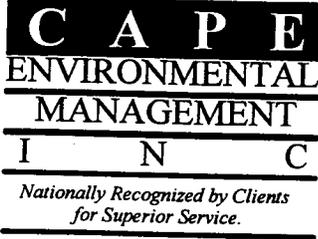


N00210.AR.000614  
NSTC GREAT LAKES  
5090.3a

PRE-DEMOLITION HAZARDOUS MATERIALS INVESTIGATION AT BUILDING 910 NSTC  
GREAT LAKES IL  
11/1/1998  
CAPE ENVIRONMENTAL MANAGEMENT INC



# Pre Demolition Hazardous Materials Investigation

**Building 910**  
**Naval Training Center**  
**Great Lakes, Illinois**

*prepared for:*  
 Southern Division NAVFACENGCOM  
 2155 Eagle Dr.  
 Charleston, SC 29418

*prepared by:*  
 Cape Environmental Management Inc  
 91 Noll St.  
 Waukegan, IL 60085

Contact: Kurt Gates, CIH, CSP  
 Vice President

847/336-4341

November 1998

I hereby certify that the (material) (equipment) (article) shown and marked in this submittal and proposed to be incorporated with Contract Number N68950-98-D-0152 is in compliance with the Contract drawings and specification, can be installed in the allocated spaces, and is approved for use.

Certified by Submittal Reviewer \_\_\_\_\_ Date \_\_\_\_\_  
 (Signature when applicable)  
 Approved by QC Manager \_\_\_\_\_ Date \_\_\_\_\_  
 (Signature)

I hereby certify that the (equipment) (material) (article) shown and marked in this submittal is that proposed to be incorporated with Contract Number N68950-98-D-0152 is in compliance with the Contract drawings and specification, can be installed in the allocated spaces, and is submitted for Government approval.

Certified by Submittal Reviewer \_\_\_\_\_ Date \_\_\_\_\_  
 (Signature when applicable)  
 Certified by QC Manager \_\_\_\_\_ Date \_\_\_\_\_  
 (Signature)

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## **1.0 INTRODUCTION**

This introductory section briefly describes the project, outlines the format of the survey report, presents our technical approach to the project, and the sample analysis methodology. The survey results and recommendations are provided in Section 2.0 and a preliminary cost estimate is presented in Section 3.0 (under separate cover).

### **1.1 Overview**

Southern Division's Naval Facility Engineering Command (South Div) retained CAPE Environmental Management Inc (CAPE) to conduct a Pre-demolition asbestos-containing material (ACM), lead-based paint (LBP), lead dust contamination and polychlorinated biphenyl (PCB) survey of Building 910 located at the Great Lakes Naval Training Center, Great Lakes, Illinois. The asbestos, lead and PCB survey report, as well as the abatement design, are to be issued as part of a design-build solicitation for price and technical proposals to perform the work. CAPE's understanding of the intent of this military construction project is the entire Building 910 will be demolished.

The field investigation for this project was conducted between November 9 and November 12, 1998 by CAPE's survey team. The survey team included Kurt Gates and Nick Briglio. Both Mr. Gates and Mr. Briglio are accredited and State licensed lead inspectors, lead risk assessor, asbestos building inspectors and management planners. Personnel certifications are included in Appendix F.

### **1.2 Technical Approach**

The surveys consisted of investigating the interiors and exteriors of Buildings 910 for asbestos, lead-based paint, lead dust contamination and PCB light fixture ballasts.

#### **1.2.1 Lead-Containing Paint Survey**

CAPE conducted a lead-containing paint (LCP) survey to determine representative location and quantity of the LCP with the potential to be impacted during building demolition. The survey consisted of an inspection of all accessible areas of the building.

Currently, there are no regulations that include a protocol for completing lead surveys of Federal buildings (with no day-care services). The U.S. Department of Housing and Urban Development (HUD) Regulations does have survey guidelines which apply to Public and Indian housing. There are various Federal regulations that will apply to the actual building demolition. These regulations include but are not limited to 29 CFR 1926.62, 20 CFR 1910.1025 and 40 CFR 260-265. The Illinois Department of Public Health also has a Lead Poisoning Prevention Code, Title 77, Chapter I, Subchapter p, Part 845. This code primarily pertains to residential and child care facilities.

HUD defines Lead-Based Paint (LBP) as any paint with over 5,000 parts per million (ppm) or 0.5% of lead, when analyzed using atomic absorption. OSHA, however, does not recognize a threshold value for lead concentration in paint to determine potential lead exposures. According to OSHA, any amount of detectable lead in paint constitutes a potential lead exposure. When lead is detected in paint, the paint is considered lead-containing paint (LCP), as defined by OSHA.

The number of representative rooms surveyed was based on visual inspection of components. Rooms that were not sampled were assumed to have similar lead concentrations as the tested rooms. Painted components tested included the following: ceilings, stairs, floors, walls, door components, ballards and metal bullet back stop. CAPE's investigation concentrated on the most prevalent components as they are most likely to impact the demolition.

Furniture and equipment that were not an integral part of the building (such as free standing tables, chairs, desks and equipment), were not tested. Other items not tested included: factory coated vinyl products, such as basecovering, factory anodized metal components, such as air conditioners, and items that had no evidence of being painted.

A summary of the components sampled and the Atomic Absorption Spectroscopy (AAS) results are included in Appendix A. Location of bulk paint chip samples are included in Appendix D.

The collected bulk paint chip samples were sent to STAT Analysis Corporation in Chicago, Illinois. The paint chip samples were analyzed for lead content using Atomic Absorption Spectrophotometry (AAS), modified EPA SW846 Method 3050. STAT is accredited by the American Industrial Hygiene Association and participates successfully in the Environmental Lead Proficiency Analytical Testing (ELPAT) Program. The lead paint sample results are included as Appendix B. STAT's certifications are included in Appendix F.

### **1.2.2 Land Dust, Sand, Soil and Demolition Waste Survey**

CAPE surveyed the settled dust in the building for lead contamination associated with the firing range, the sand in the bullet traps for lead contamination, the soil on the exterior of the building for lead contamination and assessed the building to make an initial determination of the waste stream following demolition for lead waste characterization.

Settled dust was observed throughout the building. The settled dust samples were collected using wipe sample techniques, in accordance with Housing and Urban Development (HUD's) wipe sample collection protocol. The samples were analyzed using AAS, NIOSH Method 7082. Currently the prominent criteria to evaluate lead dust levels is HUD's criteria for clearance of residential units following a lead abatement project. HUD's clearance criteria, based on wipe sampling is:

- 100 ug/ft<sup>2</sup> for floors
- 500 ug/ft<sup>2</sup> for interior window sills
- 800 ug/ft<sup>2</sup> for window troughs and other rough surfaces

Although useful for point of reference, this criteria would not apply to demolition of this building.

Sand was observed in two bullet traps. Samples of the sand were collected and analyzed for total lead, using AAS. Additionally, a composite sample of the traps were collected and analyzed using toxicity characteristic leaching procedures (TCLP) to characterize the sand for waste disposal purposes as defined by EPA 40 CFR 260-265 (RCRA).

The firing range was equipped with an extensive exhaust system to provide make-up air to the shooters and pull the potentially contaminated air past the targets and exhausted to the exterior of the building. The current exhaust system was equipped with HEPA filters to remove the lead prior to exhaust, however the previous exhaust system may not have had HEPA filters (per Kurt Gates conversation with Building Representative, Chief Rickey). Therefore, two soil samples were collected from the exterior of the building and analyzed using TCLP method.

The actual building itself was assessed to determine if the waste stream created by the demolition process would be characterized by hazardous waste. In addition to the lead contamination previously discussed in this section, lead shot was observed to have adhered to the back stop framing. The other source of lead in the waste stream would be from the lead-based paint. However, this paint was observed to be generally in good condition, and adhered to the substrate. In Illinois, the Illinois EPA considers LBP still adhered to the substrate that is generated from a non-residential structure being demolished or renovated as general refuse, and not special waste in regards to lead.

### **1.2.3 Asbestos-Containing Material Survey**

As part of a separate contract, CAPE conducted an initial asbestos-containing material (ACM) survey of Building 910 for management purposes to determine and quantify ACM present. The initial survey was conducted in 1993 and consisted of the following:

- a) Conducting an inspection of all accessible areas to identify suspect ACMs;
- b) Development of an asbestos sampling plan based on AHERA protocols;
- c) Collection of bulk asbestos samples for analysis by polarized light microscopy in accordance with the sampling plan;
- d) Quantification of materials determined to be asbestos-containing; and
- e) Development of hazard assessments, asbestos removal costs and operations and maintenance procedures.

CAPE's current scope of work including updating the initial survey based on changes to the building over the four-year period since our initial survey was completed and to complete a demolition survey based on the proposed scope of work. Additionally, ACMs have been categorized by Federal regulatory definitions for renovation/demolition purposes.

The following definitions explain the general categorization of ACM relative to potential disturbance and requirement for removal prior to building demolition in accordance with the U.S. EPA, 40 CFR part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAP) Asbestos Revision; Final Rule and OSHA 29 CFR 1926.1101, Asbestos Construction Standard.

- **Asbestos-Containing Material (ACM):** Any material containing more than 1% (one percent) of asbestos of any type or mixture as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy.
- **Friable ACM:** Any ACM that when dry can be crumbled, pulverized or reduced to a powder by applying hand pressure.
- **Non-Friable ACM:** Any ACM that when dry can not be crumbled, pulverized or reduced to a powder by hand pressure.
- **Category I Non-Friable ACM:** Packing, gaskets, resilient floor covering, and asphalt roofing products containing more than one- percent asbestos.
- **Category II Non-Friable ACM:** Any material, excluding Category I Non-Friable ACM, containing more than one percent asbestos that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.
- **Regulated Asbestos Containing Material (RACM):** Any material that meets one or more of the following conditions:
  - a) Friable ACM;
  - b) Category I Non-Friable ACM that has become friable;
  - c) Category I Non-Friable ACM that will be or has been subject to sanding, grinding, cutting, or abrading; or
  - d) Category II Non-Friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation.
- **Non-Regulated Asbestos Containing Materials (Non-RACM):** Means Category I ACM or Category II ACM which does not meet the definition stated in RACM condition B, C, or D.
- **Class I Asbestos Work:** Means activities involving the removal of asbestos-containing or presumed asbestos-containing thermal system insulation and surfacing material.
- **Class II Asbestos Work:** Means activities involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.

- **Class III Asbestos Work:** Means repair and maintenance operations, where “ACM”, including thermal system insulation and surfacing material is likely to be disturbed.
- **Class IV Asbestos Work:** Means maintenance and custodial activities during which employees contact ACM and Presumed ACM and activities to clean up waste and debris containing ACM and Presumed ACM.

Materials were categorized as RACM or Non-RACM and classified based on an interpretation of NESHAP and OSHA regulations for friable and non-friable ACM and the conditions anticipated during demolition. A summary of asbestos-containing materials present in each building is included in Appendix C and drawings showing locations of ACM and asbestos and lead bulk samples are included in Appendix D.

Collected bulk samples from the initial survey were sent to Analytical Environmental Services (AES) located in Atlanta, Georgia. Confirmation bulk samples were sent to Cape Environmental Management’s lab in Atlanta, GA. Both Cape and AES are accredited by the American Industrial Hygiene Association and participates successfully in the National Voluntary Laboratory Accreditation Program administered by the National Institute of Standards and Technology.

#### **1.2.4 PCB Survey**

The Polychlorinated Biphenyl (PCB) investigation was conducted on November 12<sup>th</sup>, 1998 and included the identification of PCB containing light fixture ballasts.

Fluorescent light fixtures ballasts identified in the investigation were suspected of containing PCB’s. Representative fluorescent light fixtures were opened so ballasts could be visually examined to determine the manufacturer and model number. Based on the manufacturer and model number, it could then be determined if the oil in the ballast does or does not contain PCB’s. Similar fixtures in the same room or adjacent areas were judged as PCB or non-PCB based upon the inspection of the representative fixture(s).

## **2.0 SURVEY RESULTS AND RECOMMENDATIONS**

### **2.1 Lead-Based Paint**

Based on the Atomic Absorption Spectroscopy (AAS) results to determine total lead concentration in paint it was determined that all of the major painted components in the building contain lead. Although each major component sampled contained lead, components did not exceed HUD’s definition of lead-based paint (5000 ppm), with the exception of certain walls, and the yellow bollards which did exceed HUD’s definition of LBP. Table 1 presents the lead paint chip bulk sample results.

**Table 1  
Paint Chip Samples – Total Lead**

| Sample Number | Substrate                | Color  | Results (ppb) |
|---------------|--------------------------|--------|---------------|
| Pb910-01      | Ceiling (wood)           | White  | 1,930         |
| Pb910-02      | Wall (wood)              | White  | 3,660         |
| Pb910-03      | Wall (wood)              | White  | 14,200        |
| Pb910-04      | Floor (concrete)         | Gray   | 4,960         |
| Pb910-05      | Bollard (metal)          | Yellow | 7,660         |
| Pb910-06      | Roof truss (wood)        | Black  | 1,110         |
| Pb910-07      | Bullet back stop (metal) | Black  | 3,150         |

As previously stated, OSHA does not recognize a threshold value for lead concentration in paint relative to potential exposures. According to OSHA, any amount of detectable lead in paint constitutes a potential lead exposure. The AAS results did indicate that detectable levels of lead are present in each component sampled, and therefore OSHA requirements as stated in 20 CFR 1926.62 shall be complied with during any activities impacting lead surfaces as part of this demolition project.

Based on the sampling results and CAPE's understanding of this project, LBP Abatement is not anticipated to be required. Because OSHA considers any quantity of lead in paint as a potential hazard, limited lead controls would still be required during demolition. These controls would include a work plan to control exposures and air monitoring to document actual exposures. Depending on the contractor's selected means and methods for demolition and the actual air monitoring results, the proposed lead controls should be adjusted accordingly, and shall always be in full compliance with OSHA.

Based on the TCLP results, this waste would not be expected to be characterized as lead waste, as defined by EPA 40 CFR 260-265. Because this is a design-build project, and the demolition contractor may segregate the waste, the exact waste stream cannot be determined and therefore this determination will be the responsibility of the contractor. Although not expected, if lead-contaminated waste (as defined by RCRA) is generated, the waste shall be placed in labeled containers (in accordance with 29 CFR 1926.62 and 40 CFR 260-265) and transported (in accordance with 49 CFR 171) off-site to an EPA-approved hazardous waste treatment or disposal facility.

## **2.2 Lead Dust, Sand, Soil and Demolition Waste**

Lead dust was found throughout the building, with the highest concentrations identified in the back stop/range area. The results identified are presented in Table 2.

**Table 2  
Lead Dust Wipe Results**

| Sample Number | Substrate                                  | Location              | Result (µg/di) |
|---------------|--|-----------------------|----------------|
| WP-910-01     | Floor                                      | Armory                | 1,270          |
| WP-910-02     | Floor                                      | Crews lounge          | 1,030          |
| WP-910-03     | Floor                                      | Shower area           | 5,080          |
| WP-910-04     | Floor                                      | South open area       | 8,400          |
| WP-910-05     | Floor                                      | South open area       | 6,140          |
| WP-910-06     | Floor                                      | Firing range          | 6,820          |
| WP-910-07     | Floor                                      | Firing range          | 7,420          |
| WP-910-08     | Floor                                      | Behind backstop       | 744,000        |
| WP-910-09     | Floor                                      | Middle firing range   | 33,600         |
| WP-910-10     | Backstop                                   | Backstop              | D              |
| WP-910-11     | Floor                                      | Firing range          | 21,400         |
| WP-910-12     | Floor                                      | Work out room         | 13,500         |
| WP-910-13     | Floor                                      | Work out room         | 21,700         |
| WP-910-14     | Floor                                      | Work out room         | 22,000         |
| WP-910-15     | Pipe 9' above floor                        | Gun & repair shop     | 2,420          |
| WP-910-16     | Ceiling 8' above floor,<br>slanted ceiling | Firing range (center) | 477            |
| WP-910-17     | Dust 12' above floor                       | Work out room         | 3,160          |
| WP-910-18     | Locker 7' above floor                      | S. office             | 743            |
|               |  |                       |                |

Note: Actual lab results are presented in Appendix A.

Although there is not a threshold in which lead dust is required to be decontaminated prior to demolition, CAPE feels that the levels in this building would justify a decontamination. This recommendation is primarily based on the concern for protecting both the demolition workers and the surrounding environment if this decontamination is not completed.

The soil surrounding the building was also determined to be contaminated with lead. Two soil samples were collected and analyzed using TCLP method. The results of these samples are 6 and 18 mg/L. The TCLP lab results are included in Appendix B. Soil with greater than 5 mg/L of lead analyzed by TCLP is considered hazardous. The soil would not be expected to be directly impacted by the demolition, therefore soil cleanup would not be required to be associated with the demolition. However, if the contractor is required to excavate the surrounding soil and transport off-site, this soil should be treated as hazardous waste. Additionally, South Div should be aware that this contamination is present and may select to remediate the soil as part of this or an independent project to limit the dispersion of the contamination.

The lead-based paint was observed to be in generally good condition and therefore, based on IEPA regulations, the demolition waste can be treated as general refuse and would not have to be

treated as hazardous or special waste. One exception was the backstop framing was observed to have lead shot adhered to the framing. CAPE recommends that this framing be disposed of as hazardous waste, or the lead removed prior to disposal.

### **2.3 Asbestos-Containing Materials**

In accordance with the NESHAP regulations, it is recommended that all Regulated Asbestos Containing Material (reference Section 1.2.2 for definition of regulated material) be removed. Certain Category I and Category II non-friable ACMs not expected to become friable or will not be subjected to sanding, cutting, grinding or abrading during demolition activities could remain in the building. Additionally, all work involving ACM shall be completed in accordance with the appropriate OSHA classification.

Appendix C presents the ACM identified in each building, as well as the NESHAP and OSHA classifications. The contractor's industrial hygienist shall review the contractor's work plan to ensure each ACM is appropriately classified. Specific contractor proposed means and methods of demolition could result in a material being classified differently. Appendix D presents drawings showing sample locations and locations of ACM identified.

RACMs will become friable during demolition, and therefore, should be removed prior to demolition activities.

### **2.4 PCBs**

Representative light fixture ballasts were inspected for PCB content. If the manufacturer's label on the ballast indicated "NO PCB" or "NON PCB", the ballast was assumed to be non-PCB-containing. If the label did not indicate "NO PCB", the ballast were assumed to contain PCBs. Approximately 10% of the light fixtures were checked for PCBs. Of the light fixtures checked, they all displayed labels stating that they were "Non-PCB-containing". Therefore, the number of assumed PCB-containing ballasts is estimated to be less than 10%.

Based on this representative inspection, CAPE estimated that there are a total of 70 light fixtures in Building 910. Because each representative light fixture ballast inspected did not contain PCB's, it is possible that all PCB ballasts have been removed from the building. However, for estimating purposes, CAPE is using 7 ballasts (10% of 70) in case unrepresentative ballasts contain PCB's.

Additionally, fluorescent lamps were assumed to contain mercury and should be disposed or recycled in accordance with Federal, State, local and Navy regulations.

## **Appendix A**

**STAT** Analysis Corporation:

2201 West Campbell Park Drive, Chicago, Illinois 60612-3501

Tel. 312.733.0551; Fax: 312.733.2386; e-mail address: StatLabs@AOL.Com



**LEAD DUST ANALYSIS BY  
FLAME ATOMIC ABSORPTION SPECTROSCOPY**  
Niosh 7082/AOAC 5.001-3: OSHA reg. 29 CFR 1910.1450  
**Cape Environmental Management, Inc.**

91 Noll Street  
Waukegan, IL 60085  
Phone: 847-336-4341  
Fax: 847-336-4971

|                                 |                          |
|---------------------------------|--------------------------|
| STAT Batch: 99319               | Date Received: 11/13/98  |
| Client Ref: BLD 910 Great Lakes | Date Analyzed: 11/13/98  |
| Stat Client:                    | Date Reported: 11/13/98  |
| Site Location:                  | Turnaround time: 4 hours |

| Laboratory Number | Client Number | Area Wiped (ft <sup>2</sup> ) | Pb (µg) | Pb (µg/ft <sup>2</sup> ) | Comments |
|-------------------|---------------|-------------------------------|---------|--------------------------|----------|
| 19319001          | WP-910-01     | 1.00                          | 1270    | 1,270                    |          |
| 19319002          | WP-910-02     | 1.00                          | 1030    | 1,030                    |          |
| 19319003          | WP-910-03     | 1.00                          | 5080    | 5,080                    |          |
| 19319004          | WP-910-04     | 1.00                          | 8400    | 8,400                    |          |
| 19319005          | WP-910-05     | 1.00                          | 6140    | 6,140                    |          |
| 19319006          | WP-910-06     | 1.00                          | 6820    | 6,820                    |          |
| 19319007          | WP-910-07     | 1.00                          | 7420    | 7,420                    |          |
| 19319008          | WP-910-08     | 1.00                          | 744000  | 744,000                  |          |
| 19319009          | WP-910-09     | 1.00                          | 33600   | 33,600                   |          |
| 19319010          | WP-910-10     | 1.00                          | D       | D                        |          |
| 19319011          | WP-910-11     | 1.00                          | 21400   | 21,400                   |          |
| 19319012          | WP-910-12     | 1.00                          | 13500   | 13,500                   |          |
| 19319013          | WP-910-13     | 1.00                          | 21700   | 21,700                   |          |
| 19319014          | WP-910-14     | 1.00                          | 22000   | 22,000                   |          |
| 19319015          | WP-910-15     | 1.00                          | 2420    | 2,420                    |          |
| 19319016          | WP-910-16     | 1.00                          | 477     | 477                      |          |
| 19319017          | WP-910-17     | 1.00                          | 3160    | 3,160                    |          |
| 19319018          | WP-910-18     | 1.00                          | 743     | 743                      |          |

Note: Samples nos 8 & 10 are so high in lead content that readings are close to, or greater than, unity. The dilutions needed to read the analyte concentration are greater than 10000 fold.

|   |                               |
|---|-------------------------------|
| 3PH clearance limit for all horizontal surfaces | 200µg/ft <sup>2</sup>         |
| HUD Guidelines (1996 Revision)                  | Floors: 200µg/ft <sup>2</sup> |
|   | Walls: 300µg/ft <sup>2</sup>  |
|   | Sills: 500µg/ft <sup>2</sup>  |

(µg/ft<sup>2</sup> = micrograms per foot squared)

Instrument: PE3300  
 Corr. Coeff.: 0.99997  
 Ref. Abs. (20ppm Pb): 0.159  
 Analyzed by: Don Puff  
 Date: 11/13/98

**STAT Analysis Corporation:**  
 2201 West Campbell Park Drive, Chicago, Illinois 60612-3501  
 Tel. 312.733.0551; Fax: 312.733.2386; e-mail address: StatLabs@AOL.Com



**LEAD BASED PAINT ANALYSIS BY  
 FLAME ATOMIC ABSORPTION SPECTROSCOPY**

Niosh 7082/AOAC 5.001-3  
 OSHA reg. 29 CFR 1910.1450

**CAPE ENVIRONMENTAL MANAGEMENT INC**

Kurt Gates  
 91 Noll Street  
 Waukegan, Illinois 60085  
 Phone: (847) 336-4341  
 Fax: (847) 336-4971

STAT Batch: 99318  
 Client Ref: Bld 910 Great Lakes  
 Stat Client: 843  
 Job Site:

Date Received: 11/13/98  
 Date Analyzed: 11/16/98  
 Date Reported: 11/16/98  
 Turnaround time: 24 hours

| Laboratory Number | Client Number | Sample Wt. (g) | Pb (µg) | Pb (ppm) | Comments |
|-------------------|---------------|----------------|---------|----------|----------|
| 19318001          | Pb-910-01     | 0.050          |         | 1,930    |          |
| 19318002          | Pb-910-02     | 0.064          |         | 3,660    |          |
| 19318003          | Pb-910-03     | 0.050          |         | 14,200   |          |
| 19318004          | Pb-910-04     | 0.050          |         | 4,960    |          |
| 19318005          | Pb-910-05     | 0.050          |         | 7,660    |          |
| 19318006          | Pb-910-06     | 0.050          |         | 1,110    |          |
| 19318007          | Pb-910-07     | 0.050          |         | 3,150    |          |
| 19318008          | TPb-910-08    | 0.050          |         | 13,600   |          |
| 19318009          | TPb-910-09    | 0.050          |         | 18,700   |          |

HUD Guidelines (1997) = 5000ppm

CPSC (1978) consumer lead based paint = 600ppm

Analyzed by: Angela H. Gibson  
 Date: 11/12/98

## **Appendix B**

**STAT** Analysis Corporation:

2201 West Campbell Park Drive, Chicago, Illinois 60612-3501  
 Tel. 312.733.0551; Fax: 312.733.2386; e-mail address: StatLabs@AOL.Com



**TCLP LEAD ANALYSIS BY  
 FLAME ATOMIC ABSORPTION SPECTROSCOPY**  
 EPA 1311/Niosh 7082/AOAC 5.001-3: OSHA reg. 29 CFR 1910.1450

**Cape Environmental Management, Inc.**

Doug Paris  
 91 Noll Street  
 Waukegan, IL 60085  
 Phone: 847-336-4341  
 Fax: 847-336-4971

STAT Batch: 99317 Date Received: 11/13/98  
 Client Ref: Date Analyzed: 11/18/98  
 Stat Client: 843 Date Reported: 11/18/98  
 Job Name: Bld. 910 Great Lakes Turnaround time: 72 hours

| Laboratory Number | Client Number | Sample Vol. (ml) | Pb (mg/L) | Comments |
|-------------------|---------------|------------------|-----------|----------|
| 19317001          | TCLP-01       | 10.00            | 1160      |          |
| 19317002          | Soil - 910-01 | 10.00            | 18.3      |          |
| 19317003          | Soil - 910-02 | 10.00            | 6.16      | 0.05     |

RCRA Disposal Code D008 = 5.00 mg/L

Instrument: PE3300  
 Corr. Coeff.: 0.99882  
 Ref. Abs. (20.0ppm Pb): 0.142

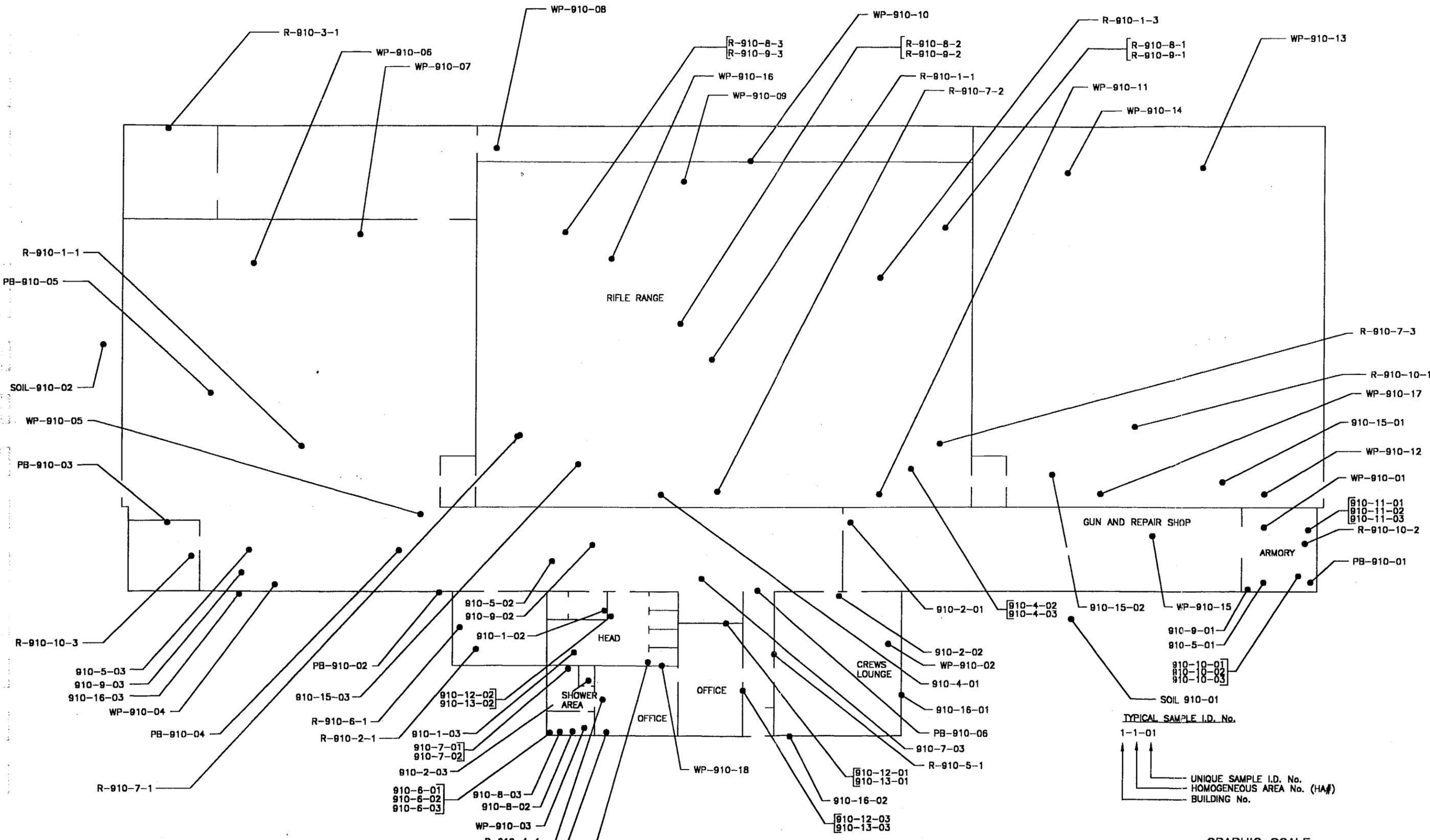
Analyzed by: \_\_\_\_\_  
 Date: 11/18/98

## **Appendix C**

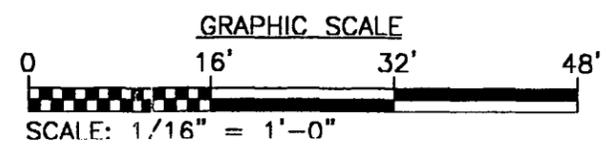
## Asbestos Material Summary

| Material Description  | Location   | Sample Numbers<br>(Q10)                  | Asbestos  |
|---|--|--|-----------|
| Floor tile 12"x12" black/white streaks w/mastic                 | Head   | 1-01, 1-02, 1-03                         | Yes       |
| Floor tile 12"x12", grey/streaks w/mastic                       | Armory, gun and repair shop, crews lounge, entrance, offices and shower area | 2-01, 2-02, 2-03, R-4-01                 | No        |
| Floor tile 9"x9", w/mastic                                      | Under 12"x12" floor tile   | R-5-01                                   | Yes       |
| Duct joint sealer   | Rifle range  | 4-01, 4-02, 4-03                         | No        |
| Pipe fitting insulation, on non-ACM insulated (fiberglass) runs | Throughout   | 5-01, 5-02, 5-03, R-10-1, R-10-2, R-10-3 | No        |
| Pipe fitting insulation, on cardboard-type runs                 | Rifle range and shower area  | 6-01, 6-02, 6-03                         | Yes       |
| Pipe insulation, cardboard-type runs                            | Rifle range and shower area  | 7-01, 7-02, 7-03                         | Yes       |
| Pipe insulation, magnesia-type runs                             | Shower area  | 8-01, 8-02, 8-03                         | Yes       |
| Pipe insulation, canvas wrap (fiberglass)                       | Throughout   | 9-01, 9-02, 9-03                         | No        |
| Tank insulation   | Armory   | 10-01, 10-02, 10-03                      | Yes       |
| Capping insulation  | Armory   | 11-01, 11-02, 11-03                      | No        |
| Gypsum board  | Entrance, offices, head and rifle range                                      | 12-01, 12-02, 12-03                      | No        |
| Joint compound on gypsum board                                  | Entrance, offices, rifle range, and head                                     | 13-01, 13-02, 13-03                      | No        |
| Flexible duct connector   | Rifle range  | 15-01, 15-02, 15-03                      | No        |
| Window putty  | Interior and exterior windows  | 16-01, 16-02, 16-03                      | No (< 1%) |
| Foam roofing  | Roof   | R-1-1, R-1-2, R-1-3                      | No        |
| Rolled roofing  | Women's head roof  | R-2-1                                    | No        |
| Transite-type siding  | Exterior walls   | R-3-1                                    | Yes       |
| Floor tile 12"x12" white w/mastic                               | Women's head   | R-6-1                                    | No        |
| 2'x4' ceiling tile  | Range  | R-7-1, R-7-2, R-7-3                      | No        |
| 1'x1' acoustical tile   | Range  | R-8-1, R-8-2, R-8-3                      | No        |
| 1'x1' acoustical tile mastic                                    | Range  | R-9-1, R-9-2, R-9-3                      | No        |

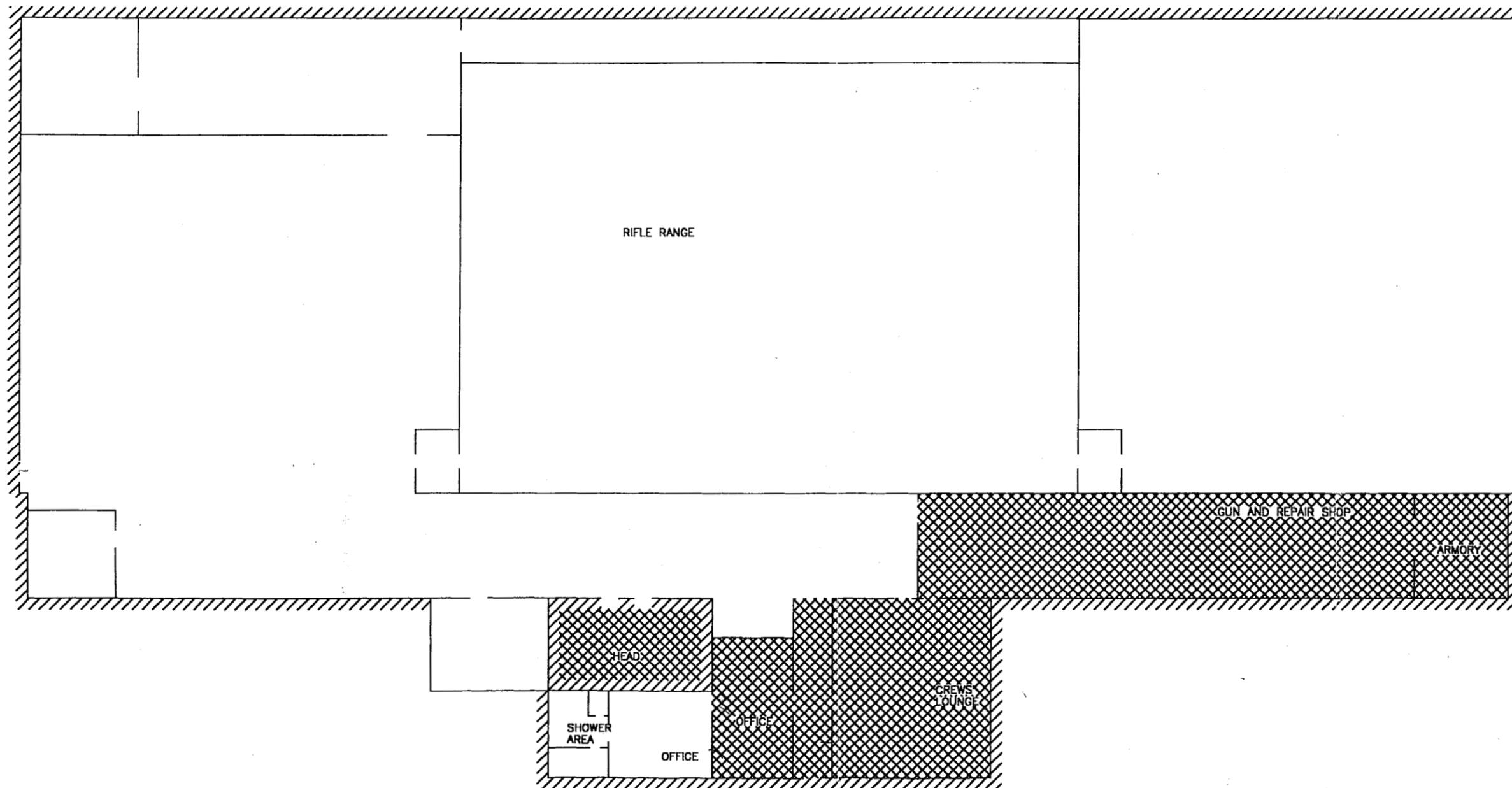
## **Appendix D**



**BUILDING 910 - FLOOR PLAN**  
SCALE 1/16" = 1'-0"



|  |                   |                                      |                  |         |             |      |                   |
|--|-------------------|--------------------------------------|------------------|---------|-------------|------|-------------------|
| DEPARTMENT OF THE NAVY                   | SOUTHERN DIVISION | NAVAL FACILITIES ENGINEERING COMMAND | REV. DESCRIPTION | PREP BY | DATE APPROV | DATE | OFFICER IN CHARGE |
|  | CHARLESTON, S.C.  |                                      |                  |         |             |      |                   |
| HAZARDOUS MATERIAL-PRE-DEMOLITION SURVEY |                   |                                      |                  |         |             |      |                   |
| AT NTC GREAT LAKES                       |                   |                                      |                  |         |             |      |                   |
| BUILDING 910 FLOOR PLAN                  |                   |                                      |                  |         |             |      |                   |
| SAMPLE LOCATIONS                         |                   |                                      |                  |         |             |      |                   |
| PROJECT No:                              | 1501A099.000      |                                      |                  |         |             |      |                   |
| RECORD DRAWING DATE                      |                   |                                      |                  |         |             |      |                   |
| CODE I.D. NO.                            | 80081             |                                      |                  |         |             |      |                   |
| DRAWING SIZE:                            | D                 |                                      |                  |         |             |      |                   |
| SPEC. NO.                                | N/A               |                                      |                  |         |             |      |                   |
| CONSTRN. CNTRL. NO.                      | N/A               |                                      |                  |         |             |      |                   |
| NAVFAC DRAWING NO.                       | N/A               |                                      |                  |         |             |      |                   |
| SHEET 1                                  | OF 3              |                                      |                  |         |             |      |                   |

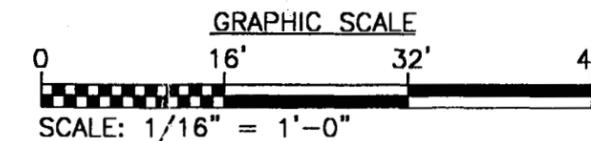


**LEGEND**

ASBESTOS-CONTAINING MATERIALS (ACM)  
IDENTIFIED ON FLOORS AND WALLS INCLUDING TOTAL  
QUANTITIES THIS SHEET:

-  FLOOR COVERING/MASTIC (3 LAYERS) (2300 SF.)
-  TRANSITE TYPE WALLS (9000 SF.)

**BUILDING 910 - FLOOR PLAN**  
SCALE 1/16" = 1'-0"



|  |                                      |                                    |         |                   |                  |
|--|--------------------------------------|------------------------------------|---------|-------------------|------------------|
| DEPARTMENT OF THE NAVY   | NAVAL FACILITIES ENGINEERING COMMAND | CAPE ENVIRONMENTAL MANAGEMENT INC. | PREP BY | DATE APPROV       | REV. DESCRIPTION |
| SOUTHERN DIVISION  | CHARLESTON, S.C.                     | WALDEGAN                           |         |                   |                  |
| HAZARDOUS MATERIAL - PRE-DEMOLITION SURVEY<br>AT NTC GREAT LAKES<br>BUILDING 910 - FLOOR PLAN<br>FLOOR AND WALLS |                                      | DATE APPROV                        | DATE    | OFFICER IN CHARGE | DATE             |
| PROJECT No:<br>1501A.099.000   |                                      | DATE                               | DATE    | DATE              | DATE             |
| RECORD DRAWING DATE  |                                      | DATE                               | DATE    | DATE              | DATE             |
| CODE I.D. NO. 80081  |                                      | DATE                               | DATE    | DATE              | DATE             |
| DRAWING SIZE: D  |                                      | DATE                               | DATE    | DATE              | DATE             |
| SPEC. NO. N/A  |                                      | DATE                               | DATE    | DATE              | DATE             |
| CONSTR. CNTR. NO. N/A  |                                      | DATE                               | DATE    | DATE              | DATE             |
| NAVFAC DRAWING NO. N/A   |                                      | DATE                               | DATE    | DATE              | DATE             |
| SHEET 2 OF 3   |                                      | DATE                               | DATE    | DATE              | DATE             |
| 910ASB-2   |                                      | DATE                               | DATE    | DATE              | DATE             |



## **Appendix E**

Analytical Environmental Services, Inc.  
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340  
 TEL: (404)457-8177 FAX: (404)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-1-01 AES LAB NO : 20515 AES JOB NO : B1114

AMPLE LOCATION :

AMPLE - \* BLACK HARD COMPACT PARTLY GRANULAR WITH FIBERS, GLUE AND BLACK  
 RIPTION MASTIC.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |   | NONFIBROUS COMPONENTS |    |
|--------------------|---|-----------------------|----|
| HRYSOTILE          |   | VERMICULITE           |    |
| AMOSITE            |   | BIOTITE               |    |
| ROCIDOLITE         |   | MICA                  |    |
| NTHOPHYLLITE       |   | PERLITE               |    |
| FREMOLITE          |   | AGGREGATE/SAND        | 45 |
| CTINOLITE          |   | STYROFOAM             |    |
| NONASBESTOS FIBERS |   | OTHER COMPONENTS      |    |
| YNTHETICS          | 1 | ALUMINUM              |    |
| MINERAL WOOL       |   | BITUMEN               | 2  |
| FIBERGLASS         |   | RESILIENT MATERIAL    |    |
| CELLULOSE          | 3 | GLUE                  | 3  |
| ANIMAL HAIR        |   | BINDERS               | 46 |
| VTIGORITE          |   |                       |    |

MENTS :

is certified by the signatures below that this laboratory is accredited  
 the National Institute of Standards and Technology under NVLAP for the  
 analysis of asbestos in building materials by polarized light microscopy.  
 NVLAP Laboratory Code: 2033.

ROANALYST : RB

RESH BIHALLI

QUALITY CONTROL BY : Lev Kuznetsov

LEV KUZNETSOV

Analytical Environmental Services, Inc.  
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340  
 TEL: (404)457-8177 FAX: (404)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-1-02 AES LAB NO : 20516 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : **BLACK HARD COMPACT PARTLY GRANULAR WITH FIBERS, GLUE AND BLACK MASTIC.**

**RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)**

| ASBESTOS FIBERS    |     | NONFIBROUS COMPONENTS |    |
|--------------------|-----|-----------------------|----|
| CHRYSOTILE         | < 1 | VERMICULITE           |    |
| AMOSITE            |     | BIOTITE               |    |
| CROCIDOLITE        |     | MICA                  |    |
| ANTHOPHYLLITE      |     | PERLITE               |    |
| TREMOLITE          |     | AGGREGATE/SAND        | 45 |
| ACTINOLITE         |     | STYROFOAM             |    |
| NONASBESTOS FIBERS |     | OTHER COMPONENTS      |    |
| SYNTHETICS         | 1   | ALUMINUM              |    |
| MINERAL WOOL       |     | BITUMEN               | 3  |
| FIBERGLASS         |     | RESILIENT MATERIAL    |    |
| CELLULOSE          | 2   | GLUE                  | 3  |
| ANIMAL HAIR        |     | BINDERS               | 46 |
| ANTIGORITE         |     |                       |    |

COMMENTS : BITUMEN CONTAINS 3% CHRYSOTILE.

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ANALYST : RB

RESH BIHALLI

QUALITY CONTROL BY : Lev Kuznetsov

LEV KUZNETSOV

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 TEL: (404)457-8177 FAX: (404)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME : GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-1-03 AES LAB NO : 20517 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : BLACK HARD COMPACT PARTLY GRANULAR WITH FIBERS, GLUE AND BLACK MASTIC.

**RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)**

| ASBESTOS FIBERS    |   | NONFIBROUS COMPONENTS |    |
|--------------------|---|-----------------------|----|
| CHRYSOTILE         |   | VERMICULITE           |    |
| AMOSITE            |   | BIOTITE               |    |
| TROCIDOLITE        |   | MICA                  |    |
| ANTHOPHYLLITE      |   | PERLITE               |    |
| TREMOLITE          |   | AGGREGATE/SAND        | 40 |
| ACTINOLITE         |   | STYROFOAM             |    |
| NONASBESTOS FIBERS |   | OTHER COMPONENTS      |    |
| SYNTHETICS         | 1 | ALUMINUM              |    |
| MINERAL WOOL       |   | BITUMEN               | 3  |
| FIBERGLASS         |   | RESILIENT MATERIAL    |    |
| CELLULOSE          | 3 | GLUE                  | 5  |
| ANIMAL HAIR        |   | BINDERS               | 48 |
| ANTIGORITE         |   |                       |    |

COMMENTS :

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ANALYST : RB

RESH BIHALLI

QUALITY CONTROL BY : Lev Kuznetsov

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

OBJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-2-01 AES LAB NO : 20518 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LIGHT BLUE HARD COMPACT PARTLY GRANULAR WITH FIBERS, GLUE AND  
 DESCRIPTION BLACK MASTIC.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |   | NONFIBROUS COMPONENTS |    |
|--------------------|---|-----------------------|----|
| CHRYSTILE          |   | VERMICULITE           |    |
| AMOSITE            |   | BIOTITE               |    |
| CROCIDOLITE        |   | MICA                  |    |
| ANTHOPHYLLITE      |   | PERLITE               |    |
| TREMOLITE          |   | AGGREGATE/SAND        | 45 |
| ACTINOLITE         |   | STYROFOAM             |    |
| NONASBESTOS FIBERS |   | OTHER COMPONENTS      |    |
| SYNTHETICS         | 1 | ALUMINUM              |    |
| MINERAL WOOL       |   | BITUMEN               | 5  |
| FIBERGLASS         |   | RESILIENT MATERIAL    |    |
| CELLULOSE          | 2 | GLUE                  | 2  |
| ANIMAL HAIR        |   | BINDERS               | 45 |
| ANTIGORITE         |   |                       |    |

REMARKS :

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MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

ADDRESS BIHALLI

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-2-02 AES LAB NO : 20519 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : LIGHT BLUE HARD COMPACT PARTLY GRANULAR WITH FIBERS, GLUE AND BLACK MASTIC.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |   | NONFIBROUS COMPONENTS |    |
|--------------------|---|-----------------------|----|
| CHRYBOTILE         |   | VERMICULITE           |    |
| AMOSITE            |   | BIOTITE               |    |
| CROCIDOLITE        |   | MICA                  |    |
| ANTHOPHYLLITE      |   | PERLITE               |    |
| TREMOLITE          |   | AGGREGATE/SAND        | 45 |
| ACTINOLITE         |   | STYROFOAM             |    |
| NONASBESTOS FIBERS |   | OTHER COMPONENTS      |    |
| SYNTHETICS         | 1 | ALUMINUM              |    |
| MINERAL WOOL       |   | BITUMEN               | 4  |
| FIBERGLASS         |   | RESILIENT MATERIAL    |    |
| CELLULOSE          | 3 | GLUE                  | 2  |
| ANIMAL HAIR        |   | BINDERS               | 45 |
| ANTIGORITE         |   |                       |    |

REMARKS :

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MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-2-03 AES LAB NO : 20520 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : LIGHT BLUE HARD COMPACT PARTLY GRANULAR WITH FIBERS, GLUE AND BLACK MASTIC.

**RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)**

| ASBESTOS FIBERS    |   | NONFIBROUS COMPONENTS |    |
|--------------------|---|-----------------------|----|
| CHRYSOTILE         |   | VERMICULITE           |    |
| AMOSITE            |   | BIOTITE               |    |
| CROCIDOLITE        |   | MICA                  |    |
| ANTHOPHYLLITE      |   | PERLITE               |    |
| TREMOLITE          |   | AGGREGATE/SAND        | 45 |
| ACTINOLITE         |   | STYROFOAM             |    |
| NONASBESTOS FIBERS |   | OTHER COMPONENTS      |    |
| SYNTHETICS         | 1 | ALUMINUM              |    |
| MINERAL WOOL       |   | BITUMEN               | 5  |
| FIBERGLASS         |   | RESILIENT MATERIAL    |    |
| CELLULOSE          | 2 | GLUE                  | 2  |
| ANIMAL HAIR        |   | BINDERS               | 45 |
| ANTIGORITE         |   |                       |    |

COMMENTS :

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MICROANALYST : RB

ADDRESS BIHALLI

QUALITY CONTROL BY : Lev Kuznetsov

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-4-01 AES LAB NO : 20521 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : BLACK SOFT BITUMENOUS TO VACUOUS WITH FIBERS AND PAINT.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |   | NONFIBROUS COMPONENTS |    |
|--------------------|---|-----------------------|----|
| CHRYSOTILE         |   | VERMICULITE           |    |
| AMOSITE            |   | BIOTITE               |    |
| TROCIDOLITE        |   | MICA                  |    |
| ANTHOPHYLLITE      |   | PERLITE               |    |
| TREMOLITE          |   | AGGREGATE/SAND        |    |
| ACTINOLITE         |   | STYROFOAM             | 25 |
| NONASBESTOS FIBERS |   | OTHER COMPONENTS      |    |
| SYNTHETICS         |   | ALUMINUM              |    |
| MINERAL WOOL       |   | BITUMEN               | 60 |
| FIBERGLASS         | 1 | RESILIENT MATERIAL    |    |
| CELLULOSE          | 2 | GLUE                  |    |
| ANIMAL HAIR        |   | BINDERS               | 12 |
| ANTIGORITE         |   |                       |    |

COMMENTS : PAINT INCLUDED AS BINDER.

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ANALYST :  
 \_\_\_\_\_  
 PRESH BIHALLI

QUALITY CONTROL BY :  
 \_\_\_\_\_  
 LEV KUZNETSOV

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-4-02 AES LAB NO : 20522 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - BLACK SOFT BITUMENOUS TO VACUOUS WITH FIBERS AND PAINT.  
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |   | NONFIBROUS COMPONENTS |    |
|--------------------|---|-----------------------|----|
| CHRYBOTILE         |   | VERMICULITE           |    |
| AMOSITE            |   | BIOTITE               |    |
| PROCIDOLITE        |   | MICA                  |    |
| ANTHOPHYLLITE      |   | PERLITE               |    |
| TREMOLITE          |   | AGGREGATE/SAND        |    |
| ACTINOLITE         |   | STYROFOAM             | 25 |
| NONASBESTOS FIBERS |   | OTHER COMPONENTS      |    |
| SYNTHETICS         |   | ALUMINUM              |    |
| MINERAL WOOL       |   | BITUMEN               | 60 |
| FIBERGLASS         | 2 | RESILIENT MATERIAL    |    |
| CELLULOSE          | 2 | GLUE                  |    |
| ANIMAL HAIR        |   | BINDERS               | 11 |
| ANTIGORITE         |   |                       |    |

COMMENTS : PAINT INCLUDED AS BINDER.

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MICROANALYST : RB  
 RESH BIHALLI

QUALITY CONTROL BY : Lev Kuznetsov  
 LEV KUZNETSOV

Analytical Environmental Services, Inc.  
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340  
 TEL: (404)457-8177 FAX: (404)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-4-03 AES LAB NO : 20523 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : BLACK SOFT BITUMENOUS TO VACUOUS WITH FIBERS AND PAINT.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |   | NONFIBROUS COMPONENTS |    |
|--------------------|---|-----------------------|----|
| CHRYBOTILE         |   | VERMICULITE           |    |
| AMOSITE            |   | BIOTITE               |    |
| CROCIDOLITE        |   | MICA                  |    |
| ANTHOPHYLLITE      |   | PERLITE               |    |
| TREMOLITE          |   | AGGREGATE/SAND        |    |
| ACTINOLITE         |   | STYROFOAM             | 20 |
| NONASBESTOS FIBERS |   | OTHER COMPONENTS      |    |
| SYNTHETICS         |   | ALUMINUM              |    |
| MINERAL WOOL       |   | BITUMEN               | 60 |
| FIBERGLASS         | 2 | RESILIENT MATERIAL    |    |
| CELLULOSE          | 2 | GLUE                  |    |
| ANIMAL HAIR        |   | BINDERS               | 16 |
| ANTIGORITE         |   |                       |    |

COMMENTS : PAINT INCLUDED AS BINDER.

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MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

RESH BIHALLI

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-5-01 AES LAB NO : 20524 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) GRAY SOFT WOVEN WITH PAINT;  
 DESCRIPTION 2) GRAY SOFT POWDERY TO FIBROUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYBOTILE         |    | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       | 45 | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 15 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 40 |
| ANTIGORITE         |    |                       |    |

COMMENTS : PAINT INCLUDED AS BINDER.

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MICROANALYST : RB

RESH BIHALLI

QUALITY CONTROL BY : Lev Kuznetsov

LEV KUZNETSOV

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 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340  
 TEL: (404)457-8177 FAX: (404)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

SUBJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-5-02 AES LAB NO : 20525 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) GRAY SOFT WOVEN WITH PAINT;  
 DESCRIPTION 2) GRAY SOFT POWDERY TO FIBROUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| HRYSOTILE          |    | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| ROCIDOLITE         |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       | 25 | BITUMEN               |    |
| FIBERGLASS         | 5  | RESILIENT MATERIAL    |    |
| CELLULOSE          | 25 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 45 |
| ANTIGORITE         |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033.

ANALYST : RB  
 RESH BIHALLI

QUALITY CONTROL BY : Lev Kuznetsov  
 LEV KUZNETSOV

Analytical Environmental Services, Inc.  
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340  
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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-5-03 AES LAB NO : 20526 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : LAYERED: 1) GRAY SOFT WOVEN WITH PAINT;  
 2) GRAY SOFT POWDERY TO FIBROUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYBOTILE         |    | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       | 30 | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 30 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 40 |
| ANTIGORITE         |    |                       |    |

COMMENTS : PAINT INCLUDED AS BINDER.

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MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

AJDRSH BIHALLI

LEV KUZNETSOV

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-6-01 AES LAB NO : 20527 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT BROWN SOFT WOVEN WITH PAINT;  
 DESCRIPTION 2) GRAY SOFT FIBROUS TO POWDERY.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYBOTILE         | 45 | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 15 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 40 |
| ANTIGORITE         |    |                       |    |

COMMENTS : PAINT INCLUDED AS BINDER.

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MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

DRESH BIHALLI

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-6-02 AES LAB NO : 20528 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT BROWN SOFT WOVEN WITH PAINT;  
 DESCRIPTION 2) GRAY SOFT WOVEN;  
 3) GRAY SOFT FIBROUS TO POWDERY.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYBOTILE         | 40 | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         | 15 | RESILIENT MATERIAL    |    |
| CELLULOSE          | 10 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 35 |
| ANTIGORITE         |    |                       |    |

COMMENTS : PAINT INCLUDED AS BINDER.

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MICROANALYST : RB  
 DRESH BIHALLI

QUALITY CONTROL BY : Lev Kuznetsov  
 LEV KUZNETSOV

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-6-03 AES LAB NO : 20529 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT BROWN SOFT WOVEN WITH PAINT;  
 DESCRIPTION 2) GRAY SOFT FIBROUS TO POWDERY;  
 3) LIGHT BROWN SOFT FIBROUS.

**RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)**

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYSOTILE         | 35 | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| ROCIDOLITE         |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| REMOLITE           |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| INTHETICS          |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| BERGLASS           |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 35 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 30 |
| TIGORITE           |    |                       |    |

MENTS : PAINT INCLUDED AS BINDER.

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ANALYST : RB

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QUALITY CONTROL BY : Lev Kuznetsov

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-7-01 AES LAB NO : 20530 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : LAYERED: 1) BROWN SOFT WOVEN WITH PAINT;  
 2) LIGHT BROWN SOFT FIBROUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |       | NONFIBROUS COMPONENTS |         |
|--------------------|-------|-----------------------|---------|
| CHRYSOTILE         | 1 - 2 | VERMICULITE           |         |
| AMOSITE            |       | BIOTITE               |         |
| ROCIDOLITE         |       | MICA                  |         |
| ANTHOPHYLLITE      |       | PERLITE               |         |
| TREMOLITE          |       | AGGREGATE/SAND        |         |
| ACTINOLITE         |       | STYROFOAM             |         |
| NONASBESTOS FIBERS |       | OTHER COMPONENTS      |         |
| SYNTHETICS         |       | ALUMINUM              |         |
| MINERAL WOOL       |       | BITUMEN               |         |
| FIBERGLASS         |       | RESILIENT MATERIAL    |         |
| CELLULOSE          | 85    | GLUE                  |         |
| ANIMAL HAIR        |       | BINDERS               | 13 - 14 |
| ANTIGORITE         |       |                       |         |

COMMENTS : PAINT INCLUDED AS BINDER.  
 LAYER #2 CONTAINS 3% CHRYSOTILE.

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MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-7-02 AES LAB NO : 20531 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) BROWN SOFT WOVEN WITH PAINT;  
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |       | NONFIBROUS COMPONENTS |         |
|--------------------|-------|-----------------------|---------|
| CHRYSOTILE         | 1 - 2 | VERMICULITE           |         |
| AMOSITE            |       | BIOTITE               |         |
| CROCIDOLITE        |       | MICA                  |         |
| ANTHOPHYLLITE      |       | PERLITE               |         |
| TREMOLITE          |       | AGGREGATE/SAND        |         |
| ACTINOLITE         |       | STYROFOAM             |         |
| NONASBESTOS FIBERS |       | OTHER COMPONENTS      |         |
| SYNTHETICS         |       | ALUMINUM              |         |
| MINERAL WOOL       |       | BITUMEN               |         |
| FIBERGLASS         |       | RESILIENT MATERIAL    |         |
| CELLULOSE          | 85    | GLUE                  |         |
| ANIMAL HAIR        |       | BINDERS               | 13 - 14 |
| ANTIGORITE         |       |                       |         |

COMMENTS : PAINT INCLUDED AS BINDER.  
 LAYER #2 CONTAINS 3% CHRYSOTILE.

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MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-7-03 AES LAB NO : 20532 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) BROWN SOFT WOVEN WITH PAINT;  
 DESCRIPTION 2) LIGHT BROWN SOFT FIBROUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |     | NONFIBROUS COMPONENTS |    |
|--------------------|-----|-----------------------|----|
| CHRYSOTILE         | < 1 | VERMICULITE           |    |
| AMOSITE            |     | BIOTITE               |    |
| CROCIDOLITE        |     | MICA                  |    |
| ANTHOPHYLLITE      |     | PERLITE               |    |
| TREMOLITE          |     | AGGREGATE/SAND        |    |
| ACTINOLITE         |     | STYROFOAM             |    |
| NONASBESTOS FIBERS |     | OTHER COMPONENTS      |    |
| SYNTHETICS         |     | ALUMINUM              |    |
| MINERAL WOOL       |     | BITUMEN               |    |
| FIBERGLASS         |     | RESILIENT MATERIAL    |    |
| CELLULOSE          | 90  | GLUE                  |    |
| ANIMAL HAIR        |     | BINDERS               | 10 |
| ANTIGORITE         |     |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.  
 LAYER #2 CONTAINS <1% CHRYSOTILE.

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 NVLAP Laboratory Code: 2033.

MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

ADDRESS BIHALLI

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-8-01 AES LAB NO : 20533 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) GRAY SEMI-HARD WOVEN WITH PAINT;  
 DESCRIPTION 2) LIGHT GRAY SOFT POWDERY TO FIBROUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |       | NONFIBROUS COMPONENTS |         |
|--------------------|-------|-----------------------|---------|
| CHRYBOTILE         | 1 - 2 | VERMICULITE           |         |
| AMOSITE            | 45    | BIOTITE               |         |
| CROCIDOLITE        |       | MICA                  |         |
| ANTHOPHYLLITE      |       | PERLITE               |         |
| TREMOLITE          |       | AGGREGATE/SAND        |         |
| ACTINOLITE         |       | STYROFOAM             |         |
| NONASBESTOS FIBERS |       | OTHER COMPONENTS      |         |
| SYNTHETICS         |       | ALUMINUM              |         |
| MINERAL WOOL       |       | BITUMEN               |         |
| FIBERGLASS         |       | RESILIENT MATERIAL    |         |
| CELLULOSE          | 10    | GLUE                  |         |
| ANIMAL HAIR        |       | BINDERS               | 43 - 44 |
| ANTIGORITE         |       |                       |         |

COMMENTS : PAINT INCLUDED AS BINDER.

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MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-8-02 AES LAB NO : 20534 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : LIGHT GRAY SOFT POWDERY TO FIBROUS WITH PAINT.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYBOTILE         | 5  | VERMICULITE           |    |
| AMOSITE            | 45 | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          |    | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 50 |
| ANTIGORITE         |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

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ANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

ADRESH BIHALLI

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-8-03 AES LAB NO : 20535 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT BROWN SOFT FIBROUS WITH PAINT;  
 DESCRIPTION 2) LIGHT GRAY SOFT POWDERY TO FIBROUS.

**RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)**

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYSOTILE         | 5  | VERMICULITE           |    |
| AMOSITE            | 45 | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 10 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 40 |
| ANTIGORITE         |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

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 by the National Institute of Standards and Technology under NVLAP for the  
 analysis of asbestos in building materials by polarized light microscopy.  
 LAP Laboratory Code: 2033.

ANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-9-01 AES LAB NO : 20536 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT BROWN SEMI-HARD WOVEN WITH PAINT;  
 DESCRIPTION 2) GRAY SOFT FIBROUS TO WOVEN WITH GLUE AND ALUMINUM.

**RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)**

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYSOTILE         |    | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              | 3  |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         | 5  | RESILIENT MATERIAL    |    |
| CELLULOSE          | 70 | GLUE                  | 2  |
| ANIMAL HAIR        |    | BINDERS               | 20 |
| ANTIGORITE         |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

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 NVLAP Laboratory Code: 2033.

MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-9-02 AES LAB NO : 20537 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : LIGHT GRAY SOFT WOVEN WITH GLUE AND PAINT.

**RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)**

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYSOTILE         |    | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 85 | GLUE                  | 5  |
| ANIMAL HAIR        |    | BINDERS               | 10 |
| ANTIGORITE         |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

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MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

KUDRESH BIHALLI

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-9-03 AES LAB NO : 20538 AES JOB NO : B1114

SAMPLE LOCATION :

DESCRIPTION - LAYERED: 1) LIGHT BROWN SEMI-HARD WOVEN WITH PAINT;  
 2) GRAY SOFT FIBROUS.

**RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)**

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYSOTILE         |    | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 80 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 20 |
| ANTIGORITE         |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

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NVLAP Laboratory Code: 2033.

MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

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 TEL: (404)457-8177 FAX: (404)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-10-01 AES LAB NO : 20539 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT BROWN SEMI-HARD WOVEN WITH PAINT;  
 DESCRIPTION 2) GRAY SOFT FIBROUS TO POWDERY.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYBOTILE         | 70 | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 10 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 20 |
| ANTIGORITE         |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033.

MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

RUDRESH BIHALLI

LEV KUZNETSOV

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-10-02 AES LAB NO : 20540 AES JOB NO : B1114

SAMPLE LOCATION :

DESCRIPTION - LAYERED: 1) LIGHT BROWN SEMI-HARD WOVEN WITH PAINT;  
 2) GRAY SOFT FIBROUS TO POWDERY.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYBOTILE         | 70 | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDLITE         |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 10 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 20 |
| ANTIGORITE         |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

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MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-10-03 AES LAB NO : 20541 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT BROWN SEMI-HARD WOVEN WITH PAINT;  
 DESCRIPTION 2) GRAY SOFT FIBROUS TO POWDERY.

**RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)**

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYBOTILE         | 70 | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 10 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 20 |
| ANTIGORITE         |    |                       |    |

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ANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

OBJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-11-01 AES LAB NO : 20542 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SOFT WOVEN;  
 DESCRIPTION 2) GRAY SOFT FIBROUS TO POWDERY.

**RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)**

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYSOTILE         |    | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       | 35 | BITUMEN               |    |
| FIBERGLASS         | 20 | RESILIENT MATERIAL    |    |
| CELLULOSE          | 3  | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 42 |
| ANTIGORITE         |    |                       |    |

MENTS :

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MICROANALYST : R B

QUALITY CONTROL BY : Lev Kuznetsov

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-11-02 AES LAB NO : 20543 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) GRAY SOFT POWDERY TO FIBROUS WITH PAINT;  
 DESCRIPTION 2) LIGHT GRAY SOFT WOVEN.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYSOTILE         |    | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       | 25 | BITUMEN               |    |
| FIBERGLASS         | 50 | RESILIENT MATERIAL    |    |
| CELLULOSE          |    | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 25 |
| ANTIGORITE         |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

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 NVLAP Laboratory Code: 2033.

MICROANALYST : RB  
 UDRESH BIHALLI

QUALITY CONTROL BY : Lev Kuznetsov  
 LEV KUZNETSOV

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-11-03 AES LAB NO : 20544 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) LIGHT GRAY SOFT WOVEN;  
 DESCRIPTION 2) GRAY SOFT FIBROUS TO POWDERY.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYBOTILE         |    | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       | 35 | BITUMEN               |    |
| FIBERGLASS         | 20 | RESILIENT MATERIAL    |    |
| CELLULOSE          | 5  | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 40 |
| ANTIGORITE         |    |                       |    |

COMMENTS :

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MICROANALYST : RB

RUDRESH BIHALLI

QUALITY CONTROL BY : Lev Kuznetsov

LEV KUZNETSOV

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-12-01 AES LAB NO : 20545 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE DESCRIPTION - LAYERED: 1) BROWN SOFT FIBROUS WITH PAINT;  
 2) GRAY SEMI-HARD SILTY TO FIBROUS WITH MICA.

| RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE) |    |                       |    |
|--|----|-----------------------|----|
| ASBESTOS FIBERS  |    | NONFIBROUS COMPONENTS |    |
| CHRYROTILE   |    | VERMICULITE           |    |
| AMOSITE  |    | BIOTITE               |    |
| CROCIDOLITE  |    | MICA                  | 3  |
| ANTHOPHYLLITE  |    | PERLITE               |    |
| TREMOLITE  |    | AGGREGATE/SAND        |    |
| ACTINOLITE   |    | STYROFOAM             |    |
| NONASBESTOS FIBERS   |    | OTHER COMPONENTS      |    |
| SYNTHETICS   |    | ALUMINUM              |    |
| MINERAL WOOL   |    | BITUMEN               |    |
| FIBERGLASS   | 10 | RESILIENT MATERIAL    |    |
| CELLULOSE  | 25 | GLUE                  |    |
| ANIMAL HAIR  |    | BINDERS               | 62 |
| ANTIGORITE   |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

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 NVLAP Laboratory Code: 2033.

ANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-12-02 AES LAB NO : 20546 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) BROWN SOFT FIBROUS WITH PAINT;  
 DESCRIPTION 2) GRAY SEMI-HARD SILTY TO FIBROUS.

**RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)**

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYBOTILE         |    | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         | 10 | RESILIENT MATERIAL    |    |
| CELLULOSE          | 25 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 65 |
| ANTIGORITE         |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

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MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

UDRESH BIHALLI

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

OBJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-12-03 AES LAB NO : 20547 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LAYERED: 1) BROWN SOFT FIBROUS WITH PAINT;  
 DESCRIPTION 2) GRAY SEMI-HARD SILTY TO FIBROUS.

| RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE) |    |                       |    |
|--|----|-----------------------|----|
| ASBESTOS FIBERS  |    | NONFIBROUS COMPONENTS |    |
| CHRYBOTILE   |    | VERMICULITE           |    |
| AMOSITE  |    | BIOTITE               |    |
| CROCIDOLITE  |    | MICA                  |    |
| ANTHOPHYLLITE  |    | PERLITE               |    |
| TREMOLITE  |    | AGGREGATE/SAND        |    |
| ACTINOLITE   |    | STYROFOAM             |    |
| NONASBESTOS FIBERS   |    | OTHER COMPONENTS      |    |
| SYNTHETICS   |    | ALUMINUM              |    |
| MINERAL WOOL   |    | BITUMEN               |    |
| FIBERGLASS   | 10 | RESILIENT MATERIAL    |    |
| CELLULOSE  | 20 | GLUE                  |    |
| ANIMAL HAIR  |    | BINDERS               | 70 |
| ANTIGORITE   |    |                       |    |

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MICROANALYST : RB  
 SURJESH BIHALLI

QUALITY CONTROL BY : Lev Kuznetsov  
 LEV KUZNETSOV

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-13-01 AES LAB NO : 20548 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE DESCRIPTION - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS AND PAINT;  
 2) BROWN SOFT FIBROUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYBOTILE         |    | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 40 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 60 |
| ANTIGORITE         |    |                       |    |

COMMENTS : PAINT INCLUDED AS BINDER.

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MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-13-02 AES LAB NO : 20549 AES JOB NO : B1114

SAMPLE LOCATION :

DESCRIPTION - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS AND PAINT;  
 2) LIGHT BROWN SEMI-HARD FIBROUS WITH PAINT.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYBOTILE         |    | VERMICULITE           |    |
| MOSITE             |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 80 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 20 |
| ANTIGORITE         |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

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MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

RUDRESH BIHALLI

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-13-03 AES LAB NO : 20550 AES JOB NO : B1114

SAMPLE LOCATION :

DESCRIPTION - LAYERED: 1) LIGHT GRAY SEMI-HARD SILTY WITH FIBERS AND PAINT;  
 2) BROWN SOFT FIBROUS.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYBOTILE         |    | VERMICULITE           |    |
| MOSITE             |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| INTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 30 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 70 |
| ANTIGORITE         |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

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 NVLAP Laboratory Code: 2033.

MICROANALYST : RB

QUALITY CONTROL BY : *Lev Kuznetsov*

UDRESH BIHALLI

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-15-01 AES LAB NO : 20551 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - DARK GRAY SOFT WOVEN WITH PAINT.  
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYBOTILE         |    | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 90 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 10 |
| ANTIGORITE         |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

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 NVLAP Laboratory Code: 2033.

MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

ADDRESS BIHALLI

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CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

OBJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-15-02 AES LAB NO : 20552 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - DARK GRAY SOFT WOVEN WITH PAINT.

DESCRIPTION

**RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)**

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYSOTILE         |    | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 90 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 10 |
| ANTIGORITE         |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033.

ANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

RESH BIHALLI

LEV KUZNETSOV

Analytical Environmental Services, Inc.  
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340  
 TEL: (404)457-8177 FAX: (404)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

OBJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-15-03 AES LAB NO : 20553 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - DARK GRAY SOFT WOVEN WITH PAINT.  
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |    | NONFIBROUS COMPONENTS |    |
|--------------------|----|-----------------------|----|
| CHRYBOTILE         |    | VERMICULITE           |    |
| AMOSITE            |    | BIOTITE               |    |
| CROCIDOLITE        |    | MICA                  |    |
| ANTHOPHYLLITE      |    | PERLITE               |    |
| TREMOLITE          |    | AGGREGATE/SAND        |    |
| ACTINOLITE         |    | STYROFOAM             |    |
| NONASBESTOS FIBERS |    | OTHER COMPONENTS      |    |
| SYNTHETICS         |    | ALUMINUM              |    |
| MINERAL WOOL       |    | BITUMEN               |    |
| FIBERGLASS         |    | RESILIENT MATERIAL    |    |
| CELLULOSE          | 90 | GLUE                  |    |
| ANIMAL HAIR        |    | BINDERS               | 10 |
| ANTIGORITE         |    |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033.

MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

DRESH BIHALLI

LEV KUZNETSOV

Analytical Environmental Services, Inc.  
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340  
 TEL: (404)457-8177 FAX: (404)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-16-01 AES LAB NO : 20554 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : LIGHT BROWN SEMI-HARD SILTY WITH FIBERS AND PAINT.

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |     | NONFIBROUS COMPONENTS |    |
|--------------------|-----|-----------------------|----|
| CHRYBOTILE         | < 1 | VERMICULITE           |    |
| AMOSITE            |     | BIOTITE               |    |
| CROCIDOLITE        |     | MICA                  |    |
| ANTHOPHYLLITE      |     | PERLITE               |    |
| TREMOLITE          |     | AGGREGATE/SAND        |    |
| ACTINOLITE         |     | STYROFOAM             |    |
| NONASBESTOS FIBERS |     | OTHER COMPONENTS      |    |
| SYNTHETICS         |     | ALUMINUM              |    |
| MINERAL WOOL       |     | BITUMEN               |    |
| FIBERGLASS         |     | RESILIENT MATERIAL    |    |
| CELLULOSE          | 1   | GLUE                  |    |
| ANIMAL HAIR        |     | BINDERS               | 99 |
| ANTIGORITE         |     |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033.

ANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

RUDRESH BIHALLI

LEV KUZNETSOV

Analytical Environmental Services, Inc.  
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340  
 TEL: (404)457-8177 FAX: (404)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-16-02 AES LAB NO : 20555 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - DESCRIPTION : LIGHT BROWN SEMI-HARD SILTY WITH FIBERS AND PAINT.

**RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)**

| ASBESTOS FIBERS    |     | NONFIBROUS COMPONENTS |    |
|--------------------|-----|-----------------------|----|
| CHRYBOTILE         | < 1 | VERMICULITE           |    |
| AMOSITE            |     | BIOTITE               |    |
| CROCIDOLITE        |     | MICA                  |    |
| ANTHOPHYLLITE      |     | PERLITE               |    |
| TREMOLITE          |     | AGGREGATE/SAND        |    |
| ACTINOLITE         |     | STYROFOAM             |    |
| NONASBESTOS FIBERS |     | OTHER COMPONENTS      |    |
| SYNTHETICS         |     | ALUMINUM              |    |
| MINERAL WOOL       |     | BITUMEN               |    |
| FIBERGLASS         |     | RESILIENT MATERIAL    |    |
| CELLULOSE          | 1   | GLUE                  |    |
| ANIMAL HAIR        |     | BINDERS               | 99 |
| ANTIGORITE         |     |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.  
 PICROLITE INCLUDED AS CHRYBOTILE.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033.

MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

ADDRESS BIHALLI

LEV KUZNETSOV

Analytical Environmental Services, Inc.  
 3781 Presidential Parkway, Suite 111, Atlanta, GA 30340  
 TEL: (404)457-8177 FAX: (404)457-8188

CLIENT NAME : CAPE ENVIRONMENTAL MANAGEMENT, INC. DATE : 12-21-93

PROJECT NAME: GREAT LAKES SURVEY / 1303A.04

SAMPLE ID : 910-16-03 AES LAB NO : 20556 AES JOB NO : B1114

SAMPLE LOCATION :

SAMPLE - LIGHT BROWN SEMI-HARD SILTY WITH FIBERS AND PAINT.  
 DESCRIPTION

RESULT OF BULK SAMPLE ANALYSIS (BY VISUAL VOLUMETRIC PERCENTAGE)

| ASBESTOS FIBERS    |     | NONFIBROUS COMPONENTS |    |
|--------------------|-----|-----------------------|----|
| CHRYSTOLE          | < 1 | VERMICULITE           |    |
| AMOSITE            |     | BIOTITE               |    |
| CROCIDOLITE        |     | MICA                  |    |
| ANTHOPHYLLITE      |     | PERLITE               |    |
| TREMOLITE          |     | AGGREGATE/SAND        |    |
| ACTINOLITE         |     | STYROFOAM             |    |
| NONASBESTOS FIBERS |     | OTHER COMPONENTS      |    |
| SYNTHETICS         |     | ALUMINUM              |    |
| MINERAL WOOL       |     | BITUMEN               |    |
| FIBERGLASS         |     | RESILIENT MATERIAL    |    |
| CELLULOSE          | 2   | GLUE                  |    |
| ANIMAL HAIR        |     | BINDERS               | 98 |
| ANTIGORITE         |     |                       |    |

REMARKS : PAINT INCLUDED AS BINDER.

It is certified by the signatures below that this laboratory is accredited by the National Institute of Standards and Technology under NVLAP for the analysis of asbestos in building materials by polarized light microscopy. NVLAP Laboratory Code: 2033.

MICROANALYST : RB

QUALITY CONTROL BY : Lev Kuznetsov

RUDRESH BIHALLI

LEV KUZNETSOV

CAPE ENVIRONMENTAL MANAGEMENT INC  
 91 Noll Street, Waukegan, Illinois 60085  
 847/336-4341 FAX: 847/336-4971

|  |                                       |
|--|---------------------------------------|
| LABORATORY NAME:                             |                                       |
| CAPE PROJECT MANAGER: <i>Kurt Gates</i>      |                                       |
| CAPE JOB NAME: <i>Rd 910 Great Lakes</i>     | CAPE JOB NUMBER: <i>1501A.099.000</i> |
| ANALYSIS REQUESTED: <i>PLM</i>               | CLIENT NAME:                          |
| TURNAROUND TIME REQUESTED: <i>RUSH</i>       |                                       |
| SPECIAL INSTRUCTIONS: <i>Results to kurt</i> |                                       |

| SAMPLE ID               | SAMPLE DESCRIPTION/LOCATION |
|-------------------------|-----------------------------|
| 1. <i>R 910-1-1</i>     |                             |
| 2. <i>R 910-1-2</i>     |                             |
| 3. <i>R 910-1-3</i>     |                             |
| 4. <i>R 910-2-1</i>     |                             |
| 5. <i>R 910-3-1</i>     |                             |
| 6. <i>R 910-4-1</i>     |                             |
| 7. <i>R 910-5-1</i>     |                             |
| 8. <i>R 910-6-1</i>     |                             |
| 9. <i>R 910-7-1</i>     |                             |
| 10. <i>R 910 7-2</i>    |                             |
| 11. <i>R 910 7-3</i>    |                             |
| 12. <i>R 910 - 8-1</i>  |                             |
| 13. <i>R 910 - 8-2</i>  |                             |
| 14. <i>R 910 - 8-3</i>  |                             |
| 15. <i>R 910 - 9-1</i>  |                             |
| 16. <i>R 910 - 9-2</i>  |                             |
| 17. <i>R 910 - 9-3</i>  |                             |
| 18. <i>R 910 - 10-1</i> |                             |
| 19. <i>R 910 - 10-2</i> |                             |
| 20. <i>R 910 - 10-3</i> |                             |
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|-----------------------------------|-------------------|---------------------------------|--------------------|
| RELINQUISHED BY: <i>Nick R...</i> |                   | RECEIVED BY: <i>[Signature]</i> |                    |
| DATE: <i>11/2/98</i>              | TIME: <i>4:00</i> | DATE: <i>11/13/98</i>           | TIME: <i>10:30</i> |
| RELINQUISHED BY:                  |                   | RECEIVED BY:                    |                    |
| DATE:                             | TIME:             | DATE:                           | TIME:              |

**PLM ANALYSIS SUMMARY**

for quick reference on asbestos content

CLIENT NAME: NAVY SOUTH DIVISION  
PROJECT NAME: GREAT LAKES BLDG. 910

PROJECT NO: 1501A.099.000  
LAB JOB NO: B8277

DATE RCVD: 11/13/98

| SAMPLE LAB ID | SAMPLE FIELD ID | LAYER NUMBER | APPEARANCE   | LOCATION / DESCRPTION | % ASBESTOS (COMMENTS) |
|---------------|-----------------|--------------|--|-----------------------|-----------------------|
| 1 814738      | R910-1-1        |              | YELLOW SOFT VACUOUS WITH RESILIENT PAINT                                 |                       | -                     |
| 2 814739      | R910-1-2        |              | YELLOW SOFT VACUOUS WITH RESILIENT PAINT                                 |                       | -                     |
| 3 814740      | R910-1-3        |              | YELLOW SOFT VACUOUS WITH RESILIENT PAINT                                 |                       | -                     |
| 4 814741      | R910-2-1        |              | BLACK SEMI-HARD BITUMINOUS TO FIBROUS WITH AGGREGATES                    |                       | -                     |
| 5 814742      | R910-3-1        |              | GRAY HARD CEMENTITIOUS TO FIBROUS WITH PAINT                             |                       | 30%CHR                |
| 6 814743-1    | R910-4-1        | 1 (of 2)     | BLUE HARD RESILIENT TO GRANULAR WITH FIBERS                              |                       | -                     |
| 7 814743-2    | R910-4-1        | 2 (of 2)     | BLACK SOFT BITUMINOUS WITH FIBERS  |                       | -                     |
| 8 814744-1    | R910-5-1        | 1 (of 3)     | BLACK SOFT BITUMINOUS WITH FIBERS  |                       | <1%CHR                |
| 9 814744-2    | R910-5-1        | 2 (of 3)     | GREEN HARD RESILIENT TO GRANULAR WITH FIBERS                             |                       | 3%CHR                 |
| 10 814744-3   | R910-5-1        | 3 (of 3)     | BLACK SOFT BITUMINOUS WITH FIBERS  |                       | 3%CHR                 |
| 11 814745     | R910-6-1        | 1+2 (of 2)   | 1. GRAY HARD RESILIENT TO GRANULAR; 2. BLACK SOFT BITUMINOUS WITH FIBERS |                       | -                     |
| 12 814746     | R910-7-1        |              | GRAY SOFT FIBROUS TO GRANULAR TO POWDERY WITH PAINT                      |                       | -                     |
| 13 814747     | R910-7-2        |              | GRAY SOFT FIBROUS TO GRANULAR TO POWDERY WITH PAINT                      |                       | -                     |
| 14 814748     | R910-7-3        |              | GRAY SOFT FIBROUS TO GRANULAR TO POWDERY WITH PAINT                      |                       | -                     |

"-" = NO ASBESTOS DETECTED

These results are provided before full QC is completed and therefore could be changed. Use signed copies of anlyses reports as final results

**PLM ANALYSIS SUMMARY**

for quick reference on asbestos content

CLIENT NAME: NAVY SOUTH DIVISION  
PROJECT NAME: GREAT LAKES BLDG. 910

PROJECT NO: 1501A.099.000  
LAB JOB NO: B8277

DATE RCVD: 11/13/98

| SAMPLE LAB ID | SAMPLE FIELD ID | LAYER NUMBER | APPEARANCE   | LOCATION / DESCRPTION | % ASBESTOS (COMMENTS) |
|---------------|-----------------|--------------|--|-----------------------|-----------------------|
| 15 814749     | R910-8-1        |              | GRAY SOFT FIBROUS TO GRANULAR TO POWDERY WITH PAINT            |                       | -                     |
| 16 814750     | R910-8-2        |              | GRAY SOFT FIBROUS TO GRANULAR TO POWDERY WITH PAINT            |                       | -                     |
| 17 814751     | R910-8-3        |              | GRAY SOFT FIBROUS TO GRANULAR TO POWDERY WITH PAINT            |                       | -                     |
| 18 814752-1   | R910-9-1        | 1 (of 2)     | YELLOW HARD SILTY  |                       | -                     |
| 19 814752-2   | R910-9-1        | 2 (of 2)     | GRAY SOFT FIBROUS TO GRANULAR TO POWDERY <del>WITH PAINT</del> |                       | -                     |
| 20 814753-1   | R910-9-2        | 1 (of 2)     | YELLOW HARD SILTY  |                       | -                     |
| 21 814753-2   | R910-9-2        | 2 (of 2)     | GRAY SOFT FIBROUS TO GRANULAR TO POWDERY <del>WITH PAINT</del> |                       | -                     |
| 22 814754-1   | R910-9-3        | 1 (of 2)     | YELLOW HARD SILTY  |                       | -                     |
| 23 814754-2   | R910-9-3        | 2 (of 2)     | GRAY SOFT FIBROUS TO GRANULAR TO POWDERY <del>WITH PAINT</del> |                       | -                     |
| 24 814755     | R910-10-1       |              | GRAY SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT             |                       | -                     |
| 25 814756     | R910-10-2       |              | GRAY SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT             |                       | -                     |
| 26 814757     | R910-10-3       |              | GRAY SOFT POWDERY TO FIBROUS WITH CANVAS AND PAINT             |                       | -                     |

"-" = NO ASBESTOS DETECTED

these results are provided before full QC is completed and therefore could be changed. Use signed copies of anlyses reports as final results

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
SAMPLE FIELD ID: R910-1-1 LAB ID: 814738  
SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

LAYERED: NO

APPEARANCE: YELLOW SOFT VACUOUS WITH RESILIENT PAINT

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

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

**COMMENTS:**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.

ANALYST

  
ALEKSEY REZNIK

QUALITY CONTROL

  
MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-1-2 LAB ID: 814739  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

|  |
|--|
| LAYERED: NO  |
| APPEARANCE: YELLOW SOFT VACUOUS WITH RESILIENT PAINT |

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

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

**COMMENTS:**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.

ANALYST

  
 ALEKSEY REZNIK

QUALITY CONTROL

  
 MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-1-3 LAB ID: 814740  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

LAYERED: NO  
 APPEARANCE: YELLOW SOFT VACUOUS WITH RESILIENT PAINT

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

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

**COMMENTS:**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.

ANALYST

  
 ALEKSEY REZNIK

QUALITY CONTROL

  
 MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-2-1 LAB ID: 814741  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

LAYERED: NO  
 APPEARANCE: BLACK SEMI-HARD BITUMINOUS TO FIBROUS WITH AGGREGATES

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

| ASBESTOS FIBERS |  | NONASBESTOS FIBERS |   | NONFIBROUS COMPONENTS |  | OTHER COMPONENTS |    |
|-----------------|--|--------------------|---|-----------------------|--|------------------|----|
| CHRYSTOLE       |  | CELLULOSE          |   | VERMICULITE/MICA      |  | BITUMEN/TAR      | 60 |
| AMOSITE         |  | GLASS FIBERS       | 3 | PERLITE               |  | SAND/AGGR.       | 20 |
| CROCIDOLITE     |  | SYNTHETICS         | 7 | EXPANDED GLASS        |  | GLUE/CAULK       |    |
| TREMOLITE       |  | WOLLASTONITE       |   | SYNTHETIC FOAM        |  | VINYL            |    |
| ACTINOLITE      |  | TALC               |   | ALUMINUM/METAL        |  | CORK             |    |
| ANTHOPHYLLITE   |  |                    |   | FOAM RUBBER           |  | LATEX/RUBBER     |    |
|                 |  |                    |   |                       |  | BINDERS/PAINT    | 10 |

**COMMENTS:**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.

ANALYST

  
 ALEKSEY REZNIK

QUALITY CONTROL

  
 MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-3-1 LAB ID: 814742  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

LAYERED: NO  
 APPEARANCE: GRAY HARD CEMENTITIOUS TO FIBROUS WITH PAINT

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

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

**COMMENTS:**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-4-1 LAB ID: 814743-1  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

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

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

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

**COMMENTS:**

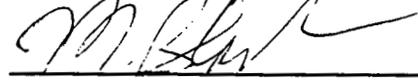
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. \* NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-4-1 LAB ID: 814743-2  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

SAMPLE DESCRIPTION

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

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

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

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. \* NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST

  
 ALEKSEY REZNIK

QUALITY CONTROL

  
 MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-5-1 LAB ID: 814744-1  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

|   |             |                    |
|---|-------------|--------------------|
| LAYERED: YES                                  | LAYER NO: 1 | NO. OF LAYERS: * 3 |
| APPEARANCE: BLACK SOFT BITUMINOUS WITH FIBERS |             |                    |

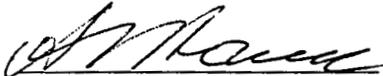
**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

| ASBESTOS FIBERS |    | NONASBESTOS FIBERS |   | NONFIBROUS COMPONENTS |  | OTHER COMPONENTS |    |
|-----------------|----|--------------------|---|-----------------------|--|------------------|----|
| CHRYSTOLE       | <1 | CELLULOSE          | 5 | VERMICULITE/MICA      |  | BITUMEN/TAR      | 90 |
| AMOSITE         |    | GLASS FIBERS       |   | PERLITE               |  | SAND/AGGR.       |    |
| CROCIDOLITE     |    | SYNTHETICS         |   | EXPANDED GLASS        |  | GLUE/CAULK       |    |
| TREMOLITE       |    | WOLLASTONITE       |   | SYNTHETIC FOAM        |  | VINYL            |    |
| ACTINOLITE      |    | TALC               |   | ALUMINUM/METAL        |  | CORK             |    |
| ANTHOPHYLLITE   |    |                    |   | FOAM RUBBER           |  | LATEX/RUBBER     |    |
|                 |    |                    |   |                       |  | BINDERS/PAINT    | 5  |

**COMMENTS:**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. \* NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST

  
 ALEKSEY REZNIK

QUALITY CONTROL

  
 MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-5-1 LAB ID: 814744-2  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

SAMPLE DESCRIPTION

|  |             |                    |
|--|-------------|--------------------|
| LAYERED: YES   | LAYER NO: 2 | NO. OF LAYERS: * 3 |
| APPEARANCE: GREEN HARD RESILIENT TO GRANULAR WITH FIBERS |             |                    |

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

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

COMMENTS:

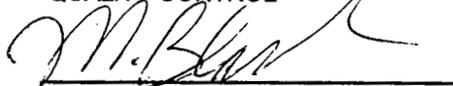
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ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-5-1 LAB ID: 814744-3  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

SAMPLE DESCRIPTION

|   |             |                    |
|---|-------------|--------------------|
| LAYERED: YES                                  | LAYER NO: 3 | NO. OF LAYERS: * 3 |
| APPEARANCE: BLACK SOFT BITUMINOUS WITH FIBERS |             |                    |

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

| ASBESTOS FIBERS |   | NONASBESTOS FIBERS |  | NONFIBROUS COMPONENTS |  | OTHER COMPONENTS |    |
|-----------------|---|--------------------|--|-----------------------|--|------------------|----|
| CHRYBOTILE      | 3 | CELLULOSE          |  | VERMICULITE/MICA      |  | BITUMEN/TAR      | 90 |
| AMOSITE         |   | GLASS FIBERS       |  | PERLITE               |  | SAND/AGGR.       |    |
| CROCIDOLITE     |   | SYNTHETICS         |  | EXPANDED GLASS        |  | GLUE/CAULK       |    |
| TREMOLITE       |   | WOLLASTONITE       |  | SYNTHETIC FOAM        |  | VINYL            |    |
| ACTINOLITE      |   | TALC               |  | ALUMINUM/METAL        |  | CORK             |    |
| ANTHOPHYLLITE   |   |                    |  | FOAM RUBBER           |  | LATEX/RUBBER     |    |
|                 |   |                    |  |                       |  | BINDERS/PAINT    | 7  |

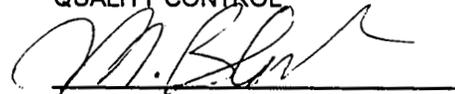
COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. \* NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST

  
 ALEKSEY REZNIK

QUALITY CONTROL

  
 MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
SAMPLE FIELD ID: R910-6-1 LAB ID: 814745  
SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

|  |               |                    |
|--|---------------|--------------------|
| LAYERED: YES   | LAYER NO: 1+2 | NO. OF LAYERS: * 2 |
| APPEARANCE: 1. GRAY HARD RESILIENT TO GRANULAR; 2. BLACK SOFT BITUMINOUS WITH FIBERS |               |                    |

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

| ASBESTOS FIBERS |  | NONASBESTOS FIBERS |   | NONFIBROUS COMPONENTS |  | OTHER COMPONENTS |    |
|-----------------|--|--------------------|---|-----------------------|--|------------------|----|
| CHRYSTOLE       |  | CELLULOSE          | 1 | VERMICULITE/MICA      |  | BITUMEN/TAR      | 3  |
| AMOSITE         |  | GLASS FIBERS       |   | PERLITE               |  | SAND/AGGR.       | 35 |
| CROCIDOLITE     |  | SYNTHETICS         |   | EXPANDED GLASS        |  | GLUE/CAULK       |    |
| TREMOLITE       |  | WOLLASTONITE       |   | SYNTHETIC FOAM        |  | VINYL            |    |
| ACTINOLITE      |  | TALC               |   | ALUMINUM/METAL        |  | CORK             |    |
| ANTHOPHYLLITE   |  |                    |   | FOAM RUBBER           |  | LATEX/RUBBER     |    |
|                 |  |                    |   |                       |  | BINDERS/PAINT    | 61 |

**COMMENTS:**

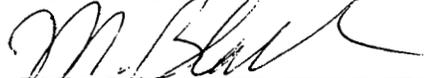
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ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-7-1 LAB ID: 814746  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

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

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

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

**COMMENTS:**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-7-2 LAB ID: 814747  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

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

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

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

**COMMENTS:**

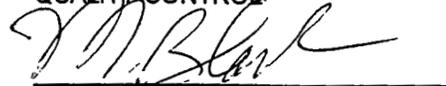
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ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
  
SAMPLE FIELD ID: R910-7-3 LAB ID: 814748  
SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

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

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

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

**COMMENTS:**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.

ANALYST

  
ALEKSEY REZNIK

QUALITY CONTROL

  
MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-8-1 LAB ID: 814749  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

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

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

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

**COMMENTS:**

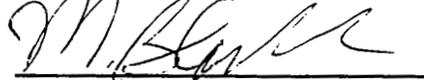
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-8-2 LAB ID: 814750  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

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

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

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

**COMMENTS:**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
SAMPLE FIELD ID: R910-8-3 LAB ID: 814751  
SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

SAMPLE DESCRIPTION

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

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

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

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.

ANALYST

  
ALEKSEY REZNIK

QUALITY CONTROL:

  
MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-9-1 LAB ID: 814752-1  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

SAMPLE DESCRIPTION

|                               |             |                    |
|-------------------------------|-------------|--------------------|
| LAYERED: YES                  | LAYER NO: 1 | NO. OF LAYERS: * 2 |
| APPEARANCE: YELLOW HARD SILTY |             |                    |

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

| ASBESTOS FIBERS |  | NONASBESTOS FIBERS |  | NONFIBROUS COMPONENTS |  | OTHER COMPONENTS |      |
|-----------------|--|--------------------|--|-----------------------|--|------------------|------|
| CHRYBOTILE      |  | CELLULOSE          |  | VERMICULITE/MICA      |  | BITUMEN/TAR      |      |
| AMOSITE         |  | GLASS FIBERS       |  | PERLITE               |  | SAND/AGGR.       |      |
| CROCIDOLITE     |  | SYNTHETICS         |  | EXPANDED GLASS        |  | GLUE/CAULK       | 900  |
| TREMOLITE       |  | WOLLASTONITE       |  | SYNTHETIC FOAM        |  | VINYL            |      |
| ACTINOLITE      |  | TALC               |  | ALUMINUM/METAL        |  | CORK             |      |
| ANTHOPHYLLITE   |  |                    |  | FOAM RUBBER           |  | LATEX/RUBBER     |      |
|                 |  |                    |  |                       |  | BINDERS/PAINT    | -800 |

COMMENTS:

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. \* NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST

  
 ALEKSEY REZNIK

QUALITY CONTROL

  
 MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-9-1 LAB ID: 814752-2  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

|  |             |                    |
|--|-------------|--------------------|
| LAYERED: YES   | LAYER NO: 2 | NO. OF LAYERS: * 2 |
| APPEARANCE: GRAY SOFT FIBROUS TO GRANULAR TO POWDERY |             |                    |

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

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

**COMMENTS:**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. 1 (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. \* NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST

  
 ALEKSEY REZNIK

QUALITY CONTROL

  
 MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-9-2 LAB ID: 814753-1  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

SAMPLE DESCRIPTION

|                               |             |                    |
|-------------------------------|-------------|--------------------|
| LAYERED: YES                  | LAYER NO: 1 | NO. OF LAYERS: * 2 |
| APPEARANCE: YELLOW HARD SILTY |             |                    |

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

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

COMMENTS:

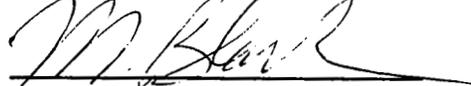
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ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-9-2 LAB ID: 814753-2  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

|  |             |                    |
|--|-------------|--------------------|
| LAYERED: YES   | LAYER NO: 2 | NO. OF LAYERS: * 2 |
| APPEARANCE: GRAY SOFT FIBROUS TO GRANULAR TO POWDERY |             |                    |

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

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

**COMMENTS:**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. \* NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST

  
 ALEKSEY REZNIK

QUALITY CONTROL

  
 MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-9-3 LAB ID: 814754-1  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

SAMPLE DESCRIPTION

|                               |             |                    |
|-------------------------------|-------------|--------------------|
| LAYERED: YES                  | LAYER NO: 1 | NO. OF LAYERS: * 2 |
| APPEARANCE: YELLOW HARD SILTY |             |                    |

RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)

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

COMMENTS:

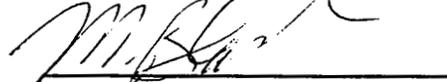
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ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

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

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-9-3 LAB ID: 814754-2  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

LAYERED: YES LAYER NO: **2** NO. OF LAYERS: \* **2**  
 APPEARANCE: GRAY SOFT FIBROUS TO GRANULAR TO POWDERY

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

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

**COMMENTS:**

SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY. \* NO OF LAYERS - INDICATES NUMBER OF SUBSAMPLES ANALYZED AND REPORTS ISSUED (UNLESS COMPOSITED).

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

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

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-10-2 LAB ID: 814756  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

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

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

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

**COMMENTS:**

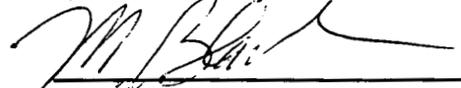
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ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

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

CLIENT NAME: NAVY SOUTH DIVISION LAB JOB NO: B8277  
 PROJECT NAME: GREAT LAKES BLDG. 910 DATE RECEIVED: 11/13/98  
 PROJECT NO: 1501A.099.000 REPORT ISSUED: 11/13/98  
 SAMPLE FIELD ID: R910-10-3 LAB ID: 814757  
 SAMPLE INFO: \_\_\_\_\_ DATE ANALYZED: 11/13/98

**SAMPLE DESCRIPTION**

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

**RESULT OF ANALYSIS IN VOLUME PERCENTAGE (BY VISUAL ESTIMATE)**

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

**COMMENTS:**

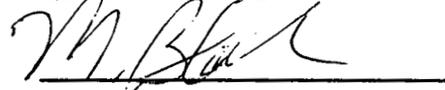
SAMPLE WAS ANALYZED BY PLM USING DISPERSION STAINING TECHNIQUES IN ACCORDANCE WITH U.S. EPA METHOD 40CFR Ch. I (7-1-92) PT. 763, SUBPT. F, APP. A. LAST CALIBRATION OF EQUIPMENT WAS PERFORMED ON: 11/13/98 FOR ALL HETEROGENEOUS AND LAYERED SAMPLES EASILY SEPARATED INTO SUBLAYERS, EACH LAYER IS ANALYZED SEPARATELY.

ANALYST



ALEKSEY REZNIK

QUALITY CONTROL



MICHAEL BLACK

## **Appendix F**

State of Illinois A 86367  
Department of Public Health

LICENSE, PERMIT, CERTIFICATION, REGISTRATION  
ASBESTOS PROFESSIONAL LICENSE

| EXPIRATION DATE | CATEGORY | I.D. NUMBER |
|-----------------|----------|-------------|
| 05/15/99        | 5319     | 100-3516    |

NICKOLAS

BRIGLIO

INSPECTOR

MANAGEMENT PLAN  
PROJECT MANAGER  
AIR SAMPLING PROFESSION



State of Illinois

A 86261

Department of Public Health

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois Statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

JOHN R. LUMPKIN, M.D.
DIRECTOR

Issued under the authority of
The State of Illinois
Department of Public Health

Table with 3 columns: EXPIRATION DATE (05/15/99), CATEGORY (5319), I.D. NUMBER (100-0269). Below the table, the name KURT GATES is listed with various professional titles: PROJECT DESIGNER, INSPECTOR, MANAGEMENT PLANNER, PROJECT MANAGER, AIR SAMPLING PROFESSIONAL.

BUSINESS ADDRESS

ALTERING THIS CERTIFICATE MAY RESULT IN LEGAL ACTION

KURT GATES

6949 MORGAN COURT

GURNEE IL 60031

THIS LICENSE IS NOT VALID IF YOUR IDPH
REFRESHER COURSE CERTIFICATE IS NOT CURRENT



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Certificate of Accreditation

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**ANALYTICAL ENVIRONMENTAL SERVICES, INC.**  
ATLANTA, GA

*is recognized under the National Voluntary Laboratory Accreditation Program  
for satisfactory compliance with criteria established in Title 15, Part 7 Code of Federal Regulations.  
Accreditation is awarded for specific services, listed on the Scope of Accreditation, for:*

**BULK ASBESTOS FIBER ANALYSIS**

---

**October 1, 1994**  
Effective until



*Albert P. Holen*  
For the National Institute of Standards and Technology

NVLAP LAB CODE: 2033

United States Department of Commerce  
National Institute of Standards and Technology

**NVLAP**®

ISO/IEC GUIDE 25:1990  
ISO 9002:1987

**Certificate of Accreditation**



**CAPE ENVIRONMENTAL MANAGEMENT, INC.**  
ATLANTA, GA

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

**BULK ASBESTOS FIBER ANALYSIS**

June 30, 1999

Effective through

For the National Institute of Standards and Technology  
NVLAP Lab Code: 102111-0