ten homogeneous areas were identified during the initial survey.
- One homogeneous area was assumed to contain asbestos.
- Nine of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Five of the suspected homogeneous areas were confirmed to contain asbestos.
- Four of the suspected homogenous areas did not contain asbestos.

### 2. FINDINGS:

Nine homogeneous areas with suspected ACM were identified. Eighteen samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in no homogeneous areas.

**Confirmed ACM.** The following homogeneous areas sampled were confirmed to contain asbestos:

- H-6: MISC, SEALER, Grey, was Non-friable and Not Damaged.
- H-7: MISC, CAULKING, White, was Non-friable and Not Damaged.
- H-8: MISC, SEALER, Black w/felt, was Non-friable and Not Damaged.
- H-9: MISC, ROOFING, TAR AND GRAVEL, Black w/felt, was Non-friable and Not Damaged.
- H-10: MISC, SEALER, Black, was Non-friable and Not Damaged.

**Asbestos Free.** Asbestos was not detected in the following homogeneous areas:

- H-1: MISC, MORTAR, 8" x 8" x 16", Grey
- H-3: MISC, CAULKING, White
- H-4: MISC, MORTAR, BRICK, 2" x 4" x 8", Grey
- H-5: MISC, CAULKING, Grey

**Assumed ACM.** The following homogeneous areas were assumed to contain asbestos:

- H-2: MISC, VIBRATION JOINT, Black, was Non-friable and Not Damaged.

## 3. OBSERVATIONS:

No observations.

## 4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-2: MISC, VIBRATION JOINT, Black: O&M
- H-6: MISC, SEALER, Grey: O&M
- H-7: MISC, CAULKING, White: O&M
- H-8: MISC, SEALER, Black w/felt: O&M
- H-9: MISC, ROOFING, Black w/felt: O&M
- H-10: MISC, SEALER, Black: O&M

## 5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance recommendations for confirmed and assumed homogeneous areas of ACM are found in the Operations & Maintenance Table of this section. The materials listed below should be maintained following the guidelines in an O & M Plan during regular maintenance and small-scale repair activities until removed.

MISC CAULKING is Confirmed, Non-friable ACM.

- H-7 (CAULKING, White) is located on the Roof.

MISC ROOFING is Confirmed, Non-friable ACM.

- H-9 (ROOFING, Black w/felt) is located on the Roof.

MISC SEALER is Confirmed, Non-friable ACM.

- H-8 (SEALER, Black w/felt) is located on the Roof.
- H-10 (SEALER, Black) is located in C-100.
- H-6 (SEALER, Grey) is located on the Roof.

MISC VIBRATION JOINT is Assumed, Non-friable ACM.

- H-2 (VIBRATION JOINT, Black) is located in Room 100.

# BUILDING SUMMARY TABLE

## CHARLESTON NAVAL COMPLEX
## ASBESTOS BUILDING SURVEY

## Building No. 290

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N | Misc, MORTAR, 8" x 8" x 16", Grey | 2,820 SF | 0 | | | | | | |
| | | Rooms 100, 101 | | | | | | | | |
| 2 | A | Misc, VIBRATION JOINT, Black | 16 LF | 6 | Non | PD | 0.0 | O&M | | |
| | | Rooms 100 | | | | | | | | |
| 3 | N | Misc, CAULKING, White | 80 LF | 0 | | | | | | |
| | | Rooms 100, 101 | | | | | | | | |
| 4 | N | Misc, MORTAR, BRICK, 2" x 4" x 8", Grey | 2,940 SF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |
| 5 | N | Misc, CAULKING, Grey | 60 LF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |
| 6 | Y | Misc, SEALER, Grey | 20 SF | 6 | Non | PD | 0.0 | O&M | | |
| | | Rooms ROOF | | | | | | | | |
| 7 | Y | Misc, CAULKING, White | 20 LF | 6 | Non | PD | 0.0 | O&M | | |
| | | Rooms ROOF | | | | | | | | |
| 8 | Y | Misc, SEALER, Black w/felt | 30 SF | 6 | Non | PD | 0.0 | O&M | | |
| | | Rooms ROOF | | | | | | | | |
| 9 | Y | Misc, ROOFING, TAR AND GRAVEL, Black w/felt | 1,073 SF | 6 | Non | PD | 0.0 | O&M | | |
| | | Rooms ROOF | | | | | | | | |
| 10 | Y | Misc, SEALER, Black | 2,940 SF | 6 | Non | PD | 0.0 | O&M | | |
| | | Rooms C-100 | | | | | | | | |

Note: Cost estimates are found in the Building Summary section of each building.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

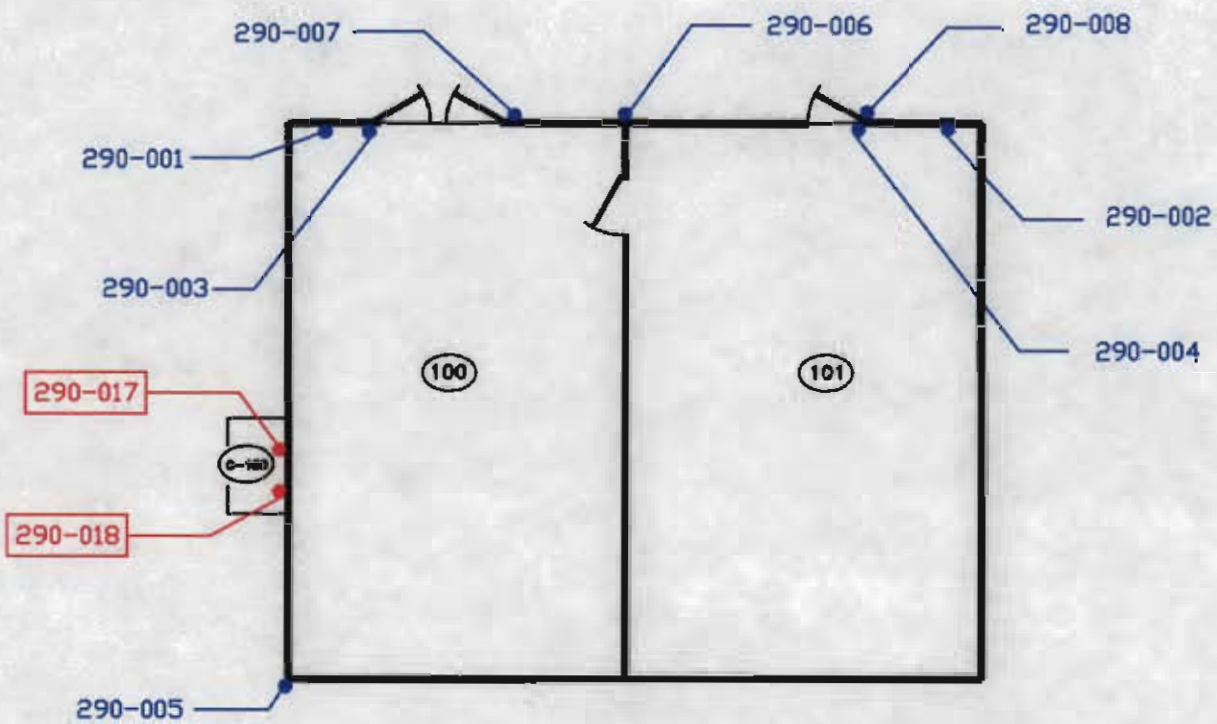
## Building No. 290

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 1 | NO | 290-001 | 100 | Misc, MORTAR, 8" x 8" x 16", Grey | 04/29/98 | 04/30/98 | No Asbestos Detected | 0% |
| 1 | NO | 290-002 | 101 | Misc, MORTAR, 8" x 8" x 16", Grey | 04/29/98 | 04/30/98 | No Asbestos Detected | 0% |
| 3 | NO | 290-003 | 100 | Misc, CAULKING, White | 04/29/98 | 04/30/98 | No Asbestos Detected | 0% |
| 3 | NO | 290-004 | 101 | Misc, CAULKING, White | 04/29/98 | 04/30/98 | No Asbestos Detected | 0% |
| 4 | NO | 290-005 | EXT | Misc, MORTAR, 2" x 4" x 8", Grey | 04/29/98 | 04/30/98 | No Asbestos Detected | 0% |
| 4 | NO | 290-006 | EXT | Misc, MORTAR, 2" x 4" x 8", Grey | 04/29/98 | 04/30/98 | No Asbestos Detected | 0% |
| 5 | NO | 290-007 | EXT | Misc, CAULKING, Grey | 04/29/98 | 04/30/98 | No Asbestos Detected | 0% |
| 5 | NO | 290-008 | EXT | Misc, CAULKING, Grey | 04/29/98 | 04/30/98 | No Asbestos Detected | 0% |
| 6 | YES | 290-009 | ROOF | Misc, SEALER, Grey | 04/29/98 | 04/30/98 | Chrysotile | 2% |
| 6 | YES | 290-010 | ROOF | Misc, SEALER, Grey | 04/29/98 | 04/30/98 | Chrysotile | 2% |
| 7 | YES | 290-011 | ROOF | Misc, CAULKING, White | 04/29/98 | 04/30/98 | Chrysotile | 20% |
| 7 | YES | 290-012 | ROOF | Misc, CAULKING, White | 04/29/98 | 04/30/98 | Chrysotile | 20% |
| 8 | YES | 290-013 | ROOF | Misc, SEALER, Black w/felt | 04/29/98 | 04/30/98 | Chrysotile | 20% |
| 8 | YES | 290-014 | ROOF | Misc, SEALER, Black w/felt | 04/29/98 | 04/30/98 | Chrysotile | 20% |
| 9 | YES | 290-015 | ROOF | Misc, ROOFING, Black w/felt | 04/29/98 | 04/30/98 | Chrysotile | 25% |
| 9 | YES | 290-016 | ROOF | Misc, ROOFING, Black w/felt | 04/29/98 | 04/30/98 | Chrysotile | 25% |
| 10 | YES | 290-017 | C-100 | Misc, SEALER, Black | 04/29/98 | 04/29/98 | Chrysotile | 2% |
| 10 | YES | 290-018 | C-100 | Misc, SEALER, Black | 04/29/98 | 04/30/98 | Chrysotile | 2% |

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

| Bldg. No. | Homo No. | Material Description | Quantity | Rat-ing | Fria-bility | Condition | % D | Recommended Action |
|---|---|---|---|---|---|---|---|---|
| 290 | 2 | Misc, VIBRATION JOINT, Black | 16 LF | 6 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 100 | | | | | | |
| 290 | 6 | Misc, SEALER, Grey | 20 SF | 6 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms ROOF | | | | | | |
| 290 | 7 | Misc, CAULKING, White | 20 LF | 6 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms ROOF | | | | | | |
| 290 | 8 | Misc, SEALER, Black w/felt | 30 SF | 6 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms ROOF | | | | | | |
| 290 | 9 | Misc, ROOFING, TAR AND GRAVEL, Black w/felt | 1,073 SF | 6 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms ROOF | | | | | | |
| 290 | 10 | Misc, SEALER, Black | 2,940 SF | 6 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms C-100 | | | | | | |

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.




## LEGEND

(xxx) — Indicates unique room number assigned by inspector

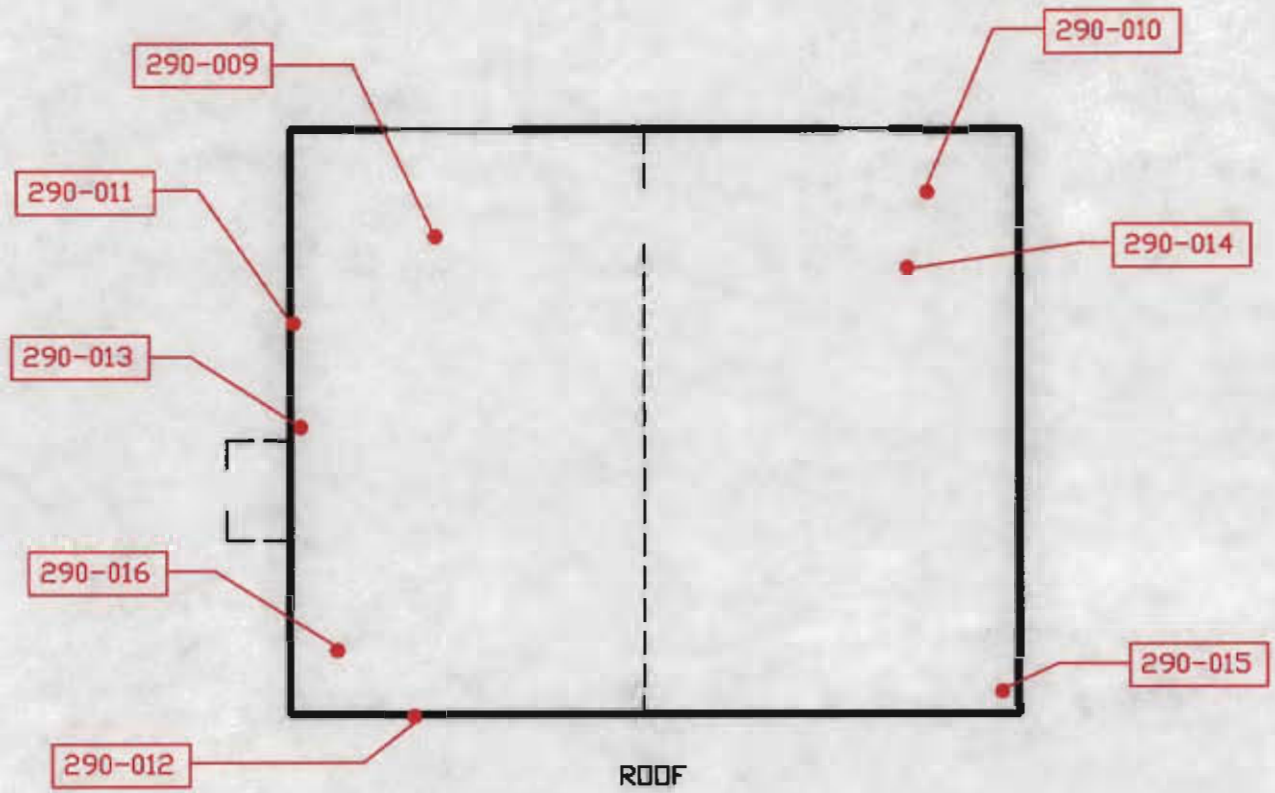
xxxx-xxx — Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE - BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29406-2106

SAMPLE LOCATIONS
BUILDING 290
CHARLESTON NAVAL BASE, CHARLESTON, SC

| DATE | PREPARED BY: | REV |
|---|---|---|
| 6-11-98 | B.D. MURRAY | ORIG |

SCALE: NONE | SHEET 1 of 1




LEGEND

XXXX-XXX — Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE – BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2108

SAMPLE LOCATIONS
BUILDING 290
CHARLESTON NAVAL BASE, CHARLESTON, SC

| DATE | PREPARED BY: | REV |
|---|---|---|
| 6-11-98 | B.D. MURRAY | ORIG |

SCALE: NONE | SHEET 2 of 2

Charleston Naval Complex
Asbestos Abatement & Demolition Estimates

## Building 290

The estimates below reflect costs for removal of all asbestos listed in the Building Summary Table, repair of friable or damaged asbestos only, if applicable, and demolition of building after asbestos removal.

| | Total Removal | | Repair | | Demolition |
|---|---|---|---|---|---|
| Labor costs | $6,736 | - | NA | - | $4,220 |
| Material/equipment costs | $2,695 | - | NA | - | $1,906 |
| Disposal costs | $1,310 | - | NA | - | $2,090 |
| **Total cost** | **$10,741** | **-** | **NA** | **-** | **$8,216** |

The total cost for removal of all asbestos listed in the Building Summary Table is $10,741 and the cost for demolition after asbestos removal is $8,216.

## BUILDING 641: Warehouse/Administrative

### 1. DESCRIPTION:

Building 641 is an 8,000 square-foot building. It is a single story, concrete, brick and metal siding structure with metal windows and a pitched metal roof. The year built was 1978. The following information was identified during the survey and from the analysis of the samples taken:

- Twenty-four homogeneous areas were identified during the initial survey.
- Zero homogeneous areas were assumed to contain asbestos.
- Twenty-four of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Two of the suspected homogeneous areas were confirmed to contain asbestos.
- Twenty-two of the suspected homogenous areas did not contain asbestos.

### 2. FINDINGS:

Twenty-four homogeneous areas with suspected ACM were identified. Forty-eight samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in no homogeneous areas.

**Confirmed ACM.** The following homogeneous areas sampled were confirmed to contain asbestos:

- H-1: MISC, FLOOR TILE, 12" x 12", White w/black marble & mastic, was Non-friable and Not Damaged.
- H-24: MISC, SEALER, Silver, was Non-friable and Not Damaged.

**Asbestos Free.** Asbestos was not detected in the following homogeneous areas:

- H-2: MISC, FLOOR TILE, 12" x 12", Cream w/brown marble & mastic
- H-3: MISC, COVING MASTIC, Black
- H-4: MISC, SHEETROCK, PAINTED, 4' x 8', White w/mud & tape
- H-5: MISC, MASTIC, Black stair tread
- H-6: MISC, CEILING TILE, 2' x 4', White w/long grooves
- H-7: MISC, CEILING TILE, 2' x 4', White w/short grooves
- H-8: MISC, CEILING TILE, 2' x 4', White w/minute holes
- H-9: MISC, COVING MASTIC, Yellow
- H-10: MISC, MORTAR, 8" x 8" x 16", Grey
- H-11: MISC, GROUT, CERAMIC TILE, 2" x 2", White

- H-12: MISC, GROUT, CERAMIC TILE, 4" x 6", White
- H-13: MISC, CAULKING, White
- H-14: MISC, FLOOR TILE, 12" x 12", Blue w/mastic
- H-15: MISC, MORTAR, BRICK, 3" x 3" x 8", Grey
- H-16: TSI, FITTING, CLOTH WRAPPED, White
- H-17: TSI, PIPE, CLOTH WRAPPED, White
- H-18: MISC, MASTIC, Grey vent duct
- H-19: MISC, MASTIC, Brown vent duct
- H-20: MISC, MASTIC, White vent duct
- H-21: MISC, VIBRATION JOINT, Black
- H-22: MISC, MASTIC, Silver vent duct tape
- H-23: MISC, GLAZING, WINDOW EXTERIOR, Grey

**Assumed ACM.** The following homogeneous areas were assumed to contain asbestos:

- None.

## 3. OBSERVATIONS:

Other suspect ACM noted, but not sampled, includes valve packing and various piping systems/components gasket material.

## 4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-1: MISC, FLOOR TILE, White w/black marble & mastic: O&M
- H-24: MISC, SEALER, Silver: O&M

## 5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance recommendations for confirmed and assumed homogeneous areas of ACM are found in the Operations & Maintenance Table of this section. The materials listed below should be maintained following the guidelines in an O & M Plan during regular maintenance and small-scale repair activities until removed.

MISC FLOOR TILE is Confirmed, Non-friable ACM.

- H-1 (FLOOR TILE, White w/black marble & mastic) is located in Rooms 100, 101, 102, 103, 104, 105, 106, 107, 113, H-100, H-101.

MISC SEALER is Confirmed, Non-friable ACM.

- H-24 (SEALER, Silver) is located on the Roof.

# BUILDING SUMMARY TABLE

# CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY

# Building No. 641

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Y | **Misc, FLOOR TILE, 12" x 12", White w/black marble & mastic** | **1,958 SF** | **10** | **Non** | **PD** | **0.0** | **O&M** | | |
| | | Rooms 100, 101, 102, 103, 104, 105, 106, 107, 113, H-100, H-101 | | | | | | | | |
| 2 | N | **Misc, FLOOR TILE, 12" x 12", Cream w/brown marble & mastic** | **1,789 SF** | **0** | | | | | | |
| | | Rooms 109, 111, 112, 114, 115, 116, 117, 118, 119, 125, 126, H-100, H-102 | | | | | | | | |
| 3 | N | **Misc, COVING MASTIC, Black** | **1,229 LF** | **0** | | | | | | |
| | | Rooms 100, 105, 106, 109, 111, 113, 114, 116, 117, 118, 119, 120, 125, 126, 127, H-100, H-102, H-103 | | | | | | | | |
| 4 | N | **Misc, SHEETROCK, PAINTED, 4' x 8', White w/mud & tape** | **9,708 SF** | **0** | | | | | | |
| | | Rooms 101, 102, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 127, H-100, H-101, H-103 | | | | | | | | |
| 5 | N | **Misc, MASTIC, Black stair tread** | **6 SF** | **0** | | | | | | |
| | | Rooms H-100 | | | | | | | | |
| 6 | N | **Misc, CEILING TILE, 2' x 4', White w/long grooves** | **1,983 SF** | **0** | | | | | | |
| | | Rooms 100, 102, 103, 104, 105, 106, 107, 108, 109, 111, 115, 116, 117, 118, 119, 121, 123, 127, H-100, H-101, H-103 | | | | | | | | |
| 7 | N | **Misc, CEILING TILE, 2' x 4', White w/short grooves** | **1,700 SF** | **0** | | | | | | |
| | | Rooms 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 111, 112, 113, 114, 116, 117, 119, 123, H-100, H-101, H-102 | | | | | | | | |
| 8 | N | **Misc, CEILING TILE, 2' x 4', White w/minute holes** | **1,348 SF** | **0** | | | | | | |
| | | Rooms 103, 105, 107, 111, 119, 121, 122, 123, 125, 126, 127, H-100, H-102, H-103 | | | | | | | | |
| 9 | N | **Misc, COVING MASTIC, Yellow** | **136 LF** | **0** | | | | | | |
| | | Rooms 101, 102, 111, 112 | | | | | | | | |
| 10 | N | **Misc, MORTAR, 8" x 8" x 16", Grey** | **2,010 SF** | **0** | | | | | | |
| | | Rooms 105, 106, 107, 110, 111, 112, 114, 115, 119, 120, 128 | | | | | | | | |
| 11 | N | **Misc, GROUT, CERAMIC TILE, 2" x 2", White** | **180 SF** | **0** | | | | | | |
| | | Rooms 108 | | | | | | | | |
| 12 | N | **Misc, GROUT, CERAMIC TILE, 4" x 6", White** | **228 SF** | **0** | | | | | | |
| | | Rooms 108 | | | | | | | | |

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 13 | N | Misc, CAULKING, White | 240 LF | 0 | | | | | | |
| | | Rooms 108, EXT | | | | | | | | |
| 14 | N | Misc, FLOOR TILE, 12" x 12", Blue w/mastic | 1,214 SF | 0 | | | | | | |
| | | Rooms 121, 123, 124, 127, H-103 | | | | | | | | |
| 15 | N | Misc, MORTAR, BRICK, 3" x 3" x 8", Grey | 1,300 SF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |
| 16 | N | TSI, FITTING, CLOTH WRAPPED, White | 40 LF | 0 | | | | | | |
| | | Rooms 128 | | | | | | | | |
| 17 | N | TSI, PIPE, CLOTH WRAPPED, White | 80 LF | 0 | | | | | | |
| | | Rooms 128 | | | | | | | | |
| 18 | N | Misc, MASTIC, Grey vent duct | 100 LF | 0 | | | | | | |
| | | Rooms 128 | | | | | | | | |
| 19 | N | Misc, MASTIC, Brown vent duct | 5 LF | 0 | | | | | | |
| | | Rooms 128 | | | | | | | | |
| 20 | N | Misc, MASTIC, White vent duct | 200 LF | 0 | | | | | | |
| | | Rooms 128 | | | | | | | | |
| 21 | N | Misc, VIBRATION JOINT, Black | 12 LF | 0 | | | | | | |
| | | Rooms 128 | | | | | | | | |
| 22 | N | Misc, MASTIC, Silver vent duct tape | 500 SF | 0 | | | | | | |
| | | Rooms 128 | | | | | | | | |
| 23 | N | Misc, GLAZING, WINDOW EXTERIOR, Grey | 260 LF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |
| 24 | Y | Misc, SEALER, Silver | 25 SF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms ROOF | | | | | | | | |

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

# BUILDING SUMMARY TABLE

# CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY

# Building No. 641

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|

Note: Cost estimates are found in the Building Summary section of each building.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

## Building No. 641

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 1 | YES | 641-001 | 100 | Misc, FLOOR TILE, White w/black marble & mastic | 05/07/98 | 05/11/98 | Chrysotile | 2% |
| 1 | YES | 641-002 | H-100 | Misc, FLOOR TILE, White w/black marble & mastic | 05/07/98 | 05/11/98 | Chrysotile | 2% |
| 2 | NO | 641-003 | 118 | Misc, FLOOR TILE, Cream w/brown marble & mastic | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 2 | NO | 641-004 | H-100 | Misc, FLOOR TILE, Cream w/brown marble & mastic | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 3 | NO | 641-005 | 100 | Misc, COVING MASTIC, Black | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 3 | NO | 641-006 | 105 | Misc, COVING MASTIC, Black | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 4 | NO | 641-007 | H-100 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 4 | NO | 641-008 | 120 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 5 | NO | 641-009 | H-100 | Misc, MASTIC, Black stair tread | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 5 | NO | 641-010 | H-100 | Misc, MASTIC, Black stair tread | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 6 | NO | 641-011 | 115 | Misc, CEILING TILE, 2' x 4', White w/long grooves | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 6 | NO | 641-012 | 118 | Misc, CEILING TILE, 2' x 4', White w/long grooves | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 7 | NO | 641-013 | 116 | Misc, CEILING TILE, 2' x 4', White w/short grooves | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 7 | NO | 641-014 | 123 | Misc, CEILING TILE, 2' x 4', White w/short grooves | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 8 | NO | 641-015 | 125 | Misc, CEILING TILE, 2' x 4', White w/minute holes | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 8 | NO | 641-016 | 127 | Misc, CEILING TILE, 2' x 4', White w/minute holes | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 9 | NO | 641-017 | 112 | Misc, COVING MASTIC, Yellow | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 9 | NO | 641-018 | 101 | Misc, COVING MASTIC, Yellow | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 10 | NO | 641-019 | 128 | Misc, MORTAR, 8" x 8" x 16", Grey | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 10 | NO | 641-020 | 120 | Misc, MORTAR, 8" x 8" x 16", Grey | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 11 | NO | 641-021 | 108 | Misc, GROUT, 2" x 2", White | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 11 | NO | 641-022 | 108 | Misc, GROUT, 2" x 2", White | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 12 | NO | 641-023 | 108 | Misc, GROUT, 4" x 6", White | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 12 | NO | 641-024 | 108 | Misc, GROUT, 4" x 6", White | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 13 | NO | 641-025 | 108 | Misc, CAULKING, White | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 13 | NO | 641-026 | EXT | Misc, CAULKING, White | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 14 | NO | 641-027 | 123 | Misc, FLOOR TILE, Blue w/mastic | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 14 | NO | 641-028 | H-103 | Misc, FLOOR TILE, Blue w/mastic | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 15 | NO | 641-029 | EXT | Misc, MORTAR, 3" x 3" x 8", Grey | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 15 | NO | 641-030 | EXT | Misc, MORTAR, 3" x 3" x 8", Grey | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

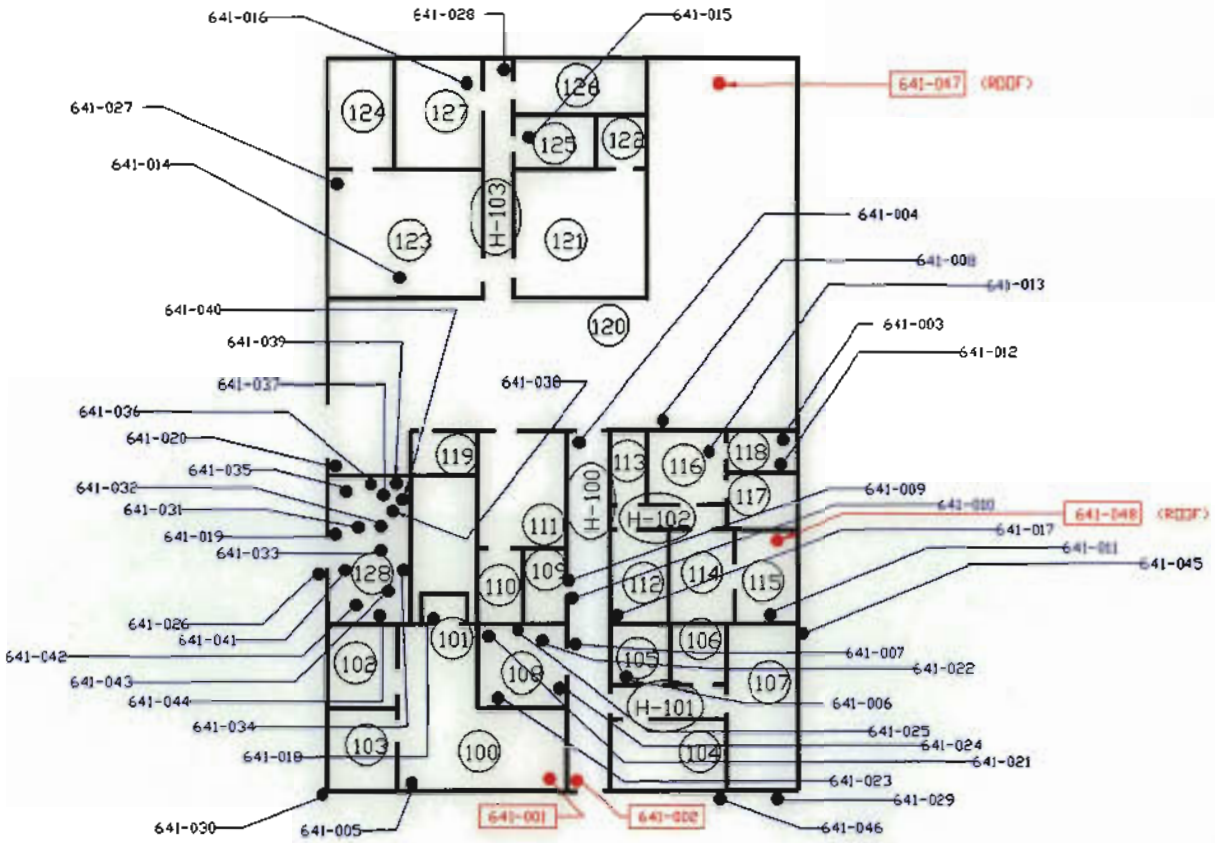
## Building No. 641

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 16 | NO | 641-031 | 128 | TSI, FITTING, White | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 16 | NO | 641-032 | 128 | TSI, FITTING, White | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 17 | NO | 641-033 | 128 | TSI, PIPE, White | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 17 | NO | 641-034 | 128 | TSI, PIPE, White | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 18 | NO | 641-035 | 128 | Misc, MASTIC, Grey vent duct | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 18 | NO | 641-036 | 128 | Misc, MASTIC, Grey vent duct | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 19 | NO | 641-037 | 128 | Misc, MASTIC, Brown vent duct | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 19 | NO | 641-038 | 128 | Misc, MASTIC, Brown vent duct | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 20 | NO | 641-039 | 128 | Misc, MASTIC, White vent duct | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 20 | NO | 641-040 | 128 | Misc, MASTIC, White vent duct | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 21 | NO | 641-041 | 128 | Misc, VIBRATION JOINT, Black | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 21 | NO | 641-042 | 128 | Misc, VIBRATION JOINT, Black | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 22 | NO | 641-043 | 128 | Misc, MASTIC, Silver vent duct tape | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 22 | NO | 641-044 | 128 | Misc, MASTIC, Silver vent duct tape | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 23 | NO | 641-045 | EXT | Misc, GLAZING, Grey | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 23 | NO | 641-046 | EXT | Misc, GLAZING, Grey | 05/07/98 | 05/11/98 | No Asbestos Detected | 0% |
| 24 | YES | 641-047 | ROOF | Misc, SEALER, Silver | 05/07/98 | 05/11/98 | Chrysotile | 2% |
| 24 | YES | 641-048 | ROOF | Misc, SEALER, Silver | 05/07/98 | 05/11/98 | Chrysotile | 2% |

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

| Bldg. No. | Homo No. | Material Description | Quantity | Rat-ing | Fria-bility | Condition | % D | Recommended Action |
|---|---|---|---|---|---|---|---|---|
| 641 | 1 | Misc, FLOOR TILE, 12" x 12", White w/black marble & mastic | 1,958 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: Rooms 100, 101, 102, 103, 104, 105, 106, 107, 113, H-100, H-101 | | | | | | | | |
| 641 | 24 | Misc, SEALER, Silver | 25 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: Rooms ROOF | | | | | | | | |

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.




LEGEND

(xxx) – Indicates unique room number assigned by inspector

xxx-xxx – Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE – BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2106

SAMPLE LOCATIONS
BLDG 641
CHARLESTON NAVAL BASE, CHARLESTON SC

| DATE | PREPARED BY: | REV DRIG |
|---|---|---|
| 6-25-98 | R. JENKINS | |

SCALE: NONE | SHEET 1 OF 1

Charleston Naval Complex
Asbestos Abatement & Demolition Estimates

## Building 641

The estimates below reflect costs for removal of all asbestos listed in the Building Summary Table, repair of friable or damaged asbestos only, if applicable, and demolition of building after asbestos removal.

| | Total Removal | | Repair | | Demolition |
|---|---|---|---|---|---|
| Labor costs | $10,580 | - | NA | - | $24,469 |
| Material/equipment costs | $4,003 | - | NA | - | $7,094 |
| Disposal costs | $1,587 | - | NA | - | $13,827 |
| **Total cost** | **$16,170** | **-** | **NA** | **-** | **$45,390** |

The total cost for removal of all asbestos listed in the Building Summary Table is $16,170 and the cost for demolition after asbestos removal is $45,390.

# BUILDING 674: Performance Monitoring Facility

## 1. DESCRIPTION:

Building 674 is a 4,380 square-foot building. It is a single story, concrete block structure with red brick exterior, metal windows and a built-up roof. The year built was 1985. The following information was identified during the survey and from the analysis of the samples taken:

- Sixteen homogeneous areas were identified during the initial survey.
- One homogeneous area was assumed to contain asbestos.
- Fifteen of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Four of the suspected homogeneous areas were confirmed to contain asbestos.
- Eleven of the suspected homogenous areas did not contain asbestos.

## 2. FINDINGS:

Fifteen homogeneous areas with suspected ACM were identified. Thirty samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in no homogeneous areas.

**Confirmed ACM.** The following homogeneous areas sampled were confirmed to contain asbestos:

- H-8: MISC, UNDERCOAT,SINK, White, was Non-friable and Not Damaged.
- H-11: MISC, MASTIC, White, was Non-friable and Not Damaged.
- H-15: MISC, ROOFING, TAR AND GRAVEL, Black w/felt, was Non-friable and Not Damaged.
- H-16: MISC, SEALER, Grey w/felt, was Non-friable and Not Damaged.

**Asbestos Free.** Asbestos was not detected in the following homogeneous areas:

- H-1: MISC, COVING MASTIC, Black
- H-2: MISC, SHEETROCK, PAINTED, 4' x 8', White w/mud & tape
- H-3: MISC, CEILING TILE, 2' x 4', White w/short grooves
- H-4: MISC, GROUT, CERAMIC TILE, 1" x 1", Grey
- H-5: MISC, GROUT, CERAMIC TILE, 4" x 4", White
- H-6: MISC, FLOOR TILE, 12" x 12", Cream w/brown marble & mastic
- H-7: MISC, COVING MASTIC, Brown
- H-9: MISC, FLOOR TILE, 12" x 12", White w/brown marble & mastic
- H-10: MISC, FLOOR TILE, 12" x 12", Grey w/white marble & mastic

- H-13: MISC, MORTAR, BRICK, 2" x 4" x 8", Grey
- H-14: MISC, SEALER, Black

**Assumed ACM.** The following homogeneous areas were assumed to contain asbestos:

- H-12: MISC, VIBRATION JOINT, Black, was Non-friable and Not Damaged.

## 3. OBSERVATIONS:

No observations.

## 4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-8: MISC, UNDERCOAT,SINK, White: O&M
- H-11: MISC, MASTIC, White: O&M
- H-12: MISC, VIBRATION JOINT, Black: O&M
- H-15: MISC, ROOFING, Black w/felt: O&M
- H-16: MISC, SEALER, Grey w/felt: O&M

## 5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance recommendations for confirmed and assumed homogeneous areas of ACM are found in the Operations & Maintenance Table of this section. The materials listed below should be maintained following the guidelines in an O & M Plan during regular maintenance and small-scale repair activities until removed.

MISC MASTIC is Confirmed, Non-friable ACM.

- H-11 (MASTIC, White) is located in Rooms 111, 112, 113, 114.

MISC ROOFING is Confirmed, Non-friable ACM.

- H-15 (ROOFING, Black w/felt) is located on the Roof.

MISC SEALER is Confirmed, Non-friable ACM.

- H-16 (SEALER, Grey w/felt) is located on the Roof.

MISC UNDERCOAT,SINK is Confirmed, Non-friable ACM.

- H-8 (UNDERCOAT,SINK, White) is located in Room 100.

MISC VIBRATION JOINT is Assumed, Non-friable ACM.

- H-12 (VIBRATION JOINT, Black) is located in Room 115.

# BUILDING SUMMARY TABLE

## CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY

## Building No. 674

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N | Misc, COVING MASTIC, Black | 698 LF | 0 | | | | | | |
| | | Rooms 100, 101, 102, 108, 109, 110, 111, 112, 113, 114 | | | | | | | | |
| 2 | N | Misc, SHEETROCK, PAINTED, 4' x 8', White w/mud & tape | 10,457 SF | 0 | | | | | | |
| | | Rooms 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115 | | | | | | | | |
| 3 | N | Misc, CEILING TILE, 2' x 4', White w/short grooves | 3,172 SF | 0 | | | | | | |
| | | Rooms 100, 101, 102, 106, 107, 109, 110, 111, 112, 113, 114 | | | | | | | | |
| 4 | N | Misc, GROUT, CERAMIC TILE, 1" x 1", Grey | 162 SF | 0 | | | | | | |
| | | Rooms 103, 104 | | | | | | | | |
| 5 | N | Misc, GROUT, CERAMIC TILE, 4" x 4", White | 544 SF | 0 | | | | | | |
| | | Rooms 103, 104 | | | | | | | | |
| 6 | N | Misc, FLOOR TILE, 12" x 12", Cream w/brown marble & mastic | 709 SF | 0 | | | | | | |
| | | Rooms 105, 106, 107, 108, 110 | | | | | | | | |
| 7 | N | Misc, COVING MASTIC, Brown | 117 LF | 0 | | | | | | |
| | | Rooms 105, 106, 107 | | | | | | | | |
| 8 | Y | Misc, UNDERCOAT,SINK, White | 10 SF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms 100 | | | | | | | | |
| 9 | N | Misc, FLOOR TILE, 12" x 12", White w/brown marble & mastic | 8 SF | 0 | | | | | | |
| | | Rooms 110 | | | | | | | | |
| 10 | N | Misc, FLOOR TILE, 12" x 12", Grey w/white marble & mastic | 256 SF | 0 | | | | | | |
| | | Rooms 114 | | | | | | | | |
| 11 | Y | Misc, MASTIC, White | 420 LF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms 111, 112, 113, 114 | | | | | | | | |
| 12 | A | Misc, VIBRATION JOINT, Black | 12 LF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms 115 | | | | | | | | |

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

# BUILDING SUMMARY TABLE

## CHARLESTON NAVAL COMPLEX
## ASBESTOS BUILDING SURVEY

## Building No. 674

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 13 | N | Misc, MORTAR, BRICK, 2" x 4" x 8", Grey | 3,780 SF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |
| 14 | N | Misc, SEALER, Black | 200 LF | 0 | | | | | | |
| | | Rooms ROOF | | | | | | | | |
| 15 | Y | Misc, ROOFING, TAR AND GRAVEL, Black w/felt | 1,400 SF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms ROOF | | | | | | | | |
| 16 | Y | Misc, SEALER, Grey w/felt | 450 SF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms ROOF | | | | | | | | |

Note: Cost estimates are found in the Building Summary section of each building.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

## Building No. 674

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 1 | NO | 674-001 | 100 | Misc, COVING MASTIC, Black | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 1 | NO | 674-002 | 101 | Misc, COVING MASTIC, Black | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 2 | NO | 674-003 | 101 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 2 | NO | 674-004 | 102 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 3 | NO | 674-005 | 111 | Misc, CEILING TILE, 2' x 4', White w/short grooves | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 3 | NO | 674-006 | 112 | Misc, CEILING TILE, 2' x 4', White w/short grooves | 05/08/98 | 05/11/98 | No Asbestos Detected | 0% |
| 4 | NO | 674-007 | 103 | Misc, GROUT, 1" x 1", Grey | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 4 | NO | 674-008 | 104 | Misc, GROUT, 1" x 1", Grey | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 5 | NO | 674-009 | 103 | Misc, GROUT, 4" x 4", White | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 5 | NO | 674-010 | 104 | Misc, GROUT, 4" x 4", White | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 6 | NO | 674-011 | 105 | Misc, FLOOR TILE, Cream w/brown marble & mastic | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 6 | NO | 674-012 | 108 | Misc, FLOOR TILE, Cream w/brown marble & mastic | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 7 | NO | 674-013 | 106 | Misc, COVING MASTIC, Brown | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 7 | NO | 674-014 | 107 | Misc, COVING MASTIC, Brown | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 8 | YES | 674-015 | 100 | Misc, UNDERCOAT,SINK, White | 05/08/98 | 05/12/98 | Chrysotile | 3% |
| 8 | YES | 674-016 | 100 | Misc, UNDERCOAT,SINK, White | 05/08/98 | 05/12/98 | Chrysotile | 3% |
| 9 | NO | 674-017 | 110 | Misc, FLOOR TILE, White w/brown marble & mastic | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 9 | NO | 674-018 | 110 | Misc, FLOOR TILE, White w/brown marble & mastic | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 10 | NO | 674-019 | 114 | Misc, FLOOR TILE, Grey w/white marble & mastic | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 10 | NO | 674-020 | 114 | Misc, FLOOR TILE, Grey w/white marble & mastic | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 11 | YES | 674-021 | 113 | Misc, MASTIC, White | 05/08/98 | 05/12/98 | Chrysotile | 2% |
| 11 | YES | 674-022 | 114 | Misc, MASTIC, White | 05/08/98 | 05/12/98 | Chrysotile | 2% |
| 13 | NO | 674-025 | EXT | Misc, MORTAR, 2" x 4" x 8", Grey | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 13 | NO | 674-026 | EXT | Misc, MORTAR, 2" x 4" x 8", Grey | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 14 | NO | 674-027 | ROOF | Misc, SEALER, Black | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 14 | NO | 674-028 | ROOF | Misc, SEALER, Black | 05/08/98 | 05/12/98 | No Asbestos Detected | 0% |
| 15 | YES | 674-029 | ROOF | Misc, ROOFING, Black w/felt | 05/08/98 | 05/12/98 | Chrysotile | 2% |
| 15 | YES | 674-030 | ROOF | Misc, ROOFING, Black w/felt | 05/08/98 | 05/12/98 | Chrysotile | 2% |
| 16 | YES | 674-031 | ROOF | Misc, SEALER, Grey w/felt | 05/08/98 | 05/12/98 | Chrysotile | 2% |
| 16 | YES | 674-032 | ROOF | Misc, SEALER, Grey w/felt | 05/08/98 | 05/12/98 | Chrysotile | 2% |

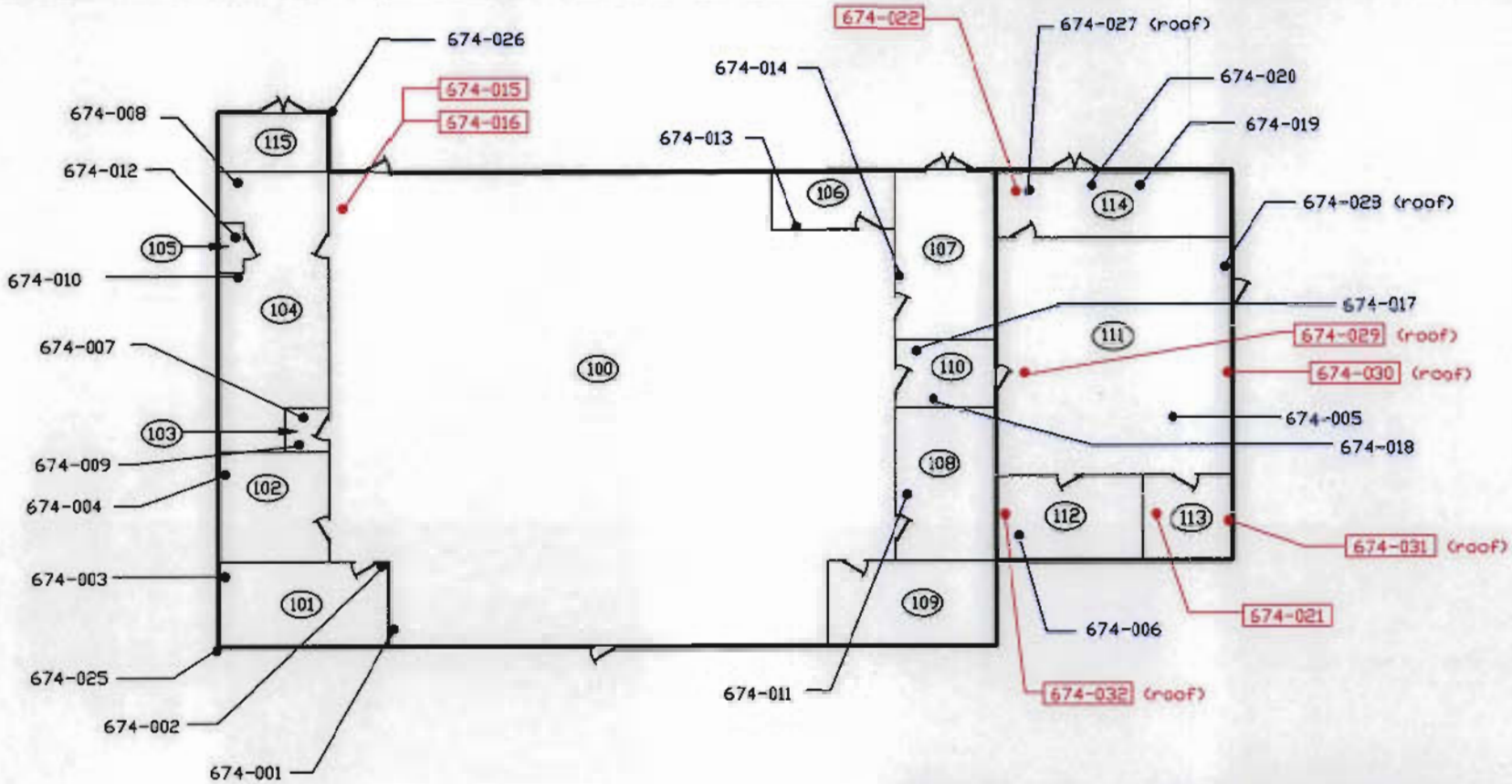
TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY



| Bldg. No. | Homo No. | Material Description | Quantity | Rat-ing | Fria-bility | Condition | % D | Recommended Action |
|---|---|---|---|---|---|---|---|---|
| 674 | 8 | Misc, UNDERCOAT,SINK, White | 10 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 100 | | | | | | |
| 674 | 11 | Misc, MASTIC, White | 420 LF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 111, 112, 113, 114 | | | | | | |
| 674 | 12 | Misc, VIBRATION JOINT, Black | 12 LF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 115 | | | | | | |
| 674 | 15 | Misc, ROOFING, TAR AND GRAVEL, Black w/felt | 1,400 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms ROOF | | | | | | |
| 674 | 16 | Misc, SEALER, Grey w/felt | 450 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms ROOF | | | | | | |

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.




LEGEND

(XXX) – Indicates unique room number assigned by Inspector

XXX-XXX – Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HORSON AVENUE – BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2108

SAMPLE LOCATIONS
BLDG 674
CHARLESTON NAVAL BASE, CHARLESTON SC

| DATE | PREPARED BY: | REV DRIG |
|---|---|---|
| 6-22-98 | B.D. MURRAY | |

SCALE: NONE | SHEET 1 OF 1

Charleston Naval Complex
Asbestos Abatement & Demolition Estimates

## Building 674

The estimates below reflect costs for removal of all asbestos listed in the Building Summary Table, repair of friable or damaged asbestos only, if applicable, and demolition of building after asbestos removal.

| | Total Removal | | Repair | | Demolition |
|---|---|---|---|---|---|
| Labor costs | $19,967 | - | NA | - | $13,675 |
| Material/equipment costs | $7,288 | - | NA | - | $3,905 |
| Disposal costs | $2,995 | - | NA | - | $7,570 |
| **Total cost** | **$30,250** | **-** | **NA** | **-** | **$25,150** |

The total cost for removal of all asbestos listed in the Building Summary Table is $30,250 and the cost for demolition after asbestos removal is $25,150.

## BUILDING 1177: Fire Station #3

### 1. DESCRIPTION:

Building 1177 is a 3,000 square-foot building. It is a single story, concrete block/cinder block structure with metal windows and a built-up roof. The year built was 1942. The following information was identified during the survey and from the analysis of the samples taken:

- Seventeen homogeneous areas were identified during the initial survey.
- Zero homogeneous areas were assumed to contain asbestos.
- Seventeen of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Five of the suspected homogeneous areas were confirmed to contain asbestos.
- Twelve of the suspected homogenous areas did not contain asbestos.

### 2. FINDINGS:

Seventeen homogeneous areas with suspected ACM were identified. Thirty-four samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in no homogeneous areas.

**Confirmed ACM.** The following homogeneous areas sampled were confirmed to contain asbestos:

- H-2: MISC, FLOOR TILE, 9" x 9", Dark green w/ white marble, was Non-friable and Not Damaged.
- H-4: MISC, FLOOR TILE, 12" x 12", Green w/ white marble, was Non-friable and Not Damaged.
- H-9: MISC, UNDERCOAT,SINK, Black, was Non-friable and Not Damaged.
- H-14: MISC, GLAZING, WINDOW EXTERIOR, White, was Non-friable and Damaged.
- H-16: MISC, SEALER, Black, was Non-friable and Not Damaged.

**Asbestos Free.** Asbestos was not detected in the following homogeneous areas:

- H-1: MISC, FLOOR TILE, 12" x 12", White w/ black marble
- H-3: MISC, CEILING TILE, 2' x 4', White w/small holes
- H-5: SURFACING, PLASTER, White
- H-6: MISC, CAULKING, White
- H-7: MISC, CEILING TILE, White w/short grooves

- H-8: MISC, SHEETROCK, PAINTED, White
- H-10: MISC, VIBRATION JOINT, Tan
- H-11: MISC, MORTAR, BRICK, 3" x 3" x 10", Grey
- H-12: MISC, MORTAR, 8" x 8" x 16", Grey
- H-13: MISC, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey
- H-15: MISC, ROOFING, COMPOSITION SHEET, Pink & white canvas
- H-17: MISC, ROOFING, TAR AND GRAVEL, Black w/felt

**Assumed ACM.** The following homogeneous areas were assumed to contain asbestos:

- None.

## 3. OBSERVATIONS:

Strong, pungent odors of sewer gas can be detected throughout the building.

## 4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-2: MISC, FLOOR TILE, Dark green w/ white marble: O&M
- H-4: MISC, FLOOR TILE, Green w/ white marble: O&M
- H-9: MISC, UNDERCOAT,SINK, Black: O&M
- H-14: MISC, GLAZING, White: Repair/O&M
- H-16: MISC, SEALER, Black: O&M

## 5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance recommendations for confirmed and assumed homogeneous areas of ACM are found in the Operations & Maintenance Table of this section. The materials listed below should be maintained following the guidelines in an O & M Plan during regular maintenance and small-scale repair activities until removed.

MISC FLOOR TILE is Confirmed, Non-friable ACM.

- H-2 (FLOOR TILE, Dark green w/ white marble) is located in Rooms 102, 103, 104, 106, 107, 108.

- H-4 (FLOOR TILE, Green w/ white marble) is located in Room 105.

MISC GLAZING is Confirmed, Non-friable ACM.

- H-14 (GLAZING, White) is located on the Exterior.

MISC SEALER is Confirmed, Non-friable ACM.

- H-16 (SEALER, Black) is located on the Roof.

MISC UNDERCOAT,SINK is Confirmed, Non-friable ACM.

- H-9 (UNDERCOAT,SINK, Black) is located in Room 108.

# BUILDING SUMMARY TABLE

# CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY

# Building No. 1177

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N | Misc, FLOOR TILE, 12" x 12", White w/black marble & mastic | 1,090 SF | 0 | | | | | | |
| | | Rooms 102, 103, 104, 106, 107, 108 | | | | | | | | |
| 2 | Y | Misc, FLOOR TILE, 9" x 9", Dark green w/white marble & mastic | 1,090 SF | 3 | Non | PD | 0.0 | O&M | | |
| | | Rooms 102, 103, 104, 106, 107, 108 | | | | | | | | |
| 3 | N | Misc, CEILING TILE, 2' x 4', White w/small holes | 826 SF | 0 | | | | | | |
| | | Rooms 102, 103, 104, 107, 108 | | | | | | | | |
| 4 | Y | Misc, FLOOR TILE, 12" x 12", Green w/white marble & mastic | 21 SF | 3 | Non | PD | 0.0 | O&M | | |
| | | Rooms 105 | | | | | | | | |
| 5 | N | Surfacing, PLASTER, White | 260 SF | 0 | | | | | | |
| | | Rooms 105 | | | | | | | | |
| 6 | N | Misc, CAULKING, White | 84 LF | 0 | | | | | | |
| | | Rooms 106, EXT | | | | | | | | |
| 7 | N | Misc, CEILING TILE, 2' x 4', White w/short grooves | 48 SF | 0 | | | | | | |
| | | Rooms 106 | | | | | | | | |
| 8 | N | Misc, SHEETROCK, PAINTED, 4' x 8', White w/mud & tape | 10 SF | 0 | | | | | | |
| | | Rooms 107 | | | | | | | | |
| 9 | Y | Misc, UNDERCOAT,SINK, Black | 10 SF | 3 | Non | PD | 0.0 | O&M | | |
| | | Rooms 108 | | | | | | | | |
| 10 | N | Misc, VIBRATION JOINT, Tan | 40 LF | 0 | | | | | | |
| | | Rooms 109 | | | | | | | | |
| 11 | N | Misc, MORTAR, BRICK, 3" x 3" x 10", Grey | 90 SF | 0 | | | | | | |
| | | Rooms 109 | | | | | | | | |
| 12 | N | Misc, MORTAR, 8" x 8" x 16", Grey | 250 SF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 13 | N | Misc, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey | 1,700 SF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |
| 14 | Y | Misc, GLAZING, WINDOW EXTERIOR, White | 144 LF | 4 | Non | D | 30.0 | O&M | | |
| | | Rooms EXT | | | | | | | | |
| 15 | N | Misc, ROOFING, COMPOSITION SHEET, Pink & white canvas | 1,224 SF | 0 | | | | | | |
| | | Rooms ROOF | | | | | | | | |
| 16 | Y | Misc, SEALER, Black | 12 LF | 3 | Non | PD | 0.0 | O&M | | |
| | | Rooms ROOF | | | | | | | | |
| 17 | N | Misc, ROOFING, TAR AND GRAVEL, Black w/felt | 2,730 SF | 0 | | | | | | |
| | | Rooms ROOF | | | | | | | | |

Note: Cost estimates are found in the Building Summary section of each building.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

## Building No. 1177

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 1 | NO | 1177-001 | 104 | Misc, FLOOR TILE, White w/black marble & mastic | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 1 | NO | 1177-002 | 107 | Misc, FLOOR TILE, White w/black marble & mastic | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 2 | YES | 1177-003 | 104 | Misc, FLOOR TILE, Dark green w/white marble & mastic | 04/27/98 | 04/29/98 | Chrysotile | 39% |
| 2 | YES | 1177-004 | 107 | Misc, FLOOR TILE, Dark green w/white marble & mastic | 04/27/98 | 04/29/98 | Chrysotile | 46% |
| 3 | NO | 1177-005 | 102 | Misc, CEILING TILE, 2' x 4', White w/small holes | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 3 | NO | 1177-006 | 103 | Misc, CEILING TILE, 2' x 4', White w/small holes | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 4 | YES | 1177-007 | 105 | Misc, FLOOR TILE, Green w/white marble & mastic | 04/27/98 | 04/29/98 | Chrysotile | 6% |
| 4 | YES | 1177-008 | 105 | Misc, FLOOR TILE, Green w/white marble & mastic | 04/27/98 | 04/29/98 | Chrysotile | 6% |
| 5 | NO | 1177-009 | 105 | Surfacing, PLASTER, White | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 5 | NO | 1177-010 | 105 | Surfacing, PLASTER, White | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 6 | NO | 1177-011 | 106 | Misc, CAULKING, White | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 6 | NO | 1177-012 | EXT | Misc, CAULKING, White | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 7 | NO | 1177-013 | 106 | Misc, CEILING TILE, 2' x 4', White w/short grooves | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 7 | NO | 1177-014 | 106 | Misc, CEILING TILE, 2' x 4', White w/short grooves | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 8 | NO | 1177-015 | 107 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 8 | NO | 1177-016 | 107 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 9 | YES | 1177-017 | 108 | Misc, UNDERCOAT,SINK, Black | 04/27/98 | 04/29/98 | Chrysotile | 2% |
| 9 | YES | 1177-018 | 108 | Misc, UNDERCOAT,SINK, Black | 04/27/98 | 04/29/98 | Chrysotile | 2% |
| 10 | NO | 1177-019 | 109 | Misc, VIBRATION JOINT, Tan | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 10 | NO | 1177-020 | 109 | Misc, VIBRATION JOINT, Tan | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 11 | NO | 1177-021 | 109 | Misc, MORTAR, 3" x 3" x 10", Grey | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 11 | NO | 1177-022 | 109 | Misc, MORTAR, 3" x 3" x 10", Grey | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 12 | NO | 1177-023 | EXT | Misc, MORTAR, 8" x 8" x 16", Grey | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 12 | NO | 1177-024 | EXT | Misc, MORTAR, 8" x 8" x 16", Grey | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 13 | NO | 1177-025 | EXT | Misc, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 13 | NO | 1177-026 | EXT | Misc, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 14 | YES | 1177-027 | EXT | Misc, GLAZING, White | 04/27/98 | 04/29/98 | Chrysotile | 2% |
| 14 | NO | 1177-028 | EXT | Misc, GLAZING, White | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 15 | NO | 1177-029 | ROOF | Misc, ROOFING, Pink & white canvas | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 15 | NO | 1177-030 | ROOF | Misc, ROOFING, Pink & white canvas | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

## Building No. 1177

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 16 | YES | 1177-031 | ROOF | Misc, SEALER, Black | 04/27/98 | 04/29/98 | Chrysotile | 2% |
| 16 | YES | 1177-032 | ROOF | Misc, SEALER, Black | 04/27/98 | 04/29/98 | Chrysotile | 2% |
| 17 | NO | 1177-033 | ROOF | Misc, ROOFING, Black w/felt | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |
| 17 | NO | 1177-034 | ROOF | Misc, ROOFING, Black w/felt | 04/27/98 | 04/29/98 | No Asbestos Detected | 0% |

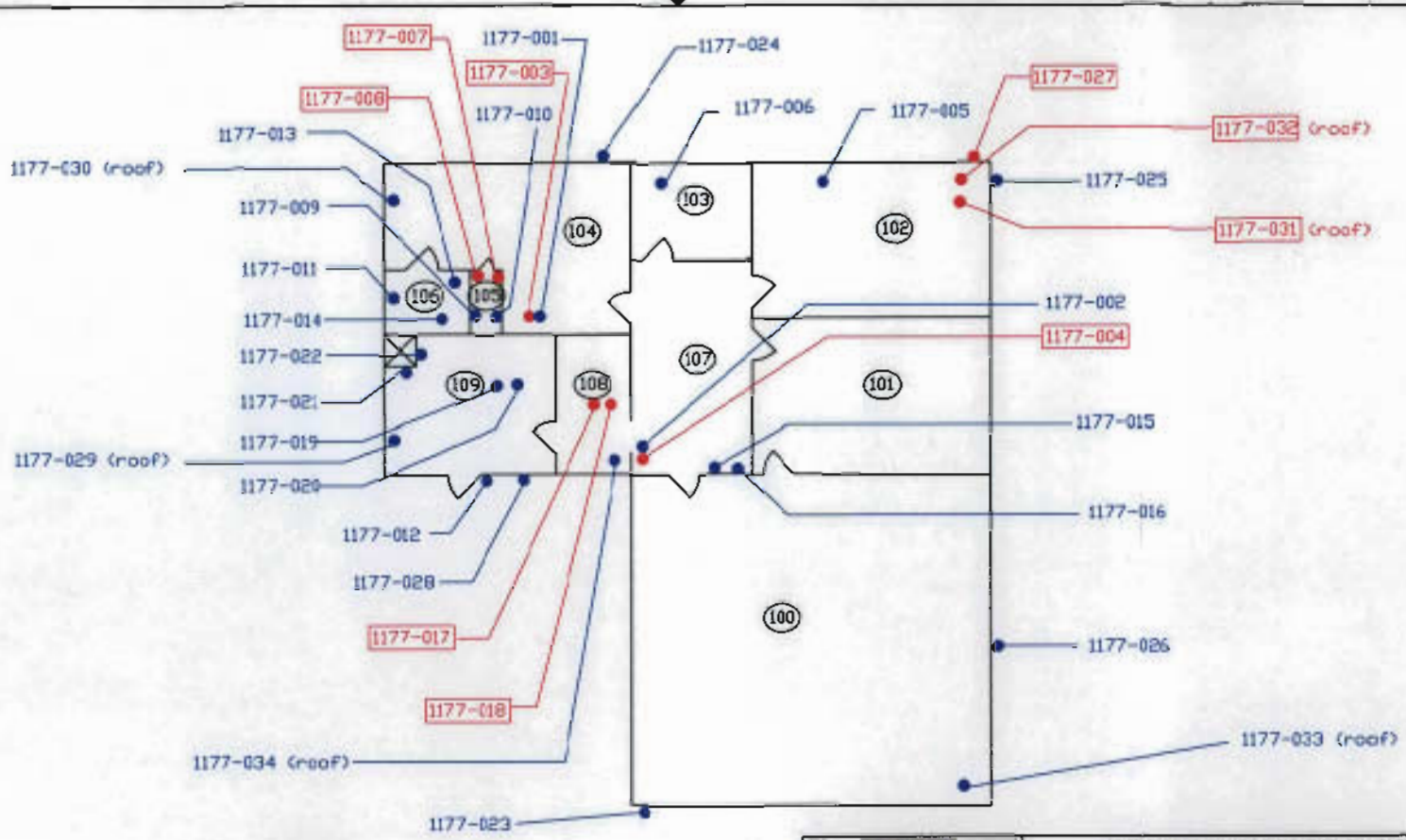
TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY



| Bldg. No. | Homo No. | Material Description | Quantity | Rat-ing | Fria-bility | Condition | % D | Recommended Action |
|---|---|---|---|---|---|---|---|---|
| 1177 | 2 | Misc, FLOOR TILE, 9" x 9", Dark green w/white marble & mastic | 1,090 SF | 3 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 102, 103, 104, 106, 107, 108 | | | | | | |
| 1177 | 4 | Misc, FLOOR TILE, 12" x 12", Green w/white marble & mastic | 21 SF | 3 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 105 | | | | | | |
| 1177 | 9 | Misc, UNDERCOAT,SINK, Black | 10 SF | 3 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 108 | | | | | | |
| 1177 | 14 | Misc, GLAZING, WINDOW EXTERIOR, White | 144 LF | 4 | Non | Damaged | 30.00 | O&M |
| Locations: | | Rooms EXT | | | | | | |
| 1177 | 16 | Misc, SEALER, Black | 12 LF | 3 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms ROOF | | | | | | |

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.




LEGEND

(XXX) – Indicates unique room number assigned by inspector

XXXX-XXXX – Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE – BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2108

SAMPLE LOCATIONS
BLDG 1177
CHARLESTON NAVAL BASE, CHARLESTON, SC

| DATE | PREPARED BY: | REV |
|---|---|---|
| 6-8-98 | B.D. MURRAY | ORIG |

SCALE: NONE | SHEET 1 OF 1

Charleston Naval Complex
Asbestos Abatement & Demolition Estimates

## Building 1177

The estimates below reflect costs for removal of all asbestos listed in the Building Summary Table, repair of friable or damaged asbestos only, if applicable, and demolition of building after asbestos removal.

| | Total Removal | | Repair | | Demolition |
|---|---|---|---|---|---|
| Labor costs | $6,344 | - | $88 | - | $9,561 |
| Material/equipment costs | $2,520 | - | $145 | - | $2,689 |
| Disposal costs | $1,269 | - | $35 | - | $5,185 |
| **Total cost** | **$10,133** | **-** | **$268** | **-** | **$17,435** |

The total cost for removal of all asbestos listed in the Building Summary Table is $10,133, the total cost for repairs to damaged and/or friable asbestos listed in the Building Summary Table is $268 and the cost for demolition after asbestos removal is $17,435.

# BUILDING 1346: SERVICE STATION

## 1. DESCRIPTION:

Building 1346 is a 13,910 square-foot building. It is a single story, concrete, brick and metal siding structure with metal windows. The roof is composed of three different types of construction, that include, asphalt shingles, rolled asphalt sheeting and pitched metal. The year built was 1962. The following information was identified during the survey and from the analysis of the samples taken:

- Thirty-two homogeneous areas were identified during the initial survey.
- Zero homogeneous areas were assumed to contain asbestos.
- Thirty-two of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Ten of the suspected homogeneous areas were confirmed to contain asbestos.
- Twenty-two of the suspected homogenous areas did not contain asbestos.

## 2. FINDINGS:

Thirty-two homogeneous areas with suspected ACM were identified. Sixty-eight samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in one of the homogeneous areas.

**Confirmed ACM.** The following homogeneous areas sampled were confirmed to contain asbestos:

- H-07: MISC, CAULKING, Grey, was Non-friable and Not Damaged.
- H-15: MISC, SHEET FLOORING, Tan w/brown marble & mastic, was Non-friable and Not Damaged.
- H-18: MISC, FLOOR TILE, 12" x 12", Tan w/brown & white marble & mastic, was Non-friable and Not Damaged.
- H-19: MISC, FLOOR TILE, 12" x 12", Pea Green w/black & white marble & mastic, was Non-friable and Not Damaged.
- H-20: MISC, FLOOR TILE, 12" x 12", White w/grey streaks & mastic, was Non-friable and Not Damaged.
- H-21: TSI, FITTING, CLOTH WRAPPED, White, was Low-friable and Not Damaged.
- H-25: MISC, CAULKING, White, was Non-friable and Not Damaged.
- H-26: MISC, TRANSITE, PANELS, Grey, was Non-friable and Not Damaged.
- H-27: MISC, CAULKING, White, was Non-friable and Not Damaged.

- H-30: MISC, SEALER, Grey & black, was Non-friable and Not Damaged.

**Asbestos Free.** Asbestos was not detected in the following homogeneous areas:

- H-01: MISC, FLOOR TILE, 12" x 12", White w/grey marble & mastic
- H-02: MISC, FLOOR TILE, 12" x 12", Maroon w/white marble & mastic
- H-03: MISC, COVING MASTIC, Yellow
- H-04: MISC, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey
- H-05: MISC, SHEETROCK, PAINTED, 4' x 8', White w/mud & tape
- H-06: MISC, CAULKING, Yellow
- H-08: MISC, COVING MASTIC, Brown
- H-09: MISC, CEILING TILE, 2' x 4', White w/long grooves
- H-10: MISC, CEILING TILE, 2' x 4', White w/short grooves
- H-11: MISC, CEILING TILE, 2' x 4', White w/wings
- H-12: MISC, FLOOR TILE, 9" x 9", Tan w/brown & white marble & mastic
- H-13: MISC, COVING MASTIC, Brown
- H-14: MISC, Brown / carpet mastic
- H-16: MISC, GROUT, CERAMIC TILE, 1" x 1", Grey
- H-17: MISC, GROUT, CERAMIC TILE, 4" x 4", White
- H-22: MISC, CEILING TILE, 2' x 4', White w/bird feet
- H-23: MISC, 3" x 3" x 8", Grey
- H-24: MISC, GLAZING, WINDOW EXTERIOR, Grey
- H-28: MISC, SEALER, Black
- H-29: MISC, SEALER, Silver
- H-31: MISC, ROOFING, COMPOSITION SHEET, Black w/tar & shingle
- H-32: MISC, ROOFING, COMPOSITION SHINGLE, Black w/felt

**Assumed ACM.** The following homogeneous areas were assumed to contain asbestos:

- None.

## 3. OBSERVATIONS:

Other suspect ACM noted, but not sampled. includes valve packing, various piping systems/components gasket material and drain piping joint compound.

## 4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-07: MISC, CAULKING, Grey: O&M

- H-15: MISC, SHEET FLOORING, Tan w/brown marble & mastic: O&M
- H-18: MISC, FLOOR TILE, Tan w/brown & white marble & mastic: O&M
- H-19: MISC, FLOOR TILE, Pea Green w/black & white marble & mastic: O&M
- H-20: MISC, FLOOR TILE, White w/grey streaks & mastic: O&M
- H-21: TSI, FITTING, White: O&M
- H-25: MISC, CAULKING, White: Repair/O&M
- H-26: MISC, TRANSITE, Grey: O&M
- H-27: MISC, CAULKING, White: Repair/O&M
- H-30: MISC, SEALER, Grey & black: O&M

## 5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance recommendations for confirmed and assumed homogeneous areas of ACM are found in the Operations & Maintenance Table of this section. The materials listed below should be maintained following the guidelines in an O & M Plan during regular maintenance and small-scale repair activities until removed.

MISC CAULKING is Confirmed, Non-friable ACM.

- H-07 (CAULKING, Grey) is located in Rooms 100, 101.

- H-25 (CAULKING, White) is located on the Exterior.

- H-27 (CAULKING, White) is located on R-100, R-101, R-105, R-106.

TSI FITTING is Confirmed, Low-friable ACM.

- H-21 (FITTING, White) is located in Rooms 108, 109, 110, 111.

MISC FLOOR TILE is Confirmed, Non-friable ACM.

- H-18 (FLOOR TILE, Tan w/brown & white marble & mastic) is located in Rooms 106, 107, 115, 117, H-100.

- H-20 (FLOOR TILE, White w/grey streaks & mastic) is located in Rooms 108, 109.

- H-19 (FLOOR TILE, Pea Green w/black & white marble & mastic) is located in Rooms 106, 107, 118.

MISC SEALER is Confirmed, Non-friable ACM.

- H-30 (SEALER, Grey & black) is located on R-101, R-103.

MISC SHEET FLOORING is Confirmed, Non-friable ACM.

- H-15 (SHEET FLOORING, Tan w/brown marble & mastic) is located in Room 103.

MISC TRANSITE is Confirmed, Non-friable ACM.

- H-26 (TRANSITE, Grey) is located on the Exterior.

# BUILDING SUMMARY TABLE

# CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY

# Building No. 1346

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 | N | **Misc, FLOOR TILE, 12" x 12", White w/grey marble & mastic** | 1,182 SF | 0 | | | | | | |
| | | Rooms 100, 101, 106, 108, 109 | | | | | | | | |
| 02 | N | **Misc, FLOOR TILE, 12" x 12", Maroon w/white marble & mastic** | 2,350 SF | 0 | | | | | | |
| | | Rooms 101, 106, 107, 108, 109, 115, 117, H-100 | | | | | | | | |
| 03 | N | **Misc, COVING MASTIC, Yellow** | 555 LF | 0 | | | | | | |
| | | Rooms 100, 101, 106, 107, 108, 109, 115, 117 | | | | | | | | |
| 04 | N | **Misc, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey** | 3,625 SF | 0 | | | | | | |
| | | Rooms 100, 103, 104, 105, 106, 107, 108, 109, 110, 111, 115, 116, H-100 | | | | | | | | |
| 05 | N | **Misc, SHEETROCK, PAINTED, 4' x 8', White w/mud & tape** | 2,789 SF | 0 | | | | | | |
| | | Rooms 100, 101, 102, 103, 104, 105, 115, 116, 117 | | | | | | | | |
| 06 | N | **Misc, CAULKING, Yellow** | 20 LF | 0 | | | | | | |
| | | Rooms 100 | | | | | | | | |
| 07 | Y | **Misc, CAULKING, Grey** | 24 LF | 10 | Non | PD | 0.0 | O&M | See Note | |
| | | Rooms 100, 101 | | | | | | | | |
| 08 | N | **Misc, COVING MASTIC, Brown** | 4 LF | 0 | | | | | | |
| | | Rooms 100 | | | | | | | | |
| 09 | N | **Misc, CEILING TILE, 2' x 4', White w/long grooves** | 5,543 SF | 0 | | | | | | |
| | | Rooms 100, 101, 102, 103, 106, 108, 109, 110, 115, 116, 117, 118, H-100 | | | | | | | | |
| 10 | N | **Misc, CEILING TILE, 2' x 4', White w/short grooves** | 1,160 SF | 0 | | | | | | |
| | | Rooms 100, 106, 107, 115, 116, 117 | | | | | | | | |
| 11 | N | **Misc, CEILING TILE, 2' x 4', White w/wings** | 245 LF | 0 | | | | | | |
| | | Rooms 100, 102, 106, 108, 115, 117 | | | | | | | | |
| 12 | N | **Misc, FLOOR TILE, 9" x 9", Tan w/brown & white marble & mastic** | 5,429 SF | 0 | | | | | | |
| | | Rooms 100, 101, 117 | | | | | | | | |

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 13 | N | Misc, COVING MASTIC, Brown | 80 SF | 0 | | | | | | |
| | | Rooms 102, 103 | | | | | | | | |
| 14 | N | Misc, Brown / carpet mastic | 99 SF | 0 | | | | | | |
| | | Rooms 102 | | | | | | | | |
| 15 | Y | Misc, SHEET FLOORING, Tan w/brown marble & mastic | 100 SF | 10 | Non | PD | 0.0 | O&M | See Note | |
| | | Rooms 103 | | | | | | | | |
| 16 | N | Misc, GROUT, CERAMIC TILE, 1" x 1", Grey | 55 SF | 0 | | | | | | |
| | | Rooms 104, 105 | | | | | | | | |
| 17 | N | Misc, GROUT, CERAMIC TILE, 4" x 4", White | 55 SF | 0 | | | | | | |
| | | Rooms 104, 105 | | | | | | | | |
| 18 | Y | Misc, FLOOR TILE, 12" x 12", Tan w/brown & white marble & mastic | 706 SF | 10 | Non | PD | 0.0 | O&M | See Note | |
| | | Rooms 106, 107, 115, 117, H-100 | | | | | | | | |
| 19 | Y | Misc, FLOOR TILE, 12" x 12", Pea Green w/black & white marble & mastic | 350 SF | 10 | Non | PD | 0.0 | O&M | See Note | |
| | | Rooms 106, 107, 118 | | | | | | | | |
| 20 | Y | Misc, FLOOR TILE, 12" x 12", White w/grey streaks & mastic | 170 SF | 10 | Non | PD | 0.0 | O&M | See Note | |
| | | Rooms 108, 109 | | | | | | | | |
| 21 | Y | TSI, FITTING, CLOTH WRAPPED, White | 105 LF | 20 | Low | PD | 0.0 | O&M | See Note | |
| | | Rooms 108, 109, 110, 111 | | | | | | | | |
| 22 | N | Misc, CEILING TILE, 2' x 4', White w/bird feet | 154 SF | 0 | | | | | | |
| | | Rooms 112, 113 | | | | | | | | |
| 23 | N | Misc, 3" x 3" x 8", Grey | 1,230 SF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |
| 24 | N | Misc, GLAZING, WINDOW EXTERIOR, Grey | 280 LF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Y | Misc, CAULKING, White | 132 LF | 10 | Non | PD | 0.0 | Repair/O&M | | |
| | | Rooms EXT | | | | | | | | |
| 26 | Y | Misc, TRANSITE, PANELS, Grey | 104 SF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms EXT | | | | | | | | |
| 27 | Y | Misc, CAULKING, White | 346 LF | 10 | Non | PD | 0.0 | Repair/O&M | | Only the silver coating on the cauking contains asbestos |
| | | Rooms R-100, R-101, R-105, R-106 | | | | | | | | |
| 28 | N | Misc, SEALER, Black | 120 SF | 0 | | | | | | |
| | | Rooms R-101, R-102, R-103, R-107 | | | | | | | | |
| 29 | N | Misc, SEALER, Silver | 20 LF | 0 | | | | | | |
| | | Rooms R-101 | | | | | | | | |
| 30 | Y | Misc, SEALER, Grey & black | 50 SF | 10 | Non | PD | 0.0 | O&M | | |
| | | Rooms R-101, R-103 | | | | | | | | |
| 31 | N | Misc, ROOFING, COMPOSITION SHEET, Black w/tar & shingle | 2,970 SF | 0 | | | | | | |
| | | Rooms R-102 | | | | | | | | |
| 32 | N | Misc, ROOFING, COMPOSITION SHINGLE, Black w/felt | 180 SF | 0 | | | | | | |
| | | Rooms R-104 | | | | | | | | |

Note: Cost estimates are found in the Building Summary section of each building.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

## Building No. 1346

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 1 | NO | 1346-001 | 106 | Misc, FLOOR TILE, White w/grey marble & mastic | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 1 | NO | 1346-002 | 100 | Misc, FLOOR TILE, White w/grey marble & mastic | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 2 | NO | 1346-003 | H-100 | Misc, FLOOR TILE, Maroon w/white marble & mastic | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 2 | NO | 1346-004 | 117 | Misc, FLOOR TILE, Maroon w/white marble & mastic | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 3 | NO | 1346-005 | 100 | Misc, COVING MASTIC, Yellow | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 3 | NO | 1346-006 | 106 | Misc, COVING MASTIC, Yellow | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 4 | NO | 1346-007 | 100 | Misc, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 4 | NO | 1346-008 | 103 | Misc, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 5 | NO | 1346-009 | 117 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 5 | NO | 1346-010 | 103 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 5 | NO | 1346-011 | 116 | Misc, SHEETROCK, 4' x 8', White w/mud & tape | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 6 | NO | 1346-012 | 100 | Misc, CAULKING, Yellow | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 6 | NO | 1346-013 | 100 | Misc, CAULKING, Yellow | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 7 | YES | 1346-014 | 100 | Misc, CAULKING, Grey | 05/11/98 | 05/19/98 | Chrysotile | 2% |
| 7 | YES | 1346-015 | 100 | Misc, CAULKING, Grey | 05/11/98 | 05/19/98 | Chrysotile | 2% |
| 8 | NO | 1346-016 | 100 | Misc, COVING MASTIC, Brown | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 8 | NO | 1346-017 | 100 | Misc, COVING MASTIC, Brown | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 9 | NO | 1346-018 | 103 | Misc, CEILING TILE, 2' x 4', White w/long grooves | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 9 | NO | 1346-019 | 100 | Misc, CEILING TILE, 2' x 4', White w/long grooves | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 10 | NO | 1346-020 | 116 | Misc, CEILING TILE, 2' x 4', White w/short grooves | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 10 | NO | 1346-021 | 116 | Misc, CEILING TILE, 2' x 4', White w/short grooves | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 11 | NO | 1346-022 | 106 | Misc, CEILING TILE, 2' x 4', White w/wings | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 11 | NO | 1346-023 | 106 | Misc, CEILING TILE, 2' x 4', White w/wings | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 12 | NO | 1346-024 | 100 | Misc, FLOOR TILE, Tan w/brown & white marble & mastic | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 12 | NO | 1346-025 | 117 | Misc, FLOOR TILE, Tan w/brown & white marble & mastic | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 13 | NO | 1346-026 | 103 | Misc, COVING MASTIC, Brown | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 13 | NO | 1346-027 | 102 | Misc, COVING MASTIC, Brown | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 14 | NO | 1346-028 | 102 | Misc, Brown / carpet mastic | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 14 | NO | 1346-029 | 102 | Misc, Brown / carpet mastic | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 15 | YES | 1346-030 | 103 | Misc, SHEET FLOORING, Tan w/brown marble & mastic | 05/11/98 | 05/19/98 | Chrysotile | 30% |

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

## Building No. 1346

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 15 | YES | 1346-031 | 103 | Misc, SHEET FLOORING, Tan w/brown marble & mastic | 05/11/98 | 05/19/98 | Chrysotile | 30% |
| 16 | NO | 1346-032 | 104 | Misc, GROUT, 1" x 1", Grey | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 16 | NO | 1346-033 | 105 | Misc, GROUT, 1" x 1", Grey | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 17 | NO | 1346-034 | 104 | Misc, GROUT, 4" x 4", White | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 17 | NO | 1346-035 | 105 | Misc, GROUT, 4" x 4", White | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 18 | YES | 1346-036 | 115 | Misc, FLOOR TILE, Tan w/brown & white marble & mastic | 05/11/98 | 05/19/98 | Chrysotile | 32% |
| 18 | NO | 1346-037 | 117 | Misc, FLOOR TILE, Tan w/brown & white marble & mastic | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 19 | YES | 1346-038 | 107 | Misc, FLOOR TILE, Pea Green w/black & white marble & m | 05/11/98 | 05/19/98 | Chrysotile | 55% |
| 19 | YES | 1346-039 | 106 | Misc, FLOOR TILE, Pea Green w/black & white marble & m | 05/11/98 | 05/19/98 | Chrysotile | 68% |
| 20 | YES | 1346-040 | 108 | Misc, FLOOR TILE, White w/grey streaks & mastic | 05/11/98 | 05/19/98 | Chrysotile | 48% |
| 20 | YES | 1346-041 | 109 | Misc, FLOOR TILE, White w/grey streaks & mastic | 05/11/98 | 05/19/98 | Chrysotile | 26% |
| 21 | YES | 1346-042 | 111 | TSI, FITTING, White | 05/11/98 | 05/19/98 | Amosite | 3% |
| 21 | YES | 1346-042 | 111 | TSI, FITTING, White | 05/11/98 | 05/19/98 | Chrysotile | 2% |
| 21 | YES | 1346-043 | 108 | TSI, FITTING, White | 05/11/98 | 05/19/98 | Amosite | 3% |
| 21 | YES | 1346-043 | 108 | TSI, FITTING, White | 05/11/98 | 05/19/98 | Chrysotile | 2% |
| 21 | YES | 1346-044 | 110 | TSI, FITTING, White | 05/11/98 | 05/19/98 | Amosite | 3% |
| 21 | YES | 1346-044 | 110 | TSI, FITTING, White | 05/11/98 | 05/19/98 | Chrysotile | 2% |
| 22 | NO | 1346-045 | 112 | Misc, CEILING TILE, 2' x 4', White w/bird feet | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 22 | NO | 1346-046 | 113 | Misc, CEILING TILE, 2' x 4', White w/bird feet | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 23 | NO | 1346-047 | EXT | Misc, 3" x 3" x 8", Grey | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 23 | NO | 1346-048 | EXT | Misc, 3" x 3" x 8", Grey | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 24 | NO | 1346-049 | EXT | Misc, GLAZING, Grey | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 24 | NO | 1346-050 | EXT | Misc, GLAZING, Grey | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 25 | YES | 1346-051 | EXT | Misc, CAULKING, White | 05/11/98 | 05/19/98 | Chrysotile | 2% |
| 25 | YES | 1346-052 | EXT | Misc, CAULKING, White | 05/11/98 | 05/19/98 | Chrysotile | 2% |
| 26 | YES | 1346-053 | EXT | Misc, TRANSITE, Grey | 05/11/98 | 05/19/98 | Chrysotile | 80% |
| 26 | YES | 1346-054 | EXT | Misc, TRANSITE, Grey | 05/11/98 | 05/19/98 | Chrysotile | 80% |
| 27 | NO | 1346-055 | R-100 | Misc, CAULKING, White | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 27 | NO | 1346-056 | R-101 | Misc, CAULKING, White | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 27 | YES | 1346-057 | R-105 | Misc, CAULKING, White | 05/11/98 | 05/19/98 | Chrysotile | 5% |

TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

## Building No. 1346

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 28 | NO | 1346-058 | R-102 | Misc, SEALER, Black | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 28 | NO | 1346-059 | R-107 | Misc, SEALER, Black | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 29 | NO | 1346-060 | R-101 | Misc, SEALER, Silver | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 29 | NO | 1346-061 | R-101 | Misc, SEALER, Silver | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 30 | YES | 1346-062 | R-101 | Misc, SEALER, Grey & black | 05/11/98 | 05/19/98 | Chrysotile | 10% |
| 30 | YES | 1346-063 | R-103 | Misc, SEALER, Grey & black | 05/11/98 | 05/19/98 | Chrysotile | 10% |
| 30 | YES | 1346-064 | R-103 | Misc, SEALER, Grey & black | 05/11/98 | 05/19/98 | Chrysotile | 10% |
| 31 | NO | 1346-065 | R-102 | Misc, ROOFING, Black w/tar & shingle | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 31 | NO | 1346-066 | R-102 | Misc, ROOFING, Black w/tar & shingle | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 32 | NO | 1346-067 | R-104 | Misc, ROOFING, Black w/felt | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |
| 32 | NO | 1346-068 | R-104 | Misc, ROOFING, Black w/felt | 05/11/98 | 05/19/98 | No Asbestos Detected | 0% |

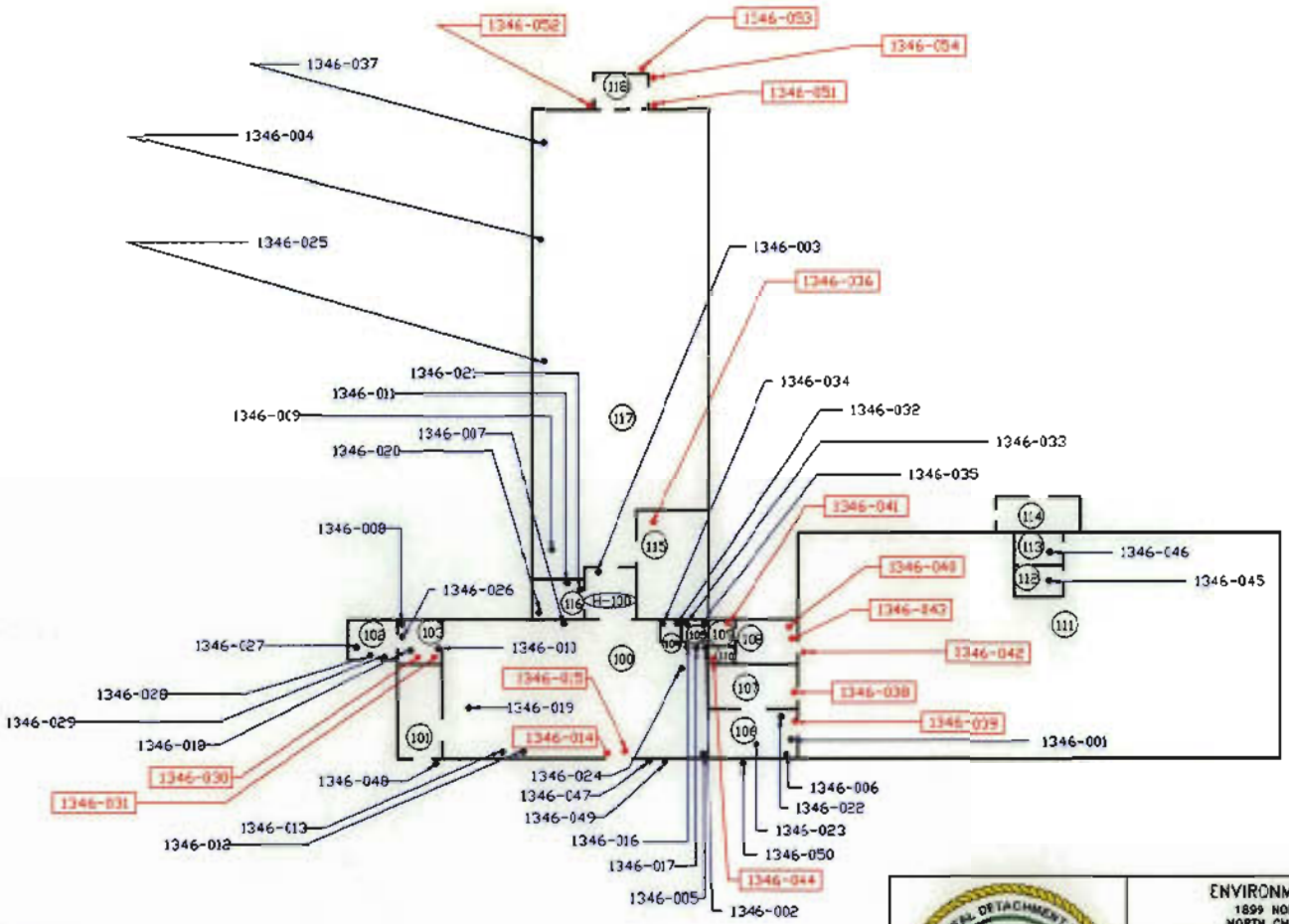
TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY



| Bldg. No. | Homo No. | Material Description | Quantity | Rat-ing | Fria-bility | Condition | % D | Recommended Action |
|---|---|---|---|---|---|---|---|---|
| 1346 | 07 | Misc, CAULKING, Grey | 24 LF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 100, 101 | | | | | | |
| 1346 | 15 | Misc, SHEET FLOORING, Tan w/brown marble & mastic | 100 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 103 | | | | | | |
| 1346 | 18 | Misc, FLOOR TILE, 12" x 12", Tan w/brown & white marble & mastic | 706 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 106, 107, 115, 117, H-100 | | | | | | |
| 1346 | 19 | Misc, FLOOR TILE, 12" x 12", Pea Green w/black & white marble & mastic | 350 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 106, 107, 118 | | | | | | |
| 1346 | 20 | Misc, FLOOR TILE, 12" x 12", White w/grey streaks & mastic | 170 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 108, 109 | | | | | | |
| 1346 | 21 | TSI, FITTING, CLOTH WRAPPED, White | 105 LF | 20 | Low | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 108, 109, 110, 111 | | | | | | |
| 1346 | 25 | Misc, CAULKING, White | 132 LF | 10 | Non | Not Damaged | 0.00 | Repair/O&M |
| Locations: | | Rooms EXT | | | | | | |
| 1346 | 26 | Misc, TRANSITE, PANELS, Grey | 104 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms EXT | | | | | | |
| 1346 | 27 | Misc, CAULKING, White | 346 LF | 10 | Non | Not Damaged | 0.00 | Repair/O&M |
| Locations: | | Rooms R-100, R-101, R-105, R-106 | | | | | | |
| 1346 | 30 | Misc, SEALER, Grey & black | 50 SF | 10 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms R-101, R-103 | | | | | | |

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.




LEGEND

(xxx) - Indicates unique room number assigned by inspector

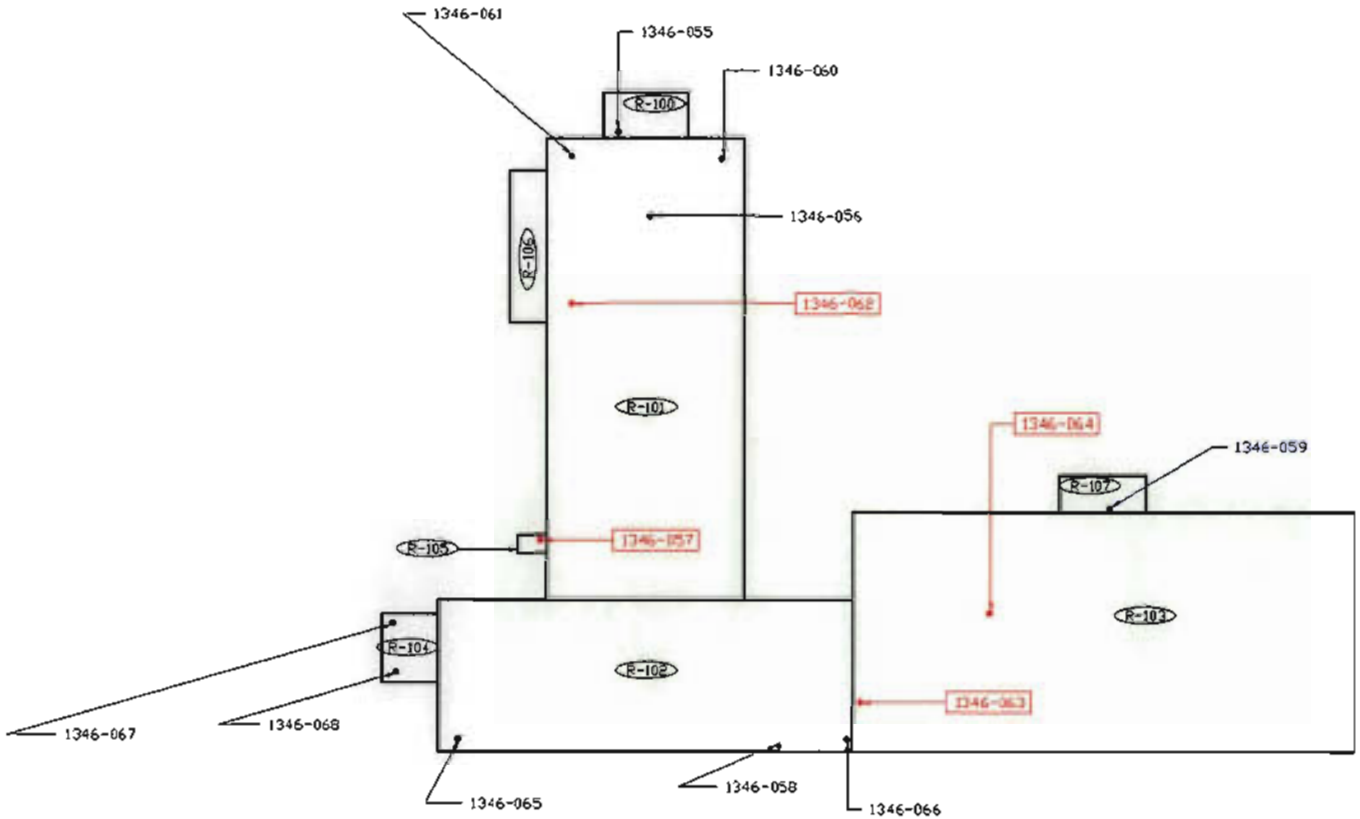
xxx-xxx - Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE - BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2106

SAMPLE LOCATIONS
BLDG 1346
CHARLESTON NAVAL BASE, CHARLESTON SC

| DATE | PREPARED BY: | REV |
|---|---|---|
| 6-26-98 | R. JENKINS | ORIG |

SCALE: NONE | SHEET 1 OF 2




LEGEND

(XXX) - Indicates unique room number assigned by inspector

XXX-XXX - Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE - BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2106

SAMPLE LOCATIONS
BLDG 1346 (ROOF)
CHARLESTON NAVAL BASE, CHARLESTON SC

| DATE | PREPARED BY: | REV |
|---|---|---|
| 6-26-98 | R. JENKINS | ORIG |

SCALE: NONE | SHEET 2 OF 2

Charleston Naval Complex
Asbestos Abatement & Demolition Estimates

## Building 1346

The estimates below reflect costs for removal of all asbestos listed in the Building Summary Table, repair of friable or damaged asbestos only, if applicable, and demolition of building after asbestos removal.

| | Total Removal | | Repair | | Demolition |
|---|---|---|---|---|---|
| Labor costs | $9,008 | - | $630 | - | $42,090 |
| Material/equipment costs | $3,603 | - | $415 | - | $12,300 |
| Disposal costs | $1,201 | - | $252 | - | $24,042 |
| **Total cost** | **$13,812** | **-** | **$1,297** | **-** | **$78,432** |

The total cost for removal of all asbestos listed in the Building Summary Table is $13,812, the total cost for repairs to damaged and/or friable asbestos listed in the Building Summary Table is $1,297 and the cost for demolition after asbestos removal is $78,432.

## BUILDING 1737: Restroom

### 1. DESCRIPTION:

Building 1737 is a 2,100 square-foot building. It is a single story, concrete block structure with red brick exterior and a built-up roof. The year built was 1970. The following information was identified during the survey and from the analysis of the samples taken:

- Ten homogeneous areas were identified during the initial survey.
- Zero homogeneous areas were assumed to contain asbestos.
- Ten of the homogeneous areas were suspected to contain asbestos and sampled to confirm.
- Five of the suspected homogeneous areas were confirmed to contain asbestos.
- Five of the suspected homogenous areas did not contain asbestos.

### 2. FINDINGS:

Ten homogeneous areas with suspected ACM were identified. Twenty samples were collected and analyzed. Sample results are summarized in the Laboratory Test Results table in this section. Friable asbestos was found in two of the homogeneous areas.

**Confirmed ACM.** The following homogeneous areas sampled were confirmed to contain asbestos:

- H-3: TSI, FITTING, CLOTH WRAPPED, White, was Low-friable and Not Damaged.
- H-5: TSI, TANK, White, was Low-friable and Not Damaged.
- H-7: MISC, CAULKING, Grey, was Non-friable and Damaged.
- H-9: MISC, SEALER, Black w/green asphalt shingle, was Non-friable and Not Damaged.
- H-10: MISC, ROOFING, TAR AND GRAVEL, Black w/felt, was Non-friable and Not Damaged.

**Asbestos Free.** Asbestos was not detected in the following homogeneous areas:

- H-1: MISC, GROUT, CERAMIC TILE, 1" x 1", Grey
- H-2: MISC, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey
- H-4: TSI, PIPE, CLOTH WRAPPED, White
- H-6: MISC, MORTAR, BRICK, 3" x 3" x 11", Grey
- H-8: MISC, CAULKING, White

**Assumed ACM.** The following homogeneous areas were assumed to contain asbestos:

- None.

## 3. OBSERVATIONS:

Other suspect ACM noted, but not sampled, includes valve packing and various piping systems/components gasket material.

## 4. RECOMMENDED ABATEMENT ACTIONS:

Recommended actions for the following homogeneous areas:

- H-3: TSI, FITTING, White: O&M
- H-5: TSI, TANK, White: O&M
- H-7: MISC, CAULKING, Grey: Repair/O&M
- H-9: MISC, SEALER, Black w/green asphalt shingle: O&M
- H-10: MISC, ROOFING, Black w/felt: O&M

## 5. RECOMMENDATIONS FOR OPERATIONS AND MAINTENANCE:

Operations and Maintenance recommendations for confirmed and assumed homogeneous areas of ACM are found in the Operations & Maintenance Table of this section. The materials listed below should be maintained following the guidelines in an O & M Plan during regular maintenance and small-scale repair activities until removed.

MISC CAULKING is Confirmed, Non-friable ACM.

- H-7 (CAULKING, Grey) is located on the Exterior.

TSI FITTING is Confirmed, Low-friable ACM.

- H-3 (FITTING, White) is located in Rooms 100, 101, 102, 103.

MISC ROOFING is Confirmed, Non-friable ACM.

- H-10 (ROOFING, Black w/felt) is located on the Roof.

MISC SEALER is Confirmed, Non-friable ACM.

- H-9 (SEALER, Black w/green asphalt shingle) is located on the Roof.

TSI TANK is Confirmed, Low-friable ACM.

- H-5 (TANK, White) is located in Room 103.

# BUILDING SUMMARY TABLE

## CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY

## Building No. 1737

| H-No | ACM Y,N,A | Material Description | Quantity | Rating | Fria-bility | Cond | % D | Recommended Action | Cost Estimate | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | N | Misc, GROUT, CERAMIC TILE, 1" x 1", Grey | 1,822 SF | 0 | | | | | | |
| | | Rooms 100, 102 | | | | | | | | |
| 2 | N | Misc, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey | 4,320 SF | 0 | | | | | | |
| | | Rooms 100, 101, 102, 103 | | | | | | | | |
| 3 | Y | TSI, FITTING, CLOTH WRAPPED, White | 429 LF | 6 | Low | PD | 0.0 | O&M | | |
| | | Rooms 100, 101, 102, 103 | | | | | | | | |
| 4 | N | TSI, PIPE, CLOTH WRAPPED, White | 60 LF | 0 | | | | | | |
| | | Rooms 100, 101, 102 | | | | | | | | |
| 5 | Y | TSI, TANK, White | 120 SF | 6 | Low | PD | 0.0 | O&M | | |
| | | Rooms 103 | | | | | | | | |
| 6 | N | Misc, MORTAR, BRICK, 3" x 3" x 11", Grey | 1,818 SF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |
| 7 | Y | Misc, CAULKING, Grey | 40 LF | 4 | Non | D | 30.0 | Repair/O&M | | |
| | | Rooms EXT | | | | | | | | |
| 8 | N | Misc, CAULKING, White | 40 LF | 0 | | | | | | |
| | | Rooms EXT | | | | | | | | |
| 9 | Y | Misc, SEALER, Black w/green asphalt shingle | 120 SF | 3 | Non | PD | 0.0 | O&M | | |
| | | Rooms ROOF | | | | | | | | |
| 10 | Y | Misc, ROOFING, TAR AND GRAVEL, Black w/felt | 1,970 SF | 3 | Non | PD | 0.0 | O&M | | |
| | | Rooms ROOF | | | | | | | | |

Note: Cost estimates are found in the Building Summary section of each building.

H-No= Homogenous Area Number, ACM= Asbestos Containing Material: Y=Yes, N= No, A= Assumed, TSI= Thermal System Insulation, Misc= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Condition: PD= Potential for Damage, D= Damaged, SD= Significantly Damaged, Recommended Action: O&M= Operation and Maintenance

# LABORATORY TEST RESULTS TABLE

# CHARLESTON NAVAL COMPLEX
# ASBESTOS BUILDING SURVEY
# INDUSTRIAL LABORATORY TEST REPORT

## Building No. 1737

| Homo. Area No. | ASB Y/N | Sample Number | Room Number | Material Description: | Date Sampled | Date Analyzed | Sample Results | Percent Asbestos |
|---|---|---|---|---|---|---|---|---|
| 1 | NO | 1737-001 | 100 | Misc, GROUT, 1" x 1", Grey | 05/06/98 | 05/11/98 | No Asbestos Detected | 0% |
| 1 | NO | 1737-002 | 102 | Misc, GROUT, 1" x 1", Grey | 05/06/98 | 05/11/98 | No Asbestos Detected | 0% |
| 2 | NO | 1737-003 | 100 | Misc, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey | 05/06/98 | 05/11/98 | No Asbestos Detected | 0% |
| 2 | NO | 1737-004 | 101 | Misc, CINDER BLOCK AND MORTAR, 8" x 8" x 16", Grey | 05/06/98 | 05/11/98 | No Asbestos Detected | 0% |
| 3 | YES | 1737-005 | 100 | TSI, FITTING, White | 05/06/98 | 05/11/98 | Amosite | 2% |
| 3 | YES | 1737-006 | 102 | TSI, FITTING, White | 05/06/98 | 05/11/98 | Amosite | 2% |
| 4 | NO | 1737-007 | 100 | TSI, PIPE, White | 05/06/98 | 05/11/98 | No Asbestos Detected | 0% |
| 4 | NO | 1737-008 | 102 | TSI, PIPE, White | 05/06/98 | 05/11/98 | No Asbestos Detected | 0% |
| 5 | NO | 1737-009 | 103 | TSI, TANK, White | 05/06/98 | 05/11/98 | No Asbestos Detected | 0% |
| 5 | YES | 1737-010 | 103 | TSI, TANK, White | 05/06/98 | 05/11/98 | Amosite | 15% |
| 6 | NO | 1737-011 | EXT | Misc, MORTAR, 3" x 3" x 11", Grey | 05/06/98 | 05/11/98 | No Asbestos Detected | 0% |
| 6 | NO | 1737-012 | EXT | Misc, MORTAR, 3" x 3" x 11", Grey | 05/06/98 | 05/11/98 | No Asbestos Detected | 0% |
| 7 | YES | 1737-013 | EXT | Misc, CAULKING, Grey | 05/06/98 | 05/11/98 | Chrysotile | 2% |
| 7 | YES | 1737-014 | EXT | Misc, CAULKING, Grey | 05/06/98 | 05/11/98 | Chrysotile | 2% |
| 8 | NO | 1737-015 | EXT | Misc, CAULKING, White | 05/06/98 | 05/11/98 | No Asbestos Detected | 0% |
| 8 | NO | 1737-016 | EXT | Misc, CAULKING, White | 05/06/98 | 05/11/98 | No Asbestos Detected | 0% |
| 9 | YES | 1737-017 | ROOF | Misc, SEALER, Black w/green asphalt shingle | 05/06/98 | 05/11/98 | Chrysotile | 25% |
| 9 | YES | 1737-018 | ROOF | Misc, SEALER, Black w/green asphalt shingle | 05/06/98 | 05/11/98 | Chrysotile | 25% |
| 10 | YES | 1737-019 | ROOF | Misc, ROOFING, Black w/felt | 05/06/98 | 05/11/98 | Chrysotile | 2% |
| 10 | YES | 1737-020 | ROOF | Misc, ROOFING, Black w/felt | 05/06/98 | 05/11/98 | Chrysotile | 2% |

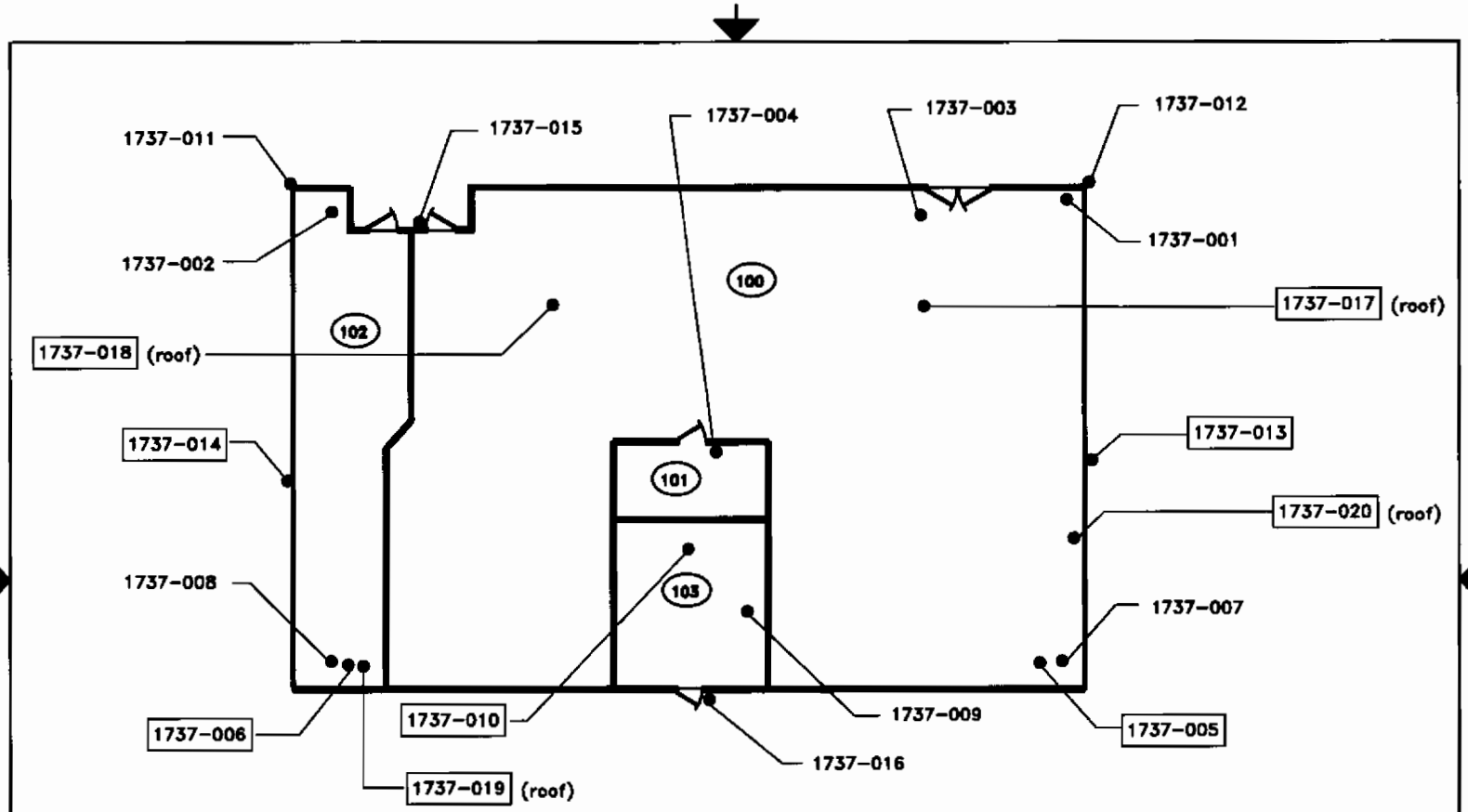
TEST METHOD: Method for the determination of Asbestos in bulk building materials (EPA/600/R-93/116) DETECTION LIMIT: 1%

# CHARLESTON NAVAL COMPLEX ASBESTOS BUILDING SURVEY



| Bldg. No. | Homo No. | Material Description | Quantity | Rat-ing | Fria-bility | Condition | % D | Recommended Action |
|---|---|---|---|---|---|---|---|---|
| 1737 | 3 | TSI, FITTING, CLOTH WRAPPED, White | 429 LF | 6 | Low | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 100, 101, 102, 103 | | | | | | |
| 1737 | 5 | TSI, TANK, White | 120 SF | 6 | Low | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms 103 | | | | | | |
| 1737 | 7 | Misc, CAULKING, Grey | 40 LF | 4 | Non | Damaged | 30.00 | Repair/O&M |
| Locations: | | Rooms EXT | | | | | | |
| 1737 | 9 | Misc, SEALER, Black w/green asphalt shingle | 120 SF | 3 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms ROOF | | | | | | |
| 1737 | 10 | Misc, ROOFING, TAR AND GRAVEL, Black w/felt | 1,970 SF | 3 | Non | Not Damaged | 0.00 | O&M |
| Locations: | | Rooms ROOF | | | | | | |

Homo No= Homogenous Area Number, ACM= Asbestos Containing Material, TSI= Thermal System Insulation, MISC= Miscellaneous, Quantity: SF= Square Footage, LF= Linear Feet, Friability: Mod= Moderate, Non= Non-Friable, Recommended Action: O&M= Operation and Maintenance, Refer to the Section III Operations and Maintenance Plan for standard O&M and Repair procedures.




## LEGEND

(xxx) — Indicates unique room number assigned by inspector

xxxx-xxx — Indicates sample locations which tested positive for asbestos

ENVIRONMENTAL DETACHMENT CHARLESTON
1000 NORTH HOBSON AVENUE - BUILDING 30
NORTH CHARLESTON, SOUTH CAROLINA 29405-2106

# SAMPLE LOCATIONS
# BUILDING 1737
# CHARLESTON NAVAL BASE, CHARLESTON, SC

| DATE | PREPARED BY: | REV |
|---|---|---|
| 6-8-98 | B.D. MURRAY | ORIG |

SCALE: NONE | SHEET 1 of 1

Charleston Naval Complex
Asbestos Abatement & Demolition Estimates

## Building 1737

The estimates below reflect costs for removal of all asbestos listed in the Building Summary Table, repair of friable or damaged asbestos only, if applicable, and demolition of building after asbestos removal.

| | Total Removal | | Repair | | Demolition |
|---|---|---|---|---|---|
| Labor costs | $24,310 | - | $3,354 | - | $6,877 |
| Material/equipment costs | $8,809 | - | $1,777 | - | $1,896 |
| Disposal costs | $3,646 | - | $1,342 | - | $3,630 |
| **Total cost** | **$36,765** | **-** | **$6,473** | **-** | **$12,403** |

The total cost for removal of all asbestos listed in the Building Summary Table is $36,765, the total cost for repairs to damaged and/or friable asbestos listed in the Building Summary Table is $6,473 and the cost for demolition after asbestos removal is $12,403.

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** NS-27 **DATE:** 4/28/98

**INSPECTORS NAMES:** BUTLER / ~~CHAPLIN~~ RB
(PRINT)

**INSPECTOR SIGNATURE / LICENSE #:** R. Butler 22A15

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-NS 27 - 001 | 1 | Rm-100 | Floor Tile * (2 mastics) | TILE: Not determined |
| Environmental Detachment Charleston, SC CNC-NS 27 - 002 | 1 | Rm-102 | Floor Tile | >1% Chrysotile |
| Environmental Detachment Charleston, SC CNC-NS 27 - 003 | 2 | Rm-101 | Sheetrock w/mud tape vinyl wallcover | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 004 | 2 | Rm-102 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 005 | 3 | Rm-105 | Ceiling Tile | NONE. |
| Environmental Detachment Charleston, SC CNC-NS 27 - 006 | 3 | Rm-106 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 007 | 4 | Rm-100 ~~Rm 106~~ RB | Ceiling Tile | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 008 | 4 | Rm-101 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 009 | 5 | Rm-105 | Cinder Block Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 010 | 5 | Rm-109 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 011 | 6 | Rm-103 | Cer. Tile Grout 1"x1" | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 012 | 6 | Rm-103 | ↓ | NONE |

* FLOOR TILE CAN NOT BE DETERMINED TO BE ASBESTOS FREE ON THE BASIS OF PLM.

SHEET 1 OF 3

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** NS-27 **DATE:** 4/28/98

**INSPECTORS NAMES:** BUTLER / ~~CHAPLIN~~ RB
(PRINT)

**INSPECTOR SIGNATURE / LICENSE #:** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-NS 27 - 013 | 7 | Rm-103 | Brn. Coving Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 014 | 7 | Rm-103 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 015 | 8 | Rm-103 | Black Coving Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 016 | 8 | Rm-108 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 017 | 9 | Rm-108 | Sheetrock w/mud & tape | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 018 | 9 | Rm-107 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 019 | 10 | Rm-110 | Cer. Tile Grout 2"x2" | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 020 | 10 | Rm-110 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 021 | 11 | Rm-110 | Cer. Tile Grout 4"x4" | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 022 | 11 | Rm-110 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 023 | 12 | EXT | Red Brick Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 024 | 12 | EXT | ↓ | NONE |



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** NS-27 **DATE:** 4/28/98

**INSPECTORS NAMES:** BUTLER / ~~CHAPLIN~~ RB
(PRINT)

**INSPECTOR SIGNATURE / LICENSE #:** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-NS 27 - 025 | 13 | ROOF | Tar & Felt | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 026 | 13 | ROOF | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 027 | 14 | ROOF | Roof Patch | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 028 | 14 | ROOF | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 029 | 15 | ROOF | Black Coat Sealer | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 030 | 15 | ROOF | ↓ BLACK CAT | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 031 | 16 | ROOF | Felt & Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-NS 27 - 032 | 16 | ROOF | ↓ | NONE |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

SHEET 3 OF 3

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** X-5A **DATE:** 5/14/98

**INSPECTORS NAMES:** BUTLER / ADKINS
(PRINT)

**INSPECTOR SIGNATURE / LICENSE #:** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-X54 - 001 | 1 | Room 100 | Blue 12"x12" Floor Tile w/ mastic | * TILE NOT DETERMINED → NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 002 | 1 | Rm 101 ~~Rm 102~~ | ↓ MASTIC | * TILE NOT DETERMINED → NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 003 | 2 | Rm 100 | Black Coving w/ yellow mastic | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 004 | 2 | Rm H-100 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 005 | 3 | Rm-100 | Sheetrock w/ wall covering | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 006 | 3 | Rm-105 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 007 | 3 | Rm-108 | Sheetrock w/ wall covering | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 008 | 4 | Rm-111 | Sheetrock w/ mud & tape | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 009 | 4 | Rm-104 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 010 | 4 | Rm-109 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 011 | 5 | Rm - 100 | Ceiling Tile | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 012 | 5 | Rm- H-101 | ↓ | NONE |

* FLOOR TILE CANNOT BE DETERMINED TO BE ASBESTOS FREE ON THE BASIS OF PLM.

SHEET 1 OF 5

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** X-54 **DATE:** 5/14/98

**INSPECTORS NAMES:** BUTLER / ADKINS
(PRINT)

**INSPECTOR SIGNATURE / LICENSE #:** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-X54 - 013 | 6 | Rm-100 | Ceiling Tile | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 014 | 6 | Rm H-101 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 015 | 7 | Rm-110 | Transite Panel | 80% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-X54 - 016 | 7 | EXT. | TRANSITE PANEL | 80% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-X54 - 017 | 8 | Rm 101 | Conc. Block Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 018 | 8 | Rm H 101 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 019 | 9 | Rm-101 | Vent Duct Black Mastic | 3% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-X54 - 020 | 9 | Rm 101 | *BLACK mastic | 3% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-X54 - 021 | 10 | Rm 102 | Brown Covering w/tan Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 022 | 10 | Rm 103 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 023 | 11 | Rm-102 | Brown 12"x12" Floor Tile w/ mastic | * TILE NOT DETERMINED → NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 024 | 11 | Rm-107 | ↓ MASTIC | * TILE NOT DETERMINED → NONE |

* FLOOR TILE CANNOT BE DETERMINED TO BE ASBESTOS FREE ON THE BASIS OF PLM.



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

FACILITY: CNC

BUILDING #: X-5A DATE: 5/14/98

INSPECTORS NAMES: BUTLER / ADKINS
(PRINT)

INSPECTOR SIGNATURE / LICENSE #: R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-X54 - 025 | 12 | Rm-103 | Gray 12"x12" Floor Tile w/mastic | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-X54 - 026 | 12 | Rm-103 | Floor Tile w/mastic | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-X54 - 027 | 13 | Rm-111 | white Caulking | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 028 | 13 | Rm-111 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 029 | 14 | Rm-109 | Cream 12"x12" Floor Tile w/mastic | *Tile Not Determined → NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 030 | 14 | Rm-109 | ↓ | *Tile Not Determined |
| Environmental Detachment Charleston, SC CNC-X54 - 031 | 15 | Rm-107 | TSI | 10% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-X54 - 032 | 15 | Rm-110 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 033 | 15 | Rm-110 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 034 | 16 | Rm-110 | Vent Duct Tape | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 035 | 16 | Rm-110 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 036 | 18 | Rm-111 | Grout 2"x2" Ceiling Tile | NONE |

* FLOOR TILE CANNOT BE DETERMINED TO BE ASBESTOS FREE ON THE BASIS OF PLM.



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** X-54 **DATE :** 5/14/98

**INSPECTORS NAMES:** BUTLER / ADKINS
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-X54 - 037 | 18 | Rm-111 | Grout 2"x2" Cer. Tile | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 038 | 19 | Rm-111 | Grout 6"x6" Quarry Tile | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 039 | 19 | Rm-111 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 040 | 20 | Rm-111 | Grout 4"x4" Cer. Tile | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 041 | 20 | Rm-111 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 042 | 21 | ~~EXT~~ R-100 | Tar & Felt | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 043 | 21 | ~~EXT~~ R-100 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 044 | 22 | ~~EXT~~ R-101 | Shingle & Felt | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 045 | 22 | ~~EXT~~ R-101 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 046 | 23 | EXT | Non-skid | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 047 | 23 | EXT | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 048 | 23 ~~24~~ | EXT | ↓ | NONE |



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** X-54 **DATE :** 5/14/98

**INSPECTORS NAMES:** BUTLER / ADKINS
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-X54 - 049 | 23 ~~24~~ | EXT | Non-skid | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 050 | 23 | EXT | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 051 | 23 | EXT | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 052 | 23 | EXT | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 053 | 24 | EXT | Red Brick Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-X54 - 054 | 24 | EXT | ↓ | NONE |
| | | | | |
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SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** NS-84 **DATE:** 5/15/98

**INSPECTORS NAMES:** BUTLER/ADKINS
(PRINT)

**INSPECTOR SIGNATURE / LICENSE #:** R. Butler 22A15

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-NS84 - 001 | 1 | E-001 | Floor Tile 12"x12" Cream w/mastic | *TILE NOT DETERMINED |
| Environmental Detachment Charleston, SC CNC-NS84 - 002 | 1 | Rm-106 | ↓ | *TILE NOT DETERMINED |
| Environmental Detachment Charleston, SC CNC-NS84 - 003 | 2 | E-001 | Floor Tile 12"x12" Wood Grain Peel & Stick | *TILE NOT DETERMINED |
| Environmental Detachment Charleston, SC CNC-NS84 - 004 | 2 | Rm-102 | ↓ | *TILE NOT DETERMINED |
| Environmental Detachment Charleston, SC CNC-NS84 - 005 | 3 | E-001 | Floor Tile 12"x12" Pea Green w mastic | *TILE: Not determined >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-NS84 - 006 | 3 | Rm-105 | ↓ MASTIC | TILE: Not determined >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-NS84 - 007 | 4 | Rm 102 ~~E-001~~ | Sheetrock w/mud & tape | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 008 | 4 | Rm 105 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 009 | 4 | Rm 102 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 010 | 5 | E-001 | Ceiling Tile | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 011 | 5 | E-001 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 012 | 6 | Rm-100 | Vent Duct Silver Tape Mastic | NONE |

*FLOOR TILE CANNOT BE DETERMINED TO BE ASBESTOS FREE ON THE BASIS OF PLM.

SHEET 1 OF 6

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** NS-84 **DATE:** 5/15/98

**INSPECTORS NAMES:** BUTLER / ADKINS
(PRINT)

**INSPECTOR SIGNATURE / LICENSE #:** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-NS84 - 013 | 6 | Rm-100 | Vent Duct Silver Tape Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 014 | 7 | Rm 112 | Ceiling Tile | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 015 | 7 | Rm 112 | | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 016 | 8 | Rm-102 | | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 017 | 8 | Rm 112 | | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 018 | 9 | Rm-102 | | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 019 | 9 | Rm-102 | | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 020 | 10 | Rm 102 | | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 021 | 10 | Rm 114 | | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 022 | 11 | Rm-102 | Floor Tile 12"x12" Chocklate w/ Mastic | * TILE NOT DETERMINED >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-NS84 - 023 | 11 | Rm-111 | mastic | * TILE NOT DETERMINED >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-NS84 - 024 | 12 | Rm-102 | Floor Tile 9"x9" Tan w/ mastic | * TILE: NOT DETERMINED >1% CHRYSOTILE |

* FLOOR TILE CAN NOT BE DETERMINED TO BE ASBESTOS FREE ON THE BASIS OF PLM.



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** NS-84 **DATE:** 5/15/98

**INSPECTORS NAMES:** BUTLER / ADKINS
(PRINT)

**INSPECTOR SIGNATURE / LICENSE #:** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-NS84 - 025 | 12 | Rm-102 | Floor-Tile 9"x9" Tan w/ mastic | * TILE: NOT DETERMINED >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-NS84 - 026 | 13 | Rm 102 | Brn. Coving w/ yellow mastic | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 027 | 13 | Rm 102 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 028 | 14 | Rm-111 ~~Rm 106~~ | Conc. Block Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 029 | 14 | ~~EXT.~~ RM ~~Rm 102~~ 106 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 030 | 15 | Rm-103 | Floor-Tile 12"x12" Tan w/ mastic (mastic on concrete) | * TILE NOT DETERMINED CHRYSOTILE >1% |
| Environmental Detachment Charleston, SC CNC-NS84 - 031 | 15 | Rm-104 | ↓ (MASTIC on CONCRETE) | * TILE NOT DETERMINED CHRYSOTILE >1% |
| Environmental Detachment Charleston, SC CNC-NS84 - 032 | 16 | Rm-106 | Wallboard | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 033 | 16 | Rm-106 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 034 | 17 | Rm 107 | 1"x1", 1"x2", 2"x2" Cer. Tile Grout | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 035 | 17 | Rm 107 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 036 | 18 | Rm-107 | 4"x4" Cer. Tile Grout | NONE |

* FLOOR TILE CANNOT BE DETERMINED TO BE ASBESTOS FREE ON THE BASIS OF PLM.



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

FACILITY: CNC

BUILDING #: NS-84 DATE: 5/15/98

INSPECTORS NAMES: BUTLER / ADKINS
(PRINT)

INSPECTOR SIGNATURE / LICENSE #: R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-NS84 - 037 | 18 | Rm 107 | 4" x 4" Cer. Tile Grout | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 038 | 19 | E-002 | Blk. Coving w/ yellow mastic | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 039 | 19 | Rm-116 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 040 | 20 | Rm-112 | Red Brick Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 041 | 20 | EXT. | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 042 | 21 | Rm 115 | Floor Tile 9"x9" Gray w/ mastic | * TILE: Not determined 3% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-NS84 - 043 | 21 | Rm 115 | ↓ mastic | * TILE: Not determined 3% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-NS84 - 044 | 22 | Rm 115 | Floor Tile 12"x12" Beige w/ mastic | * TILE: Not determined >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-NS84 - 045 | 22 | Rm 115 | ↓ mastic | * TILE: Not determined >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-NS84 - 046 | 23 | Rm-115 | Vibration Joint | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 047 | 23 | Rm-115 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 048 | 24 | Rm 117 | Sound Dampening | NONE |

* FLOOR TILE CAN NOT BE DETERMINED TO BE ASBESTOS FREE ON THE BASIS OF PLM.

SHEET 4 OF 6

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** NS-84 **DATE:** 5/15/98

**INSPECTORS NAMES:** BUTLER / ADKINS
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-NS84 - 049 | 2A | RM 117 | Sound Dampening | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 050 | 25 | EXT. | White Caulking | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-NS84 - 051 | 25 | EXT. | CAULKING WHITE | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-NS84 - 052 | 26 | EXT. | Grey Caulking | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-NS84 - 053 | 26 | EXT. | CAULKING GREY | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-NS84 - 054 | 27 | EXT. | ~~Yellowish Caulking~~ Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 055 | 27 | EXT. | ↓ | NONE |
| nvironmental Detachment Charleston, SC CNC-NS84 - 056 | 28 | EXT. | Yellowish Caulking | NONE |
| nvironmental Detachment Charleston, SC CNC-NS84 - 057 | 28 | EXT. | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 058 | 29 | EXT. | Black Felt | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 059 | 29 | EXT. | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-NS84 - 060 | 30 | R-100 | Black Felt & Black Tar Sealer | NONE |



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** NS-84 **DATE:** 5/15/98

**INSPECTORS NAMES:** BUTLER / ADKINS
(PRINT)

**INSPECTOR SIGNATURE / LICENSE #:** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| nvironmental Detachment Charleston, SC CNC-NS84 - 061 | 30 | R-102 | Black Felt & Black Cut Sealer | NONE |
| nvironmental Detachment Charleston, SC CNC-NS84 - 062 | 31 | R-100 | Silver Sealer | >1% CHRYSOTILE |
| nvironmental Detachment Charleston, SC CNC-NS84 - 063 | 31 | R-101 | SILVER SEALER | >1% CHRYSOTILE |
| nvironmental Detachment Charleston, SC CNC-NS84 - 064 | 32 | R-100 | Black & Gray Sealer | 3% CHRYSOTILE |
| nvironmental Detachment Charleston, SC CNC-NS84 - 065 | 32 | R-102 | BLACK & Grey Sealer | 3% CHRYSOTILE |
| nvironmental Detachment Charleston, SC CNC-NS84 - 066 | 33 | R-100 | Black Tar & Felt | NONE |
| nvironmental Detachment Charleston, SC CNC-NS84 - 067 | 33 | R-101 | ↓ | NONE |
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SHEET 6 OF 6

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** 180 **DATE :** 4/6/98

**INSPECTORS NAMES:** BUTLER / MAY
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-180 - 001 | 1 | EXT. | Conc. Blk. Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 002 | 1 | Rm-106 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 003 | 2 | Rm-207 | Plaster | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 004 | 2 | Rm-208 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 005 | 3 | Rm-106 | Beige 12"x12" Floor Tile w/ mastic → | * TILE NOT DETERMINED NONE |
| Environmental Detachment Charleston, SC CNC-180 - 006 | 3 | ↓ | ↓ MASTIC → | * TILE NOT DETERMINED NONE |
| Environmental Detachment Charleston, SC CNC-180 - 007 | 4 | Rm-213 | Brown Coving Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 008 | 4 | Rm-215 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 009 | 5 | Rm-103 | Yellow/Brn Caulking | > 1% ACTINOLITE |
| Environmental Detachment Charleston, SC CNC-180 - 010 | 5 | Rm-112 | CAULKING ↓ | CHRYSOTILE > 1% ACTINOLITE |
| Environmental Detachment Charleston, SC CNC-180 - 011 | 6 | EXT. | white Caulking | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 012 | 6 | ↓ | ↓ | NONE |

* FLOOR TILE CANNOT be DETERMINED TO Be asbestos-FREE ON The BASIS OF PLM.

SHEET 1 OF 7

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** 180 **DATE :** 4/6/98

**INSPECTORS NAMES:** BUTLER / MAY
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-180 - 013 | 7 | H-101 | Dark Brown 9"x9" Floor Tile w/mastic | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-180 - 014 | 7 | Rm-218 | ↓ | * TILE: Not determined |
| Environmental Detachment Charleston, SC CNC-180 - 015 | 8 | Rm-106 | Black Coving Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 016 | 8 | ↓ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 017 | 9 | ↓ | TSI Piping | Amosite 40% Chrysotile 10% |
| Environmental Detachment Charleston, SC CNC-180 - 018 | 9 | ↓ | TSI | Amosite 40% Chrysotile 10% |
| Environmental Detachment Charleston, SC CNC-180 - 019 | 10 | ↓ | Conc. Blk. Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 020 | 10 | ↓ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 021 | 11 | Rm-108 | Terrazo | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 022 | 11 | ↓ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 023 | 12 | ↓ | Ceiling Tile 2'x2' | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 024 | 12 | ↓ | ↓ | NONE |

Floor
* TILE CAN NOT BE determined to BE ASBESTOS FREE ON THE BASIS OF PLM.

SHEET 2 OF 7

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

FACILITY: CNC

BUILDING #: 180 DATE: 4/6/98

INSPECTORS NAMES: BUTLER / MAY
(PRINT)

INSPECTOR SIGNATURE / LICENSE #: R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-180 - 025 | 13 | Rm-111 | Gray Cer. Tile Grout | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 026 | 13 | Rm-201 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 027 | 14 | Rm-110 | Cream Cer. Tile Grout | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 028 | 14 | Rm-205 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 029 | 15 | Rm-103 | TSI Fittings | NONE. |
| Environmental Detachment Charleston, SC CNC-180 - 030 | 15 | Rm-106 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 031 | 16 | Rm-113 | Sheetrock w/mudatape | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 032 | 16 | Rm-218 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 033 | 17 | Rm-115 | Quarry Tile Grout | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 034 | 17 | Rm-121 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 035 | 18 | Rm-119 | Cream 12"x12" Floor Tile w/mastic * | TILE: Not determined |
| Environmental Detachment Charleston, SC CNC-180 - 036 | 18 | ↓ | ↓ * | TILE: Not determined |

* FLOOR TILE CAN NOT BE DETERMINED TO BE ASBESTOS FREE ON THE BASIS OF PLM.

SHEET 3 OF 7

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

FACILITY: CNC

BUILDING #: 180 DATE: 4/6/98

INSPECTORS NAMES: BUTLER / MAY
(PRINT)

INSPECTOR SIGNATURE / LICENSE #: R. Butler 22A15

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-180 - 037 | 19 | Rm-119 | Red Rubber Mat Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 038 | 19 | ↓ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 039 | 20 | Rm-125 | Black Rubber Mat Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 040 | 20 | ↓ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 041 | 21 | M-102 | Vib. joint | NONE. |
| Environmental Detachment Charleston, SC CNC-180 - 042 | 21 | ↓ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 043 | 22 | Rm-219 | Vent Duct Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 044 | 22 | M-102 ~~M-102~~ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 045 | 23 | M-102 | Green / Black Vent Duct Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 046 | 23 | ↓ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 047 | 2A | Rm-202 | 12" x 12" Ceiling Tile | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 048 | 2A | Rm-20A | ↓ | NONE |



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** 180 **DATE :** 4/6/98

**INSPECTORS NAMES:** BUTLER / MAY
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22A15

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-180 - 049 | 25 | H-201 | white 12"x12" * Floor Tile w/mastic | Tile: Not determined |
| Environmental Detachment Charleston, SC CNC-180 - 050 | 25 | H-202 | ↓ * | Tile: Not determined |
| Environmental Detachment Charleston, SC CNC-180 - 051 | 26 | Rm-201 | Blue Cut Tile Grout | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 052 | 26 | ↓ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 053 | 27 | Rm-207 | 2'x2' Ceiling Tile | NONE. |
| Environmental Detachment Charleston, SC CNC-180 - 054 | 27 | Rm-208 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 055 | 28 | Rm-209 | Sheetrock w/vinyl wall covering | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 056 | 28 | Rm-211 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 057 | 29 | Rm-218 | Lt. Brown 9"x9" Floor Tile w/mastic | >1% Chrysotile |
| Environmental Detachment Charleston, SC CNC-180 - 058 | 29 | ↓ | Floor Tile | >1% Chrysotile |
| Environmental Detachment Charleston, SC CNC-180 - 059 | 30 | S-002 | Stairway Tread Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 060 | 30 | ↓ | ↓ | NONE |

* Floor Tile can not be determined to be asbestos free on the basis of PLM.

SHEET 5 OF 7

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

FACILITY: CNC

BUILDING #: 180 DATE: 4/6/98

INSPECTORS NAMES: BUTLER / MAY
(PRINT)

INSPECTOR SIGNATURE / LICENSE # : R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-180 - 061 | 31 | S-002 | White 12"x12" * Floor Tile w/mastic | Tile: Not determined |
| Environmental Detachment Charleston, SC CNC-180 - 062 | 31 | ↓ | ↓ * | Tile: Not determined |
| Environmental Detachment Charleston, SC CNC-180 - 063 | 32 | Ext. | Window Glazing | >1% Chrysotile |
| Environmental Detachment Charleston, SC CNC-180 - 064 | 32 | ↓ | glazing | >1% Chrysotile |
| Environmental Detachment Charleston, SC CNC-180 - 065 | 33 | ↓ | Wall Patch | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 066 | 33 | ↓ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 067 | 34 | Roof | Sealer | 3% Chrysotile |
| Environmental Detachment Charleston, SC CNC-180 - 068 | 34 | ↓ | Sealer | 3% Chrysotile |
| Environmental Detachment Charleston, SC CNC-180 - 069 | 35 | ↓ | Tar & Felt | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 070 | 35 | ↓ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 071 | 36 | ↓ | Shingle & Felt | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 072 | 36 | ↓ | ↓ | NONE |



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** 180 **DATE :** 4/6/98

**INSPECTORS NAMES:** BUTLER / MAY
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-180 - 073 | 37 | C-100 | TSI Fitting | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 074 | 37 | ↓ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 075 | 38 | | Black Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 076 | 38 | ↓ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 077 | 39 | | Soil | NONE. |
| Environmental Detachment Charleston, SC CNC-180 - 078 | 39 | ↓ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 079 | 40 | | Debris | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-180 - 080 | 40 | ↓ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 081 | 41 | Rm-112 | Foam Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 082 | 41 | ↓ | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 083 | 42 | Rm-112 | Vib. Jt. | NONE |
| Environmental Detachment Charleston, SC CNC-180 - 084 | 42 | ↓ | ↓ | NONE |



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** 290 **DATE :** 4/29/98

**INSPECTORS NAMES:** BUTLER
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-290 - 001 | 1 | Rm-100 | Conc. Block Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-290 - 002 | 1 | Rm-101 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-290 - 003 | 3 | Rm-100 | Interior Door Caulking | NONE |
| Environmental Detachment Charleston, SC CNC-290 - 004 | 3 | Rm-101 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-290 - 005 | 4 | EXT. | Red Brick Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-290 - 006 | 4 | EXT. | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-290 - 007 | 5 | EXT. | Exterior Door Caulking | NONE |
| Environmental Detachment Charleston, SC CNC-290 - 008 | 5 | EXT. | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-290 - 009 | 6 | ROOF | BLACK MASTIC Gray Sealer | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-290 - 010 | 6 | ROOF | BLACK MASTIC | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-290 - 011 | 7 | ROOF | BLACK Roof Caulking | 20% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-290 - 012 | 7 | ROOF | BLACK CAULKING | 20% CHRYSOTILE |



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** 290 **DATE :** 4/29/98

**INSPECTORS NAMES:** BUTLER
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-290 - 013 | 8 | ROOF | Black Cat & Felt | 20% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-290 - 014 | 8 | ROOF | BLACK CAT | 20% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-290 - 015 | 9 | ROOF | Tar & Felt | 25% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-290 - 016 | 9 | ROOF | TAR | 25% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-290 - 017 | 10 | C-100 | Conc. Block Sealer BLACK | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-290 - 018 | 10 | C-100 | SEALER BLACK | >1% CHRYSOTILE |
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SHEET 2 OF 2

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** 641 **DATE :** 5/7/98

**INSPECTORS NAMES:** BUTLER / NELSON
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** W. Butler 22A15

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-641 - 001 | 1 | Rm-100 | White 12"x12" Floor Tile (MASTIC) | * TILE: Not determined >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-641 - 002 | 1 | H-100 | ↓ (MASTIC) | * TILE: Not determined >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-641 - 003 | 2 | Rm-118 | Cream 12"x12" Floor Tile | * TILE: Not determined |
| Environmental Detachment Charleston, SC CNC-641 - 004 | 2 | H-100 | ↓ | * TILE: Not determined |
| Environmental Detachment Charleston, SC CNC-641 - 005 | 3 | Rm-100 | Black Coving Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 006 | 3 | Rm-105 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 007 | 4 | H-100 | Sheetrock w/ mud & tape | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 008 | 4 | Rm-120 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 009 | 5 | H-100 | Stairtread Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 010 | 5 | H-100 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 011 | 6 | Rm-115 | Ceiling Tile Long Groove | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 012 | 6 | Rm-118 | ↓ | NONE |

* FLOOR TILE CAN NOT BE DETERMINED TO BE ASBESTOS-FREE ON THE BASIS OF PLM.

SHEET 1 OF 4

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

FACILITY: CNC

BUILDING #: 641 DATE: 5/7/98

INSPECTORS NAMES: BUTLER / NELSON
(PRINT)

INSPECTOR SIGNATURE / LICENSE # : W. R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-641 - 013 | 7 | Rm-116 | Ceiling Tile Sheet Grove | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 014 | 7 | Rm-123 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 015 | 8 | Rm-125 | Ceiling Tile Minute | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 016 | 8 | Rm-127 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 017 | 9 | Rm-112 | Brn. Coving Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 018 | 9 | Rm-101 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 019 | 10 | Rm-128 | Conc. Blk. Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 020 | 10 | Rm-120 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 021 | 11 | Rm-108 | Car. Tile 2" x 2" Grout | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 022 | 11 | Rm-108 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 023 | 12 | Rm-108 | Car. Tile 4" x 6" Grout | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 024 | 12 | Rm-108 | ↓ | NONE |



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** 641 **DATE :** 5/7/98

**INSPECTORS NAMES:** BUTLER / NELSON
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-641 - 025 | 13 | Rm-108 | Caulking | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 026 | 13 | EXT | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 027 | 14 | RM-123 | Blue 12"x12" Floor Tile * | TILE: Not determined |
| Environmental Detachment Charleston, SC CNC-641 - 028 | 14 | H-103 | ↓ * | TILE: NOT determined |
| Environmental Detachment Charleston, SC CNC-641 - 029 | 15 | EXT | Red Brick Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 030 | 15 | EXT | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 031 | 16 | Rm-128 | TSI Fitting | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 032 | 16 | Rm-128 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 033 | 17 | Rm-128 | TSI piping | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 034 | 17 | Rm-128 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 035 | 18 | Rm-128 | Gray Vent Duct Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 036 | 18 | Rm-128 | ↓ | NONE |

* FLOOR TILE CAN NOT BE determined TO BE ASBESTOS-FREE ON THE BASIS OF P.L.M.

SHEET 3 OF 4

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** 641 **DATE :** 5/7/98

**INSPECTORS NAMES:** BUTLER / NELSON
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-641 - 037 | 19 | Rm-128 | Brown Vent Duct Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 038 | 19 | Rm-128 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 039 | 20 | Rm-128 | white Vent Duct Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 040 | 20 | Rm-128 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 041 | 21 | Rm-128 | Vib. Joint | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 042 | 21 | Rm-128 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 043 | 22 | Rm-128 | Vent Duct Silver Tape | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 044 | 22 | Rm-128 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 045 | 23 | Ext. | Window Glazing | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 046 | 23 | Ext. | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-641 - 047 | 24 | Roof | Silver Sealer | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-641 - 048 | 24 | Roof | ↓ Silver Sealer | >1% CHRYSOTILE |



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

FACILITY: CNC

BUILDING #: 674 DATE: 5/8/98

INSPECTORS NAMES: BUTLER / NELSON
(PRINT)

INSPECTOR SIGNATURE / LICENSE #: R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-674 - 001 | 1 | Rm-100 | Black Coving Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 002 | 1 | Rm-101 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 003 | 2 | Rm-101 | Sheetrock w/mud & tape | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 004 | 2 | Rm-102 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 005 | 3 | Rm-111 | Ceiling Tile | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 006 | 3 | Rm-112 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 007 | 4 | Rm-103 | Cer. Tile Grout 1"x1" | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 008 | 4 | Rm-104 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 009 | 5 | Rm-103 | Cer. Tile Grout 4"x4" | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 010 | 5 | Rm-~~100~~ 10A RB | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 011 | 6 | Rm-105 | Cream 12"x12" Floor Tile | * TILE: Not determined |
| Environmental Detachment Charleston, SC CNC-674 - 012 | 6 | Rm-108 | ↓ | * TILE: Not determined |

* FLOOR TILE CAN NOT BE determined TO BE ASBESTOS FREE ON THE BASIS OF PLM.

SHEET 1 OF 3

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

FACILITY: CNC

BUILDING #: 674 DATE: 5/8/98

INSPECTORS NAMES: BUTLER / NELSON
(PRINT)

INSPECTOR SIGNATURE / LICENSE # : R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-674 - 013 | 7 | Rm-106 | Brown Coving Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 014 | 7 | Rm-107 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 015 | 8 | Rm-100 | Pinkish Sink white undercoating | 3% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-674 - 016 | 8 | Rm-100 | ↓ Pinkish white | 3% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-674 - 017 | 9 | Rm-110 | white 12"x12" Floor Tile * | TILE: Not determined |
| Environmental Detachment Charleston, SC CNC-674 - 018 | 9 | Rm-110 | ↓ * | TILE: Not determined |
| Environmental Detachment Charleston, SC CNC-674 - 019 | 10 | Rm-114 | Gray 12"x12" Floor Tile * | TILE: Not determined |
| Environmental Detachment Charleston, SC CNC-674 - 020 | 10 | Rm-114 | ↓ * | TILE: Not determined |
| Environmental Detachment Charleston, SC CNC-674 - 021 | 11 | Rm-113 | Vent Duct white Mastic | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-674 - 022 | 11 | Rm-114 | ↓ white mastic | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-674 - 023 | 12 | Rm-115 | Vib. Joint | ASSUMED! NO SAMPLES TAKEN |
| Environmental Detachment Charleston, SC CNC-674 - 024 | 12 | Rm-115 | ↓ | R. Butler 5/8/98 |

* FLOOR TILE CAN NOT BE determined TO BE ASBESTOS FREE ON THE BASIS OF PLM.

SHEET 2 OF 3

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** 674 **DATE :** 5/8/98

**INSPECTORS NAMES:** BUTLER / NELSON
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-674 - 025 | 13 | EXT. | Red Brick Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 026 | 13 | EXT. | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 027 | 14 | ROOF | Black Cat Sealer | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 028 | 14 | ROOF | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-674 - 029 | 15 | ROOF | Tar & Felt | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-674 - 030 | 15 | ROOF | TAR ↓ | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-674 - 031 | 16 | ROOF | Gray Sealer & Felt | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-674 - 032 | 16 | ROOF | GRAY SEALER ↓ | >1% CHRYSOTILE |
| | | | | |
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SHEET 3 OF 3

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** 1177 **DATE :** 4/27/98

**INSPECTORS NAMES:** NELSON / BUTLER
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-1177 - 001 | 1 | Rm-104 | Floor Tile w/mastic white | * Tile: Not determined |
| Environmental Detachment Charleston, SC CNC-1177 - 002 | 1 | Rm-107 | ↓ | * Tile: Not determined |
| Environmental Detachment Charleston, SC CNC-1177 - 003 | 2 | Rm-104 | Floor Tile w/mastic Green | * Tile: Not determined |
| Environmental Detachment Charleston, SC CNC-1177 - 004 | 2 | Rm-107 | ↓ | * Tile: Not determined |
| Environmental Detachment Charleston, SC CNC-1177 - 005 | 3 | Rm-102 | Ceiling Tile | NONE. |
| Environmental Detachment Charleston, SC CNC-1177 - 006 | 3 | Rm-103 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 007 | 4 | Rm-105 | Floor Tile w/mastic Green | * Tile: Not determined > 1% Chrysotile |
| Environmental Detachment Charleston, SC CNC-1177 - 008 | 4 | Rm-105 | ↓ mastic | * Tile: Not determined > 1% Chrysotile |
| Environmental Detachment Charleston, SC CNC-1177 - 009 | 5 | Rm-105 | Plaster | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 010 | 5 | Rm-105 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 011 | 6 | Rm-106 | Caulking | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 012 | 6 | Ext | ↓ | NONE |

* Floor Tile can not be determined to be Asbestos-Free on the basis of PLM.



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** 1177 **DATE :** 4/27/98

**INSPECTORS NAMES:** NELSON / BUTLER
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-1177 - 013 | 7 | Rm-106 | Ceiling Tile | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 014 | 7 | Rm-106 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 015 | 8 | Rm-107 | Sheetrock w/mud & tape | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 016 | 8 | Rm-107 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 017 | 9 | Rm-108 | MASTIC MATERIAL Sink undercoating | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1177 - 018 | 9 | Rm-108 | ↓ MASTIC MATERIAL | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1177 - 019 | 10 | Rm-109 | Vibration Joint | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 020 | 10 | Rm-109 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 021 | 11 | Rm-109 | Red Brick Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 022 | 11 | Rm-109 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 023 | 12 | EXT | Conc. Blk. Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 024 | 12 | EXT | ↓ | NONE |



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** 1177 **DATE :** 4/27/98

**INSPECTORS NAMES:** NELSON / BUTLER
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22A15

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-1177 - 025 | 13 | EXT | Cinder Blk. Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 026 | 13 | EXT | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 027 | 14 | EXT | Window Glazing | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1177 - 028 | 14 | EXT | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 029 | 15 | ROOF | Roofing Canvas | NONE. |
| Environmental Detachment Charleston, SC CNC-1177 - 030 | 15 | ROOF | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 031 | 16 | ROOF | Black Cat Sealer | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1177 - 032 | 16 | ROOF | ↓ BLACK CAT SEALER | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1177 - 033 | 17 | ROOF | Tar & Felt | NONE |
| Environmental Detachment Charleston, SC CNC-1177 - 034 | 17 | ROOF | ↓ | NONE |
| | | | | |
| | | | | |

SHEET 3 OF 3

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

FACILITY: CNC

BUILDING #: 1177 DATE : 4-27-98

INSPECTORS NAMES: Butler
(PRINT)

INSPECTOR SIGNATURE / LICENSE # :

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| CNC-1177-015 | | | SHEETROCK w/mud & TAPE | No Asbestos Detected |
| CNC-1177-030 | | | ROOFING CANVAS | No Asbestos Detected |
| | | | John C Barnes | |

SHEET _____ OF _____

# ASBESTOS LABORATORY SAMPLE LOG

FACILITY: CNC

BUILDING #: 1346 DATE: 5/12/98

INSPECTORS NAMES: BUTLER / ADKINS
(PRINT)

INSPECTOR SIGNATURE / LICENSE #: R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-1346 - 001 | 1 | Rm-106 | white 12"x12" Floor Tile w/ Mastic | * Tile: Not determined |
| Environmental Detachment Charleston, SC CNC-1346 - 002 | 1 | Rm-100 | ↓ | * Tile: Not determined |
| Environmental Detachment Charleston, SC CNC-1346 - 003 | 2 | Rm H-100 | Maroon 12"x12" Floor Tile w/ Mastic | * Tile: Not determined |
| Environmental Detachment Charleston, SC CNC-1346 - 004 | 2 | Rm-117 | ↓ | * Tile: Not determined |
| Environmental Detachment Charleston, SC CNC-1346 - 005 | 3 | Rm-100 ~~Rm-100~~ | 4" Maroon Coving Yellow Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 006 | 3 | Rm-106 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 007 | 4 | Rm 100 | Conc. Blk. Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 008 | 4 | Rm-103 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 009 | 5 | Rm 117 | Sheetrock w/ mud & tape | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 010 | 5 | Rm 103 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 011 | 5 | Rm-116 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 012 | 6 | Rm-100 | Caulking Yellow | NONE |

* FLOOR TILE CAN NOT BE DETERMINED TO BE ASBESTOS FREE ON THE BASIS OF PLM.

SHEET 1 OF 6

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

FACILITY: CNC

BUILDING #: 1346 DATE: 5/12/98

INSPECTORS NAMES: BUTLER / ADKINS
(PRINT)

INSPECTOR SIGNATURE / LICENSE #: R. Butler 22A15

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-1346 - 013 | 6 | Rm-100 | Caulking Yellow | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 014 | 7 | Rm-100 | Caulking Grey | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1346 - 015 | 7 | Rm-100 | GREY CAULKING | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1346 - 016 | 8 | Rm-100 | 4" Black Coving Brown Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 017 | 8 | Rm-100 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 018 | 9 | Rm - 103 | Ceiling Tile | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 019 | 9 | Rm 100 | | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 020 | 10 | Rm - 116 | | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 021 | 10 | Rm 116 | | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 022 | 11 | Rm - ~~H2~~ 106 | | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 023 | 11 | Rm H3 106 | | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 024 | 12 | Rm-100 | Tan 9"x9" Floor Tile w/Mastic | * TILE: NOT determined |

* Floor Tile can not be determined to be asbestos free on the basis of PLM.

SHEET 2 OF 6

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

FACILITY: CNC

BUILDING #: 1346 DATE: 5/12/98

INSPECTORS NAMES: BUTLER / ADKINS
(PRINT)

INSPECTOR SIGNATURE / LICENSE #: R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-1346 - 025 | 12 | Rm-117 | Tan 9"x9" Floor Tile w/Mastic * | TILE: Not determined |
| Environmental Detachment Charleston, SC CNC-1346 - 026 | 13 | Rm-103 | 4" Brown Coving Brown Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 027 | 13 | Rm-102 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 028 | 14 | Rm-102 | Brown Carpet Mastic | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 029 | 14 | Rm-102 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 030 | 15 | Rm-103 | BACK Sheet Flooring w/Mastic | 30% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1346 - 031 | 15 | Rm-103 | BACK Sheet Flooring | 30% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1346 - 032 | 16 | Rm-104 | Grout. 1"x1" Cut. Tile | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 033 | 16 | Rm-105 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 034 | 17 | Rm-104 | Grout 4"x4" Cut Tile | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 035 | 17 | Rm-105 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 036 | 18 | Rm 115 | Tan 12"x12" Floor Tile w/Mastic * | TILE: Not determined |

* FLOOR TILE CAN NOT BE DETERMINED TO BE ASBESTOS FREE ON THE BASIS OF PLM.

SHEET 3 OF 6

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

FACILITY: CNC

BUILDING #: 1346 DATE: 5/12/98

INSPECTORS NAMES: BUTLER / ADKINS
(PRINT)

INSPECTOR SIGNATURE / LICENSE # : R. Butler 22A15

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-1346 - 037 | 18 | Rm - 117 | Tan 12" x 12" Floor Tile w/ Mastic * | Tile: Not determined |
| Environmental Detachment Charleston, SC CNC-1346 - 038 | 19 | Rm - 107 | Pea Green 12"x12" Floor Tile w/ Mastic * | Tile: Not determined > 1% Chrysotile |
| Environmental Detachment Charleston, SC CNC-1346 - 039 | 19 | Rm - 106 | Mastic * | Tile: Not determined > 1% Chrysotile |
| Environmental Detachment Charleston, SC CNC-1346 - 040 | 20 | Rm - 108 | white 12" x 12" Floor Tile w/ Mastic * | Tile: Not determined > 1% Chrysotile |
| Environmental Detachment Charleston, SC CNC-1346 - 041 | 20 | Rm - 109 | mastic * | Tile: Not determined NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 042 | 21 | Rm - 111 | TSI | Amosite = 3% Chrysotile > 1% |
| Environmental Detachment Charleston, SC CNC-1346 - 043 | 21 | Rm - 108 | TSI | Amosite = 3% Chrysotile > 1% |
| Environmental Detachment Charleston, SC CNC-1346 - 044 | 21 | Rm - 110 | TSI | Amosite = 3% Chrysotile > 1% |
| Environmental Detachment Charleston, SC CNC-1346 - 045 | 22 | Rm 112 | Ceiling Tile | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 046 | 22 | Rm 113 | | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 047 | 23 | Ext | Red Brick Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 048 | 23 | Ext | | NONE |

* Floor Tile can not be determined to be asbestos free on the basis of PLM.

SHEET 4 OF 6

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

FACILITY: CNC

BUILDING #: 1346 DATE: 5/12/98

INSPECTORS NAMES: BUTLER / ADKINS
(PRINT)

INSPECTOR SIGNATURE / LICENSE # : R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-1346 - 049 | 2A | EXT | Window Glazing | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 050 | 2A | EXT | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 051 | 25 | EXT | Caulking | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1346 - 052 | 25 | EXT | CAULKING | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1346 - 053 | 26 | EXT | Transite Panel | 80% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1346 - 054 | 26 | EXT | TRANSITE | 80% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1346 - 055 | 27 | R-100 | Caulking | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 056 | 27 | R-101 | | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 057 | 27 | R-105 | Silver Coating | 5% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1346 - 058 | 28 | R-102 | Black Cat Sealer | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 059 | 28 | R-107 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 060 | 29 | R-101 | Silver Sealer | NONE |



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** 1346 **DATE :** 5/12/98

**INSPECTORS NAMES:** BUTLER / ADKINS
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-1346 - 061 | 29 | R-101 | Silver Sealer | NONE ~~CHRYSOTILE~~ 5-19-98 |
| Environmental Detachment Charleston, SC CNC-1346 - 062 | 30 | R-101 | Gray & Black Sealer | 10% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1346 - 063 | 30 | R-103 | Grey & Black MATL | 10% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1346 - 064 | 30 | R-103 | Grey & Black MATL | 10% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1346 - 065 | 31 | R-102 | Tar & Shingle | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 066 | 31 | R-102 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 067 | 32 | R-104 | Felt & Shingles | NONE |
| Environmental Detachment Charleston, SC CNC-1346 - 068 | 32 | R-104 | ↓ | NONE |
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SHEET 6 OF 6

SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

FACILITY: CNC

BUILDING #: 1737 DATE : 4/6/98

INSPECTORS NAMES: BUTLER
(PRINT)

INSPECTOR SIGNATURE / LICENSE # : R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-1737 - 001 | 1 | Rm-100 | Cer. Tile Grout | NONE |
| Environmental Detachment Charleston, SC CNC-1737 - 002 | 1 | Rm-102 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1737 - 003 | 2 | Rm-100 | Conc. Block Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-1737 - 004 | 2 | Rm-101 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1737 - 005 | 3 | Rm-100 | TSI (FITTING) | 2% Amosite |
| Environmental Detachment Charleston, SC CNC-1737 - 006 | 3 | Rm-102 | ↓ TSI BROWN | 2% Amosite |
| Environmental Detachment Charleston, SC CNC-1737 - 007 | 4 | Rm-100 | TSI (piping) | NONE |
| Environmental Detachment Charleston, SC CNC-1737 - 008 | 4 | Rm-102 | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1737 - 009 | 5 | Rm-103 | TSI WHITE (tank) | NONE |
| Environmental Detachment Charleston, SC CNC-1737 - 010 | 5 | Rm-103 | ↓ BROWNISH TSI | 15% Amosite |
| Environmental Detachment Charleston, SC CNC-1737 - 011 | 6 | EXT. | Red Brick Mortar | NONE |
| Environmental Detachment Charleston, SC CNC-1737 - 012 | 6 | EXT. | ↓ | NONE |



SMPLOG-98

# ASBESTOS LABORATORY SAMPLE LOG

**FACILITY:** CNC

**BUILDING #:** 1737 **DATE :** 4/6/98

**INSPECTORS NAMES:** BUTLER
(PRINT)

**INSPECTOR SIGNATURE / LICENSE # :** R. Butler 22415

| SAMPLE NO. | HOMO # | SAMPLE LOCATION (Room #, Floor #, Etc.) | SAMPLE DESCRIPTION | RESULTS |
|---|---|---|---|---|
| Environmental Detachment Charleston, SC CNC-1737 - 013 | 7 | EXT. | Gray Caulking | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1737 - 014 | 7 | EXT. | GRAY CAULKING | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1737 - 015 | 8 | EXT. | White Caulking | NONE |
| Environmental Detachment Charleston, SC CNC-1737 - 016 | 8 | EXT. | ↓ | NONE |
| Environmental Detachment Charleston, SC CNC-1737 - 017 | 9 | ROOF | Shingle & Sealer | 25% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1737 - 018 | 9 | ROOF | SEALER BLACK | 25% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1737 - 019 | 10 | ROOF | Tar & Felt | >1% CHRYSOTILE |
| Environmental Detachment Charleston, SC CNC-1737 - 020 | 10 | ROOF | TAR | >1% CHRYSOTILE |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

SHEET 2 OF 2

SMPLOG-98

Westmont, NJ (609) 858-1260 | Piscataway, NJ (908) 981-0550 | Carle Place, NY (516) 997-7251 | Atlanta, GA (770) 988-9160 | Melbourne, FL (407)253-4224 | Ann Arbor, MI (313) 668-6810 | San Mateo, CA (415) 570-5401

EMSL

**General Engineering Laboratories, Inc.**
**Attention: Karen Blakeney**
P.O. Box 30712
Charleston, SC 29417

Friday, June 12, 1998

Reference No: GA981411

# Asbestos Analysis of Bulk Samples Performed by Transmission Electron Microscopy (TEM) Chatfield Method*

**Project: NPWC00197**

| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
|---|---|---|---|---|
| SPORT 0696-1 | 14.2 | 80.5 | None Detected | 0 |
| SPORT 0696-2 | 17.6 | 70.8 | None Detected | 0 |
| SPORT 0696-3 | 13.9 | 78.9 | Chrysotile | 0.5 |
| SPORT 0696-4 | 16.2 | 76.6 | Chrysotile | 0.5 |
| SPORT 0696-5 | 15.5 | 79.3 | Chrysotile | 0.9 |
| SPORT 0696-6 | 28.7 | 17.1 | Chrysotile | 47.5 |
| SPORT 0696-7 | 28.1 | 17.8 | Chrysotile | 44.6 |
| SPORT 0696-8 | 13.8 | 82.2 | None Detected | 0 |
| SPORT 0696-9 | 25.1 | 26.5 | Chrysotile | 26.6 |
| SPORT 0696-10 | 11.1 | 41.4 | None Detected | 0 |

Laboratory Manager
Rachel Travis

*Results near 1% are not reliable by this method and a more accurate SEM method is recommended.
**To ensure results, EMSL recommends the use of SEM as a quality control measure. Without SEM QC the current diagnosis error rate for TEM/NOB and TEM/Chatfield occurs at a frequency of approximately 1-2% of samples analyzed. Without SEM QC, EMSL is not responsible for errors which could have been prevented with SEM QC.



06-12-1998 16:05 8037661178 GENERAL ENGINEERIN P.02

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EMSL

**General Engineering Laboratories, Inc.**
**Attention: Karen Blakeney**
P.O. Box 30712
Charleston, SC 29417

Friday, June 12, 1998

Reference No: GA981411

# Asbestos Analysis of Bulk Samples Performed by Transmission Electron Microscopy (TEM) Chatfield Method*

**Project: NPWC00197**

| Sample ID | Dry Weight of Original Sample | Dry Weight of Asbestos Containing Material | Asbestos Type | TEM Positive** Concentration |
|---|---|---|---|---|
| SPORT 0696-11 | 15.3 | 82.8 | None Detected | 0 |
| SPORT 0696-12 | 13.7 | 84.3 | None Detected | 0 |
| SPORT 0696-13 | 23.1 | 64.0 | Chrysotile | 4.9 |
| SPORT 0696-14 | 21.9 | 68.9 | Chrysotile | 4.2 |
| SPORT 0696-15 | 12.8 | 81.8 | None Detected | 0 |
| SPORT 0696-16 | 17.2 | 80.3 | Chrysotile | Trace |
| SPORT 0696-17 | 19.6 | 63.9 | None Detected | 0 |
| SPORT 0696-18 | 20.8 | 61.9 | None Detected | 0 |
| SPORT 0696-19 | 20.0 | 77.6 | None Detected | 0 |
| SPORT 0696-20 | 20.3 | 76.5 | None Detected | 0 |

Laboratory Manager
Rachel Travis

*Results near 1% are not reliable by this method and a more accurate SEM method is recommended.
**To ensure results, EMSL recommends the use of SEM as a quality control measure. Without SEM QC the current diagnosis error rate for TEM/NOB and TEM/Chatfield occurs at a frequency of approximately 1-2% of samples analyzed. Without SEM QC, EMSL is not responsible for errors which could have been prevented with SEM QC.
NVLAP# 101048-1

Westmont, NJ (609) 858-1260 | Piscataway, NJ (908) 981-0550 | Carle Place, NY (516) 997-7251 | Atlanta, GA (770) 988-9160 | Melbourne, FL (407)253-4224 | Ann Arbor, MI (313) 668-6810 | San Mateo, CA (415) 570-6401
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**General Engineering Laboratories, Inc.**
**Attention: Karen Blakeney**
P.O. Box 30712
Charleston, SC 29417

Friday, June 12, 1998

Reference No: GA981411

# Asbestos Analysis of Bulk Samples Performed by Transmission Electron Microscopy (TEM) Chatfield Method*

**Project: NPWC00197**

| Sample ID | % Weight of Organic Material | % Weight of Soluble Material | Asbestos Type | TEM Results** % Asbestos |
|---|---|---|---|---|
| SPORT 0696-21 | 26.4 | 64.1 | None Detected | 0 |
| SPORT 0696-22 | 24.5 | 53.8 | None Detected | 0 |
| SPORT 0696-23 | 23.2 | 59.7 | None Detected | 0 |
| SPORT 0696-24 | 21.2 | 46.1 | None Detected | 0 |
| SPORT 0696-25 | 17.9 | 75.0 | None Detected | 0 |
| SPORT 0696-26 | 20.3 | 75.2 | None Detected | 0 |
| SPORT 0696-27 | 26.0 | 45.2 | None Detected | 0 |
| SPORT 0696-28 | 27.8 | 46.1 | Chrysotile | 18.3 |
| SPORT 0696-29 | 26.7 | 26.7 | Chrysotile | 32.6 |
| SPORT 0696-30 | 26.8 | 55.5 | None Detected | 0 |

Laboratory Manager
Rachel Travis

*Results near 1% are not reliable by this method and a more accurate SEM method is recommended.
**To ensure results, EMSL recommends the use of SEM as a quality control measure. Without SEM QC the current diagnostic error rate for TEM/NOB and TEM/Chatfield occurs at a frequency of approximately 1-2% of samples analyzed. Without SEM QC, EMSL is not responsible for errors which could have been prevented with SEM QC.
NVLAP# 101048-1



06-12-1998 16:05 8037661178 GENERAL ENGINEERIN P.04

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EMSL

**General Engineering Laboratories, Inc.**
**Attention: Karen Blakeney**
**P.O. Box 30712**
**Charleston, SC 29417**

**Friday, June 12, 1998**

**Reference No: GA981411**

# Asbestos Analysis of Bulk Samples Performed by Transmission Electron Microscopy (TEM) Chatfield Method*

**Project: NPWC00197**

| Sample | % Weight Asbestos | % Weight Non-Asbestos Fibrous Material | Asbestos Type | TEM Results* % Asbestos |
|---|---|---|---|---|
| SPORT 0696-31 | 14.7 | 75.7 | Chrysotile | 5.5 |
| SPORT 0696-32 | 11.3 | 85.7 | None Detected | 0 |
| SPORT 0696-33 | 23.3 | 50.4 | Chrysotile | 16.4 |
| SPORT 0696-34 | 15.4 | 74.6 | Chrysotile | 4.7 |
| SPORT 0696-35 | 10.5 | 80.6 | None Detected | 0 |
| SPORT 0696-36 | 5.9 | 93.2 | None Detected | 0 |
| SPORT 0696-37 | 19.1 | 62.6 | None Detected | 0 |
| SPORT 0696-38 | 17.2 | 69.8 | Chrysotile | 4.9 |
| SPORT 0696-39 | 14.3 | 74.1 | Chrysotile | 3.2 |
| SPORT 0696-40 | 12.3 | 58.7 | None Detected | 0 |

Laboratory Manager
Rachel Travis

*Results near 1% are not reliable by this method and a more accurate SEM method is recommended.
**To ensure results, EMSL recommends the use of SEM as a quality control measure. Without SEM QC the current diagnosis error rate for TEM/NOB and TEM/Chatfield occurs at a frequency of approximately 1-2% of samples analyzed. Without SEM QC, EMSL is not responsible for errors which could have been prevented with SEM QC.
NVLAP# 101043-1



06-12-1998 16:07 8037561178 GENERAL ENGINEERIN P.05

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**Attention: Karen Blakeney**
P.O. Box 30712
Charleston, SC 29417

Friday, June 12, 1998

Reference No: GA981411

# Asbestos Analysis of Bulk Samples Performed by Transmission Electron Microscopy (TEM) Chatfield Method*

**Project: NFWC00197**

| Sample | % Weight* | % Weight of Acid Insoluble Material | Asbestos Type | TEM Result** % Asbestos |
|---|---|---|---|---|
| SPORT 0696-41 | 13.1 | 85.5 | None Detected | 0 |
| SPORT 0696-42 | 9.4 | 89.8 | None Detected | 0 |
| SPORT 0696-43 | 8.3 | 90.2 | None Detected | 0 |
| SPORT 0696-44 | 12.8 | 79.4 | None Detected | 0 |
| SPORT 0696-45 | 12.9 | 50.7 | None Detected | 0 |
| SPORT 0696-46 | 27.5 | 29.0 | Chrysotile | 31.5 |
| SPORT 0696-47 | 13.1 | 81.3 | Chrysotile | 0.1 |
| SPORT 0696-48 | 26.8 | 6.2 | Chrysotile | 55.3 |
| SPORT 0696-49 | 24.2 | 2.8 | Chrysotile | 67.5 |
| SPORT 0696-50 | 30.8 | 11.0 | Chrysotile | 48.0 |

Laboratory Manager
Rachel Travis

*Results near 1% are not reliable by this method and a more accurate SEM method is recommended.
**To ensure results, EMSL recommends the use of SEM as a quality control measure. Without SEM QC the current diagnosis error rate for TEM/NOB and TEM/Chatfield occurs at a frequency of approximately 1-2% of samples analyzed. Without SEM QC, EMSL is not responsible for errors which could have been prevented with SEM QC.



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EMSL

**General Engineering Laboratories, Inc.**
**Attention: Karen Blakeney**
P.O. Box 30712
Charleston, SC 29417

Friday, June 12, 1998

Reference No: GA981411

# Asbestos Analysis of Bulk Samples Performed by Transmission Electron Microscopy (TEM) Chatfield Method*

**Project: NPWC00197**

| Sample | % Volume | % Weight Asbestos | Fibers | SEM Results** |
|---|---|---|---|---|
| SPORT 0696-51 | 31.2 | 34.1 | Chrysotile | 26.0 |
| SPORT 0696-52 | 17.0 | 74.9 | Chrysotile | 0.1 |
| SPORT 0696-53 | 13.9 | 78.8 | None Detected | 0 |
| SPORT 0696-54 | 15.9 | 73.4 | None Detected | 0 |
| SPORT 0696-55 | 15.7 | 50.1 | None Detected | 0 |
| SPORT 0696-56 | 19.2 | 52.5 | None Detected | 0 |
| Green Floor Tile SPORT 0696-57 A | 14.2 | 63.8 | Chrysotile | 1.6 |
| Red Floor Tile SPORT 0696-57 B | 15.8 | 83.2 | None Detected | 0 |
| Black Floor Tile SPORT 0696-57 C | 28.0 | 47.7 | Chrysotile | 9.7 |
| Red Floor Tile SPORT 0696-58 A | 14.3 | 82.8 | None Detected | 0 |

Laboratory Manager
Rachel Travis

*Results near 1% are not reliable by this method and a more accurate SEM method is recommended.
**To ensure results, EMSL recommends the use of SEM as a quality control measure. Without SEM QC the current diagnosis error rate for TEM/NOB and TEM/Chatfield occurs at a frequency of approximately 1-2% of samples analyzed. Without SEM QC, EMSL is not responsible for errors which could have been prevented with SEM QC.
NVLAP# 101048-1



06-12-1998 16:08 8037661178 GENERAL ENGINEERIN P.07

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EMSL

**General Engineering Laboratories, Inc.**
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Charleston, SC 29417

Friday, June 12, 1998

Reference No: GA981411

# Asbestos Analysis of Bulk Samples Performed by Transmission Electron Microscopy (TEM) Chatfield Method*

**Project: NPWC00197**

| Sample ID TEM | % Asbestos by Volume | % Non-Asbestos by Volume | Asbestos Type | TEM Results % Asbestos |
|---|---|---|---|---|
| Green Floor Tile SPORT 0696-58 B | 9.1 | 89.0 | None Detected | 0 |
| SPORT 0696-59 | 14.6 | 83.0 | None Detected | 0 |
| SPORT 0696-60 | 24.6 | 11.7 | Chrysotile | 46.2 |
| SPORT 0696-61 | 24.9 | 25.2 | Chrysotile | 38.7 |
| SPORT 0696-62 | 15.6 | 80.9 | None Detected | 0 |
| SPORT 0696-63 | 18.2 | 68.0 | Chrysotile | 5.8 |
| SPORT 0696-64 | 14.1 | 84.4 | None Detected | 0 |
| SPORT 0696-65 | 13.6 | 84.6 | None Detected | 0 |
| SPORT 0696-66 | 15.0 | 55.5 | None Detected | 0 |
| SPORT 0696-67 | 14.6 | 79.3 | None Detected | 0 |

Laboratory Manager
Rachel Travis

*Results near 1% are not reliable by this method and a more accurate SEM method is recommended.
**To ensure results, EMSL recommends the use of SEM as a quality control measure. Without SEM QC the current diagnosis error rate for TEM/NOB and TEM/Chatfield occurs at a frequency of approximately 1-2% of samples analyzed. Without SEM QC, EMSL is not responsible for errors which could have been prevented with SEM QC.



06-12-1998 16:08 8037661178 GENERAL ENGINEERIN P.08

# ASBESTOS

# CHAIN OF CUSTODY FORM

**FACILITY:** CNC **BUILDING #:** NS-27

**INSPECTOR'S NAME(S):** BUTLER / ~~CHAPLIN~~ RB **DATE :** 4/28/98
(PRINT)

**TOTAL NUMBER OF SAMPLES RELINQUISHED:** 32

| Sample #s | Relinquished by; | Received by; | Date |
|---|---|---|---|
| CNC-NS27-001 THRU CNC-NS27-032 | R. Butler | Jeremy L. Smith | 4/29/98 |
| | | | |
| | | | |

**Additional Information / Comments**

## ANALYSIS

| Analysis Completed | | Sample #s |
|---|---|---|
| Authenticated by: Jeremy L. Smith | Date 4/30 | 001 thru 032 |
| Authenticated by: | Date | |
| Authenticated by: | Date | |

>Identification is determined by Polarized Light Microscopy and Dispersion Staining<

**Notify of Results:** Moltzen **Phone** 743-6777 Ext-238

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE
NORTH CHARLESTON, SC 29405-2106
(803) 743-6777

# ASBESTOS
# CHAIN OF CUSTODY FORM

**FACILITY:** Charleston Naval Complex **BUILDING #:** X-54

**INSPECTOR'S NAME(S):** Butler- Adkins (PRINT) **DATE :** 5/14/98

**TOTAL NUMBER OF SAMPLES RELINQUISHED:** 54

| Sample #s | Relinquished by; | Received by; | Date |
|---|---|---|---|
| CNC-X54-001 THRU CNC-X54-054 | R. Butler | J. J. Smith | 5-14-98 |
| | | | |
| | | | |

**Additional Information / Comments**

## ANALYSIS

**Analysis Completed**

**Sample #s**

CNC-X54-001 THRU 014
CNC-X54-017 & 018
CNC-X54-021 THRU 024
CNC-X54-027 THRU 030
CNC-X54-034 THRU 054
CNC-X54-015 & 016, 019 & 020, 025 & 026, 031 THRU 033

**Authenticated by;** W. E. May **Date** 5/19/98

**Authenticated by;** W. E. May **Date** 5/19/98

**Authenticated by;** Jimmy L. Smith **Date** 5/19/98

*Identification is determined by Polarized Light Microscopy and Dispersion Staining*

**Notify of Results:** McLeod **Phone** 743-6777 EXT - 238

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE
NORTH CHARLESTON, SC 29405-2106
(803) 743-6777

# ASBESTOS
# CHAIN OF CUSTODY FORM

**FACILITY:** Charleston Naval Complex **BUILDING #:** NS-84

**INSPECTOR'S NAME(S):** Butler- Adkins (PRINT) **DATE :** 5/18/98

**TOTAL NUMBER OF SAMPLES RELINQUISHED:** 67

| Sample #s | Relinquished by; | Received by; | Date |
|---|---|---|---|
| CNC-NS84-001 THRU CNC-NS84-067 | R. Butler | W.E. May | 5/18/98 |
| | | | |
| | | | |

**Additional Information / Comments**

## ANALYSIS

**Analysis Completed** **Sample #s** CNC

**Authenticated by;** Jeremy L. Smith **Date** 5/25/98 B-NS-84-001 THRU 067

**Authenticated by;** **Date**

**Authenticated by;** **Date**

**>Identification is determined by Polarized Light Microscopy and Dispersion Staining<**

**Notify of Results:** Moltzen **Phone** 743-6777 Ext-238

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE
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(803) 743-6777

# ASBESTOS
# CHAIN OF CUSTODY FORM

**FACILITY:** CNC **BUILDING #:** 180

**INSPECTOR'S NAME(S):** BUTLER / MAY **DATE :** 4/6/98
(PRINT)

**TOTAL NUMBER OF SAMPLES RELINQUISHED:** 84

| Sample #s | Relinquished by; | Received by; | Date |
|---|---|---|---|
| CNC-180-001 THRU CNC-180-084 | R. Butler | W. E. May | 5/6/98 |
| | | | |
| | | | |

**Additional Information / Comments**

## ANALYSIS

**Analysis Completed** **Sample #s**

**Authenticated by;** Jimmy L. Smith **Date** 5-7-98 CNC B-180-001 THRU 084

**Authenticated by;** **Date**

**Authenticated by;** **Date**

**>Identification is determined by Polarized Light Microscopy and Dispersion Staining<**

**Notify of Results:** MOLTZEN **Phone** 743-6777 EXT-238

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE
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(803) 743-6777

# ASBESTOS
# CHAIN OF CUSTODY FORM

**FACILITY:** CNC **BUILDING #:** 290

**INSPECTOR'S NAME(S):** BUTLER **DATE :** 4/29/98
(PRINT)

**TOTAL NUMBER OF SAMPLES RELINQUISHED:** 18

| Sample #s | Relinquished by; | Received by; | Date |
|---|---|---|---|
| CNC-290-001 THRU CNC-290-018 | R. Butler | Jimmy L. Smith | 4-29-98 |
| | | | |
| | | | |

**Additional Information / Comments**

## ANALYSIS

| Analysis Completed | Sample #s |
|---|---|
| Authenticated by: Jimmy L. Smith Date 4-29-98 | [illegible] |
| Authenticated by: Date | |
| Authenticated by: Date | |

>Identification is determined by Polarized Light Microscopy and Dispersion Staining

**Notify of Results:** Moltzer **Phone** 743-6777 Ext-238

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE
NORTH CHARLESTON, SC 29405-2106
(803) 743-6777

# ASBESTOS
# CHAIN OF CUSTODY FORM

**FACILITY:** Charleston Naval Complex **BUILDING #:** 6A1

**INSPECTOR'S NAME(S):** Butler- Nelson (PRINT) **DATE :** 5/7/98

**TOTAL NUMBER OF SAMPLES RELINQUISHED:** 48

| Sample #s | Relinquished by; | Received by; | Date |
|---|---|---|---|
| CNC 6A1-001 THRU CNC 6A1-048 | R. Butler | Jimmy L Smith | 5/7/98 |
| | | | |
| | | | |

**Additional Information / Comments**

## ANALYSIS

| Analysis Completed | | | Sample #s |
|---|---|---|---|
| Authenticated by: Jimmy L Smith | Date: 5-11-98 | | CNC 6A1-001 THRU 048 |
| Authenticated by: | Date | | |
| Authenticated by: | Date | | |

>Identification is determined by Polarized Light Microscopy and Dispersion Staining<

**Notify of Results:** Moltzen **Phone** 743-6777 Ext-238

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE
NORTH CHARLESTON, SC 29405-2106
(803) 743-6777

# ASBESTOS
# CHAIN OF CUSTODY FORM

**FACILITY:** Charleston Naval Complex **BUILDING #:** 674

**INSPECTOR'S NAME(S):** Butler-Nelson (PRINT) **DATE :** 5/8/98

**TOTAL NUMBER OF SAMPLES RELINQUISHED:** ~~32~~ 30 WEM

| Sample #s | Relinquished by; | Received by; | Date |
|---|---|---|---|
| CNC-674-001 THRU CNC-674-022 | R. Butler | W. E. May | 5/8/98 |
| CNC-674-025 THRU CNC-674-032 | R. Butler | ↓ | ↓ |
| | | | |

**Additional Information / Comments**

## ANALYSIS

| Analysis Completed | | Sample #s |
|---|---|---|
| Authenticated by; Jeremy L. Smith | Date 5-12-98 | CNC-674-001 thru 032 |
| Authenticated by; Jeremy L. Smith | Date 5-12-98 | CNC-674-025 thru 032 |
| Authenticated by; | Date | |

>Identification is determined by Polarized Light Microscopy and Dispersion Staining<

**Notify of Results:** Moltzer **Phone** 743-6777 Ext-238

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE
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(803) 743-6777

# ASBESTOS

# CHAIN OF CUSTODY FORM

**FACILITY:** CNC **BUILDING #:** 1177

**INSPECTOR'S NAME(S):** NELSON / BUTLER **DATE :** 4/27/98
(PRINT)

**TOTAL NUMBER OF SAMPLES RELINQUISHED:** 34

| Sample #s | Relinquished by; | Received by; | Date |
|---|---|---|---|
| CNC-1177-001 THRU CNC-1177-034 | R. Butler | W. E. May | 4/28/98 |
| | | | |
| | | | |

**Additional Information / Comments**

## ANALYSIS

| Analysis Completed | Sample #s |
|---|---|
| Authenticated by: Date | |
| Authenticated by: Date | |
| Authenticated by: Date | |

>Identification is determined by Polarized Light Microscopy and Dispersion Staining<

**Notify of Results:** Moltzer **Phone** 743-6777 Ext-238

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE
NORTH CHARLESTON, SC 29405-2106
(803) 743-6777

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE
NORTH CHARLESTON, SC 29405-2106

# ASBESTOS CHAIN OF CUSTODY FORM

FACILITY: CNC BUILDING #: 1177

INSPECTORS NAME: BUTLER (PRINT) DATE: 4-27-98

TOTAL NUMBER OF SAMPLES RELINQUISHED: 2

| Sample #s | Relinquished by: | Received by: | Date |
|---|---|---|---|
| CNC-1177-015&030 | Jeremy L. Butler | Kathy D. Bailey | 29Apr98 |
| | | | |
| | | | |
| | | | |

Additional Information / Comments

## ANALYSIS

| Analysis Completed | | | Sample #s |
|---|---|---|---|
| Authenticated by: John C Barnes | Date | 5-7-98 | 98-463 |
| Authenticated by: John C Barnes | Date | 5-7-98 | 98-464 |
| Authenticated by: | Date | | |

> Identification is determined by Polarized Light Microscopy and Dispersion Staining <

Notify of Results: _____ Phone _____

# ASBESTOS
# CHAIN OF CUSTODY FORM

**FACILITY:** Charleston Naval Complex **BUILDING #:** 1346

**INSPECTOR'S NAME(S):** Butler- Adkins (PRINT) **DATE :** 5/12/98

**TOTAL NUMBER OF SAMPLES RELINQUISHED:** 68

| Sample #s | Relinquished by; | Received by; | Date |
|---|---|---|---|
| CNC-1346-001 THRU CNC-1346-068 | R. Butler | J. Smith | 5-14-98 |
| | | | |
| | | | |

**Additional Information / Comments**

## ANALYSIS

**Analysis Completed**

**Sample #s** CNC-1346-001 thru 068

**Authenticated by;** Jimmy J. Smith **Date** 5-19-98

**Authenticated by;** **Date**

**Authenticated by;** **Date**

>Identification is determined by Polarized Light Microscopy and Dispersion Staining<

**Notify of Results:** Moltzon **Phone** 743-6777 Ext-238

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE
NORTH CHARLESTON, SC 29405-2106
(803) 743-6777

# ASBESTOS
# CHAIN OF CUSTODY FORM

FACILITY: CNC BUILDING #: 1737

INSPECTOR'S NAME(S): BUTLER DATE : 4/6/98
(PRINT)

TOTAL NUMBER OF SAMPLES RELINQUISHED: 20

| Sample #s | Relinquished by; | Received by; | Date |
|---|---|---|---|
| CNC-1737-001 THRU CNC-1737-020 | R. Butler | Jimmy L. Smith | 5/7/98 |
| | | | |
| | | | |

Additional Information / Comments

## ANALYSIS

| Analysis Completed | | Sample #s |
|---|---|---|
| Authenticated by; Jimmy L. Smith | Date 5/11/98 | CNC-B-1737-001 THRU 020 |
| Authenticated by; | Date | |
| Authenticated by; | Date | |

>Identification is determined by Polarized Light Microscopy and Dispersion Staining<

Notify of Results: Moltzer Phone 743-6777 Ext. 238

ENVIRONMENTAL DETACHMENT CHARLESTON
1899 NORTH HOBSON AVENUE
NORTH CHARLESTON, SC 29405-2106
(803) 743-6777

General Engineering Labor[illegible]es, Inc.
2040 Savage Road
Charleston, South Carol[illegible]7
P.O. Box 30712
Charleston, South Carolina 29417
(803) 556-8171

# CHAIN OF CUSTODY RECORD



Client Name/Facility Name: SPORTENVDETCHASN

Collected by/Company: SPORTENVDETCHASN

SAMPLE ANALYSIS REQUIRED (x) - use remarks area to specify specific compounds or methods

Use F or P in the boxes to indicate whether sample was filtered and/or preserved

| SAMPLE ID | DATE | TIME | WELL | SOIL | COMP | GRAB | # OF CONTAINERS | pH, conductivity | TOC/DOC | TOX | Chloride, Fluoride, Sulfide | Nitrite/Nitrate | VOC - Specify Method required | METALS - specify | Pesticide | Herbicide | Total Phenol | Acid Extractables | B/N Extractables | PCB's | Cyanide | Coliform - specify type | Asbestos TEM Bulk | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPORT0696-1 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-N584-001 |
| SPORT0696-2 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-N584-003 |
| SPORT0696-3 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-N584-005 |
| SPORT0696-4 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-N584-022 |
| SPORT0696-5 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-N584-023 |
| SPORT0696-6 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC N584-024 |
| SPORT0696-7 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-N584-031 |
| SPORT0696-8 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-180-006 |
| SPORT0696-9 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-180-014 |
| SPORT0696-10 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-180-035 |
| SPORT0696-11 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-180-049 |
| SPORT0696-12 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-180-050 |
| SPORT0696-13 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-180-061 |

| Relinquished by: | Date: | Time: | Received by: | Relinquished by: | Date: | Time: | Received by: |
|---|---|---|---|---|---|---|---|
| [signature] | 5-26-98 | 1630 | Vivian Washington | Vivian Washington | 5/27/98 | 1400 | Stephanie Barkley |
| Relinquished by: | Date: | Time: | Received by lab by: | Date: | Time: | Remarks: | |
| | | | | | | | |

White = sample collector Yellow = file Pink = with report

# CHAIN OF CUSTODY RECORD

General Engineering Labo[illegible]ies, Inc.
2040 Savage Road
Charleston, South Carol[illegible]07
P.O. Box 30712
Charleston, South Carolina 29417
(803) 556-8171

Client Name/Facility Name: SPORTENVDETCHASN

Collected by/Company: SPORTENV DETCHASN

SAMPLE ANALYSIS REQUIRED (x) - use remarks area to specify specific compounds or methods

Use F or P in the boxes to indicate whether sample was filtered and/or preserved

| SAMPLE ID | DATE | TIME | WELL | SOIL | COMP | GRAB | # OF CONTAINERS | pH, conductivity | TOC/DOC | TOX | Chloride, Fluoride, Sulfide | Nitrite/Nitrate | VOC - Specify Method required | METALS - specify | Pesticide | Herbicide | Total Phenol | Acid Extractables | B/N Extractables | PCB's | Cyanide | Coliform - specify type | ASBESTOS | TEM Bulk | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sport-0696-14 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-814-033 |
| Sport-0696-15 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-641-001 |
| Sport-0696-16 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-641-002 |
| Sport-0696-17 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-641-003 |
| Sport-0696-18 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-641-004 |
| Sport-0696-19 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-641-027 |
| Sport-0696-20 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-641-028 |
| Sport-0696-21 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | ARC-GRNVILLE-025 |
| Sport-0696-22 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-303-001 |
| Sport-0696-23 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-303-003 |
| Sport-0696-24 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-303-004 |
| Sport-0696-25 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-303-010 |
| Sport-0696-26 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-303-011 |

| Relinquished by: | Date: | Time: | Received by: | Relinquished by: | Date: | Time: | Received by: |
|---|---|---|---|---|---|---|---|
| [signature] | 5-26-98 | 1630 | Vivian Washington | Vivian Washington | 5/27/98 | 1450 | Stephanie Berkeley |

| Relinquished by: | Date: | Time: | Received by lab by: | Date: | Time: | Remarks: |
|---|---|---|---|---|---|---|
| | | | | | | |

White = sample collector  Yellow = file  Pink = with report

General Engineering Laboratories, Inc.
2040 Savage Road
Charleston, South Carolina 29407
P.O. Box 30712
Charleston, South Carolina 29417
(803) 556-8171

# CHAIN OF CUSTODY RECORD



Client Name/Facility Name: SPORTENVDETCHASN

Collected by/Company: SPORTENVDETCHASN

SAMPLE ANALYSIS REQUIRED (x) - use remarks area to specify specific compounds or methods

Use F or P in the boxes to indicate whether sample was filtered and/or preserved

| SAMPLE ID | DATE | TIME | WELL | SOIL | COMP | GRAB | # OF CONTAINERS | pH, conductivity | TOC/DOC | TOX | Chloride, Fluoride, Sulfide | Nitrite/Nitrate | VOC - Specify Method required | METALS - specify | Pesticide | Herbicide | Total Phenol | Acid Extractables | B/N Extractables | PCB's | Cyanide | Coliform - specify type | Asbestos TEM Bulk | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPORT0696-27 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-1033-001 |
| SPORT0696-28 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-1033-011 |
| SPORT0696-29 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-1033-012 |
| SPORT0696-30 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-X54-029 |
| SPORT0696-31 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-X54-023 |
| SPORT0696-32 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-X54-001 |
| SPORT0696-33 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | Cecil-338-044 |
| SPORT0696-34 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-N527-001 |
| SPORT0696-35 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-304-001 |
| SPORT0696-36 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-304-012 |
| SPORT0696-37 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-304-014 |
| SPORT0696-38 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-304-016 |
| SPORT0696-39 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-304-018 |

| Relinquished by: | Date: | Time: | Received by: | Relinquished by: | Date: | Time: | Received by: |
|---|---|---|---|---|---|---|---|
| [signature] | 5-26-98 | 1630 | Vivian Washington | Vivian Washington | 5/27/98 | 1450 | Stephanie Bodison |

| Relinquished by: | Date: | Time: | Received by lab by: | Date: | Time: | Remarks: |
|---|---|---|---|---|---|---|
| | | | | | | |

White = sample collector  Yellow = file  Pink = with report

General Engineering Laboratories, Inc.
2040 Savage Road
Charleston, South Carolina 29407
P.O. Box 30712
Charleston, South Carolina 29417
(803) 556-8171

# CHAIN OF CUSTODY RECORD



Client Name/Facility Name: SPORTENV DET CHASN

Collected by/Company: SPORTENV DET CHASN

SAMPLE ANALYSIS REQUIRED (x) - use remarks area to specify specific compounds or methods

Use F or P in the boxes to indicate whether sample was filtered and/or preserved

| SAMPLE ID | DATE | TIME | WELL | SOIL | COMP | GRAB | # OF CONTAINERS | pH, conductivity | TOC/DOC | TOX | Chloride, Fluoride, Sulfide | Nitrite/Nitrate | VOC - Specify Method required | METALS - specify | Pesticide | Herbicide | Total Phenol | Acid Extractables | B/N Extractables | PCB's | Cyanide | Coliform - specify type | ASBESTOS | TEM Bulk | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPORT0696-40 | 5-26-98 | 1500 | | | | Y | | | | | | | | | | | | | | | | | Y | | CNC-1346-001 |
| SPORT0696-41 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | Y | | CNC-1346-002 |
| SPORT0696-42 | 5-26-98 | 1500 | | | | Y | | | | | | | | | | | | | | | | | Y | | CNC-1346-003 |
| SPORT0696-43 | 5-26-98 | 1500 | | | | Y | | | | | | | | | | | | | | | | | Y | | CNC-1346-004 |
| SPORT0696-44 | 5-26-98 | 1500 | | | | Y | | | | | | | | | | | | | | | | | Y | | CNC-1346-024 |
| SPORT0696-45 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | Y | | CNC-1346-025 |
| SPORT0696-46 | 5-26-98 | 1500 | | | | Y | | | | | | | | | | | | | | | | | Y | | CNC-1346-036 |
| SPORT0696-47 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | Y | | CNC-1346-037 |
| SPORT0696-48 | 5-26-98 | 1500 | | | | Y | | | | | | | | | | | | | | | | | Y | | CNC-1346-038 |
| SPORT0696-49 | 5-26-98 | 1500 | | | | X | | | | | | | | | | | | | | | | | Y | | CNC-1346-039 |
| SPORT0696-50 | 5-26-98 | 1500 | | | | Y | | | | | | | | | | | | | | | | | Y | | CNC-1346-040 |
| SPORT0696-51 | 5-26-98 | 1500 | | | | Y | | | | | | | | | | | | | | | | | Y | | CNC-1346-041 |
| SPORT0696-52 | 5-26-98 | 1500 | | | | Y | | | | | | | | | | | | | | | | | Y | | HAAF-6015-054 |

| Relinquished by: | Date: | Time: | Received by: | Relinquished by: | Date: | Time: | Received by: |
|---|---|---|---|---|---|---|---|
| Jeremy L. Smith | 5/26/98 | 1630 | Vivian Washington | Vivian Washington | 5/27/98 | 1450 | Stephanie Bostick |
| Relinquished by: | Date: | Time: | Received by lab by: | Date: | Time: | Remarks: | |
| | | | | | | | |

White = sample collector  Yellow = file  Pink = with report

General Engineering Labor[illegible]ies, Inc.
2040 Savage Road
Charleston, South Caroli[illegible]7
P.O. Box 30712
Charleston, South Carolina 29417
(803) 556-8171

# CHAIN OF CUSTODY RECORD



Client Name/Facility Name: SPORTENV DET CHASN

Collected by/Company: SPORT ENV DET CHASN

SAMPLE ANALYSIS REQUIRED (x) - use remarks area to specify specific compounds or methods

Use F or P in the boxes to indicate whether sample was filtered and/or preserved

| SAMPLE ID | DATE | TIME | WELL | SOIL | COMP | GRAB | # OF CONTAINERS | pH, conductivity | TOC/DOC | TOX | Chloride, Fluoride, Sulfide | Nitrite/Nitrate | VOC - Specify Method required | METALS - specify | Pesticide | Herbicide | Total Phenol | Acid Extractables | B/N Extractables | PCB's | Cyanide | Coliform - specify type | Asbestos TCLP Bulk | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPORT0696-53 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-6015-056 |
| SPORT0696-54 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-6015-055 |
| SPORT0696-55 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-6015-053 |
| SPORT0696-56 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-6015-052 |
| SPORT0696-57 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-6015-035 |
| SPORT0696-58 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | HAAF-6015-038 Yuw/ov |
| SPORT0696-59 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-674-017 |
| SPORT0696-60 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-1177-004 |
| SPORT0696-61 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-1177-003 |
| SPORT0696-62 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-1177-002 |
| SPORT0696-63 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-1177-007 |
| SPORT0696-64 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-1177-001 |
| SPORT0696-65 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-674-019 |

| Relinquished by: | Date: | Time: | Received by: | Relinquished by: | Date: | Time: | Received by: |
|---|---|---|---|---|---|---|---|
| Jenny L. Smith | 5/26/98 | 1630 | Vivian Washington | Vivian Washington | 5/27/98 | 1450 | Stephanie Barkerdon |

| Relinquished by: | Date: | Time: | Received by lab by: | Date: | Time: | Remarks: |
|---|---|---|---|---|---|---|
| | | | | | | |

White = sample collector  Yellow = file  Pink = with report

# CHAIN OF CUSTODY RECORD

General Engineering Laboratories, Inc.
2040 Savage Road
Charleston, South Carolina 29407
P.O. Box 30712
Charleston, South Carolina 29417
(803) 556-8171

Client Name/Facility Name: SPORTENVDET CHASN

Collected by/Company: SPORTENVDET CHASN

SAMPLE ANALYSIS REQUIRED (x) - use remarks area to specify specific compounds or methods

Use F or P in the boxes to indicate whether sample was filtered and/or preserved

| SAMPLE ID | DATE | TIME | WELL | SOIL | COMP | GRAB | # OF CONTAINERS | pH, conductivity | TOC/DOC | TOX | Chloride, Fluoride, Sulfide | Nitrite/Nitrate | VOC - Specify Method required | METALS - specify | Pesticide | Herbicide | Total Phenol | Acid Extractables | B/N Extractables | PCB's | Cyanide | Coliform - specify type | ASBESTOS TEM BULK | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPORTO696-66 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-674-011 |
| SPORTO696-67 | 5/26/98 | 1500 | | | | X | | | | | | | | | | | | | | | | | X | | CNC-674-012 |

| Relinquished by: | Date: | Time: | Received by: | Relinquished by: | Date: | Time: | Received by: |
|---|---|---|---|---|---|---|---|
| [signature] | 5/26/98 | 1630 | Vivian Washington | Vivian Washington | 5/27/98 | 1450 | Stephanie Robertson |
| Relinquished by: | Date: | Time: | Received by lab by: | Date: | Time: | Remarks: | |

White = sample collector Yellow = file Pink = with report

# Medical University of South Carolina

## College of Health Professions

## Department of Environmental Health Sciences

171 Ashley Avenue Charleston, South Carolina, 29425 (803) 792-5315

Certifies that

**RICHARD O. BUTLER**

Attended and Satisfactorily completed the

*Inspecting for Asbestos in Buildings*

conducted November 3 through November 05, 1997

and satisfactorily passed an exam on November 05, 1997.

AUGET LARGIENDO
UNIV. MED. CAR. AUS. 1824

| | | | |
|---|---|---|---|
| I27150-00766 | 24 | 247-15-7024 | R. Martin Jones, Ph. D. Chairmain |
| Certificate number | Contact Hours | ID Number | |
| November 05, 1997 | November 04, 1998 | | T. A. Rowland III Instructor |
| Exam Date | Certificate Expires | | |

This certifies that the above recipient has completed the requisite training for Asbestos Accreditation under TSCA Title II.

# Medical University of South Carolina

## College of Health Professions

## Department of Environmental Health Sciences

171 Ashley Avenue Charleston, South Carolina, 29425 (803) 792-5315

Certifies that

**RANDY E. ADKINS**

Attended and Satisfactorily completed the

*Inspecting for Asbestos in Buildings Refresher*

conducted April 1 through April 01, 1998

and satisfactorily passed an exam on April 01, 1998.

AUGET LARGIENDO
UNIV. MED.
CAR. AUS.
1824

| | | | |
|---|---|---|---|
| IR27150-01677 | 4 | 251-02-6161 | R. Martin Jones, Ph. D. Chairman |
| Certificate number | Contact Hours | ID Number | |
| April 01, 1998 | March 31, 1999 | | T. A. Rowland III Instructor |
| Exam Date | Certificate Expires | | |

This certifies that the above recipient has completed the requisite training for Asbestos Accreditation under TSCA Title II.

# Medical University of South Carolina

## College of Health Professions

## Department of Environmental Health Sciences

171 Ashley Avenue Charleston, South Carolina, 29425 (803) 792-5315

CAR. AUS.
1824

Certifies that

**WILLIAM E. MAY**

Attended and Satisfactorily completed the

*Inspecting for Asbestos in Buildings Refresher*

conducted August 20 through August 20, 1997

and satisfactorily passed an exam on August 20, 1997.

| IR27150-01412 | 4 | 247-98-0917 | |
|---|---|---|---|
| Certificate number | Contact Hours | ID Number | R. Martin Jones, Ph. D.<br>Chairmain |

| August 20, 1997 | August 19, 1998 | |
|---|---|---|
| Exam Date | Certificate Expires | T. A. Rowland III<br>Instructor |

This certifies that the above recipient has completed the requisite training for Asbestos Accreditation under TSCA Title II.

# Medical University of South Carolina

## College of Health Professions

## Department of Environmental Health Sciences

171 Ashley Avenue Charleston, South Carolina, 29425 (803) 792-5315

Certifies that

**JOHN J. NELSON**

Attended and Satisfactorily completed the

*Inspecting for Asbestos in Buildings Refresher*

conducted April 1 through April 01, 1998

and satisfactorily passed an exam on April 01, 1998.

AUGET LARGIENDO
UNIV. MED.
CAR. AUS.
1824

| | | | |
|---|---|---|---|
| IR27150-01681 | 4 | 247-80-3440 | R. Martin Jones, Ph. D. Chairman |
| Certificate number | Contact Hours | ID Number | |
| April 01, 1998 | March 31, 1999 | | T. A. Rowland III Instructor |
| Exam Date | Certificate Expires | | |

This certifies that the above recipient has completed the requisite training for Asbestos Accreditation under TSCA Title II.